GARMIN

Garmin Pilot for Android™

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This manual reflects the operation of Software version 3.0 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™ 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WARNING: *Do not use outdated database information.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™ must be updated regularly in order to ensure that the information remains current. Pilots using any outdated database do so entirely at their own risk.*

WARNING: *To reduce the risk of unsafe operation, carefully review and understand all aspects of Garmin Pilot™ 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™ 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™ 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™. 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™ 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.*

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

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Rev	Date	Change Summary
A	December, 2012	Initial Release
B	January, 2013	Updated for Application version 2.3: • Airport Information Page updates • Chart Next Cycle Downloads
C	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
H	August, 2015	Updated for Application version 4.3

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OVERVIEW

PLAN FILE FLY

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, and navigation capabilities; it's all included. The app's intuitive interface closely resemble those on the newest Garmin touchscreen avionics so you can go seamlessly from preflight to in-flight. Plan, file, fly with Garmin Pilot.

FEATURES

- Charts: VFR Sectionals, WAC, TAC, low and high IFR en-route, airport diagrams and approach procedures.
- 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, Area Forecasts and NOTAMs.
- Dynamic weather overlays with your route displayed on the map
- AOPA Airport Directory and Fuel Prices
- Flight plan filing via DUAT(S)
- 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™, are subject to change and may not reflect the most current Garmin Pilot™ 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 or your individual 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 you have before using Garmin Pilot for navigation.

There are also a few things to know about your tablets basic features and settings that will enhance your Garmin Pilot experience. These features are not hidden, but they may not be immediately apparent. To get completely familiar with your tablet and its features, it is recommended that you access the User's Guide for your tablet and/or the User's Guide for your Android version (Garmin Pilot requires Android 2.3 or later).

Some features of this application will vary between handsets and tablets. Also, the 3.0 release is only available on Android 4.0 (Ice Cream Sandwich) and above. Devices with older versions of Android will continue to have access to Garmin Pilot 2.8.

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 your 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. Your device may have other options to lock the display orientation, consult your User's Guide.

Locking Display Orientation:

1) Tap **Settings > Display**.

2) Tap **Auto-rotate screen** to select/deselect.

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) Tap **Settings > Display** > **Brightness.**

2) Use the slider control to manually adjust the display brightness or tap **Automatic brightness** to select/deselect.

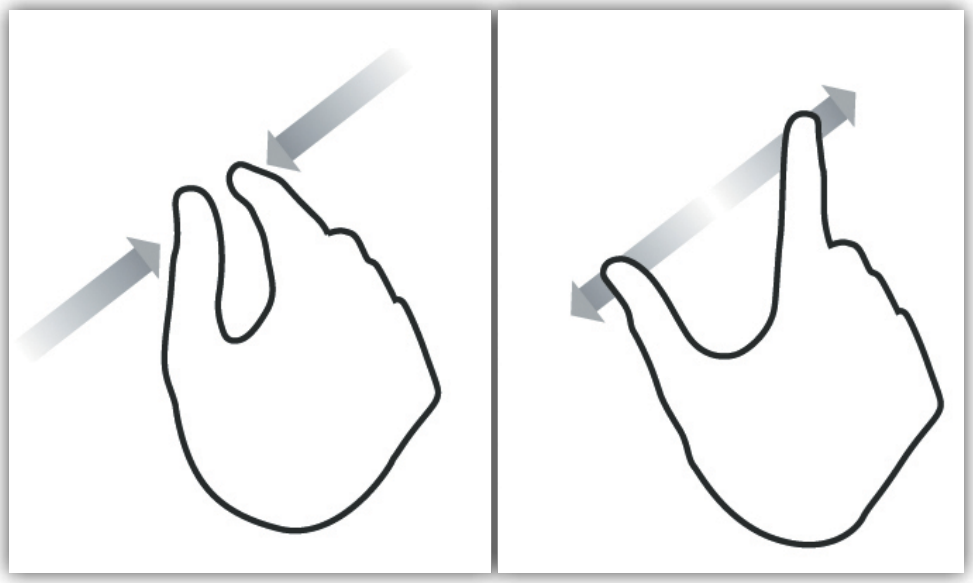
Or: Within Garmin Pilot, tap **Tools > Brightness** located in the Navigation Bar and use the slider control to set the desired display brightness.

NOTE: *To enable the in application brightness settings some Android devices may require disabling the "Automatic brightness" setting for the system 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 tapping, flicking, and/or dragging your 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" the finger across the display and you can magnify or zoom by double-tapping the display, by pinching, or use the button. Reversing your pinch or tapping the will de-magnify or zoom out. Additionally, double-tapping 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 four possible functions; Panel, Widgets, Charts, SafeTaxi, Traffic, Terrain, or VIRB.

- 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 up to 15 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 and can also display up to 14 navigation parameters which are also configurable.

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 you have downloaded everything needed for your flight, 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

GETTING STARTED

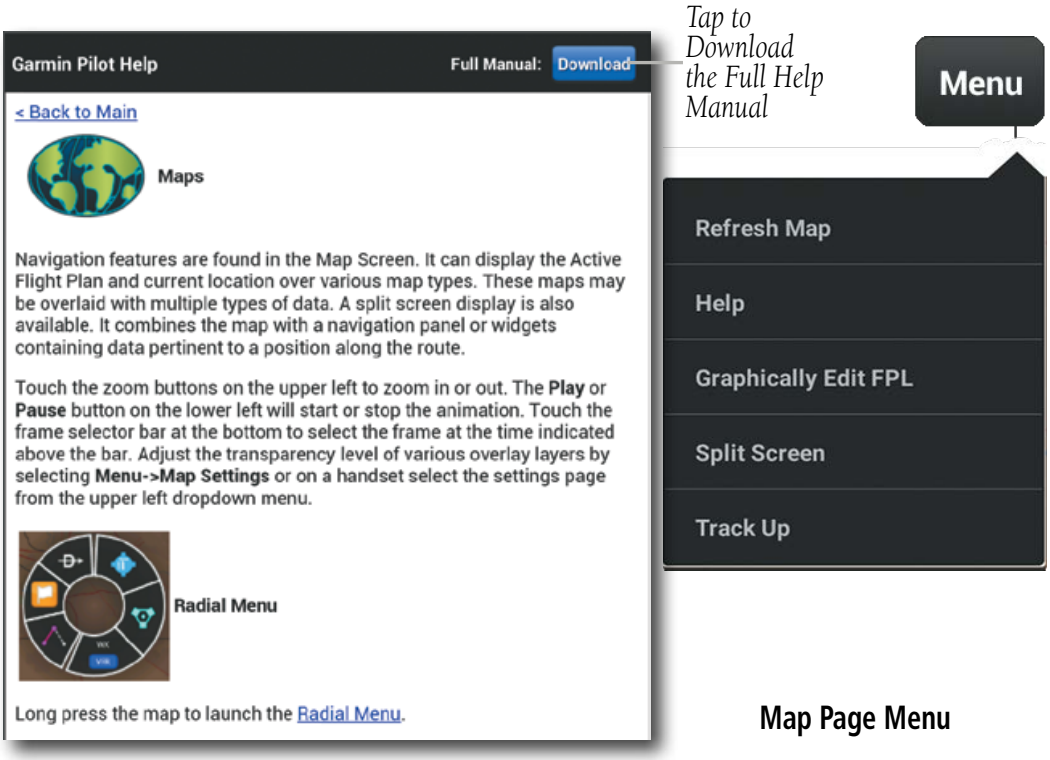
Garmin Pilot is fully functional immediately upon installation, but there are a few things you may wish to set up in order to optimize performance right away. The best place to start is with the highly intuitive Settings Menu, which can be found by momentarily tapping the Home Button and then the Settings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

Garmin Pilot Settings

From the Settings Menu it is possible to set up or change the time format, show/hide features like the Navigation Bar (on the map display) or input pilot profile and aircraft information, manage user waypoints, set up your preferred flight plan filing service, manage your data subscriptions and much more. All of these and more selections are available by tapping the tab associated with the desired function.

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 your Garmin Pilot subscription. The help file can be accessed from any page, by tapping the Menu Button(Menu) located in the Navigation Bar and then tapping **Help** in the page sensitive menu. Navigating within the Help File is as easy as tapping any of the hyperlinks.



Help File

Map Page Menu

Accessing the Help File:

Tap **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 you will be prompted to chose 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:

1) Tap **Menu > Help.**
2) Tap **Download** to download, tap **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) Point your browser to www.garmin.com
2) At the top of the page hover your pointer over **Support**.
3) Select **Manuals.**
4) From the drop down menu select **In the Air.**
5) From the next drop down menu select **Apps**.
6) From the next drop down menu select **Garmin Pilot™**.
7) Select **Download** for the desired 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.

Navigation Bar

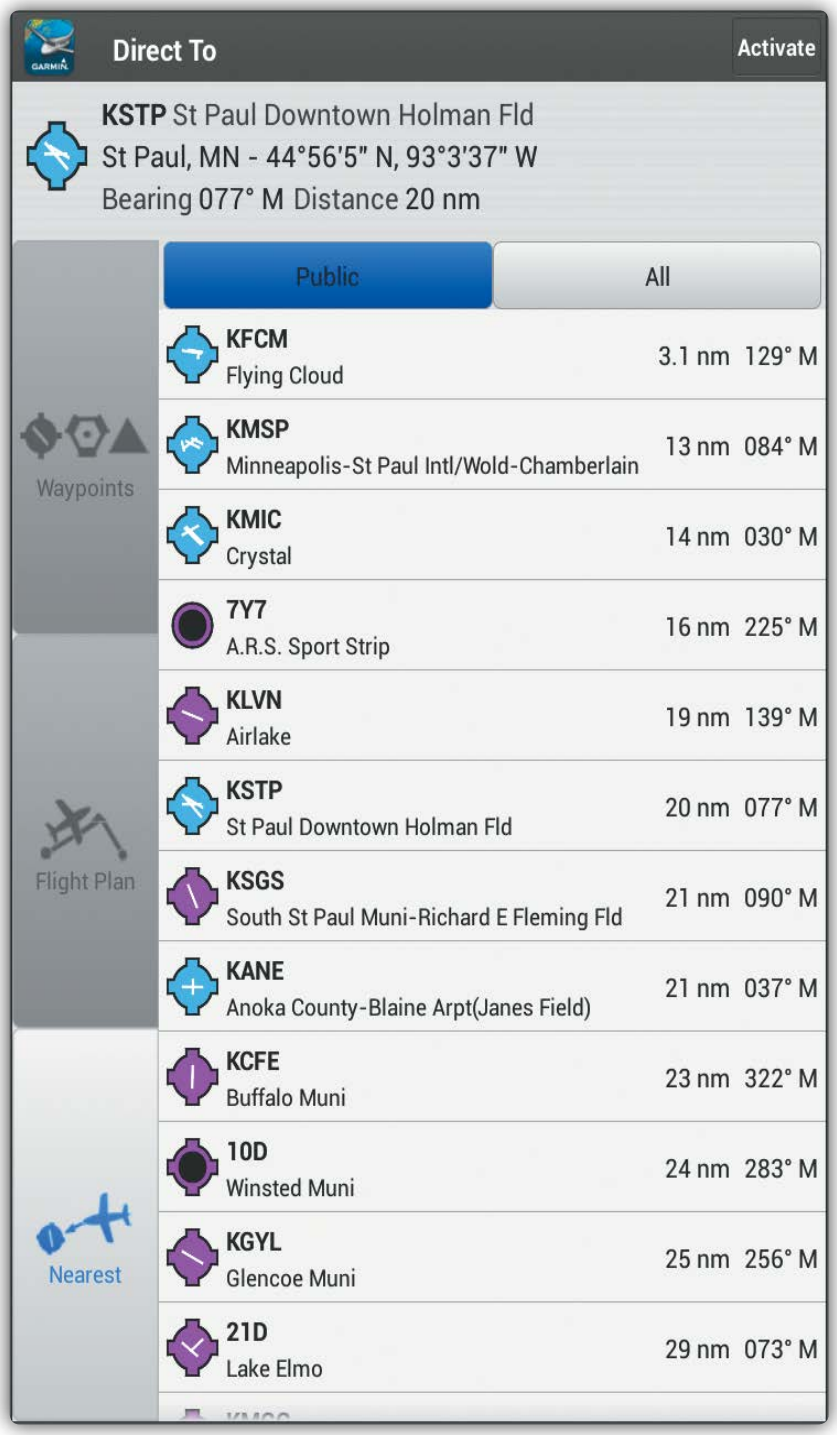
HOME BUTTON

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, Downloads, Connext, Settings).

Home Menu

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).



Direct-to Dialog

TOOLS

The Tools Button provides access Brightness, and Alerts. Control display brightness and create Alerts based on time or location.

Brightness

The Tools Menu provides access to the display brightness control. Simply tap **Tools > 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.*

Alerts

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) Tap **Tools** > **Alerts** > **Add Alert**.
2) Tap **Time**.
3) Enter the desired count down time (HH:MM:SS).
4) If desired, use the Repeating **On/Off** switch, to enable/disable repeating.
5) Tap **Save**, to save.

Creating a location based alert:

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

Editing Alerts:

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

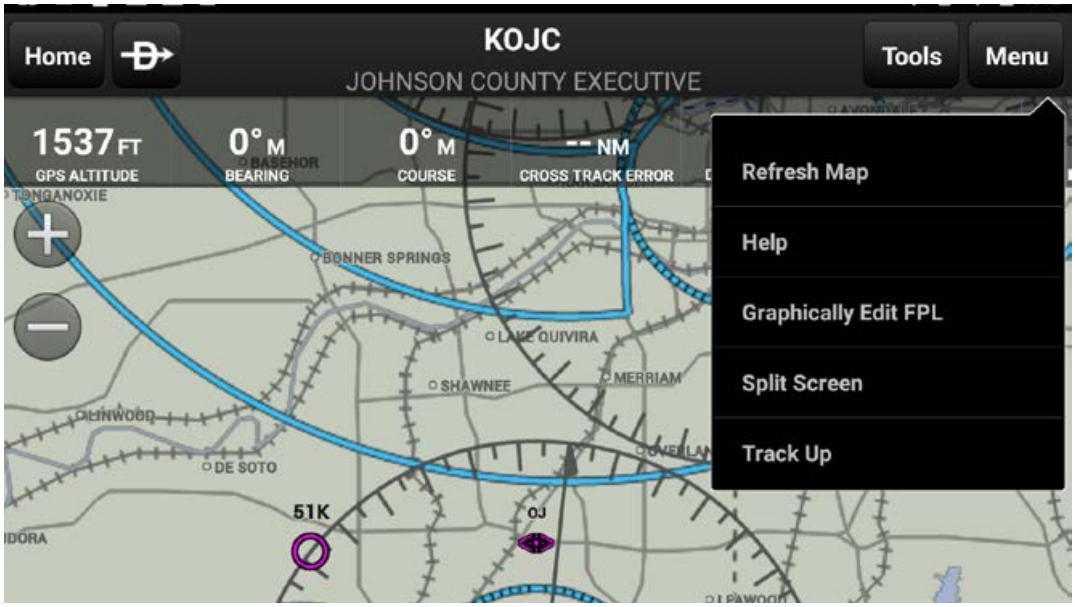
Deleting Alerts:

1) Tap **Tools** > **Alerts > Edit.**
2) Tap > **Delete** to delete the Alert.

Alerts

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.



Map Page Menu

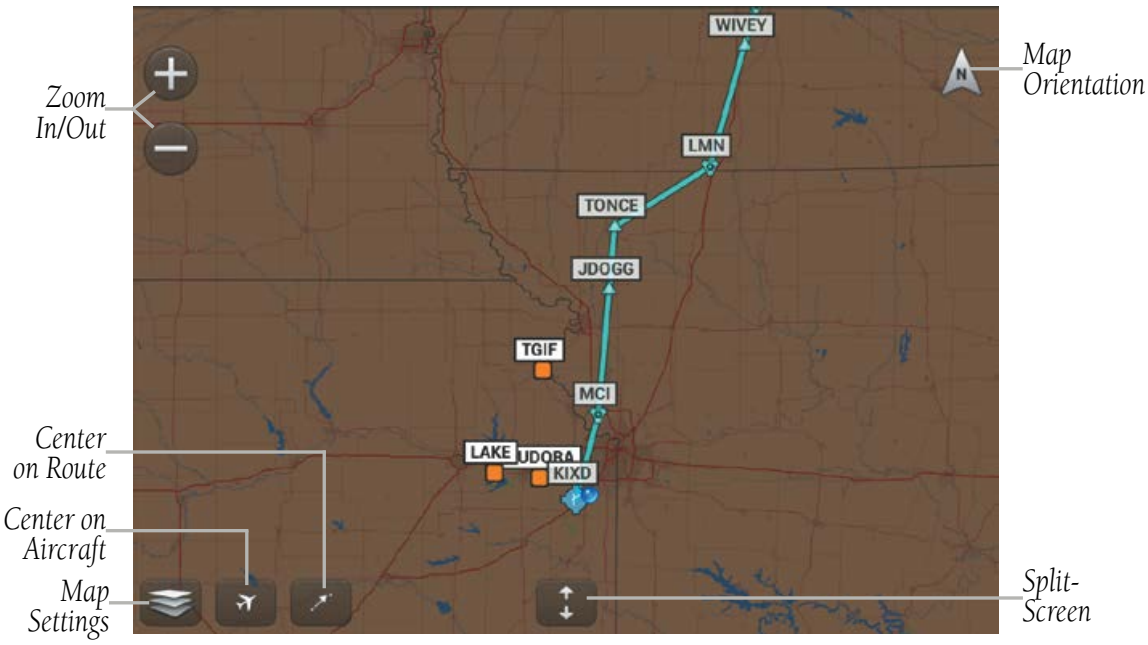
MAP PANE CONTROLS

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	Icon	Description
Map Settings		Map/Chart Selection/Settings, Map Overlay Selection, Overlay Opacity Settings, and General Map Settings
Center on Aircraft		Centers the Map Pane on the current location.
Center on Route		Centers the entire route in Map Pane.

Control	Icon	Description
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		Toggles map orientation from north up to track up. The Icon is blue when track up is active.

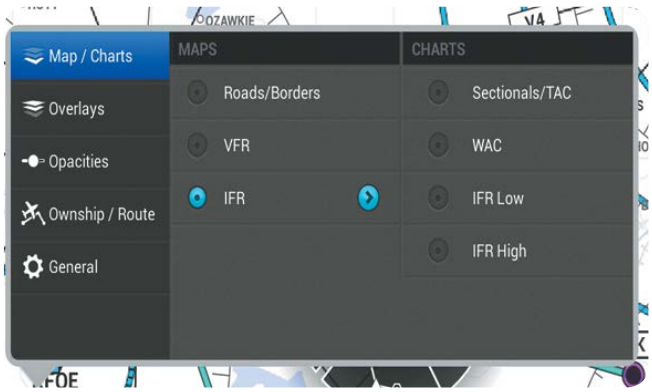
Map Pane Controls



Map Pane

MAP/CHART SELECTION AND SETTINGS

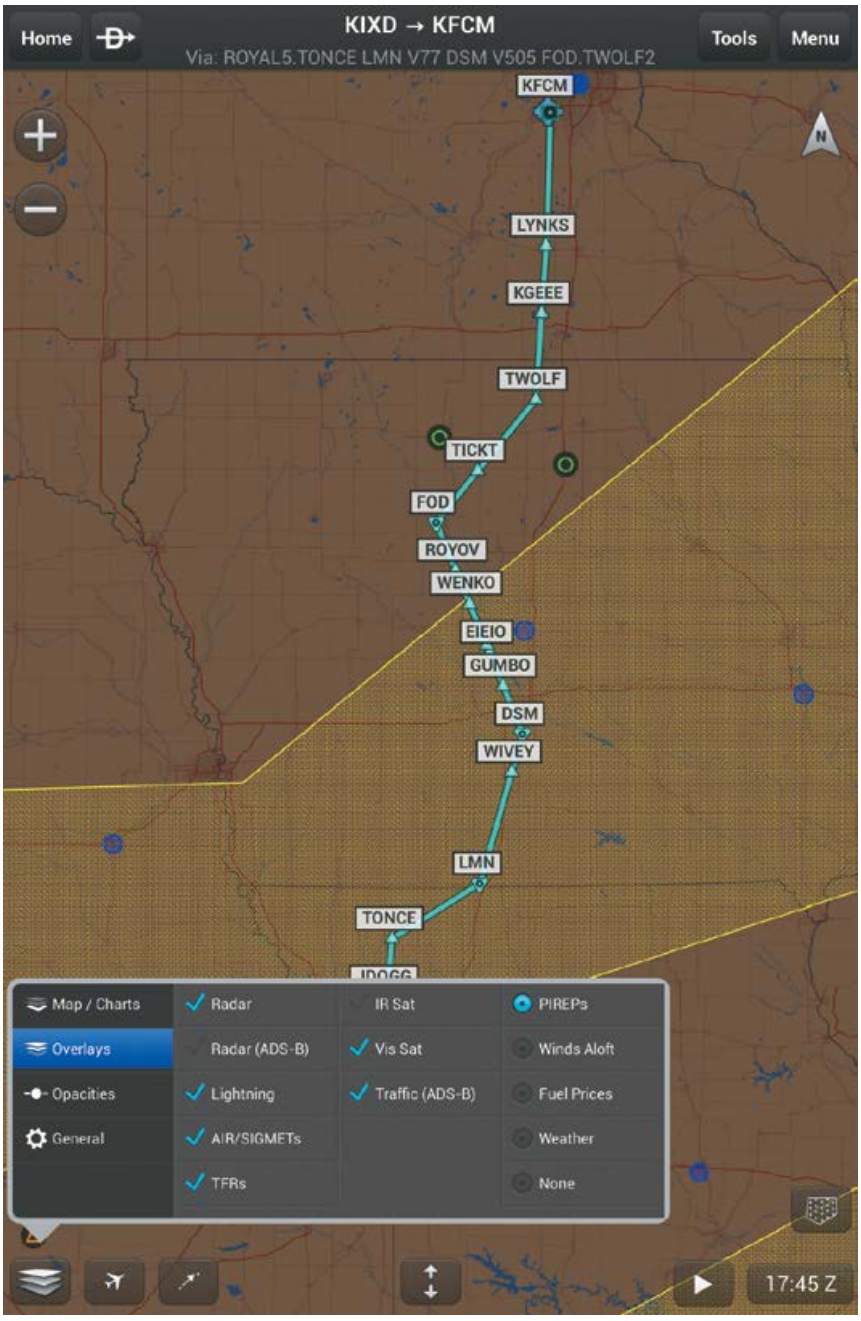
There are three maps and four charts available for display on the Map Page. The following charts are available for viewing in the map area: Sectional TAC, WAC, IFR Low, and IFR High. Charts are high-resolution color images that resemble the paper version of the National Aeronautical Navigation Products (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, airspaces, and victor airways.



Map/Chart Menu

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 IR Sat and Vis Sat. Overlays in the right column, (i.e. PIREPs, Winds Aloft, Fuel Prices, and Weather) are also mutually exclusive.


Home
KIXD → KFCM
Via: ROYAL5.TONCE LMN V77 DSM V505 FOD.TWOLF2
Tools
Menu
KFCM
LYNKS
KGEEE
TWOLF
TICKT
FOD
ROYOV
WENKO
EIEIO
GUMBO
DSM
WIVEY
LMN
TONCE
Map / Charts
Overlays
Opacities
General
Radar
Radar (ADS-B)
Lightning
AIR/SIGMETs
TFRs
IR Sat
Vis Sat
Traffic (ADS-B)
PIREPs
Winds Aloft
Fuel Prices
Weather
None
17:45 Z

Overlays

SETTINGS

Located under the Home Button, tap 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 Brightness, Time Format, displaying the Nav Bar, Alerts and selecting and displaying the Own Ship Symbol. Tap **About** to display the current version of the Garmin Pilot Application installed on your device, copyright information, and contact information (both email and phone) for Garmin Aviation Support. Tap 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 us in troubleshooting and resolving any issues you may have.

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

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

When **Automatic SafeTaxi** is on, SafeTaxi will launch after landing at the destination airport when ground speed drops below 40 kts.

ALERTS

The Alerts settings allow the pilot the turn Notifications On/Off and configure ringtone and vibration settings, when notifications are on. When Notifications are On the Garmin Pilot Icon will appear in the device notification area when the configured alert criteria (i.e., time or location) is met.

Configuring Alert Notifications:

1) From any page, tap **Home** > **Settings**.
2) Tap the **General** Tab.
3) Tap Notification **On/Off** button
4) Tap **Notification Ringtone** to select a ringtone
5) Tap the Vibrate **On/Off** button to select/deselect notification vibrations.

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 40kts and when viewing SafeTaxi
- **On**: The screen will always be on.
- **Off**: Uses the system default display settings.

Configuring Screen Settings:

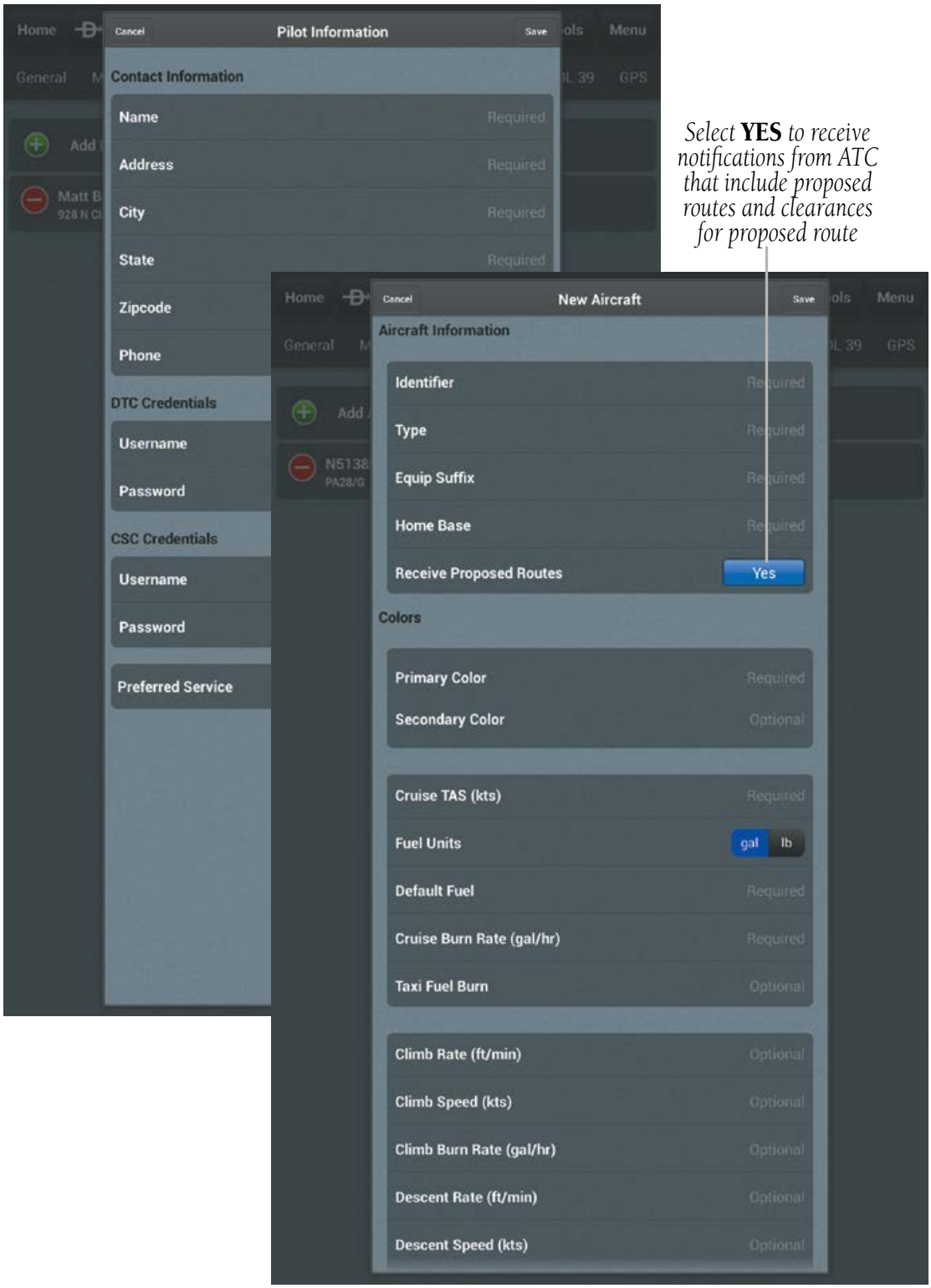
1) From any page, tap **Home** > **Settings**.
2) Tap the **General** Tab.
3) Tap **Auto**, **On** or **Off** to select the desired Keep Screen On settings.

PILOT AND AIRCRAFT INFO

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

If you already have a Garmin Pilot account, Pilot and Aircraft information will automatically be synchronized across your devices. To add a new pilot tap **Pilot Info** > . Tap in each field and use the on-screen keyboard to enter your information (i.e., Name, Telephone, Street, City, State, and Zipcode). Add aircraft information by tapping **Aircraft >** **,** enter aircraft Identifier, Type, Equip Suffix, Home Base, Primary and Secondary Color, TAS, and Fuel information**.**

To link Garmin Pilot with a Direct User Access Terminal Service (DUATS) account, under Pilot Information, enter username and password information for the preferred DUATS provider. By linking to a DUATS account, Garmin Pilot can file flight plans. Garmin Pilot is compatible with both Data Transformation Corp. (DTC) or Computer Sciences Corporation (CSC) Direct User Access Terminal Service (DUATS) services.



*Select **YES** to receive notifications from ATC that include proposed routes and clearances for proposed route*

Pilot and Aircraft Information Entry

Entering Pilot Information:

1) From any page, tap **Home** > **Settings.**
2) Tap **Pilot Information > Add Pilot Information...**
3) Enter the Pilot Information by tapping each field and use the keyboard.
4) Tap **Save**, to save Pilot Information.

Entering Aircraft Information:

1) From any page, tap **Home** > **Settings.**
2) Tap **Aircraft > Add Aircraft...**
3) Enter Required and/or optional Aircraft Information by tapping each field and use the keyboard.
4) Tap **Save**, to save Aircraft Information.

ATC PROPOSED ROUTE NOTIFICATIONS

ATC Proposed Route Notifications are Push notifications, that include a proposed route for departures and destinations that you have filed flight plans for. Notifications come in the notification area if you are not currently using Garmin Pilot, or as Popups 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:

1) From any page, tap **Home** > **Settings**.
2) Tap the **Aircraft** Tab.
3) Tap **Add Aircraft...**

Or Tap a current Aircraft in the list, to edit.

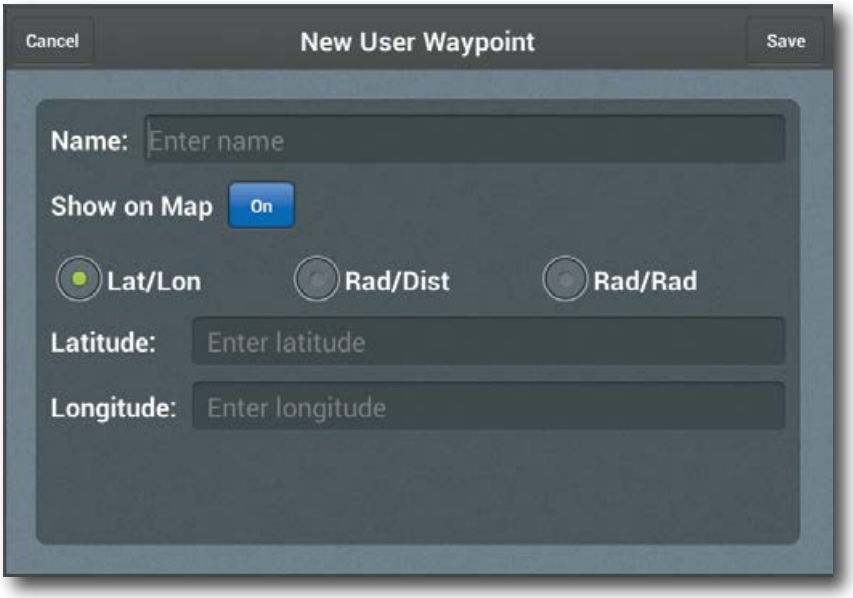
4) Tap **YES**, for Receive Proposed Routes, to subscribe to Proposed Route Notifications.
5) Tap **Save**, to save Aircraft Information.

USER WAYPOINTS

The User Waypoints Tab provides a quick and easy way to create and view stored user waypoints. User Waypoints are synchronized across devices.

Creating a User Waypoint from User Waypoint Tab:

1) Tap the User Waypoint Tab to display the list of user waypoints.
2) Tap button to display the **New User Waypoint** dialog box.
3) Enter a name.
4) Define the waypoint location by Lat/Lon, Rad/Dist, or Rad/Rad.
5) Tap **Save**, to save the waypoint, or Back to exit.



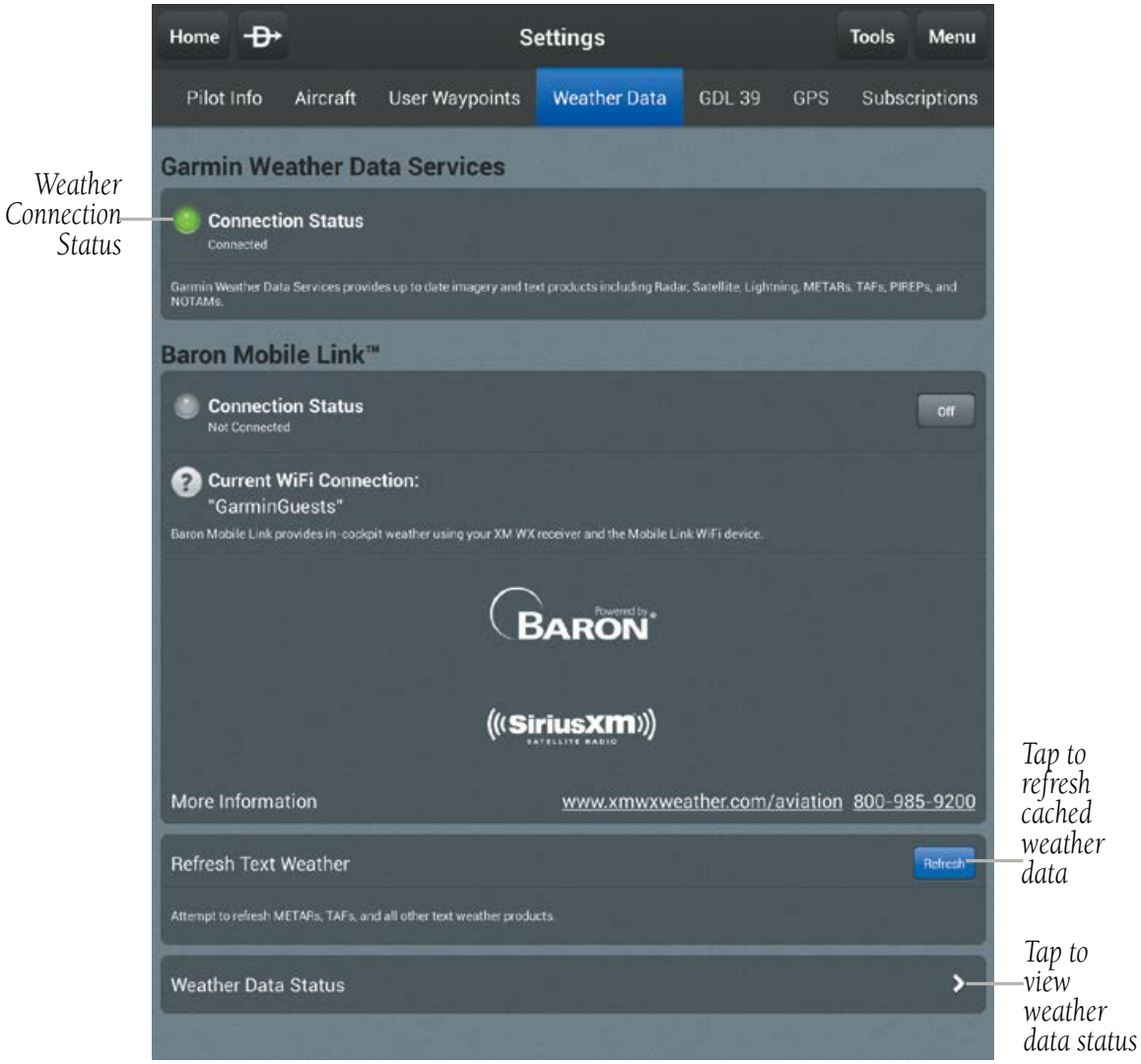
New User Waypoint Dialog

Sharing User Waypoints with D2™ Pilot Watch:

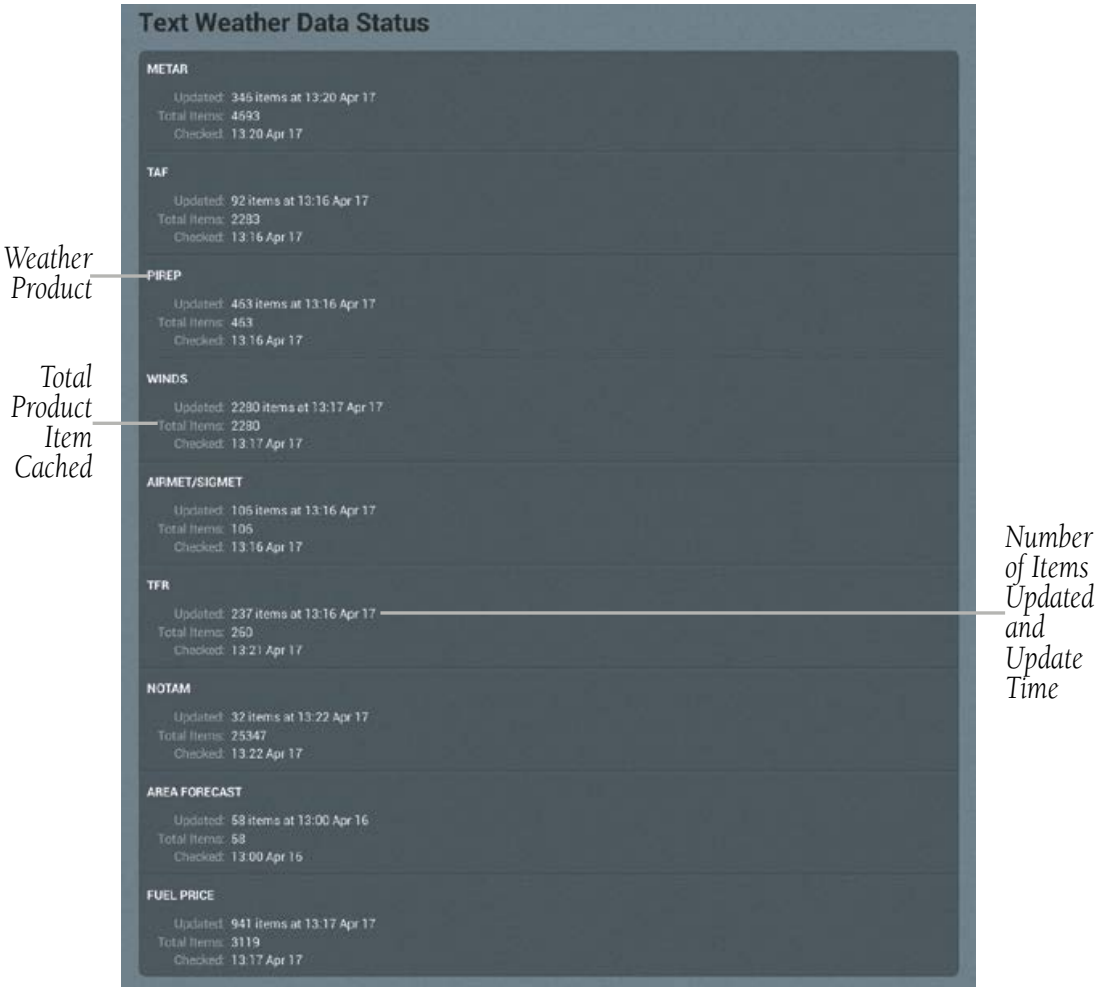
1) From any page,, tap **Home** > **Settings > User Waypoints** Tab to display the list of user waypoints.
2) Ensure the D2 Pilot Watch is in 'Share Mode' tap, **Menu** > **Send to D2,** for each waypoint. Waypoints that have been shared with D2 will display a light blue check mark.
3) Touch **Done** to finish and exit sharing mode.

WEATHER DATA

The Weather Data 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 GDL 39 Tab. Weather data is available from three sources, Garmin Weather Data Services, FIS-B weather via a GDL 39, GDL 39 3D, or SiriusXM Weather via a Baron Mobile Link™. Garmin Weather Data Services requires a data connection through Wi-Fi or cellular network. Baron Mobile Link™ weather, and FIS-B weather, require additional hardware. Baron Mobile Link also requires a subscription to SiriusXM Weather.



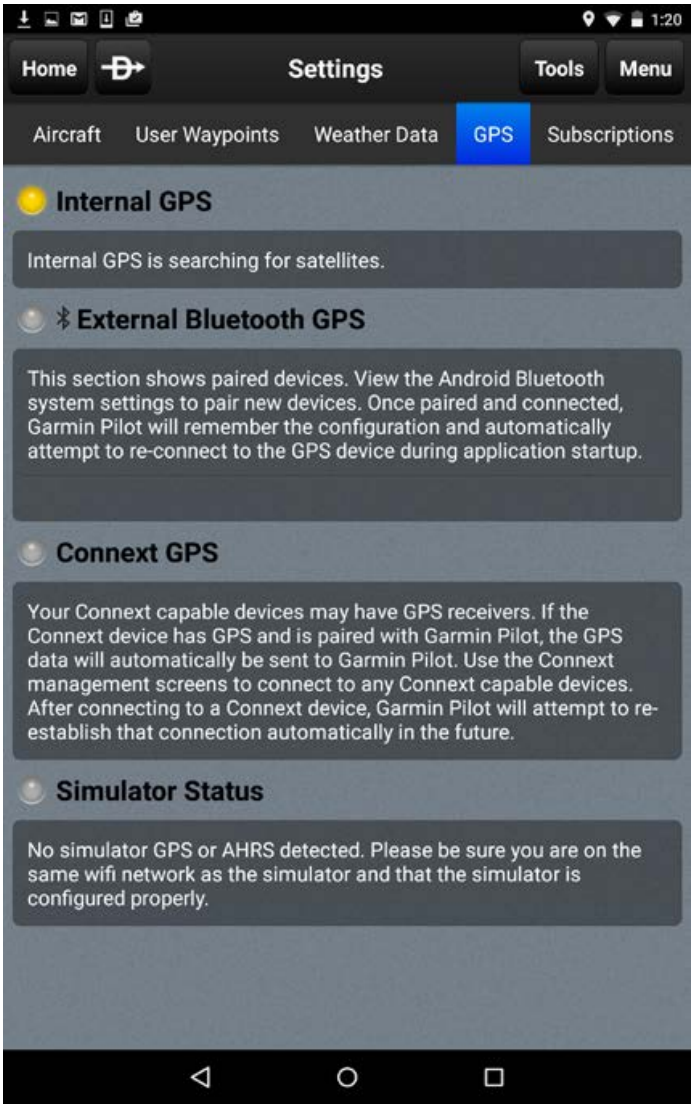
Weather Data Services



Weather Data Status

GPS

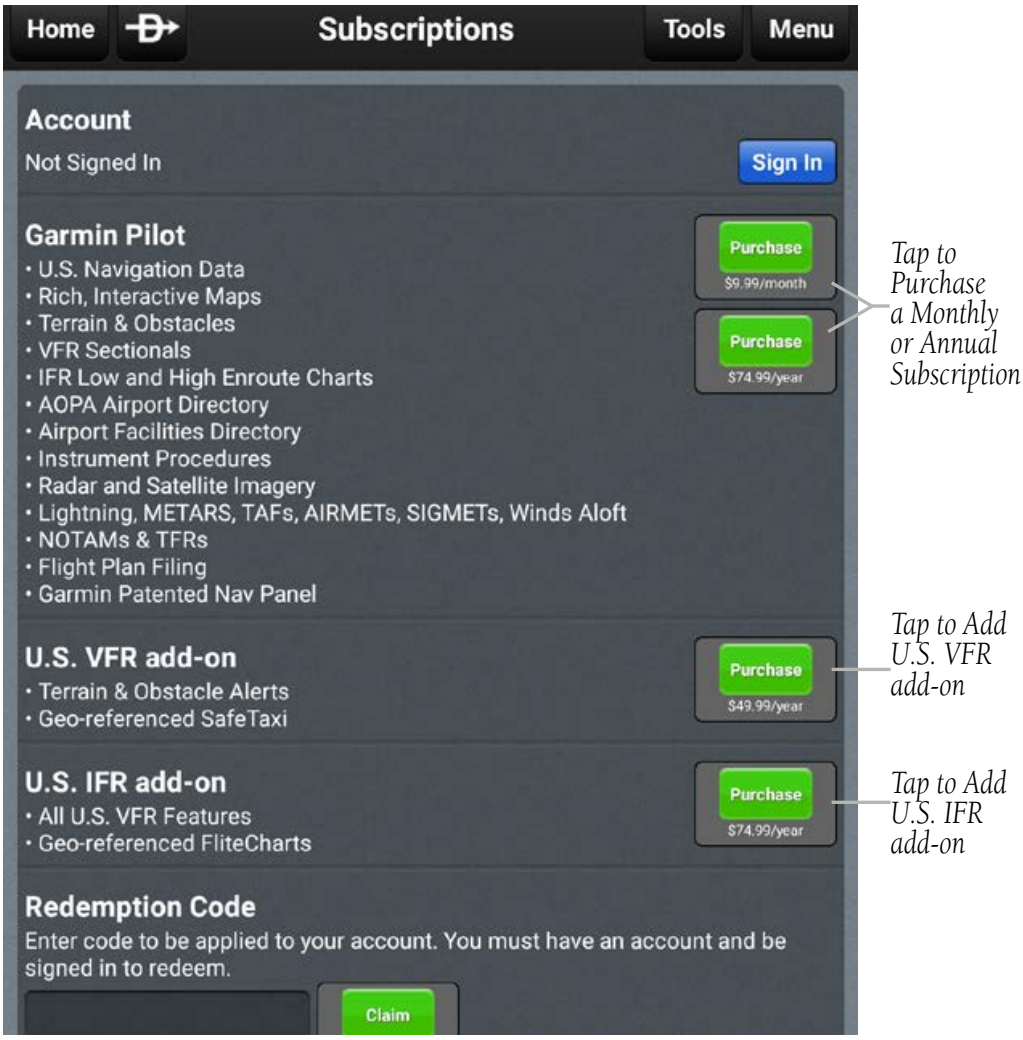
Most Android devices are built with an internal GPS receiver. These may work fine in smaller aircraft but often a stronger, external GPS receiver is necessary. If your Android device does not include a GPS receiver, a Garmin GLO™ portable GPS and GLONASS receiver, or a Connext GPS and ADS-B receiver 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.



External GPS Tab

SUBSCRIPTIONS

The Subscriptions Tab provides information about the status of any subscription associated with your Garmin Pilot Account and the ability to purchase annual or monthly subscriptions or renew expired subscriptions. Tap the green icon associated with the desired subscription and enter your Google credentials. The subscription fee will be charged to your Google play account. If you already have Garmin Pilot subscriptions, log in to your Garmin Pilot account to view subscriptions, expiration dates, as well as share routes, aircraft, and pilot information. With an active subscription Garmin Pilot can be installed on up to two devices at the same time, typically a mobile phone and a tablet device.



Subscriptions

CONNEXT

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

Touch **Home > Connext** 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 Window

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 version 7.0 and later.*

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, tap **Home** > **Settings**.
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

Caution: *Never remove power from the GDL 39 or power off the Andriod 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.*

GDL 39 Firmware Warning

Pairing an Android device with a GDL 39:

1) Power on the GDL 39. The GDL 39 will automatically enter Bluetooth pairing mode.
2) On the Android device, go to **Settings** > **Bluetooth.** Ensure Bluetooth is **On** and select the GDL 39 from the list of available devices.
3) Acknowledge the Bluetooth pairing request message that appears.
4) Touch **Home** > **Connext** > **GDL 39.**
5) Select the paired Bluetooth device from the drop-down list.
6) Touch **Connect**.

Viewing GDL 39 / GDL 39 3D Status (including Ground Stations, Traffic, and Weather):

1) From any page, tap **Home** > **Settings**.
2) Tap the GDL 39 Tab.

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

1) From any page, tap **Home** > **Settings.**
2) Tap the GDL 39 Tab.
3) Tap 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.*

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.

GLO wirelessly pairs to your iPad using Bluetooth technology.

Pairing an Andorid device with GLO:

1) Power on GLO. GLO will automatically enter Bluetooth pairing mode.
2) On the Android device, go to **Settings** > **Bluetooth**. Ensure Bluetooth is **On** and select GLO from the list of available devices.
3) Acknowledge the Bluetooth pairing request message that appears.
4) Touch **Home** > **Connext** > **GLO.**
5) Select the paired Bluetooth device from the drop-down list.
6) Touch **Connect**.

Displaying GLO Firmware Verson, Connection Status, and Battery Level:

1) From any page touch **Home** > **Connext**.
2) Touch the **GLO** Tab.

Displaying GLO GPS Status:

1) With GLO paired to your Android device, from any page touch **Home** > **Connext**.
2) Touch the **Situational Data** Tab.

Connext Page (Situational Data Tab)

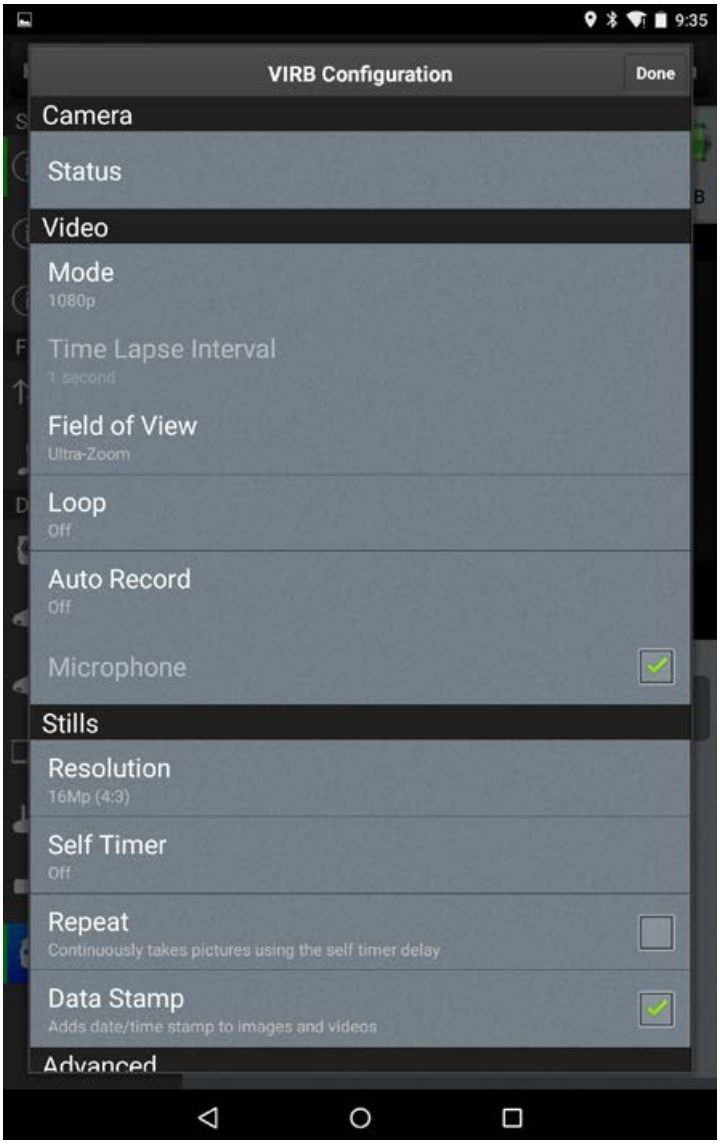
NOTE: *When connected to GLO, the device GPS information is replaced with GLO GPS information. The GLO receiver is capable of updating position information ar a much higher frequency, thus providing more accurate GPS position information.*

VIRB ELITE ACTION CAMERA

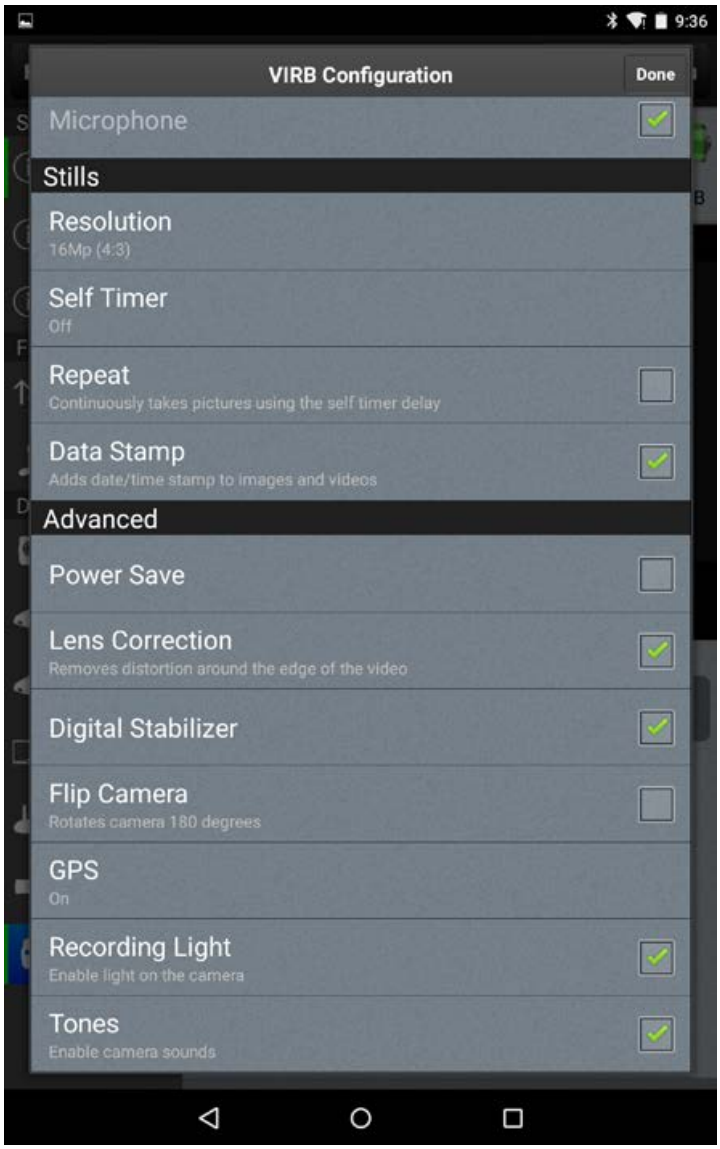
Garmin Pilot allows the user to remotely control the VIRB to start and stop video recording as well as take still photos.

Configuring Camera Settings:

1) From any page touch **Home** > **Connext** > **VIRB Elite** Tab.
2) Touch **Configure Camera Settings.**



Connext Page (VIRB Elite Tab)



Connext Page (VIRB Elite Tab)

Recording using the VIRB Elite:

1) From any page touch **Home** > **Connext** > **VIRB Elite** Tab.
2) Touch **Start Recording/Stop Recording**.

Or:

1) From any Map Page touch **Menu** > **Split Screen** > **VIRB Elite.**
2) Touch **Start Recording/Stop Recording**.

Taking a photo us the VIRB Elite:

1) From any page touch **Home** > **Connext** > **VIRB Elite** Tab.

2) Touch **Take Photo**.

Or:

1) From any Map Page touch **Menu** > **Split Screen** > **VIRB Elite.**

2) Touch **Take Photo**.

VIRB Elite (Split-Screen)

D2™ PILOT WATCH

Garmin Pilot can share Flight Plans with the Garmin D2™ Pilot Watch via a Bluetooth connection. When the Garmin D2™ Pilot Watch is in 'Share Mode' it will automatically pair with your Android device.

NOTE: D2™ *route sharing is only available with Android devices that support Bluetooth 4.0 +.*

Sending User Waypoints to the D2™ Pilot Watch:

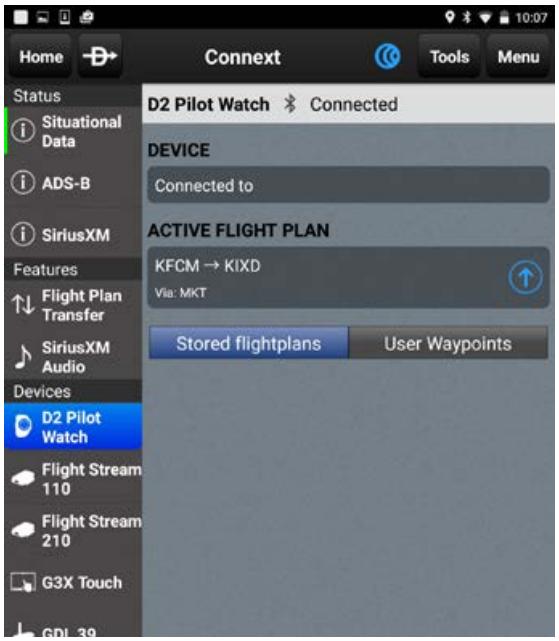
1) From any page touch **Home** > **Connext** > **D2 Pilot Watch** Tab.
2) Ensure the D2™ Pilot Watch is in 'Share Mode'. Touch **Send** next to the desired waypoint to send. Watpoints that have been shared with D2™ will momentarily display a green checkmark.

Sending Flight Plans to the D2™ Pilot Watch:

From any page touch **Home** > **Flight Plan** > **Menu** > **Share Flight Plan**. Ensure the D2™ Pilot Watch is in 'Share Mode' to receive flight plan data.

Or:

1) From any page touch **Home** > **Connext** > **D2 Pilot Watch** Tab.
2) Touch next to the desired flight plan to send.



Connext Page (D2 Pilot Watch Tab)

FLIGHT STREAM

NOTE: *Up to two mobile devices can be simultaneously connected to a Flight Stream 110 or 220.*

Flight Stream is a wireless Bluetooth gateway that integrates pre-flight and in-flightactivities by enabling bi-directional communication between Garmin avionics and Garmin Pilot.

Flight Stream is compatible with GTN 650/750, GNS WAAS Navigators, GDL 88, and GDL 69(A).

Flight Stream & Remote Capabilities	Flight Stream 110	Flight Stream 210
GPS (Position, Velocity, and Time)	✓	✓
ADS-B Weather and Traffic	✓	✓
SXM Weather	✓	✓
SXM Audio Remote Control	✓	✓
Attitude Information		✓
Two-way Flight Plan Transfer		✓
GDL 88 and GDL 696/69A Compatible	✓	✓
GTN Series and GNS 430W/530W Compatible		✓

Flight Stream 110/210 Capabilities

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.

- The GTN 650/750 or GNS 430W/530W shares GPS information with Garmin Pilot.
- Remotely control SiriusXM satellite radio from Garmin Pilot.

Flight Steam 210 enables all of the above communications including:

- Flight plan transfer to and from a GTN 650/750 or GNS 430W/530W.
- Adding of victor airways into flight plans from Garmin Pilot to GNS 430W/530W navigators.
- Shares attitude information to the Garmin Pilot's Synthetic Vision and panel displays.

Pairing an Android device with Flight Stream 110:

1) Power on the Flight Stream 110 with your aircraft avionics. The Flight Stream 110 will automatically enter Bluetooth pairing mode.
2) On the Android device, go to **Settings** > **Bluetooth**. Ensure Bluetooth is **On** and select the Flight Stream 110 from the list of available devices.
3) Acknowledge the Bluetooth pairing request message that appears.
4) Touch **Home** > **Connext** > **Flight Stream 110.**
5) Select the paired Bluetooth device from the drop-down list.
6) Touch **Connect**.

Pairing an Android device with Flight Stream 210:

1) Power on the Flight Stream 210 with your aircraft avionics. If the Flight Stream 210 is not connected to a display unit (e.g., GTN 750/650 or GNS 430W/530W), it will automatically enter Bluetooth pairing mode 1 minute after being powered on.
2) If the Flight Stream 210 is connected to a display unit, navigate to the Connext Bluetooth Setup Page on the display unit. The Flight Stream 210 will enter Bluetooth pairing mode.
3) On the Android device, go to **Settings** > **Bluetooth**. Ensure Bluetooth is **On** and select the Flight Stream 210 from the list of available devices.
4) Acknowledge the Bluetooth pairing request messages that appear on the Android device and on the display unit (if applicable).
5) Touch **Home** > **Connext** > **Flight Stream 210.**
6) Select the paired Bluetooth device from the drop-down list.
7) Touch **Connect**.

Enabling auto reconnect of paired devices:

1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **Flight Stream 110** or **Flight Stream 210** Tab.
3) Touch the **Auto Reconnect** switch to enable/disable auto reconnect on the desired device(s).

Deleting paired devices:

1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **Flight Stream 110** or **Flight Stream 210** Tab.
3) Touch ⊖ next to the desired device.

Flight Stream 210 Tab (Connext Page)

TROUBLESHOOTING FLIGHT STREAM 110/210

If a Bluetooth connection cannot be established, it may be neccessary to remove the Flight Stream 110/210 from the list of available devices on the Android device and repeat the pairing instructions.

Removing Flight Stream 110/210 from the 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 (**i**) symbol next to Flight Stream 110 or 210.
3) Touch **Forget this Device**.
4) Repeat the pairing instructions.

SITUATIONAL DATA

Flight Stream 110/210 enables Garmin Pilot to access the same GPS information utilized by the GTN or GNS WAAS series display units. In addition, Flight Stream 210 shares attitude information to the Garmin Pilot's Synthetic vision and panel displays.

Viewing Flight Stream situational data:

NOTE: *Ensure the Flight Stream 110/210 is paired to your Android device.*

1) From the Garmin Pilot, touch **Menu** > **Connext**.
2) Touch the **Situational Data** Tab.

Flight Stream 210 Tab (Connext Page)

AHRS and Altitude Information (Flight Stream 210)

When connected to the Flight Stream 210, 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.

Panel (with Flight Stream 210)

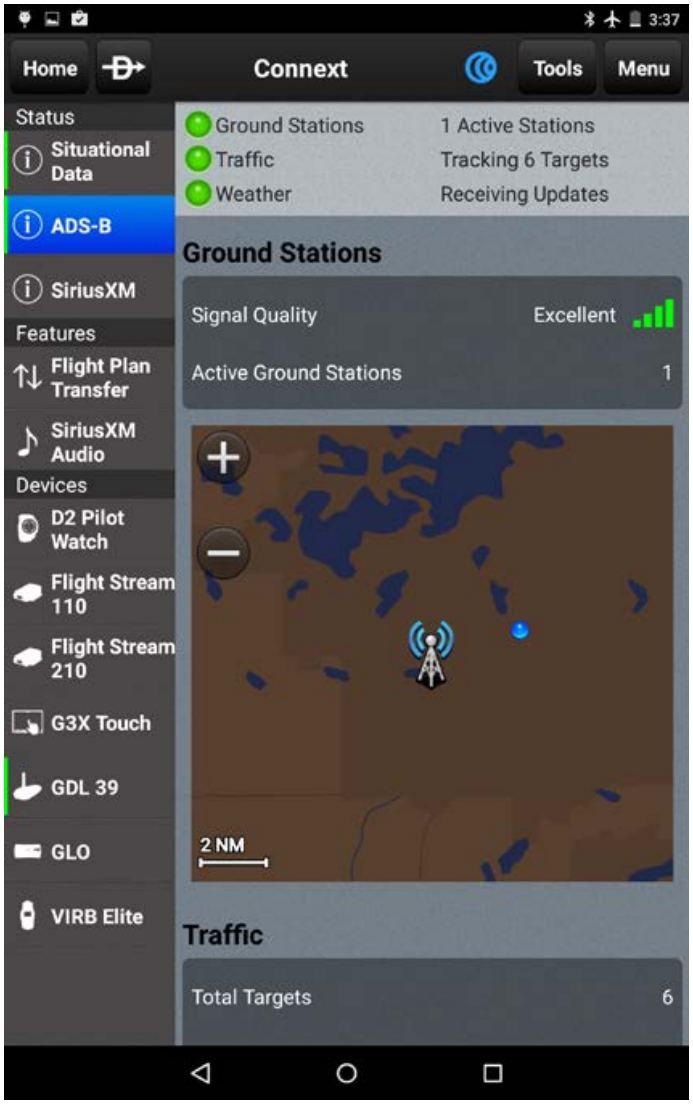
ADS-B

For installations with a GDL 88 ADS-B datalink, traffic and FIS-B weather information can be displayed using Garmin Pilot.

Viewing Flight Stream ADS-B traffic and weather data:

NOTE: *Ensure the Flight Stream 110/210 is paired to your Android device.*

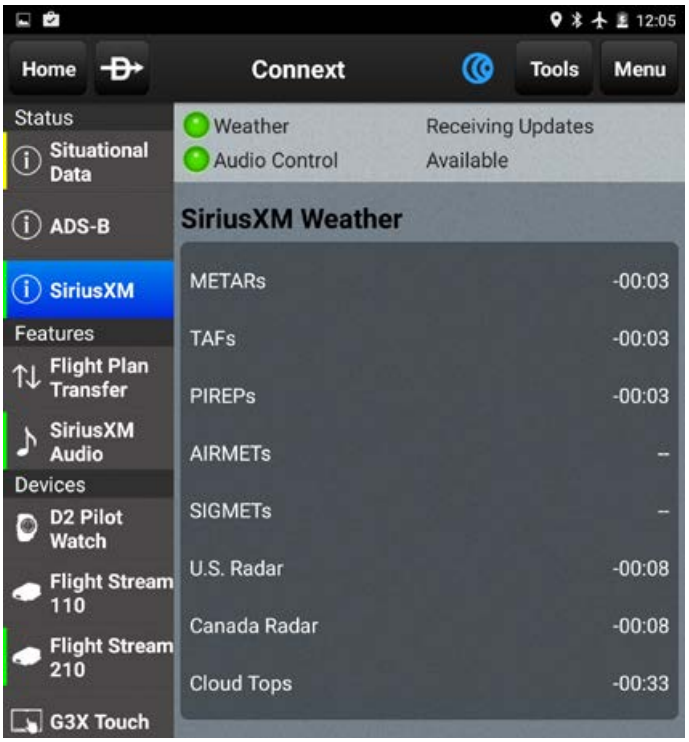
1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **ADS-B** Tab.



ADS-B (Connext Page)

SIRIUSXM

Sirius XM weather information is shared with Garmin Pilot for installations with a GDL 69/GDL 69A Sirius XM datalink. In addition, remote control of SiriusXM satellite radio from Garmin Pilot is available.



SiriusXM Tab (Connext Page)

SiriusXM Weather

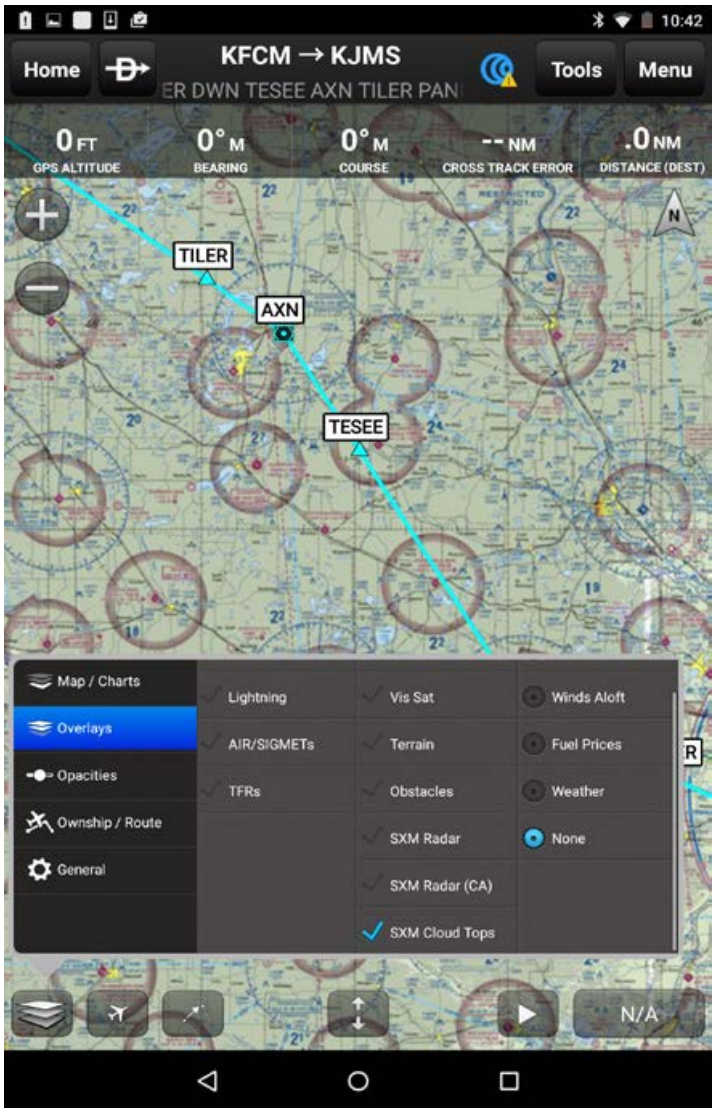
NOTE: *Ensure the Flight Stream 110/210 (wired to a GDL 69/GDL 69A) is paired to your Android device.*

Displaying SiriusXM radar overlay on Garmin Pilot:

1) From the Garmin Pilot, touch **Home** > **Map**.
2) Touch > **Overlays**.
3) Touch to expand the **Radar** options.
4) Touch **SXM U.S.** or **SXM CA**.

Displaying SiriusXM cloud overlay on Garmin Pilot:

1) From the Garmin Pilot, touch **Home** > **Map**.
2) Touch > **Overlays**.
3) Touch **SXM Cloud Tops.**



Map Page (Sirius XM Weather Overlays)

SiriusXM Audio Remote Control

NOTE: *Ensure the Flight Stream 110/210 (wired to a GDL 69/GDL 69A) is paired to your Android device.*

Adjusting the SiriusXM volume using Garmin Pilot:

1) From the Garmin Pilot, touch **Home** > **Connext**.

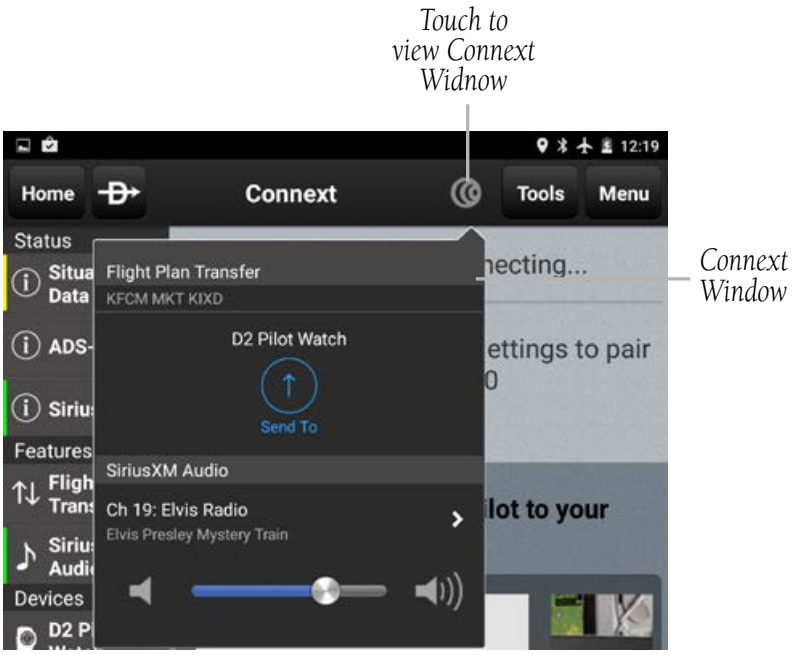
2) Touch the SiriusXM Audio Tab.

3) Touch the volume slider to adjust volume.

Or:

1) From the Garmin Pilot touch to display the Connext Window.

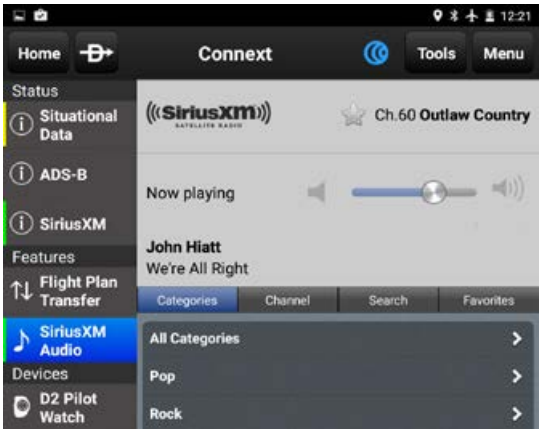
2) Touch the colume slider to adjust the volume.



SiriusXM Tab (Connext Page)

Selecting a SiriusXM category using Garmin Pilot:

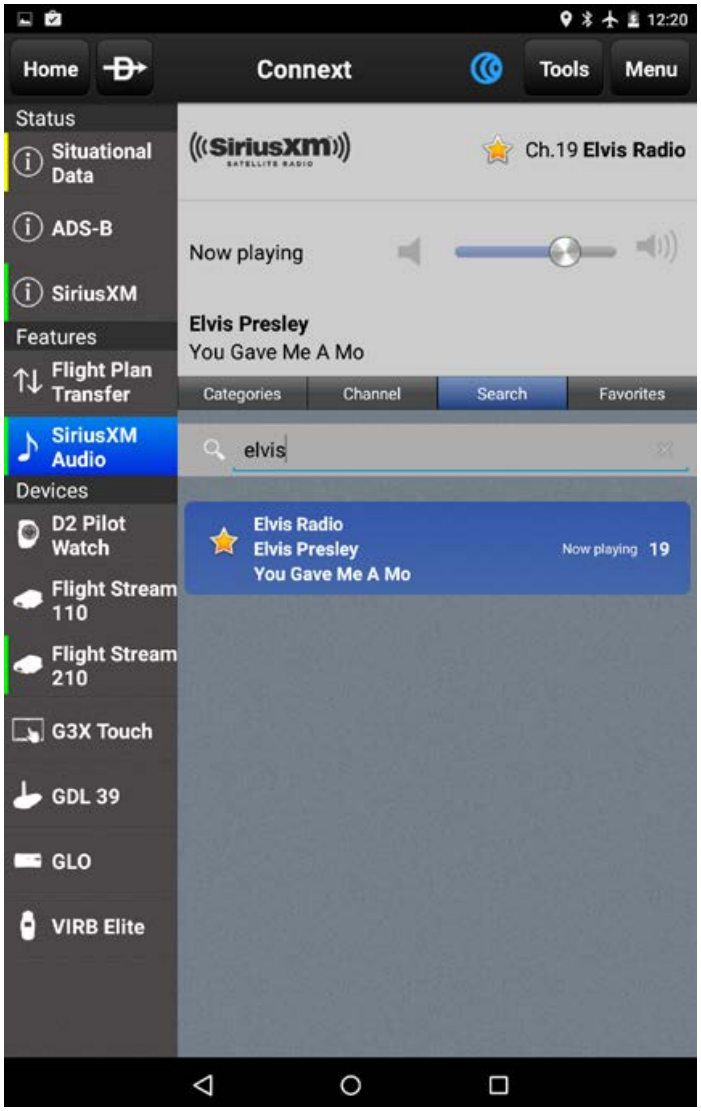
1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **SiriusXM Audio** Tab.
3) Touch the **Categories** Button.
4) Touch the desired category from the list.



SiriusXM Audio Tab (Categories)

Searching SiriusXM Satellite Radio using Garmin Pilot:

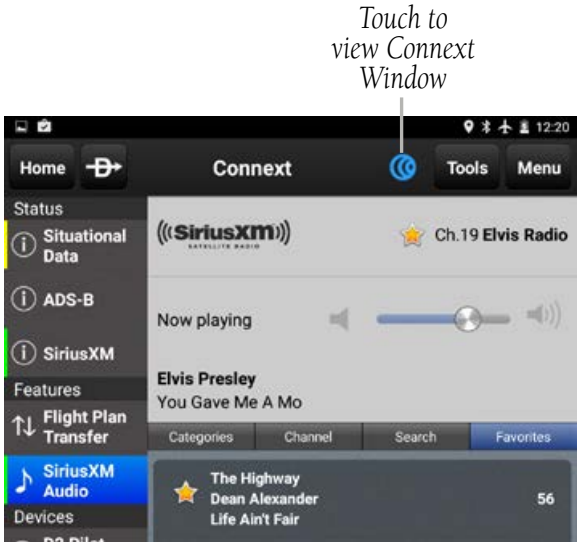
1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **SiriusXM Audio** Tab.
3) Touch the **Search** Button.
4) Enter the artist or song using the keypad.
5) Touch **Search** on the keypad.



SiriusXM Audio Tab (Search)

Adding a Channel to Favorites using Garmin Pilot:

1) From the Garmin Pilot, touch **Home** > **Connext**.
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 the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **SiriusXM Audio** Tab.
3) Touch the **Favorites** Button.

WIRELESS FLIGHT PLAN TRANSFER

Flight Stream 210 uses Bluetooth technology to transfer flight plan informtion between Garmin Pilot and a GTN 650/750 or GNS 430W/530W.

Sending a flight plan from Garmin Pilot to a display unit:

NOTE: *Ensure the Flight Stream 210 is paired to your Android device.*

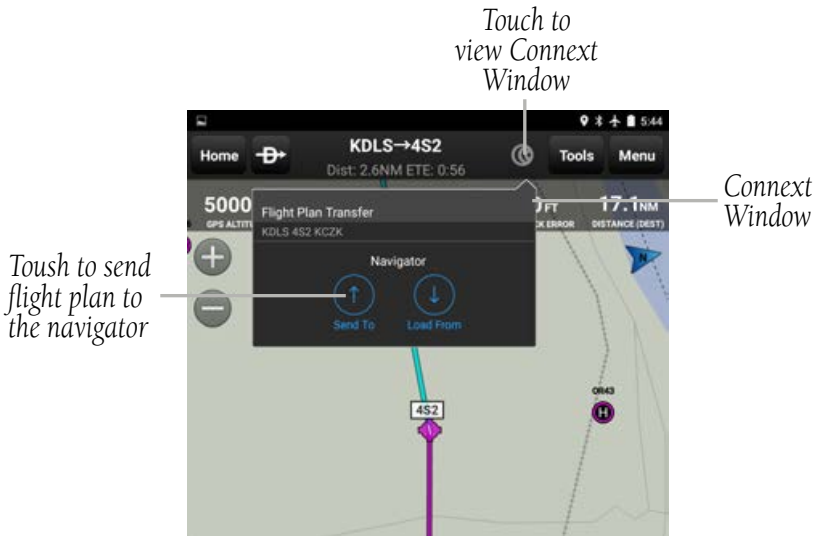
1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **Flight Plan Transfer** Tab.

Flight Plan Transfer Tab (Connext Page)

3) Touch **Send**.

Or:

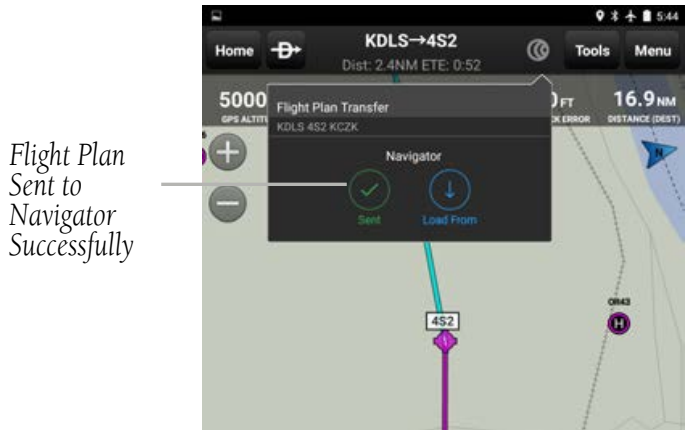
1) From the Garmin Pilot touch to display the Connext Window.



Connext Window

2) Touch **Send To** .

3) **Sent** is displyed.



Flight Plan Sent to Navigator

Loading a flight plan from a display unit to Garmin Pilot:

NOTE: *Ensure the Flight Stream 210 is paired to your Android device.*

1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **Flight Plan Transfer** Tab.

Flight Plan Transfer Tab

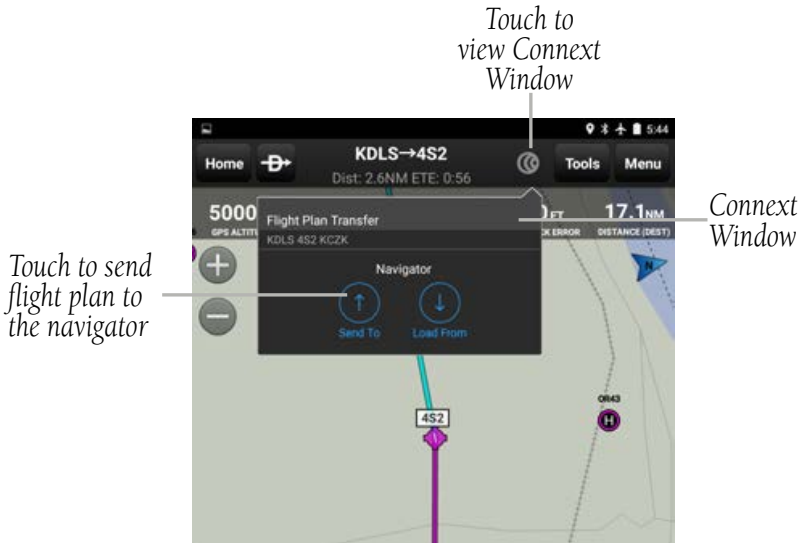
Touch to load flight plan from navigator

Flight Plan Transfer Tab (Connext Page)

3) Touch **Load**.

Or:

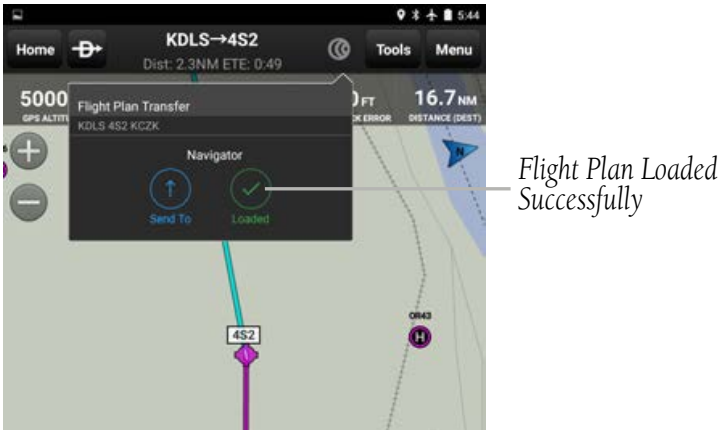
1) From the Garmin Pilot touch to display the Connext Window.



Connext Window

2) Touch **Load From**.

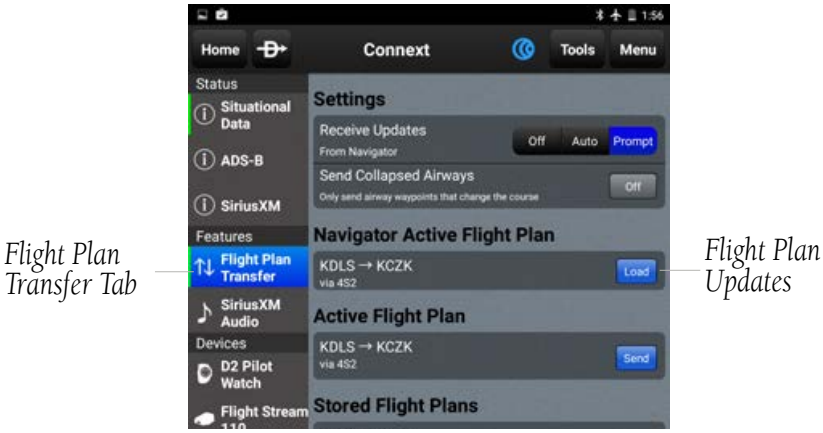
3) **Loaded** is displayed.



Flight Plan Loaded From Navigator

Receiving flight plan updates from a display list:

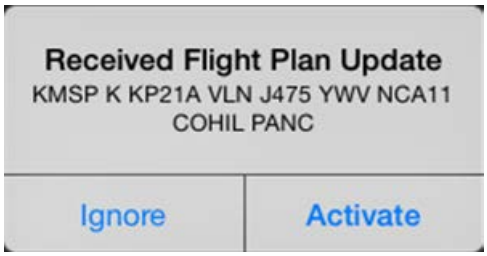
1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **Flight Plan Transfer** Tab.
3) Touch **Off, Auto, or Prompt.**



Flight Plan Transfer Tab (Connect Page)

Activating/Ignoring flight plan updates from a display unit:

Touch **Ignore** or **Activate** when the Flight Plan Update Window appears.



Flight Plan Update Window

G3X TOUCH

NOTE: *Interfacing with Android devices requires a Connext config module for proper Bluetooth operation. Without this config 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 GDL 39/39R, 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.*

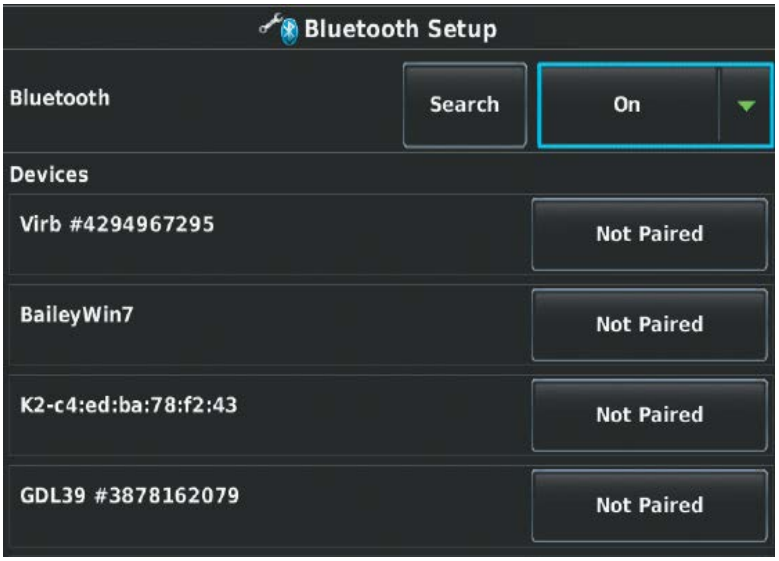
Connext Bluetooth Supported Configurations	
One or two Android or iOS devices may be connected to the G3X Touch	
One Android or iOS* device may be connected to both a GDL 39/39R and a G3X Touch. A second Android or iOS* device may be connected to either the GDL 39/39R or the G3X Touch, but not both.	

*iOS Garmin Pilot 7.2+ with location data disabled

Pairing an Android device with the G3X Touch:

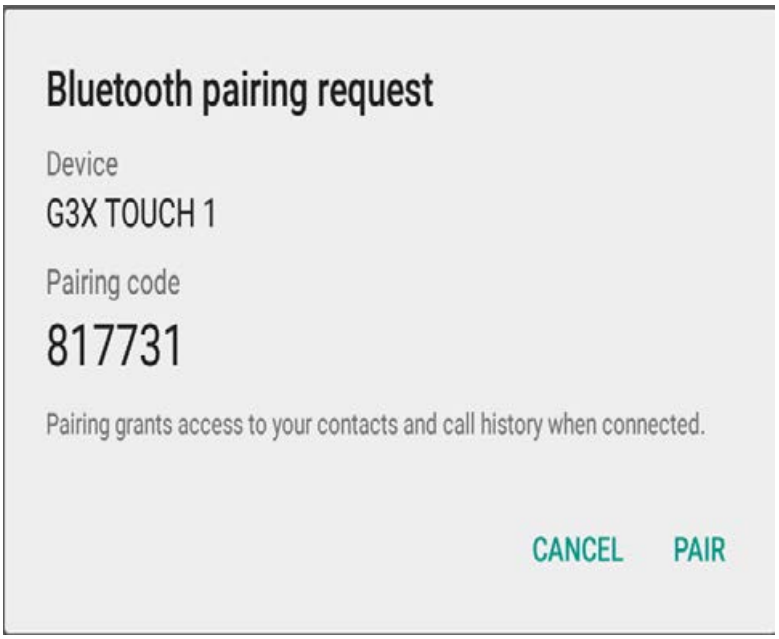
NOTE: *Bluetooth pairing to the G3X Touch may be established from the Android settings page with the G3X touch Bluetooth Setup Page selected and visible.*

1) Power on the Android device and ensure Bluetooth® is turned on in Settings.
2) Refer to the Android device's documentation for instructions on making the device discoverable.
3) Refer to the Android device's documentation for instructions on finding the device name. Take note of the device name as it is the name you will want to select in step 6.
4) From the G3X Touch, touch **MENU** > **MENU** > **Setup** > **Bluetooth**.
5) If Bluetooth is set to **Off** on the G3X Touch, touch the **Bluetooth** > **On**. The G3X Touch will begin searching for devices.
6) When the G3X Touch has completed the search for available devices, touch **Not Paired** next to the Android device to be paired.



G3X Touch Bluetooth Setup Page

7) The first time a device is paired, a Bluetooth Pairing Request may be displayed to confirm what device you are attempting to pair with. Touch **Pair** on the Android device to confirm that the passkey is displayed on the G3X Touch.



Android Settings Page

8) Touch **OK** on the G3X Touch. When the device is paired, **Connected** is displayed next to the device.

Bluetooth Passkey Window (G3X Touch)

NOTE: *Once an Android device is initially paired to the G3X Touch, the Bluetooth connection is automatic each time both devices are powered up.*

G3X Touch Tab (Connext Page)

TROUBLESHOOTING G3X TOUCH

If a Bluetooth connection cannot be established, it may be neccessary to remove the G3X Touch from the list of available devices on the Android device and repeat the pairing instructions.

Removing G3X Touch from the 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 (**i**) symbol next to the G3X Touch.
3) Touch **Forget this Device**.
4) Repeat the pairing instructions.

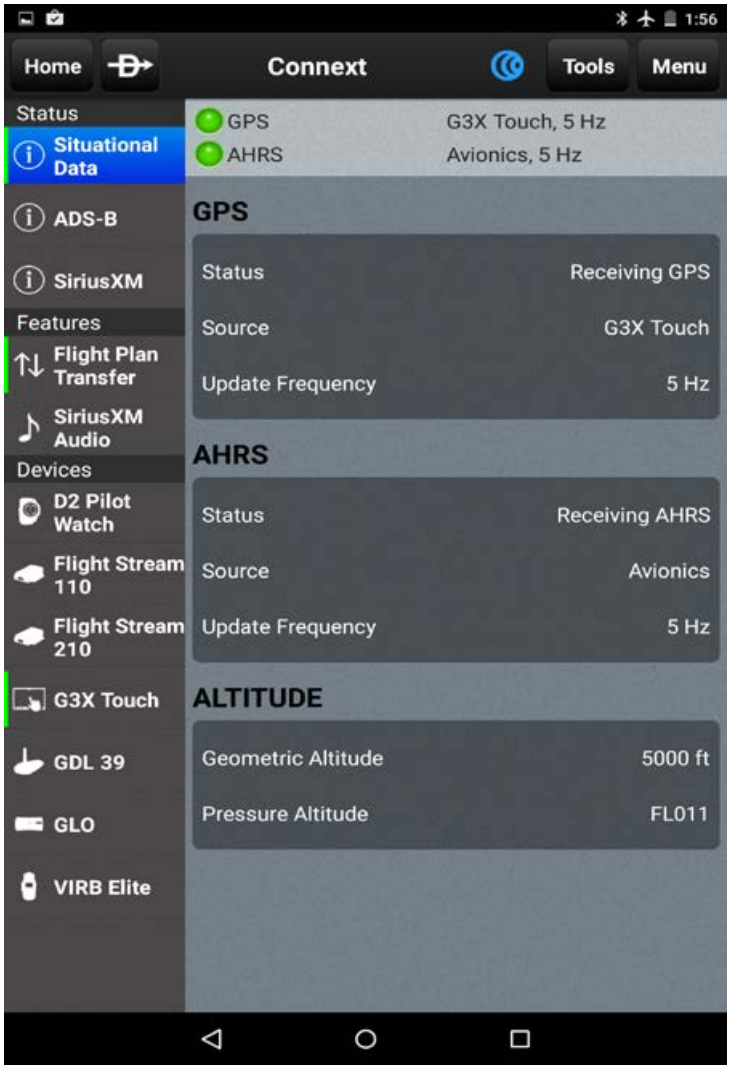
SITUATIONAL DATA

When paired with the G3X Touch, Garmin Pilot has to access the same GPS information utilized by the G3X Touch. In addition, the G3X Touch shares attitude information to the Garmin Pilot's Synthetic vision and panel displays.

Viewing G3X Touch situational data:

NOTE: *Ensure the G3X Touch is paired to your Android device.*

1) From the Garmin Pilot, touch **Menu** > **Connext**.
2) Touch the **Situational Data** Tab.



Situational Data Tab (Connext Page)

AHRS and Altitude Information (G3X Touch)

When connected to the G3X Touch, 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.

Panel (with G3X Touch connected)

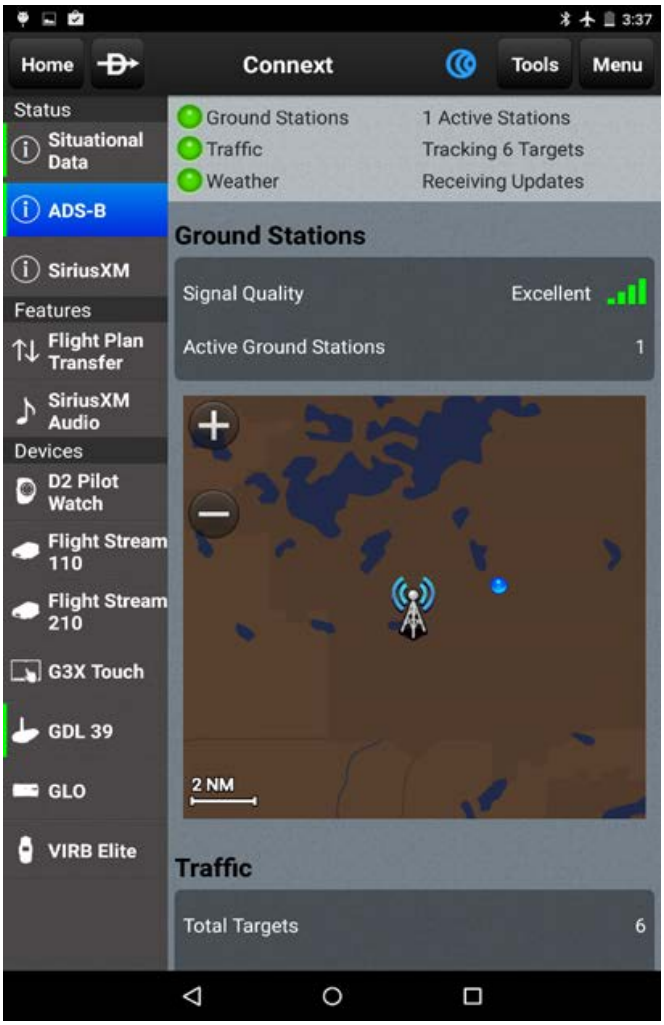
ADS-B

A G3X Touch with a GDL 39 hardwired or connected via Bluetooth, traffic and FIS-B weather information is available by pairing your Android device directly to the GDL 39. ADS-B data does not travel from the G3X Touch to Garmin Pilot.

Viewing ADS-B traffic and weather data:

NOTE: *Ensure the G3X Touch and the GDL 39/39R are paired to your Android device. The G3X Touch will not pass ADS-B data through to the Garmin Pilot even if the GDL 39R is wired to it.*

1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **ADS-B** Tab.



ADS-B Tab (Connext Page)

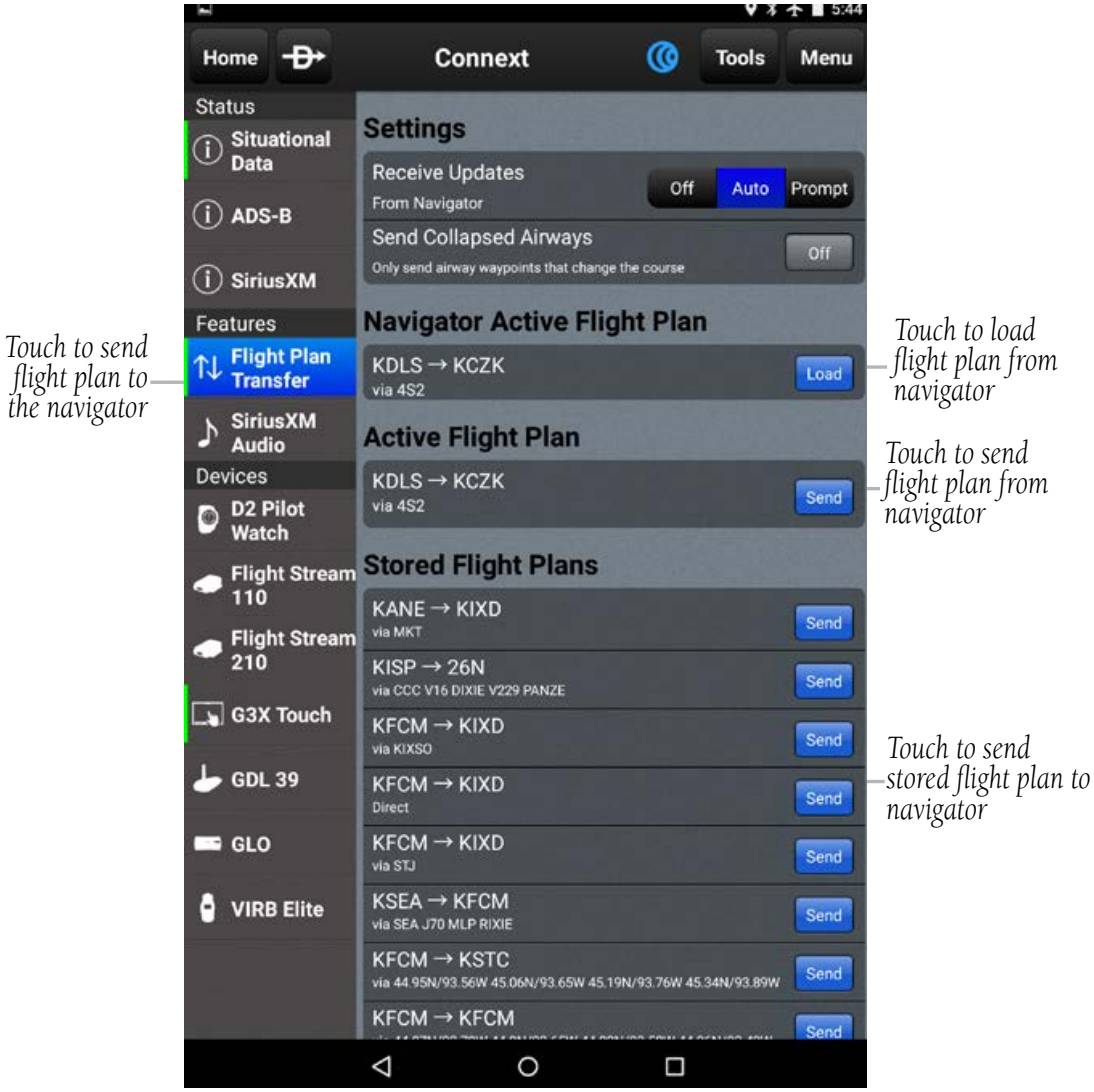
WIRELESS FLIGHT PLAN TRANSFER (G3X TOUCH)

G3X Touch uses Bluetooth technology to transfer flight plan information between Garmin Pilot and the G3X Touch.

Sending a flight plan from Garmin Pilot to the G3X Touch:

NOTE: *Ensure the G3X Touch is paired to your Android device.*

1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **Flight Plan Transfer** Tab.

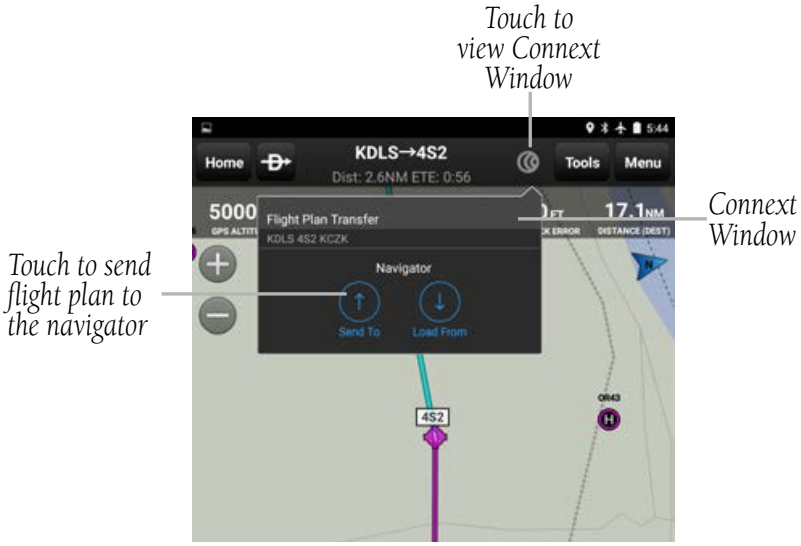


Flight Plan Transfer Tab (Connext Page)

3) Touch **Send**.

Or:

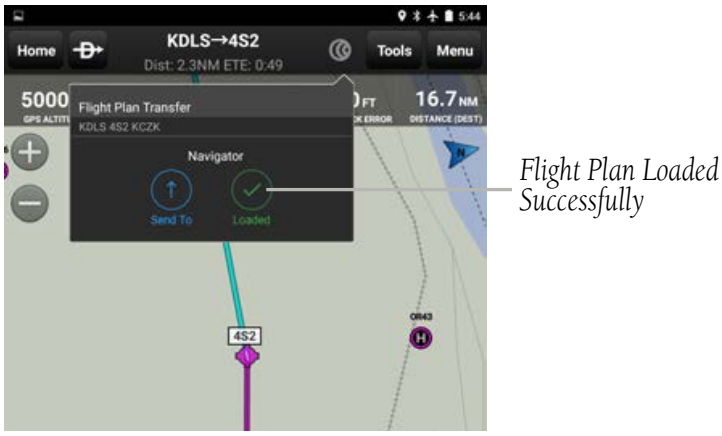
1) From the Garmin Pilot touch to display the Connext Window.



Connext Window

2) Touch **Send To** .

3) **Sent** is displayed.



Flight Plan Loaded From G3X

Loading a flight plan from the G3X Touch to Garmin Pilot:

NOTE: *Ensure the G3X Touch is paired to your Android device.*

1) From the Garmin Pilot, touch **Home** > **Connext**.

2) Touch the **Flight Plan Transfer** Tab.

Flight Plan Transfer Tab

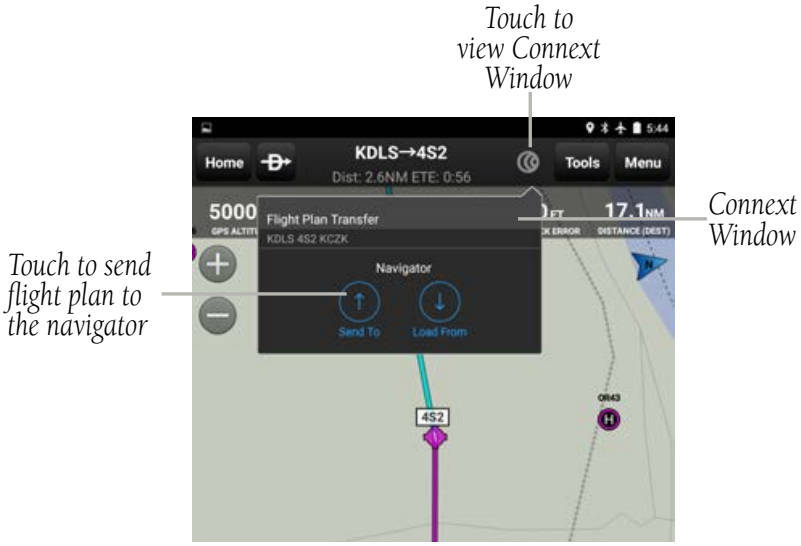
Touch to load flight plan from navigator

Flight Plan Transfer Tab (Connext Page)

3) Touch **Load**.

Or:

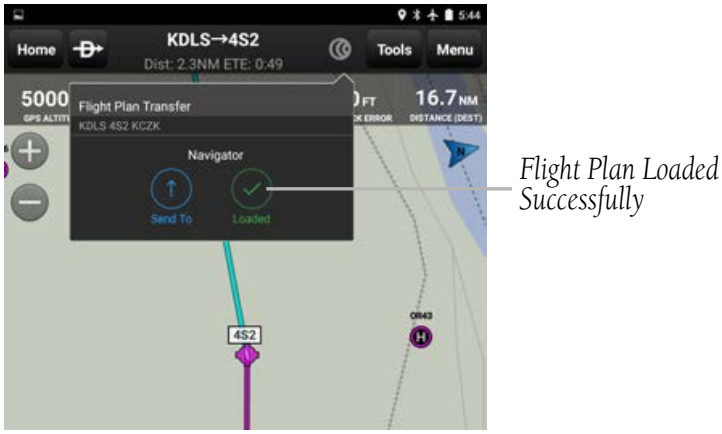
1) From the Garmin Pilot touch to display the Connext Window.



Connext Window

2) Touch **Load From** .

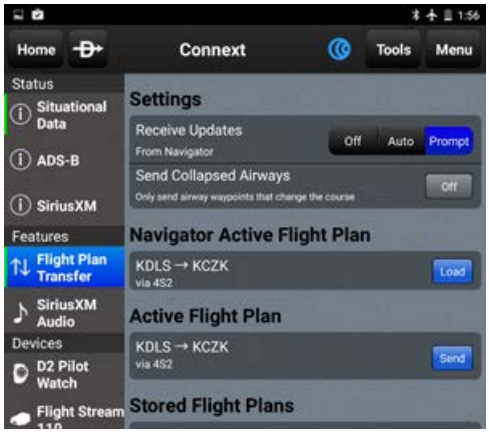
3) **Loaded** is displayed.



Flight Plan Loaded From Navigator

Receiving flight plan updates from a G3X:

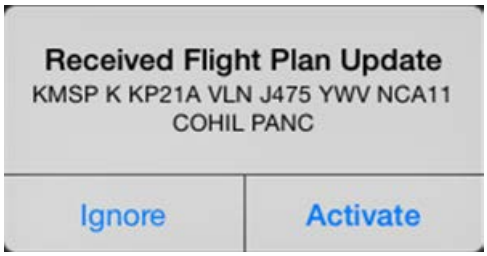
1) From the Garmin Pilot, touch **Home** > **Connext**.
2) Touch the **Flight Plan Transfer** Tab.
3) Touch **Off, Auto, or Prompt.**



Flight Plan Transfer Tab (Connect Page)

Activating/Ignoring flight plan updates from a G3X:

Touch **Ignore** or **Activate** when the Flight Plan Update Window appears.



Flight Plan Update Window

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.*

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 tap the file folder in the lower right corner and tap **Select All** from the list or tap the outlined area for the desired chart(s). After selecting the chart(s) to download tap 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.

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

Downloading US Navigation Data, Airport Info or SafeTaxi:

1) From any page, tap **Home** > **Downloads**.
2) Tap to begin downloading the desired information.

Downloads Page

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

1) From any page, tap **Home** > **Downloads**.
2) From the **Procedures & Charts** list select the submenu for the desired chart.
3) Tap **Current**.
4) Tap the outlined area on the Chart Selection Screen for the desired chart(s).
5) Tap to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

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

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

NOTE: WAC and 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.

1) From any page, tap **Home** > **Downloads**.
2) From the **Procedures & Charts** list select the submenu for the desired chart.
3) Tap **Next**.
4) Tap the outlined area on the Chart Selection Screen for the desired chart(s).
5) Tap to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

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

Downloading Current Cycle Instrument Procedures:

1) From any page, tap **Home** > **Downloads**.
2) From the **Procedures & Charts** list select the submenu for **US Instrument Procedures**.
3) Tap **Current**.
4) Tap the State(s) on the Chart Selection Screen for the desired chart(s).

5) Tap to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

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

Downloading Next Cycle Instrument Procedures:

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

1) From any page, tap **Home** > **Downloads**.
2) From the **Procedures & Charts** list select the submenu for **US Instrument Procedures**.
3) Tap **Next**.
4) Tap the State(s) on the Chart Selection Screen for the desired chart(s).
5) Tap to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

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

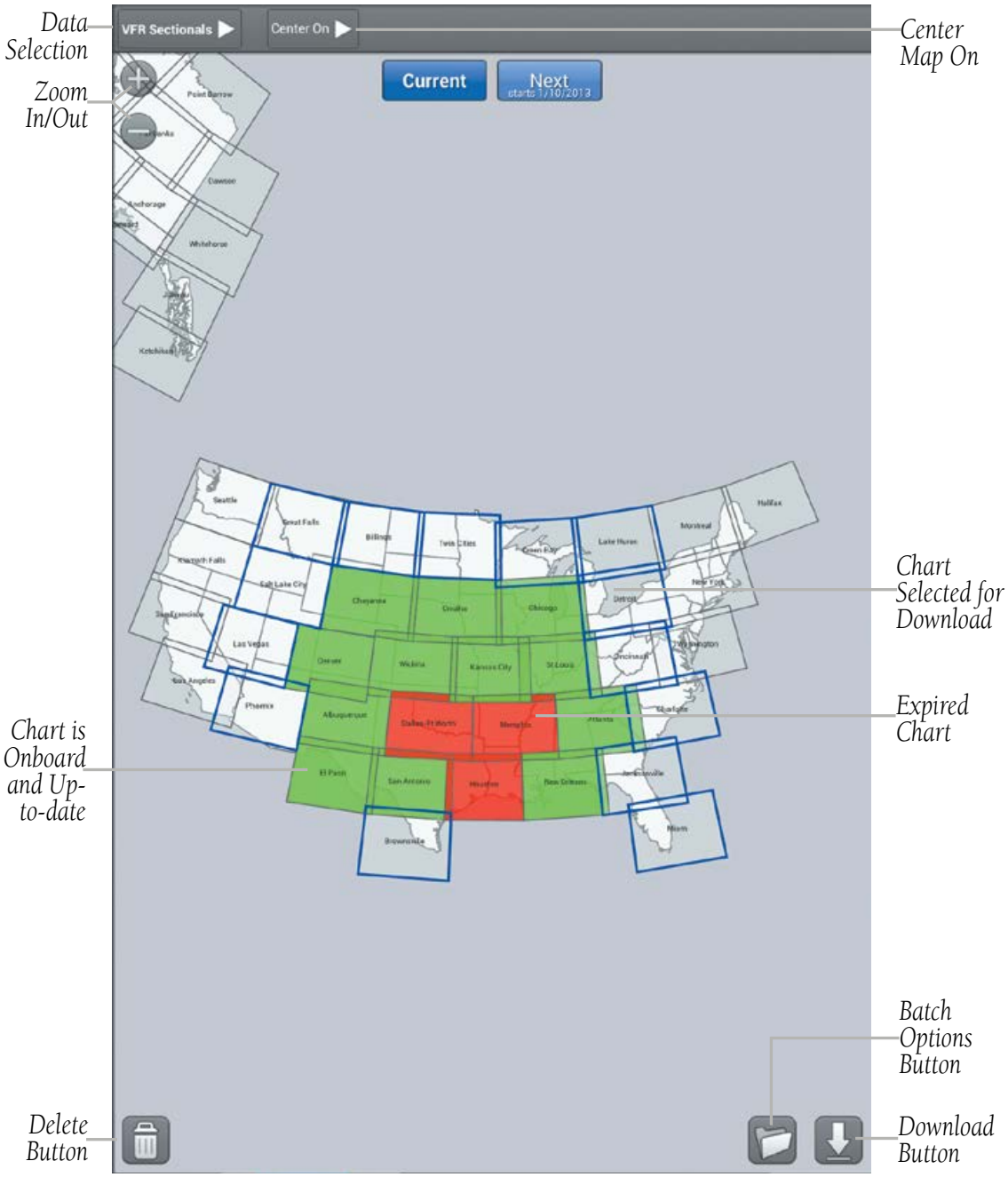


Chart Selection Screen

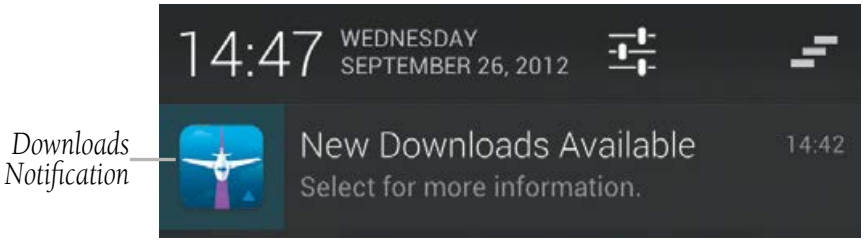
BATCH OPTIONS

The Batch Options Button provides quick access to batch operations including; **Update Expired, Delete Expired, Delete All, Cancel Active Downloads, Reset Selection and Select All.**

CHART UPDATES

NOTE: *Electronic Charts are updated frequently. Always ensure that 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 your 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 Update All (7) button becomes active. The Update All (7) 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, WAC, IFR Low, or IFR High Altitude Charts:

1) From any page, tap **Home** > **Downloads**.
2) Tap **Update All (X)** to update all available charts.

Or:

1) Select the desired chart type submenu.
2) From the Chart Selection Screen tap the expired chart(s), shown in red.
3) Tap 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 tap > **Update Expired** > . The download will begin immediately as shown in the Download Queue.

Updating Instrument Procedures:

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

Or: Tap > **Update Expired** > , to update any expired charts.

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 your route. Add text-based weather widgets and use the exclusive NavTrack feature to view weather information along the planned route.

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, tap within the route field and use the keyboard to add waypoints separated by spaces. Second, tap 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 Plan are synchronized through your Garmin Pilot account and are available on any device with Garmin Pilot.

Creating a Flight Plan:

1) From any page, tap **Home** > **Flight Plan**.
2) Tap within the route field to activate the cursor.
3) Use the keyboard to insert waypoints. Separate each waypoint with a space.

Or:

1) Tap the **Add Waypoint** button.
2) Use the keyboard to input the waypoint identifier.
3) Tap 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:

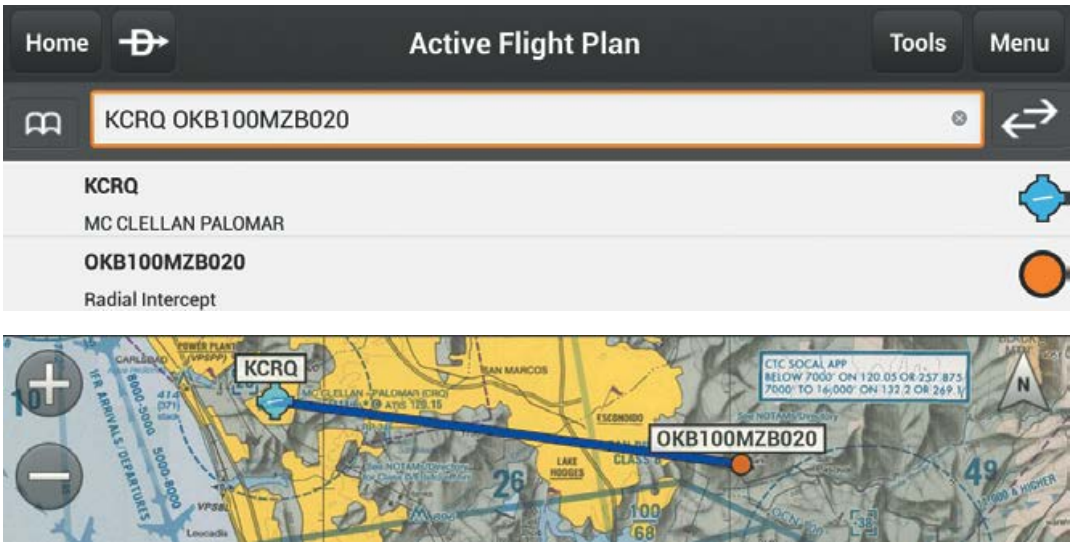
Radial/Distance	Descriptions
MSP/190/035 or MSP/190/35	Identifier/Radial/Distance
MSP190035	IdentifierRadialDistance
Spaces are not allowed, when slashes (/) are used the leading zero can be left off the radial and/or distance.	

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	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.
Add SID	Opens the SID submenu, listing available SIDs. Select the desired SID to open the submenu of available transitions.
Clear Flight Plan	Removes all Flight Plan waypoints.
Expand	Expands SID, STAR, or Airways.
Change SID	Only available when the selected item is a SID. Allows the SID and/or SID transition to be changed.
Remove SID	Only available when the selected item is a SID. Removes SID from Flight Plan.
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.
Change STAR	Opens the Edit STAR submenu with a list of available STARs. Select the desired STAR to open the submenu of available transitions.

Action	Description
Remove STAR	Removes STAR and all associated waypoints.
Add STAR	Opens the STAR submenu, listing available STARs. Select the desired STAR to open the submenu of available transitions.
Activate Leg	Actives the selected leg for navigation.

Action Menu Options

Adding a SID to a Flight Plan:

1) From any page, tap **Home** > **Flight Plan**.
2) Tap the departure point in the Flight Plan List to open the Actions Menu.
3) From the Actions Menu, tap **Add SID**.
4) Tap the desired SID.
5) Tap the desired transition. The SID, transition and associated waypoints are added to the flight plan.

Adding a STAR to a Flight Plan:

1) From any page, tap **Home** > **Flight Plan**.
2) Tap the destination in the Flight Plan List to open the Actions Menu.
3) From the Actions Menu, tap **Add STAR**.
4) Tap the desired STAR.
5) Tap the desired transition. The STAR, 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.

Adding an Airway to a Flight Plan:

1) From any page, tap **Home** > **Flight Plan**.
2) Tap a waypoint in the Flight Plan List to open the Actions Menu.
3) If the waypoint is a valid Airway entry point, tap **Load Airway** in the Actions Menu. Only valid Airway entry points will have the **Load Airway** action in the Actions Menu.
4) Tap the desired Airway.
5) Tap 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.

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

1) From any page, tap **Home** > **Flight Plan**.
2) Tap to expand.
3) Tap to collapse any of the expanded fields.

Bookmarking a Flight Plan:

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

Deleting Bookmarked Flight Plans:

1) From any page, tap **Home** > **Flight Plan** > **Bookmark.**
2) Tap > **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.*

Reversing the Flight Plan:

1) From any page, tap **Home** > **Flight Plan**.
2) Tap to reverse the Flight Plan.

D2™ PILOT ROUTE SHARING

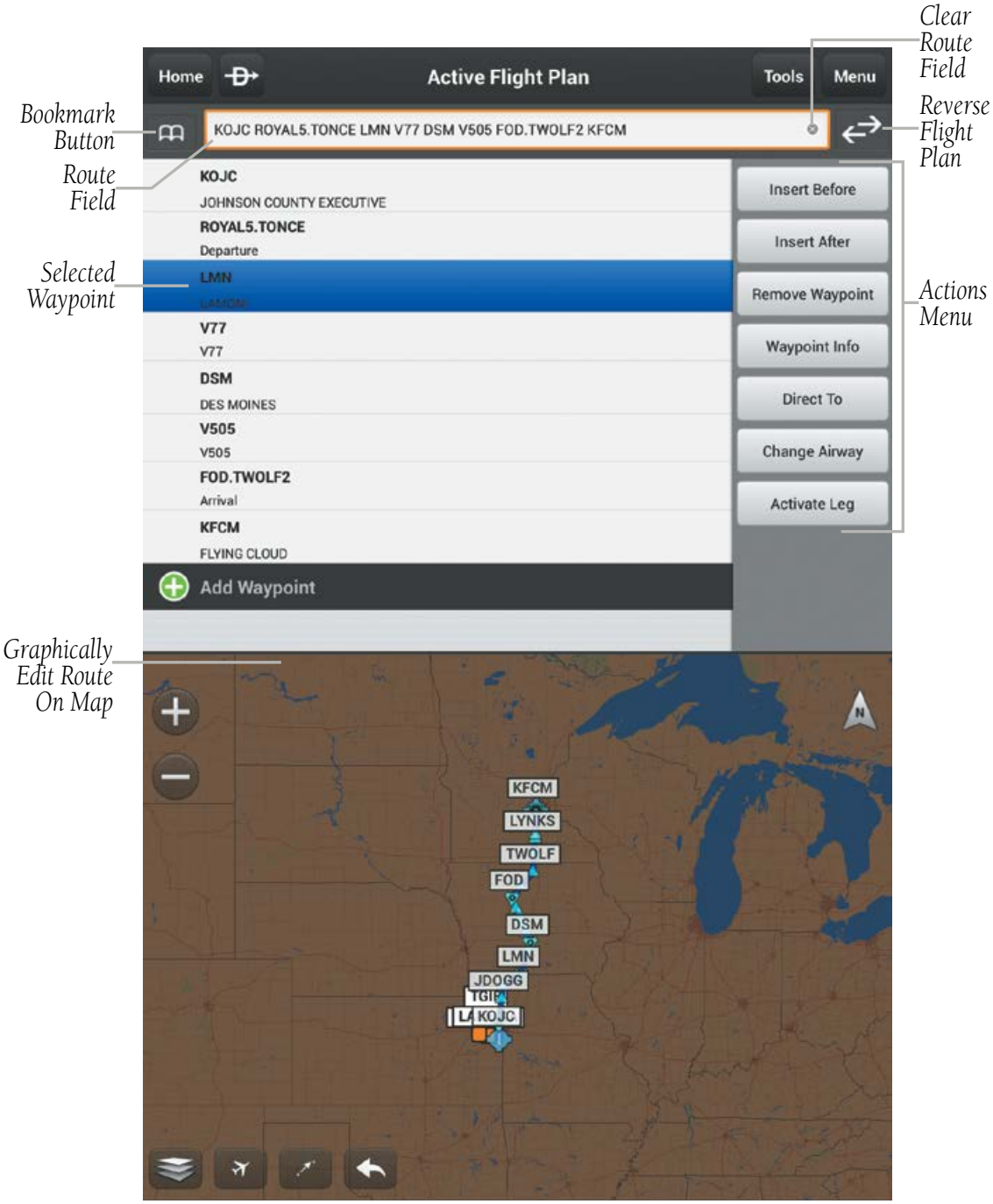
Garmin Pilot can share the Flight Plan with the Garmin D2 Pilot Watch via a Bluetooth connection. When the Garmin D2 Pilot Watch is in 'Share Mode' it will automatically pair with a compatible Android device.

NOTE: *D2 route sharing is only available with Android devices that support Bluetooth 4.0 +.*

Sharing the Flight Plan:

From any page,, tap **Home** > **Flight Plan > Menu > Send to D2 Watch.** Ensure the D2 Pilot Watch is in 'Share Mode' to receive flight plan data.

NOTE: *When a Flight Plan is reversed, Departures or Arrival procedures associated with the original Flight Plan are removed. If a Departure/Arrival is desired in the reversed Flight Plan, they will need to be added as described above. Airways are copied and reversed.*



Active Flight Plan Page

AIRPORT INFORMATION

Airport information is a downloadable product available free with your 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.

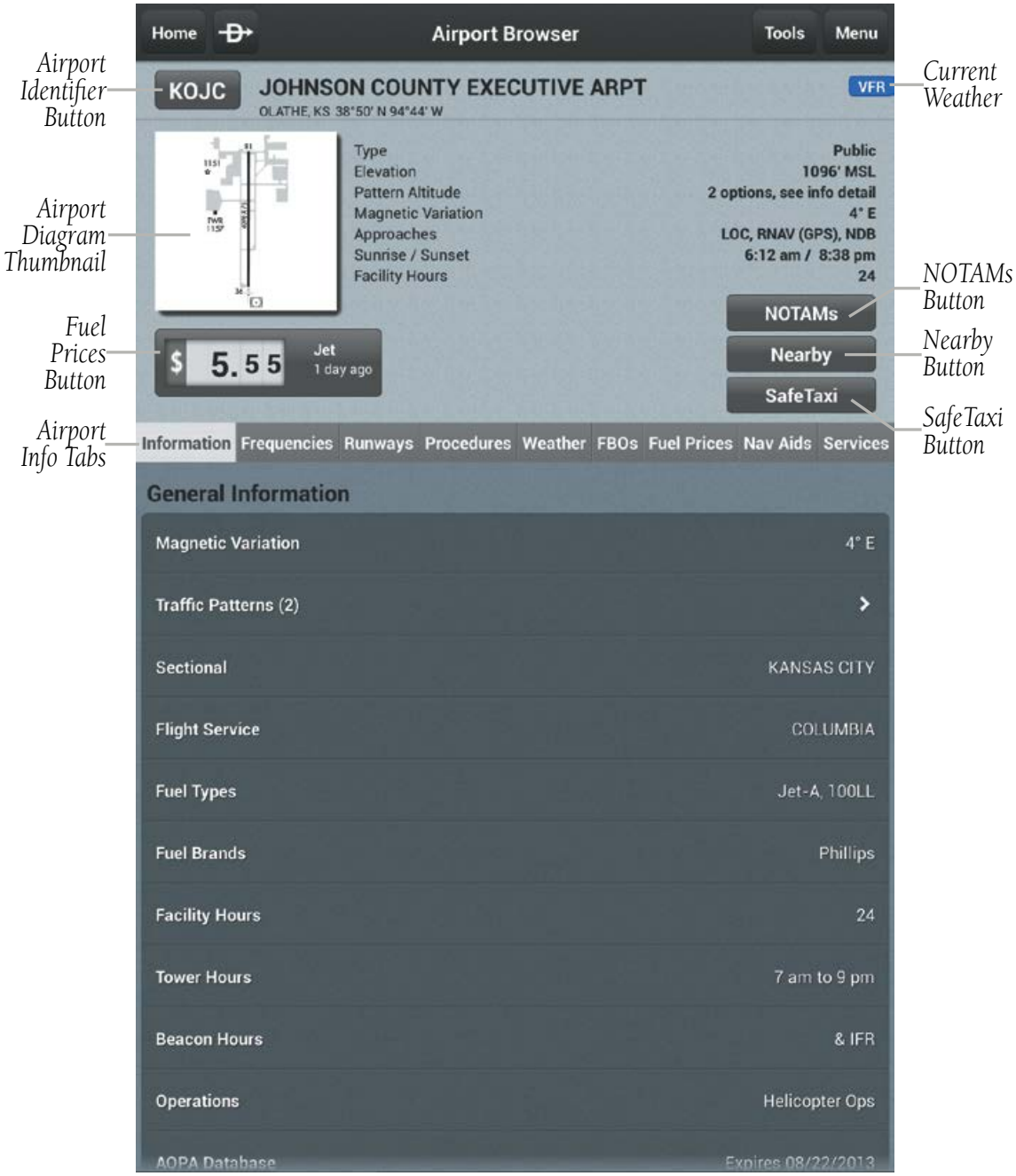
Finding airport information is easy with Garmin Pilot. The Home Button located at the top of the map page contains the Airport Info icon. Tapping the icon will present the Airport Information Page.

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 nine selectable tabs for viewing detailed airport information. View more details for select fields by tapping ›. The summary window contains the basic information for the selected airport such as; elevation, pattern altitude, magnetic variation, sunrise/sunset times, and fuel prices. There are also three buttons in the summary area for displaying NOTAMs, 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.
Nav Aids	Nearest navigation aids, frequencies, distances, and radials.
Runways	Runway numbers, dimensions, composition, and conditions.
FBOs	Fixed base operations, contact information and services available.
Services	Nearby lodging, car rental, transportation, and dining information.
Weather	Current weather conditions including: METAR, TAF, Winds Aloft, and Area Forecast.
Procedures	List of applicable procedures available for the current airport.

Tab	Description
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.

Airport Information Tabs



Airport Info Page

Within the Airport Summary window is an expandable thumbnail image of the airport diagram. Momentarily tapping the airport diagram thumbnail will open a larger view of the airport diagram. Tapping the image a second time will bring you back to the previous page

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 your 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 an Airport:

1) From any page, tap **Home** > **Airport Info**.

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

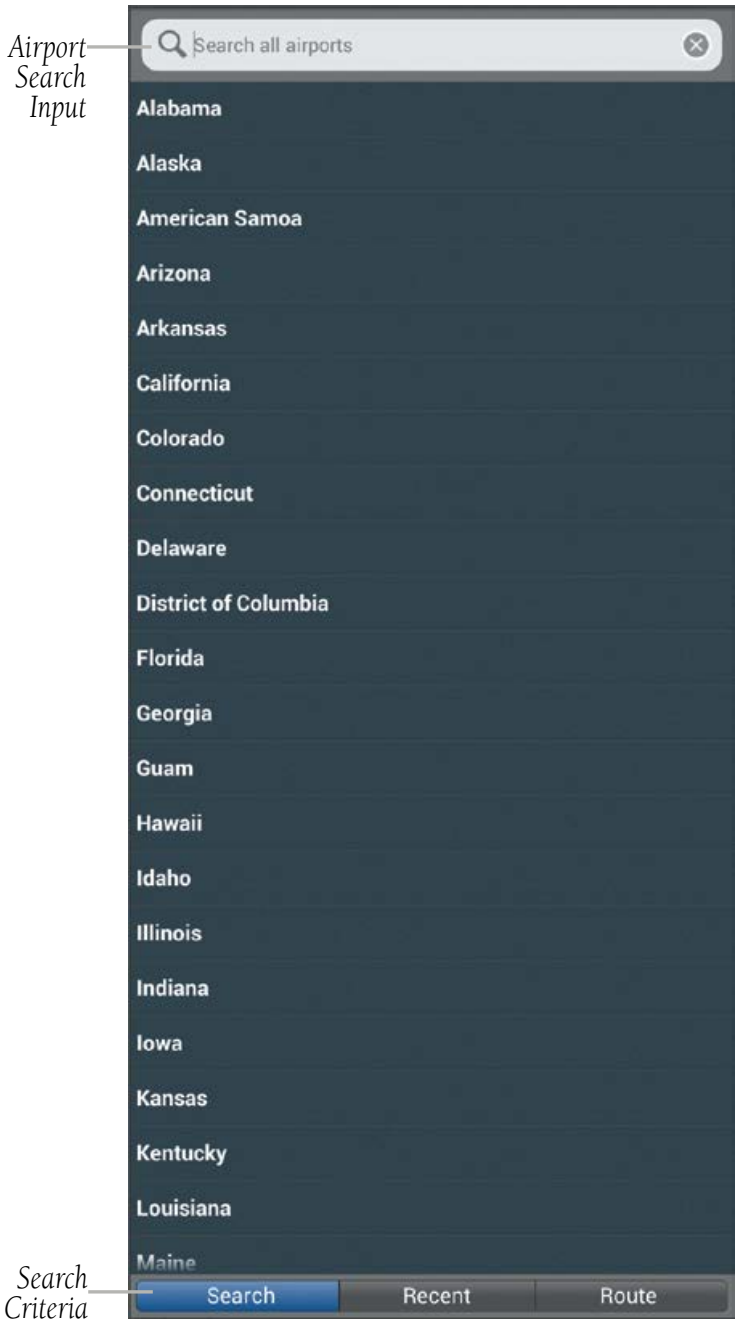
Or: Tap **Menu** > Search.

3) Select a search criteria.

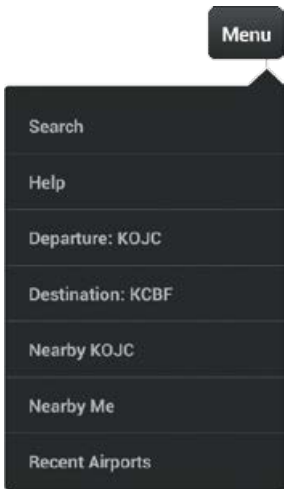
Search Criteria	Description
Search	Search Airport Information by State or use the keyboard to input the identifier, or city in the search window. This creates a list of matching airports from which to select.
Recent	Opens a list of recently viewed airports. Select desired airport from the list.
Route	Opens a list airports used to define the Flight Plan. Departure, Destination and any other airports used as waypoints along the route of flight.

Airport Search Options

4) Select an airport from the Search Results list.



Airport Identifier Search



Airport Info Page Menu

Airport Information Quick Access:

1) From any page, tap **Home** > **Airport Info**.
2) Tap **Menu**.

3) Select one of the quick access options. (Departure: XXXX, Destination: XXXX, Nearby XXXX, Nearby Me, or Recent Airports,).

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 **All**.

Viewing NOTAMs:

1) From any page, tap **Home** > **Airport Info**.
2) Tap **NOTAMs** to view the NOTAMs window.

Viewing Nearby Airports:

1) From any page, tap **Home** > **Airport Info**.
2) Tap **Nearby** to view airports (i.e., Public or All) nearby the currently selected airport.

Viewing SafeTaxi (Subscription Required):

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

Viewing Fuel Prices by type:

1) From any page, tap **Home** > **Airport Info**.
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. The age of 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, tap **Home** > **Airport Info**.
2) Tap 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) Tap the desired chart to view.

Or: To organize charts

4) Tap to create a Chart Binder or add to an existing binder.
5) Tap and enter a Binder Name or select from the list of available binders.
6) Tap for each additional chart to add to a binder.

WEATHER DATA

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.

Weather is presented in Widgets (as text), and map overlays. To receive up-to-date weather information, the device must have access to a data connection (Wi-Fi or cellular), or a GDL 39 or GDL 39 3D. However, once downloaded, some weather products will remain available for up to 90 minutes after connection to the Internet is lost.

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 that allows you 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 enables you 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 six weather, and four navigation information products available for selection from the Widget Type menu. The weather products available to be displayed as widgets are METAR, TAF, PIREPs, winds and temperatures aloft, area forecast, and AIRMET/SIGMETs. The four navigation information products are NOTAMs, Fuel Prices, TFRs, and Airspaces.

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 a Weather Widget:

1) From any page, tap **Home** > **Map**.
2) Tap **Menu** > **Split Screen** > **Widgets**.
3) Drag the Widgets from right to left and tap the plus button to add a widget.
4) Select a widget from the **Select Widget Type** menu.

Changing a Widget Type:

1) Tap 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 a Weather Widget:

1) Tap 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

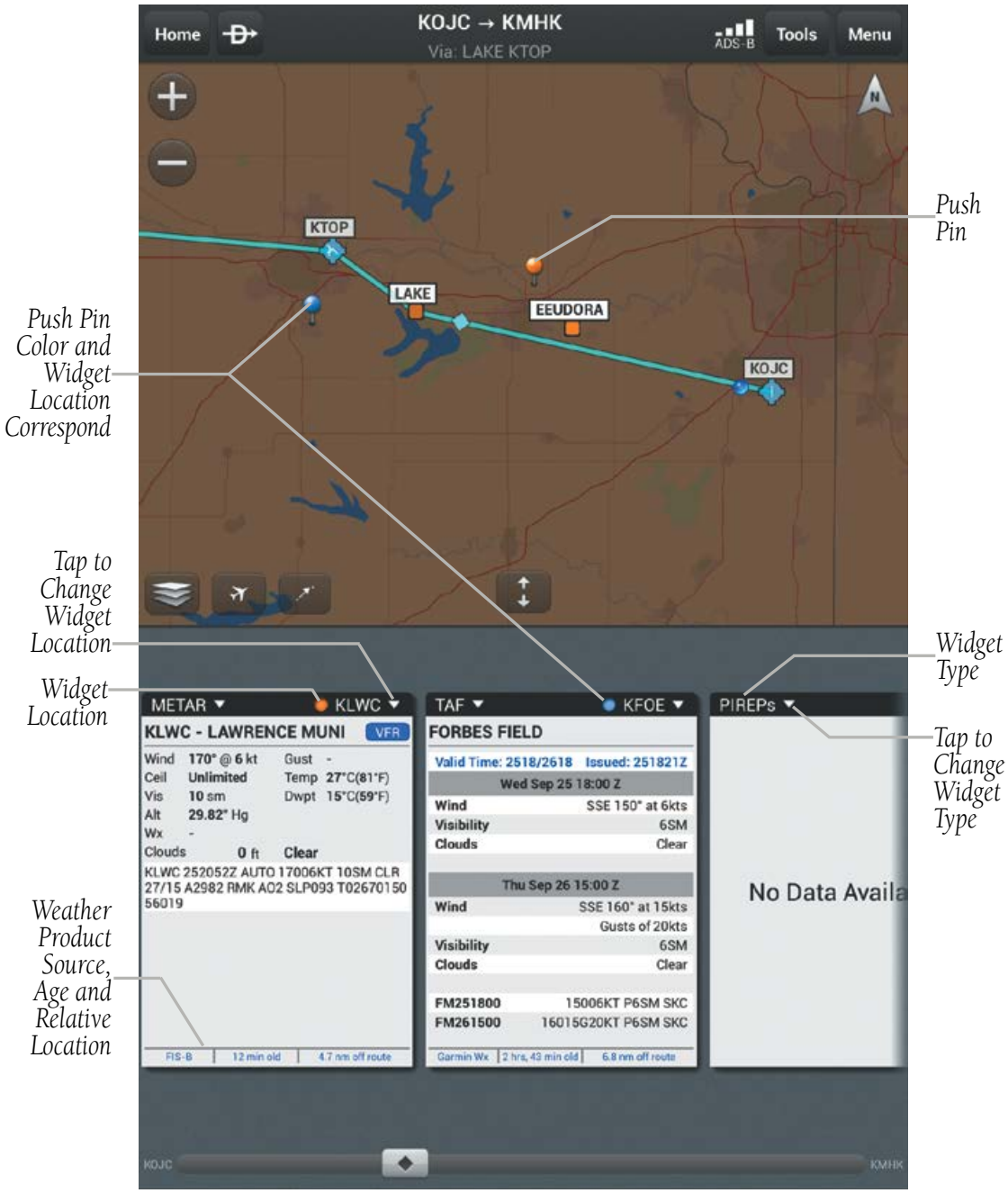
At the bottom of the widget pane is the NavTrack. Touch-dragging the slider moves a light blue diamond along the route of flight. Colored push-pins appear on the map to indicate locations near the blue diamond that provide information corresponding to selected widgets. In some cases, there may be more 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 tap 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, tap 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.


Home
KOJC → KMHK
Via: LAKE KTOP
ADS-B
Tools
Menu
KTOP
LAKE
EEUDORA
KOJC
Push Pin
Push Pin Color and Widget Location Correspond
Tap to Change Widget Location
Widget Location
Widget Type
Tap to Change Widget Type
Weather Product Source, Age and Relative Location
METAR
KLWC
KLWC - LAWRENCE MUNI
VFR
Wind 170° @ 6 kt Gust -
Ceil Unlimited Temp 27°C(81°F)
Vis 10 sm Dwpt 15°C(59°F)
Alt 29.82" Hg
Wx -
Clouds 0 ft Clear
KLWC 252052Z AUTO 17006KT 10SM CLR 27/15 A2982 RMK AO2 SLP093 T02670150 56019
FIS-B
12 min old
4.7 nm off route
TAF
KFOE
FORBES FIELD
Valid Time: 2518/2618 Issued: 251821Z
Wed Sep 25 18:00 Z
Wind SSE 150° at 6kts
Visibility 6SM
Clouds Clear
Thu Sep 26 15:00 Z
Wind SSE 160° at 15kts
Gusts of 20kts
Visibility 6SM
Clouds Clear
FM251800 15006KT P6SM SKC
FM261500 16015G20KT P6SM SKC
Garmin Wx
2 hrs, 43 min old
6.8 nm off route
PIREPs
No Data Availa
KOJC
KMHK

Widgets

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 pre-departure evaluation.

Composite data from radar sites in the United States is shown. This 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.

RADAR ABNORMALITIES

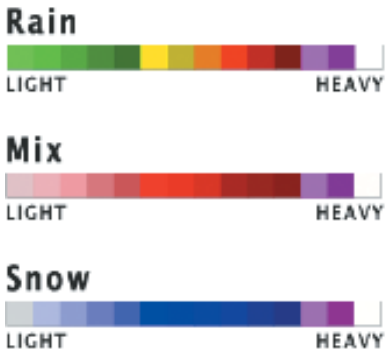
There are possible abnormalities regarding displayed radar images. Some, but not all, of those include:

- 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

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, tap **Home** > **Map**.

2) Tap select **Radar** from the Layer Select menu.

3) Tap to animate the radar loop. Each frame of the radar loop is time stamped. The time stamp is just right of the play button.

INFRARED SATELLITE (IR SAT)

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

Viewing Infrared Satellite Information:

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

Viewing Visible Satellite Information (Vis Sat):

1) From any page, tap **Home** > **Map**.
2) Tap select **Vis Clouds** from the Layer Select menu.
3) Tap to animate the satellite loop. Each frame of the satellite loop is time stamped. The time stamp is just right of the play button.

WEATHER OVERLAY

The Weather 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 green is used to indicate winds of less than 10 kts, yellow is for winds greater than 10 kts and red is used for winds greater than 20 kts. Colored icons are also used to show dew point spread where the spreads of five degrees or greater are green, spreads of three or four degrees are yellow and spreads of two degrees or less are red.

Viewing and Configuring the Weather Overlay:

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

Layer	Icons	Description
Station Model		When reading the station model clockwise provides current; altimeter, ceiling, identifier, dewpoint, visibility and temperature. Also provides current wind and cloud cover as icons.
Altimeter		Altimeter ("Hg) setting with the leading 2 or 3 omitted as well as the decimal. (e.g., 984 = 29.84 or 001 = 30.01)
Cloud Ceiling		Reported ceiling in hundreds of feet or 'Unl' if there is not a cloud layer that constitutes a ceiling.
Cloud Cover		Overcast
		Broken
		Scattered
		Few
		Clear
		Fog

Layer	Icons	Description
Dew point	25	Dew point °C
Dew point Spread	5	Dew point Spread °C
Flight Conditions		VFR
		VFR ceiling with MVFR visibility.
		MVFR ceiling with VFR visibility.
		IFR ceiling with VFR visibility.
		VFR ceiling with IFR visibility.
		LIFR ceiling with VFR visibility.
		VFR ceiling with LIFR visibility.
		MVFR
		MVFR ceiling with IFR visibility.
		IFR ceiling with MVFR visibility
		MVFR ceiling with LIFR visibility
		LIFR ceiling with MVFR visibility
		IFR
		LIFR ceiling with IFR visibility
		IFR ceiling with LIFR visibility
		LIFR
		Missing weather information. A split dot with brown indicates partial missing data.

Layer	Icons	Description
Observation Age	25	Observation Age in minutes
Station ID	KPIT	VFR conditions (Blue)
	KPIT	MVFR conditions (Green)
	KPIT	IFR conditions (Yellow)
	KPIT	LIFR conditions (Red)
Temperature	31	Temperature °C
Visibility	3/4	Reported Visibility in statute miles.
Wind Barbs		Wind barbs indicate wind speed and direction and always point in the direction that the wind is coming from. 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 where green barbs indicate wind is 5-9 kts, yellow barbs are 10-19 kts and red is for winds of 20 kts or greater. When winds are calm an open green circle is used. Light and variable winds are indicated by an open green circle with a green 'V'.
Wind Gust	31	Reported wind gusts (kts).
Wind Speed	22 Lt&Vbl	Reported steady wind speed (kts).
Wx Conditions	-DZ BR	Dynamic black shaded box that displays two letter weather condition codes and qualifiers.

Weather Icons

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

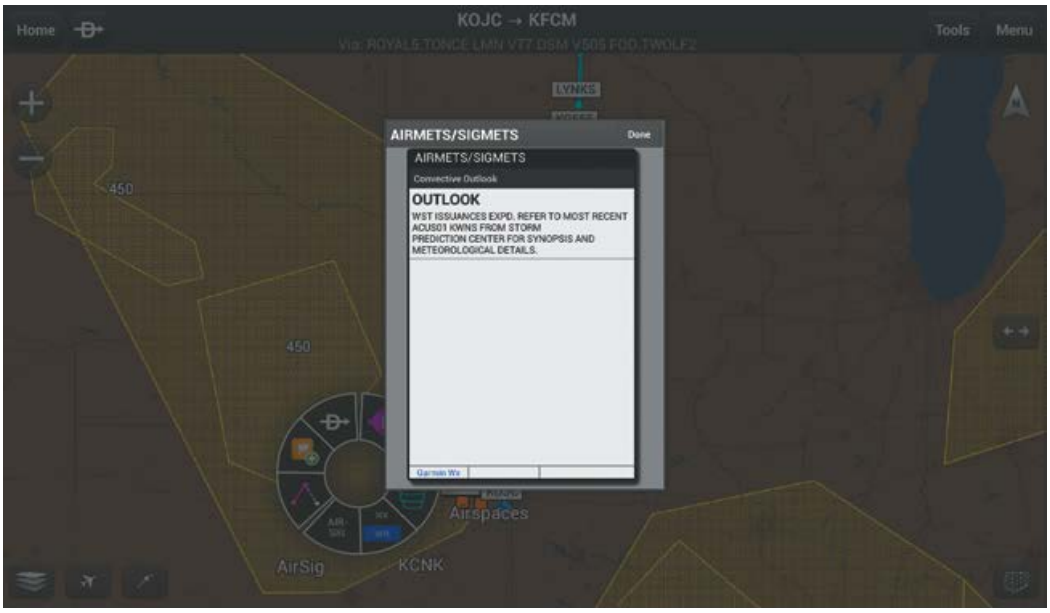
A SIGMET (SIGnificant METeorological Information) advises of weather that is potentially hazardous to all aircraft. In the contiguous United States, the following items are covered: severe icing, severe or extreme turbulence, volcanic ash (red), dust storms, and sandstorms that lower visibility to less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

1) From any page, tap **Home** > **Map**.
2) Tap and select **AIRMET/SIGMET** from the Layer Select menu.
3) Tap and select the desired type of AIRMET/SIGMET (i.e., Convective, Icing, IFR/MTN, or Turbulence) to display.
4) Tap within the shaded area for AIRMET/SIGMET details.



AIRMET/SIGMET Layer

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, tap **Home** > **Map**.

2) Tap and select **TFR** from the Layer Select menu.

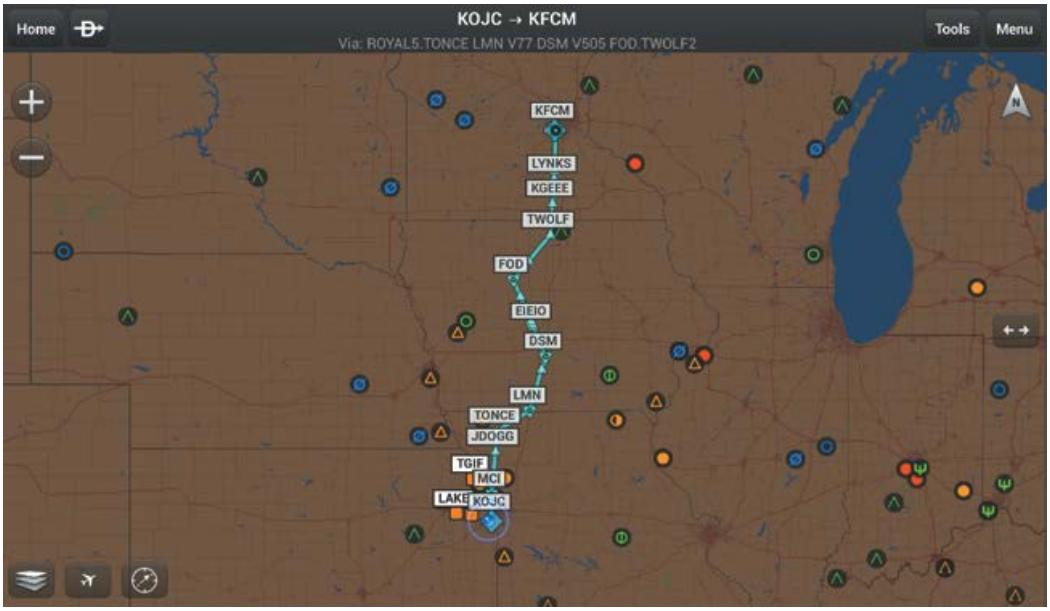
3) Tap within the outlined area for TFR details.

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 low in-flight visibility, icing conditions, wind shear, and turbulence. PIREPs are issued as either Routine (UA) or Urgent (UUA).

Viewing PIREPs:

1) From any page, tap **Home** > **Map**.
2) Tap and select **PIREPs** from the Layer Select menu.
3) Tap the PIREP icon for details.



PIREP Layer

PIREP TYPE	Icons	Description
Icing		Negligible Icing
		Trace Icing
		Trace to Light Icing
		Light Icing
		Light to Moderate Icing
		Moderate Icing
		Moderate to Severe Icing
		Severe Icing
Sky Conditions		Unknown Sky Condition
		Sky Clear
		Few Clouds
		Scattered Clouds
		Broken Clouds
		Overcast
		IMC
Turbulence		Turbulence Negligible or Smooth
		Light Turbulence
		Light to Moderate Turbulence
		Moderate Turbulence
		Moderate to Severe Turbulence
		Severe Turbulence
		Extreme Turbulence

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.

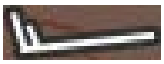
Viewing Lightning Information:

1) From any page, tap **Home** > **Map**.
2) Tap and select **Lightning** from the Layer Select menu.
3) Tap 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
	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.
	Orange indicates wind speeds of 51-80 kts.
	Red indicates wind speeds of 81 kts or greater.

Winds Aloft Barbs

Viewing Winds Aloft Information:

1) From any page, tap **Home** > **Map**.

2) Tap and select **Winds Aloft** from the Map Overlay menu.

3) Drag the horizontal slider to the right to view forecast winds aloft.

4) Drag the slider up to the desired altitude. Altitudes are displayed in 3,000-foot increments up to 42,000 feet MSL.

Or: Tap any wind barb to view a winds aloft table. Tap the time to view current/forecasted winds aloft.

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:

1) From any page, tap **Home** > **Airport Info**.
2) Select the **Weather** Tab to view METAR, TAF, and Winds Aloft for the selected airport.

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 make it simple to file, cancel or close the flight plan via DTC DUAT or CSC DUATS.

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, Nav Aids, 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 your Garmin Pilot account. Once all mandatory fields have been completed, Garmin Pilot creates a trip summary, and navlog. If Garmin Pilot has been linked to a DUATS service provider, Garmin Pilot will retrieve a DUATS Standard Weather Briefing for the route of flight for the Estimate Time of Departure (ETD). Since Garmin Pilot is connected to a DUATS account, flight plans can also be filed, amended, canceled or closed within Garmin Pilot.

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 Garmin Pilot is connected to a DUATS account, 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 are transmitted to DUATS 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 you must call the FSS.

Creating an Active Flight Plan:

1) From any page, tap **Home** > **Airport Info**.

2) Tap within the route field to activate the cursor.

3) Use the keyboard to insert waypoints. Separate each waypoint with a space.

Or:

1) Tap the **Add Waypoint** button.

2) Use the keyboard to input the waypoint identifier.

3) Tap 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 tap **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) Tap **Save** to save or **Cancel** to cancel.

PLANNING A TRIP

CREATING A NEW TRIP:

1) From any page, tap **Home** > **Trip Planning**.
2) Tap **Menu** > **New**.
3) Enter Departure, Routing, and Destination.

Or: Enter Departure, Destination and Choose a Preferred ATC Route after the trip is created.

Or:

Tap **Import Flight Plan** to import the Flight Plan. Importing the Flight Plan will fill the Departure, Routing, and Destination fields. Complete the remaining fields are necessary.

4) Tap **Create Trip**.

Choose a Preferred ATC Route:

1) Tap **Routes** to view Preferred ATC Routes.
2) Tap **Altitude**, **Aircraft**, **Date**, or **Popular** to sort the list.
3) Tap the desired route from the list, to add the route to the trip.

Preferred ATC Routes

Entering Pilot Information:

1) Tap the Pilot field.

2) Enter pilot's Name, Telephone, Street, City, State and Zipcode.

Or:

a) Tap **Add Pilot...**.

b) Enter the Required Contact Information by touching each field. A keyboard will appear to enable typing in each selected field.

c) Enter the optional DTC or CSC DUATS Credentials.

NOTE: *Garmin Pilot must be connected to a DUAT account in order to receive briefings, or file flight plans.*

d) Tap **Save**.

e) Tap the desired Pilot from the list.

Entering Aircraft Information:

1) Tap the Aircraft field.

2) Select the desired aircraft from the list.

Or:

a) Tap **Add Aircraft...**.

b) Enter the Required Aircraft Information by touching each field and using the keyboard.

c) Enter optional performance data.

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

d) Tap **Save**.

e) Tap the desired Aircraft from the list.

Enter type of Flight Plan:

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

Enter Date, ETD, Altitude, and Airspeed:

Tap the applicable field and enter the desired value(s). The Airspeed will be populated with the Cruise TAS (kts) entered for the aircraft.

Enter Souls Onboard (SOB):

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

Enter Fuel:

Tap 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):

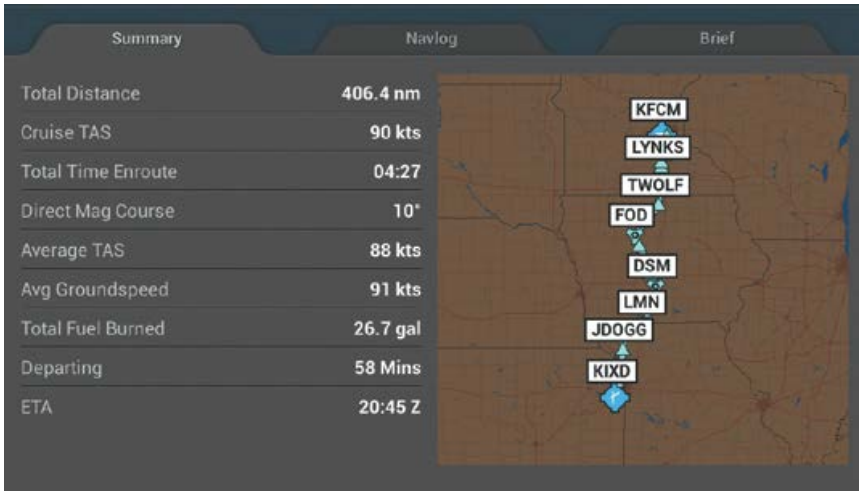
Tap the applicable field and enter the desired information.

TRIP SUMMARY

The Flight Summary displays the following information: Total Distance, True Airspeed, Total Time En Route, Direct True Course, Average Groundspeed, and Total Fuel Burned. Values are based on currently reported weather conditions and the user provided aircraft performance data.

Viewing the Trip Summary:

1) From any page, tap **Home** > **Trip Planning.**
2) Tap **Summary**, to view the Trip Summary.



Trip Summary

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, tap each column header to cycle through the available units, or tap 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 the Navlog:

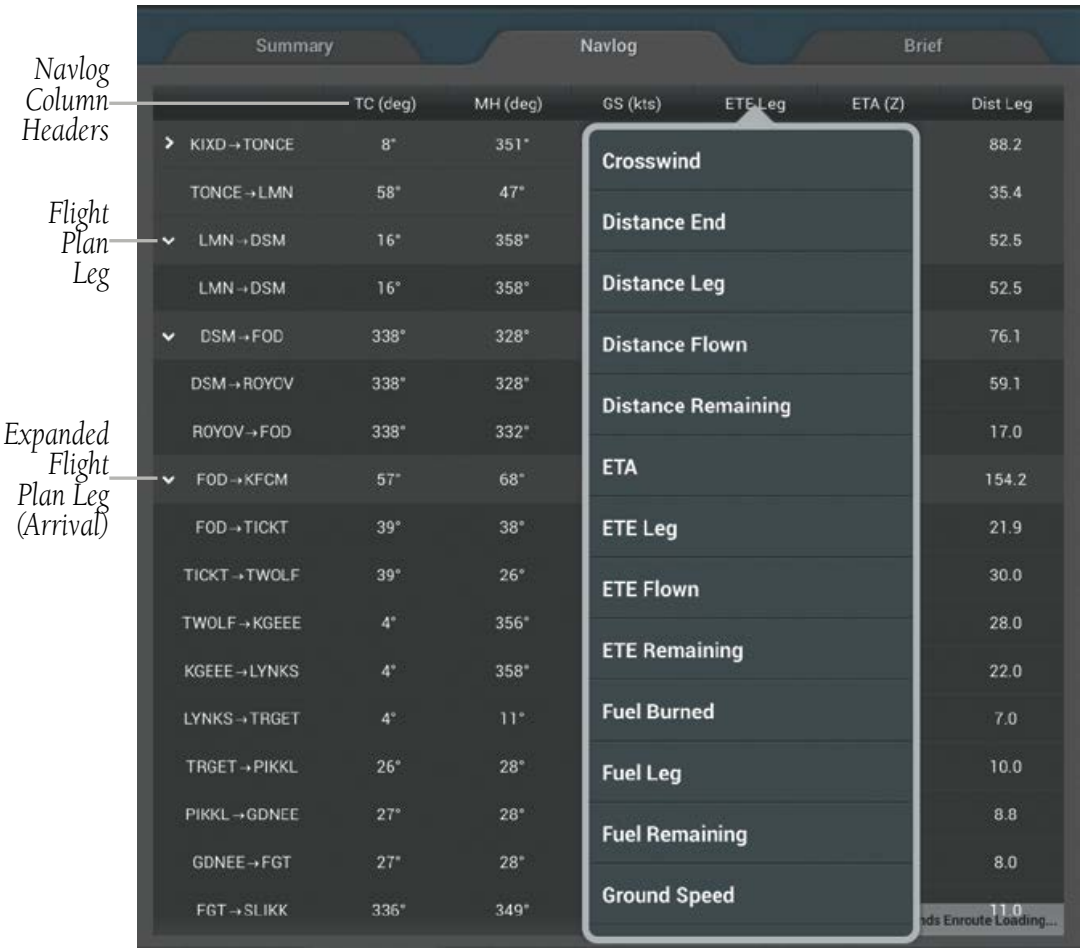
1) From any page, touch **Home** > **Trip Planning.**
2) Tap **Navlog**, to view the Garmin Pilot generated Navlog.

Changing Navlog Column Values:

1) From any page, touch **Home** > **Trip Planning.**
2) Tap a column header to view the column header options menu.
3) Tap the desired value.

Expanding Flight Plan Legs:

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



Navlog

Cloning a Trip:

1) From any page, touch **Home** > **Trip Planning.**
2) Tap **Menu** > **Clone**.

Viewing a Cloned Trip:

1) From any page, touch **Home** > **Trip Planning.**
2) Tap **History** to view the list of cloned trips
3) Tap **Date**, **Route,** or **Aircraft** to organize the Trips List by date created, route of flight, or aircraft used.

Activating a Cloned Trip:

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

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

Deleting Trips:

1) From any page, touch **Home** > **Trip Planning.**
2) Tap **History**.
3) Tap **Delete** > > **Done** to delete the trip.

BRIEF

When connected to a DUATs account, 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** > **Trip Planning.**
2) Tap **Brief,** to view the Standard Weather Briefing for the route of flight.
3) Tap **Refresh** if necessary to update the weather information.
4) Tap 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.*

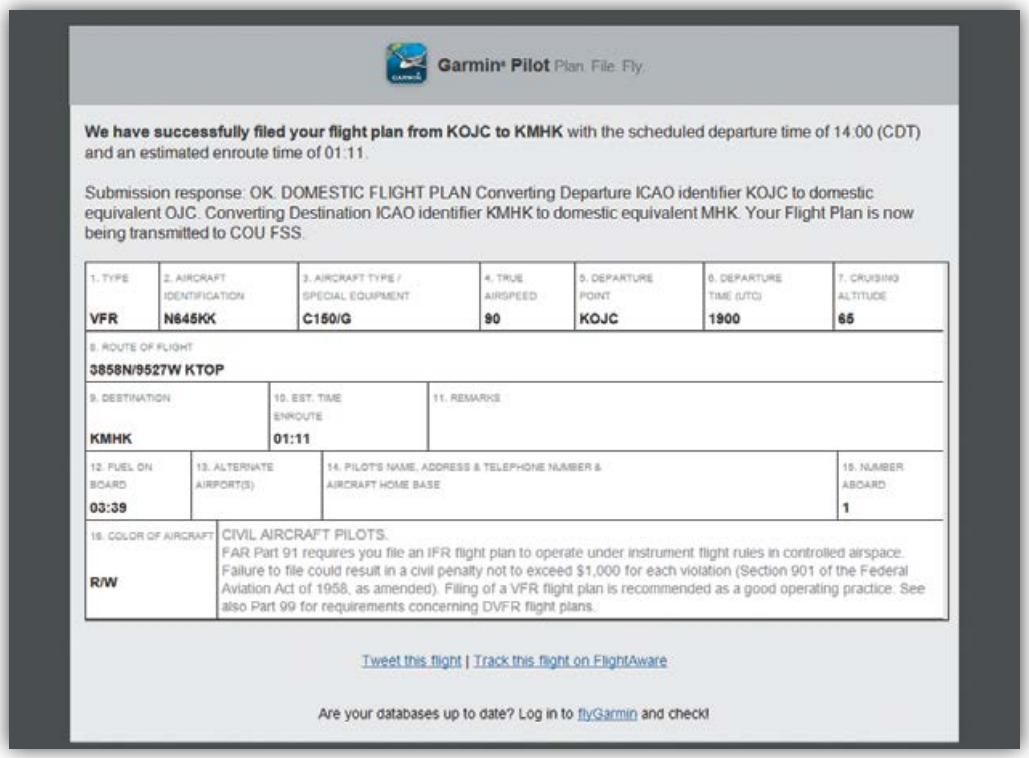
Once all required information is entered and after reviewing the weather briefing and supplemental weather information, file the flight plan. A notification appears on the Summary Tab stating the status of the flight plan. The notification on the Summary Tab gives the time the flight plan will be transmitted 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 DUATS, a notification window will provide the reason it was not transmitted.

Filing:

1) From any page, touch **Home** > **Trip Planning**.
2) Tap **Active Trip Change Date to File**.
3) Tap **File Plan** to file the Trip. The trip Status Ribbon turns green and the Trip Status on the Summary Tab displays **OK. DOMESTIC FLIGHT PLAN. Your Flight Plan will be transmitted to the XXX FSS XX hours and XX minutes from now for a proposed departure at XXXX on XX/XX/XXXX.**

Amending a Filed Flight Plan:

1) From any page, touch **Home** > **Trip Planning.**
2) Tap **Active Trip Filed**.
3) Tap **Amend Plan**.
4) Make the desired changes on the Trip Planning Page.
5) Tap **File Amendment** or **Cancel Amendment** to cancel changes and use original flight plan.



Garmin® Pilot Plan. File. Fly.

We have successfully filed your flight plan from KOJC to KMHK with the scheduled departure time of 14:00 (CDT) and an estimated enroute time of 01:11.

Submission response: OK. DOMESTIC FLIGHT PLAN Converting Departure ICAO identifier KOJC to domestic equivalent OJC. Converting Destination ICAO identifier KMHK to domestic equivalent MHK. Your Flight Plan is now being transmitted to COU FSS.

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE / SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME (UTC)	7. CRUISING ALTITUDE
VFR	N645KK	C150/G	90	KOJC	1900	65

8. ROUTE OF FLIGHT
3858N/9527W KTOP

9. DESTINATION	10. EST. TIME ENROUTE	11. REMARKS
KMHK	01:11	

12. FUEL ON BOARD	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE	15. NUMBER ABOARD
03:39			1

16. COLOR OF AIRCRAFT	
R/W	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

Tweet this flight | Track this flight on FlightAware

Are your databases up to date? Log in to flyGarmin and check!

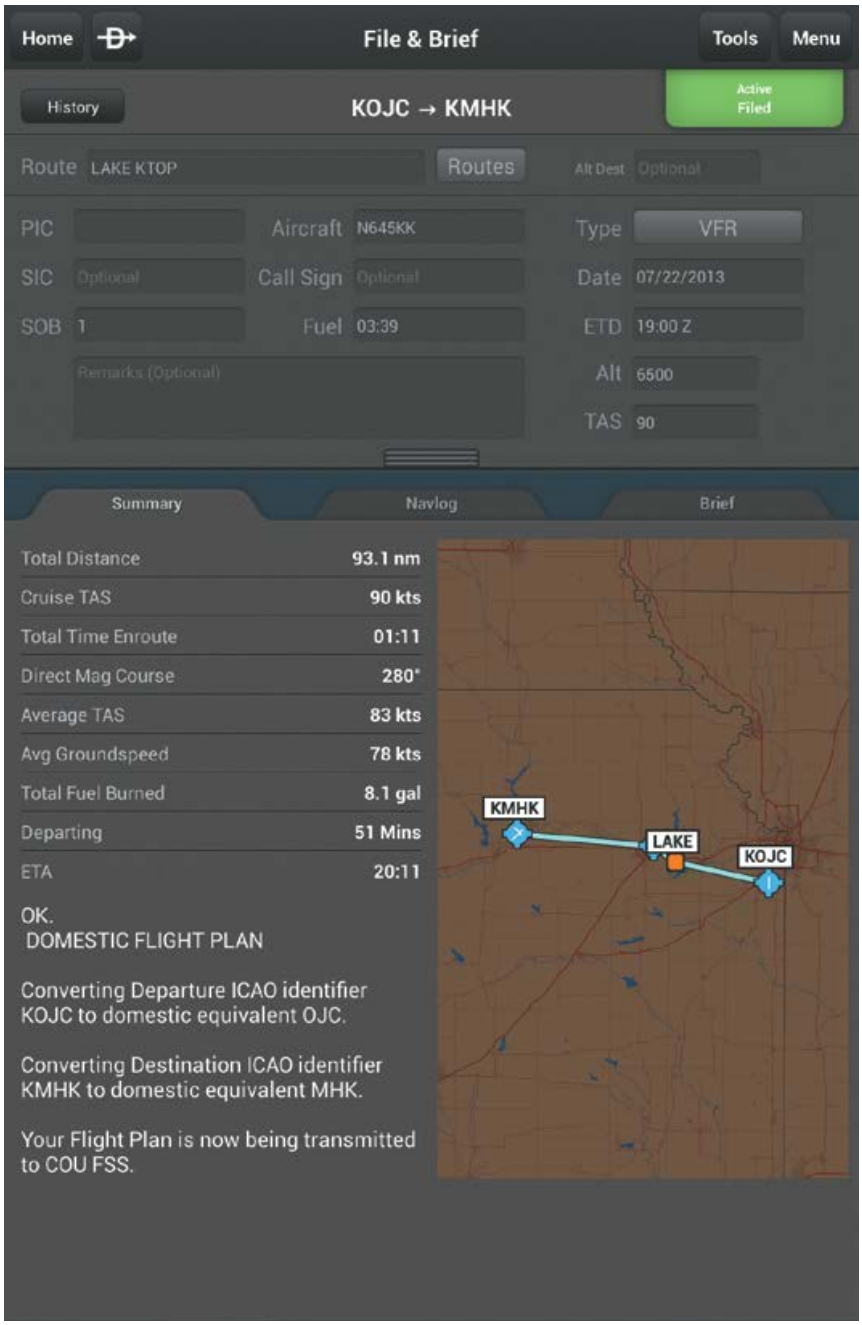
Example Confirmation E-mail

Canceling a Filed Flight Plan:

1) From any page, touch **Home** > **Trip Planning.**
2) Tap **Active Trip Filed**.
3) Tap **Cancel Plan**. The Trip Status displays **OK. Flight Plan Cancelled** on the Summary Tab.

Closing a Filed Flight Plan:

1) From any page, touch **Home** > **Trip Planning**.
2) Tap **Active Trip Filed**.
3) Tap **Close Plan**. The trip status displays **OK. Flight Plan Closed** on the Summary Tab.



Trip Planning Page

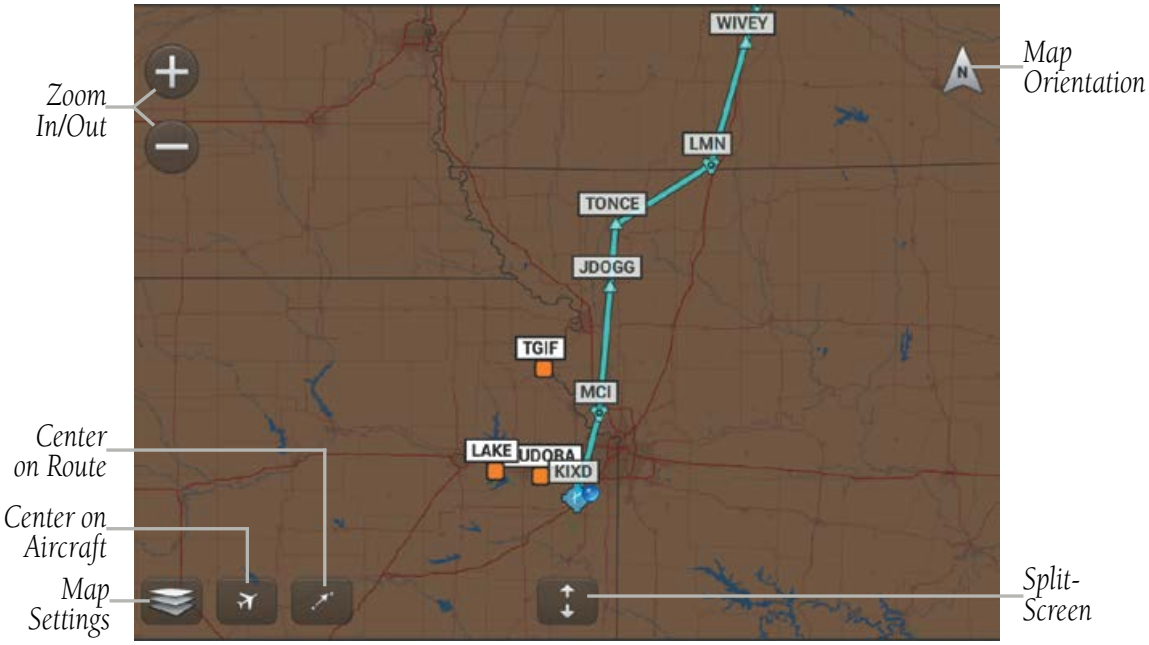
FLY

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. Long press 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 GDL 39 / GDL 39 3D (sold separately) or by connecting to SiriusXM Weather through the Baron Mobile Link™ paired with a satellite weather receiver (sold separately, subscription required).

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	Icon	Description
Map Settings		Map/Chart Selection/Settings, Map Overlay Selection, Overlay Opacity Settings, and General Map Settings
Center on Aircraft		Centers the Map Pane on the current location.
Center on Route		Centers the entire route in Map Pane.
Zoom In		Increases magnification of the map
Zoom Out		Decreases magnification of the map
Split-Screen		Selects full screen map or partial map with Widgets, Panel, Charts, and SafeTaxi.
Map Orientation		Toggles map orientation from north up to track up. The Icon is blue when track up is active.

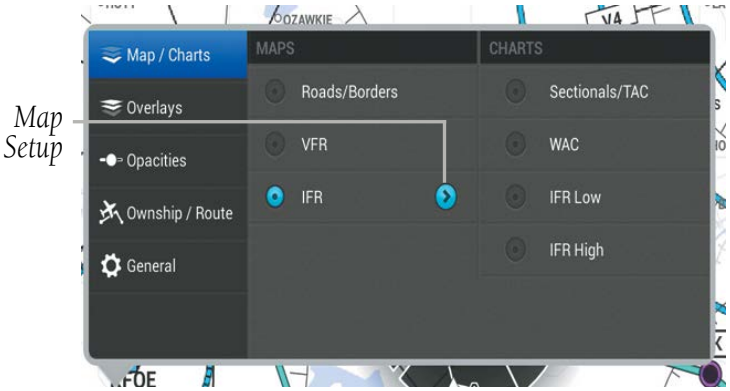
Map Pane Controls

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 rasterized charts are available for viewing in the map pane: Sectional TAC, WAC, 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, Nav Aids, 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.

Map Setup Menu

Selecting a Map or Chart:

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

Map Panning:

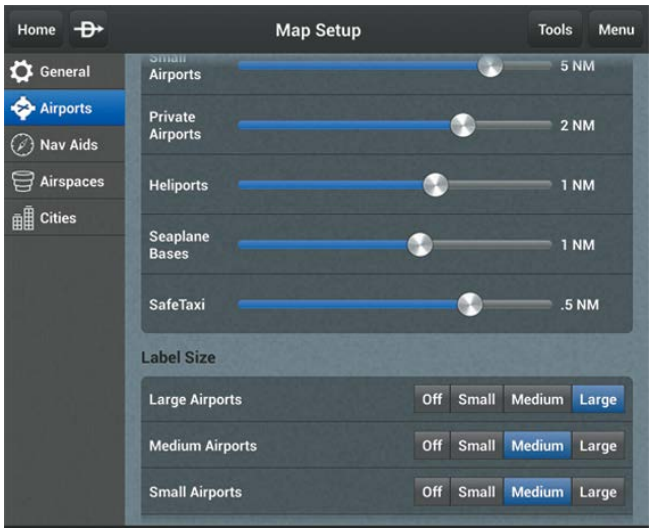
1) From any page, tap **Home** > **Map**.
2) Tap and drag within the Map Pane to pan the map to the desired area.
3) Tap to center the Map Pane over the route of flight
4) Tap to center the Map Pane over the current location.

Choosing the map topography:

1) From any page, tap **Home** > **Map**.
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 the map color:

1) From any page, tap **Home** > **Map**.
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 Airports 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 Nav Aids Menu

Setting Visibility Range and Label Size for Nav Aids

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.

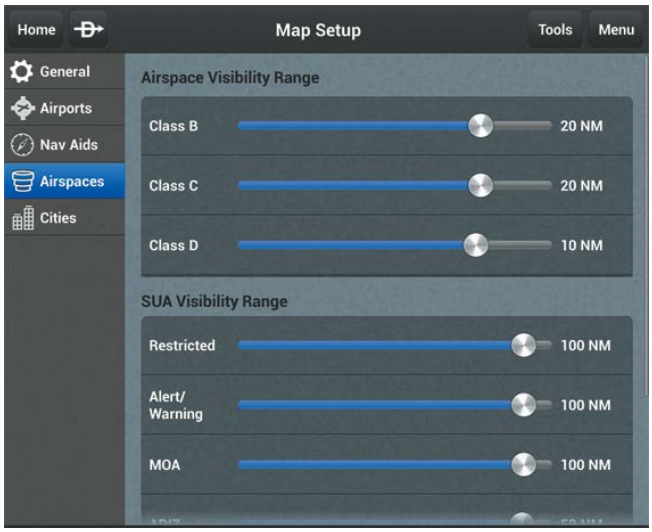
Map Setup Airspaces Menu

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 Cities 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.

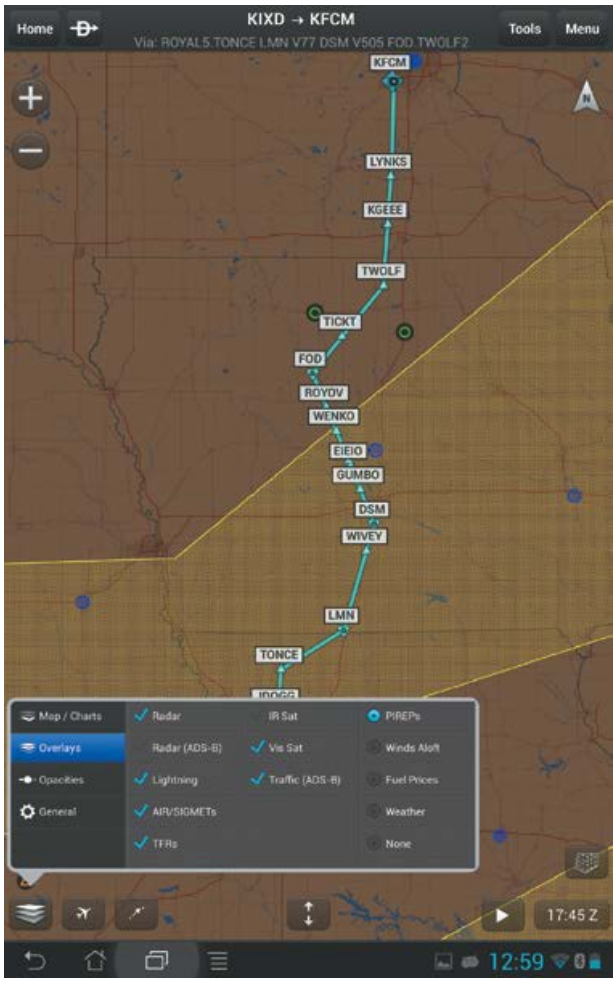
3) Scroll to bring the Label Size selections into view.

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.

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 IR Sat and Vis Sat. Overlays in the right column, (i.e. PIREPs, Winds Aloft, Fuel Prices, and Weather) are also mutually exclusive.



Overlays

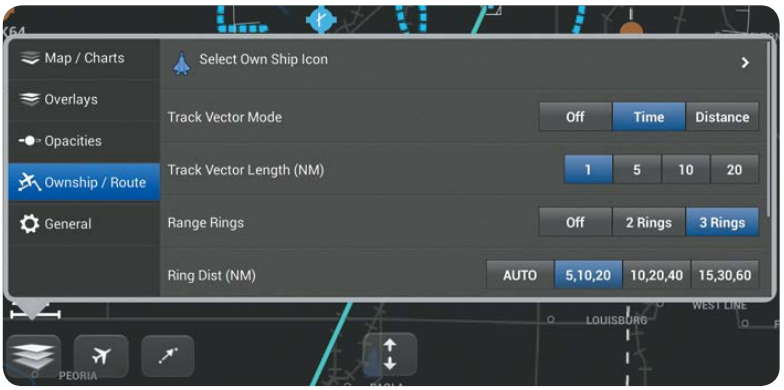
OPACITIES

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.

Opacities Menu

OWNSHIP / ROUTE

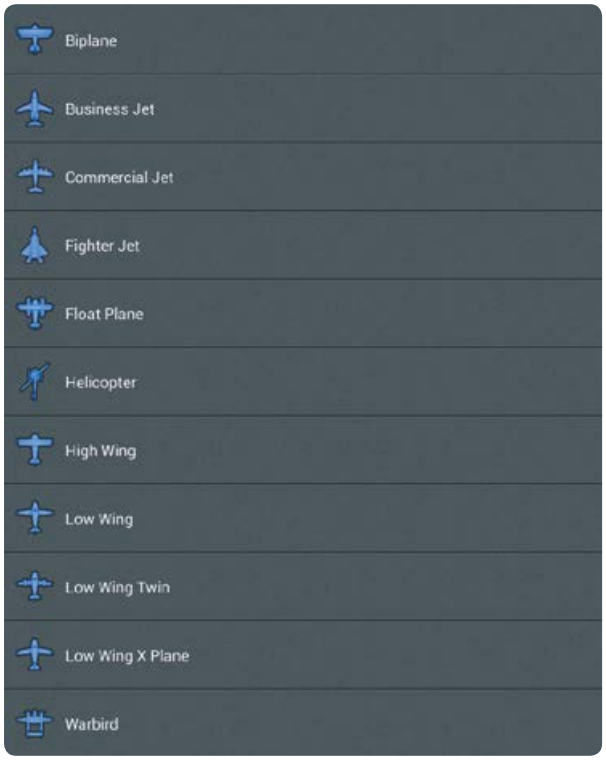
The Ownship / Route tab provides access to controls for activating and configuring the Track Vector and Range Rings as well as for changing the Ownship Symbol. The Aircraft Symbol is displayed on maps, Geo-referenced FliteCharts, and SafeTaxi diagrams when the application senses movement, otherwise the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



Ownship / Route Menu

Ownship Aircraft Symbol

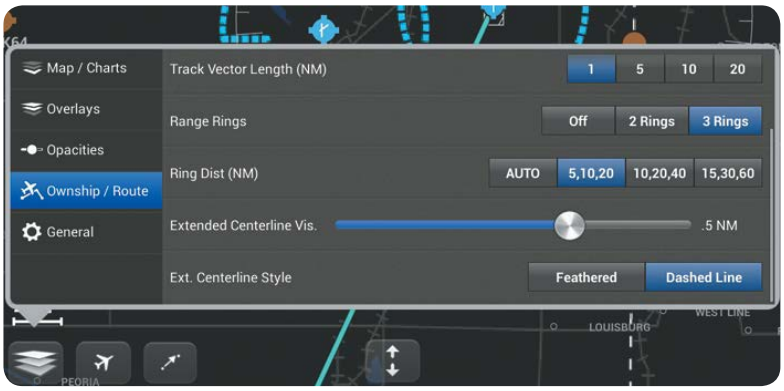
System Location Symbol



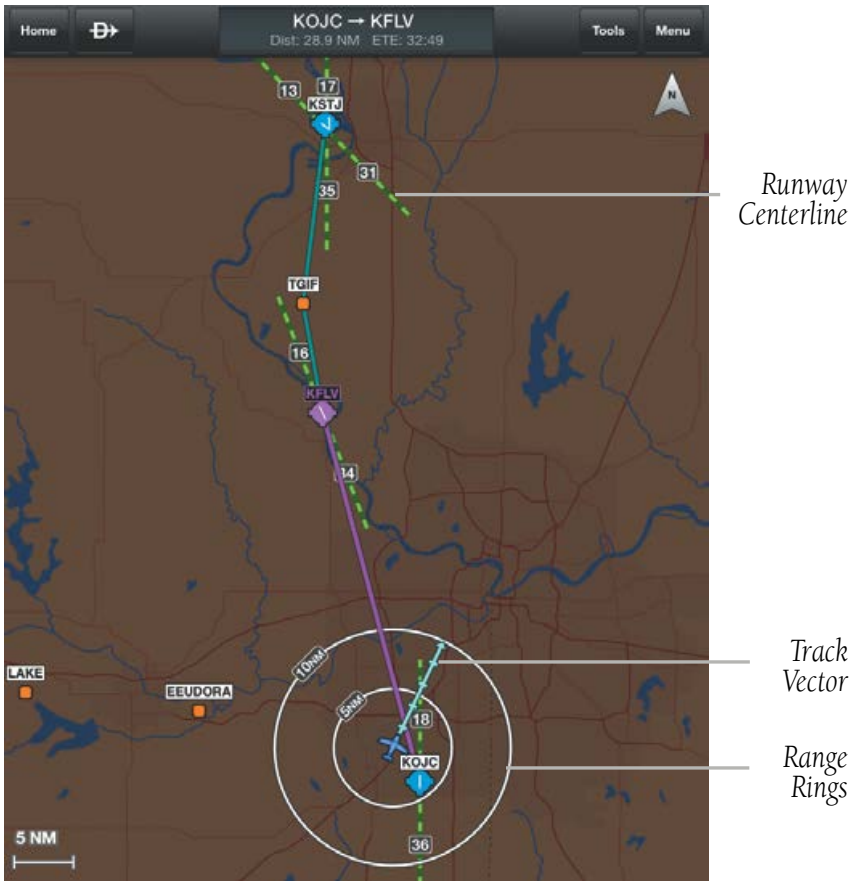
Own Ship Aircraft Symbols

Changing Ownship Symbol:

1) From the map pane, tap **Map Settings**.
2) Tap the **Ownship / Route** Tab.
3) Tap **Select Ownship Icon**.
4) Tap the desired Ownship aircraft symbol from the list.



Ownship / Route Menu



Range Rings, Centerlines, & Track Vector

RANGE RINGS

The Range Rings are rings drawn around and centered on your 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**)

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 alook 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 > **Ownship / Route.**
2) Select the Track Vector Mode **Off, Time** (min), or **Distance** (NM).
3) Select the Track Vector Length **1, 5, 10** or **20**.

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 Statium TFRs.

NIGHT MODE

Enabling Night Mode presents the map with a high-contrast background for easy viewing in low light. Night mode is not available for Charts. Enable/disable this feature from the General Map Settings Menu.

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.

Flight Plan Symbols

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
- Bearing
- Course
- Cross Track Error
- Distance (Dest)
- Distance (Next)
- ETA (Dest)
- ETA (Next)
- ETE (Dest)
- ETE (Next)
- Ground Speed
- Latitude
- Longitude
- Next Waypoint
- Time
- Track
- Vertical Speed
- Wx-Wind
- Wx-Visibility
- Wx-Altimeter
- Wx-Ceiling
- Pitch
- Roll

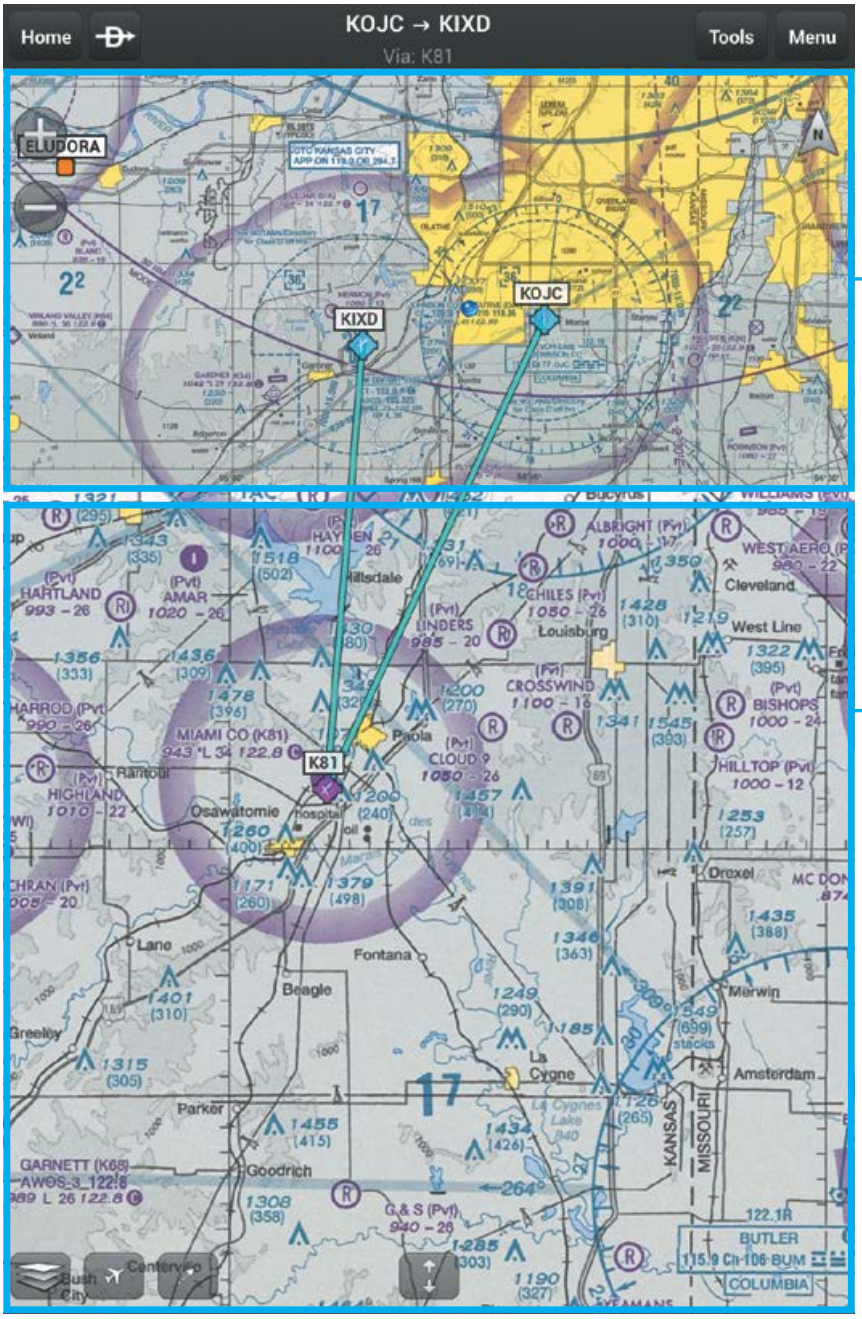
MAP ZOOM

When a more detailed Chart is available, Garmin Pilot automatically switches to the more detailed chart as you continue to zoom in. For example, if VFR WAC is the current Base Chart, as you zoom 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, if you zoom out on a VFR Sectional Base Map, Garmin Pilot will not change to a VFR WAC scale.

Chart Zooming:

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

Or: Use the Zoom In/Out Buttons or



Sectional Zooming

RADIAL MENU

The Radial Menu is accessed by long-pressing on the map. 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 the Radial Menu:

1) From any page, tap **Home** > **Map**.
2) Long press on the desired area in the Map Pane until the Radial Menu appears.
3) Tap anywhere outside of the Radial Menu to exit.

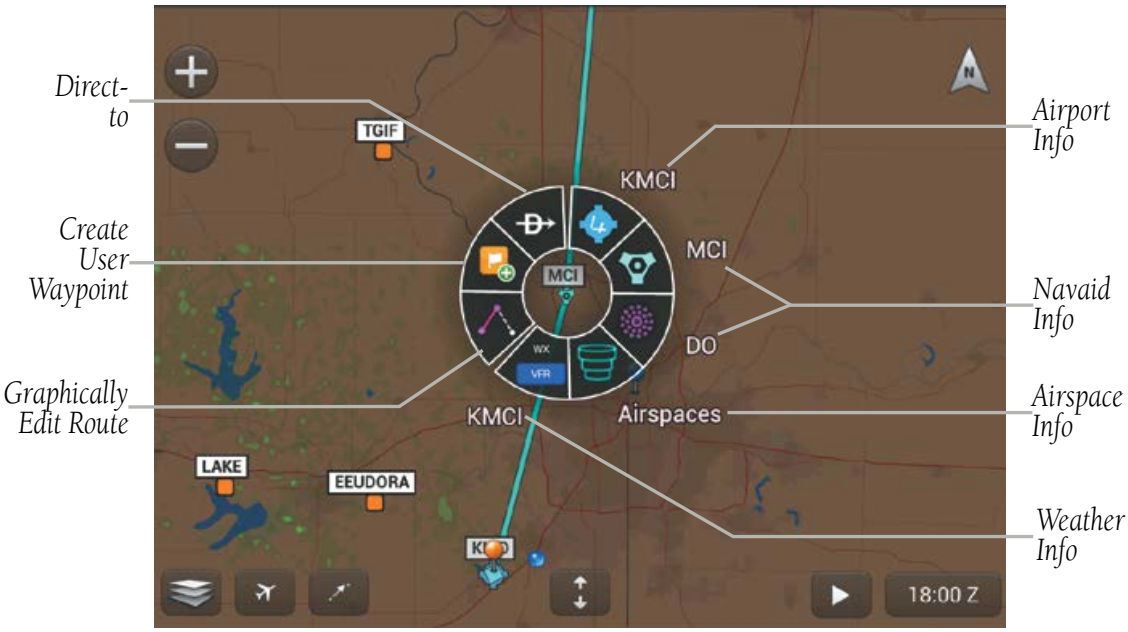
Repositioning the Radial Menu:

1) From any page, tap **Home** > **Map**.
2) Long press in the Map Pane until the Radial Menu appears.
3) Once the Radial Menu appears, touch and drag the Radial Menu to reposition over a new area.

Radial Menu Symbol	Description
	Navigate Direct-to
	Create User Waypoint
	Airspace
	Weather Observation Condition
	Graphically Edit Route
	Towered, Serviced Airport
	Towered, Private Airport
	Public Soft Surface, Serviced Airport

Radial Menu Symbol	Description
	Private Soft Surface, Serviced Airport
	Heliport
	Solid Surface Airport, No Services
	VOR/DME
	VORTAC
	VOR
	NDB/DME
	NDB

Radial Menu Symbols



Radial Menu

Viewing Navaid, Airspace, or Weather Information:

1) From any page, tap **Home** > **Map**.
2) Long press on the desired area in the Map Pane until the Radial Menu appears.
3) Tap the desired menu icon.
4) Tap outside of the dialog box to close.
5) Tap **Done** or outside of the Radial Menu to exit.

Viewing Airport Information from the Radial Menu:

1) From any page, tap **Home** > **Map**.
2) Long press near the desired Airport in the Map Pane until the Radial Menu appears.
3) Tap the Airport icon.

4) The Airport information window will always show the **General** information, select **Freq**, **Runways**, or **Fuel** to view more information.

5) Tap **Done** or outside of the dialog box to exit.

Navigating Direct To Using the Radial Menu:

1) From any page, tap **Home** > **Map**.

2) Long press the desired area in the Map Pane until the Radial Menu appears.

3) Tap **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) Tap **Activate** to begin navigation.

Graphically Edit Route:

1) From any page, tap **Home** > **Map**.

2) In the Map Pane, long press any flight plan waypoint or flight plan leg until the Radial Menu appears.

3) Tap 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: Tap to start a new route.

5) Repeat step four for each flight plan leg to edit.

6) Tap to undo the most recent action.

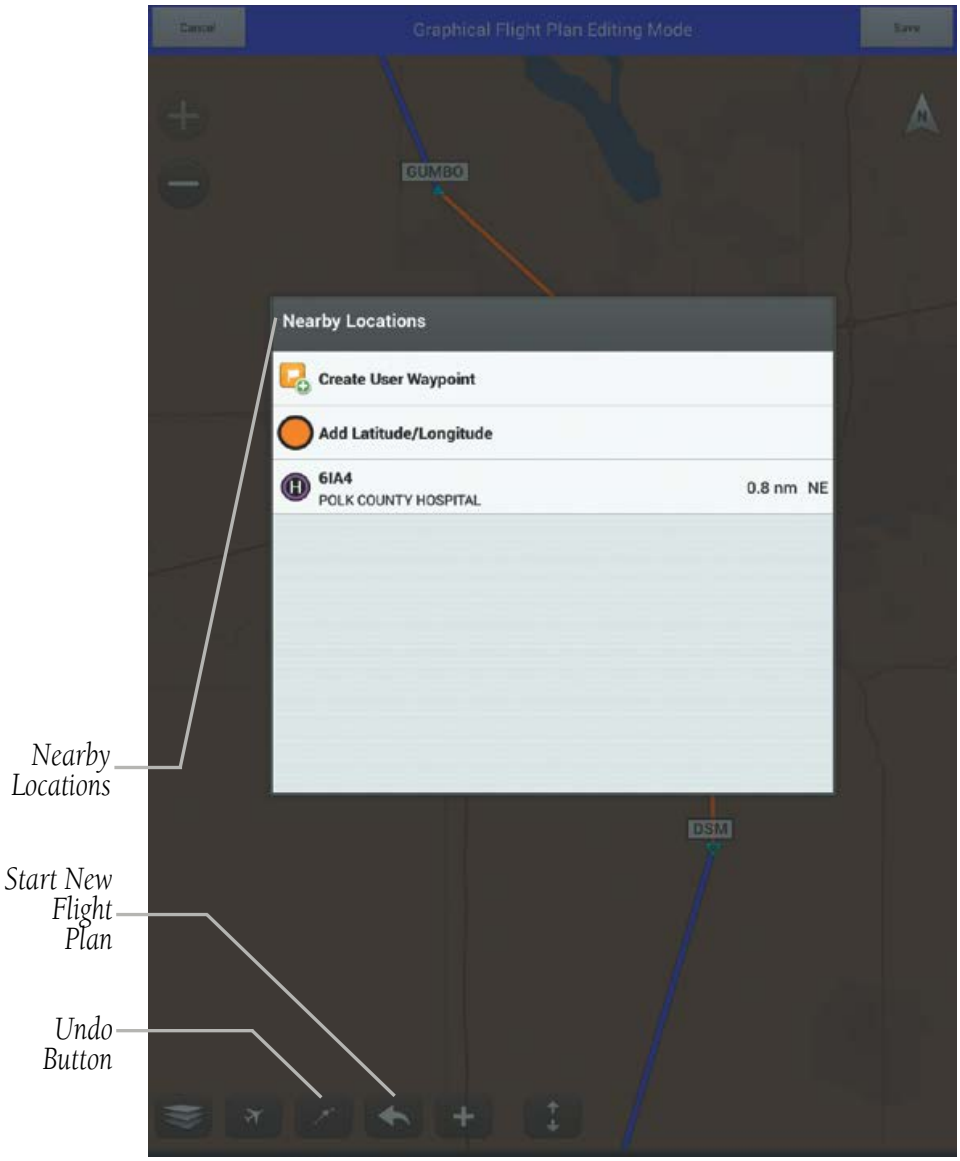
7) Tap **Save** to save or **Cancel** to cancel and exit Graphical Flight Plan Editing Mode.

Graphically Edit SIDs or STARs:

1) From any page, tap **Home** > **Map**.
2) In the Map Pane, long press any flight plan waypoint or flight plan leg until the Radial Menu appears.
3) Tap 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 SID/STAR flight plan leg or waypoint. The **Change SID/ STAR** dialog box appears.
5) Tap Delete SID/STAR to delete or select an alternate SID/STAR from the list and then selecting the desired transition from the submenu. If the selected flight plan leg is the first leg of a SID, the dialog box will allow you 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.
6) Tap to undo the most recent action.
7) Tap **Save** to save or **Cancel** to cancel and exit Graphical Flight Plan Editing Mode.

Graphical Flight Plan Editing Mode Save or Cancel

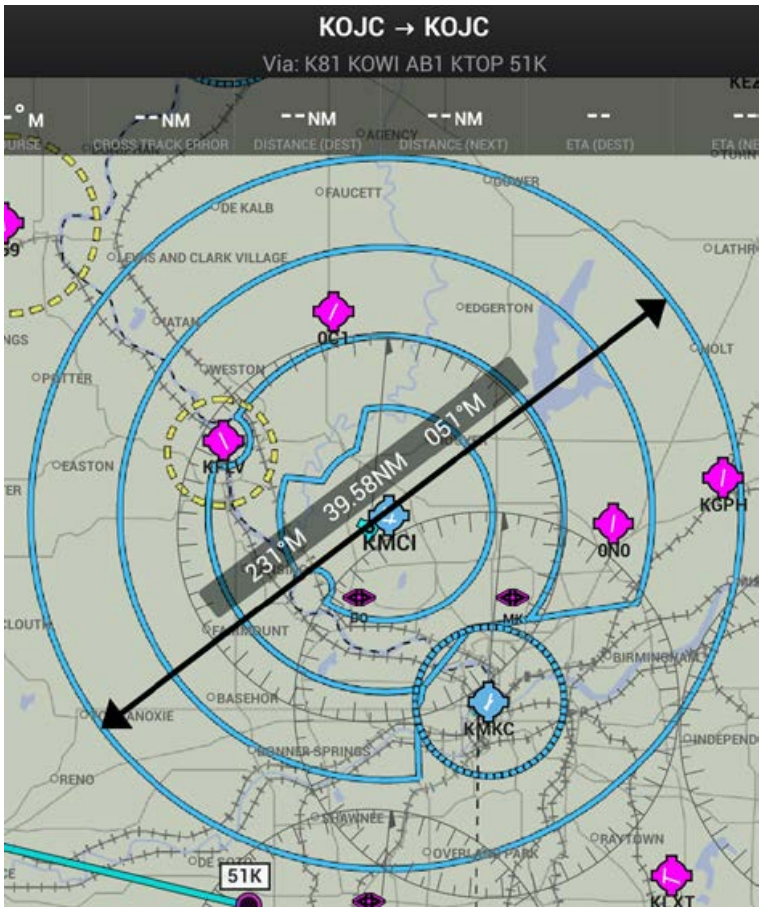
Rubber Band



Graphical Flight Plan Editing

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.



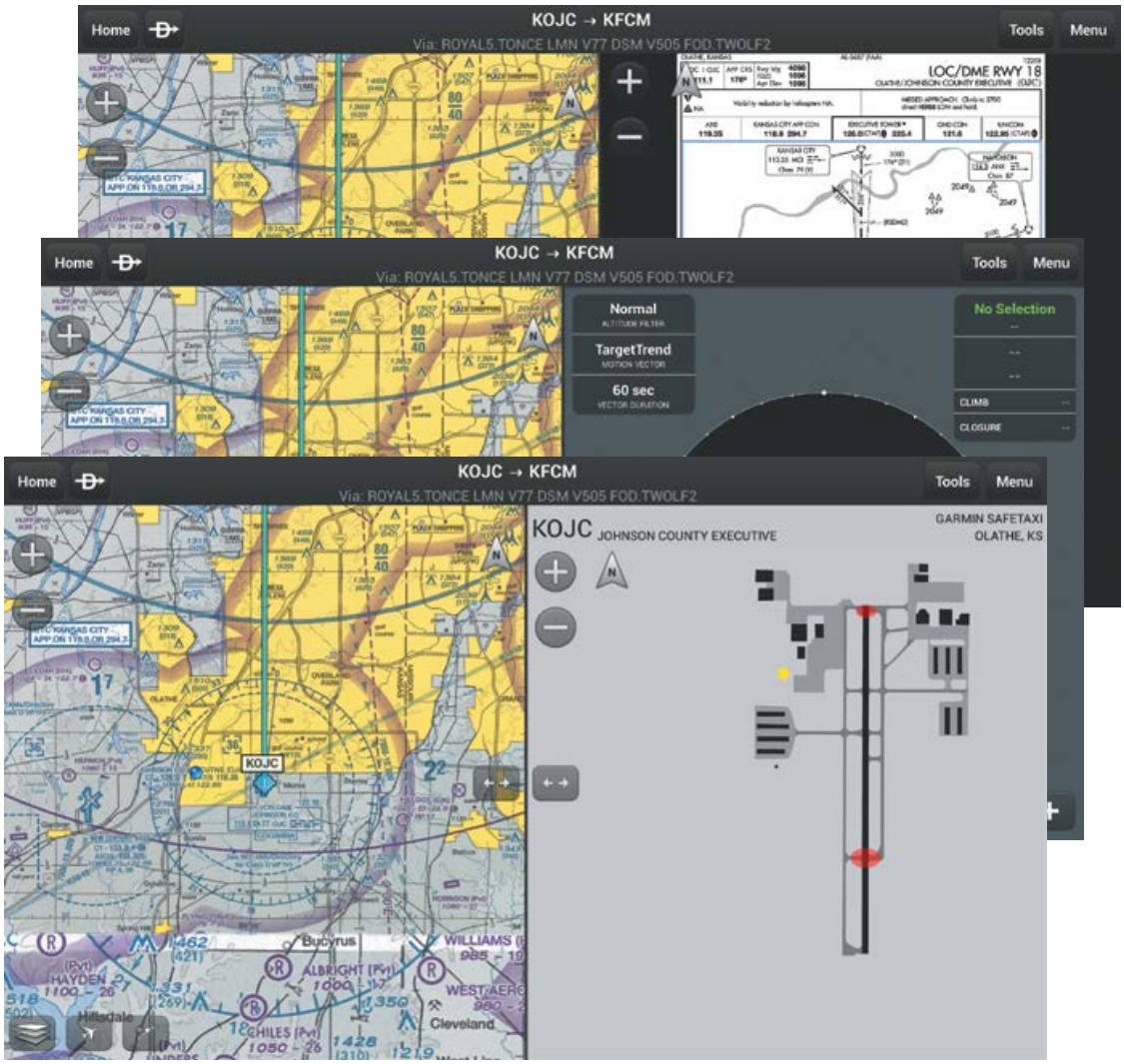
Distance Measuring Tool

SPLIT-SCREEN

The split-screen option allows the Map Page to be divided between the Map Pane and one of six options including Widgets, Panel, Charts, or SafeTaxi. 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

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, tap **Home** > **Map**.
2) Tap **Menu** > **Split Screen** > **Panel**.

Configuring Navigation Information in the Panel:

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

Navigation Data	Description
Altitude	The current GPS altitude or geometric height above Mean Sea Level (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.
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.

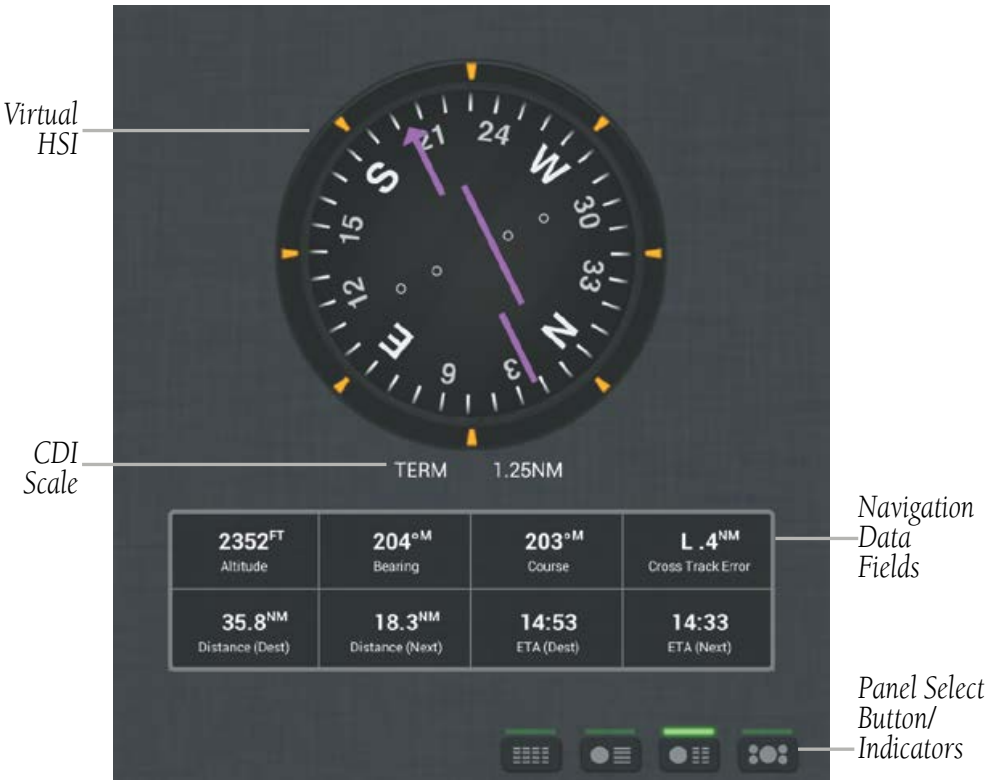
Navigation Data	Description
ETE (Dest)	The estimated time it takes to reach the destination waypoint from the present position, based upon current ground speed.
ETE (Next)	The estimated time it takes to reach the next waypoint form the present position, based upon current ground speed.
Ground Speed	The velocity that the aircraft is traveling relative to the ground.
Latitude	Current latitude.
Longitude	Current longitude.
Next Waypoint	Next waypoint on the route of flight
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 and 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
Pitch	Current pitch. (GDL 39 3D only)
Roll	Current roll. (GDL 39 3D only)

Navigation Data Field Options

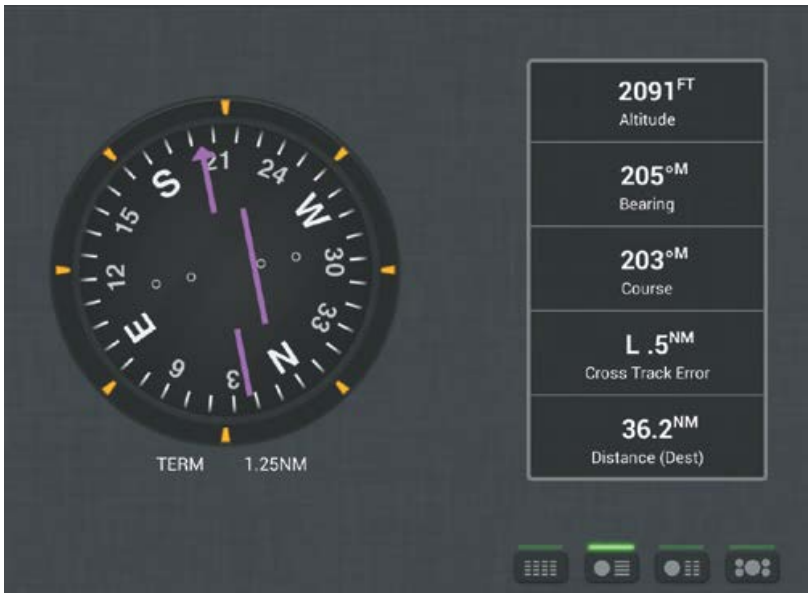
Classic Panel (Portrait)

Classic Panel (Landscape)

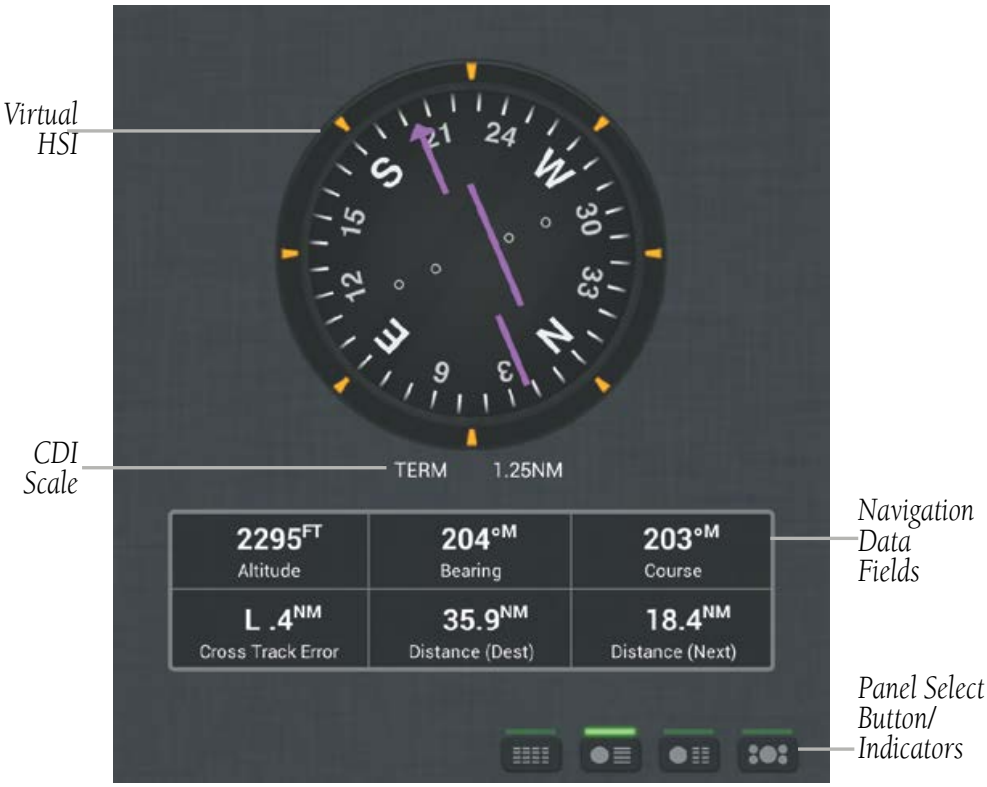
HSI + Navdata (Portrait)



HSI + Navdata (Landscape)



HSI + Condensed Navdata (Portrait)



HSI + Condensed Navdata (Landscape)

Navdata (Portrait)

Navdata (Landscape)

Split-Screen (Panel) with GDL 39 3D (Optional)

NOTE: *The GDL 39 3D is only to be used as an aid and should not be used as a primary attitude indicator.*

NOTE: *Extreme attitudes may degrade the GDL 39 3D accuracy.*

The optional GDL 39 3D is a portable ADS-B receiver with added attitude (pitch and roll) functionality.

When connected to the GDL 39 3D, Garmin Pilot will display a back-up Attitude Indicator on the Panel, as well as weather and traffic. 'Pitch' and 'Roll' become available options for the Nav Bar on the Map Pane, and Navigation Data on the Panel.

Panel w/ GDL 39 3D (Portrait)

Swapping the Attitude Indicator and HSI position:

1) From any page, tap **Home** > **Map**.
2) Tap **Menu** > **Split Screen** > **Panel**.
3) Tap to swap the position of the Attitude Indicator and the HSI.

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.

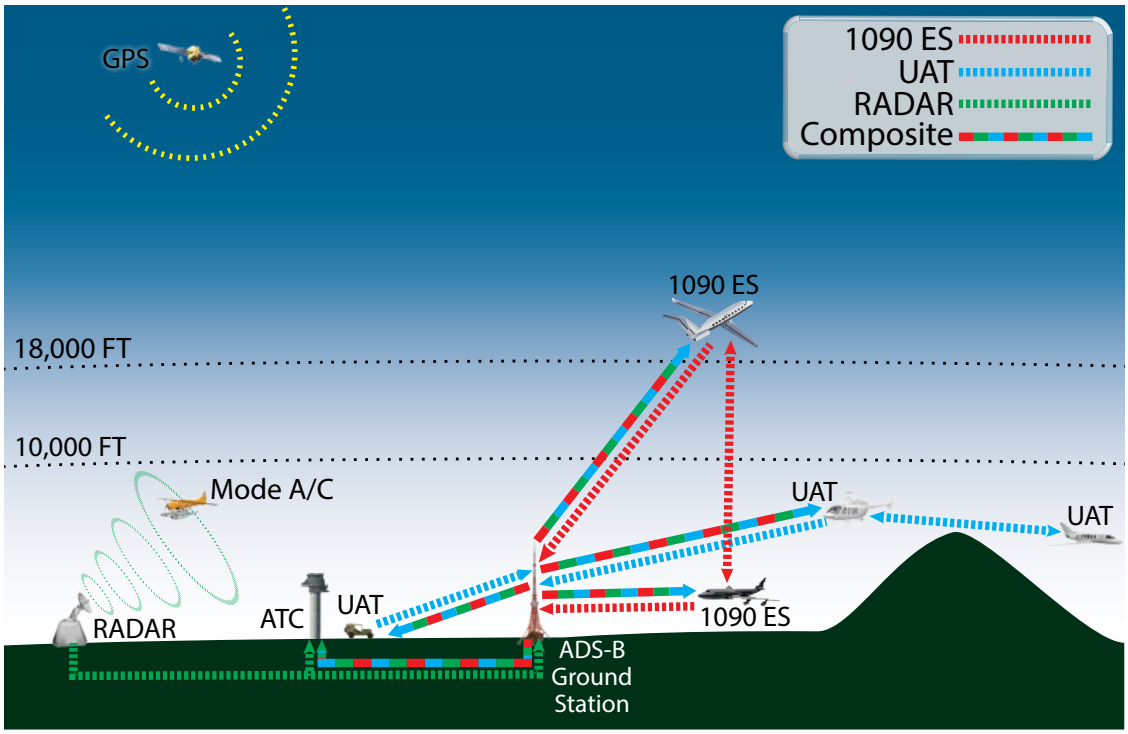
Leveling the GDL 39 3D:

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

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 that 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 that 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
	Non-threat, non-directional airborne traffic
	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'.
	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.
	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 your 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 the GDL 39 / GDL 39 3D for a Pressurized or Non-Pressurized Aircraft:

1) From any page, tap **Home** > **Settings**.
2) Tap the GDL 39 Tab.
3) Tap Pressurized Cabin to select/deselect.

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

Enabling/disabling traffic data on the Map Page:

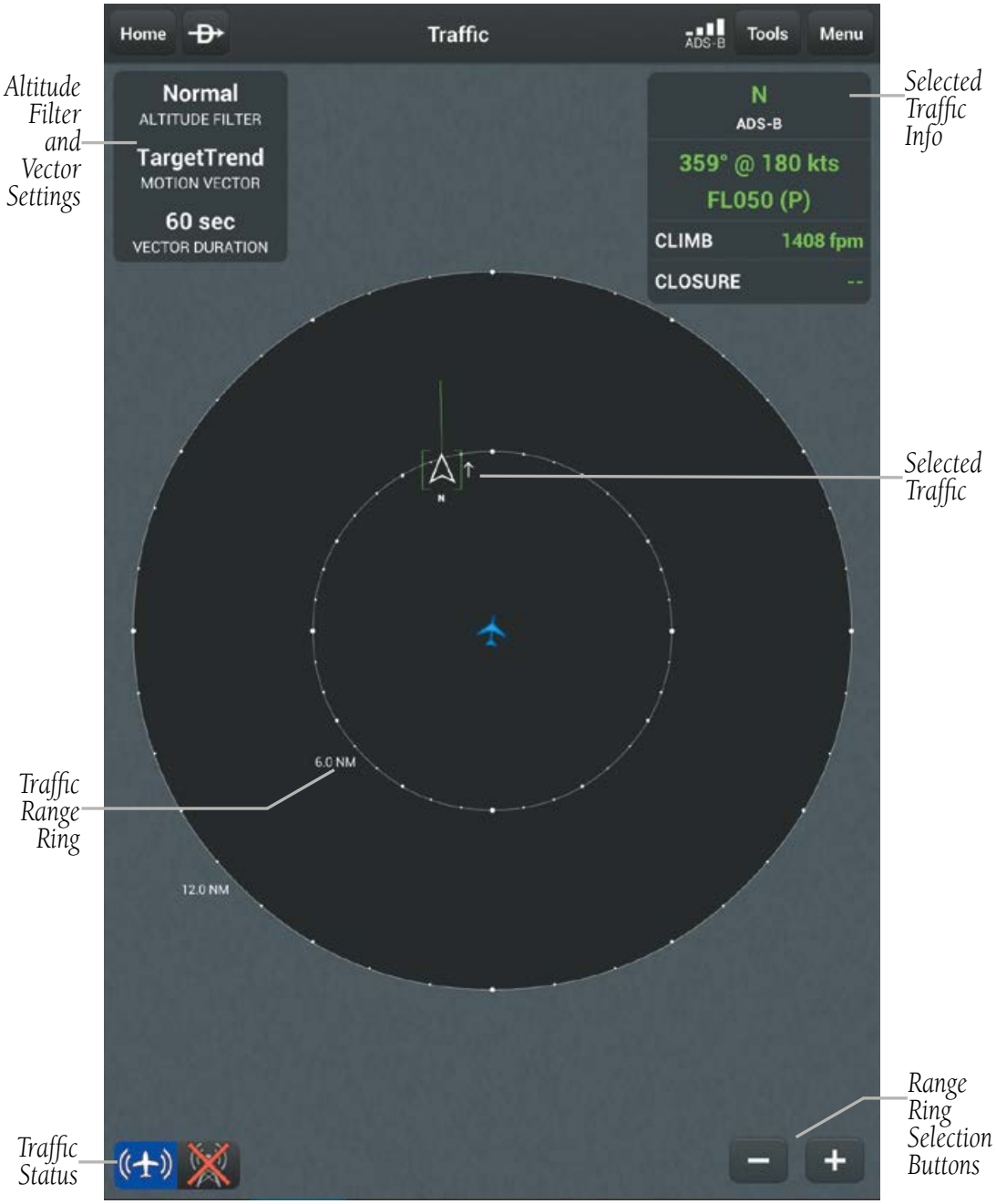
1) From any page, tap **Home > Map**.
2) Tap **Menu**.
3) Select **Show Traffic**.

Viewing the Traffic Page:

1) From any page, tap **Home** > **Traffic.**
2) Tap − + to change the range for the traffic rings.

Changing the altitude range:

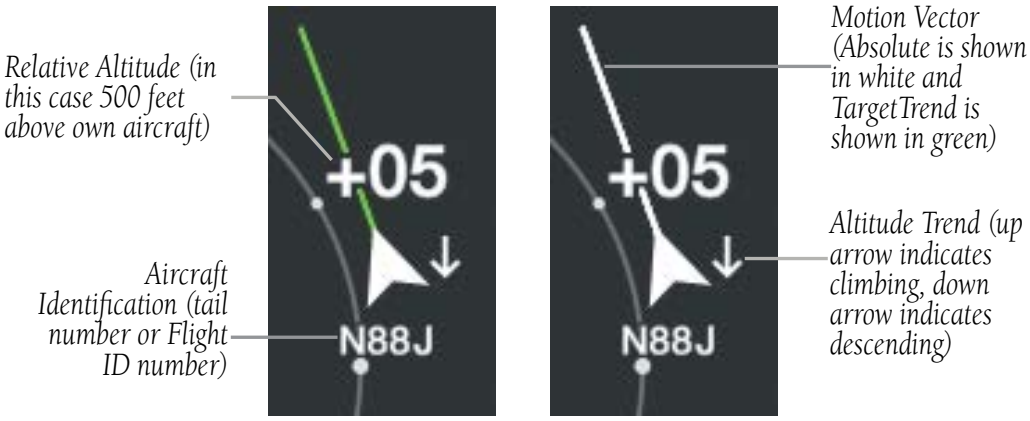
1) On the Traffic Page, Tap **Altitude Filter**.
2) Tap one of the following options:
   - **Unrestricted:** All available traffic is displayed.
   - **Above:** Displays non-threat and proximity traffic from 9000 feet above the aircraft to 2700 feet below the aircraft. Typically used during climb phase 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™ 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 your position and ground speed. For example if traffic is ahead of you and traveling in the same direction but at a slower ground speed, the motion vector would point opposite of its direction of flight, indicating that you are overtaking the traffic. Thus, the TargetTrend motion vector is relative to you, 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

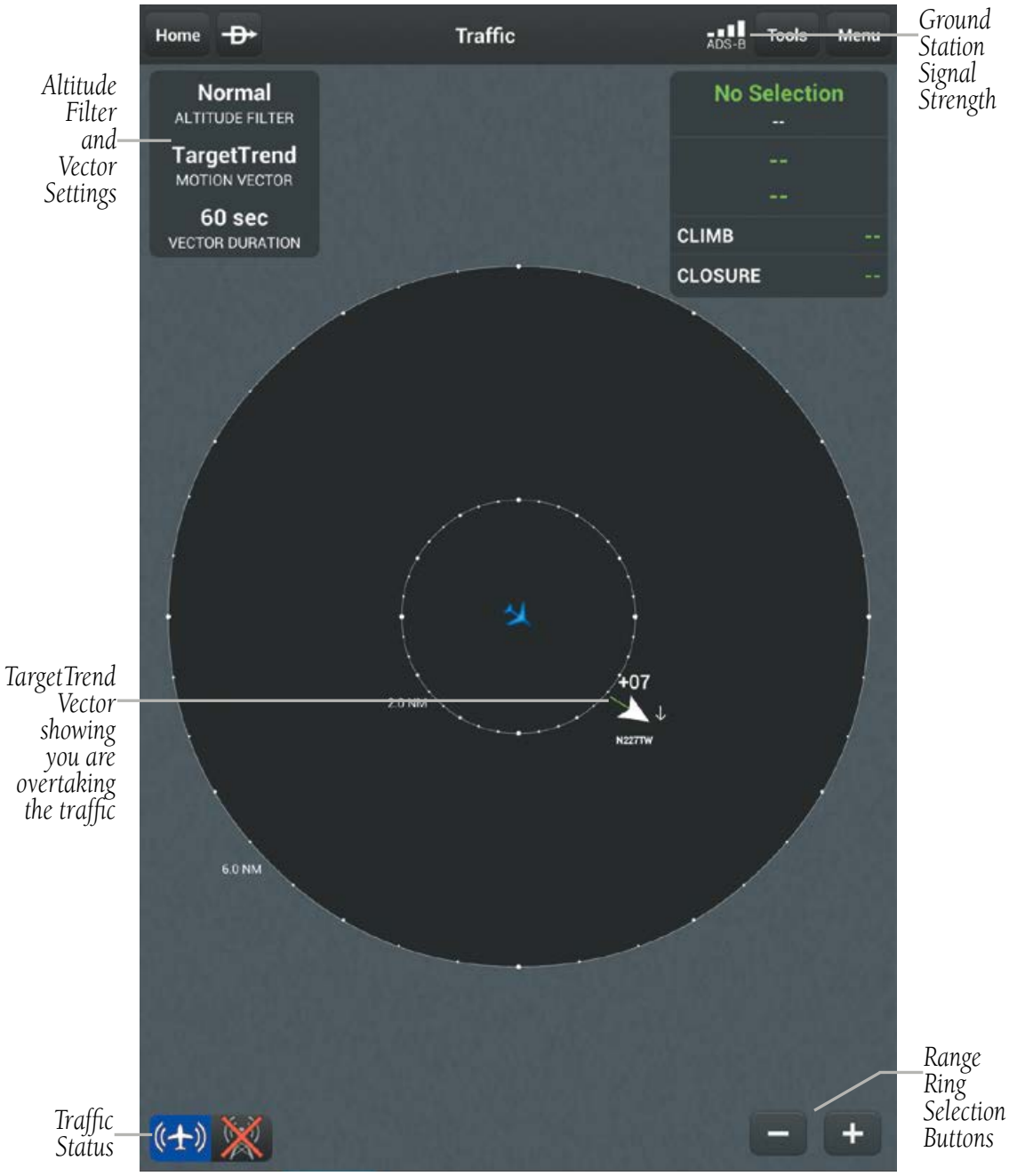
NOTE: *Traffic Altitude Filters and Motion Vector settings can only be changed on the dedicated Traffic Page. The Altitude Filter and Motion Vector settings from the Traffic Page will be used on the Map Page as well.*

Changing the Motion Vector:

1) From any page, tap **Home** > **Traffic.**
2) Tap the Motion Vector field in the upper left corner of the Traffic Page and select **TargetTrend** or **Absolute**.

Changing the Vector Duration:

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



TargetTrend™ Vectors

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.

The GDL 39 / GDL 39 3D can also receive and, when connected to Garmin Pilot, display Flight Information Service-Broadcast (FIS-B). 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 GDL 39 / GDL 39 3D must be within range and line-of-sight of an operating GBT. Reception may be affected by factors including altitude or terrain. GDL 39 / GDL 39 3D-supported 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:

1) From any page, tap **Home** > **Settings**.
2) Tap the GDL 39 Tab.

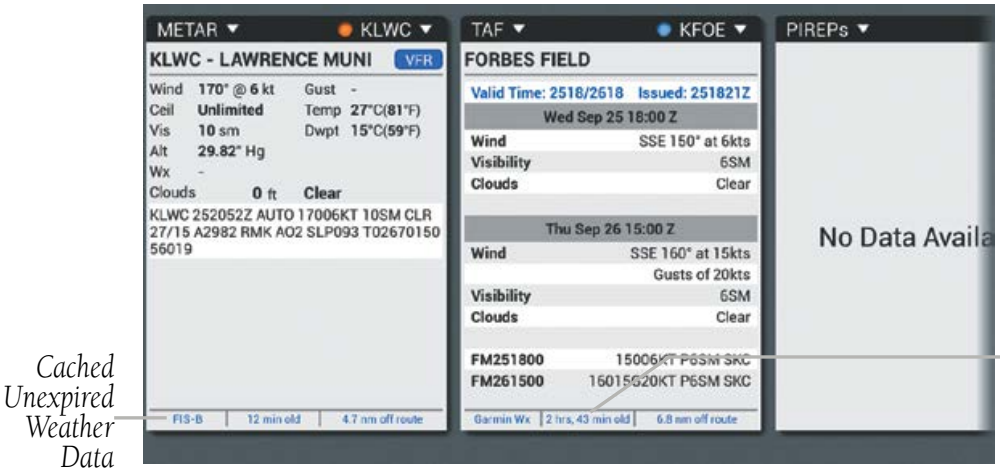
Viewing Ground Station Status:

1) From any page, tap **Home** > **Settings**.
2) Tap the GDL 39 Tab.

FIS-B WEATHER PRODUCTS

FIS-B weather broadcasts are updated regularly and may take approximately ten minutes to transmit all available weather data. Therefore, not all available weather data is immediately available. No pilot action is required to receive FIS-B weather information. Weather product status can be viewed on the Settings Page under the GDL 39 tab.

When a FIS-B 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.



Cached Unexpired Weather Data

Weather Product Source, Age and Relative Location

Weather Product Age and Source

RADAR (FIS-B)

Weather radar data is collected from radar sites across the United States. It is combined into a mosaic for easier display and analysis. Garmin Pilot combines the CONUS and Regional Radar FIS-B products into one map overlay (Radar (FIS-B).

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 maneuver in or near areas of hazardous weather. Rather, use it in an early-warning capacity for pre-departure evaluation.

Composite data from radar sites in the United States is shown. This data is composed of the maximum reflectivity from the individual radar sweeps at different title 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.

NEXRAD 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

NEXRAD Limitations

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

- NEXRAD base reflectivity does not provide sufficient information to determine cloud layers or precipitation characteristics (hail vs. rain). For example, it is not possible to distinguish between wet snow, wet hail, and rain.
- 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.

NEXRAD Intensity

Colors are used to identify the different NEXRAD echo intensities (reflectivity) measured in dBZ (decibels of 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.

Radar Intensity

Viewing Radar Information:

1) From any page, tap **Home** > **Map**.

2) Tap select **Radar (FIS-B)** from the Layer Select menu.

3) Tap to animate the radar loop. Each frame of the radar loop is time stamped. The time stamp is just right of the play button.

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 forecast 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.

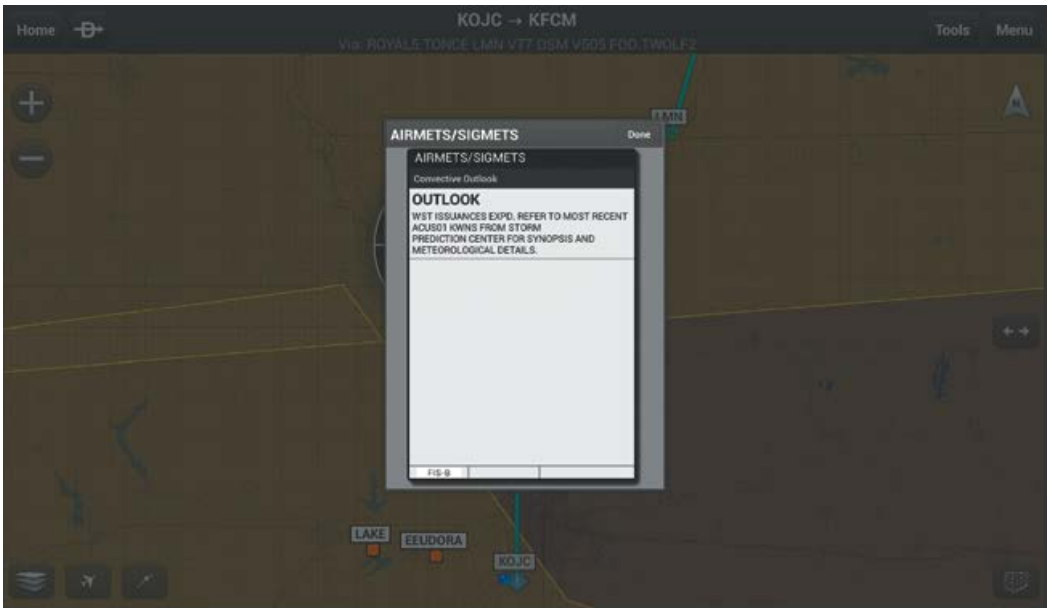
Viewing AIRMETS and SIGMETS:

1) From any page, tap **Home** > **Map**.

2) Tap and select **AIRMET/SIGMET** from the Layer Select menu.

3) Tap and select the desired type of AIRMET/SIGMET (i.e., Convective, Icing, IFR/MTN, or Turbulence) to display.

4) Tap within the shaded area for AIRMET/SIGMET details.



AIRMET/SIGMET Layer

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.*

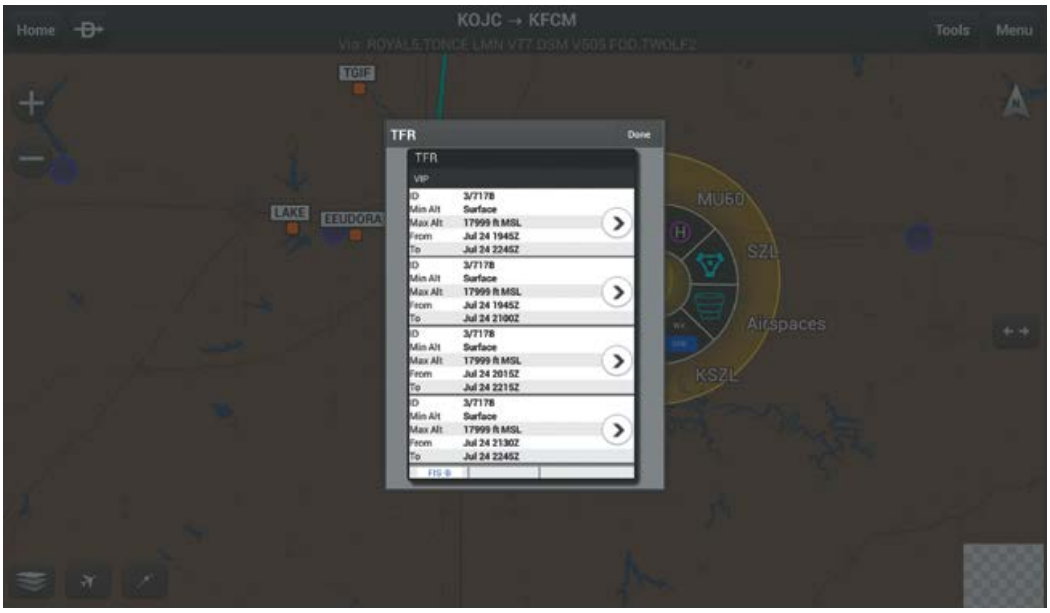
Temporary Flight Restrictions or TFRs temporarily restrict all aircraft from entering the selected airspace unless a waiver has been issued. TFRs are routinely issued for occurrences such as sporting events, dignitary visits, military depots and forest fires. TFRs are represented as an area outlined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

Viewing Temporary Flight Restrictions (TFR):

1) From any page, tap **Home** > **Map**.

2) Tap and select **TFR** from the Layer Select menu.

3) Tap within the outlined area for TFR details.



TFR Layer

PIREPS

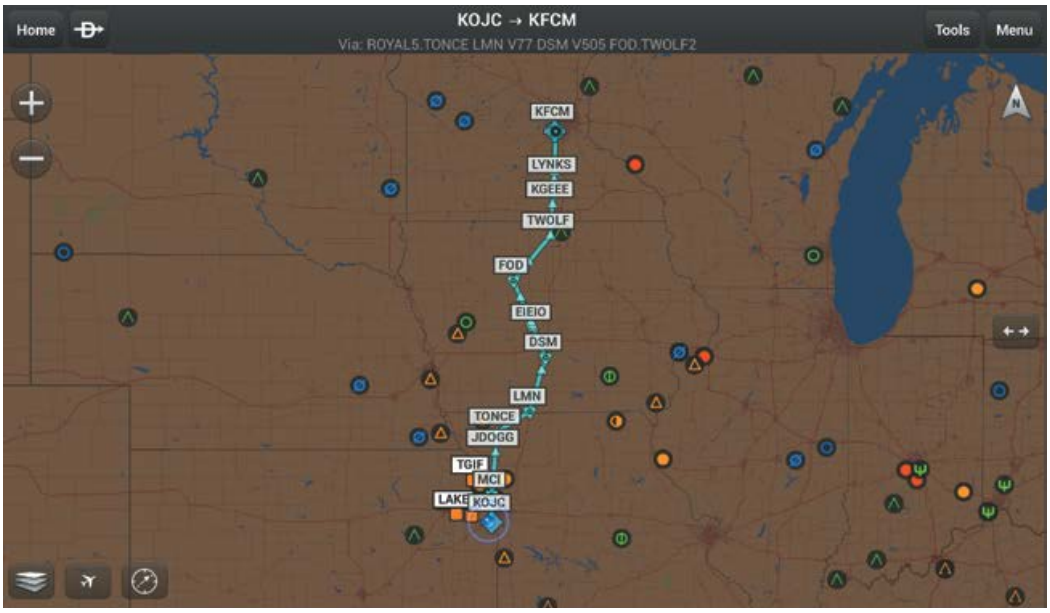
Pilot Weather Reports (PIREPs) provide timely weather information for a particular route of flight. When significant weather conditions are reported or forecast, Air Traffic Control (ATC) facilities are required to solicit PIREPs. A PIREP may contain unforecast adverse weather conditions, such as low in-flight visibility, icing conditions, wind shear, and turbulence. PIREPs are issued as either Routine (UA) or Urgent (UUA).

Viewing PIREPs:

1) From any page, tap **Home** > **Map**.

2) Tap and select **PIREPs** from the Layer Select menu.

3) Tap the PIREP icon for details.



PIREP Layer

PIREP TYPE	Icons	Description
Icing		Negligible Icing
		Trace Icing
		Trace to Light Icing
		Light Icing
		Light to Moderate Icing
		Moderate Icing
		Moderate to Severe Icing
		Severe Icing

PIREP TYPE	Icons	Description
Sky Conditions		Unknown Sky Condition
		Sky Clear
		Few Clouds
		Scattered Clouds
		Broken Clouds
		Overcast
		IMC
Turbulence		Turbulence Negligible or Smooth
		Light Turbulence
		Light to Moderate Turbulence
		Moderate Turbulence
		Moderate to Severe Turbulence
		Severe Turbulence
		Extreme Turbulence

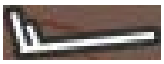
PIREP Icons

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 39,000 feet MSL.

Winds Aloft are displayed using wind barbs. The wind barbs indicate wind speed and direction and always point in the direction that the wind is coming from. 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.

The wind barbs always point in the direction that the wind is coming from. 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 triangle flag is 50 knots.

Icons	Description
	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.
	Orange indicates wind speeds of 51-80 kts.
	Red indicates wind speeds of 81 kts or greater.

Winds Aloft Barbs

Viewing Winds Aloft Information:

1) From any page, tap **Home** > **Map**.

2) Tap and select **Winds Aloft** from the Map Overlay menu.

3) Drag the horizontal slider to the right to view forecast winds aloft.

4) Drag the slider up to the desired altitude. Altitudes are displayed in 3,000-foot increments up to 39,000 feet MSL.

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:

1) From any page, tap **Home** > **Airport Info**.
2) Select the Weather Tab to view METAR, TAF, Winds Aloft and the Area Forecast for the selected airport.

WIDGETS

There are six weather information products available for selection from the Widget Type menu. The FIS-B products available to be displayed as widgets are METAR, TAF, PIREPs, winds and temperatures aloft, AIRMET/SIGMETs and NOTAMs. The source, product age and relative location will be displayed at the bottom of each widget. Use the NavTrack to view available weather products along the route of flight.

Viewing Weather Widgets:

1) From any page, tap **Home** > **Map**.
2) Tap to split the screen.
3) Drag the Widgets from right to left and tap the plus button to add a widget.
4) Select a widget from the **Select Widget Type** menu.

Viewing NOTAMs:

1) From any page, tap **Home** > **Airport Info**.
2) Tap **Menu** > **Search**.
3) Select a search criteria.

Search Criteria	Description
Code	Search by the three letter or three character (alphanumeric) airport code (i.e., LAX)
Name	Search by name (i.e., Los Angeles Intl).
City	Search by city (i.e., Los Angeles, CA).

Airport Search Options

Or: Select a state from the list and tap 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) Tap **NOTAMs** to view the NOTAMs window.

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.

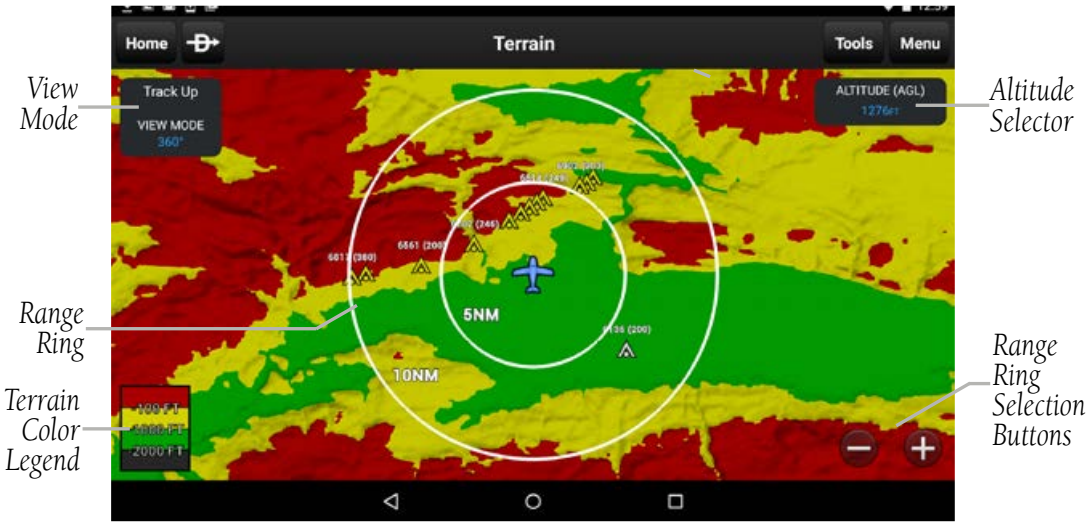
The device or external GPS receiver provides the horizontal position and altitude of the aircraft. Aircraft GPS altitude is derived from satellite position. GPS altitude is then converted to a mean sea level (MSL)-based altitude (GPS-MSL altitude) and is used to determine terrain and obstacle proximity. 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 2-D 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.

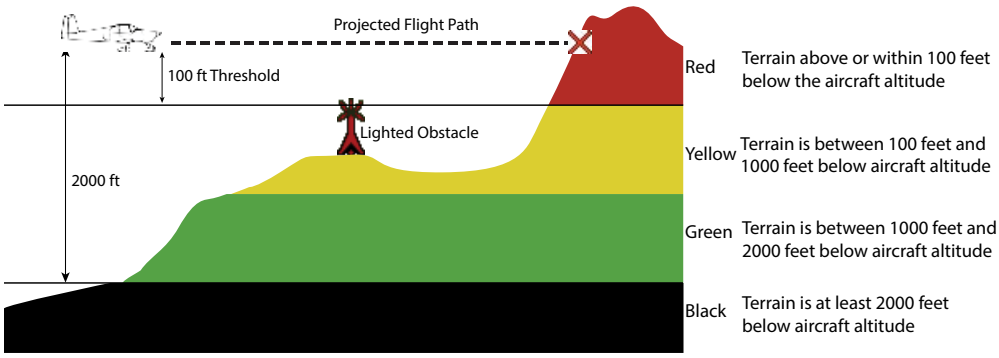
Alert windows appear to inform the pilot of proximity to the terrain and obstacles.

TERRAIN 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



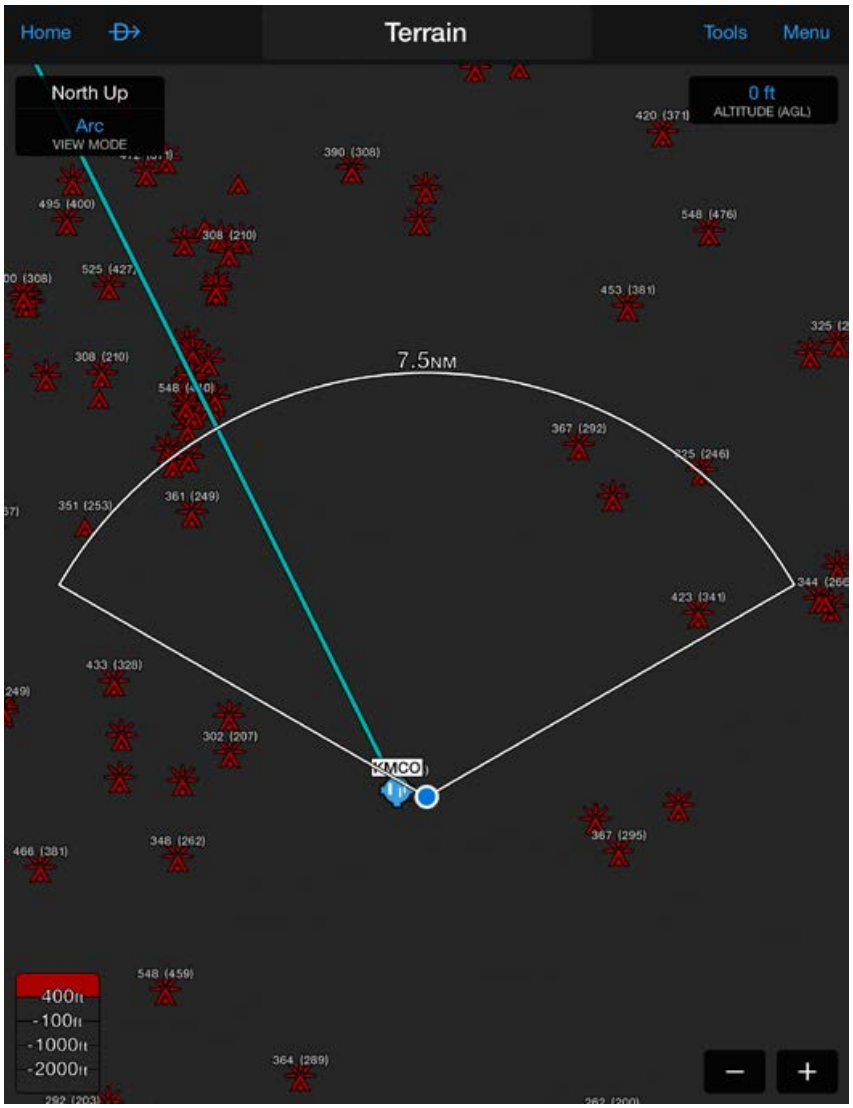
Terrain Page Altitude/Color Correlation

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

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).

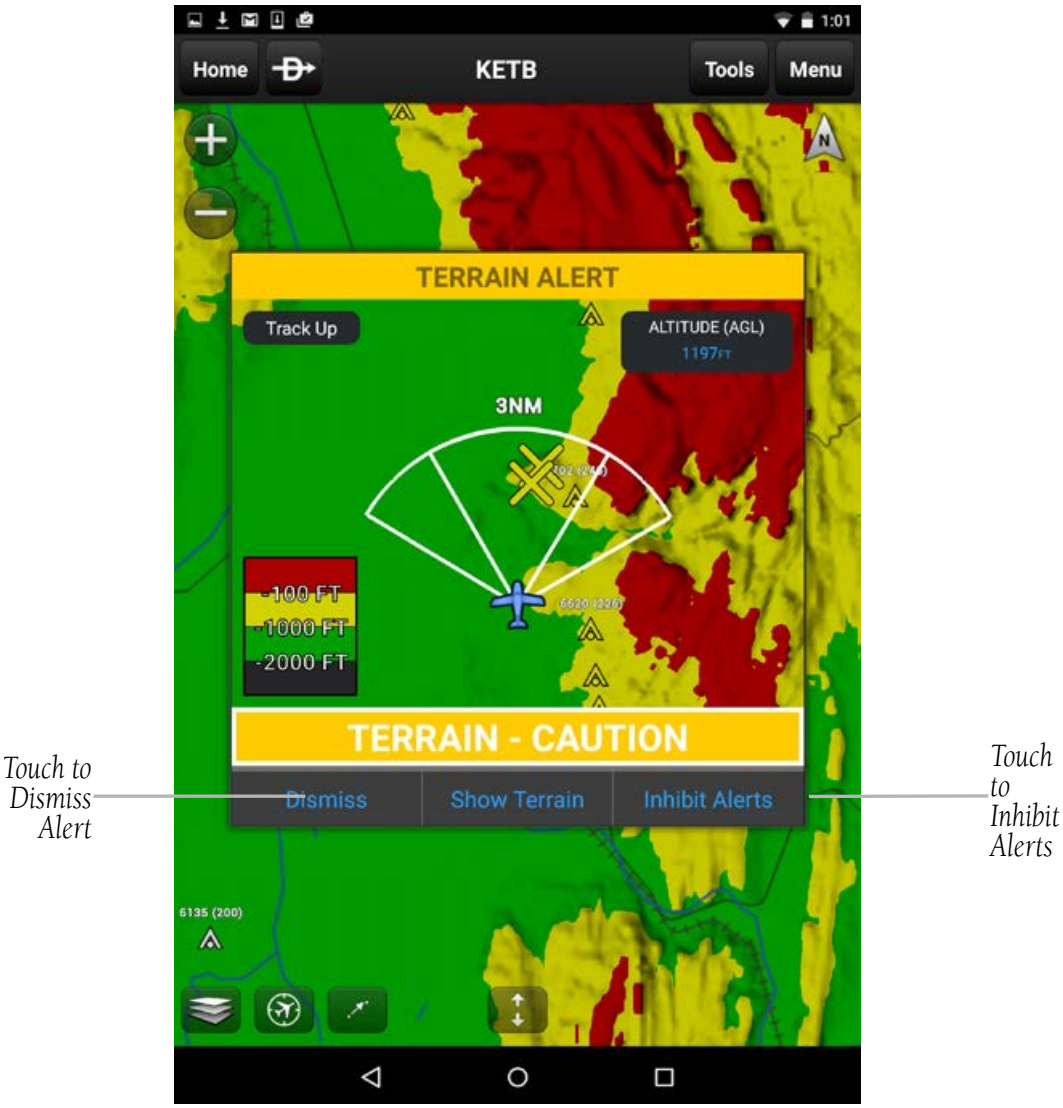
Unlighted Obstacle		Lighted Obstacle		Potential Impact Points	Obstacle Location
< 1000′ AGL	> 1000′ AGL	< 1000′ AGL	> 1000′ AGL		
					WARNING: Red obstacle is above or within 100′ below current aircraft altitude
					CAUTION: Yellow obstacle is between 100′ and 1000′ below current aircraft altitude

Terrain Obstacle Colors and Symbology

TERRAIN AND OBSTACLE ALERTS

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.



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"

**"Pull Up" is repeated every 5 seconds after the initial alert until alert conditions no longer exists*

Terrain and Obstacle Voice Alerts

Viewing the TERRAIN Page:

1) From any page touch **Home** > **Terrain**.

2) Touch − + or pinch-zoom to change the range of the terrain rings.

Configuring the Terrain Page:

1) From any page touch **Home** > **Terrain**.

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 the Navigation Map:

1) From any page touch **Home** > **Map**.

2) Touch > **Overlays** > **Terrain**.

Enabling/Disabling Obstacles on the Navigation Map:

1) From any page touch **Home** > **Map**.

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

CHARTS

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:

- Arrivals (STAR) BRAYMER FOUR KIXD.
- Departure Procedures (DP) ROYAL THREE KIXD.
- Approaches ILS OR LOC RWY 36 KIXD.
- Airport Information Charts including: Airport Diagrams, Alternate Minimums, Take-off Minimums, LAHSO, and Hot Spots LAHSO KIXD.

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) From any page,, tap **Home** > **Charts.**

2) Tap 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) Tap the system back button to return to binder contents.

5) Tap the system back button again to return to the Chart Binders Page.

Creating a Custom Binder:

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

Or:

1) From any page, tap **Home** > **Airport Info**.
2) Tap 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) Tap to create a Chart Binder or add to an existing binder.
4) Tap and enter a Binder Name or select from the list of available binders.
5) Tap for each additional chart to add to a binder.

Searching for Charts:

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

Viewing and Organizing Procedures from the Airport Info Page:

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, tap **Home** > **Airport Info**.
2) Tap 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) Tap the desired chart to view.
4) Tap to create a Chart Binder or add to an existing binder.
5) Tap and enter a Binder Name or select from the list of available binders.
6) Tap for each additional chart to add to a binder.

Deleting Custom Binders:

1) From any page,, tap **Home** > **Charts.**
2) Tap **Menu** > **Edit**.
3) Tap for the associated binder to delete the binder.
4) Tap the blue Edit Mode bar when finished to exit.

Deleting Charts from a Custom Binders:

1) From any page,, tap **Home** > **Charts.**
2) Tap **Menu** > **Edit**.
3) Tap for the associated chart to delete the chart.
4) Tap the blue Edit Mode bar when finished to exit.

SCRATCH PAD

The Scratch Pad, allows the pilot to quickly draw or write down information on the device screen. From copying clearances, to noting weather conditions, the scratch pad helps keep all flight information at your finger tips.

Using the Scratch Pad:

1) From any page, tap **Home** > **Scratch Pad**.

2) Tap to begin drawing or to view the Tool Palette.

3) Tap the desired tool (Pen, or Highlighter)

4) Tap the desired color and Line Width.

Clearing the Scratch Pad:

1) From any page, tap **Home** > **Scratch Pad**.

2) Tap to erase small areas.

Or: Tap > **Yes** to clear the entire scratch pad.

Inverting colors on the Scratch Pad:

1) From any page, tap **Home** > **Scratch Pad**.

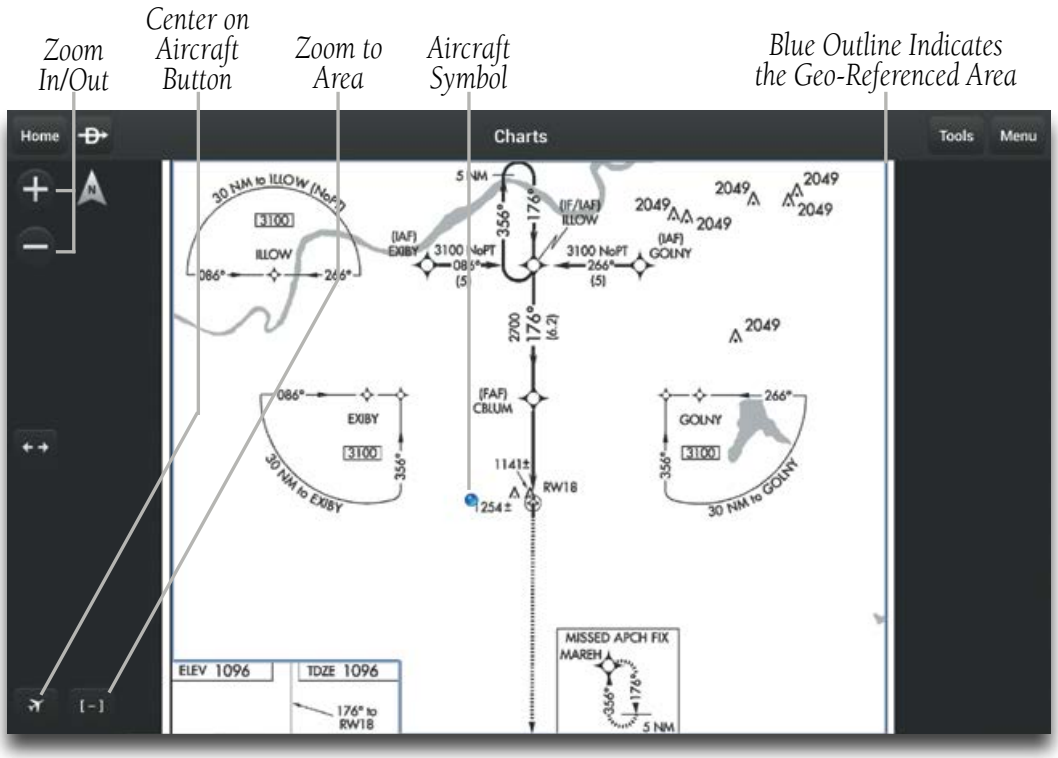
2) Tap **Menu** > **Invert Colors**.

SUBSCRIPTIONS

Garmin Pilot offers the ability to purchase two additional subscriptions. First Geo-referenced FliteCharts show aircraft position on over 11,000 approach plates. Second, Garmin's SafeTaxi shows runways, taxiways, FBOs and hangers, geo-referenced with your 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. Geo-referenced FliteCharts will be active on all available approach charts.



Geo-Referenced FliteCharts

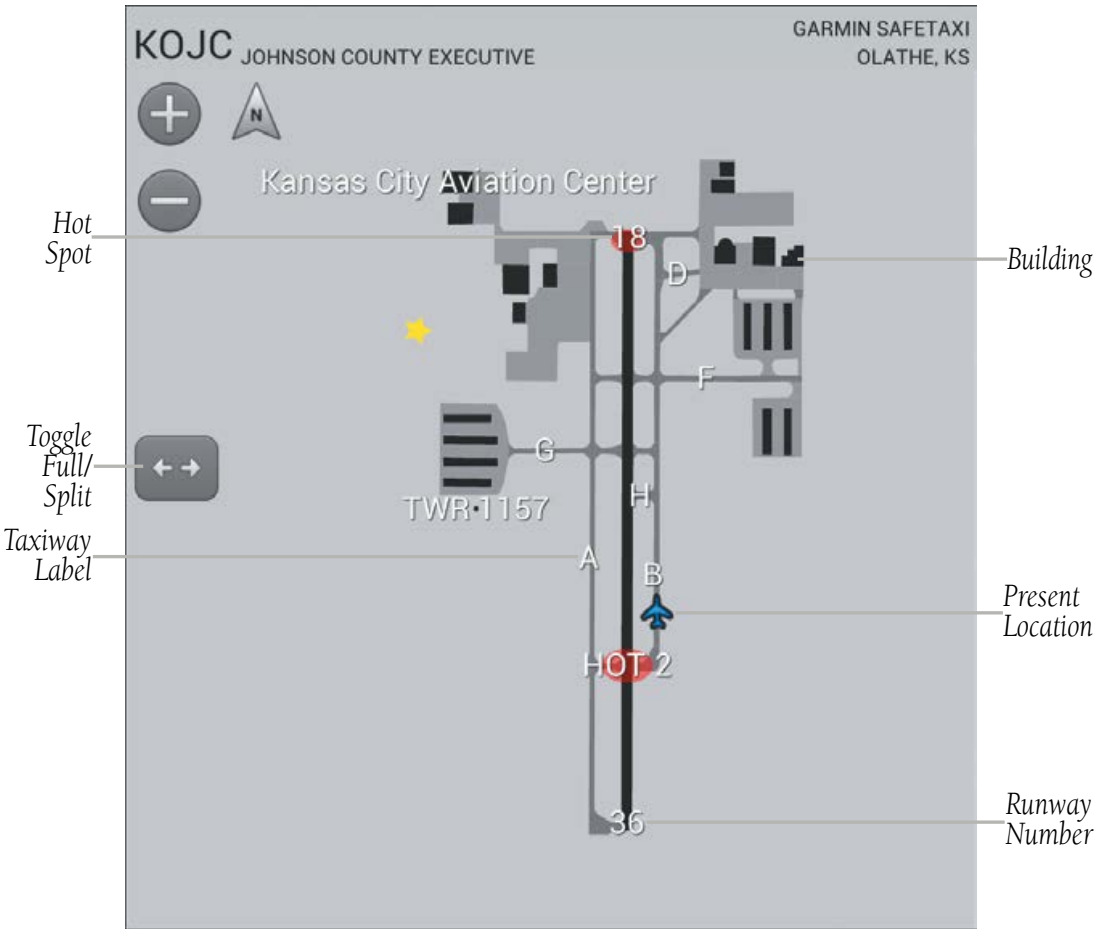
SAFETAXI

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, tap **Home** > **Airport Info**.
2) Tap **SafeTaxi** to view the SafeTaxi airport diagram.
3) Tap the system back button to return Airport Info Page.


KOJC
JOHNSON COUNTY EXECUTIVE
GARMIN SAFETAXI
OLATHE, KS
N
Kansas City Aviation Center
18
D
F
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H
TWR·1157
A
B
HOT 2
36
Hot Spot
Toggle Full/ Split
Taxiway Label
Building
Present Location
Runway Number

SafeTaxi

BARON MOBILE LINK™

The Baron Mobile Link™ in combination with a SiriusXM subscription provides in-flight weather information including: US Radar, Canada Radar, P. Rico Radar, Satellite, Echo Tops, Weather, and PIREPs. The Baron Mobile Link is an external accessory that allows Garmin Pilot to receive SiriusXM Weather wirelessly. When using the Baron Mobile Link, the Roads & Borders Base Map is replaced with mapping information provided by the Baron unit.

Caution: *Datalink weather information is subject to service interruptions, may contain errors or inaccuracies, and should not be relied upon exclusively. You are urged to check alternate weather information sources prior to making safety related decisions. You acknowledge and agree that you shall be solely responsible for use of the weather information and all decisions taken with respect thereto. By using this weather service, you release and waive any claims against SiriusXM Radio Inc. and Baron Services and affiliates with regard to the weather information.*

An active connection to the Baron Mobile Link WiFi hotspot is required for this feature. Garmin Pilot will first attempt to communicate with the Mobile Link. If the Mobile Link is not accessible, the Android WiFi connection settings screen will be shown. This should be used to select the Mobile Link WiFi connection. After the connection is estabilished, press the Android back button to return to Garmin Pilot.

When Baron Mobile Link is toggled off, Garmin Pilot will attempt to disconnect from the Mobile Link WiFi hotspot and connect to the first available WiFi connection to establish communication with Garmin Weather Data Services. Please see the Android WiFi connection settings screen if a connection to Garmin Weather Data Services is not established.

Activating Baron Mobile Link™:

1) From any page, tap **Home** > **Settings**.
2) Tap the **Weather Data** Tab.
3) Tap the On/Off button to turn on the Baron Mobile Link™.
4) Select the Baron Mobile Link from the list of available networks.
5) If necessary, enter the network password.

Connecting to a Baron Mobile Link Network:

1) Open the Device Settings Menu.
2) Under the Settings column on the left, tap **Wi-Fi**.
3) If necessary, use the On/Off slider to turn on Wi-Fi.
4) Select the Baron Mobile Link from the list of available networks.
5) If necessary, enter the network password.

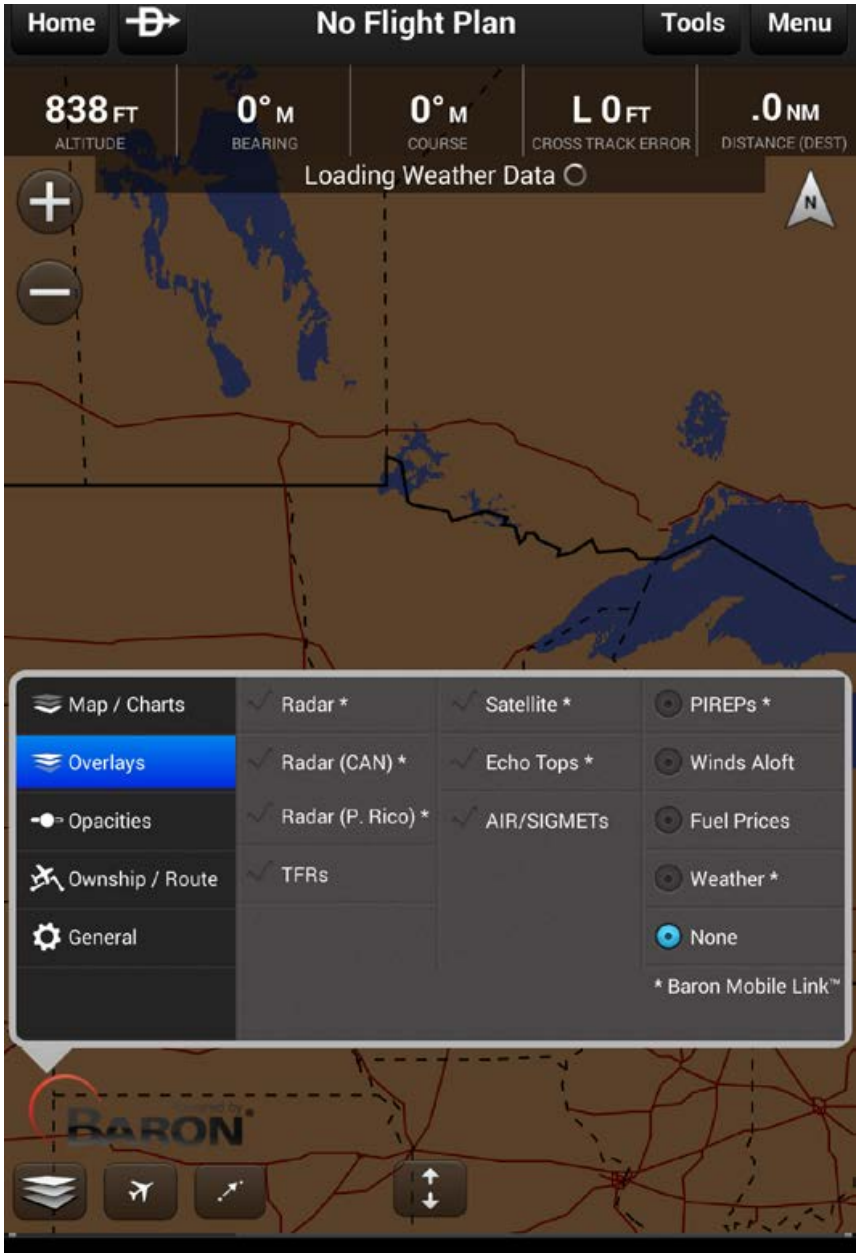
Viewing Radio Information:

1) From any page, tap **Home** > **Settings**.
2) Tap the Weather Data Tab.
3) Tap the On/Off selector to turn on the Baron Mobile Link™.
4) Tap **Connection Information** to view radio information (including Radio ID, Service Level , Signal Quality, and Weather Imagery update information).

Radio Information

Viewing Radar Information:

1) From any page, tap **Home** > **Map**.
2) Tap select Radar from the Layer Select menu.
3) Tap to animate the radar loop. Each frame of the radar loop is time stamped. The time stamp is just right of the play button.



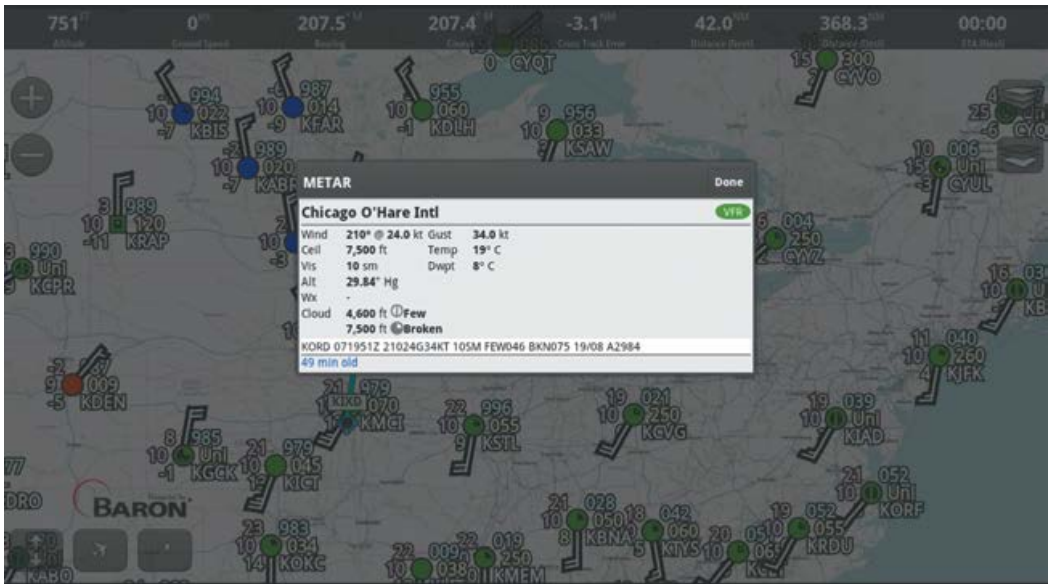
Baron MobileLink™ Layers

Viewing Satellite Information:

1) From any page, tap **Home** > **Map**.
2) Tap select **Satellite** from the Layer Select menu.
3) Tap to animate the satellite loop. Each frame of the satellite loop is time stamped. The time stamp is just right of the play button.

Viewing the Weather Overlay:

1) From any page, tap **Home** > **Map**.
2) Tap select **Weather** from the Layer Select menu.
3) Tap any of the displayed Weather Icons to view the Raw and translated METAR information.



Baron Weather Layer

Viewing Weather Widgets for METARs, TAFs or PIREPs:

1) From any page, tap **Home** > **Map**.
2) Tap to split the screen.
3) Drag the Widgets from right to left and tap the plus button to add a widget.
4) Select a widget from the **Select Widget Type** menu.

APPENDIX A: LICENSE AGREEMENT AND WARRANTY

CONTACT GARMIN

Contact Garmin if you have any questions while using Garmin Pilot. In the USA contact Garmin Product Support by phone: (866) 739-5687, Monday–Friday, 8 AM–5 PM Central Time, by email aviation.support@garmin.com or visti www.garmin.com/support.

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WX-Wind 106

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