

4 FLIGHT PLANS

The GTN 6XX lets you create up to 99 different flight plans, with up to 100 waypoints in each flight plan. The Flight Plan function is accessed by touching the **Flight Plan** key on the Home page. The Flight Plan function allows you to create, store, edit, and copy flight plans.

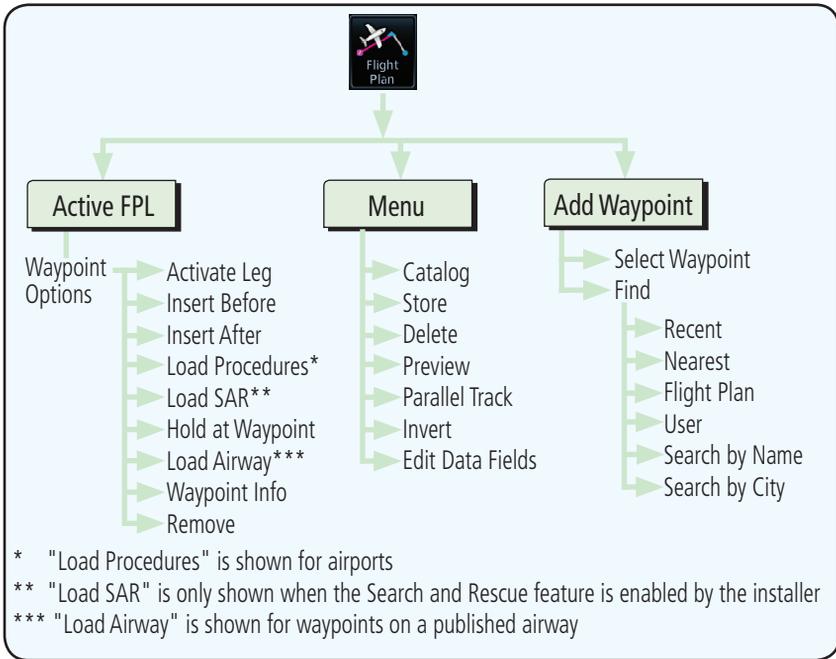


Figure 4-1 Flight Plan Functional Diagram



NOTE: Navigation is provided for fixed wing aircraft above 30 kts and for rotorcraft above 10 kts.

4.1 Creating a New Flight Plan



NOTE: If a flight plan that includes a procedure that has been modified by the pilot is saved into the flight plan catalog, the GTN cannot check the accuracy of that procedure when that flight plan is used on a later flight. It is recommended that flight plans with modified procedures not be saved in the flight plan catalog.

1. From the Home page, touch **Flight Plan**.



Figure 4-2 Create New Flight Plan

2. If there is already an Active Flight Plan, touch **Menu** and then the **Delete** and **OK** keys to delete the existing active flight plan.

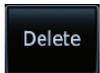


Figure 4-3 Delete Existing Flight Plan

A single waypoint may be deleted by touching the waypoint and then touching the **Remove** key.

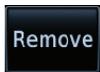


Figure 4-4 Remove Single Existing Waypoint



Figure 4-5 Select a Waypoint for the New Flight Plan

4. Touch the **Add Waypoint** key and select the waypoint identifier with the keypad for the next waypoint. Touch **Enter**.
5. Or, touch **Find**, select a category, and then select the waypoint identifier with the keypad. Touch **Enter**.



Figure 4-6 Select a Waypoint Category for Selecting Flight Plan Waypoints

6. Continue adding waypoints as needed.
7. Touch **Menu** and then touch **Store** to store the flight plan in the Catalog. The screen will now display the Flight Plan Catalog and show the new flight plan. Flight plans are listed by the Departure and Destination waypoints.



4.2 Active Flight Plan Page

The Active Flight Plan Page provides information and editing functions for the flight plan currently in use for navigation. Once you have activated a flight plan, the Active Flight Plan Page shows each waypoint for the flight plan, along with the Desired Track (DTK), Distance (DIST) for each leg and Cumulative Distance (CUM). The data fields are user-selectable and may be changed to display Cumulative Distance (CUM), Distance (DIST), Desired Track (DTK), En Route Safe Altitude (ESA), or Estimated Time of Arrival (ETA).

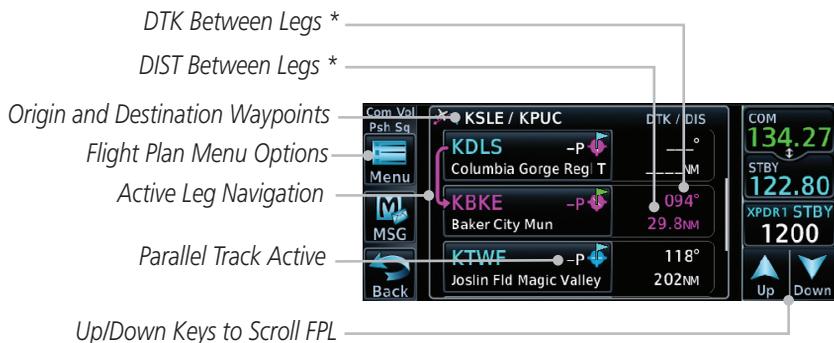


Figure 4-7 Active Flight Plan Page

* The field types may be changed using the Edit Data Fields function in the Flight Plan page Menu.

4.2.1 Waypoint Options

1. While viewing the Active Flight Plan page, touch the desired flight plan waypoint. The Waypoint Options window will be shown.



Figure 4-8 Active Flight Plan Wpt Options

2. Touch one of the options to perform the selected action. Cancel the option selection by touching the **Back** key.

4.2.1.1 Activate Leg

The Activate Leg option allows you to change the active leg of a flight plan.

Activate Leg

1. On the Waypoint Options menu, touch the desired TO waypoint and then the **Activate Leg** key to select the TO waypoint as the active leg for navigation.

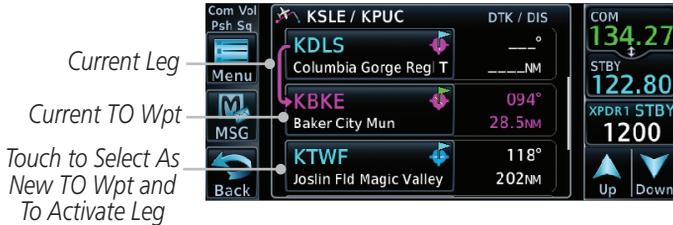


Figure 4-9 Active Flight Plan Activate Leg Option

OK

2. Touch the **OK** key to set the selected leg as the Active Leg, or **Cancel** to not select it.



Figure 4-10 Active Flight Plan Activate Leg Option

4.2.1.2 Insert Before

The Insert Before option allows you to insert a new waypoint into the active flight plan before the selected waypoint.

1. On the Active Flight Plan page, touch the desired waypoint in the flight plan. The Waypoint Options list will be displayed.

Option Will Insert New Waypoint Before This Selected Flight Plan Waypoint



Insert Before Option Was Selected

Figure 4-11 Active Flight Plan Insert Waypoint Before Option



2. Touch the **Insert Before** key to select a new waypoint before the selected waypoint.
3. Select a waypoint identifier with the alphanumeric keypad.

Choose New Waypoint To "Insert Before" The Selected Flight Plan Waypoint



Figure 4-12 Use the Alphanumeric Keypad to Select Waypoint to Insert Before



4. Then, touch **Enter** to confirm the selection or touch **Cancel** to cancel any changes. The new flight plan will be shown.

New Waypoint Inserted Before The Selected Flight Plan Waypoint



Figure 4-13 New Waypoint Is Inserted Before the Selected Waypoint



Figure 4-14 Flight Plan Before and After New Waypoint Inserted

4.2.1.3 Insert After

The Insert After option allows you to insert a new waypoint into the active flight plan after the selected waypoint.

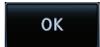
1. On the Active Flight Plan page, touch the desired waypoint in the flight plan. The Waypoint Options list will be displayed.
2. Touch the **Insert After** key to select a new waypoint after the selected waypoint.
3. Select a waypoint identifier with the alphanumeric keypad. Then, touch **Enter** to confirm the selection, or touch the **Cancel** key to cancel the operation and return to the Waypoint Options window.



4.2.1.4 Remove

The Remove option allows you to remove the selected waypoint from the active flight plan.

1. On the Active Flight Plan page, touch the desired waypoint in the flight plan. The Waypoint Options list will be displayed.
2. On the Waypoint Options menu, touch the **Remove** key and then the **OK** key to delete the selected waypoint from the active flight plan.



4.2.1.5 Load Procedures

The Load Procedure selection from the Waypoint Options will start the Procedures function. See the Procedures section for complete information.

1. On the Active Flight Plan page, touch the desired waypoint in the flight plan. The Waypoint Options list will be displayed.
2. Touch the **Load Procedures** key to go to the Procedure function for adding procedures to the selected flight plan.



Figure 4-15 Load Procedures Wpt Option



NOTE: In software v5.13 and earlier, for some procedures, due to very small position differences in the database, consecutive flight plan legs do not match up. The total effect on navigational guidance is negligible. The LOC BC 13 at KSLE via UBG shown below is an example of this.



Figure 4-16 Procedure Flight Plan Leg Position Difference

4.2.1.6 Waypoint Info

The Waypoint Info option allows you to view information about the selected waypoint. See the Waypoint Info section for complete information.

1. On the Active Flight Plan page, touch the desired waypoint in the flight plan. The Waypoint Options list will be displayed.
2. One Waypoint Options menu, touch the **WPT Info** key to view information about the selected waypoint.



Figure 4-17 Active Flight Plan Wpt Info



3. Touch the **Back** key to return to the Active Flight Plan page.

4.2.2 Airways

Airways may be added as legs in flight plans with any waypoint that is part of an airway, such as a VOR.

1. On the Active Flight Plan page, touch the desired Airway entry waypoint in the flight plan. The Waypoint Options list will then be displayed.



Figure 4-18 Active Flight Plan with VOR Entry Wpt

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2. Touch the **Load Airway** key to select an airway for the selected entry waypoint.

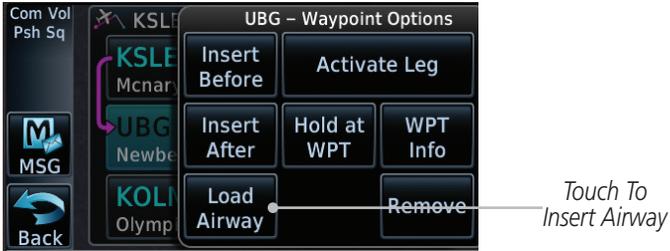


Figure 4-19 Select Load Airway from the Waypoint Options

3. Touch the desired airway to select it.



Figure 4-20 Select an Airway from the List

4. Scroll through the list and touch the desired exit point from the airway.



Figure 4-21 Select an Exit Waypoint for the Airway

Load

- Confirm the airway information and then touch **Load** to insert the selected airway into the flight plan. If changes are desired, touch the **Airway** or **Exit Waypoint** keys to select alternate choices.

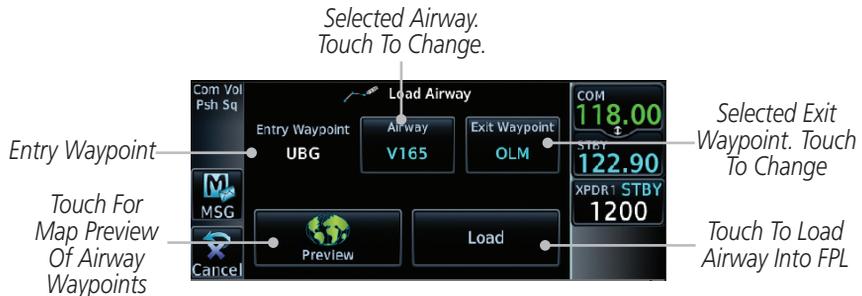


Figure 4-22 Airway Information

- Touch the **Preview** key to view the airway waypoints and map preview of the airway.



Figure 4-23 Airway Preview

- After loading the airway, it is inserted into the flight plan. The airway waypoints are shown below the **Airway** key on the display. Touch the airway to make any changes.



Figure 4-24 Airway Waypoints in the Flight Plan

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8. Touch the **Airway** key to display the Airway Options. Make the desired choice or touch **Back**.



Figure 4-25 Airway Options

9. Touch the **Collapse All Airways** key to collapse the list of points along the airway. Touch the **Collapse All Airways** key again to toggle the display of airway detail back on.



4.2.3 Load Hold at Waypoint



NOTE: This feature is available in software v6.00 and later.

4.2.3.1 Hold at Waypoint

Holding patterns may be added to existing waypoints within the flight plan.

1. On the Active Flight Plan page, touch the desired waypoint in the flight plan. The Waypoint Options list will then be displayed.



Figure 4-26 Active Flight Plan with Hold At Waypoint Option



2. Touch the **Hold at WPT** key to open the Hold at Waypoint dialog window.



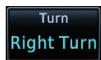
Figure 4-27 Creating a User-Defined Hold



3. Touch the **Course** key to open the keypad. Use the keypad and the **Enter** key to select the inbound or outbound course.



4. Touch the **Direction** key to select between Inbound or Outbound for the course direction.



5. Touch the **Turn** key to select between Left or Right for the turn direction.



6. Touch the **Leg Type** key to select between Time or Distance for the leg type.



7. Touch the **Leg Time** or **Leg Distance** key to display the keypad. Use the keypad and the Enter key to select the length of the leg.



8. Touch the Expect Further Clearance (**EFC**) key to display the keypad. Use the keypad and the **Enter** key to select the Expect Further Clearance time for a reminder.



9. Touch the **Load Hold** key to add the hold into the flight plan.

4.2.3.2 Removing a Hold

1. On the Active Flight Plan page, touch the Hold to be removed. The Hold Options window is displayed.



2. Touch the **Remove** key.



3. Touch the **OK** key in response to "Remove Holding Pattern?" The holding pattern is removed. To cancel the request, touch the **Cancel** key.

4.2.4 Load Search and Rescue Pattern (Optional)



NOTE: This optional feature is available in software v6.00 and later.



NOTE: Turn smoothing may result in SAR coverage being different than intended. The flight crew should always verify that the SAR pattern created conforms to the specific mission requirements.

Search and Rescue Patterns may be added to existing waypoints within the active flight plan. Only one SAR pattern can exist in the active flight plan. Loading another SAR pattern into the active flight plan when one already exists will remove the first SAR pattern.

Each pattern has a default initial track. When the pilot changes the initial track on a SAR pattern, that change becomes the default initial track the next time the SAR pattern is accessed within the GTN. The pilot can always change the initial track when creating a SAR pattern in the flight plan.



NOTE: Flight plans cannot be stored in the catalog if they contain a SAR pattern.

1. On the Active Flight Plan page, touch the desired waypoint in the flight plan. The Waypoint Options list will then be displayed.



Figure 4-28 Active Flight Plan with Load SAR Option

2. Touch the **Load SAR** key to open the Search and Rescue Patterns page.
3. Touch the **SAR Pattern** key to select between Parallel Track, Sector Search, Expanding Square, or Orbit for the SAR pattern type. The available patterns can be configured by the installer and all of the listed pattern types may not be available.
4. Touch the **Preview** key to open a preview of the selected pattern.





5. Confirm the SAR pattern information and then touch the **Load Pattern** key to load selected pattern to the active flight plan or touch the **Load Pattern & Activate** key to load selected pattern to the active flight plan and go direct-to-the initial waypoint.



6. The SAR pattern waypoints are shown below the **SAR** key on the display. Touch the **SAR Pattern** key to make any changes.

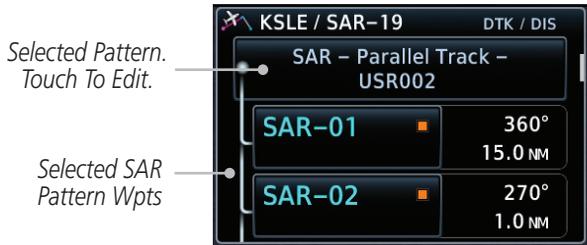


Figure 4-29 SAR Pattern Waypoints in the Flight Plan



7. Touch the **SAR** key to display the Search & Rescue Options. Make the desired choice or touch the **Back** key.



Figure 4-30 Search & Rescue Options



8. Touch the **Collapse Search Pattern** key to collapse the list of the points along the SAR pattern. Touch the **Collapse Search Pattern** key again to toggle the display of SAR pattern detail back on.



Figure 4-31 SAR Pattern Collapsed in Flight Plan

4.2.4.1 Creating a Parallel Track Pattern

The Parallel Track SAR pattern starts at the initial waypoint and follows the initial track for the length of the first parallel track leg. A 90° turn in the initial turn direction leads to the spacing leg with a length equal to the track spacing. Another 90° turn leads to the second parallel track leg. The turns at the end of the second parallel track leg are in the opposite direction as the previous parallel track leg. The parallel track pattern terminates once the desired number of parallel track legs have been flown. The default initial track for the Parallel Track Pattern is True North.



Figure 4-32 Search and Rescue Parallel Track Pattern Page

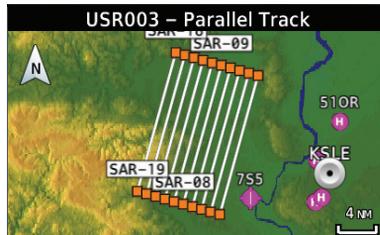


Figure 4-33 Parallel Track Search Pattern



1. Touch the **SAR Pattern** key and select Parallel Track as the pattern type.



2. Touch the **INIT TRK** key to open the keypad. Use the keypad and **Enter** to select the initial course.



3. Touch the **INIT Turn** key to select between Left or Right as the initial turn direction.



4. Touch the **Leg Length** key to open the keypad. Use the keypad and **Enter** to select the length of the parallel track legs.



5. Touch the **TRK SPCNG** key to open the keypad. Use the keypad and **Enter** to select the desired spacing between the parallel track legs.



6. Touch the **Leg Count** key to open the keypad. Use the keypad and **Enter** to select the desired number of parallel track legs.



7. Touch the **Preview** key to open a preview of the selected pattern.



8. Touch the **Load Pattern** key to load selected pattern to the active flight plan.

Or



9. Touch the **Load PTRN & Activate** key to load selected pattern to the active flight plan and go direct-to the initial waypoint.

4.2.4.2 Creating a Sector Search Pattern

The Sector Search SAR pattern starts at the initial waypoint and follows the initial track for the desired leg length. A 60° turn in the initial turn direction is followed by another leg with the desired leg length, another 60° turn, and then a leg back to the initiating waypoint. The next sector starts with a leg continuing on the same course outbound from the initiating waypoint and is followed by the same sequence of legs and turns. The third sector follows the same pattern. The default initial track for the Sector Search Pattern is True North.



Figure 4-34 Search and Rescue Sector Search Pattern Page

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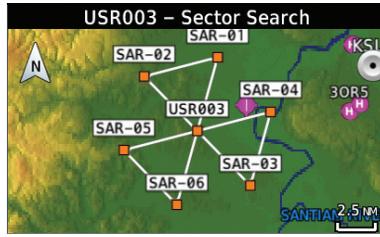


Figure 4-35 Sector Search Pattern

1. Touch the **SAR Pattern** key and select Sector Search as the pattern type.
2. Touch the **INIT TRK** key to open the keypad. Use the keypad and **Enter** to select the initial course.
3. Touch the **INIT Turn** key to select between Left or Right as the initial turn direction.
4. Touch the **Leg Length** key to open the keypad. Use the keypad and **Enter** to select the length of the parallel track legs.
5. Touch the **Preview** key to open a preview of the selected pattern.
6. Touch the **Load Pattern** key to load selected pattern to the active flight plan.
7. Or, touch the **Load PTRN & Activate** key to load selected pattern to the active flight plan and go direct-to the initial waypoint.

4.2.4.3 Creating an Expanding Square Pattern

The Expanding Square SAR pattern starts at the initial waypoint and follows the initial track for a distance equal to the track spacing. All turns in the expanding square pattern are in the initial turn direction. All legs in the expanding square pattern are separated by the track spacing distance. The default initial track for the Expanding Square Pattern is 090°T.



Figure 4-36 Search and Rescue Expanding Square Pattern Page

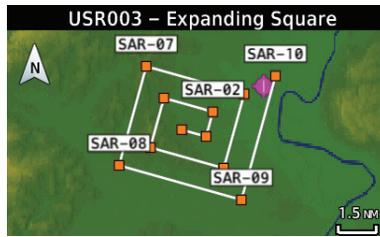


Figure 4-37 Expanding Square Search Pattern



1. Touch the **SAR Pattern** key and select Expanding Square as the pattern type.
2. Touch the **INIT TRK** key to open the keypad. Use the keypad and **Enter** to select the initial course.
3. Touch the **INIT Turn** key to select between Left or Right as the initial turn direction.
4. Touch the **TRK SPCNG** key to open the keypad. Use the keypad and **Enter** to select the desired spacing between the parallel track legs.
5. Touch the **Leg Count** key to open the keypad. Use the keypad and **Enter** to select the desired number of legs.
6. Touch the **Preview** key to open a preview of the selected pattern.
7. Touch the **Load Pattern** key to load selected pattern to the active flight plan.
8. Or, touch the **Load PTRN & Activate** key to load selected pattern to the active flight plan and go direct-to the initial waypoint.

4.2.4.4 Creating an Orbit Pattern

The Orbit SAR pattern is a fixed radius turn around the specified center waypoint. Automatic waypoint sequencing will be suspended while flying the orbit pattern.



Figure 4-38 Search and Rescue Orbit Pattern Page

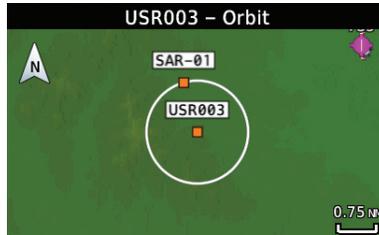


Figure 4-39 Orbit Search Pattern



1. Touch the **SAR Pattern** key and select Orbit as the pattern type.



2. Touch the **INIT Turn** key to select between Left or Right as the turn direction.



3. Touch the **Radius** key to open the keypad. Use the keypad and **Enter** to select the radius of the orbit pattern.



4. Touch the **Preview** key to open a preview of the selected pattern.



5. Touch the **Load Pattern** key to load selected pattern to the active flight plan.



6. Or touch the **Load PTRN & Activate** key to load selected pattern to the active flight plan and go direct-to the first waypoint in the pattern.

4.3 Flight Plan Menu

The Flight Plan Menu provides access to functions to manage your flight plans. The functions included are: View Catalog, Store Flight Plan, Delete Flight Plan, Preview Flight Plan, Parallel Track, Invert Flight Plan, and Edit Data Fields.



Touch the **Menu** key to access the Flight Plan Menu options: View Catalog, Store Flight Plan, Delete Flight Plan, Preview Flight Plan, Parallel Track, Invert Flight Plan, and Edit Data Fields.

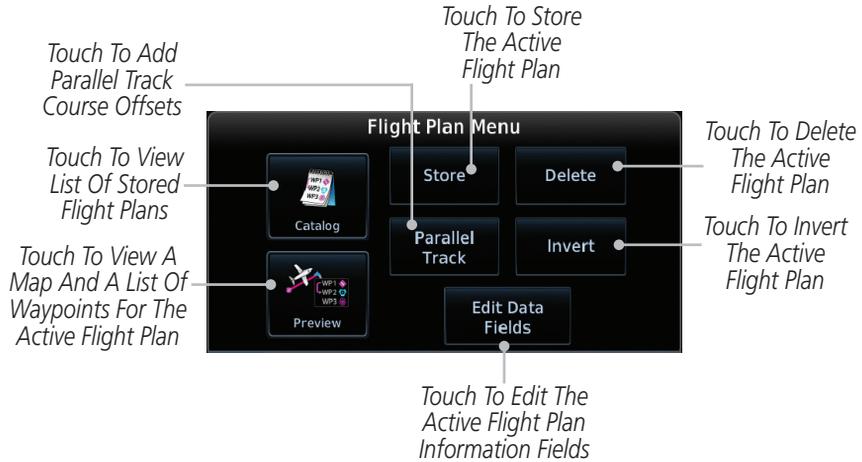


Figure 4-40 Flight Plan Menu

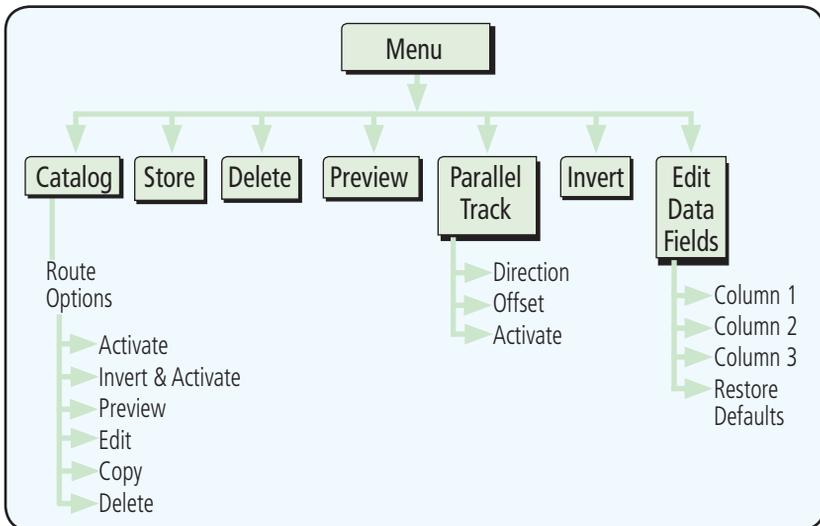


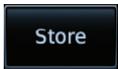
Figure 4-41 Flight Plan Menu Functional Diagram

4.3.1 Store Flight Plan

A flight plan must be saved to the Catalog to be used in future flights. The Store Flight Plan function will save the Active Flight Plan to the Catalog.



NOTE: *If a flight plan that includes a procedure that has been modified by the pilot is saved into the flight plan catalog, the GTN cannot check the accuracy of that procedure when that flight plan is used on a later flight. It is recommended that flight plans with modified procedures not be saved in the flight plan catalog.*



1. While viewing the Active Flight Plan page, touch the **Menu** key. The Flight Plan Menu will be displayed.
2. Touch the **Store** key to store the current Active Flight Plan into the Catalog. The flight plan will be named by the beginning and ending waypoints.
3. When a duplicate flight plan is created, the **Store** key will not be available and the flight plan will be saved with a numeral at the end of the destination waypoint.

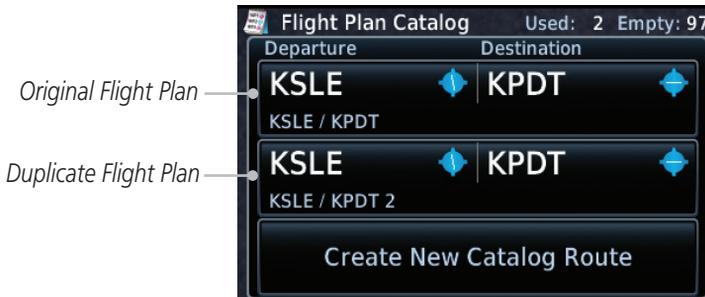


Figure 4-42 Duplicate Flight Plan Naming

4.3.2 Invert Flight Plan

The Invert Flight Plan option allows you to reverse the Active flight plan and use it for navigation guidance back to your original departure point. The original flight plan stored in the catalog is not affected.



1. While viewing the Active Flight Plan page, touch the **Menu** key. The Flight Plan Menu will be displayed.
2. Touch the **Invert** key to invert the current Active Flight Plan.

4.3.3 Parallel Track

Parallel Track allows you to create a parallel course offset of 1 to 99 NM to the left or right of your current flight plan. After setting a parallel track to your current flight plan, a magenta parallel track line will be drawn offset from the original by the selected distance. The original course line will be drawn in gray. The aircraft will navigate to the parallel track course line and external CDI/HSI guidance will be driven from the parallel track.

When you reach the end of the flight plan, a message will state, “Parallel offset terminating in X seconds.” The message will be given when the aircraft reaches the offset distance from the end of the parallel track. This will give the pilot sufficient time to intercept the original course.

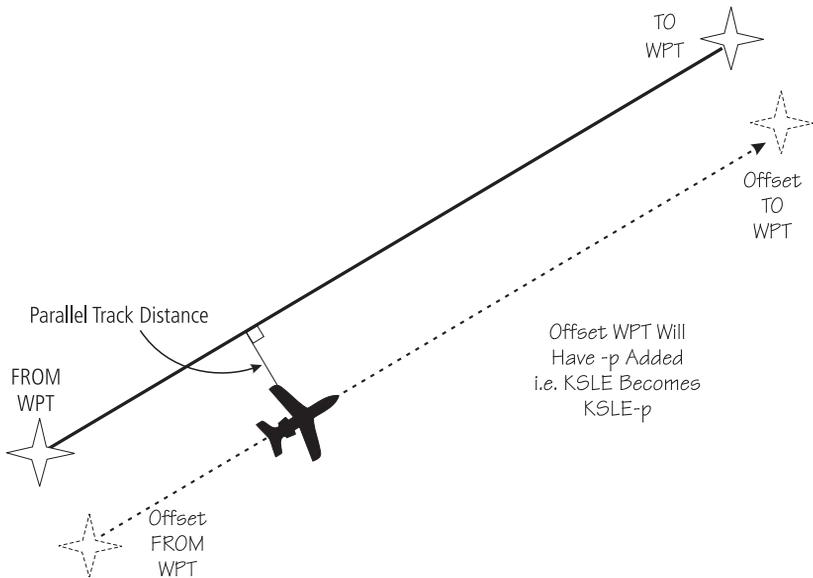


Figure 4-43 Parallel Track Description



NOTE: In software v6.21 and earlier, graphically editing a flight plan cancels the parallel track function.



NOTE: Certain leg types (such as approach) or leg geometries (changes in desired track greater than 120 degrees), combined with large offset values do not support parallel track. Default direction and offset values may result in the status indicating that parallel track is not supported. The user must enter the desired parallel track offset and distance to determine whether that flight plan, combined with the offset and distance, support parallel track.

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1. While viewing the Flight Plan page, touch the **Menu** key, and then the **Parallel Track** key.

Direct-To



Proc

Touch To Set PTK Direction

Wpt Info

PTK Status



Touch To Set PTK Distance

Touch To Activate PTK Settings

Figure 4-44 Parallel Track Selection

Traffic



2. Touch the **Direction** key to toggle the Parallel Track to be Left or Right of the current Flight Plan.

Terrain



3. Touch the **Offset** key to select the Parallel Offset from the current Flight Plan. Select the desired distance on the numeric keypad. Touch **Enter** when finished.

Weather

Nearest



4. Touch the **Activate** key. A magenta "-P" indication will appear to the right of the waypoint name on the Active Flight Plan page.

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Active FPL Leg

PTK Active Symbol



Figure 4-45 Parallel Track Shown in the Active Flight Plan Page

5. To deactivate Parallel Track, while viewing the Active Flight Plan touch the **Menu** key. With the Flight Plan Menu displayed, touch the **Deactivate PTK** key.

4.3.4 Edit Data Fields

The Active Flight Plan Page shows each waypoint for the flight plan, along with the Desired Track (DTK), Distance (DIS) for each leg and Cumulative Distance (CUM). The data fields are user-selectable and may be changed to display Cumulative Distance (CUM), Distance (DIS), Desired Track (DTK), En Route Safe Altitude (ESA), Estimated Time of Arrival (ETA), or Estimated Time En route (ETE).

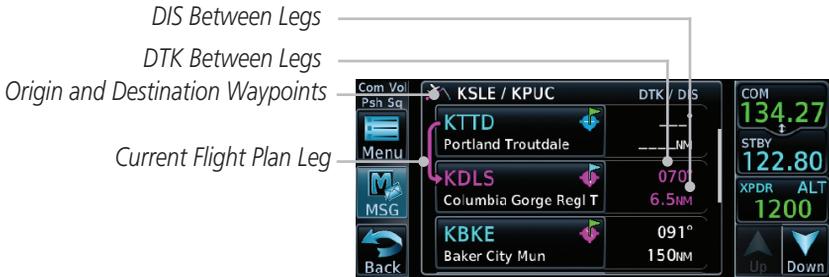


Figure 4-46 Flight Plan Data Fields



1. While viewing the Flight Plan page, touch the **Menu** key, and then the **Edit Data Fields** key.

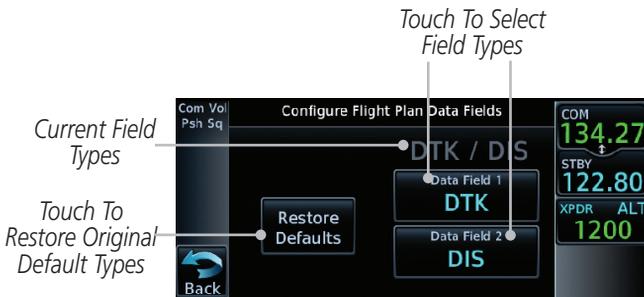


Figure 4-47 Flight Plan Edit Data Fields Page



2. Touch one of the field keys to select from the list.



Figure 4-48 Flight Plan Data Fields List

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3. Touch the **Up** or **Down** keys, or touch and drag the list, as needed to scroll through the list. Touch the desired Field Type to set it for the selected field.
4. Continue as desired for the other fields.

4.3.5 Flight Plan Catalog Route Options

The Flight Plan Catalog allows you to create, edit, activate, delete and copy flight plans. The catalog can hold up to 99 flight plans of up to 100 waypoints each. Flight plans are named by the Departure and Destination waypoint. Any time you activate a flight plan, a copy of the flight plan is automatically transferred to Active Flight Plan page and overwrites any previously active flight plan.

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

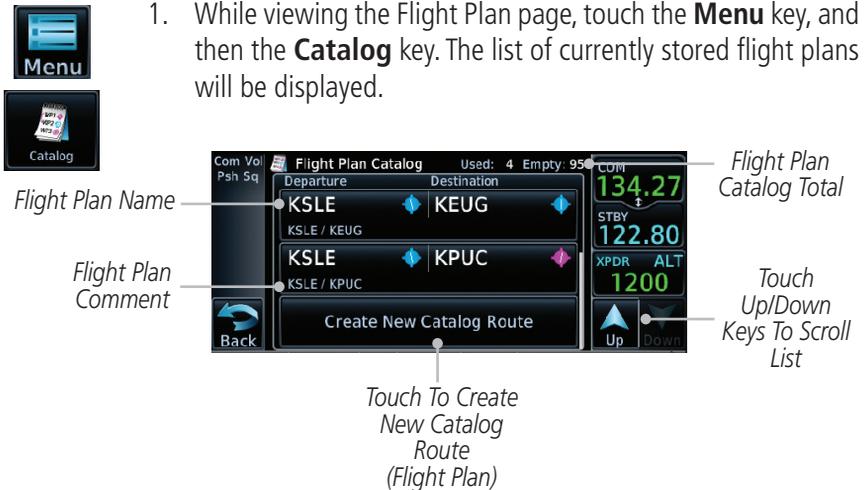


Figure 4-49 Flight Plan Catalog

2. Touch a flight plan to display the Route Options.



Figure 4-50 Flight Plan Catalog Route Options

3. Touch the Route Option key for the desired option to act on the selected flight plan.

4.3.5.1 Catalog Route Option - Activate

1. While viewing the Flight Plan Catalog page, touch the desired flight plan to select it. The Route Options menu will be displayed.
2. Touch the **Activate** key and then touch **OK**. The selected flight plan will be activated.

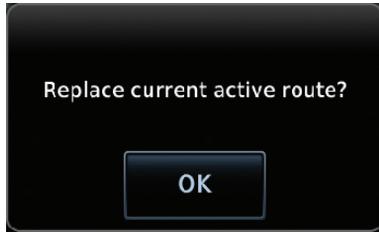


Figure 4-51 Touch OK to Replace the Existing Active Flight Plan

3. The Active Flight Plan page will now be displayed.

4.3.5.2 Catalog Route Option - Invert & Activate

1. While viewing the Flight Plan Catalog page, touch the desired flight plan to select it. The Route Options menu will be displayed.
2. Touch the **Invert & Activate** key and then touch **OK**. The selected flight plan will be inverted and activated.

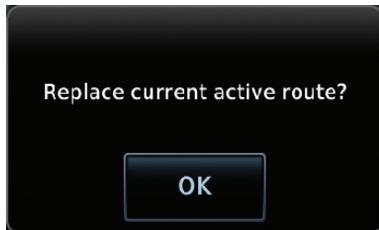


Figure 4-52 Touch OK to Invert and Activate the Selected Flight Plan

3. The Active Flight Plan page will now be displayed.

4.3.5.3 Catalog Route Option - Preview

1. While viewing the Flight Plan Catalog page, touch the desired flight plan to select it. The Route Options menu will be displayed.
2. Touch the **Preview** key. A map view of the flight plan and list of the waypoints will be displayed.



Flight Plan
Waypoint List



Flight Plan
Map Preview

Figure 4-53 Flight Plan Preview

3. Touch the **Back** key to return to the Flight Plan Catalog.



4.3.5.4 Catalog Route Option - Edit

1. While viewing the Flight Plan Catalog page, touch the desired flight plan to select it. The Route Options menu will be displayed.
2. Touch the **Edit** key. The flight plan will be displayed. Make any changes necessary by touching the desired waypoint and using the Waypoint Options.



Selected Waypoint



Touch To Edit
Flight Plan

Figure 4-54 Use Waypoint Options to Edit the Selected Flight Plan

3. Touch the **Back** key to return to the Flight Plan Catalog.



4.3.5.5 Catalog Route Option - Copy

1. While viewing the Flight Plan Catalog page, touch the desired flight plan to select it. The Route Options menu will be displayed.
2. Touch the **Copy** key. You will be prompted to copy the selected flight plan. Touch **OK** to create the flight plan copy.



Figure 4-55 Flight Plan Catalog Route Copy Option

3. A copy of the selected flight plan will now be listed. If any changes are required for the copy, it can be used as a starting point for a similar flight plan. Use the Edit Route option to make the desired changes.



Figure 4-56 Copied Flight Plan



4. Touch the **Back** key to return to the Active Flight Plan.

4.3.5.6 Catalog Route Option - Delete

1. While viewing the Flight Plan Catalog page, touch the desired flight plan to select it. The Route Options menu will be displayed.



Figure 4-57 Select Flight Plan from the Catalog to Delete

2. Touch the **Delete** key and then touch **OK**.

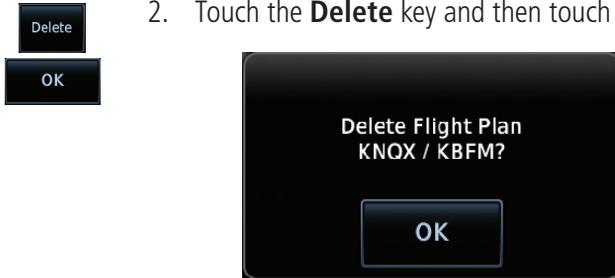


Figure 4-58 Delete the Selected Flight Plan from the Catalog

4.3.6 Delete Flight Plan

There are three ways to delete a flight plan.

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

4.3.6.1 Delete Flight Plan from Catalog

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



2. Touch one of the flight plans to select it.



Figure 4-59 Select a Flight Plan from the Catalog

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



Figure 4-60 Delete a Flight Plan from the Catalog

4.3.6.2 Delete All Flight Plans from Catalog



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



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

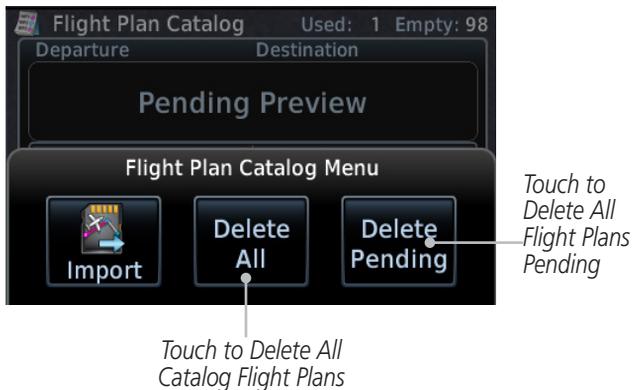


Figure 4-61 Flight Plan Catalog Menu

- Foreword
- Getting Started
- Audio & Xpdr Ctrl
- Com/Nav
- FPL
- Direct-To
- Proc
- Wpt Info
- Map
- Traffic
- Terrain
- Weather
- Nearest
- Services/
Music
- Utilities
- System
- Messages
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2. Touch **Delete All** to remove all flight plans in the catalog.



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

4.3.6.3

Delete Active Flight Plan



1. While viewing the Active Flight Plan page, touch the **Menu** key, and then the **Delete Flight Plan** key.



Figure 4-62 Delete a Flight Plan from the Active Flight Plan



2. Touch **OK** to clear the waypoints from the Active Flight Plan. The flight plan will not be removed from the Catalog.

4.3.7 Preview Flight Plan

The Preview Flight Plan function provides a summary of a flight plan. A preview of the Active Flight Plan can be selected from the Flight Plan Menu's **Preview Flight Plan** key or selecting a flight plan from the catalog and choosing Preview from the Route Options menu.

4.3.7.1 Previewing the Active Flight Plan



1. While viewing the Flight Plan page, touch the **Menu** key, and then the **Preview** key. A preview of the Active Flight Plan will be shown.

Flight Plan
Waypoint List

Current Dest
Waypoint



Current Aircraft
Position On
Current Leg of
Active Flight Plan

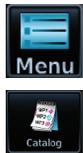
Map View
of Flight
Plan Legs

Figure 4-63 Active Flight Plan Preview



2. Touch the **Back** key to return to the Active Flight Plan page.

4.3.7.2 Previewing a Flight Plan in the Catalog



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



2. Touch the desired flight plan. The Route Options will now be displayed.



3. Touch the **Preview** key to display a preview of the selected flight plan.



4. Touch the **Back** key to return to the Flight Plan Catalog.

4.4 Graphically Editing a Flight Plan

The Active Flight Plan may be edited graphically on the Map page. See section 8.3.3 for details.

4.5 Import Flight Plans with Connex

When the GTN is interfaced with a compatible Flight Stream device, flight plans can be wirelessly imported into the GTN from supported Apps (i.e., Garmin Pilot). The imported flight plans can then be activated or stored to the flight plan catalog once they are previewed by the pilot.



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



NOTE: Flight plan information and user waypoints included as part of a flight plan will not necessarily retain their names when the flight plan is transferred from the portable device to the GTN via a Flight Stream device. Whenever a User Waypoint is imported, it is compared to the existing User Waypoint catalog. If it matches locations with an existing User Waypoint, the waypoint will utilize the name saved in the GTN for that waypoint. If there is not a location match, the waypoint is imported but without the name label that the import software may have used. Therefore all new User Waypoints will come in as USR### where the number is the lowest open User Waypoint slot in the catalog.



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

4.5.1 Operation

On the portable device, select the option to send a flight plan to the GTN. The GTN **MSG** key will appear and begin to flash.



1. Pressing the **MSG** key will open the message page with a message regarding the flight plan import and a key showing how many flight plans are ready to preview.

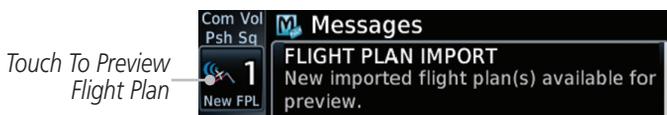


Figure 4-64 Flight Plan Import Message

2. Touch the **New FPL** key to open the flight plan preview page when only one flight plan is imported, or the flight plan catalog when more than one flight plan is imported.





Figure 4-65 Preview for Single Flight Plan Import



Figure 4-66 Catalog for Multiple Flight Plan Import

3. Selecting a flight plan in the catalog that is "Pending Preview" will slide out a menu to preview or delete the flight plan. Once the flight plan has been previewed and then stored or activated, the other Route Options in the menu will be available.



Figure 4-67 Route Options by Selecting Flight Plan with Pending Review

4.5.2 Potential Errors

If the GTN is unable to import a flight plan due to errors in the flight plan or a full catalog, the pilot will be alerted with a system message.



Figure 4-68 Flight Plan Import Error Messages

If an imported flight plan contains any errors, pop-up messages will be displayed alerting the pilot of the issues and the resulting changes to the flight plan.

When the imported flight plan is too long, the GTN will truncate the flight plan to the correct length. The pilot should be aware that waypoints are missing from the end of the flight plan, including the destination waypoint.



Figure 4-69 Pop-Up Message Reporting Flight Plan Errors

When the imported flight plan contains waypoints (non-user waypoints), procedures, or airways that are not found in navigation database, the GTN will replace those waypoints with locked (lockd) waypoints. These locked waypoints must be resolved prior to activating the flight plan to provide navigation along the flight plan.

When more than one error occurs during the flight plan import, the pilot will need to cycle through the errors by touching the **Next** key on the pop-up.

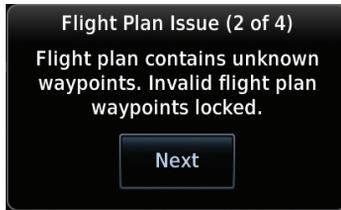


Figure 4-70 Pop-Up Message Reporting Unknown Waypoints



Figure 4-71 Pop-Up Message Reporting Unknown Procedure



Figure 4-72 Pop-Up Message Reporting Unknown Airway

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- Getting Started
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4.6 Import Flight Plans with a Datacard

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



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



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



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



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

Touch To Import
Flight Plan

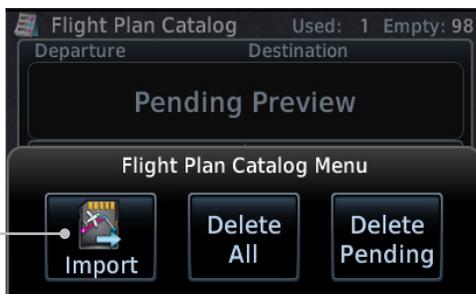


Figure 4-73 Catalog for Datacard Flight Plan Import

Foreword
 Getting Started
 Audio & Xpdr Ctrl
 Com/Nav
FPL
 Direct-To
 Proc
 Wpt Info
 Map
 Traffic
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2. An **Import** key will be present in the menu bar when flight plans are present on the datacard. Touch the **Import** key to open a pop-up with a list of the file names of the flight plans on the datacard.

Touch To Import Flight Plan From Datacard

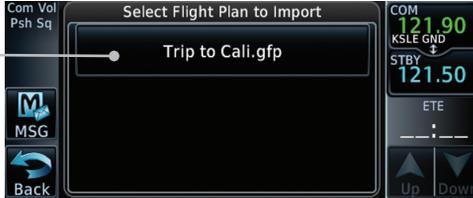


Figure 4-74 Flight Plan To Import From Datacard

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



Touch To Store To Save Flight Plan To The Catalog

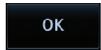


Touch To Make The Imported Flight Plan The Active Route

Figure 4-75 Route Options For Datacard Flight Plan Import

4.6.1 Potential Errors

If the GTN is unable to import a flight plan due to errors in the flight plan or a full catalog, the pilot will immediately be alerted with a pop-up.



1. Touch OK at the prompt to continue.



Figure 4-76 Flight Plan Import Fault



Figure 4-77 Flight Plan Import Fault - Catalog Full



2. If an imported flight plan contains any errors, pop-up messages will be displayed alerting the pilot of the issues and the resulting changes to the flight plan. These pop-ups are presented the first time that the flight plan is viewed on the Flight Plan Preview page.

When the imported flight plan is too long, the GTN will truncate the flight plan to the correct length. The pilot should be aware that waypoints are missing from the end of the flight plan.



Figure 4-78 Flight Plan Import Issue - Flight Plan Too Long

- When the imported flight plan contains waypoints (non-user waypoints), procedures, or airways that are not found in navigation database, the GTN will replace those waypoints with locked waypoints. These locked waypoints must be resolved prior to activating the flight plan.

When more than one error occurs during the flight plan import, the pilot will need to cycle through the errors by touching the **Next** key on the pop-up.

Next

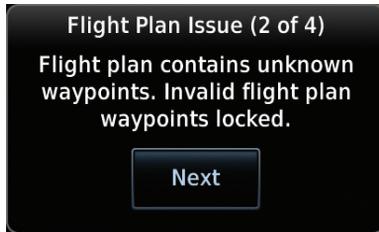


Figure 4-79 Flight Plan Import Issue - Flight Plan Contains Unknown Waypoints



Figure 4-80 Flight Plan Import Issue - Unknown Procedure Removed From Flight Plan



Figure 4-81 Flight Plan Import Issue - Unknown Airway Removed From Flight Plan

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- Getting Started
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