

Pilot's Guide to **ForeFlight Mobile**



ForeFlight, LLC

*9th Edition - Covers **ForeFlight Mobile v4.3** on iPad*

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Introduction

This pilot's guide provides an overview of ForeFlight Mobile and its capabilities on the iPad. After reading this guide, you will have the ability to:

- Plan flights quickly
- Gather preflight intelligence information efficiently, and
- Use ForeFlight Mobile to best support your type of flying.

This guide presumes a basic level of proficiency with general iPad use and navigation. If you are new to Apple iOS devices, including the iPad, you will want to *view the guided tours* available on Apple's website at <http://www.apple.com/ipad/guided-tours/> as well as the iPad User Guide at <http://support.apple.com/manuals/>

iPAD TIPS

There are a few handy iPad features you'll want to know about when using ForeFlight Mobile:

- ❖ **Multiple Orientations:** The iPad supports portrait (tall) and landscape (wide) orientations. When you rotate an iPad from one orientation to another, an application typically alters its user interface to better take advantage of the space supplied.
- ❖ **Rotation Lock:** Having the screen content rotate when you rotate the iPad isn't *always* a good thing. Rotation lock is helpful for preventing Terminal Procedure rotation or accidental rotation in turbulence. Fortunately, you can choose when the screen rotates and when it doesn't. There are a few methods for locking the orientation of content on your iPad's screen:

Physical Switch: A physical switch is located immediately above the volume buttons on the right side of the iPad. When switched on, this prevents an application from changing its orientation as you change the orientation of the iPad. On some iPads, this switch instead functions as a "mute" switch. You can change the function of this back to a "lock" switch by using the iPad's **Settings** application. Tap *General*, and use the options in the *Use Side Switch to:* section. If this section is not displayed, you may need to update your iPad's version of the iOS operating system to enable this.

iPad Soft-Lock: Double tap the circular, physical, **home** button and slide to the left in the fast-app icon list that pops up to find the rotation lock soft-

button. This method is not available if you have the physical slider switch set to manage screen lock.

ForeFlight Procedures Lock: ForeFlight Mobile also provides a soft-lock switch on the **Procedures** viewer for more flexibility.

❖ **Settings App:** The iPad includes a special application called Settings. Within Settings, you can modify the way the iPad and its applications behave. ForeFlight specific settings are addressed in the Settings section of this guide. All ForeFlight settings are available in the *More* view of ForeFlight Mobile as well.

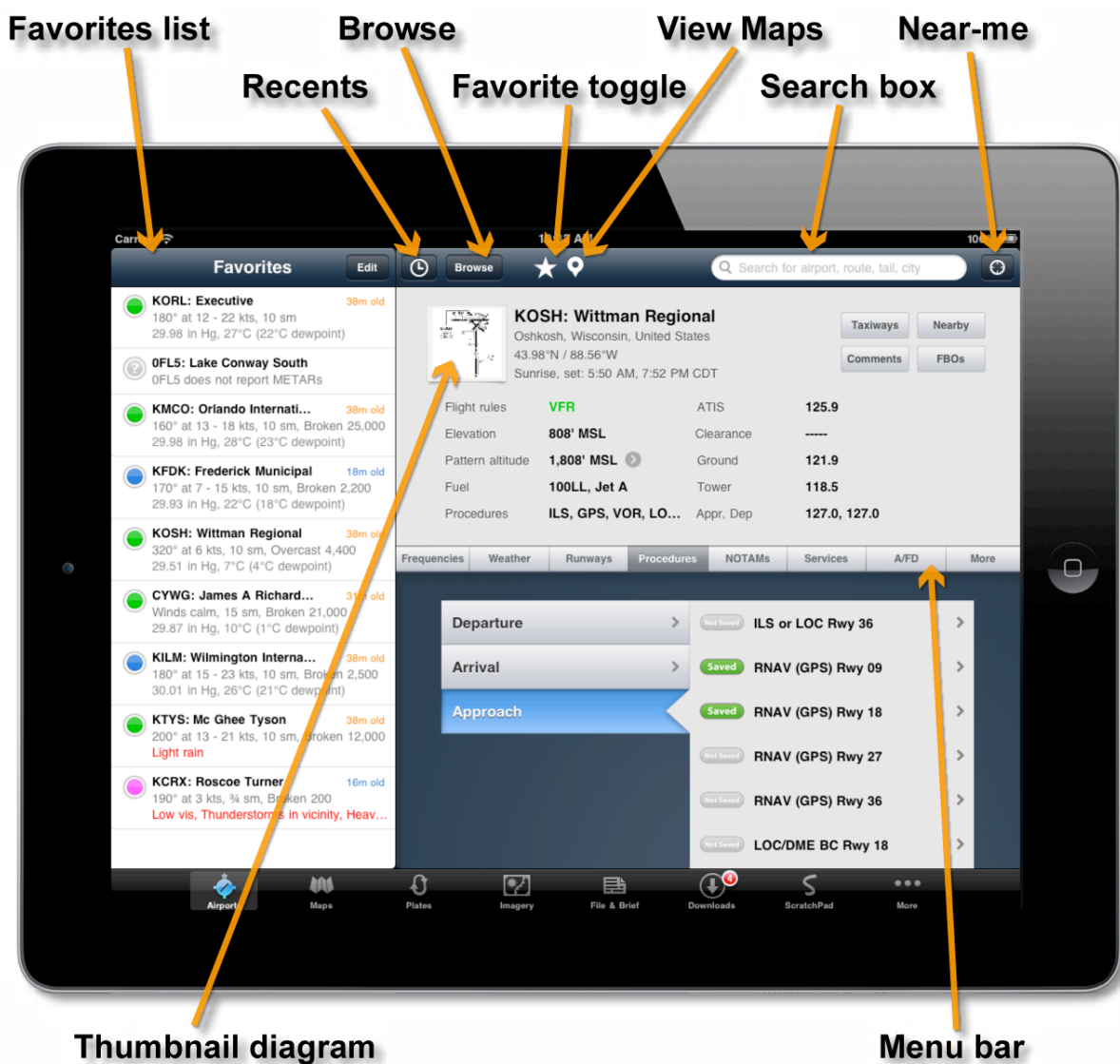
❖ **Brightness Control:** There is a brightness control accessible from the iPad's Settings app. This is helpful for reducing brightness at night. If that brightness control is not sufficient, further reduction can be gained within the ForeFlight Mobile app by using the brightness slider in the *More* view.

❖ **Inverted ("Night") Mode:** There's a clever, hidden feature in the iPad Settings app that inverts the iPad display's colors, creating a "night mode" color scheme. This is called "triple click home to invert", and is accessible from the *Accessibility* group within the Settings app.

Airports

The *Airports* view displays airport information, airport thumbnail diagrams, taxi diagrams, terminal procedures, service provider details, fuel prices and terminal area weather for over 20,000 airports worldwide.

Buttons located on the *Airports* view menu bar will help you find airports near the current airport, find airports near your current position, display the airport's location in the *Maps* view, and add or remove an airport to your *Favorites* list.



ABOUT THE DESIGN

The *Airports* view is designed to fill the whole screen, reduce scrolling, and reduce the effort required for your eyes to lock on to important airport information. The colors selected reduce brightness, draw attention to the top half of the page, and help highlight critical information.

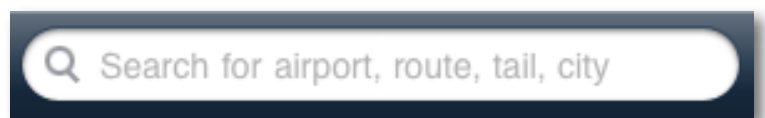
The most important airport information is displayed on the top half of the Airports view. Refer to this portion of the view when preparing to taxi or when approaching an airport, as it contains elements such as the current flight rule; field elevation and pattern altitude; automated weather frequencies, and controller frequencies.

Additional information from one of the eight available lower views is displayed in the bottom half of the screen. There are views for airport related frequencies, current and forecast weather, runway details, terminal procedures, notices to airmen, airport services, the Airport/Facility Directory entry, and supplemental airport information.

FINDING AN AIRPORT USING SEARCH

Search is the most frequently used method of finding information and creating flight plans within ForeFlight Mobile. Find airports by entering a search term in the search box, then tapping the 'Search' button displayed on the iPad's on-screen keyboard.

Valid search strings include Federal Aviation Administration airport identifiers (three-letter identifiers), International Civil Aviation Organization identifiers (four-letter identifiers), city name, or keyword.



If ForeFlight doesn't find an instant match for the search term used, a list of close matches will appear.

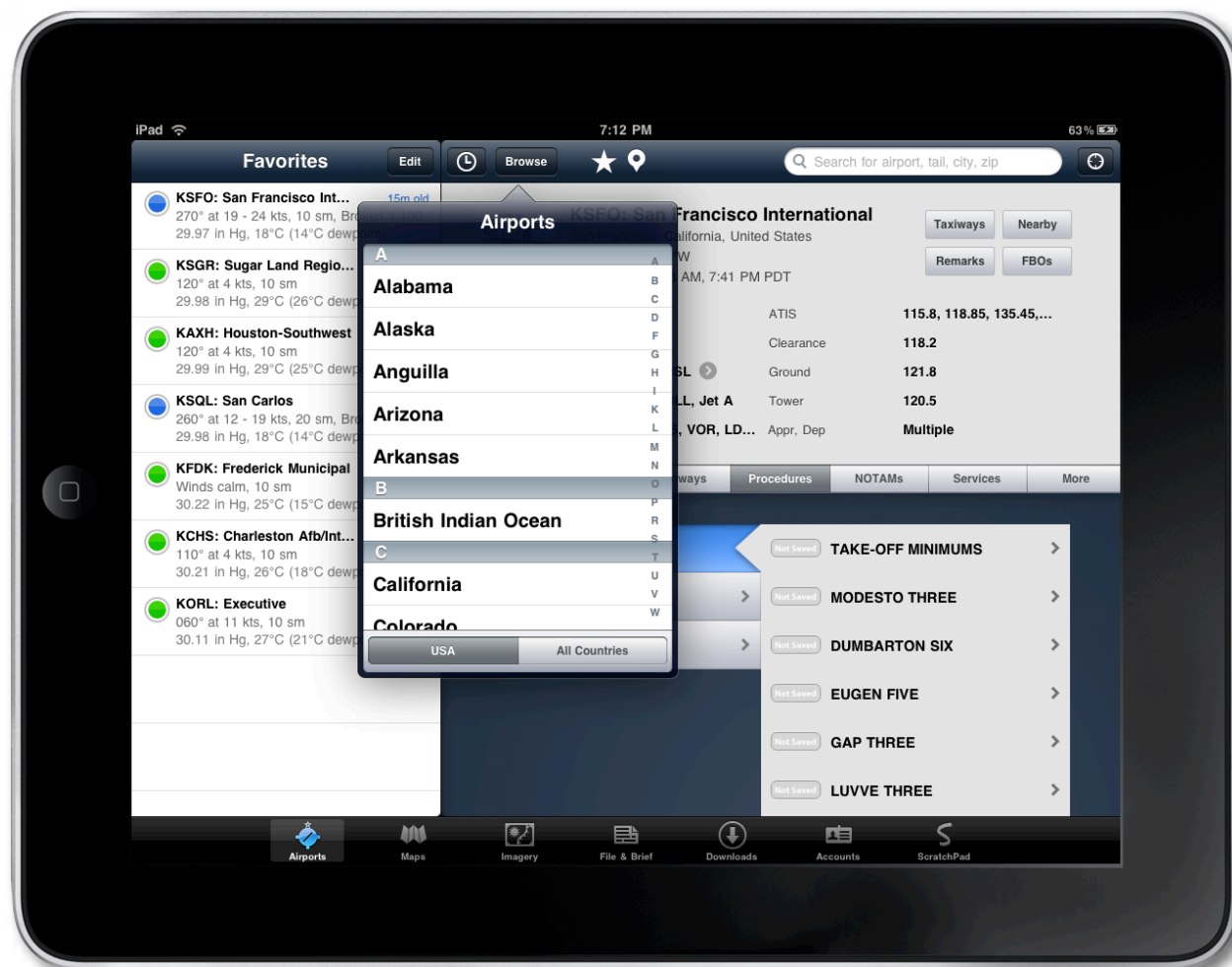
Example Searches:

- ❖ **KJFK** - immediately displays airport information for Kennedy Int'l
- ❖ **CDG** - immediately displays airport information for Charles De Gaulle
- ❖ **Kennedy** - produces a list of all airports with "kennedy" in the airport or city name
- ❖ **N2N** - returns aircraft information for the tail number N2N

FINDING AN AIRPORT USING BROWSE

The **Browse** button on the *Airports* view menu bar allows browsing airport listings by country and region. Search is the preferred method for locating airports, but Browse is a helpful option for locating an airport using the same State/City hierarchy you may already be familiar with from using Airport/Facilities Directories.

Tap the **Browse** button to display the *Airports* List. Use the 'A - Z scroller' on the right hand side of the Airports List to move forward and backwards quickly through the list. Tap the *All Countries* tab at the bottom of the airports list to view airports outside of the United States.



VIEWING A PROCEDURE

Terminal Procedures include Arrivals (STARs), Departures (DPs), and approach plates. These are all accessible from the *Airports* view. Use the search or browse methods of finding an airport, then tap the **Procedures** tab located on the segmented menu bar in the middle of the *Airports* view. Depending on the procedures available for this airport, several types of procedures may be displayed according to type (e.g., Arrival, Departure, Approach, Other). Custom procedures can be added using ForeFlight Mobile's *Bring Your Own Plates* feature. For information about using BYOP, see:

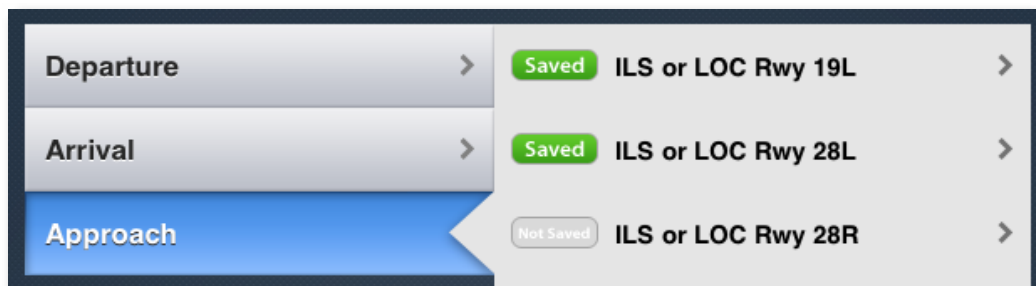
<http://foreflight.com/byop>

Procedures are organized by their type in order to reduce scrolling. Procedures are saved to the device in one of two ways:

❖ **Downloads View** (bulk downloading procedures): Using the *Downloads* view allows bulk downloading of procedures for one or more regions for access when offline. This is the preferred and most efficient method for ensuring you'll have the procedures you need, whether or not you're online when it's time to view them.

❖ **On-demand** (downloading procedures one at a time): If you have not previously downloaded a procedure, tap a procedure name to download it immediately. This download method requires an internet connection and thus will be unavailable while in flight. For this reason, ForeFlight recommends either using the bulk download functionality described above, or using this on-demand method while on the ground to ensure you'll always have the procedures you need while in flight.

Procedures are marked as **Saved** or **Not Saved**. Procedures marked *Saved* are stored locally on your iPad and are available when offline. Procedures marked **Not Saved** are not stored on your iPad and must be downloaded by viewing them or by using the Downloads view to download that region's terminal procedures in bulk.



From the **Procedures** tab, touch a procedure's name to display the ForeFlight procedure viewer. The procedure viewer includes buttons for: accessing a list of recently viewed procedures, printing a procedure, adding a procedure to your current Plates binder, and locking the procedure.

ForeFlight Mobile's **Lock** button disables touch interaction (zooming and scrolling) with the terminal procedure viewer, which minimizes the risk of accidental closure when in turbulence. It also disables the automatic rotation that would normally occur when the iPad is turned. The lock button can also, optionally, disable all buttons on the screen, including those that change views. That feature is configured in Settings.

Multi-page procedures can be viewed by sliding pages left or right.

Printing procedures one-at-a-time is supported when running iPad OS 4.2 and above. Tap the **Print** button in the upper toolbar to print. An AirPrint capable printer is required. For more information about this requirement, see:

<http://www.apple.com/ipad/features/airprint.html>

Note: Procedures are also available from the *Plates* view, discussed later. While the *Plates* view provides a different method of accessing and organizing procedures, the same rules (listed above) about over-the-air vs. downloading apply.



USING GEO-REFERENCED PROCEDURES

Geo-referencing is an optional feature that requires a ForeFlight Pro subscription. See the *Accounts* view to learn how to purchase or upgrade from "Standard" to "Pro".

Some instrument procedures can be geo-referenced. This allows ForeFlight Mobile to display the aircraft's position on the procedure.

Only approach plates and taxi diagrams are geo-referenced. When a geo-referenced procedure is displayed, a blue square is drawn around the geo-referenced area. This is the only area in which your aircraft, or "ownship", will be shown. Until GPS data senses movement and provides a track over the ground, position is indicated using a small blue dot. Once a track is established, the aircraft icon selected in ForeFlight Mobile settings is shown. Much like the *Maps* view, the aircraft speed, track, etc. is displayed at the bottom of the view. Tap an item in the HUD to change it.



FAVORITE AIRPORTS LIST

Use this favorites list to store frequently visited airports, area airports, and airports for upcoming flights. Having a nicely populated list of favorite airports makes scanning airport conditions a snap.

While viewing an airport, tap the single star button on the Airport view menu bar to add the airport to your Favorites list. Tap the button a second time to remove the airport from your Favorites list.



When in landscape mode, the Favorites List is displayed on the left side of the screen. When the iPad is in portrait mode, tap the double-star button on the Airports View menu bar to display the Favorites list. While the Favorites list is visible, tap any airport listed to display that airport's full information.



Use the **Edit** button in the upper right corner of the Favorites list to add, remove, or reorder your favorite airports. Tap the **Edit** button to enter edit mode. When in edit mode, the delete and re-order controls are displayed. Tap **Edit** again to exit edit mode.

Each airport in the Favorites list displays the most recent weather information for the airport (if available).

Information displayed includes the current flight rule, observation age, wind speed and direction, ceiling, barometric pressure, temperature, and dew point. Weather warnings (i.e., fog, thunderstorms, cumulonimbus clouds, lightning, mist) - are displayed and highlighted in red when present. ForeFlight Mobile automatically checks for updated weather observations every minute. If a more current observation is available, it is downloaded immediately and the display is updated.

Favorites

Edit



KSFO: San Francisco Intern... 53m old
260° at 16 - 25 kts, 10 sm, Broken 1,400
29.98 in Hg, 20°C (13°C dewpoint)



KSGR: Sugar Land Regio... 56m old
Winds calm, 10 sm
29.99 in Hg, 28°C (26°C dewpoint)



KAXH: Houston-Southwest 24m old
Winds calm, 10 sm
29.99 in Hg, 29°C (26°C dewpoint)



KSQL: San Carlos 62m old
270° at 12 - 17 kts, 30 sm, Broken 1,700
29.99 in Hg, 19°C (14°C dewpoint)

ForeFlight uses the following convention for conveying the airport's current flight rule:

Green VFR

Blue MVFR

Red IFR

Pink LIFR

RECENT AIRPORTS LIST

Tap the history button to display the Recents list. The Recents list displays the last twenty airports viewed in the order they were viewed.



To remove airports from the Recents list, there are two methods available: *clear* and *swipe-to-delete*. Tap the **Clear** button to remove *all* airports from the list. To remove a single entry from the Recents list use the standard Apple 'swipe-to-delete' function.

FBO INFORMATION

To access a list of Fixed Based Operators providing pilot services at an airport, tap the **FBOs** button. FBO details displayed include hours of operation, fuel prices, location on field, fuel availability, comments, contact numbers and frequencies, and any additional services provided. ForeFlight includes FBO details for thousands of airports worldwide.



Fuel prices

Fuel price data is provided for thousands of FBOs. This price data is not guaranteed, so it is important to verify the price information with the FBO when complete accuracy is required. The price data does not differentiate between cash or credit pricing, nor will it reflect any discounts that may be available.

Fuel price data updates can be submitted within the application. Tap the Update Prices button when viewing an FBO's details. When submitting price data, leave unknown prices blank. Blank values will be ignored when the prices are updated on the ForeFlight systems.

Comments

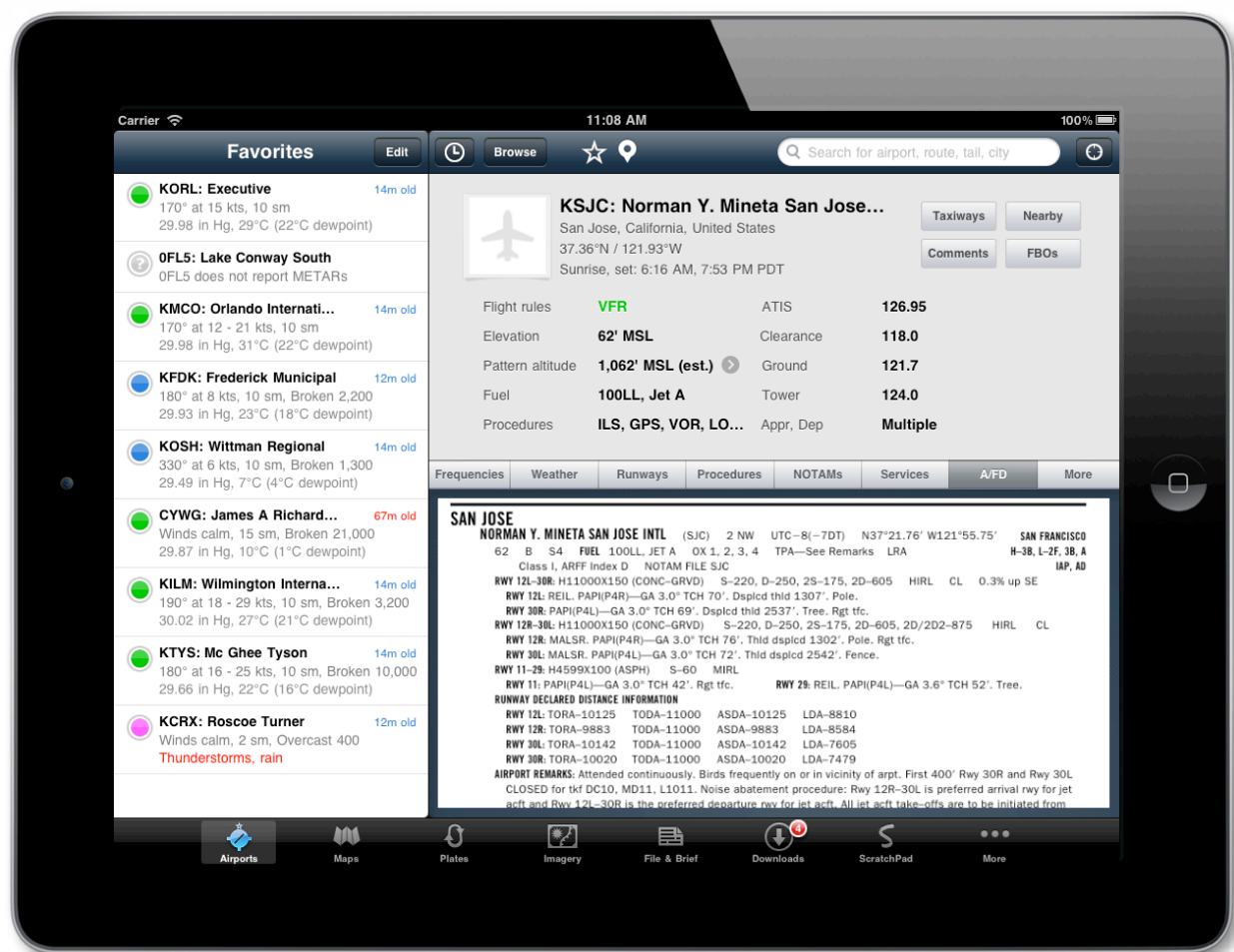
User-provided comments are available for FBOs and airports. View FBO comments by tapping the Comments button just under the fuel price information. Once you access comments, they are saved to your device so you'll be able to view them again later - even when you are offline.

To add a comment, tap the Add Comment button. Comments are moderated by ForeFlight and will appear for all users to see after they are reviewed.

AIRPORT/FACILITY DIRECTORY (A/FD)

For additional airport information like pilot-controlled lighting procedures, parachute jumping activities, etc., sometimes there's just no better place than a good old-fashioned Airport/Facility Directory.

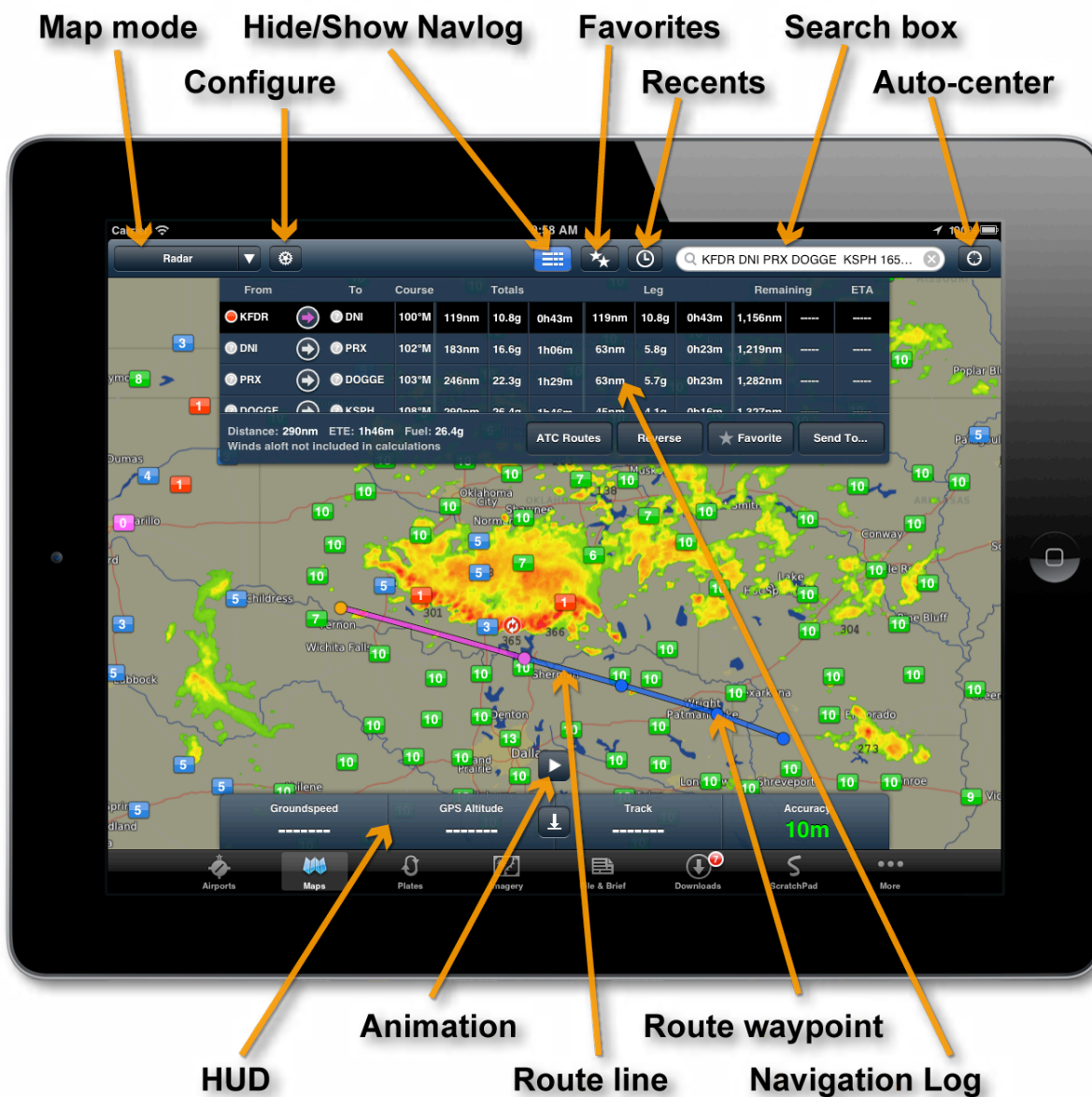
Each airport's A/FD entry is available from the A/FD tab - just as you'd see it in the familiar green-covered printed version. If the entry has multiple pages, swipe to the left or right to view each.



Maps

ABOUT THE DESIGN

The Maps view is the place to visualize airspace, weather, terrain and other factors that may affect your route. The maps view is also the place to chart your progress during a flight. The maps themselves take center stage with supporting data surrounding them.



PINCH, ZOOM, AND PAN

Each map in the Maps view supports the standard iPad gestures for zooming and panning. Drag your finger on the map to slide it to a new region. Use two fingers in a pinch or expand gesture to change the zoom scale of the map. You can also double tap the map to zoom in one level or tap once with two fingers at the same time to zoom out one level. Anytime you display a new route on the map the zoom level and region shown will auto-adjust to bring your route into view.

CHANGING MAPS

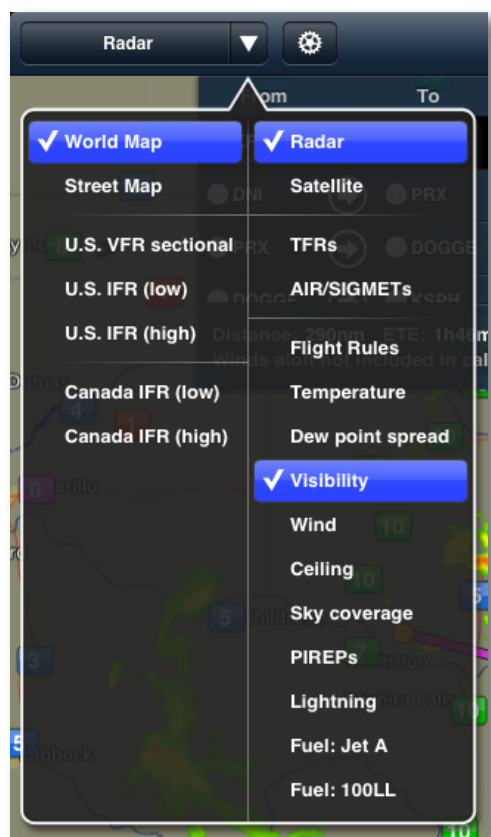
A variety of map types are available. To change which map is displayed, tap the map mode button at the top left of the view. This displays the map mode menu. Tap a map name to select it and update the map.

The current zoom and location will not change when you change maps.

If you have entered a route of flight, the route line is always displayed - no matter which map type you're viewing.

Each map is geo-referenced and seamless. This means that you can view your current location on the map and do not need to change maps to view a new region - simply drag with your finger.

Radar or Satellite data can be overlaid on any base map selection (such as VFR charts). Additionally, any marker or shape overlay can be selected for viewing. Examples of these are TFRs or Visibility. Only one marker-type can be selected at once. To de-select an overlay and hide it, tap it in the menu.



Available map types include:

- ❖ **World Map** - Global map with geopolitical borders, cities, major highways, and bodies of water. This map can be downloaded for offline use.
- ❖ **Street Map** - Detailed street map. This map can only be used when connected to the Internet.

❖ **U.S. VFR Sectional and TAC** - Terminal Area Charts (TACs) are automatically displayed when a VFR sectional is zoomed in to major cities containing a TAC inset.

❖ **U.S. IFR Enroute** - low or high.

❖ **Canada IFR Enroute** - low or high. Requires ForeFlight Canada subscription.

❖ **Fuel prices** - prices for 100LL or JetA fuel. Fuel prices are color coded by price - less expensive prices are in green, average in orange, most expensive in red. Colors are assigned based on the region in which the airport sits in order to avoid marking an inexpensive California price as expensive when compared to Texas.

❖ **Radar** - composite radar for the US and Canada. This can be animated by pressing the “play” button in the lower center of the map. See the references at the end of this manual for the radar map legend. The radar map checks for updates every three minutes.

❖ **Satellite** - covers North America. This can be animated by pressing the “play” button in the lower center of the map. The satellite map checks for updates every three minutes.

❖ **TFRs** - covers regions provided by FAA. Tap a TFR shape to see more details. Red TFRs are active or will be active in the next 24 hours. Yellow TFRs are inactive for at least the next 24 hours.

❖ **AIR/SIGMETs** - covers regions provided by FAA. The shapes are colored-coded based on type. Gray is used for IFR and obscuration, yellow for convective, orange for turbulence and high winds, and blue for freezing level and icing conditions. Tap a AIR/SIGMET shape to see more details.

❖ **Weather Maps** - a variety of weather fields can be displayed across the map, such as temperature, surface winds, PIREPs, and visibility. The weather maps check for updates every five minutes.

A **configure** button is provided adjacent to the map selection button in the dark blue tool bar. Tap this button to show a transparency slider. This slider will change how visible the colors are for radar and satellite overlays.

The radar, satellite, and weather maps require an Internet or XM WX connection. Fuel price maps require an internet connection the first time they are used. The **Downloads** view can be used to download World, IFR, and VFR charts for use when offline.

FINDING AN AIRPORT OR NAVIGATION AID USING SEARCH

To quickly center the map on an airport, navigation aid, or waypoint, tap the *search box* in the top right of the view. Type the location's identifier, and tap the **Search** button on the keyboard.

You can search by identifier, latitude/longitude, or bearing and distance from a waypoint.

Example Searches:

- ♣ **KJFK** - Centers the map on KJFK airport
- ♣ **FLW** - Centers the map on the FLW VOR
- ♣ **32.3N/99W** - Centers the map on the latitude/longitude
- ♣ **324455/-0804557** - Centers the map on 32°44'55"N, 80°45'57"W
- ♣ **3244.92/-08045.95** - Centers the map on 32°44'55"N, 80°45'57"W
- ♣ **3244556/-08045576** - Centers the map on 32°44'55.6"N, 80°45'57.6"W
- ♣ **FLW/320/15** - Centers the map on 15nm bearing 320°M from FLW

PLANNING A FLIGHT USING SEARCH

Create a route across any of the available maps by typing in multiple identifiers in the *Search* box, separated by a space.

When typing a search, look for the helpful hints that appear underneath the search box. These hints provide example route searches that act as great reminders for quickly visualizing your route. Any of the search options specified in the “Finding an Airport or Navigation Aid using Search” section are supported as route waypoints. Additionally airways, arrivals and departures are supported.



Entire airways can be viewed on the map by searching for just the airway identifier, for instance: *V16*. Airways can also be used in a route, just as ATC would issue them. For example: *NIKOL V244 ILC*.

DPs and STARs (as well as associated transitions) are also supported in a route. If the DP or STAR requires a runway input, ForeFlight Mobile will prompt you for one and provide an example. When briefing and flying these procedures, it is critical to *always* refer to the official arrival/departure plate from the Airport view as the ForeFlight Maps view is *not able to show heading vectors, altitude info, and certain other details you'll need*.

When building a route in the search box you can also provide basic performance information about your aircraft. These include:

- ❖ **True airspeed** in knots or miles per hour. Knots is the default units.
- ❖ **Altitude** in feet.
- ❖ **Fuel burn** in gallons, liters or pounds per hour. GPH is the default unit.

Example route searches:

- ❖ **KJFK KSFO** - this is a simple direct route from NY to San Francisco.
- ❖ **KJFK FLW 32.3N/99W** - this is a route from NY to the FLW VOR to a lat/lon waypoint.
- ❖ **KCLT 36R.MERIL5 RDU J209 ORF J121 SIE CAMRN4 KJFK** - this route includes a runway-specific departure, multiple jet airways and an arrival.

❖ **KUZA KOSH 165kts 17gph 8000ft** - this is a route from Rock Hill to Oshkosh with a true airspeed of 165 knots, a fuel burn rate of 17 gallons per hour, and an altitude of 8,000'.

❖ **KUZA KOSH 165 17 8000** - this is the same route and performance data as the previous example, this time using the default units.

A route search can also include a *tail number* of an aircraft setup in the **More > Aircraft** view. When that aircraft has performance data it will be automatically used. In this case, you won't need to include altitude, fuel burn, or true airspeed - unless you'd like to use different numbers than you provided in the aircraft's profile.

To clear the current route, tap the *Search* box. Then, tap the "X" button that appears in the search box on the right side. Tap the map to dismiss the keyboard.

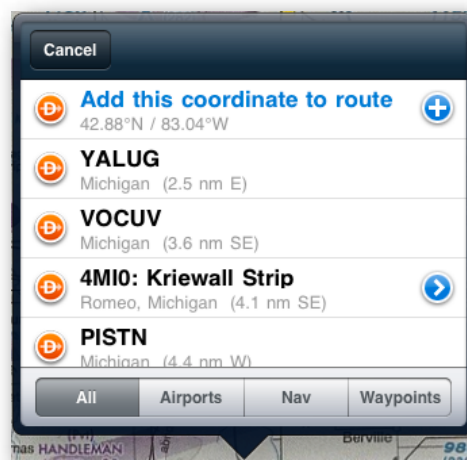
PLANNING A FLIGHT USING TOUCH


You can also create or edit a route using a single finger with ForeFlight Mobile's "Touch Planning". Touch planning is based on tap-and-hold gestures: place your finger on a waypoint or other location on the map and hold it there for a second. A dialog will appear asking you to specify which location near your touch point should be used.

- ❖ **Add** a waypoint to your current route, or **start a new route**: Tap-and-hold (or just tap) until a pop-up is displayed. Then, select the desired waypoint in the pop-up by tapping the name. If you already have a route on the map, the new waypoint will be added to the end.
- ❖ **Remove** a waypoint from your current route: Tap-and-hold on the waypoint. Tap the **Delete** button in the top right of the pop-up.
- ❖ **Insert** a waypoint in the middle of an existing route leg: Tap-and-hold on the route leg line until it turns blue. Then, keeping your finger on the screen, drag to the location you want to add. Remove your finger from the screen and select the desired waypoint from the pop-up view.

The pop-up view that appears as part of touch planning allows you to select from a list of locations near your touch point, sorted by distance. The list shown is filtered by *All* (which includes airspaces), *Airports*, *Nav* (VORs, NDBs), and *Waypoints* (intersections and user waypoints). To change the filter mode, tap the buttons in the bottom of the pop-up view.

To cancel a touch planning operation, tap the **Cancel** button that appears in the pop-up view or tap the map outside the pop-up view.




Tap the orange  button to the left of a waypoint to make a new route direct-to that waypoint from present position.

Tap the blue  chevron next to an airport name to see that airport's details in the Airports view.

To learn more about airspaces on the Maps, simply tap on them. The view will pop-up with airspace info shown (only in the *All* filter mode).

MANAGING USER WAYPOINTS

Sometimes you'll want to include a waypoint in your route that isn't an airport or a nav aid. A user waypoint is a method of saving any single point on the map for future reference, inclusion in routes, or direct-to operations. Use a custom user waypoint any time you'd like to save a position that isn't already associated with an existing waypoint.

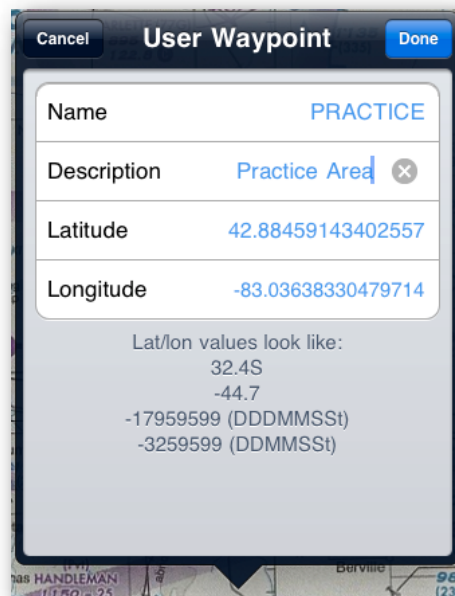
While using touch-planning, create your own custom waypoint from a point on the map: Tap-and-hold the point until a pop-up is displayed. Tap the  icon to create and name the waypoint, which you'll be able to use in future routes.

User Waypoints may also be added in bulk from KML or CSV files. See the ForeFlight website for more details.

❖ **Name:** Create a recognizable name for the waypoint. Names must be one word, with no spaces. Once a waypoint has been named, you'll be able to reference it while creating routes just as you would any other waypoint.

❖ **Description:** Provide a brief description of the waypoint. The description appears in the waypoint callout when you tap that waypoint in your route in the Maps view.

❖ **Lat/Lon:** When creating a user waypoint via touch-planning, the latitude and longitude are determined for you based on the point on the map that you touch. These can be edited here.



The image shows a 'User Waypoint' dialog box with a 'Cancel' button on the left and a 'Done' button on the right. It contains four input fields: 'Name' with the value 'PRACTICE', 'Description' with the value 'Practice Area' and a delete icon, 'Latitude' with the value '42.88459143402557', and 'Longitude' with the value '-83.03638330479714'. Below these fields, there is a note: 'Lat/lon values look like:' followed by examples: '32.4S', '-44.7', '-17959599 (DDMMSS)', and '-3259599 (DDMMSS)'.

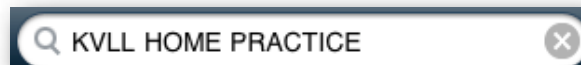
Tap the **Done** button to finish creating the user waypoint. Once the waypoint is created, it functions just as any other waypoint in ForeFlight Mobile.

To **delete** a user waypoint, use the swipe-to-delete gesture.

User waypoints can be:

❖ **Searched for:** Using the *Search* box at the top of the *Maps* view.


❖ **Included in a route:** By entering the name of the user waypoint in the same way you would use any other airport name or nav aid when planning via search.











The image shows a search bar with a magnifying glass icon on the left and a delete icon on the right. The text inside the search bar is 'KVLL HOME PRACTICE'.

WORKING WITH THE NAVIGATION LOG


The navigation log displays when a route is shown on the map. This log displays each leg of the route, with course (or heading, if winds aloft are included for your route), distance, fuel burn, and time statistics.

Use the  button in the top *Maps* view toolbar to hide and show the log. The table listing shows the start and end points of each leg, along with the leg statistics:

From	To	Heading	Totals				Leg			Remaining		ETA
 KAND	  ADENA	78°M	59nm	5.9g	0h21m	59nm	5.9g	0h21m	14nm	4m22s	7:39 PM	
 ADENA	  UZ	70°M	84nm	8.4g	0h30m	25nm	2.5g	8m42s	38nm	0h12m	7:47 PM	
 UZ	  KUZA	15°M	90nm	9.0g	0h32m	6nm	0.6g	2m15s	44nm	0h14m	7:49 PM	
Distance: 90nm ETE: 0h32m Fuel: 9.0g Winds aloft included (5 kts tailwind)												
				ATC Routes		Reverse		★ Favorite		Send To...		

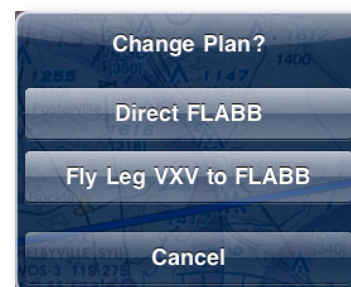
❖ **Planned Data:** Information in the *From*, *To*, *Heading* (or *Course*), *Totals*, and *Leg* columns represent the *planned* route and is based on the information you provided in the *Search* box, or based on your selected aircraft's performance profile. This information is *not* updated once displayed.

❖ **Real-Time Distance, ETE/ETA:** The *Remaining* and *ETA* columns are updated in real-time based on your current GPS position and groundspeed. The distance remaining on the leg, estimated time enroute for the leg, and estimated time of arrival at the next waypoint are displayed.

Tap on a waypoint ID in the table to jump to that waypoint on the map. Tap the  icon to adjust your route to any leg, or direct to a waypoint on a leg.

Just below the table is a summary of route and performance data, as well as the winds aloft for the flight. Winds aloft are *only* incorporated into the leg statistics if a true airspeed *and* altitude are provided as part of the route (either by manually typing them in when searching or when determined by the aircraft performance figures).

Winds aloft calculations also require an active network connection to retrieve the latest winds aloft forecast. However, once a forecast has been downloaded it will be saved for a few hours for use when offline. Note that winds aloft forecasts are only provided for altitudes above 1,500' AGL.



Buttons under the navigation log provide quick ways to perform a few different actions:

- ❖ **ATC Routes** - Displays a list of recently cleared routes for the current departure and destination. Tap one to load it as the current route.
- ❖ **Reverse** - Reverses the order of all waypoints in the current route
- ❖ **Favorite** - Toggles the favorite status of the current route. When the star icon is orange, the current route is a favorite route.
- ❖ **Send to...** - Will show multiple options:

“File & Brief” copies the current route and performance data to the File & Brief view, creating a new flight plan there. *Note:* tapping this button does not file the flight plan or submit a request for a briefing. Rather, it takes you to a page where these actions can be performed.

“Email” creates a new email message with your navigation log and a screenshot of your trip. The message also includes a link that other ForeFlight Mobile users can tap to load your route onto their iPad or iPhone.

“Printer” allows printing of the navigation log to a connected AirPrint printer. (Requires iOS 4.2 or higher.)

“Twitter” composes a new Twitter message with your route and a screenshot of your trip. (Requires iOS 5 or higher.)

“Aspen” will copy the flight plan to your Aspen Connected Panel.

ENGAGING THE MOVING MAP

The map view determines your location and displays it on the maps. When you are not in motion, your current location is shown as a blue dot. When you are in motion, your current location is shown as an aircraft. You can select your aircraft icon in the **More > Settings** view. If you have trouble seeing your location on the maps, please review the GPS tips on our web site at <http://www.foreflight.com/support/gps.php>

The map can be set to automatically scroll to keep your current location centered in the screen. Activate this auto-centering mode by tapping the crosshair button in the top right of the screen, in the gray toolbar.





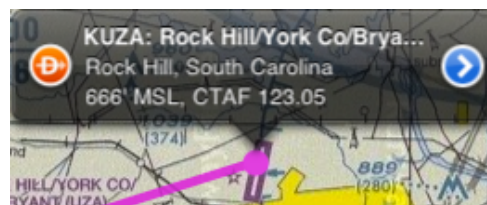
Tap the crosshair button again, or manually pan or zoom the map to disable the auto-centering mode.

Note that only the iPad 3G model contains a GPS receiver. The WiFi-only iPad does not contain a GPS receiver. In order to use the mobile map functionality with a WiFi-

only iPad, you must use use an external GPS receiver (<http://www.foreflight.com/support/gps.php>).

DIRECT-TO

To create a direct-to change to your route, tap a waypoint on the route. Then tap the orange  button. An alternate method is to tap the  icon in the navigation log.

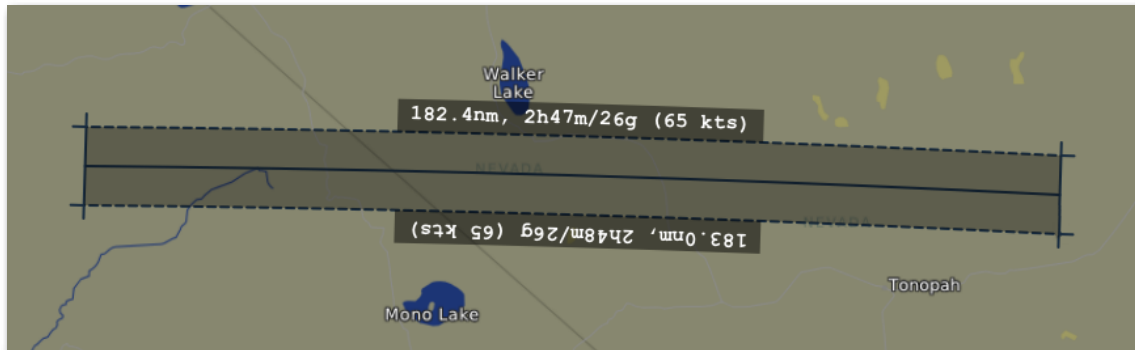


This removes all waypoints in the route prior to the selected waypoint and adds a new direct-to leg from present position to the selected waypoint.

Additionally, a direct-to change can be made to utilize a waypoint not already in the route. See the "Touch Planning" section for details.

RULER

Distances can be measured on the Maps view at any time by holding down two fingers on the map until the ruler appears. The ruler can be moved across the map to take measurements between any locations. The ruler is also handy for quickly visualizing great-circle (direct) routes between two points.



When using the ruler in flight, the current groundspeed will be used to show the time of travel for the distance measured. When not in flight, the TAS from your current route or default aircraft will be used instead.

Fuel burn estimates are also shown using the fuel burn provided for the current route or from the default aircraft.

All time and fuel estimates are based on no-wind conditions.

VIEWING AND HIDING THE HEADS UP DISPLAY

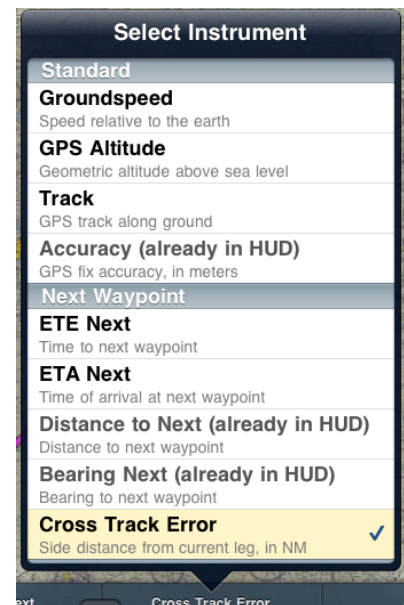
When a position fix is available, the data fields in the Heads Up Display (HUD) at the bottom of the map updates to reflect the latest values for groundspeed, track, and geometric MSL altitude. Additionally, an accuracy value is provided as an indication of the quality of the fix (lower numbers are better).



Each of the four default instruments displayed on the HUD can be replaced with an instrument of your choice. To replace an instrument, tap an instrument and select a new one from the pop-up list.

The *Select Instrument* pop-up displays all available instruments. Be sure to scroll the list up/down to see each instrument. The list provides a description of each instrument's function, as well as an indication of which ones are already displayed.

Hide the HUD by tapping the downward arrow button in the center of the HUD. Tap again to restore the HUD.



USING FAVORITE ROUTES

To view a favorite route, tap the double-star button in the dark blue tool bar at the top of the Maps view. A list of your favorite routes is displayed.



Tap a route in the list to make it the current route.

To delete a route from the favorites list, use swipe-to-delete on the route.

The favorites list can be re-ordered by tapping the **Edit** button. Once in *Edit* mode a three-bar icon is displayed on the right of each route in the list. Tap-and-hold on the three bar icon until the row appears to lift up, then drag the row to the desired location in the list. You can also delete the route by tapping the red button on the left.

Note that removing routes from your *Favorites* list will not affect items displayed in the *File and Brief* view.

USING RECENT ROUTES

Every route shown on the Map is automatically saved to the Recent routes list. This provides a great way to quickly jump to a previously viewed routing or performance configuration.



View this list by tapping the clock icon in the dark blue tool bar at the top of the view. Tap a route in the list to make it the active route.

Delete a route from the recents list using swipe-to-delete, or delete all routes from the recents list by tapping the **Clear** button at the top of the list.

CLEARING A ROUTE

Clear a route from the Map by tapping the gray X in the *Search* bar in the upper right of the *Maps* view.



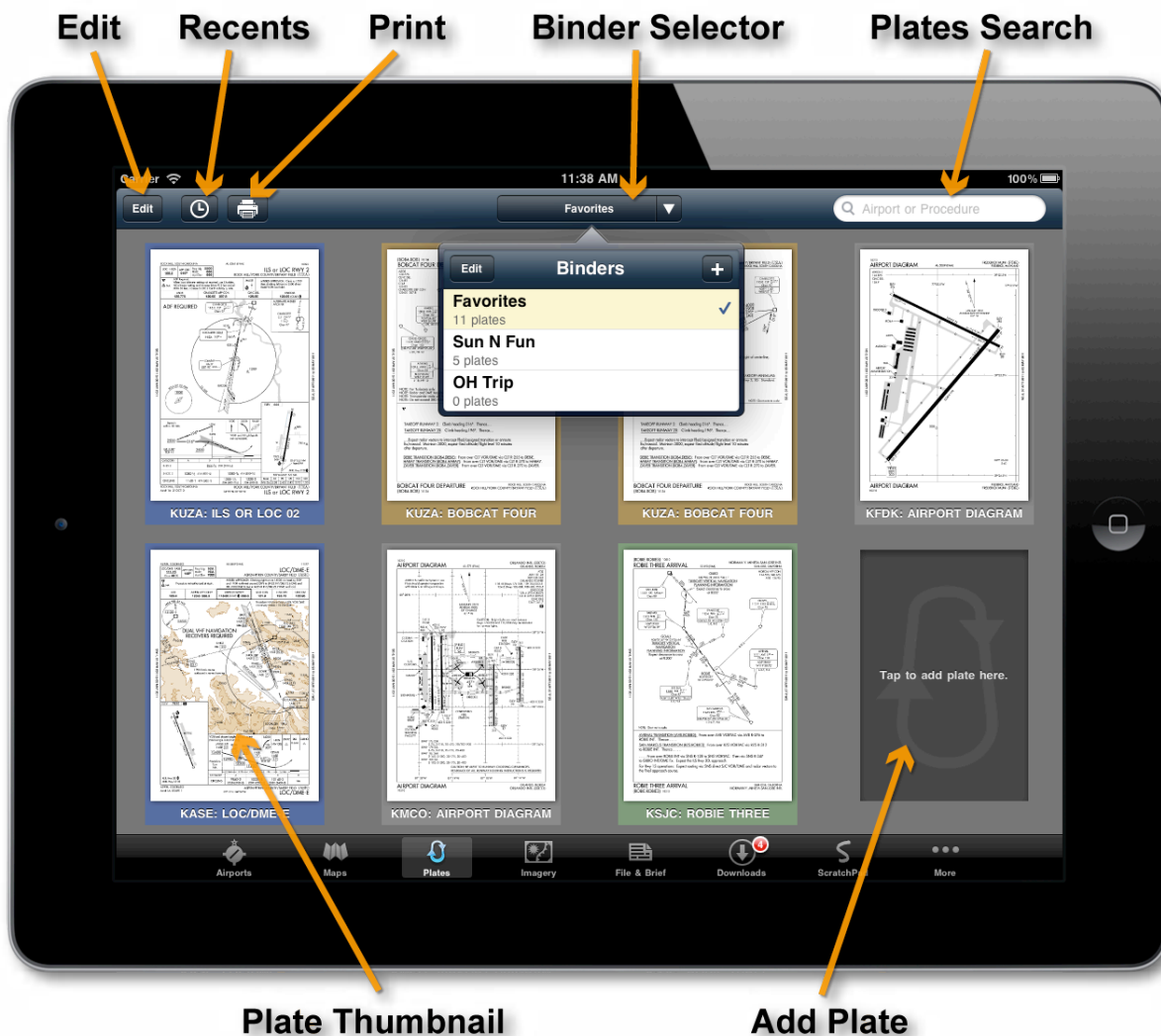
Manual text-based edits of the current route can also be performed by editing the route in the search field and pressing the **Search** key on the keyboard.

Plates

ABOUT THE DESIGN

Instrument pilots use their procedures differently in the air than when on the ground. Often, you'll view an arrival, approach, and then taxiway diagram - all without needing to return or a chart or A/FD in between. The *Plates* view is designed to account for the way you use procedures *while* you're flying.

The *Plates* view provides access to approach plates; taxiway diagrams, and arrival and departure procedures. This view enables you to organize the plates in the way that makes the most sense to you and streamlines your access to each procedure.



ABOUT PLATE BINDERS

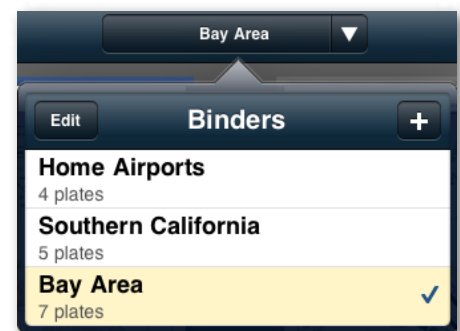
Binders provide a method for organizing plates into logical groups for easy access while in flight. A plate binder can contain any combination of:

- ❖ **Airport Diagrams**
- ❖ **Hot Spots**
- ❖ **Take-Off Minimums**
- ❖ **Departure Procedures**
- ❖ **Arrival Procedures**
- ❖ **Instrument Approach Procedures**

CREATING A BINDER

To create a new binder, tap the *Binder Selector* in the top toolbar. Use the + button to add a new binder and provide a name when prompted.

The binder is created and the *Plates* view automatically displays your new (empty) binder.



MANAGING PLATES

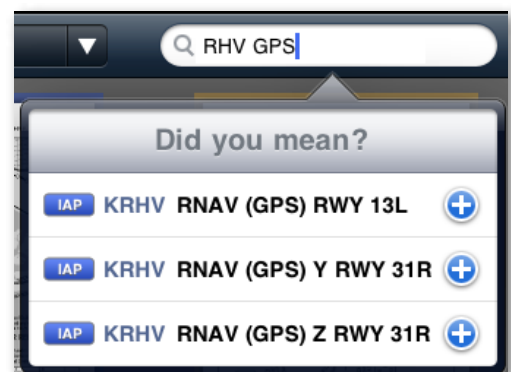
There are two methods of adding plates to a binder.

The *Tap to add plate here* thumbnail displays an intelligent list of airports gathered from airports you've used in other parts of ForeFlight Mobile. Tap an airport to see the available plates. Tap one or more plates to add them to the binder.


The *Plate Search* box in the top toolbar allows you to search for a plate by airport, or by a specific procedure.

Example Searches:

- ❖ **KJFK** - Lists all procedures associated with the JFK airport
- ❖ **RHV GPS** - Lists the RNAV (GPS) approaches to the RHV airport



❖ **MDW ILS 13-** Displays the ILS Rwy 13C approach to MDW airport in the procedure viewer.

Tap the  icon to the right of any procedure to add it to the current plate binder. Tap the procedure name to view it.

To reorder or delete plates in a binder, tap the **Edit** button on the left side of the top toolbar.

To change the order in which a plate is displayed in the binder, hold and drag the plate to the new location. Note that you can add the same plate to the same binder more than once. For example, you might create a binder that contains plates for three local airports. You could elect to include each airport's taxiway diagram both before each airport's departure procedures *and* after each airport's approach plates, making it easier to find the diagram in context during both arrival and departure operations.

To remove a plate from a the binder tap the **X** icon in the upper left of the plate thumbnail.

PRINTING PLATES FROM A BINDER

Tap the **Print** button in the top toolbar of the *Plates* view. The *Printer Options* dialog box is displayed. From here, select a printer and a number of copies. Tap the **Print** button to send the selected number of copies of *all* plates in the binder to your printer.



To print only *one* procedure, tap the plate's thumbnail to display it in the procedure viewer. Tapping the print button while in the procedure viewer sends only the currently displayed plate to the printer.

Printing requires your iPad to be using iOS version 4.2 or above, and an AirPrint capable printer is required. For more information about this requirement, see:

<http://www.apple.com/ipad/features/airprint.html>

ENSURING YOUR PLATES DON'T EXPIRE

When you view a plate or add it to your binder, ForeFlight Mobile uses either a copy of the plate stored locally on your iPad (by virtue of the fact that you've already downloaded it), or uses your iPad's internet connection to fetch the plate and store it locally on your iPad. In either case, the plates are viewable *until they expire* - whether you have an internet connection at the time you view them or not.

When these plates expire, *they are only automatically replaced if you have used the Downloads view to download new terminal procedures for the states/regions associated with the plates in your binder*. Otherwise, the plates are only replaced when you open the binder *and* have an internet connection. In-flight is not the time to discover this.

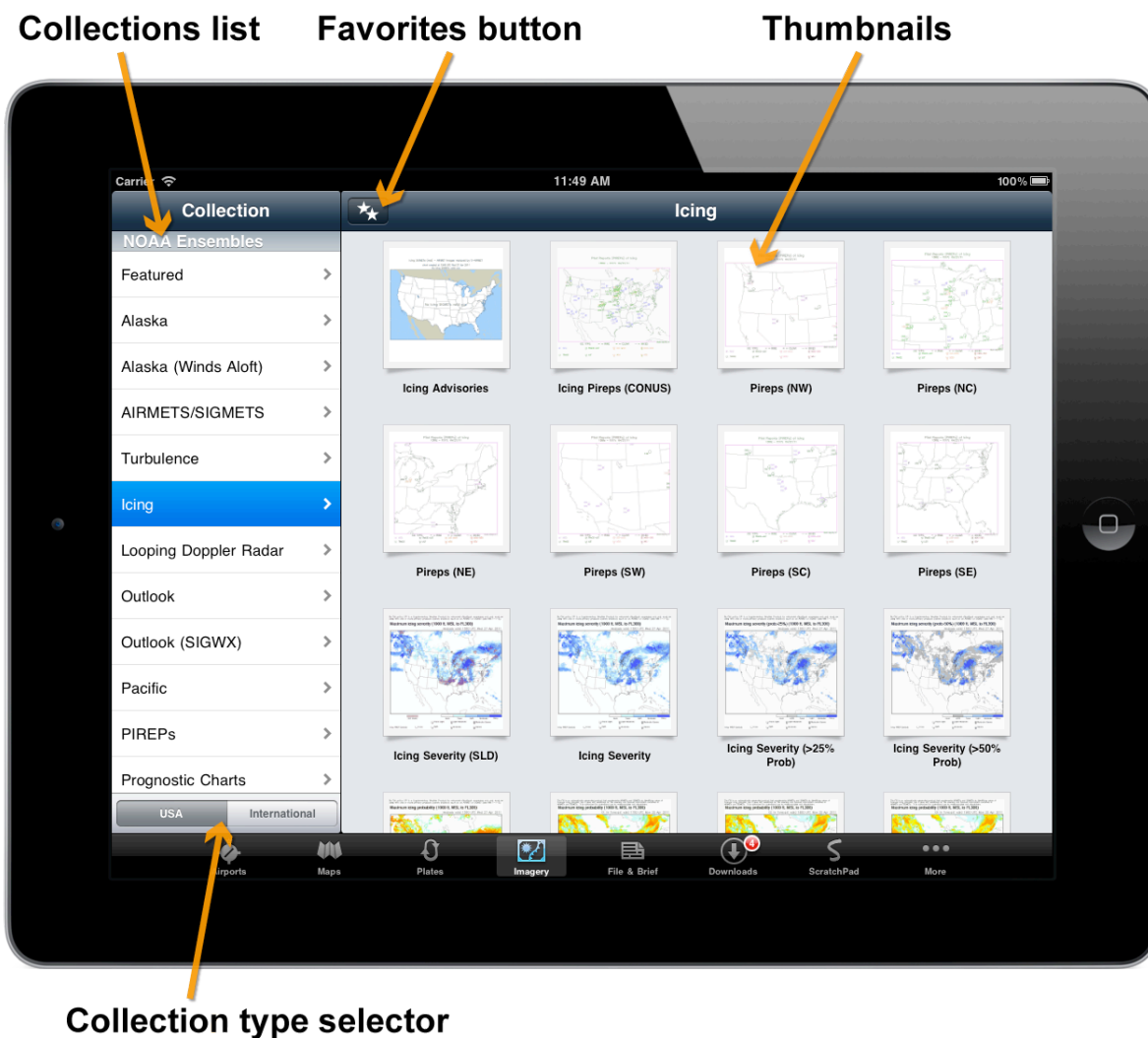
Be sure to check the *Downloads* view to ensure ForeFlight Mobile is set to download terminal procedures for all states covered in your binders and that all requested data has been downloaded. This ensures all plates in your binder will be current and available to you at any time - on the ground or in the air.

Imagery

ABOUT THE DESIGN

The Imagery view provides collections of weather images from around the globe. Images are divided into categories by type. When viewing a category a current thumbnail image is shown for each available image.

Full size images are displayed full screen and support standard pinch and expand zooming, and panning touch gestures.



SELECTING A COLLECTION

Tap a collection in the left-side list to show thumbnails from that set on the right side. Other collections are available by tapping the USA/International mode selector at the bottom of the list.

VIEWING AN IMAGE

View a image full screen by tapping on its thumbnail. The full screen view supports all the standard zoom and pan gestures, as well as rotation.

Dismiss the full screen image by tapping the **Close** button at the top left.

Tap the star at the top right to add the current image as a favorite.



USING FAVORITE IMAGES

View all favorite images by tapping the double star button in the dark blue tool bar above the thumbnail images area.



Tap a image in the list to view it full screen.

The favorites list can be re-ordered by tapping the **Edit** button. Once in Edit mode, a three-bar icon is displayed to the right of each image in the list. Tap-and-hold on the three bar icon until the image row appears to lift up, then drag the row to the desired location in the list.

Delete an image from the favorites list using swipe-to-delete. Or, tap the **Edit** button and then the red circle icon beside the image. Then, tap the **Delete** button.

File & Brief

ABOUT THE DESIGN

The *File & Brief* view of ForeFlight Mobile provides a quick way to enter details about a flight to depart 10 minutes from now or days in advance. The fields in the flight plan form correspond to the standard paper form, with the added ability to specify an email address to which a filing confirmation and briefing will be sent.



CREATING A NEW FLIGHT PLAN

Flight plans can be created in three ways: New, Copy, or from a route created in the *Maps* view.

New: To create a new flight plan form from scratch, tap the New Flight Plan button at the top right. This displays a new flight plan form and automatically fills in some details by using the last filed values such as pilot name, phone number, and aircraft. The majority of the fields will be blank.

Copy: To use a previous flight plan form as a template for a new one, select the desired plan form from the list and press the **Copy** button at the bottom right. This creates a new flight plan form and fill in all details based on the selected plan with an updated departure time; any fields can be changed as needed.

Map: As discussed in the Maps section of this guide, a new flight plan form can be started from a map-based route by tapping the **File & Brief** button on the Navigation Log. The flight plan form will be filled in according to the route details and last-filed values as in a new plan.

FILLING OUT A FLIGHT PLAN

The majority of the flight plan form has the same usage as the corresponding field on the paper form. A few items are described below in greater detail.

In the *Flight Rules* section at the top, the options are *VFR*, *IFR* and *VFR (DC SFRA)*.

When *VFR (DC SFRA)* is selected, you need to provide an appropriate gate for SFRA entry as your departure point (when inbound to the SFRA) or the appropriate exit gate in the destination field (when outbound). Your ETE value should match when you expect to enter the SFRA (when inbound) or exit it (when outbound). If you wish to do non-towered airport pattern work within the SFRA enter + *REQ PTTN* in your remarks).

ForeFlight Mobile can store profiles for your aircraft. In the *Aircraft* section, the aircraft used for the most recently filed flight plan will be chosen by default.

Tap the *Aircraft* row to edit or change the aircraft. To change the selected aircraft for the current flight, tap on the appropriate tail number in the list of aircraft. New aircraft can also be created. See the *Aircraft* section of this guide for more details.

The *Route* entry in the *Enroute* section can be as simple as DIRECT (leave blank for DIRECT routing) or as complex as you like, but note that the departure and destination airports are specified separately and thus should not be entered in the *Enroute* field.

All required fields are marked as such. Your email address is required for receiving a filing confirmation and a copy of the briefing for your flight. This email address is independent of your ForeFlight subscription account, and you can change it at any time.

OBTAINING A BRIEFING FROM DUATS

After defining your flight details, you can receive a DUATS briefing by tapping the Brief button at the bottom right. ForeFlight will request the briefing from DUATS, using your DUATS account if specified in the *Accounts -> Account Logins* area, and present the briefing as a collection of logical sections.

Sections listed in bold have content for you to review; plain sections are empty. Once you have selected a section, you can use the left and right arrows at the top right to skip to the previous or next section, respectively.

Tapping the top left button (labeled with the origin and destination) takes you back to the briefing section list. Tap **Close** at the top left to return to the flight plan form.

Briefings are stored on the iPad. To show a previous briefing, tap the **Briefing** button again when viewing the previously briefed flight plan.

Existing briefings can be refreshed to show the latest data. Select the desired plan form from the list at the left, tap the **Brief** button at the bottom right, and tap the **Refresh** button at the bottom left of the briefing segment list to refresh the briefing.

Briefings may only be obtained or refreshed when an active network connection is available.



FILING YOUR FLIGHT PLAN

Once your flight plan form is complete, you can file it using the **File** button at the bottom right of the form and confirming the action by pressing the **File!** button on the pop-up.

ForeFlight Mobile will file through DUATS, using your DUATS account if specified in the Accounts area. If you haven't specified your own account, ForeFlight will file for you using ours. The flight plan will either be accepted and you will be notified of a successful file, or it will be rejected and ForeFlight Mobile will identify the error reported by DUATS.

If rejected, you can correct the error and re-file.

Once a flight plan has been filed, it will no longer be editable. To create a new flight plan form from the filed plan, tap the **Copy** button.

Note: Once a flight plan has been filed, it cannot be cancelled or closed using ForeFlight Mobile.

MANAGING FLIGHT PLAN FORMS

When viewing the listing of flight plan forms, you may wish to remove some to keep the length of the list under control. To remove a flight plan form, use the swipe-to-delete gesture. This will not close or cancel a filed plan, but rather remove its details from ForeFlight Mobile.

Downloads

ABOUT THE DESIGN

The *Downloads* view lets you keep ForeFlight Mobile up to date with the latest airport data, diagrams, procedures, and charts. Select the data you want to download, then come back to the screen once a month to download the latest. All the data you download is available offline, whether you're up in the air or just away from an Internet connection.



A QUICK TOUR OF THE DATA AVAILABLE FOR DOWNLOAD

- ❖ **Airport Database** is an international A/FD with over 27,000 airports and NAVAIDS from 220 countries. This data is used in the *Airports* view (frequencies, runways, hours, FBOs, etc) and in the *Maps* view (locations, routes, NAVAIDS, airspaces).
- ❖ **World Map** is the data used to create the world map accessible on the Maps view. This map provides global coverage and is only available if downloaded.
- ❖ **Taxi Diagrams and A/FD** contains thumbnail diagrams with FBO locations for over 1,200 worldwide airports and taxi diagrams for U.S. airports. These are displayed at the top of an airport in the *Airports* view. Additionally, A/FD pages for that region are included. These are displayed in the lower portion of the *Airports* view.
- ❖ **Terminal procedures** and approach plates for U.S. airports or Canadian airports, viewable in the *Procedures* tab of an airport in the *Airports* view.
- ❖ **VFR, IFR High, and IFR Low Charts** (United States) contains FAA seamless sectionals and enroute charts of the U.S. and southern Canada for use in *Maps*.
- ❖ **IFR High, and IFR Low Charts** (Canada) contains Nav Canada seamless enroute charts of Canada and the Atlantic ocean.

Approximately 6GB of data is available for download each month in the continental United States, and 2GB in Alaska.

Note: It isn't necessary to have all the data downloaded to make the app function properly. The downloads are only required for in-cockpit (or offline) use. Most pilots will download the states they will be flying through and leave other states alone if they are not flying there. If plans change, you can just grab the additional states in a few minutes of downloading. Downloading all items for all states can be unnecessarily time consuming - particularly if there are items you're likely to only reference when you're on the ground with an internet connection.

SELECT DATA TO DOWNLOAD

When you first install the app, visit *Downloads* and select the data you'll need to bring with you. In *Download Settings* at the top, tap on the country in which you'll be flying. A view will slide in with the available data types for the country listed at the top and an ON/OFF toggle switch next to each one.

Decide on the appropriate data for your type of flying and toggle it to **ON**. VFR pilots will need *Taxi Diagrams & A/FD* and *VFR Charts*, but will not need *Terminal*

Procedures or any IFR Charts. IFR pilots will also want terminal procedures along with low and/or high enroute charts.

Below the data types is a list of all regions in the country with available data. Tap on a region to select it - a check mark appears on the right and the row will be highlighted in yellow. To deselect it, tap again and the check mark disappears and the row will no longer be highlighted. U.S. pilots will want to select all of the states in which they regularly fly.

After you have finished selecting your regions, tap the <**Downloads** button in the top-left to go back to *Downloads*.

New listings with all of the data types and regions that you selected are displayed. For example, if you had toggled *Taxi Diagrams and A/FD* to ON and selected Texas and Louisiana, you'd see a table titled *Taxi Diagrams and A/FD* with the Texas and Louisiana diagrams. A blue arrow next to each region indicates that it is available to download.

If you'd like to download additional data types or choose new regions, go back into the *Download Settings* at the top. Continuing our example, if you were to set *Terminal Procedures* to **ON** and also select *Oklahoma*, the *Downloads* screen would add Oklahoma to the list of Airport Diagrams available for download and show a new *Terminal Procedures* table with Texas, Louisiana, and Oklahoma.

DOWNLOADING DATA

So far, you've selected the items you want ForeFlight Mobile to download, but the download hasn't happened yet. Tap the blue arrow to download an individual region, or tap the big green **Download** button at the bottom of the screen and all of the data will start downloading, two to four at a time. You can stop the download at any time by tapping the **Pause** button. If you stop in the middle of a download, don't worry - it will automatically resume where it left off later. Downloads will automatically pause if you exit ForeFlight Mobile before they finish.

When your download has finished, you'll see a green check mark on the right side. When all of the downloads have completed, the green **Download** button at the bottom becomes disabled. All the data you downloaded can be used offline - you're now ready to fly!

Tip: if at all possible, use a *WiFi* connection for these downloads. Downloads over the cellular network are much slower and, depending on your mobile contract, can result in bandwidth fees.

KEEPING CURRENT

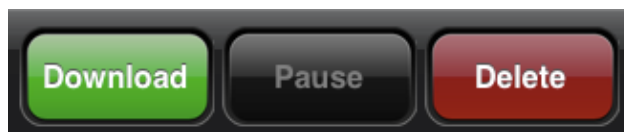
New data is available every 28 days for diagrams, procedures, and VFR charts, and every 56 days for IFR enroute charts. A few days before the current data will expire, you'll see a red badge with a number appear on the **Downloads** button. This is the number of data downloads available for the next data cycle. When you see the red badge, it's time to download new data.

To download the new data, go to the *Downloads* view and tap the big green **Download** button at the bottom. All data you've selected will queue up and download. If you don't already have a region downloaded or it's expired, then the new data will be used by the app immediately. If you already have current data for the region and you're downloading the new data a few days in advance, ForeFlight Mobile will save it on your device but keep using the current data.

The first time you start the app after the current data expires, the new data starts being used and the old data is deleted. This data cycle changeover happens automatically.

DELETING DATA DOWNLOADS

All data downloads can be deleted by tapping the **Delete** button at the bottom of the *Downloads* view. The option is given to delete *all* data or just *expired* data. Expired data is deleted automatically but, for performance reasons, may not disappear immediately upon expiration. It should be uncommon to make use of the Delete button as downloads are cleaned up automatically.



To delete an individual download, for example if a region has been downloaded that is no longer needed, swipe-to-delete the data row. Slide your finger from left to right over the entry you wish to remove and a red **Delete** button pops up. Tap on the button to remove the download.

PREFLIGHT DOWNLOAD CHECK

Remember: If it's not downloaded, you're not going to see it in flight.

Before your flight, make sure you have the necessary data downloaded:

- ✦ Go to **Settings** for your iPad and switch *Airplane Mode* **ON**. This will keep the app from retrieving data over the Internet, simulating the condition in flight.
- ✦ Launch **ForeFlight Mobile**

❖ Tap **Downloads** and ensure there is a green check mark next to each region where you'll be flying.

❖ Tap **Airports** and search for each airport on your route. If you're flying IFR, make sure there is a green "saved" mark next to each procedure.

❖ **Tap Maps** and search for each airport on your route. Toggle between *VFR*, *IFR Low*, and *IFR High*, panning around each chart to ensure that it is downloaded properly on your device. Make sure to zoom into the airports you will be flying to and ensure that the charts are downloaded.

TROUBLESHOOTING DOWNLOADS

ForeFlight hosts all of the data downloads on a network of servers located across the United States and around the world. When you start a download, the data comes from the server that is closest to you in order to provide fast, reliable downloads.

Depending on the amount of data you are downloading, it can take quite a bit of time. If you are selecting everything, that is nearly 5-7 GB of data to download. Even on a WiFi connection, that will take a while.

ForeFlight *strongly recommends* that you only download data for regions you will fly over or near. This saves significant time and disk space.

Given the nature of networks and the large amount of data transferred every month, connection errors can occur. If a download fails, the app will automatically retry it a few times. If you see a red error message on the download, that means the retry attempts did not work and you will need to restart the download for that volume.

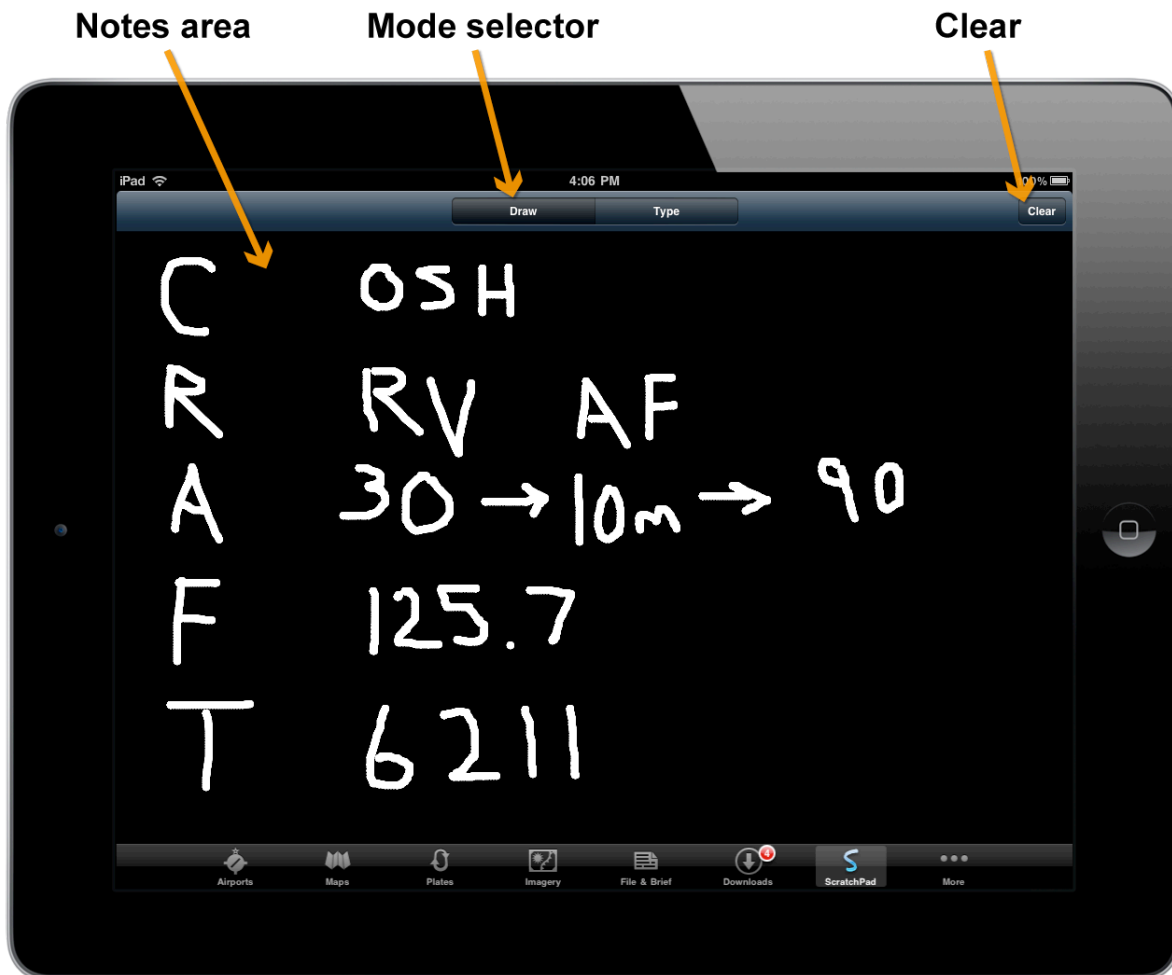
Try these troubleshooting tips:

- ❖ **Try downloading on another network** - if you're using your home WiFi, try a download over a different WiFi hotspot or, in a pinch, over 3G.
- ❖ **Update the firmware on your router** - some older WiFi routers are not compatible with the iPad. Visit your manufacturer's website to see if there is a firmware update available.
- ❖ **Reboot your iPad** by pressing and holding the button on the top of the iPad. A red slider appears on the screen - swipe where indicated to shut down your device. Wait a few seconds, then press the button again to start it back up. Once it has finished starting up, try the downloads again.
- ❖ **Double check Download Settings** to ensure the proper regions and data types are still selected

ScratchPad

ABOUT THE DESIGN

ScratchPad lets you quickly jot down notes or draw your clearance. It is intended for temporary notes such as scribbling down frequencies, ATIS information, or clearances - not long term storage.



MAKING NOTES

With *Draw* selected at the top, draw with your finger on the screen. With *Type* selected at the top, use the iPad keyboard to type notes.

All notes are saved until you press the **Clear** button, even if you exit ForeFlight Mobile.

CLEARING NOTES

Tap the **Clear** button in the top-right to clear out your scratchpad. A confirmation window will appear to confirm that you really want to clear everything out.

Tip: to save a drawing before clearing it, use the iPad's screenshot function: Press the top sleep button and the physical, circular home button at the same time to snap the picture. It is saved to your *Pictures* collection (in the *Camera Roll* section) and can be downloaded to your computer or emailed. Typed notes can be saved via the iPad's Copy function. See the iPad Guide from Apple for details on capturing screens, copy/paste functions, and transferring photos and email.

More

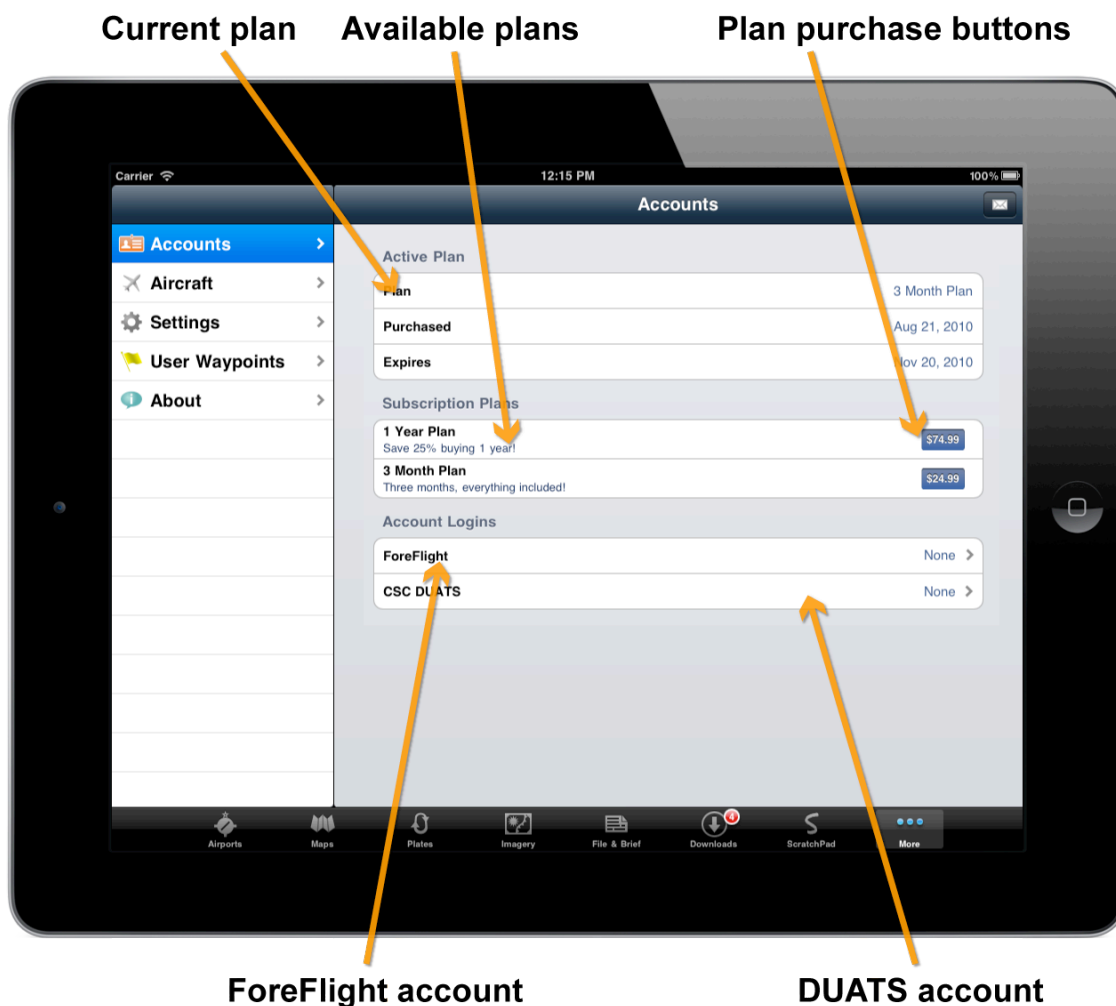
The *More* view provides access to account info, application settings, aircraft, user waypoints, and the *About* view. Tap the options on the left to view each of these different sub-views.

ACCOUNTS

About the Design

The *Accounts* view shows the status of your ForeFlight subscription and allows you to purchase a new subscription or renew your existing subscription.

If you're setting up a new device or retiring an old one, use *Accounts* to sign in and out of your ForeFlight account.



Viewing your Active Subscription

The table at the top of Accounts shows the status of your account. If you're a trial user, it shows the day you started using the app and when your trial will expire. If you've already purchased a subscription, it shows the day you placed your order and when you need to renew.

A valid subscription is required to continue using the app.

If your expiration date is not correct, then you need to sign in to your ForeFlight account (see below). Apple does not provide us a consistent method to automatically detect when you start using a new device, so ForeFlight Mobile won't recognize your subscription until you sign in. Also, subscription information can be lost in certain upgrade, backup and restore operations of the device or application, making it necessary to sign in.

Purchasing or Renewing a Subscription in the United States

To purchase or renew a subscription for the US, tap on a plan in the United States table:

- ❖ **\$24.99 (USD) ForeFlight Mobile (3 months)**
- ❖ **\$74.99 (USD) ForeFlight Mobile (1 year)**
- ❖ **\$149.99 (USD) ForeFlight Pro (1 year)**

All three plans give you the same great standard features:

- ❖ Full access to ForeFlight Mobile on **1 iPad and 1 iPhone**.
- ❖ *Monthly data updates* to download gigabytes of terminal procedures, charts, and diagrams for the United States.
- ❖ FAA VFR sectionals, FAA IFR enroute charts, fuel prices, weather, moving map, and more.

The ForeFlight Pro plan adds geo-referencing to the FAA approach plates and taxi diagrams (geo-ref data provided by Seattle Avionics). With this plan, your aircraft's location appears directly on many U.S. plates and diagrams. To learn more about the Pro plan and geo-referencing features, please visit <http://www.foreflight.com/georef>

These subscriptions do not provide access to Canadian terminal procedures or IFR enroute charts from Nav Canada. You can purchase a combined USA + Canada plan at <http://www.foreflight.com/store/canada.php>

After you tap on the plan you wish to purchase, follow instructions for entering your email address and iTunes password. This will place an order through your iTunes account, which will show up on your credit card like other iTunes purchases (e.g., music or apps).

After your purchase is complete, you'll have immediate access to the app and all data downloads. You'll also receive an email with your new ForeFlight Account password, and an email from Apple with your iTunes receipt.

If you have trouble placing an order due to a slow network connection or a "jailbroken" device, you can purchase a subscription online at <http://www.foreflight.com/buy>

If you'd like to place an order for multiple iPads, please visit <http://www.foreflight.com/groups> or send an email to team@foreflight.com.

Purchasing or Renewing a Subscription in Canada

To purchase or renew a subscription for Canada, tap on a plan in the Canada table:

❖ \$149.99 (USD) Canada IFR (1 year)

This plan gives you access to ForeFlight Mobile with Canadian data from Nav Canada:

- ❖ Full access to ForeFlight Mobile on **1 iPad and 1 iPhone**.
- ❖ *Monthly data updates* to download terminal procedures from the Canada Air Pilot (CAP), Canadian IFR low enroute charts, and Canadian IFR high enroute charts.
- ❖ Weather, moving map, and more.

This subscription does not provide access to United States plates, sectionals, or enroute charts. You can purchase a combined USA + Canada plan at <http://www.foreflight.com/store/canada.php>

Signing In to your ForeFlight Account

After you purchase a subscription, you are automatically signed in on that iPad or iPhone.

To use your subscription on a new device, you'll need to sign in to your ForeFlight Account inside the application:

- ❖ Tap the "More" option at the bottom, then "Accounts" in the left side list
- ❖ In the *Account Logins* section, tap *ForeFlight*
- ❖ Tap *Yes, I have an Account*

- ❖ Enter your email and password for your ForeFlight account. (Your auto-generated password was emailed to you when you originally placed your order.)

If you can't find your password, enter the email address that you originally used to purchase your subscription and tap the **Forgot Password** button. An email is sent to you with your password.

If you receive an *Account in Use* or *Too Many Devices* message and the app will not let you sign in, you'll need to sign out of your old device. Follow the instructions below for signing out.

If your old device accidentally fell in a swimming pool or otherwise met an untimely end, email us at team@foreflight.com and we'll be happy to unhook that device from your account.

Signing Out of your ForeFlight Account

When you're ready to retire your old iPhone or iPad and won't be using it anymore, remember to sign out of your ForeFlight Account on that device:

- ❖ Tap the "*More*" option at the bottom, then "*Accounts*" in the left side list
- ❖ In the *Account Logins* section, tap *ForeFlight*
- ❖ A screen is displayed with your email address and password. Tap **Sign Out** at the bottom.

This will unhook the device from your account and let you sign in on another iPad or iPhone. Afterwards, we recommend deleting the app from your device to free up space. Tap-and-hold on the ForeFlight icon until it starts to wiggle, then tap the "X" button displayed on the top-left corner of the icon.

Changing your Password or Email

To change your password or email address inside the app:

- ❖ In the Account Logins table at the bottom, tap *ForeFlight*
- ❖ A screen is displayed with your email address and password. Tap **Change Password** or **Change Email** at the bottom.
- ❖ Follow the on-screen instructions for changing your password or email.

You can also use the ForeFlight Manage website to change your email, password, and manage which devices are associated with your account. ForeFlight Manage is available at: <http://www.foreflight.com/manage>

Providing a DUATS Account

A CSC DUATS account can also be *optionally* provided by tapping the *DUATS* option at the bottom of the *Accounts* view. When your DUATS account is set, the *File & Brief* view will use it when filing or briefing flight plans.

When your CSC DUATS account is not provided, ForeFlight Mobile will automatically use the ForeFlight corporate DUATS account.

SETTINGS

ForeFlight Mobile supports a variety of settings to let you customize how you like to use and view your data. Settings are changed in the *More* view or the main **Settings** application on the iPad.

All settings will be reset to their default values if you uninstall ForeFlight Mobile.

❖ **Brightness Slider** - slide left to reduce screen brightness in ForeFlight Mobile. *Always reduce brightness to its minimum in the iPad **Settings** application before moving the ForeFlight Mobile brightness slider down.*

❖ **Show Weather First** - turn *on* to show the METAR view first when viewing an airport. Turn *off* to see that last-viewed data category first.

❖ **Past TAF Translations** - turn *on* to see expired TAF forecast time periods in the weather view. Turn *off* to hide expired TAF forecast periods.

❖ **Airway Decoding** - set to *Bends Only* to filter out airway intersections that do not cause a course change. VORs and NDBs will always be shown in an airway.

❖ **Show Local Times** - turn *on* to see times in the local time zone. Turn *off* to see times in Zulu time.

❖ **Wind Speed** - select preferred units.

❖ **Pressure** - select preferred units.

❖ **Temperature** - select preferred units.

❖ **Visibility** - select preferred units.

❖ **Latitude/Longitude** - select preferred units for viewing coordinates.

❖ **Radar and Satellite Basemap** - select your preferred basemap. The *White* map includes worldwide street level detail. The *Tan* map provides better contrast for overlaid weather.

❖ **Show Map Features** - select your preferred method for viewing waypoints for a given Map location. When *by Tap-Hold* is selected, only tapping and holding

down in one spot on the Maps view will bring up the waypoint list for that location. Select *by Single-Tap* or *Tap-hold* to allow a quick tap on the Maps to bring up the list as well.

❖ **Current location marker** - select an image to be used on *Maps* view to show your current location when in motion.

❖ **Show Help Tips** - turn *on* to view hints when searching or performing other actions. Turn *off* to prevent tips from showing.

❖ **Download Filed Flight Plans** - turn *on* to be prompted to download filed flight plans the next time you go to the *File & Brief* view. This setting automatically disables after one use.

❖ **Confirm Before Dial** - Not applicable to iPad, iPhone only.

❖ **Reload Download List** - turn this *on* to force the *Downloads* view to reload the list of available downloads. Normally this happens every 12 hours automatically.

❖ **Show Heliports** - turn this *on* to view heliports in nearby airports lists. You can always search for heliports (and use them in routes) regardless of this setting.

❖ **Allow Device to Sleep** - turn *on* to allow your device to sleep while running ForeFlight Mobile. Turn *off* to ensure that the iPad will not enter sleep mode while ForeFlight mobile is running in the foreground, even if your iPad is set to usually sleep after a certain period of inactivity. Even when *on*, the device will not sleep when downloading in the *Downloads* view or while viewing an Instrument Procedure.

❖ **Start on Last Screen** - turn this *off* to start on the *Airports* view on next launch. This can help if one view is causing the application to quit immediately after launch.

❖ **Clear ScratchPad** - turn this *on* to automatically clear any ScratchPad data on next launch. This can help if the *ScratchPad* view is causing the application to quit immediately after launch.

❖ **Disable Ownship** - turn this *on* to prevent your aircraft position from being displayed on charts, approach plates, or airport diagrams. This is required for certain operators.

AIRCRAFT


Tap an aircraft's row to set it as the default aircraft. It will then be used to provide flight performance characteristics in route planning when those details are not specified (see *Maps* section of this guide).

Define an aircraft profile by tapping the '+' button at the top left and enter the aircraft details. When finished, tap the **Done** button at the top right. You can edit an existing aircraft by tapping the blue right-arrow button next to the desired item or delete one by swiping your finger on it from left to right.

DEVICES

The Devices view shows any connected devices explicitly supported by ForeFlight. This includes external GPSs, data connections, etc. Some devices have further details that can be viewed by tapping the device's box in the Devices view.

USER WAYPOINTS

This section displays your previously saved user waypoints. To edit a waypoint's details, tap the blue chevron  button. You can create a new user waypoint by using the + button in the upper-right. This is the easiest way to create a waypoint if you elect to describe the waypoint using lat/lon (as opposed to selecting the point on a map).

Tap a waypoint's name in the list to view it on the Maps view. Swipe-to-delete can be used to remove a waypoint. The clear button will remove all waypoints.

Waypoint's can also be inserted by tapping on the Maps view. Tap & hold your finger on the Map for a moment then release it. A list of possible waypoints will pop up. Tap the blue + button next to the words "Add this coordinate to route" to view the "User Waypoint" form. Give the waypoint a name and, optionally, a description then press the Done button to save it.

Waypoint names cannot contain any whitespace such as spaces or tabs. Waypoints can be added to a route on the Maps view like any other waypoint - just type the waypoint name as part of the route. User Waypoints can be added in bulk as well, using a KML or CSV file. See the ForeFlight website for details.

ABOUT

The *About* view provides more information about ForeFlight, LLC as well as version information (at the top of the view).

XM WX

OVERVIEW

ForeFlight Mobile supports the Baron Services Mobile Link XM WX device. This device provides iOS and other WiFi-enabled devices the ability to access XM WX data from a Baron XM WX receiver. Please consult the Mobile Link documentation to learn how to setup and connect the device.

The Mobile Link will only allow data access to one device at a time. ForeFlight Mobile attempts to get data access whenever it is launched and again any time data is requested by the user. ForeFlight Mobile will release its access when the app is closed via the physical home button.

If a device has gained access to the data and does not release it properly, the Mobile Link will automatically release the access for that device after 60 seconds.

The Mobile Link status view in ForeFlight Mobile will state whether data access has been obtained, see the "Status information" section below for more information.

Connecting multiple copies of ForeFlight Mobile to a Mobile Link WiFi connection simultaneously should be avoided as they will fight for access.

DATA ACCESS IN FOREFLIGHT MOBILE

ForeFlight Mobile will automatically pull data from the Mobile Link when a connection is detected. When connected to the Mobile Link, the application will generally not use an available 3G connection for data or chart gathering.

These are the supported data items when using XM WX in ForeFlight Mobile:

- ❖ Radar - for any subscribed region, shown on Maps
- ❖ Satellite - for any subscribed region, shown on Maps
- ❖ METARs and METAR-derived data shown on Maps, such as temperature
- ❖ TAFs
- ❖ Winds Aloft
- ❖ TFRs on Maps
- ❖ PIREPs on Maps
- ❖ AIRMETs/SIGMETs on Maps

- ❖ Lightning on Maps (requires Mobile Link firmware version 2.0 or higher)

Data is accessed just as it is when on the ground using an internet connection. There is no user-configuration required beyond ensuring the WiFi connection to the Mobile Link is properly established.

STATUS INFORMATION

To learn the status of the Mobile Link connection, subscription, data availability and more, please use the Devices view as described above. When connected to the Mobile Link WiFi access point, Mobile Link will be an option shown in the Devices view. Tap it to see full status information. This info is extremely helpful if problems appear.

LogTen Integration

ForeFlight Mobile can export routes or flight plans to the LogTen app, when LogTen is installed. To create a new logbook entry in LogTen based on a route, create the route on the Maps view and tap the Send To... button in the Navigation Log. This will show LogTen as one option. Tap that to open LogTen and create a new log entry.

Logbook entries can also be created from the File & Brief view, once LogTen is installed on the iPad. Run ForeFlight Mobile, go to File & Brief and select the plan to export. Tap the blue LogTen button below the flight plan details list on the right to open LogTen with a new logbook entry.

Sharing Flights

To share a flight on Twitter or via Email, create a route in Maps. Bring up the Nav Log, if it is not already showing, and tap the Send to... button. Then tap either "Twitter" or "Email". Note that Twitter will not be an available option until you can configured your twitter account in the main iPad Settings app. Twitter is also only available on iOS 5 and higher.

TWITTER

Tapping the Twitter option will present a window similar to that shown below. Edit the text as desired and press Send to create the tweet.



EMAIL

Tapping the email option will show a view like that seen below. Provide the email address of the recipient and tap Send. Note that the email will include a link that other ForeFlight Customers can use to view the flight on their own iPad or iPhone.

Cancel **ForeFlight: KSGR IDU4 BITER5 KAUS** Send

From	To	Heading	Totals			Leg		
KSGR	SHYNR	301°M	27nm	2.3g	9m18s	27nm	2.3g	9m18s
SHYNR	BOCCK	261°M	36nm	3.2g	0h13m	9nm	0.8g	3m21s
BOCCK	IDU	261°M	54nm	5.0g	0h20m	18nm	1.8g	7m10s
IDU	WLEEE	276°M	71nm	6.5g	0h26m	17nm	1.6g	6m18s
WLEEE	BASTO	275°M	94nm	8.7g	0h35m	23nm	2.1g	8m28s
BASTO	KAUS	260°M	114nm	10.6g	0h42m	20nm	1.9g	7m44s

2011-11-21 22:19:32 +0000

VFR & TFRs

From To Heading Totals Leg Remaining ETA

☒ KSGR
 ☒ SHYNR
 301°M 27nm 2.3g 9m18s 27nm 2.3g 9m18s 50nm ---

☐ SHYNR
 ☒ BOCCK
 261°M 36nm 3.2g 0h13m 9nm 0.8g 3m21s 59nm ---

☐ BOCCK
 ☒ IDU
 261°M 54nm 5.0g 0h20m 18nm 1.8g 7m10s 77nm ---

☐ IDU
 ☒ WLEEE
 276°M 71nm 6.5g 0h26m 17nm 1.6g 6m18s 85nm ---

☐ WLEEE
 ☒ BASTO
 275°M 94nm 8.7g 0h35m 23nm 2.1g 8m28s 93nm ---

☐ BASTO
 ☒ KAUS
 260°M 114nm 10.6g 0h42m 20nm 1.9g 7m44s 114nm ---

Distance: 114nm ETE: 0h42m Fuel: 10.6g
Winds aloft included (3 kts headwind)

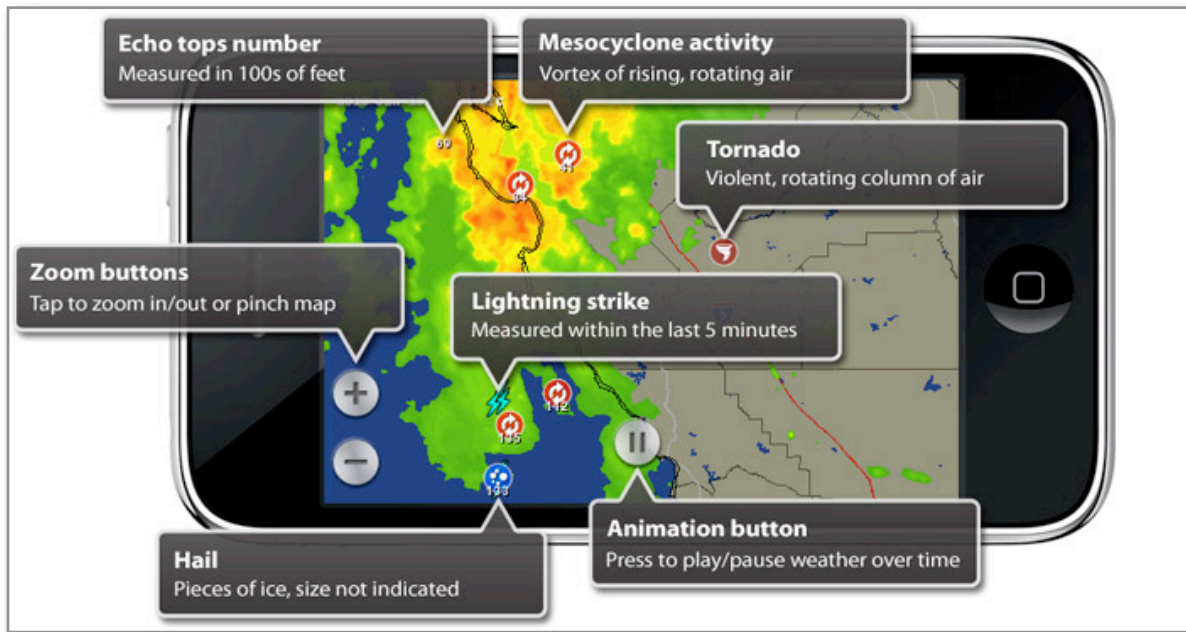
ATC Routes Reverse Favorite Send To...

Miscellany

RADAR LEGENDS (NON-XM)

Severe Weather						Wind	
Severe Thunderstorm Watch	SVA					High Wind Watch	HWA
Tornado Watch	TOA					Wind Advisory	WIY
Severe Thunderstorm Warning	SVW					High Wind Advisory	HWY
Tornado Warning	TOW					High Wind Warning	HWW
		Fog		Flood			
		Dense Fog Advisory	FGY	Flash Flood Watch	FFA		
		Dense Fog Warning	FGW	Flash Flood Warning	FFW		
				Flood Warning	FLW		
Winter Weather							
Frost Advisory	FRY	Ice Storm Watch	ISA	Winter Storm Watch	WSA		
Frost Warning	FRW	Ice Storm Warning	ISW	Winter Weather Advisory	WWY		
Freeze Advisory	FZY	Snow Advisory	SNY	Winter Storm Warning	WSW		
Freeze Warning	FZW	Snow/Blowing Snow Advisory	SBY	Winter Weather Warning	WWW		
Freezing Rain Advisory	ZRA	Snow/Blowing Snow Warning	SBW	Blizzard Watch	BZA		
Freezing Rain Warning	ZRW	Heavy Snow Warning	HSW	Blizzard Warning	BZW		

Warning area legend



Radar symbol legend

	Icing PIREP
	Turbulence PIREP
	General PIREP

PIREP legend

Learning More

To learn even more about ForeFlight Mobile, please visit our website for frequently asked questions (FAQs) and video tutorials.

FAQs: <http://foreflight.com/support.php>

Videos: <http://vimeo.com/foreflight/videos>

To help us at ForeFlight learn more about how you fly, please send any and all feedback on our applications to team@foreflight.com - we read and respond to each note we receive. We also get a kick out of hearing your flying stories, so please do share!