



# Aeronautical Application (Aero App)

iOS User Manual Version 1.2402

NSN76440152335389

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## 1 Introduction

The aeronautical multi-platform application, Aero App, is a collaborative effort reaching across NGA and other government agencies, focused on supporting the Warfighters and NGA Vision.

The design of Aero App is to enhance the use of Aeronautical Flight Information Publication (FLIP) data and manage individual FLIP products. The key offerings of Aero App are as follows:

- Provides an interactive, high-performance, worldwide Moving Map.
- Provides a library of current nationwide VFR Sectionals, worldwide IFR High and Low charts, Helicopter and TAC Maps, and a designated place to store and use personalized user maps.
- Various overlays such as Airports, Air Refueling Routes, Airspaces, Airways, Arresting Gear, ARTCCs, FIRs, International boundaries, MTRs, Pins, and many more including User Overlays.
- View detailed airport information and charts such as APD, IAP, Dep, Arr, Min, and more.
- View critical charts and documents such as Supplements, Planning, user documents, and Legends.
- View weather information such as METARs, TAFs, Winds, Temps, PIREPs, NOTAMs, and Air Force Weather.
- Create, save, edit, or delete points within the Moving Map's Route Panel.
- View navigational data such as Graphic Charts, CONUS Chart Graphics, Military Training Routes, and more.
- Use the integrated E6B calculator for flight planning on ground and air operations. Various calculations include Altitude, Cold Wx, Conversions, Coordinates, Descent, Distance, IFR Climb, Rwy Winds, and Winds Aloft.
- Manage and make modifications to files that have been downloaded and loaded onto Aero App.
- Load and view PDF format.

## 2 About the User Manual

The Aero App user manual is a comprehensive guide that describes the use and understanding of Aero App. It provides detailed information on worldwide moving map coverage, including aeronautical overlays and user maps, as well as displaying Air Force Weather, airport, and other navigation information. Pilots can view georeferenced FLIP and FAA charts that show your ownship location, as well as Electronic-Instrument Procedure Library (E-IPL) and Host Nation charts, and much more. Whether you're an experienced pilot or new to the field, the Aero App user manual is an essential resource that will assist you in your mission effortlessly.

## 3 Getting Started

The Aero App User Manual walks you through installing Aero App, loading pertinent data, managing significant data, and more. Conceptual explanations for features, tools, overlays, and various offerings of Aero App are found in this document. The following are required to get started:

1. Install Aero App following the criteria below.
2. Load an initial data cycle.
3. Update the data cycle every 28 days.

### 3.1 System Requirements

To install and utilize Aero App for iOS, it is important to ensure that your device meets the necessary requirements. These include having a compatible operating system and sufficient memory and disk space. The system requirements are listed below:

- Required
  - iPad running iOS 16.0 or later
  - iPad with Apple A12X processor or later
  - 16 GB of available storage (for the installation of Aero App and one complete data cycle)
- Optional
  - USB cable to connect the iPad to a stand-alone computer
  - The latest version of iTunes, available at <https://www.apple.com/itunes>.
- Internet connection if downloading data or Aero App via the internet

## 3.2 Use Dark Mode on Aero App

Apple's iOS 13 operating system introduced Dark Mode. A color scheme using light-colored text, icons, and graphical user interface elements on a dark background.

### 3.2.1 Enable Dark Mode With Siri

The simplest way to enable Dark Mode is by telling Siri to turn it on.

1. Say "Hey, Siri" until the listening indicator appears.
2. Tell Siri "Turn on Dark Mode." Your iPad will switch over to Dark Mode.
3. To disable Dark Mode, tell Siri "Turn off Dark Mode." Your iPad will switch to Light Mode.

### 3.2.2 Enable Dark Mode Through Control Center

Dark Mode can also be enabled through your iPad's Control Center.

1. Swipe down from the upper-right corner of your iPad to display the Control Center.
2. Hold down the Brightness control to display Dark Mode, Night Shift, and True Tone modes.
3. Tap the **Dark Mode Off** button and your iPad will switch over to Dark Mode.
4. To disable Dark Mode, tap the **Dark Mode On** button and your iPad will switch to Light Mode.


### 3.2.3 Enable Dark Mode Through Device Settings

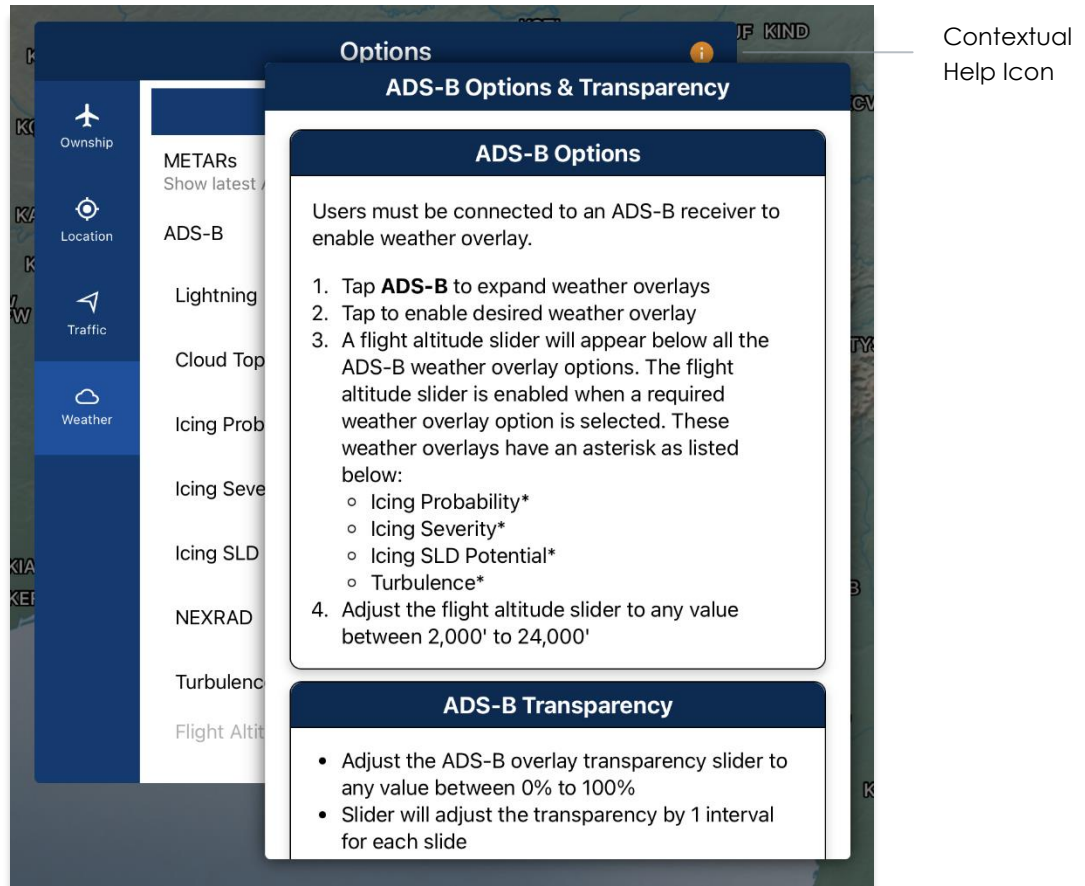
The third method to enable Dark Mode is through your iPad's settings.

1. Open your iPad's Settings.
2. Tap **Display & Brightness** to display two *APPEARANCE* options, Light and Dark.
3. Tap **Dark** and your iPad will switch over to Dark Mode.
4. To disable Dark Mode, tap **Light** and your iPad will switch to Light Mode.



### 3.3 Contextual Help

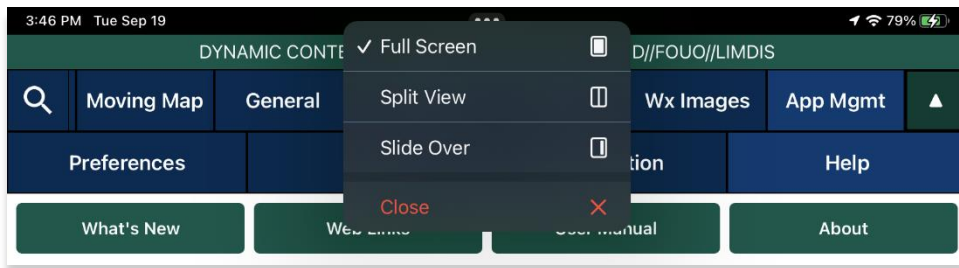
Aero App's contextual help provides a great first-time experience for users to get familiar with certain tools and features within Aero App. The views in Aero App that support contextual help have an orange  icon that displays relevant feature information when tapped. Contextual Help is located all around Aero App and is accessible to users by a single tap.



## 4 Multitasking on iOS

Aero App for iOS supports multitasking capabilities to allow users to switch between different apps simultaneously in Split View configuration. Users with earlier operating systems (iOS 15 or below) will display different Multitasking configuration options from devices running operating system 16 or later.

1. With Aero App open, tap on the **three dots** located at the top of the screen.
2. A popup will display with the following options:
  - Full Screen
  - Split View
  - Slide Over (not supported)
  - Close button

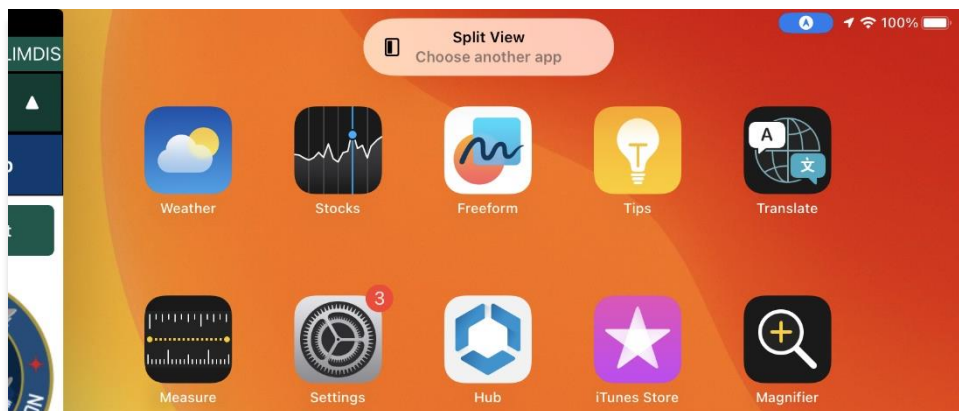


3. Select **Split View**.



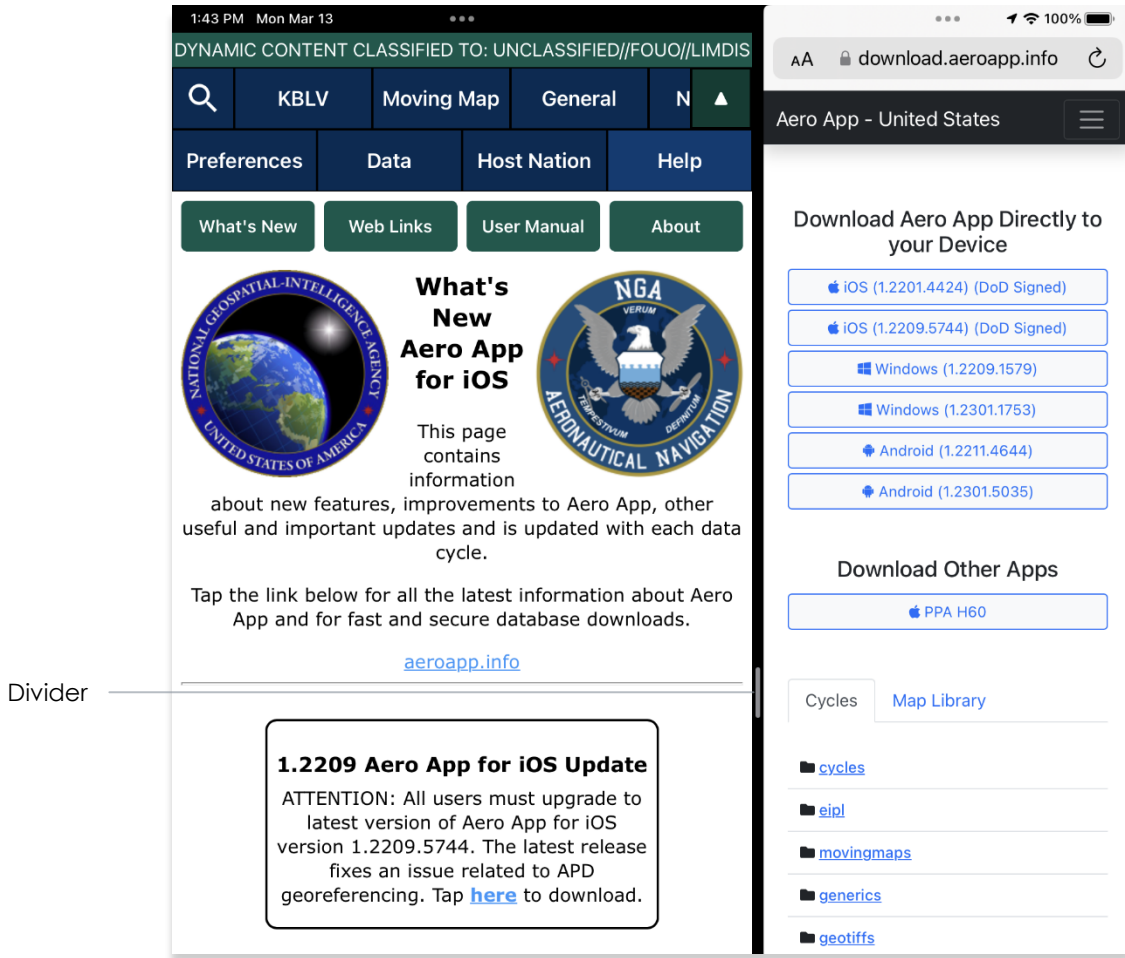
**NOTE:** Slide Over is not supported by Aero App.

4. Aero App will be pushed to the left side of the screen. Users will be prompted to choose another app. Select desired app for side-by-side app experience.



**NOTE:** Not all apps support Multitasking.

5. A divider is located between both apps to allow resizing of views when adjusted. Adjust your views to desired size preference.



Divider

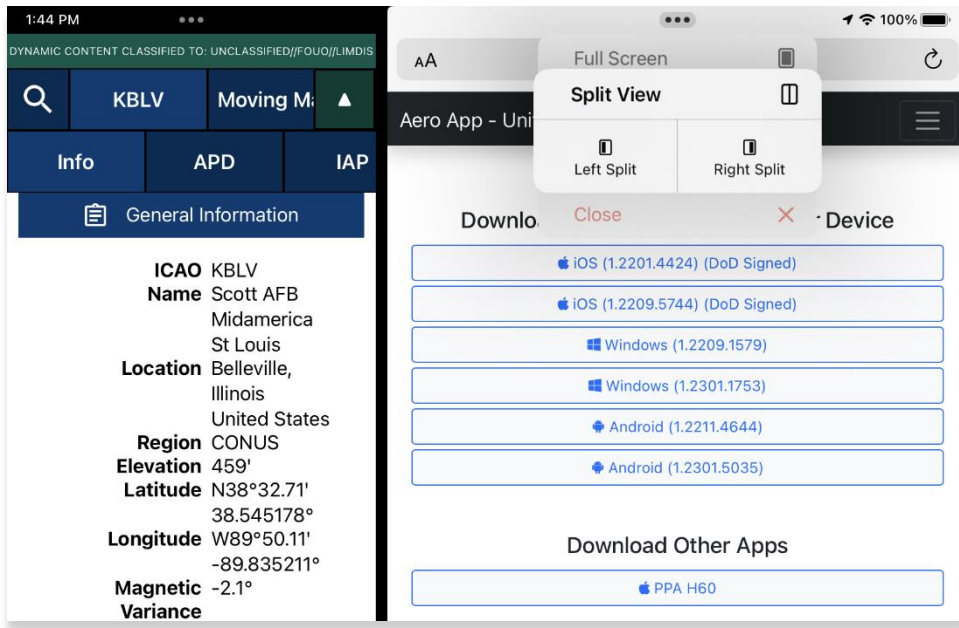


**NOTE:** For best practice, Aero App should be at 60/40 size to allow seamless user experience.

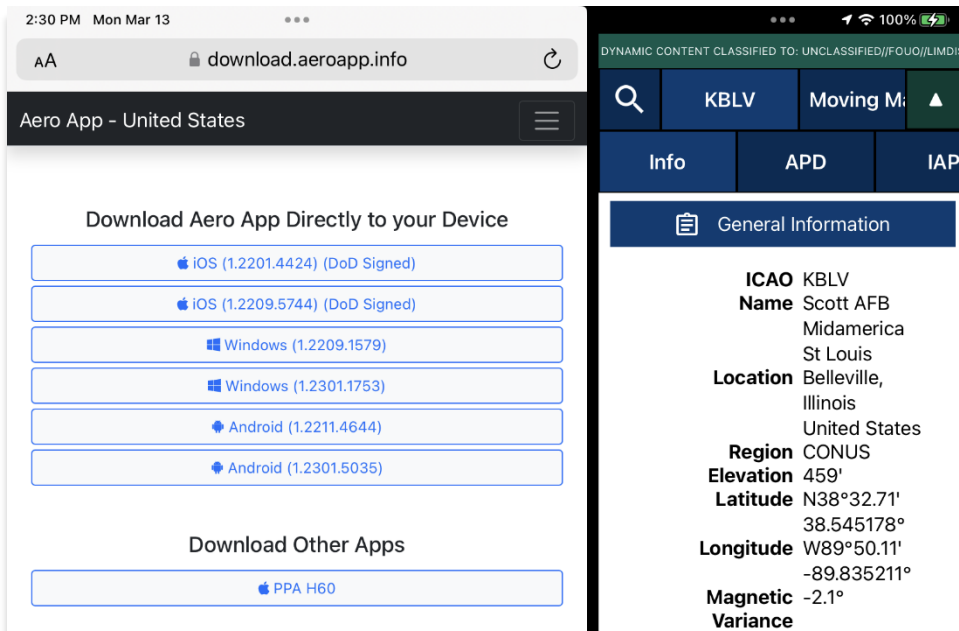


**NOTE:** Multitasking is available on both portrait and landscape mode.

6. To move the split view app to the opposite side of the screen, tap on the **three dots** and select **Split View** again.
7. Options for the *Left Split* and *Right Split* are available. Select desired side preference.



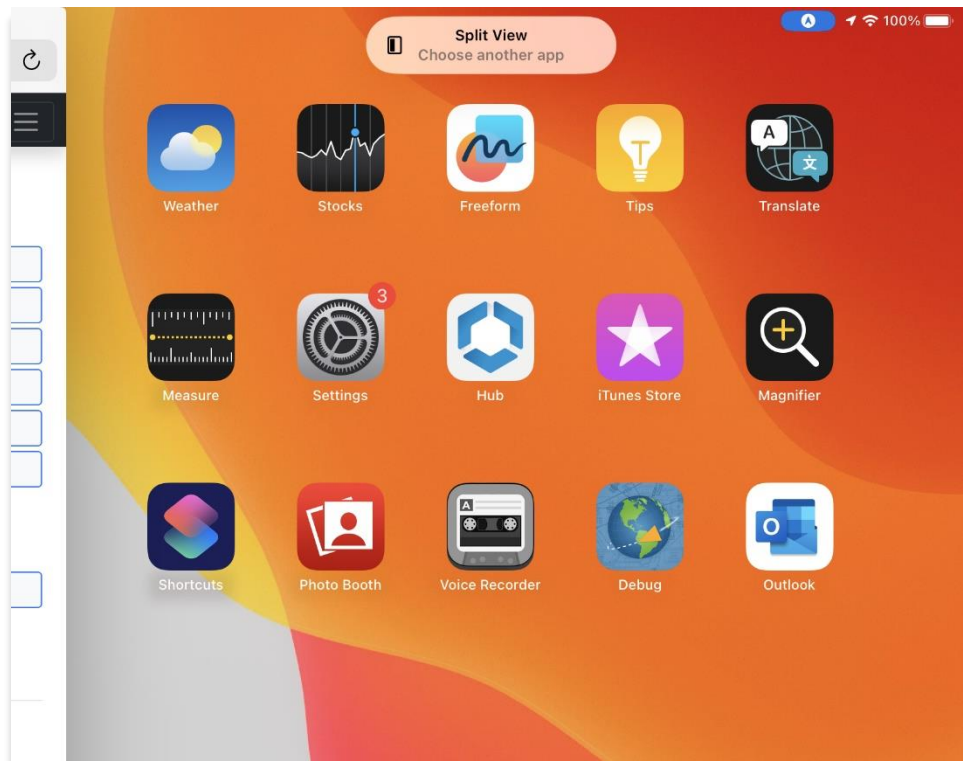
8. Alternatively, users can hold and drag the **three dots** to the desired side of the screen.



## 4.1 Switch Between Apps in Split View

Users can switch between different apps of their choosing.

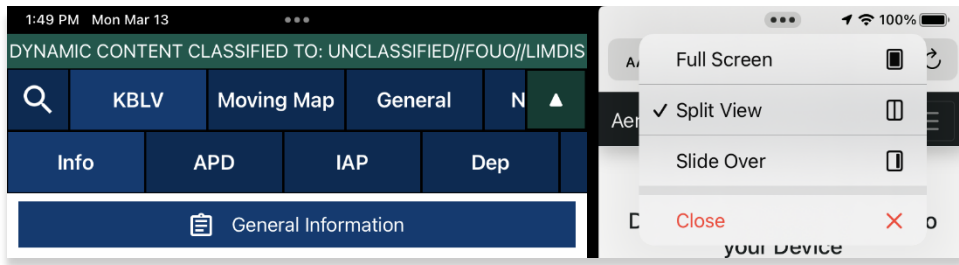
1. To switch to another app in Split View, hold and drag the **three dots** to the bottom edge of the screen.
2. Users will be prompted to choose another app. Select desired app for side-by-side app experience.



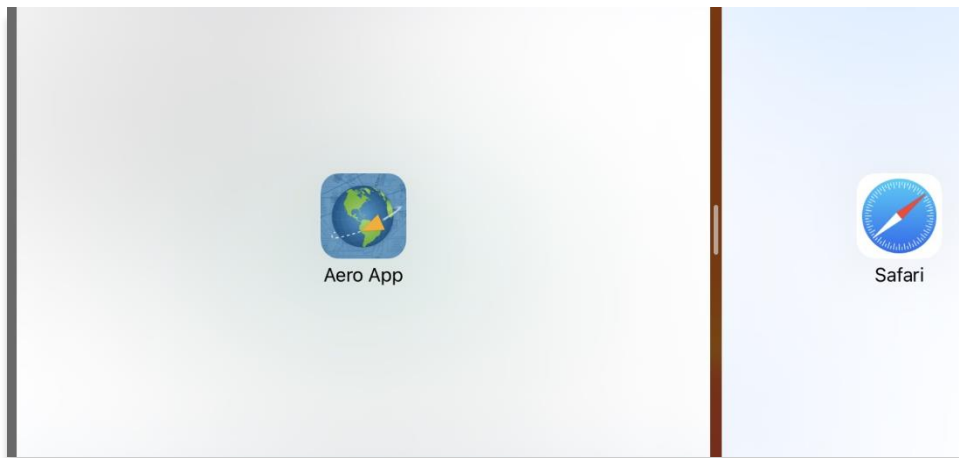
## 4.2 Close Apps in Split View

There are several methods to close apps in Split View. The following options are available to users:

- Close button – Tap the **three dots** on the app that you want to close. Multitasking configuration options will be displayed. Tap the **Close** button and your app will be viewed in Full Screen mode.



- Drag to bottom - Hold and drag the **three dots** to the bottom edge of the screen and users will be directed to the Home Screen.
- Drag divider to the edge – Drag the **divider** in the direction of the app that you want to close. The second app will disappear, and the first app be viewed in Full Screen mode.



## 5 Troubleshooting

If you have problems that cannot be resolved, contact the Aero App Support Team:

**Phone:** 954-323-2244 ext. 412

**Email:** [aeroappsupport@hiltonsoftware.com](mailto:aeroappsupport@hiltonsoftware.com)

**Contact Form:** <https://aeroapp.info/contactus/>

**Hours of Operation:** Monday - Friday 1000-1800 EST

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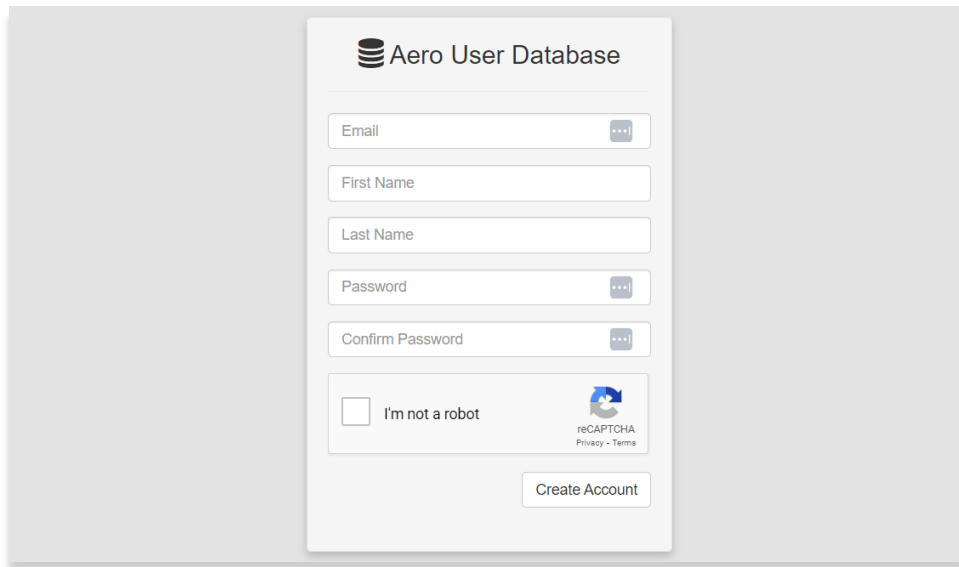
## 6 Accounts

To utilize Aero App's offerings, certain features require an active account respective to the action being made. Detailed information regarding the various account options will be provided in the sections to follow.

### 6.1 Aero User Database (AUD) Account Registration

Aero User Database (AUD) provides authentication for DOD and foreign partners seeking access to Aero App software and data. Users who chose Aero User Database as a form of authentication for Aero App must register for an account.

1. Open an internet browser of choice.
2. Enter [userdb.aeroapp.info/auth/register](https://userdb.aeroapp.info/auth/register) in the address bar.
3. The Aero User Database form displays. All fields are required to create an account; therefore, all fields must be filled.



**NOTE:** A valid .mil and .gov email is required to create an account.

4. Click **Create Account** once all required fields have been filled. Once registered, a verification email has been sent to the user-registered email address.
5. Follow the instructions provided in the email to verify your AUD account.



**NOTE:** If a verification email is not found within your email inbox, ensure to check the junk folder, or contact the Aero App Support Team at [aeroappsupport@hiltonsoftware.com](mailto:aeroappsupport@hiltonsoftware.com) for assistance.

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## 6.2 NGA GEOAxis Account Registration

GEOAxis is NGA's Enterprise Identity and Access Management authentication system. GEOAxis unifies logins between AWS and the NGA App Store, which negates CAC access. Users who choose to use GEOAxis as a form of authentication for Aero App must register for an account. The initial registration requires users to have a CAC-enabled PC with their CAC card.

1. Open an internet browser of choice.
2. Enter <https://access.geoaxis.gs.mil/oam/west/servlet/login.jsp> in the address bar.
3. Select one of the listed credentials to authenticate.
4. Follow the prompts.



**NOTE:** A valid .mil email is required to create an account.



**NOTE:** For technical assistance, contact the NGA Enterprise Service Center at 800-455-0899.

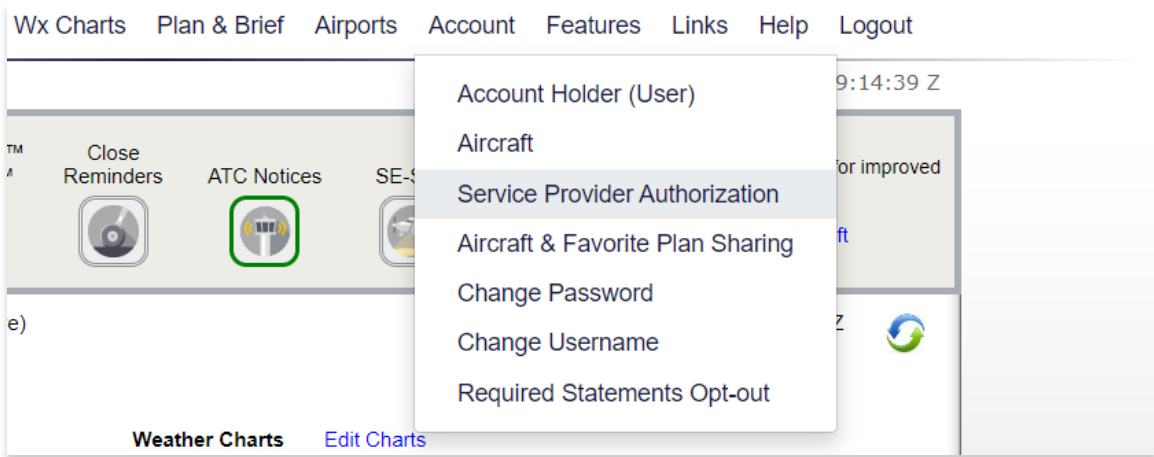
## 6.3 Flight Service Account Registration

A Flight Service account is required for those using the Flight Plan feature on Aero App.

1. Open an internet browser of choice.
2. Enter [www.1800wxbrief.com](http://www.1800wxbrief.com) in the address bar.
3. Navigate to the *Login* section of the page.
4. Select **Create Account**. You will be redirected to an Account Creation page.
5. Follow the prompts and select **Create Account** once completed.

Once an account has been created, users must authorize NGA Aeronautical Application (Aero App) as the service provider. This will allow Aero App to connect to your account and perform actions on your behalf.

6. Log in using your Flight Service credentials.
7. Navigate to the *Main Menus* located at the top of the page.
8. Hover over **Account** to view additional account options.
9. Select **Service Provider Authorization**. The Service Provider Authorization page will be displayed.



10. A button to *Edit* and *Save* is available. Select **Edit**.
11. From the provided table, locate *NGA Aeronautical Application (Aero App)* and select **Yes** on the radio buttons.
12. Click **Save**.

## 6.4 ASPS Account Registration

Pilots are required to possess an Aeronautical Source Packaging Service (ASPS) account to obtain Host Nation charts.

1. Open an internet browser of choice.
2. Enter [asps.leidos.com](https://asps.leidos.com) in the address bar.
3. Select **Request Account**.
4. Follow the prompts.
5. Select **Request Account** once complete.

The screenshot shows a web browser window with the address bar displaying [asps.leidos.com](https://asps.leidos.com). The page header includes the NGA logo and the text "UNCLASSIFIED//LIMDIS". Below the header, there is a section titled "Aero Browser - Aeronautical Source Packaging Service". The main content area contains a registration form with the following fields and options:

- E-mail:
- First Name:
- Last Name:
- Phone:
- Organization:
- Gov't POC:  \*Enter person other than yourself, i.e. your supervisor
- Justification:
- I accept the ASPS User Agreement
- 
- [Back to Login](#)

## 7 Aero App Installation

There are several methods for obtaining the installation of Aero App. The following sections ahead will expand on the different options.

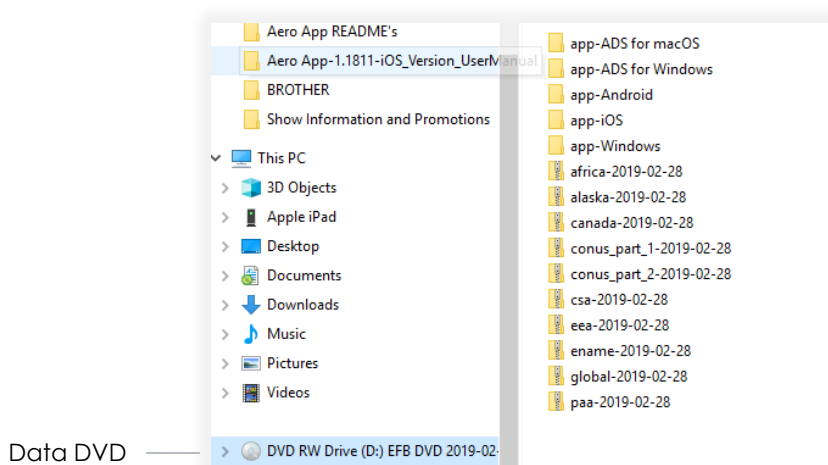
### 7.1 Where to Obtain Aero App

Aero App (National Stock Number [NSN] 7644016004225) is available from the following sources:

- **Aero App DVD** – National Geospatial Intelligence Agency (NGA) distributes the Aero App DVD to appropriate personnel.
  - **Defense Logistics Agency (DLA)**. If you have any questions or need additional information, contact Jorge Diaz ([Jorge.Diaz@dla.mil](mailto:Jorge.Diaz@dla.mil)).
  - **National Geospatial-Intelligence Agency (NGA)**. Aero App data can be downloaded via NIPRnet at (<https://dbgia.geointel.nga.mil/efb/index.cfm>). This link requires a PKI-enabled CAC card for access. See your security team for a PKI certificate if you receive the following message: "Certificate-based authentication failed."
- **Aero App Website** – Aero App's website ([aeroapp.info](http://aeroapp.info)) that requires GEOAxis or Aero User Database credentials.

#### 7.1.1 Aero App Installation From DVD

1. Connect an iPad to a USB or USB-C port of a Mac or Windows computer.
2. Insert data DVD onto the user's computer.
3. Locate and double-click on the DVD drive from File Explorer.



### 7.1.1.1 Install From iTunes

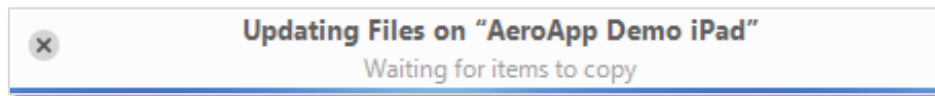
The iTunes application is used to install Aero App. Users with a Windows computer and users who have not updated their Apple Mac to macOS Catalina must use iTunes to install Aero App. Users who have macOS Catalina, refer to [Section 7.1.1.2](#).

#### 7.1.1.1.1 iTunes Version 12.7

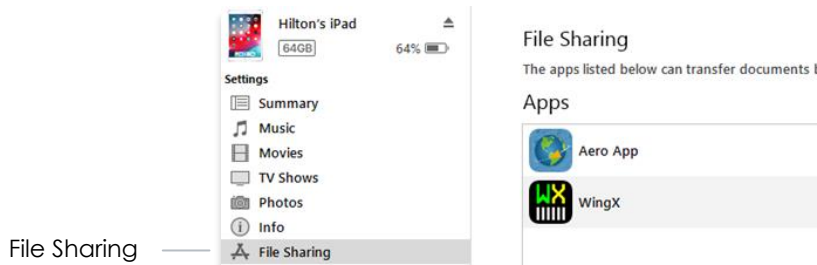
1. Connect iPad to a USB or USB-C port of a Windows computer.
2. Once your iPad is connected, iTunes will display on your screen.
3. Click the **iPad** icon and your iPad information will display.
4. Drag and drop the **AeroApp-<version-number>.ipa** file from your DVD file onto the On My Device section.



5. A status bar will confirm that Aero App has been successfully loaded.

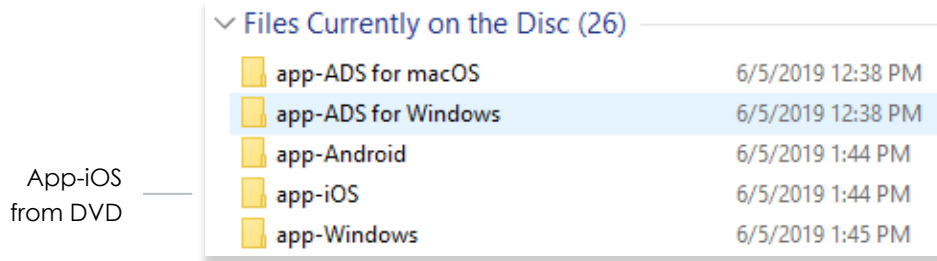


6. Click **File Sharing** and the apps that are listed below are the apps that transfer documents between the user's iPad and user's computer.

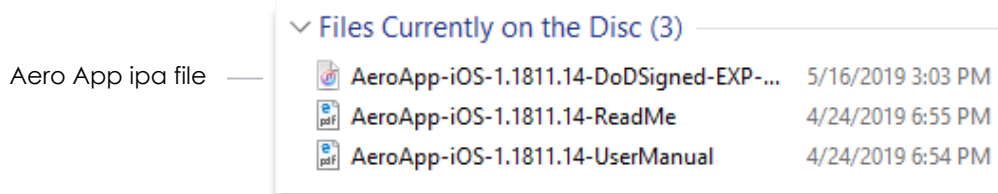


### 7.1.1.1.2 iTunes Pre-12.7 Version

1. Click the folder titled, **app-iOS** from your DVD.



2. Connect iPad to a USB or USB-C port of a Windows computer.
3. Once your iPad is connected, iTunes will display on your screen.
4. Click the **iPad** icon and your iPad information will display.
5. Click **File**.
6. Under File, click **Add File to Library** and your file library will display.
7. Click the **AeroApp ipa** file.



8. Click **open**.
9. Click **Install**.
10. Click **Apply** located at the bottom of the screen.
11. To ensure that you have installed Aero App, return to your home screen and the Aero App icon should be displayed as shown.

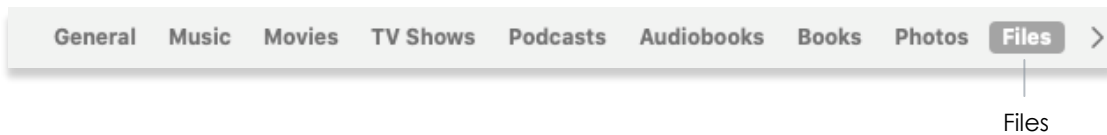


Aero App

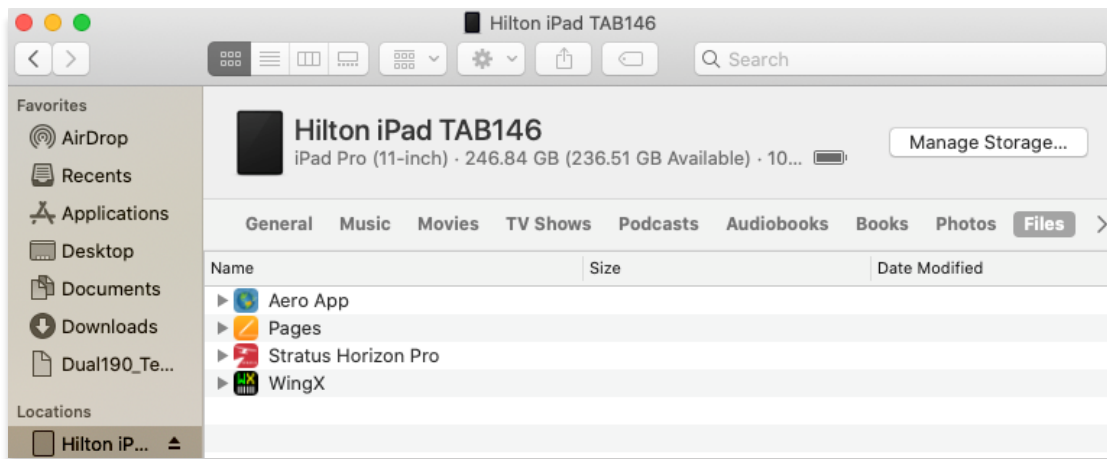
### 7.1.1.2 Install from macOS Catalina or Later

macOS Catalina has replaced the iTunes application with smaller applications. Connect the iPad to an Apple Mac running macOS Catalina and your device will appear on Finder.

1. Connect iPad to a USB or USB-C port of a Mac computer.
2. Click **Finder** from the Mac Dock.
3. Locate your iPad on the left side of the Finder screen below Locations.
4. The top of the screen will display menu options. Select **Files**.



5. Drag and drop the **AeroApp-<version-number>.ipa** file from your DVD file onto the Sync ribbon located at the bottom of the screen.
6. Aero App will be added into the Files folder.



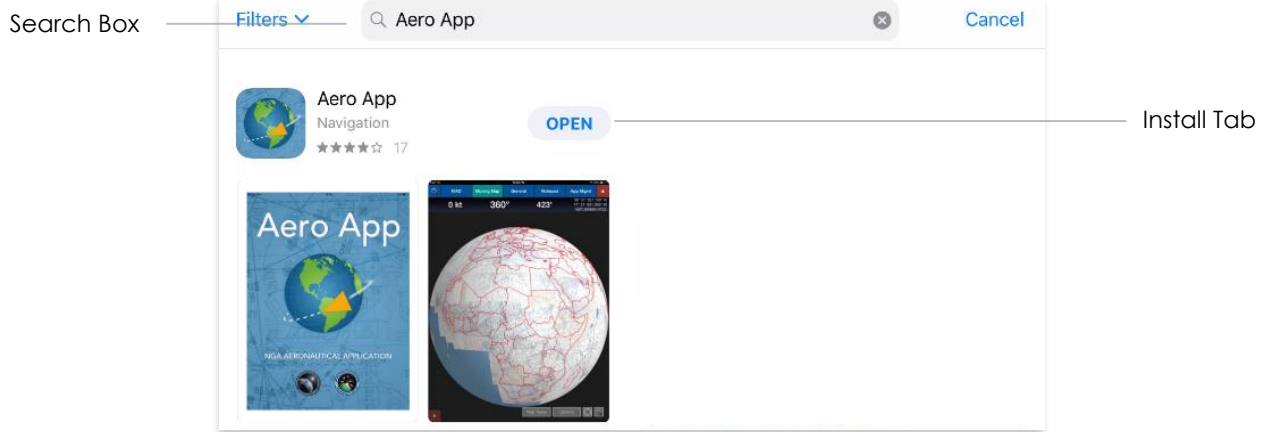
7. To ensure that you have properly installed Aero App, return to the home screen of your tablet and the Aero App icon should be displayed as shown.



Aero App

### 7.1.2 Install From Apple App Store

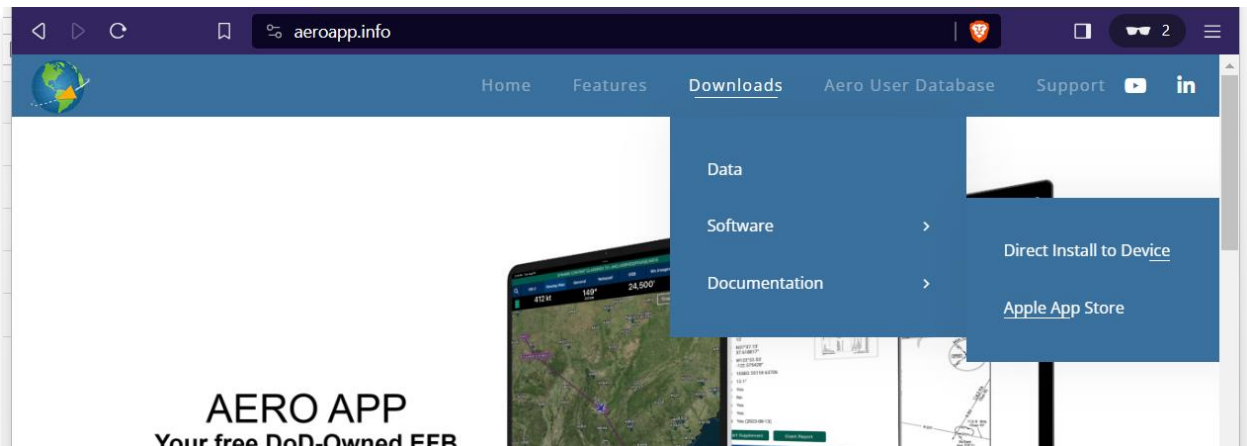
1. Go to the Apple App store on your iPad.
2. Locate the search box and enter **Aero App** in the space provided.
3. Tap **Install**.



**NOTE:** Downloading Aero App from the Apple App Store will result in users being required to authorize DOD enterprise in the iPad settings.

### 7.1.3 Install From Aero App Website

1. Open an internet browser of choice.
2. Enter <https://www.aeroapp.info> in the address bar.
3. Navigate to the **Downloads** menu. Option placement will vary depending on display size.
  - On larger screens, hover over **Downloads** from the menu ribbon to reveal additional download options.

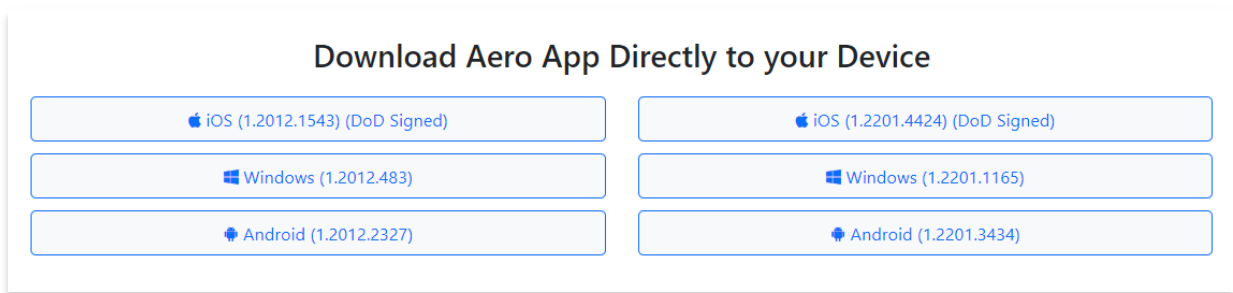




- On smaller screens, click the hamburger button and select **DOWNLOADS** to display additional download options.



4. Select **Software**.
5. Users are provided with two different ways to download Aero App:
  - Direct Install to Device
  - Apple App Store
6. Select **Direct Install to Device**.
7. Log in using *GEOAxis* or *Aero User Database* credentials.
8. Select the iOS version of Aero App and download will begin.



**NOTE:** Users must possess a *GEOAxis* or *Aero User Database* credentials prior to downloading Aero App software.

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## 8 Aero App Data

To obtain Aero App data, refer to the detailed instructions outlined in the following sections. Users can easily download Aero App data from the following sources:

- **Aero App DVD** – a physical DVD available through Defense Logistics Agency.
- **Aero Data Server (ADS)** – a server that handles the deployment of Aero App data to clients through mobile devices over a locally hosted Wi-Fi network (check with an administrator for computer configuration).
- **Aero App Website** – Aero App's website (aeroapp.info) that requires GEOAxIS or Aero User Database credentials.
- **Aero App** – data can be downloaded directly from Aero App. GEOAxIS, and Aero User Database credentials are required or set up your device with Mobile Device Management (MDM).



**NOTE:** AWS authentication requires an account with GEOAxIS or Aero User Database credentials or set up your device with Mobile Device Management. Refer to [Section 6](#) for additional information.

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## 9 Aero App Data Overview

The following data is available for download:

- Aero App Maps
- Air Force Weather (AF Wx)
- Core Data
- Core Data Delta Files
- Maxar
- Electronic – Instrument Procedure Library (E-IPL)
- FAA Sectionals
- Georeference
- Giant Reports
- Helicopter and Terminal Area Chart (TAC) Maps
- Map Library
- Temporary Flight Restrictions (TFRs)
- Terrain
- User Files



**NOTE:** Some products and/or data may be limited in their distribution. This may include but is not limited to E-IPL, AMC Giant Reports, Air Force Weather, Maxar imagery, and Contract Fuel Information. Contact NGA Aeronautical Dissemination Program office at [aerodistro@nga.mil](mailto:aerodistro@nga.mil) if you have questions regarding access to these products and/or data.

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### 9.1 Aero App Maps

Aero App includes an advanced Moving Map that displays VFR and world-wide IFR charts. Aero App enables pilots to easily download the maps for their region of interest. Refer to [Section 15.3](#) for more information on the Moving Map.

### 9.2 Air Force Weather

Air Force Weather (AF Wx) is prompt and accurate weather information from the Air Force. Aero App enables users to view real-time weather information for METARs and TAFs. Refer to [Section 15.3.3](#) for more information on Air Force Weather (AF Wx).

---

## 9.3 Core Data

Core Data includes Global zip file and the Africa, Alaska, Canada, CONUS 1, CONUS 2, CSA, EEA, ENAME, and PAA region files. Usable data products in the Core Data include, but not limited to, FLIP charts, Supplements, Planning Documents, Legends, Moving Map Overlays including Airports, Air Refueling Routes, Airways, ARTCCs, and many more. Users can choose whether to download regions. However, the Global zip file is always required. Refer to [Section 10](#) for more information on how to download data from Aero App.



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**NOTE:** Users have the option to sideload data, refer to [Section 11](#) to view different methods of sideloading data.

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## 9.4 Core Data Delta Files

Core Data Delta Files are significantly smaller files that contain only data that has changed from the previous cycle. Downloading Core Data Delta Files significantly reduces download time.

Aero App will automatically download the delta files if the previous cycle is already loaded in Aero App – this process is transparent to the user. After downloading the delta files, Aero App will apply Deltas to create the new cycle.

## 9.5 Electronic – Instrument Procedure Library (E-IPL)

Electronic – Instrument Procedure Library (E-IPL) charts are translations of Host Nation procedures drawn in the familiar DOD approach format. E-IPL charts are intended to fill gaps in instrument procedure coverage in existing DOD FLIP charts. E-IPL charts are available for download from ADS and AWS.



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**NOTE:** E-IPL full cycle is available every 28 days.

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## 9.6 FAA Sectionals

FAA Sectionals are Sectional Aeronautical Charts designed for visual navigation used for a flight under Visual Flight Rules and can be displayed as base maps on Aero App's Moving Map. Users with GEOAxis and Aero User Database (AUD) credentials will have access to FAA Sectionals. Refer to [Section 15.4.1](#) to reference how to load FAA Sectional Charts. Refer to [Section 15.3.5.1.1](#) to reference how to display FAA Sectionals onto the Moving Map.



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**NOTE:** All FAA Sectionals, Helicopter and TAC Maps, and IFR Enroute charts are updated on a 56-day cycle.

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## 9.7 Georeference

Georeference is an alignment of accurate location data to a map coordinate system for Aero App. Aero App enables users to show their ownship on Airport Diagrams, Instrument Approach Procedures, and on the Moving Map, perfectly georeferenced. Refer to [Section 15.8.1.1](#) on how to show Ownship on APD and IAP and show Airport Ring on APD and IAP.

## 9.8 Giant Reports

Giant Reports are PDF documents that are an assessment from the Air Force for safe operations at an airfield. These can be downloaded and viewable within Aero App. Refer to [Section 15.2](#) for additional information on Giant Reports.

## 9.9 Helicopter and Terminal Area Chart (TAC) Maps

Aero App can display Helicopter - Gulf Coast Charts, Helicopter – Route charts, and Terminal Area Charts (TACs) on the Moving Map.

Displaying Helicopter and Terminal Area Charts directly on the Moving Map results in perfect alignment on the underlining sectional (or other base map).

Georeferencing and spatial accuracy ensure that these charts can be used for an accurate, non-primary means of navigation. Refer to [Section 15.3.5.4](#) for more information on Helicopter and Terminal Area Chart (TAC) Maps.



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**NOTE:** All FAA Sectionals, Helicopter and TAC Maps, and IFR Enroute charts are updated on a 56-day cycle.

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## 9.10 Map Library

Aero App includes Map Library charts that can be displayed on the Moving Map. Map Library will include maps such as NavPlan charts, range charts, maps for Search and Rescue mission, and many others. Map Library can be downloaded from AWS using Aero User Database credentials or directly from ADS. Map Library data is available to DOD and specific government foreign partners. For information on downloading Map Library charts, refer to [Section 10.2.1.1](#) and [Section 10.3.1.1](#). For information on overlaying Map Library charts on the Moving Map, refer to [Section 15.3.5.5](#).

## 9.11 Maxar

Maxar is satellite imagery that supplies a visual percept of the ground conditions to improve situational awareness. Maxar can be zoomed and panned. Maxar images can be viewed using internet connection or downloaded for offline use. Refer to [Section 15.3.5.1.4](#) for guidance in enabling the option.

*"Maxar is the first company to deliver native 30cm resolution imagery, delivering clearer, richer images that empower better decision making through improved situational awareness."* – Maxar

## 9.12 Temporary Flight Restrictions (TFRs)

Temporary Flight Restrictions (TFRs) are restricted areas for air travel. Aero App enables users to display graphical and textual TFRs on demand when connected to cellular data, Wi-Fi, or ADS-B receiver. Refer to [Section 15.3.6.1.25](#) for additional information on displaying TFRs on the Moving Map.

## 9.13 Terrain

Aero App includes Terrain Coloring and Terrain Analysis that provides situational awareness to flight crews. Users can overlay Terrain Coloring on the Moving Map that includes an altitude-based color system that depicts the proximity of the pilot's ownship relative to terrain. For more information on Terrain overlay, refer to [Section 15.3.6.1.23](#). Terrain Analysis data is respective to the Orbit Line of Sight configuration and is required for download prior to use. For more information on Orbit Line of Sight, refer to [Section 15.3.13.3.6.1](#).

Terrain Coloring and Terrain Analysis data can be downloaded from AWS using GEOAxis or Aero User Database credentials or directly from ADS. Terrain data will be listed under Other in the Data Download screen and is available to specific government foreign partners.

## 9.14 User Files

User Files include User Map files and other PDF files and can be accessed from the data download screen in Aero App.

## 10 Download Data

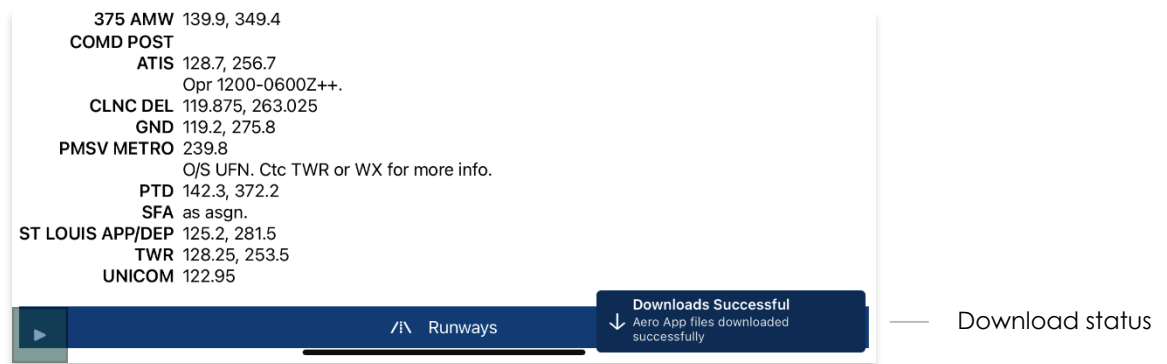
Aero App allows users to download data directly from the app. Sources such as Amazon Web Services (AWS) and Aero Data Server (ADS) are accessible within Aero App. Alternatively, users can visit the Aero App website (aeroapp.info) and download data directly to their devices.

An active internet connection (Wi-Fi or cellular) is required to experience an interruption-free downloading session.

### 10.1 Background Downloading

Aero App has background downloading capabilities that enable users to download data while switching screens within Aero App or while using another application. The sections ahead will elaborate on how to download data from Aero App.

1. Select desired method of authentication (i.e., AUD, GEOAxis, or MDM).
2. Follow the prompts then tap **Download** to start the downloading process.
3. Tap **Done** to return to the **Data Status** screen.
4. Navigate to desired screen within Aero App or an application in which you would like to proceed in normal operations.
5. Once the downloading is complete, a popup will notify users that the download was successful.



6. Navigate back to the **Data Status** screen. Notice the files you have selected to download display **Found**. This indicates that the files have successfully downloaded with no interruptions.



**NOTE:** In addition to switching screens within Aero App or using another application, users can lock their devices and the download will continue. A notification will be displayed on the device's lock screen.



## 10.2 Download Data Through Amazon Web Services (AWS)

Aero App enables users to download data from AWS using Aero User Database (AUD) or GEOAxis credentials or through Mobile Device Management (MDM), which requires users to set up their device with MDM. To obtain core data files, Global must be included when downloading data.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **AWS – Fast Cloud Downloading** option, if necessary.
5. Users are given the option to access data using GEOAxis or Aero User Database (AUD) credentials or set up your device with Mobile Device Management (MDM).

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Done Data Sources

AWS Aero Data Server File Manager

### AWS - Fast Cloud Downloading

Aero User Database GEOAxis MDM

Username:

Password:

Connect

The Aero User Database is used for user authentication and is not related to GEOAxis. Therefore the user name and password may be different to your GEOAxis credentials. CAC access is not required.

To sign up for an account or reset your password, tap on the buttons below.

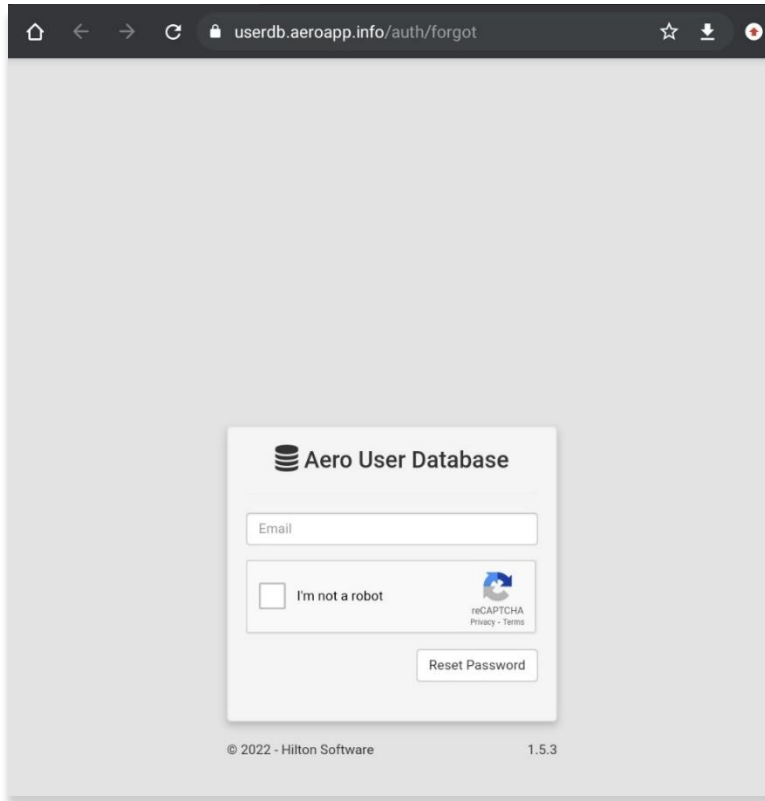
6. Below each user authentication option, you are presented with the options to *Sign Up For An Account* and *Reset Password*.

Sign Up For An Account Reset Password

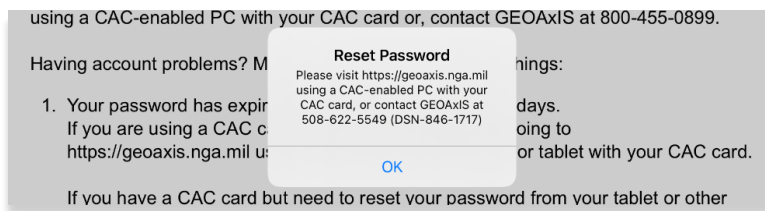
7. Tap **Sign Up for An Account** to create an Aero User Database (AUD) or GEOAxis account.

8. The following options are available for Reset Password:

- Tapping **Reset Password** under **Aero User Database** will redirect users to Aero User Database management page on a separate browser.



- Tapping **Reset Password** under **GEOAxis** will provide instructions for how to reset password.



**NOTE:** The Background Downloading feature allows users to continue downloading data while switching screens within Aero App or while using another application. Refer to [Section 10.1](#) for more information.

## 10.2.1 Download Data Using Aero User Database (AUD)

Aero User Database (AUD) allows for authentication of both DOD users and Foreign Partners. Aero User Database credentials are not related to GEOAxis credentials and CAC card access is not required.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **AWS** option, if necessary.
5. Tap the **Aero User Database** option.
6. Enter credentials then tap **Connect**.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Done Data Sources

AWS Aero Data Server File Manager

**AWS - Fast Cloud Downloading**

Aero User Database GEOAXIS MDM

Username:

Password:

Connect

User's Credentials —

7. The Select Partner popup will display. Select from partners list.

Select Partner

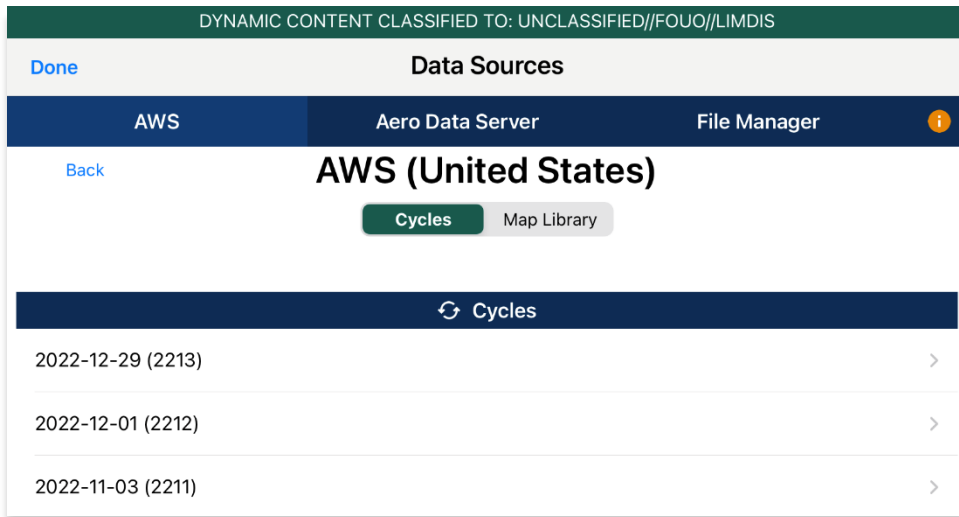
United States

FAA

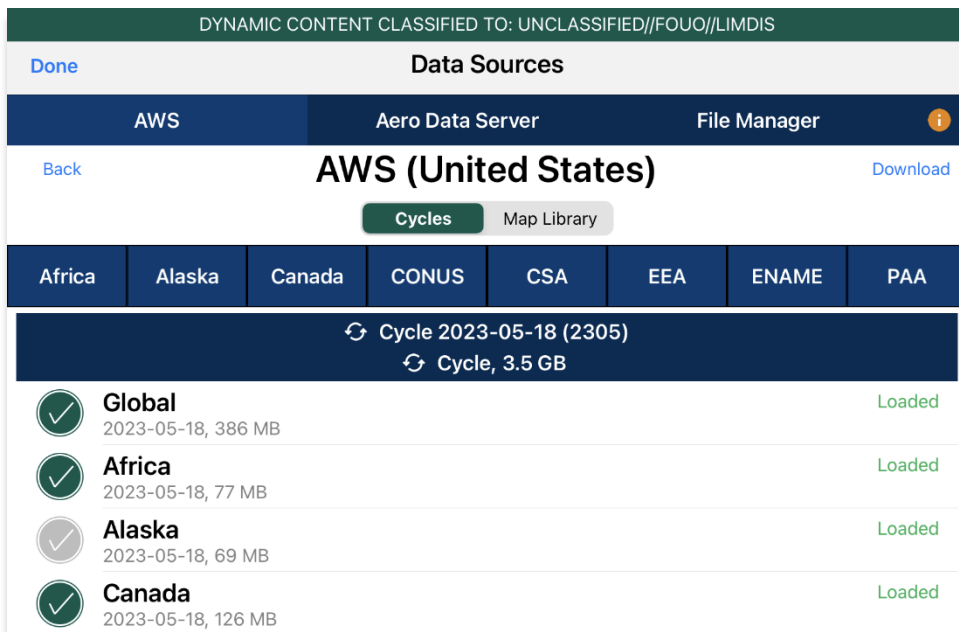


**NOTE:** The *Select Partner* popup will appear to those who have access to multiple government foreign partners.

- Users will be prompted to the Data Cycle Download screen. Users are provided with options to download *Cycles* or *Map Library*. Select **Cycles**.



- Available data pertaining to the respective cycle will be displayed on the screen. Select individual data files or select region Easy Buttons for faster data selection.
- Tap **Download** once desired data files have been selected.



**NOTE:** Refer to [Section 6](#) for additional information regarding registering for an AUD account.

### 10.2.1.1 Download Map Library Data Using Aero User Database (AUD)

Once credentials have been entered and the appropriate government foreign partner has been selected, users will be redirected to the Data Download screen. Follow the steps below to download Map Library data.

1. From the Data Download screen, select **Map Library** from segmented controller.
2. Available charts will be displayed. The files are grouped into categories. Tap on the desired folders to *reveal* files. Tap again to *hide* files.
3. Tap on the header of the date column to display **Created**, **Effective**, or **Expiration** dates.



**NOTE:** If the files have expired, the Created time is replaced by "Expired".

4. Select desired map file(s).
5. Tap **Download** once desired Map Library files have been selected.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Done
Data Sources

AWS
Aero Data Server
File Manager i

Back
Download All

## macmini

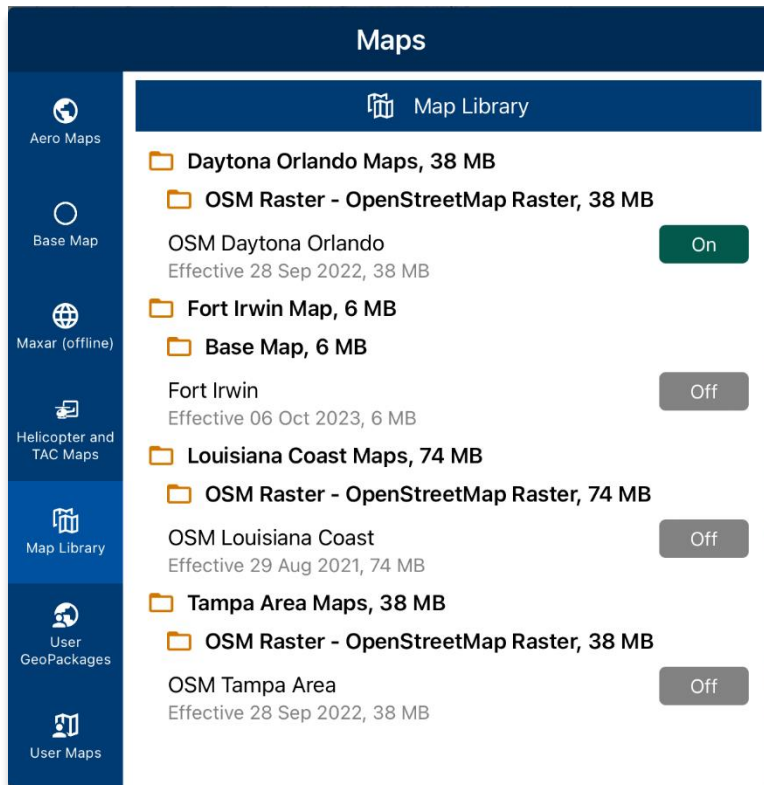
Host: 192.168.98.17    HTTP Port: 5555

Cycles
Map Library

Map Library i

Filename	Effective	Size
<span style="color: orange;">📁</span> <b>Partner Maps</b>		17.8 GB
<span style="color: orange;">📁</span> <b>Australia NavPlan Coverage</b>		3.0 GB
<input checked="" type="checkbox"/> <b>NGA GNC</b> <small>mm_nga_gnc_australia-2023-03-03.mbtiles</small>	03 Mar 2023	261 MB Available
<input checked="" type="checkbox"/> <b>NGA JNC</b> <small>mm_nga_jnc_australia-2023-03-03.mbtiles</small>	03 Mar 2023	372 MB Available
<input checked="" type="checkbox"/> <b>NGA JOG</b> <small>mm_nga_jog_australia-2023-03-08.mbtiles</small>	08 Mar 2023	1.4 GB Available
<input checked="" type="checkbox"/> <b>NGA ONC</b> <small>mm_nga_onc_australia-2023-03-03.mbtiles</small>	03 Mar 2023	642 MB Available
<input checked="" type="checkbox"/> <b>NGA TPC</b> <small>mm_nga_tpc_australia-2023-03-08.mbtiles</small>	08 Mar 2023	358 MB Available
<span style="color: orange;">📁</span> <b>Central and South America NavPlan Coverage</b>		5.6 GB
<span style="color: orange;">📁</span> <b>Colombia NavPlan Coverage</b>		2.0 GB
<input checked="" type="checkbox"/> <b>NGA JOG</b> <small>mm_nga_jog_colombia-2023-03-22.mbtiles</small>	22 Mar 2023	2.0 GB Available
<span style="color: orange;">📁</span> <b>Costa Rica NavPlan Coverage</b>		179 MB

- To verify that Map Library files were successfully downloaded, navigate to the **Moving Map** from the Main Menu.
- Tap **Maps**.
- Tap **Map Library** from the side menu and the downloaded Map Library charts will display.



**NOTE:** Map Library charts can be deleted from File Manager or from the Maps popup in the Moving Map by swiping left and tapping the **Delete** button.

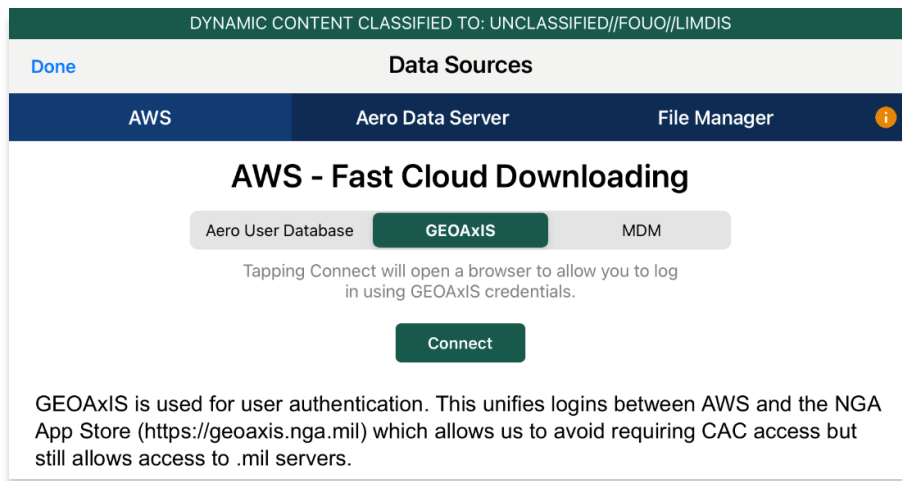


**NOTE:** Users can display Map Library charts on the Moving Map. Refer to [Section 15.3.5.5](#) on how to display Map Library charts on the Moving Map.

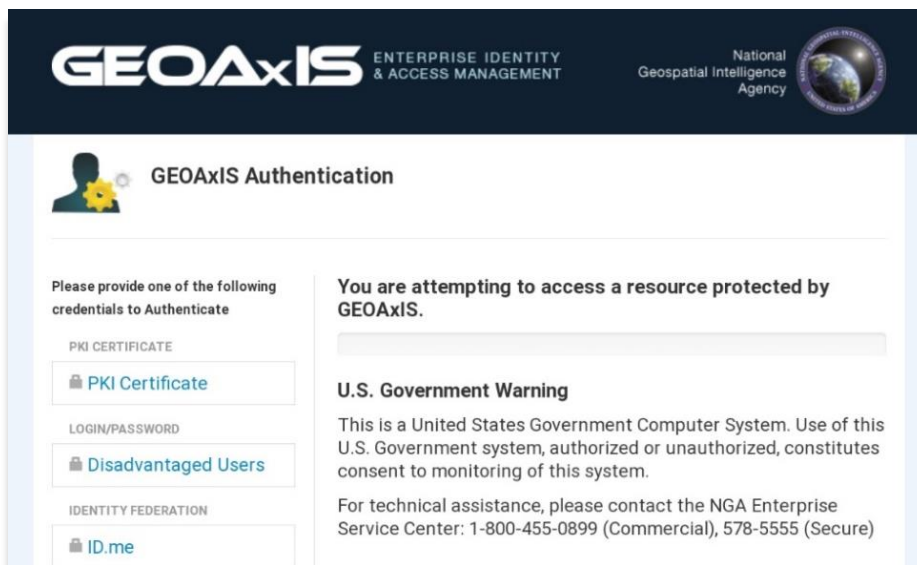
## 10.2.2 Download Data Using GEOAxis

GEOAxis is a form of authentication for Disadvantage Users – users without a CAC card. Users must possess a GEOAxis account to use GEOAxis as their login method to download Aero App data. Refer to [Section 6.2](#) for additional information.

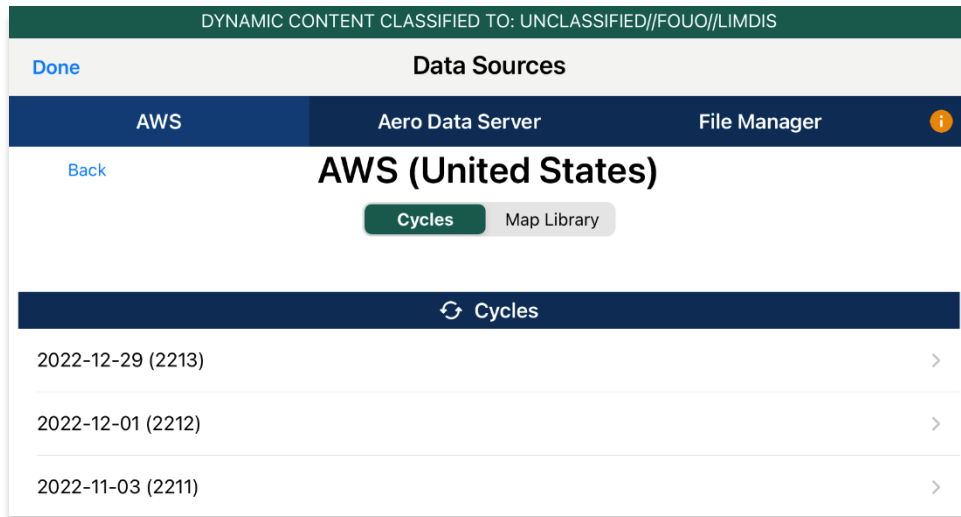
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **AWS** option, if necessary.
5. Tap the **GEOAxis** option.



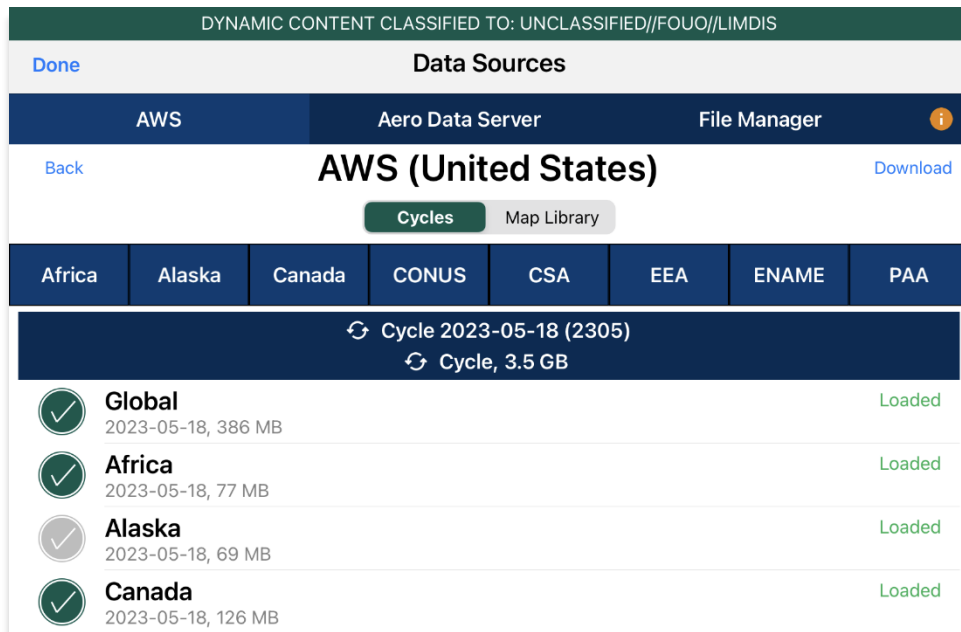
6. Tap **Connect** and users will be redirected to the GEOAxis webpage.
7. Select desired authentication method.



- Once authenticated, users will be prompted to the AWS download screen. Users are provided with options to download Cycles or Map Library. Select **Cycles**.



- Available data pertaining to that cycle will be displayed on the screen. Select individual data files or select region Easy Buttons for faster data selection.
- Tap **Download** once desired data files have been selected.

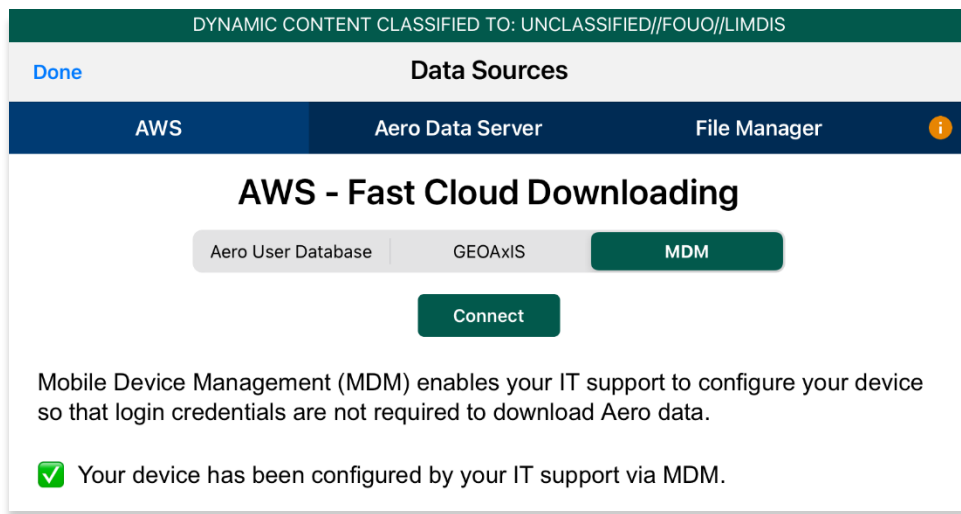




### 10.2.3 Download Data Using Mobile Device Management (MDM)

Mobile Device Management (MDM) is a software that allows the IT department to automate and monitor the user's device. The IT administrator would securely connect the user's device to the organization's network. This allows for devices to be automatically authenticated, thereby negating the need for login credentials.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **AWS** option, if necessary.
5. Tap the **MDM** option.

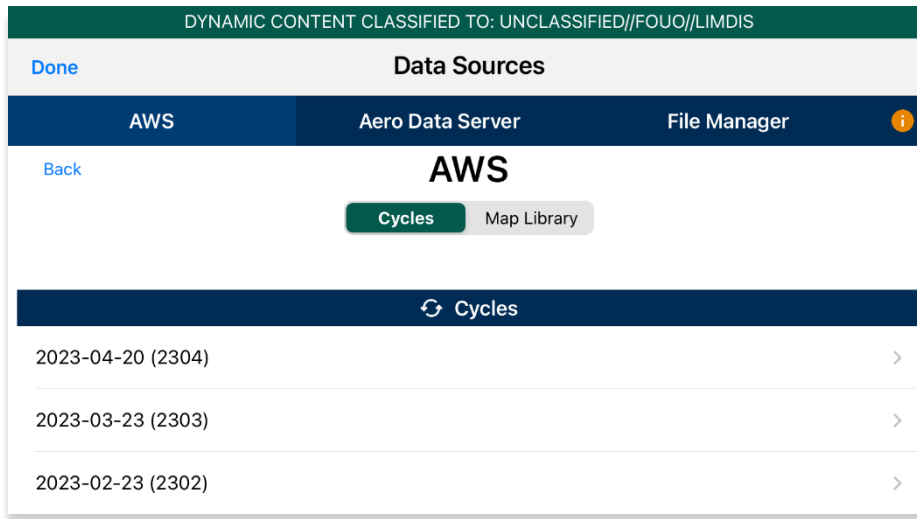


**NOTE:** IT administrator must be contacted to retrieve key value pairs for MDM configuration prior to downloading data; otherwise, the following message will appear as displayed below.

**✗** Your device has not been configured by your IT support via MDM.

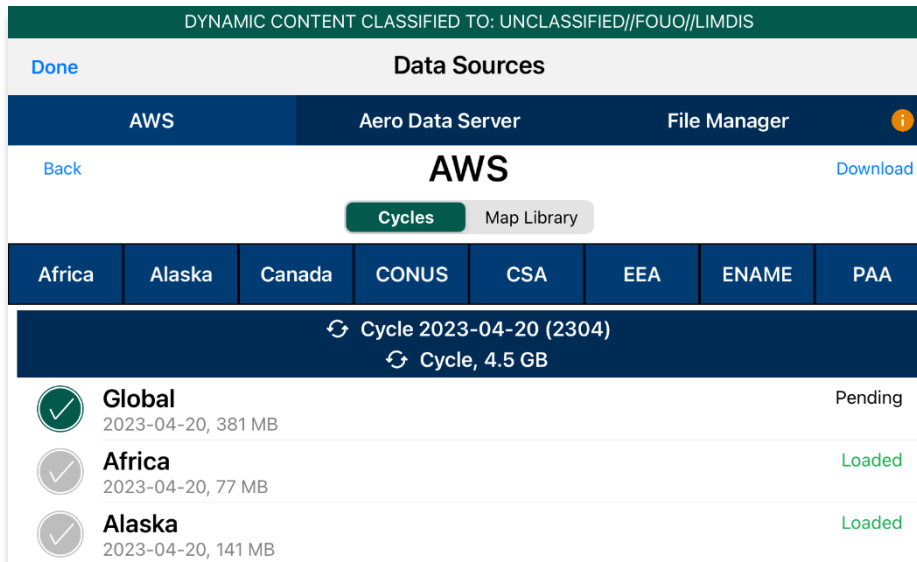
6. Tap **Connect**. Users will be redirected to the *Data Download* page.

- Users are provided with options to download *Cycles* or *Map Library*. Select **Cycles**.



**NOTE:** When selecting *Map Library* to load data using MDM, refer to [Section 10.2.1.1](#) for additional information.

- Available data pertaining to that cycle will be displayed on the screen. Select individual data files or select region Easy Buttons for faster data selection.
- Tap **Download** once desired data cycles are selected.



**NOTE:** Maxar cannot be accessed through MDM. To access Maxar (online) and/or download Maxar (offline) tiles, user must be authenticated via *Download* screen or *AF Wx and TFRs* with authorized partner (AUD).

## 10.3 Download Data Using Aero Data Server (ADS)

Aero Data Server (ADS) enables users to download Aero App data and Map Library charts over a local Wi-Fi network to an iOS device. Global is required to be loaded in ADS for Aero App to access cycle, Aero App Maps, E-IPL, and other data, not including User Files or Map Library.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **Aero Data Server** option.
5. Users will be presented with options to Discover, enter Host and Port numbers, and Connect. Tap **Discover** and a list of ADS servers will display.

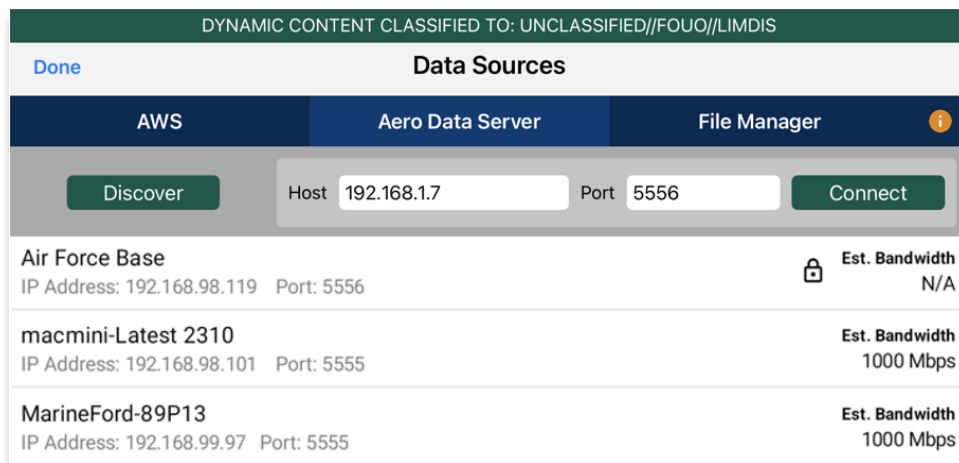


**NOTE:** The Background Downloading feature allows users to continue downloading data while switching screens within Aero App or while using another application. Refer to [Section 10.1](#) for additional information.

### 10.3.1 Aero Data Server (ADS) Discover

The Aero Data Server (ADS) Discover tool automatically locates servers that share the same Wi-Fi network as your device. In turn, the ADS Discover tool negates having to enter an IP address and the Port number of a server.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **Aero Data Server** option, then tap **Discover** and all available servers will display.



- Alternatively, users can manually connect to a server by entering the Host and Port numbers, respectively, in provided fields.



**NOTE:** To establish a connection with a secured server, certificates would need to be installed in the ADS device as needed.

- Once entered, tap **Connect** to connect to the server.
- Users will be prompted to the Data Cycle Download screen. Users are provided with options to download Cycles or Map Library. Select **Cycles**.
- Available data pertaining to that cycle will be displayed on the screen. Select individual data files or select region Easy Buttons for faster data selection.
- Tap **Download** once desired data files have been selected.



**NOTE:** Aero App will receive data for the latest three cycles loaded on ADS but will only have access to the cycles containing global.

### 10.3.1.1 Download Map Library Data Using Aero Data Server (ADS)

Map Library charts will be available to users who have Map Library files loaded on ADS. Once the respective server has been selected, users will be redirected to the Data Download screen.

1. From the Data Download screen, select **Map Library** from segmented controller.
2. Available charts will be displayed. The files are grouped into categories. Tap on the desired folders to *reveal* files. Tap again to *hide* files.
3. Tap on the header of the date column to display **Created**, **Effective**, or **Expiration** dates.



**NOTE:** If the files have expired, the Created time is replaced by “Expired”.

4. Select desired map file(s).
5. Tap **Download** once desired Map Library files have been selected.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Done **Data Sources**

AWS **Aero Data Server** File Manager ⓘ

Back **macmini** Download All

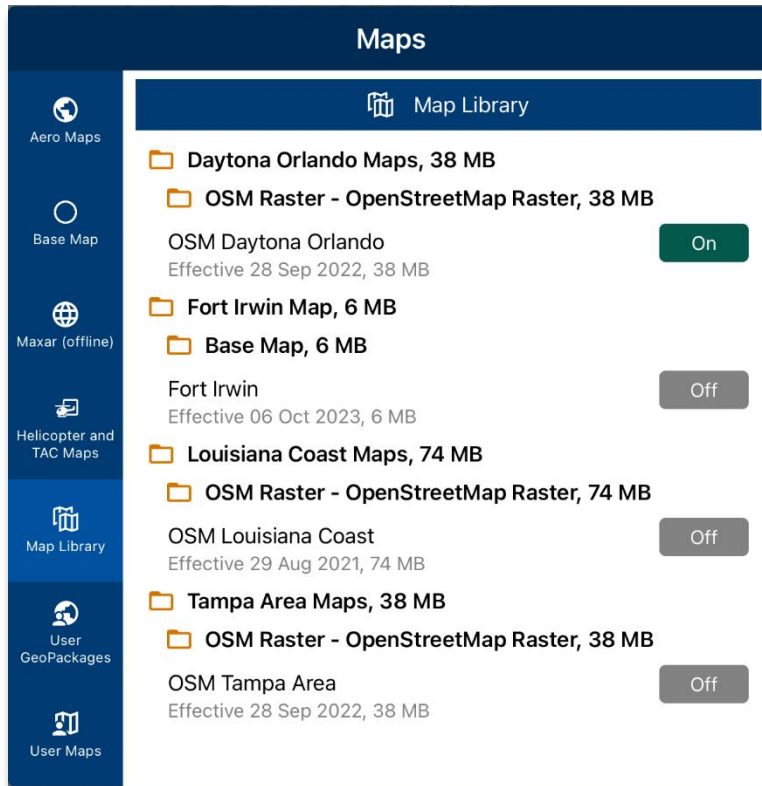
Host: 192.168.98.17 HTTP Port: 5555

Cycles **Map Library**

Map Library ⓘ

Filename	Effective	Size	
Partner Maps		17.8 GB	
Australia NavPlan Coverage		3.0 GB	
<input checked="" type="checkbox"/> NGA GNC mm_nga_gnc_australia-2023-03-03.mbtiles	03 Mar 2023	261 MB	Available
<input checked="" type="checkbox"/> NGA JNC mm_nga_jnc_australia-2023-03-03.mbtiles	03 Mar 2023	372 MB	Available
<input checked="" type="checkbox"/> NGA JOG mm_nga_jog_australia-2023-03-08.mbtiles	08 Mar 2023	1.4 GB	Available
<input checked="" type="checkbox"/> NGA ONC mm_nga_onc_australia-2023-03-03.mbtiles	03 Mar 2023	642 MB	Available
<input checked="" type="checkbox"/> NGA TPC mm_nga_tpc_australia-2023-03-08.mbtiles	08 Mar 2023	358 MB	Available
Central and South America NavPlan Coverage		5.6 GB	
Colombia NavPlan Coverage		2.0 GB	
<input checked="" type="checkbox"/> NGA JOG mm_nga_jog_colombia-2023-03-22.mbtiles	22 Mar 2023	2.0 GB	Available
Costa Rica NavPlan Coverage		179 MB	

- To verify that Map Library files were successfully downloaded, navigate to the **Moving Map** from the Main Menu.
- Tap **Maps**.
- Tap **Map Library** from the side menu and the Map Library charts will display.



**NOTE:** Map Library charts can be deleted from File Manager or from the Maps popup in the Moving Map by swiping left and tapping the **Delete** button.



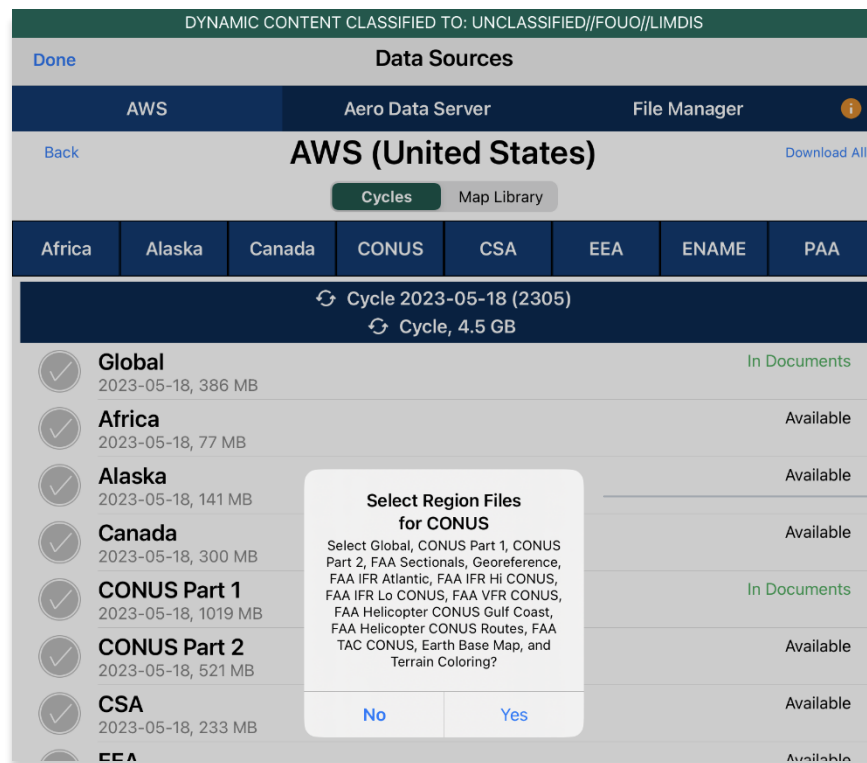
**NOTE:** Users can display Map Library charts on the Moving Map. Refer to [Section 15.3.5.5](#) how to display Map Library charts on the Moving Map.

## 10.4 Easy Buttons

Easy Button is a feature that bundles region files for the respective region. One or more Easy Buttons can be selected for the desired regions. Easy Buttons are available on the AWS – GEOAxis, Aero User Database, and MDM, and Aero Data Server (ADS).

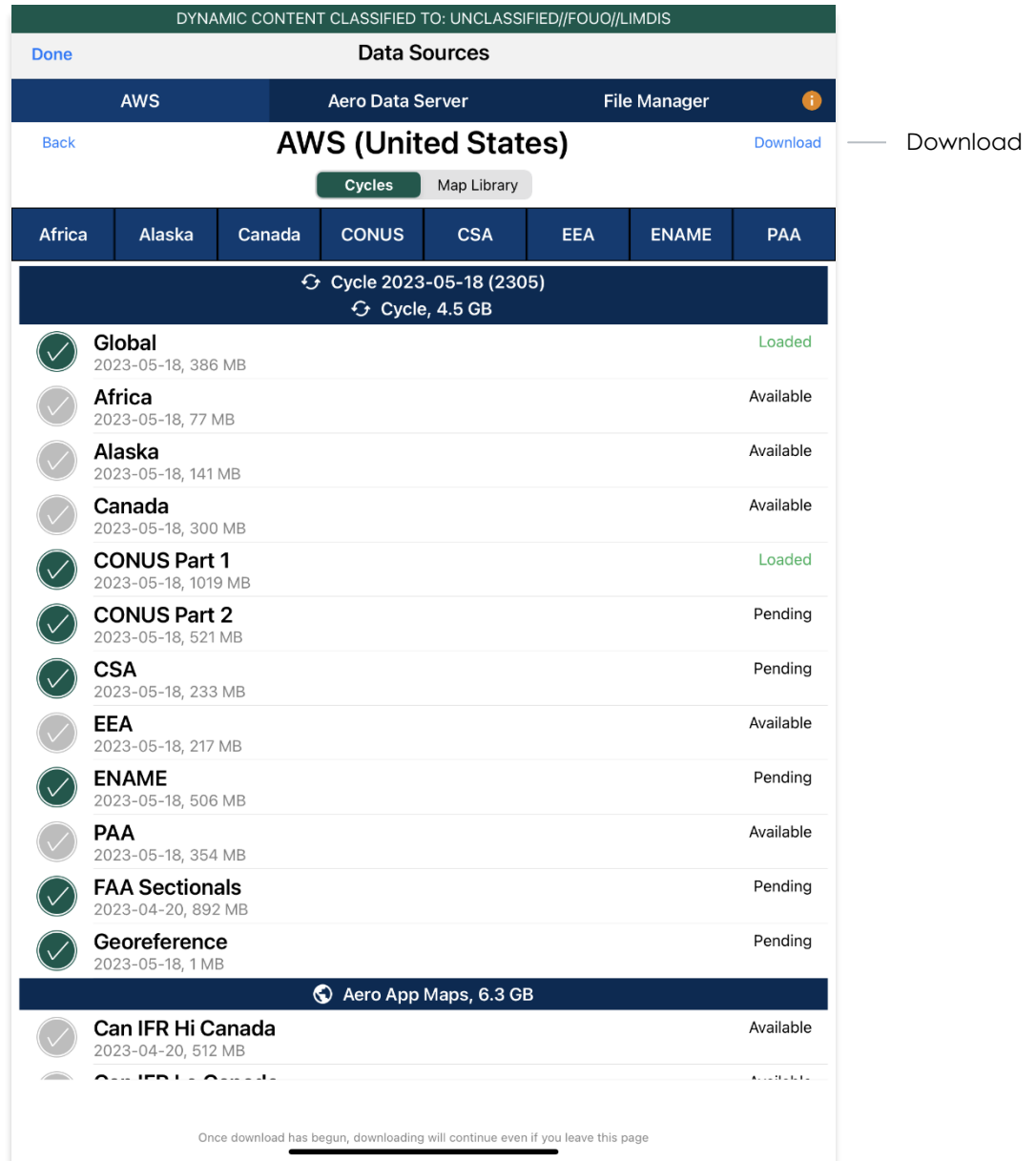
1. Once the user has selected the appropriate Data Source and the desired cycle, users will be prompted to the Data Cycle Download screen.
2. Tap desired **Easy Button(s)**:
  - Africa
  - Alaska
  - Canada
  - CONUS
  - CSA
  - EEA
  - ENAME
  - PAA
3. A dialog box displays all region files for the preferred Region. Tap **No** to cancel or **Yes** to proceed. All related files will be selected once the selection of region is confirmed.

Easy Buttons —



Easy Buttons confirmation

4. Users can individually select or deselect desired data cycle files. Tap **Download** to begin the download.





## 10.5 Download Data From the Aero App Website

The Aero App website ([aeroapp.info](https://aeroapp.info)) is a source to download Aero App data directly to your device. An active GEOAxis and Aero User Database credentials are required.

1. From your device, open an internet browser of choice.
2. Enter <https://download.aeroapp.info> in the address bar.



**NOTE:** Alternatively, users can go to [aeroapp.info](https://aeroapp.info) > Downloads > Data and users will be directed to the Data Menu Options page.

3. Log in using your *GEOAxis* or *Aero User Database* credentials. The Select Partner popup will appear to those who have access to multiple government foreign partners for Aero User Database users.
4. A data menu options screen will display. Users are presented with various folders to choose from. Click **Cycles**.

The screenshot shows the Aero App website interface. At the top, there is a navigation bar with "Aero App - United States", "Refresh", "Change Partner", and "Logout" buttons. Below the navigation bar, the main heading is "Download Aero App Directly to your Device". Under this heading, there are six buttons for downloading the app: two for iOS (versions 1.2201.4424 and 1.2209.5744, both DoD Signed), two for Windows (versions 1.2209.1579 and 1.2301.1753), and two for Android (versions 1.2209.4390 and 1.2211.4644). Below the app download buttons, there is a section titled "Download Other Apps" with a button for "PPA H60". At the bottom of the screenshot, there is a "Cycles" tab selected, showing a list of folders: "cycles", "eipl", "movingmaps", "generics", and "geotiffs".

5. Click the **latest cycle** or a **cycle** of choice.

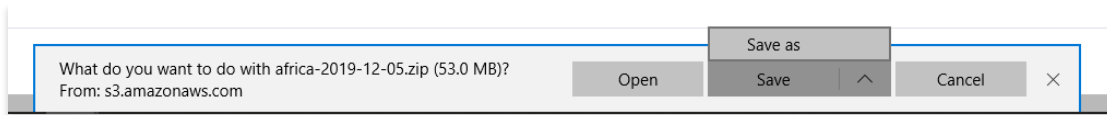
The screenshot shows the Aero App website interface. At the top, there is a navigation bar with "Aero App - United States", "Refresh", "Change Partner", and "Logout" buttons. Below the navigation bar, there is a breadcrumb trail "Home >". Underneath, there is a list of data cycles: "2023-01-26", "2022-12-29", and "2022-12-01".

6. Users will be redirected to the download page. Located at the upper-right corner of the screen are options to choose from **Full Data Files**, or **Delta Files** to download data.
7. Click the respective **ZIP** and **SIG** buttons to the region of choice: **Africa, Alaska, Canada, CONUS, CSA, EEA, ENAME**, and/or **PAA**, and other files.

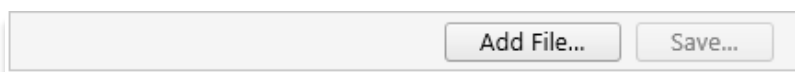


**NOTE:** Global files must be included when downloading a full data cycle.

8. A download confirmation window will appear above the taskbar with options to Open, Save, or Cancel download. Click **Save** or click the up-arrow (icon) and select **Save as**.

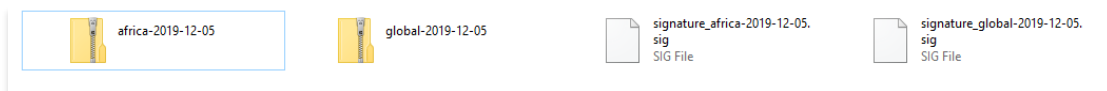


9. Once the data has completed the download, select from options to **Open, Open folder**, or **View downloads**.
10. Connect your iPad to a Mac or Windows computer.
11. Locate device storage on the computer:
  - On Windows, open iTunes
  - On macOS, open Finder and select device under Locations.
12. Click the **iPad** icon and your device information will display.
13. Locate **Aero App** under File Sharing.
14. Go to the bottom of the iTunes screen and click **Add File**. File Explorer will display.



Add File

15. Drag the downloaded data files from your Downloads folder onto your iPad.



**NOTE:** Refer to [Section 13](#) on how to load and view data status.

## 11 Sideload Data

Aero App provides users the ability to sideload data from a trusted source into Aero App. Data such as User Maps, GeoPackages, User Waypoints, CRD files, Pins, Documents, and KML/KMZ files can be sideloaded and loaded onto Aero App.

### 11.1 Sideload Data Using DVD

Users can sideload data through the distributed Aero App DVD provided by NGA. Refer to [Section 7.1](#) for additional information.

Ways to sync device:

- On Windows, open iTunes
  - On macOS, open Finder and select device under Locations
1. Insert the Aero App DVD into your computer.
  2. Locate and double click on the DVD drive from File Explorer.

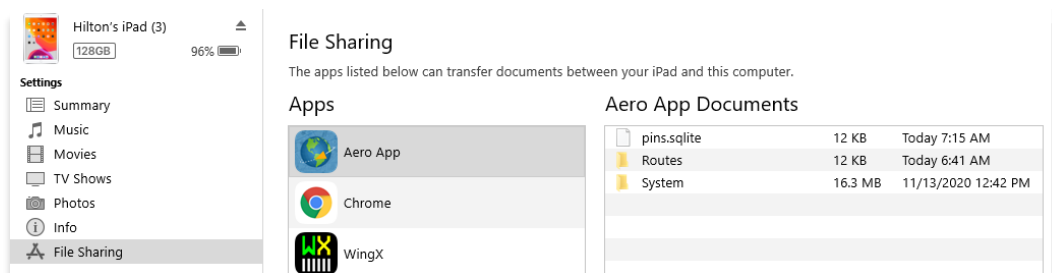
#### 11.1.1 Sideload Data Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.

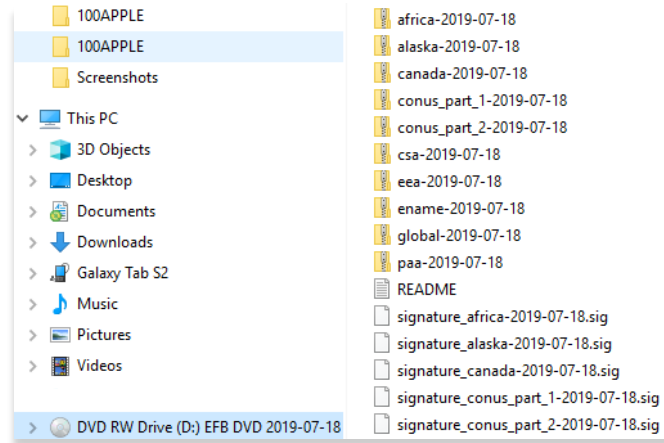


**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.

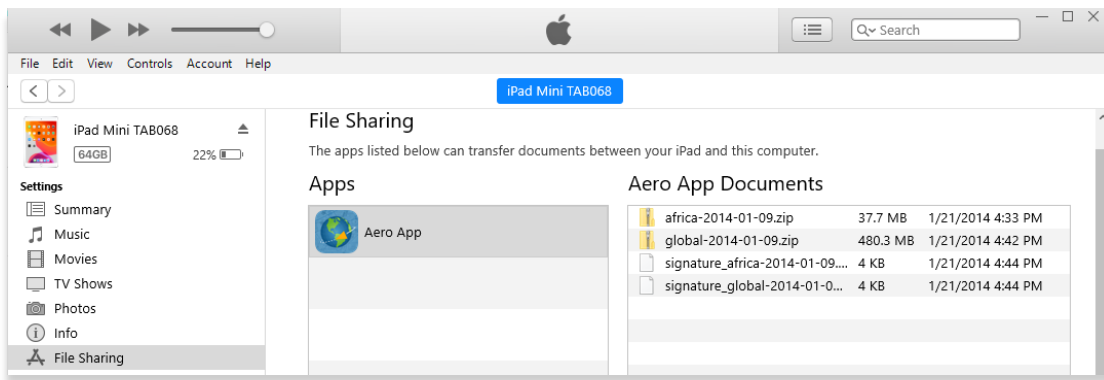


6. Navigate to the Aero App DVD on File Explorer.



Aero App Data DVD

7. Drag and drop desired data files from the Aero App DVD onto Aero App files. Ensure to *include* Global zip and sig file.



8. To confirm if the files were properly transferred, open **Aero App** on your iPad.
9. Tap **App Mgmt** on the **Main Menu**.
10. Tap **Data** on the **Secondary Menu**.
11. The loaded data files will display **Found** if both zip and sig files are present.



**NOTE:** The Global zip and sig file must be included in your sideload.

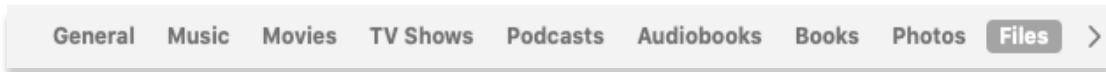


**NOTE:** Refer to [Section 13](#) on how to load and view data status.

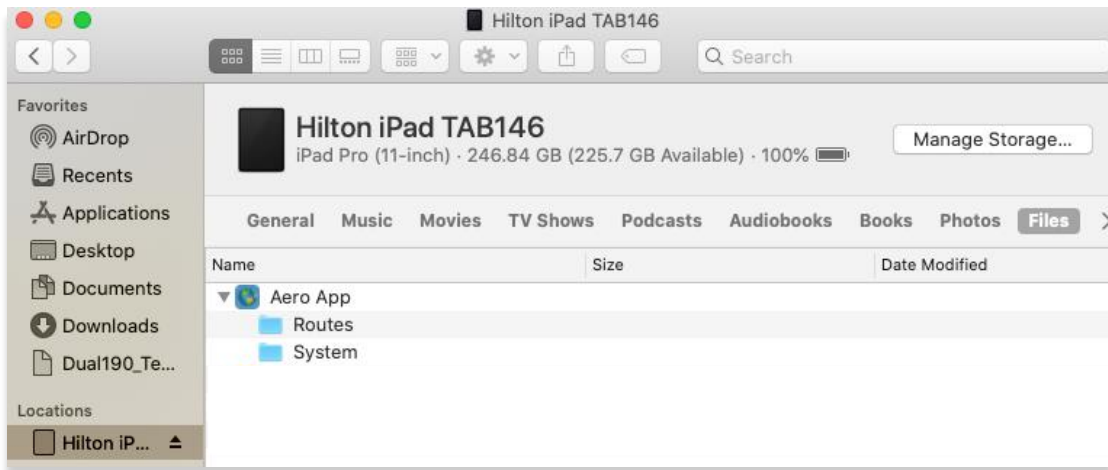
### 11.1.2 Sideload Data Using macOS Catalina or Later

macOS Catalina has replaced the iTunes application. Connect iPad to a USB or USB-C port of a Mac computer running macOS Catalina or later.

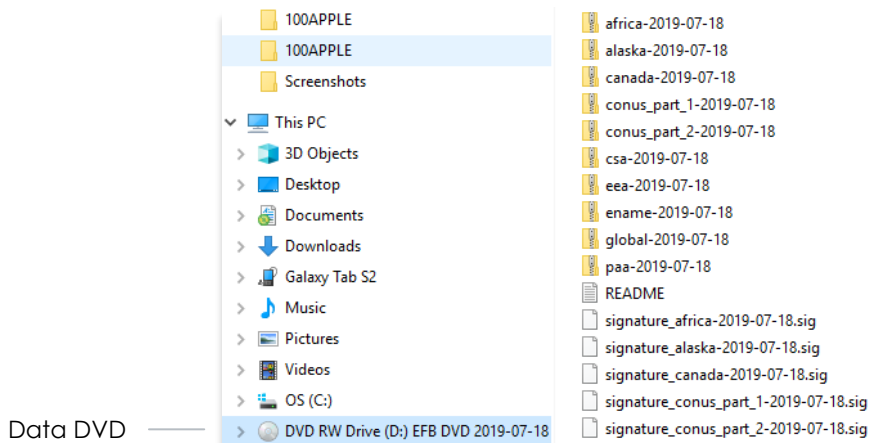
1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. Locate your iPad on the left side of the Finder screen under Locations.
4. The top of the screen will display menu options. Click **Files**.



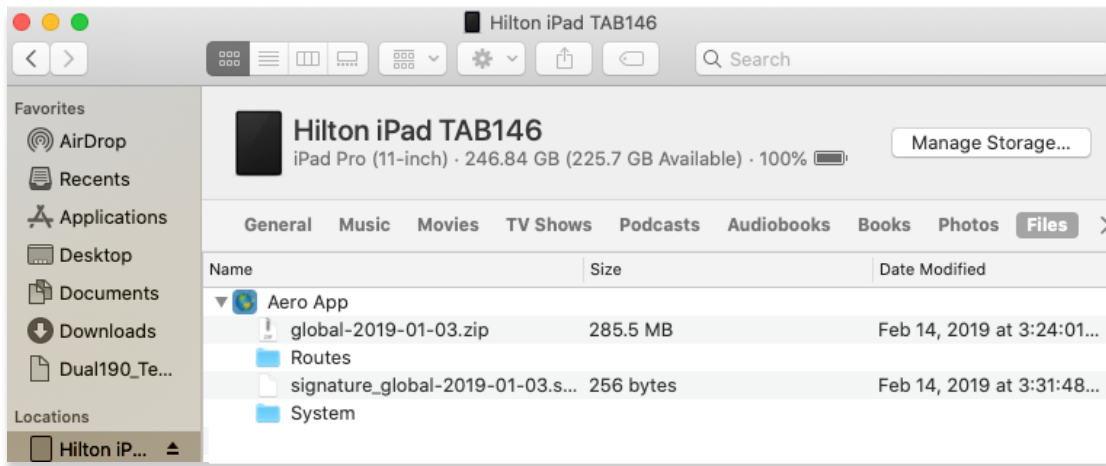
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to expand all available folders.



6. Navigate to the Aero App DVD on File Explorer.



7. Drag and drop desired data files from the Aero App DVD onto Aero App files. Ensure to *include* Global zip and sig file.



8. To confirm if the files were properly transferred, open **Aero App** on your iPad.
9. Tap **App Mgmt** on the **Main Menu**.
10. Tap **Data** on the **Secondary Menu**.
11. The loaded data files will display **Found** if both zip and sig files are present.



**NOTE:** The Global zip and sig file must be included in your sideload.



**NOTE:** Refer to [Section 13](#) on how to load and view data status.

## 11.2 Sideload User Maps

Aero App enables users to load User Maps as their base map. User Maps must be sideloaded. Refer to [Section 15.3.5.7](#) for additional information on how to overlay User Maps on the Moving Map.

Ways to sync device:

- On Windows, open iTunes
- On macOS, open Finder and select device under Locations

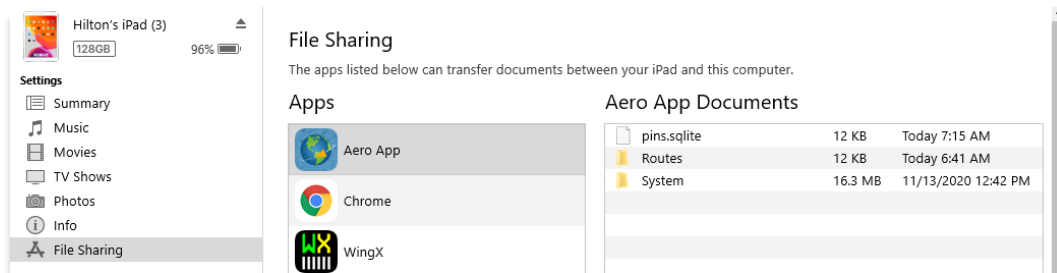
### 11.2.1 Sideload User Maps Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.



**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

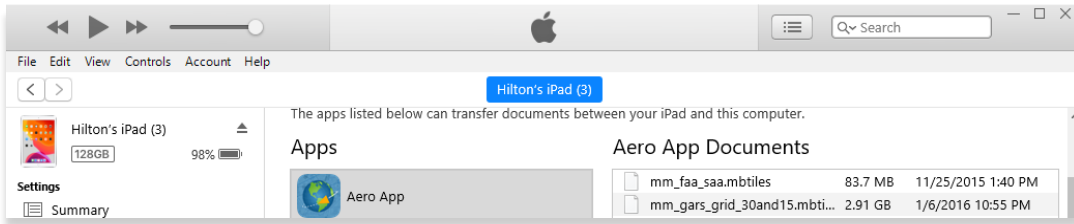
3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.



6. Navigate to the file containing User Maps.

	mm_faa_saa.mbtiles	11/25/2015 1:40 PM	MBTILES File	85,645 KB
	mm_gars_grid_30and15.mbtiles	1/6/2016 10:55 PM	MBTILES File	3,051,108 KB

7. Drag and drop desired User Map file(s) from the Aero App DVD onto Aero App files.



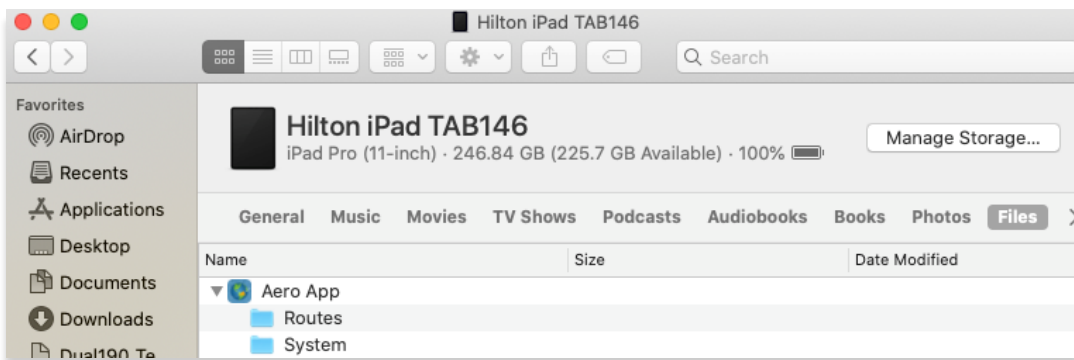
8. To confirm if the files were properly transferred, open **Aero App** on your iPad.
9. Tap **Moving Map** on the **Main Menu**.
10. Tap **Maps**.
11. Tap **User Maps** from the side menu. Your loaded User Maps will be listed. Refer to [Section 15.3.5.7](#) for additional information on User Maps.

## 11.2.2 Sideload User Maps Using macOS Catalina or Later

1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display on the sidebar. Click your device.
4. The top of the page will display menu options. Click **Files**.





5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.

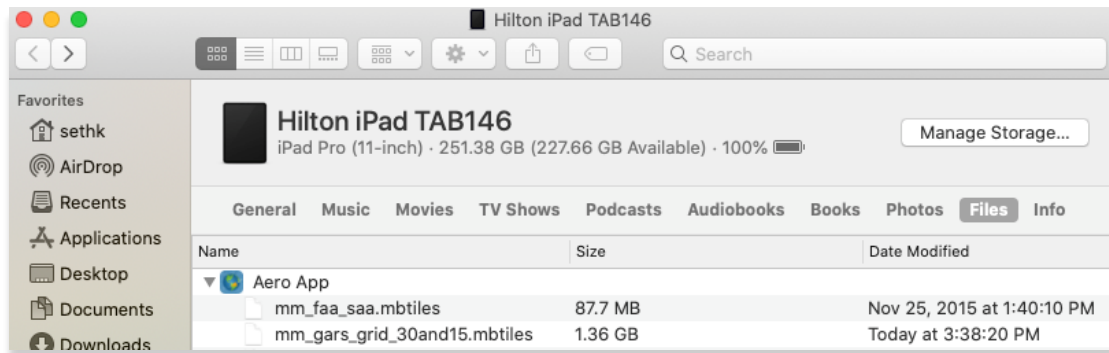




6. Navigate to the file containing User Maps.

	mm_faa_saa.mbtiles	11/25/2015 1:40 PM	MBTILES File	85,645 KB
	mm_gars_grid_30and15.mbtiles	1/6/2016 10:55 PM	MBTILES File	3,051,108 KB

7. Drag and drop desired User Map(s) onto Aero App files.

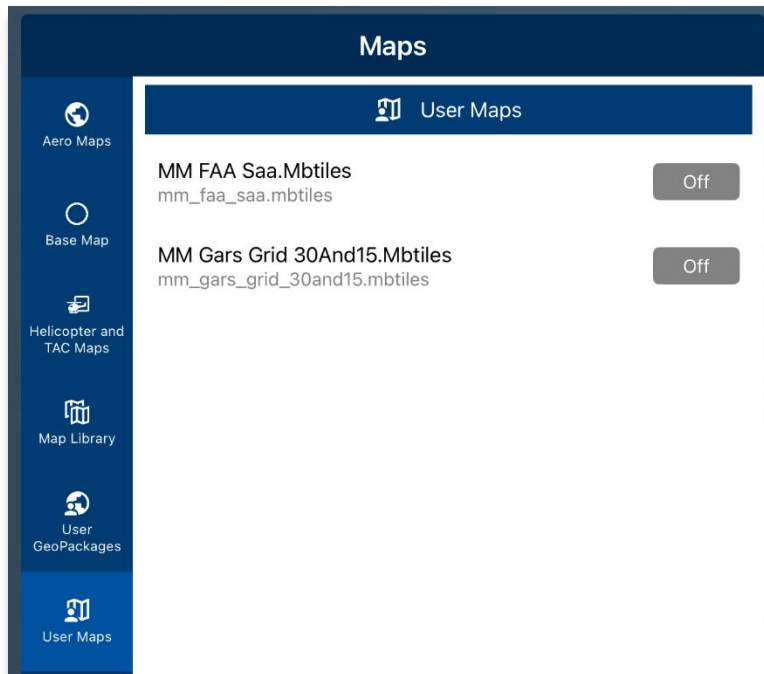


8. To confirm if the files were properly transferred, open **Aero App** on your iPad.

9. Tap **Moving Map** on the **Main Menu**.

10. Tap **Maps**.

11. Tap **User Maps** from the side menu. Your loaded User Maps will be listed. Refer to [Section 15.3.5.7](#) for additional information on User Maps.



## 11.3 Sideload User GeoPackages

Aero App enables users to sideload and load GeoPackages to overlay on the Moving Map. Refer to [Section 15.3.5.6](#) additional information on how to overlay User GeoPackages on the Moving Map.

Ways to sync device:

- On Windows, open iTunes
- On macOS, open Finder and select device under Locations

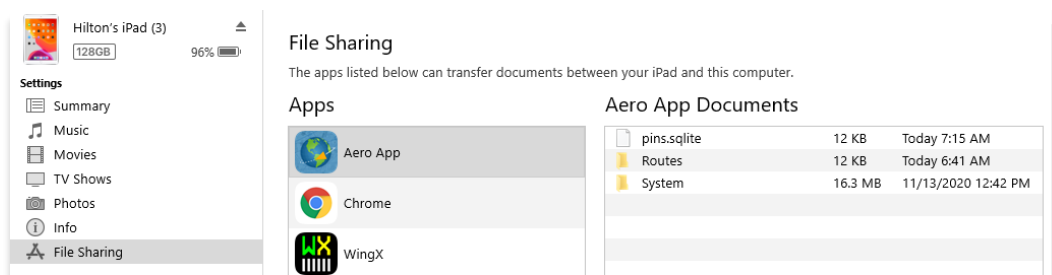
### 11.3.1 Sideload User GeoPackages Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.









**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

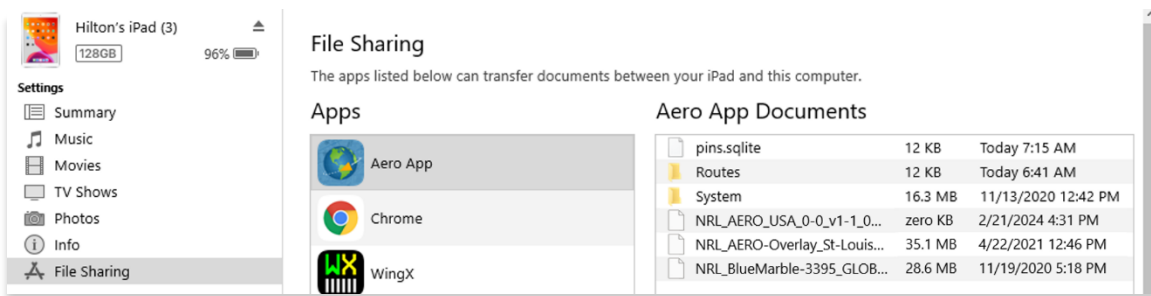
3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.



6. Navigate to the file containing GeoPackages.

	NRL_AERO_St-Louis_4-13_v1-1_02JUL2...	4/22/2021 12:46 PM	GPKG File	47,124 KB
	NRL_AERO_USA_0-0_v1-1_02JUL2019...	4/22/2021 12:46 PM	GPKG File	8,940 KB
	NRL_AERO-Overlay_St-Louis_4-13_v1-...	4/22/2021 12:46 PM	GPKG File	35,844 KB
	NRL_BlueMarble-3395_GLOBAL_0-6_v...	11/19/2020 5:18 PM	GPKG File	29,232 KB
	NRL_DNC_Norfolk_4-16_v1-0_19OCT2...	4/22/2021 12:52 PM	GPKG File	693,020 KB
	NRL_DNC_San-Diego_4-16_v1-0_18OC...	4/22/2021 12:47 PM	GPKG File	86,504 KB

7. Drag and drop desired GeoPackage file(s) onto Aero App files.



8. To confirm if the files were properly transferred, open **Aero App** on your iPad.

9. Tap **Moving Map** on the **Main Menu**.

10. Tap **Maps**.

11. Tap **User GeoPackages** from the side menu. Your loaded GeoPackage files will be listed. Refer to [Section 15.3.5.6](#) for additional information.







### 11.3.2 Sideload User GeoPackages Using macOS Catalina or Later

1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display on the sidebar. Click your device.
4. The top of the page will display menu options. Click **Files**.

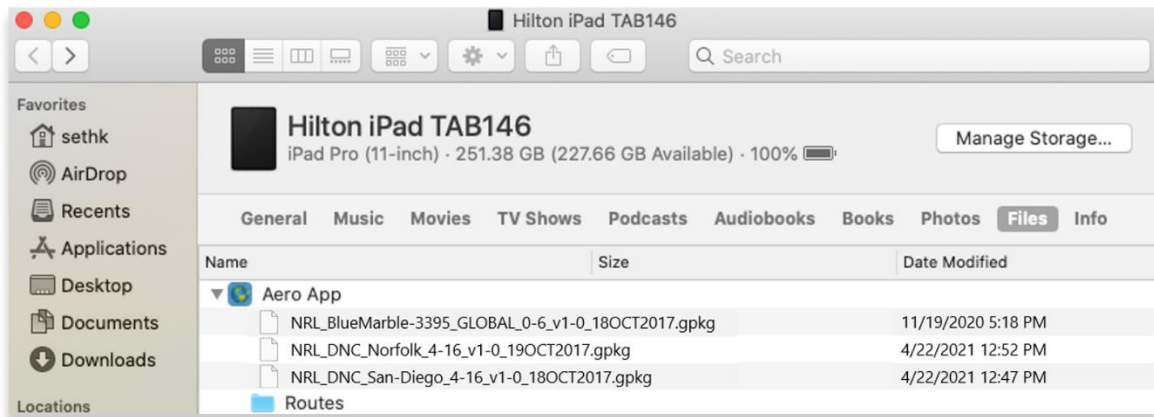


5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.

6. Navigate to the file containing GeoPackages.

	NRL_AERO_St-Louis_4-13_v1-1_02JUL2...	4/22/2021 12:46 PM	GPKG File	47,124 KB
	NRL_AERO_USA_0-0_v1-1_02JUL2019....	4/22/2021 12:46 PM	GPKG File	8,940 KB
	NRL_AERO-Overlay_St-Louis_4-13_v1-...	4/22/2021 12:46 PM	GPKG File	35,844 KB
	NRL_BlueMarble-3395_GLOBAL_0-6_v...	11/19/2020 5:18 PM	GPKG File	29,232 KB
	NRL_DNC_Norfolk_4-16_v1-0_19OCT2...	4/22/2021 12:52 PM	GPKG File	693,020 KB
	NRL_DNC_San-Diego_4-16_v1-0_18OC...	4/22/2021 12:47 PM	GPKG File	86,504 KB

7. Drag and drop desired user GeoPackage(s) onto Aero App files.

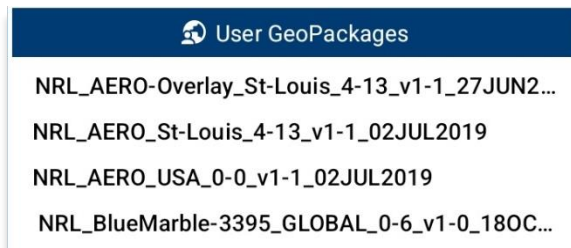


8. To confirm if the files were properly transferred, open **Aero App** on your iPad.

9. Tap **Moving Map** on the **Main Menu**.

10. Tap **Maps**.

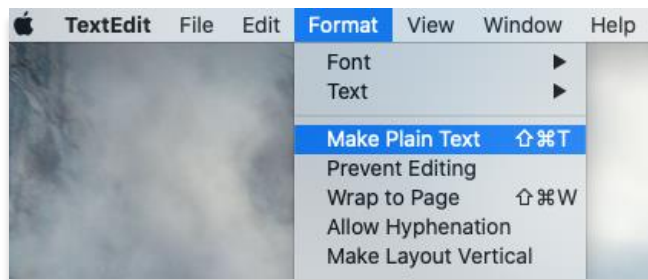
11. Tap **User GeoPackages** from the side menu. Your loaded GeoPackage files will be listed. Refer to [Section 15.3.5.6](#) for additional information.



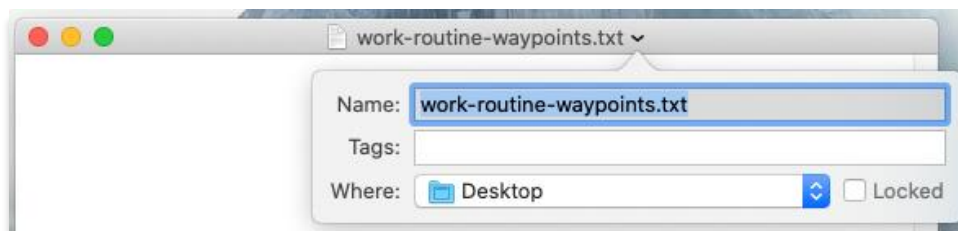
## 11.4 Sideload User Waypoints

Aero App enables users to sideload user waypoints into Aero App. A user waypoint text file must be created. The user waypoint file should follow the format `{name}-waypoints.txt`.

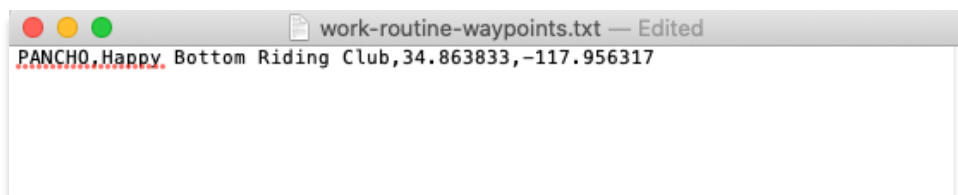
1. Connect your Apple device to a USB or USB-C port of a Mac or Windows computer.
2. Locate device storage on the computer:
  - On Windows, open iTunes
  - On macOS, open Finder and select device under Locations.
3. Create a folder in your desktop named User Waypoints.
4. Right-click on the folder and open **TextEdit** on your Mac desktop.
5. On the upper-left corner of the screen, hover over Format and click **Make Plain Text**.



6. The TextEdit will be renamed to Untitled – Edited.
7. Click the drop-down arrow and create a name for the Text Document following the format: **<waypoint name>-waypoints.txt**.



8. Click on textfile to open TextEdit. Create the Waypoint following the format: **<ID>,<Name>,<Latitude>,<Longitude>**.



- Once the User Waypoint has been created, click the **exit** button to quit the app. Your data will automatically be saved.



**NOTE:** To create User Waypoints, pilots can use TextEdit on a Mac and Notepad on Windows.

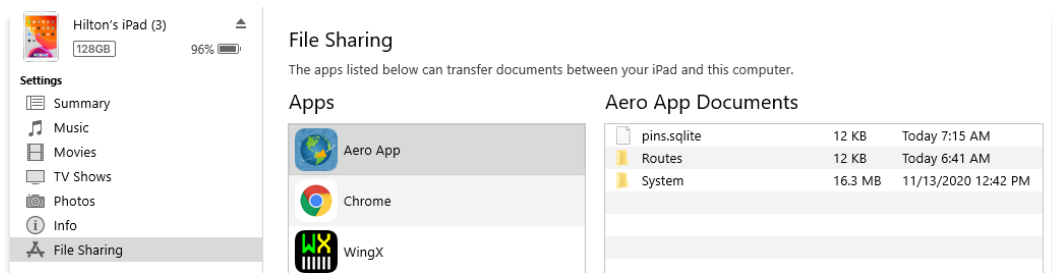
### 11.4.1 Sideload User Waypoints Using iTunes

- Connect your Apple device to a USB or USB-C port of a Windows computer.
- Open **iTunes**.



**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

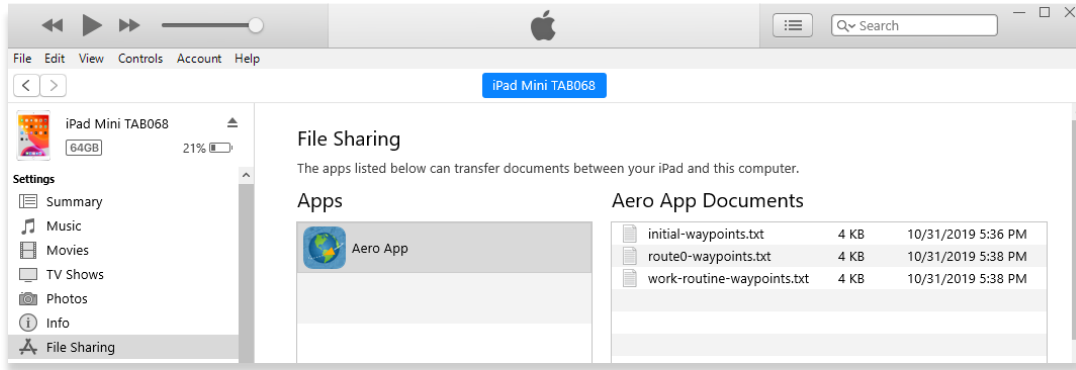
- Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
- In the left sidebar, click **File Sharing**.
- Select **Aero App** from the File Sharing section.



- Navigate to the file containing User Waypoints.

initial-waypoints.txt	Today at 11:43 AM	53 bytes	Plain Text
work-routine-waypoints.txt	Today at 11:52 AM	53 bytes	Plain Text

7. Drag and drop desired User Waypoint(s) onto Aero App files.



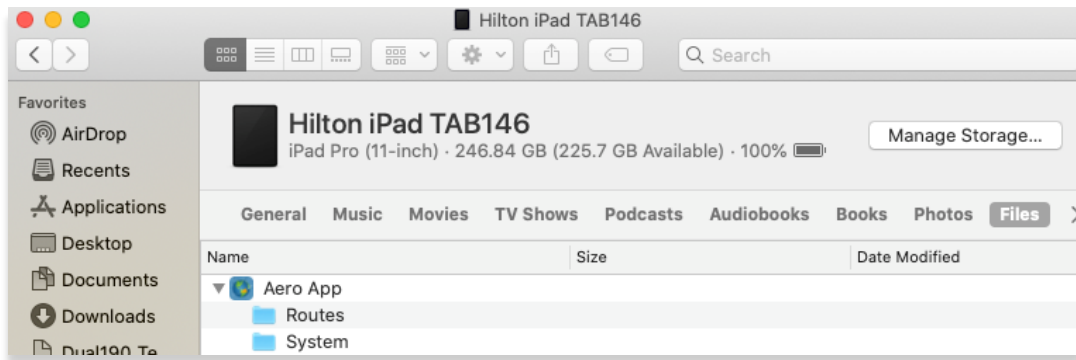
8. To confirm if the files were properly transferred, open **Aero App** on your iPad.
9. Tap the **search icon** on the **Main Menu**.
10. Tap the **text box** and enter the exact name of your user waypoint textfile.
11. The side panel categorizes identifiers. Tap **User Waypoints** and your loaded user waypoint will be listed.

### 11.4.2 Sideload User Waypoints Using macOS Catalina or Later



1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display in the sidebar. Click your device.
4. The top of the screen will display menu options. Click **Files**.



5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



6. Navigate to the file containing User Waypoints.

 initial-waypoints.txt	Today at 11:43 AM	53 bytes	Plain Text
 work-routine-waypoints.txt	Today at 11:52 AM	53 bytes	Plain Text

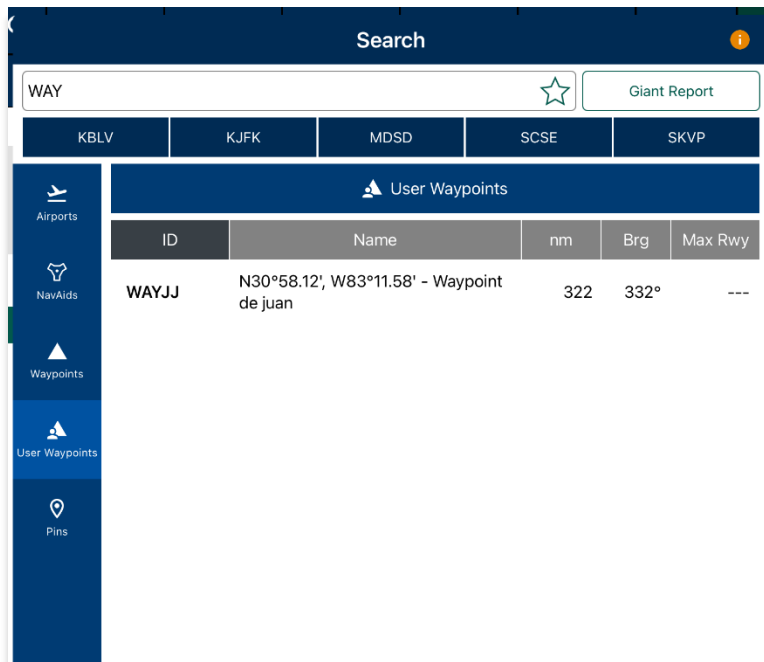
7. Drag and drop desired User Waypoint(s) onto Aero App files.



8. To confirm if the files were properly transferred, open **Aero App** on your iPad.

9. Tap the **search icon** on the **Main Menu**.

10. The side panel categorizes identifiers. Tap **User Waypoints** and your loaded user waypoint will be listed.





## 11.5 Sideload Common Route Definition (CRD) Files

Aero App enables users to sideload and import routes using Common Route Definition (CRD) files. Refer to [Section 15.3.14.3.1.1.1](#) for guidance on how to load CRD files to Aero App.

Ways to sync device:

- On Windows, open iTunes
- On macOS, open Finder and select device under Locations

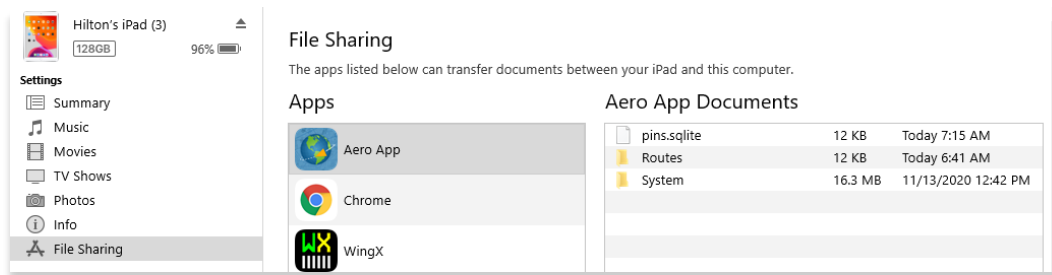
### 11.5.1 Sideload CRD Files Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.



**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

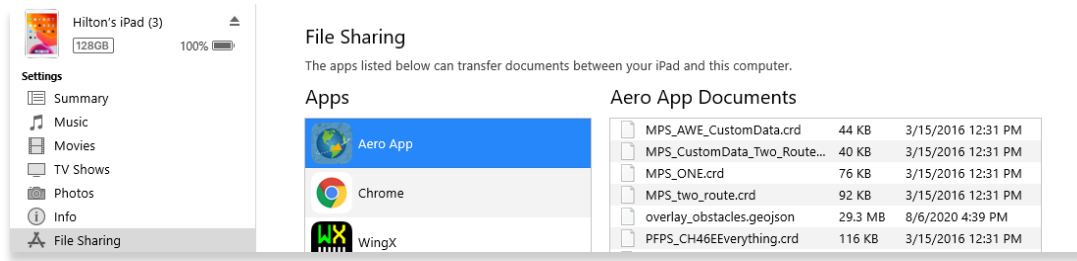
3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.



6. Navigate to the file containing CRD files.

MPS_AWE_CustomData.crd	3/15/2016 12:31 PM	CRD File	41 KB
MPS_CustomData_Two_Routes.crd	3/15/2016 12:31 PM	CRD File	38 KB
MPS_ONE.crd	3/15/2016 12:31 PM	CRD File	75 KB
MPS_two_route.crd	3/15/2016 12:31 PM	CRD File	90 KB
PFPS_CH46EEverything.crd	3/15/2016 12:31 PM	CRD File	113 KB

7. Drag and drop desired CRD file(s) onto Aero App files.



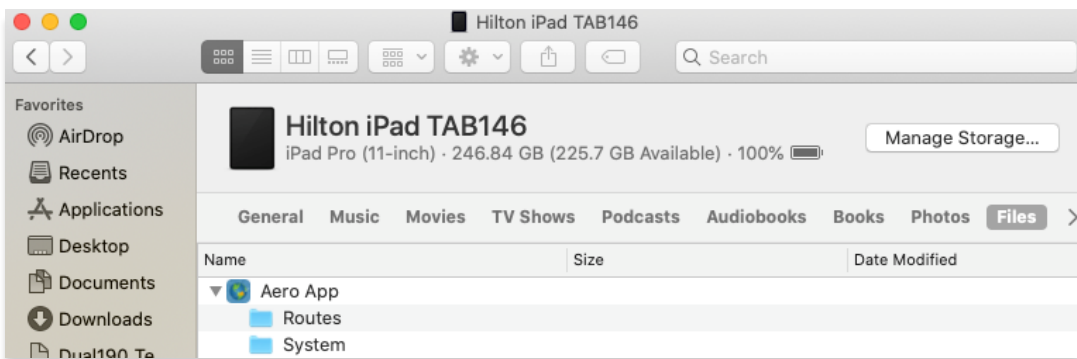
8. To confirm if the files were properly transferred, open **Aero App** on your iPad.
9. Tap **Moving Map** on the **Main Menu**.
10. Navigate to the **Route Panel**.
11. Tap **Route**.
12. The Route menu will appear. Select **Actions** from the side menu, if necessary.
13. Tap **Load** and your CRD files will be listed.

### 11.5.2 Sideload CRD Files Using macOS Catalina or Later

1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display in the sidebar. Click your device.
4. The top of the screen will display menu options. Click **Files**.



5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



6. Navigate to the file containing CRD files.

MPS_AWE_CustomData.crd	3/15/2016 12:31 PM	CRD File	41 KB
MPS_CustomData_Two_Routes.crd	3/15/2016 12:31 PM	CRD File	38 KB
MPS_ONE.crd	3/15/2016 12:31 PM	CRD File	75 KB
MPS_two_route.crd	3/15/2016 12:31 PM	CRD File	90 KB
PFPS_CH46EEverything.crd	3/15/2016 12:31 PM	CRD File	113 KB

7. Drag and drop desired CRD file(s) onto Aero App files.



8. To confirm if the files were properly transferred, open **Aero App** on your iPad.

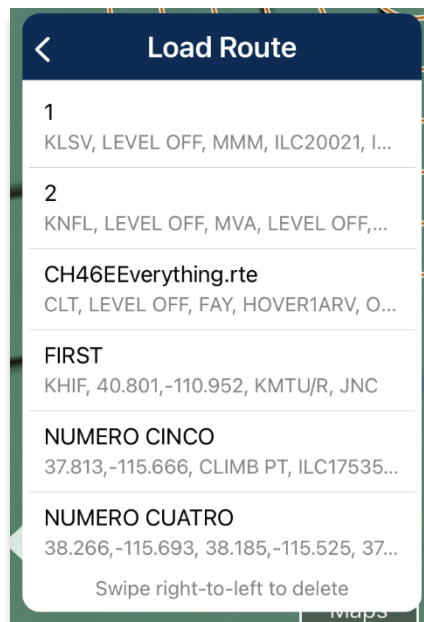
9. Tap **Moving Map** on the **Main Menu**.

10. Navigate to the **Route Panel**.

11. Tap **Route**.

12. The Route menu will appear. Select **Actions** from the side menu, if necessary.

13. Tap **Load** and your CRD files will be listed.



## 11.6 Sideload Pins

Aero App enables users to sideload Pins into Aero App. To sideload Pins, users must create a SQLite file. Refer to [Appendix C | Hazards and Pins SQLite Files](#) for additional information. The Pin SQLite file should follow the format *pins-{name}.sqlite* and be stored in the AeroApp\Pins directory.

A file with the format *pins.sqlite* contains stored pins that were created through the app. These pins are viewed in the Dropped Pins table on Aero App. Refer to [Section 15.3.14.3.4.2](#) for additional information.

Ways to sync device:

- On Windows, open iTunes
- On macOS, open Finder and select device under Locations

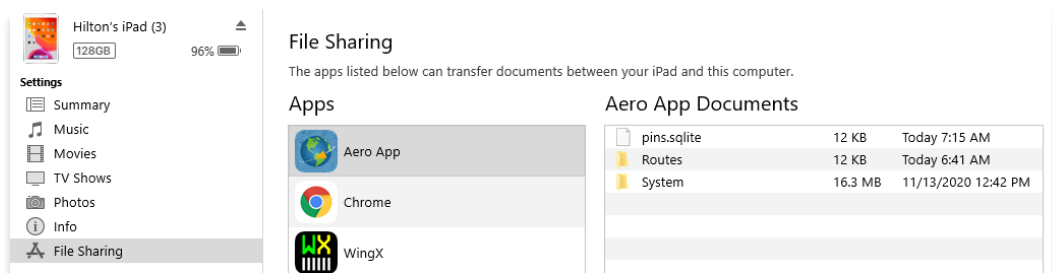
### 11.6.1 Sideload Pins Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.

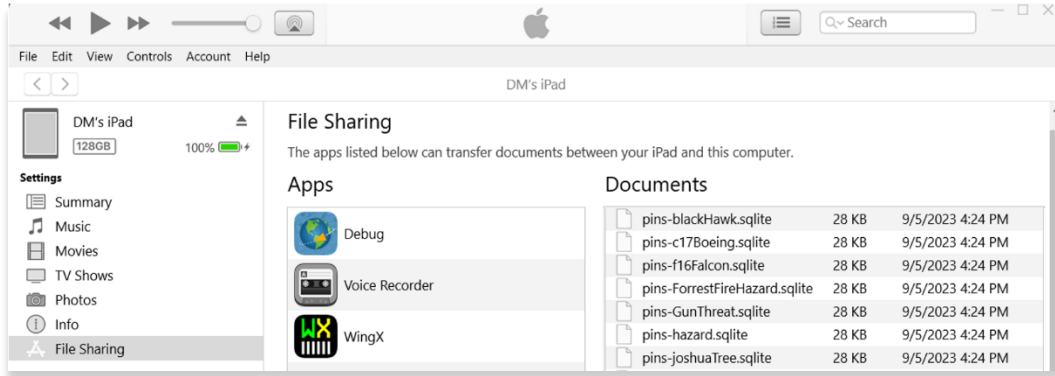


**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.

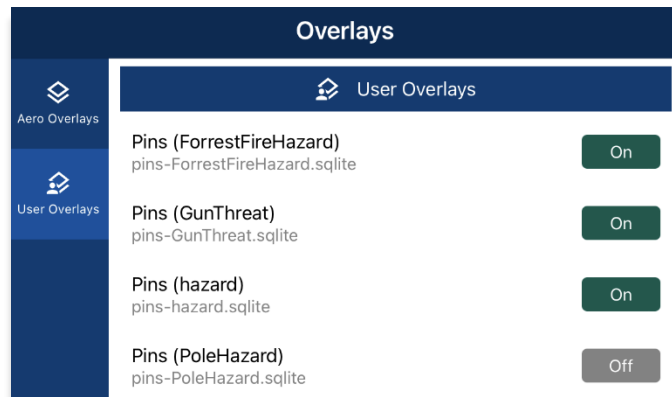


6. Locate the pins.sqlite files you wish to sideload onto Aero App. Rename the SQLite file to the format, *pins-{name}.sqlite*.
7. Drag and drop desired pin SQLite file(s) onto Aero App files.



**NOTE:** If the imported file is not renamed, any pins stored in pins.sqlite will be overwritten.

8. To confirm if the files were properly imported, open **Aero App** on your iPad.
9. Tap **Moving Map** on the **Main Menu**.
10. Tap **Overlays** located at the bottom-right corner of the Moving Map screen.
11. Tap **User Overlays** from the side menu.
12. Locate your imported files. The files should display as *pins-{name}.sqlite*. Users must enable *Pins* from the Overlays menu to view on the Moving Map. Refer to [Section 15.3.6.1.19](#) for additional information.



**NOTE:** If photo pins were sideloaded, users must enable *User Images* from the Overlays menu to view on the Moving Map. Refer to [Section 15.3.6.1.27](#) for additional information.

13. Tap your desired imported pins file and your pin will overlay on the Moving Map.



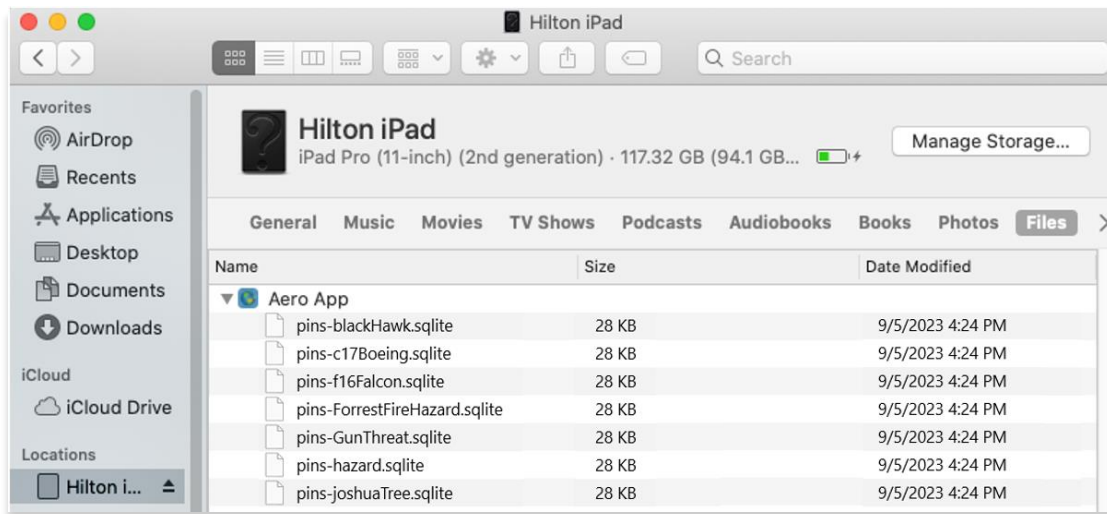
14. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the *delete* button of the file that you choose to permanently remove. Tap **Delete**.

## 11.6.2 Sideload Pins Using macOS Catalina or Later

1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display in the sidebar. Click your device.
4. The top of the screen will display menu options. Click **Files**.

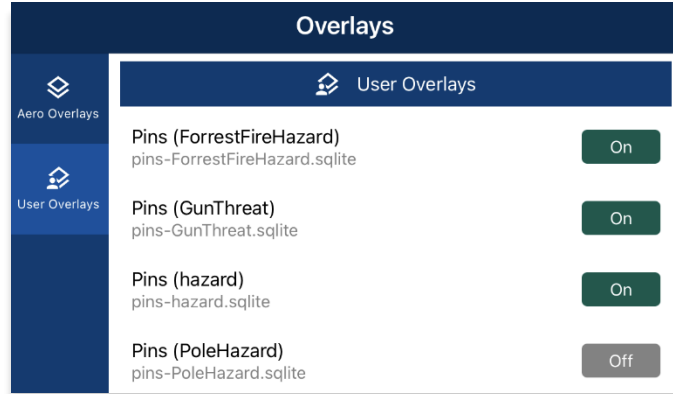


5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.
6. Locate the pins.sqlite files that you wish to sideload onto Aero App. Rename the SQLite file to the format, *pins-{name}.sqlite*.
7. Drag and drop desired pins SQLite file(s) onto Aero App files.



8. To confirm if the files were properly imported, open **Aero App** on your iPad.
9. Tap **Moving Map** on the **Main Menu**.
10. Tap **Overlays** located at the bottom-right corner of the Moving Map screen.
11. Tap **User Overlays** from the side menu.

12. Locate your imported files. The files should display as *pins-{name}.sqlite*. Users must enable *Pins* from the *Overlays* menu to view on the Moving Map. Refer to [Section 15.3.6.1.19](#) for additional information.



**NOTE:** If photo pins were sideloaded, users must enable *User Images* from the *Overlays* menu to view on the Moving Map. Refer to [Section 15.3.6.1.27](#) for additional information.

13. Tap your desired imported pins file and your pin will overlay on the Moving Map.



14. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the *delete* button of the file that you choose to permanently remove. Tap **Delete**.



## 11.7 Sideload Hazards

Aero App enables users to sideload Hazards into Aero App. To sideload Hazards, users must create a SQLite file. Refer to [Appendix C | Hazards and Pins SQLite Files](#) for additional information. The Hazard SQLite file should follow the format *pins-{name}.sqlite* and be stored in the AeroApp\Pins directory.

A file with the format *pins.sqlite* contains stored hazards that were created through the app. These hazards are viewed in the Dropped Hazards table on Aero App. Refer to [Section 15.3.14.3.4.3](#) for additional information.

Ways to sync device:

- On Windows, open iTunes
- On macOS, open Finder and select device under Locations

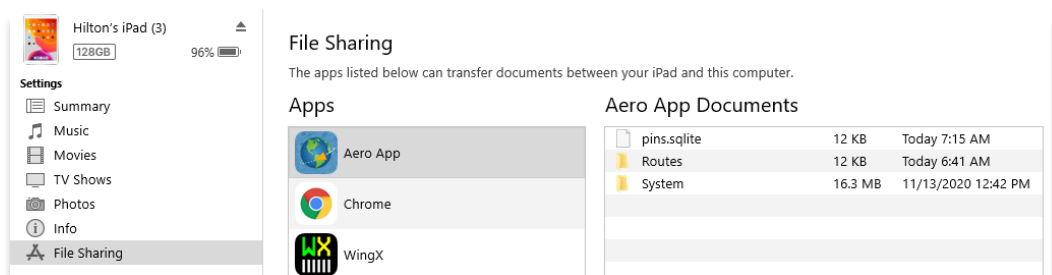
### 11.7.1 Sideload Hazards Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.

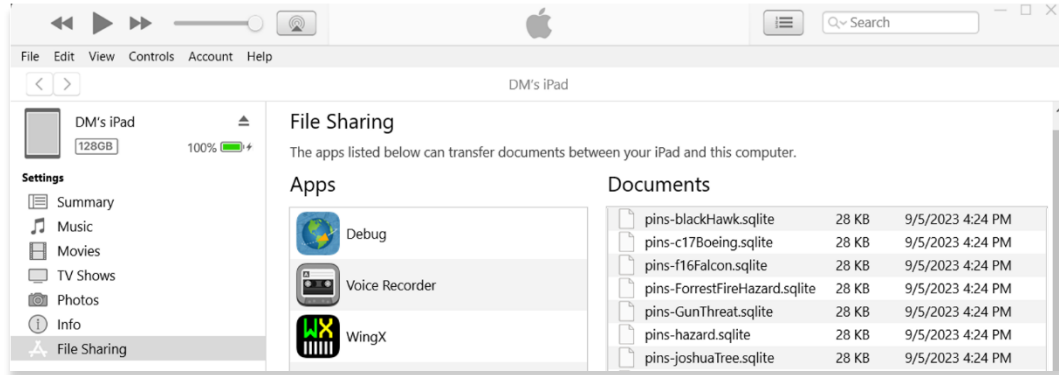


**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.

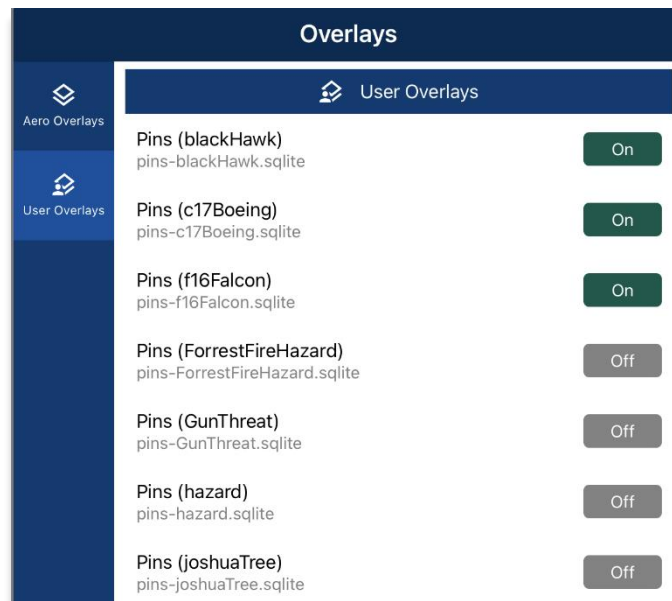


6. Locate the pins.sqlite files you wish to sideload onto Aero App. Rename the SQLite file to the format, *pins-{name}.sqlite*.
7. Drag and drop desired pins SQLite file(s) onto Aero App files.

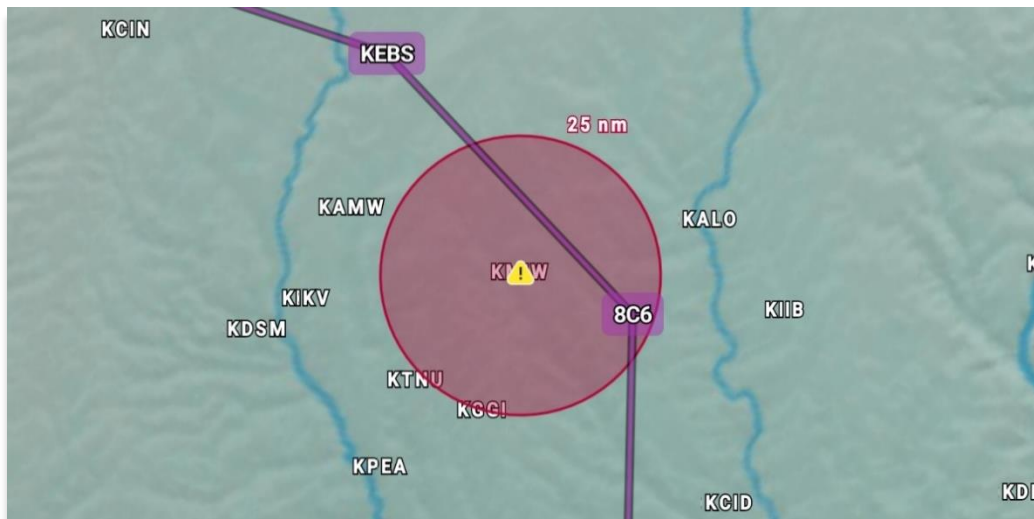


**NOTE:** If the imported file is not renamed, any pins stored in pins.sqlite will be overwritten.

8. To confirm if the files were properly imported, open **Aero App** on your iPad.
9. Tap **Moving Map** on the **Main Menu**.
10. Tap **Overlays**.
11. Tap **User Overlays** from the side menu.
12. Locate your imported files. The files should display as *pins-{name}.sqlite*. Users must enable *Hazards* from the Overlays menu to view on the Moving Map. Refer to [Section 15.3.6.1.13](#) for additional information.



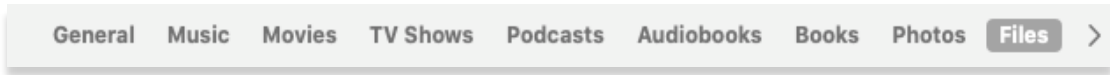
13. Tap your desired imported pins file and your hazard will overlay on the Moving Map.



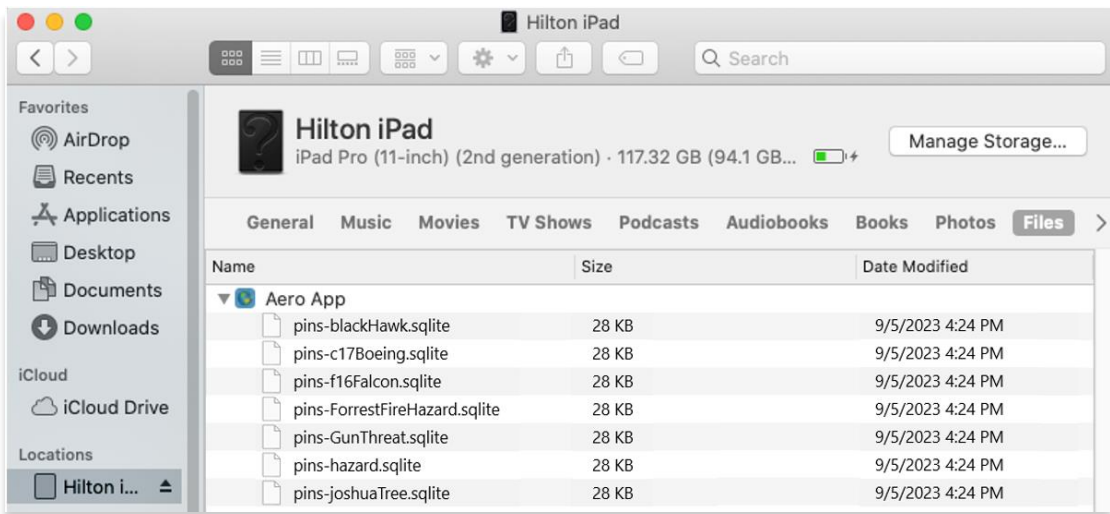
14. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

## 11.7.2 Sideload Hazards Using macOS Catalina or Later

1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display in the sidebar. Click your device.
4. The top of the screen will display menu options. Click **Files**.

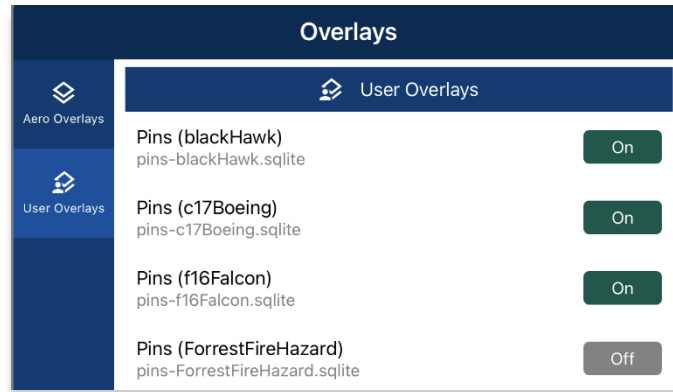


5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.
6. Locate the pins.sqlite files that you wish to sideload onto Aero App. Rename the SQLite file to the format, *pins-{name}.sqlite*.
7. Drag and drop desired pins SQLite file(s) onto Aero App files.

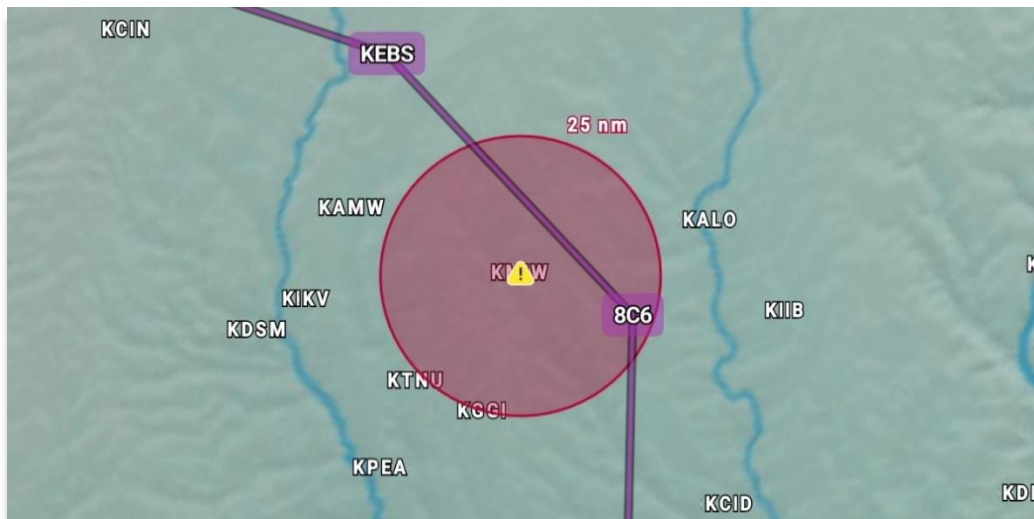


8. To confirm if the files were properly imported, open **Aero App** on your iPad.
9. Tap **Moving Map** on the **Main Menu**.
10. Tap **Overlays**.
11. Tap **User Overlays** from the side menu.

12. Locate your imported files. The files should display as *pins-{name}.sqlite*. Users must enable *Hazards* from the *Overlays* menu to view on the Moving Map. Refer to [Section 15.3.6.1.13](#) for additional information.



13. Tap your desired imported pins file and your hazard will overlay on the Moving Map.



14. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

## 11.8 Sideload Documents

Your document of choice can be viewed on Aero App. User documents can be sideloaded onto Aero App and viewed under General.

Ways to sync device:

- On Windows, open iTunes
- On macOS, open Finder and select device under Locations

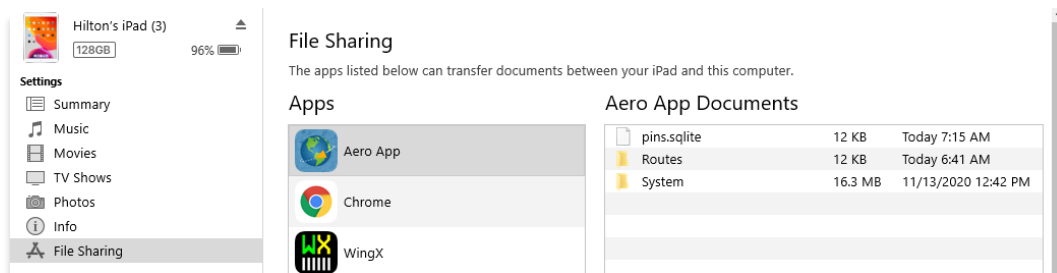
### 11.8.1 Sideload Documents Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.



**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

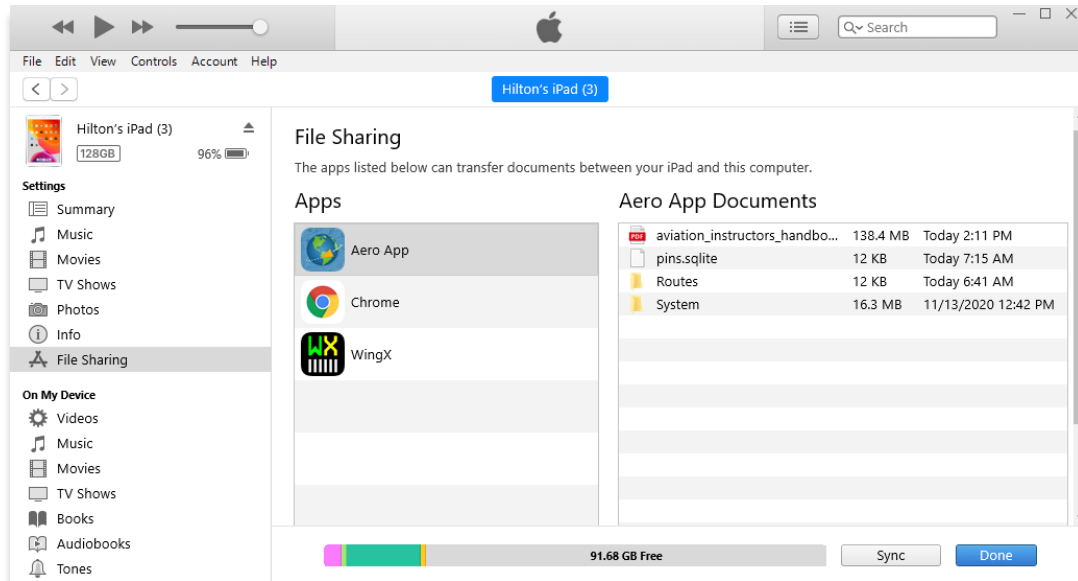
3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.



6. Navigate to the file containing documents.

AeroApp-Windows-1.2012-UserManual	11/4/2020 4:49 PM	Microsoft Edge P...	9,952 KB
aviation_instructors_handbook	11/19/2020 2:11 PM	Microsoft Edge P...	141,705 KB

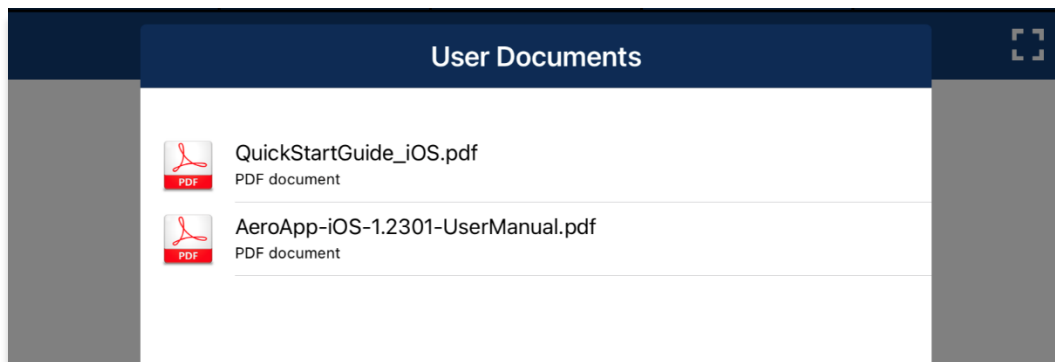
7. Drag and drop desired document(s) onto Aero App files.



8. To confirm if the files were properly transferred, open **Aero App** on your tablet.
9. Tap **General** on the **Main Menu**.
10. Tap **Docs** on the **Secondary Menu**.
11. Tap the **actions ribbon** to select a document.



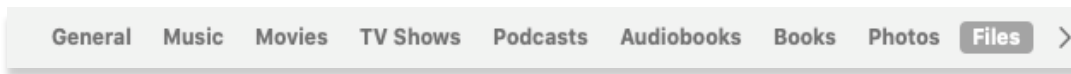
12. Your loaded PDF file(s) will be listed.



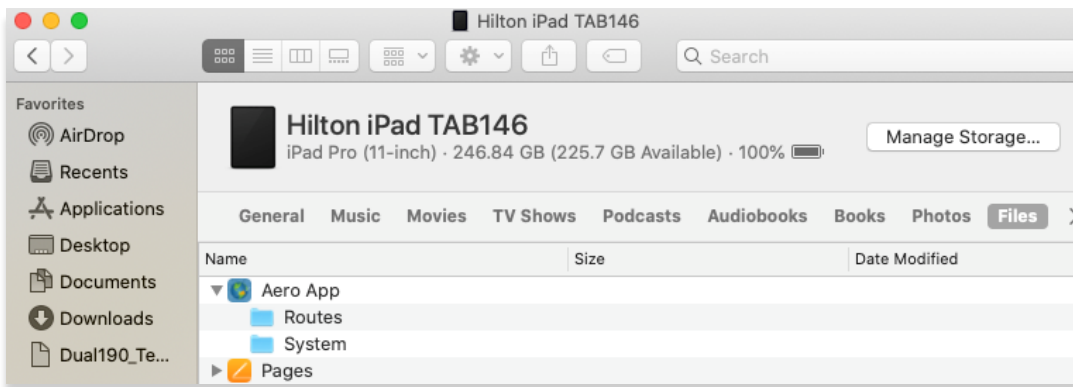
**NOTE:** Alternatively, users can view user documents from a split screen view. For more information, refer to [Section 15.3.10.2](#).

## 11.8.2 Sideload Documents Using macOS Catalina or Later

1. Connect your device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display in the sidebar. Click your device.
4. The top of the screen will display menu options. Click **Files**.



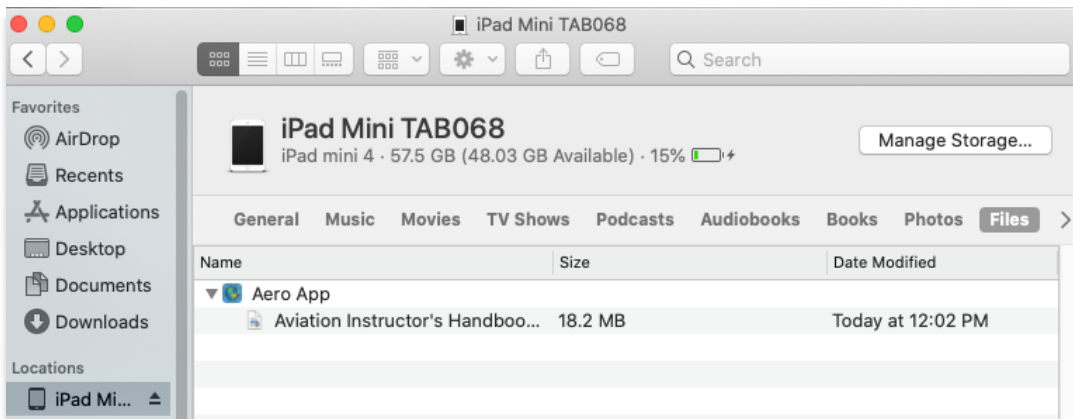
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



6. Navigate to the file containing documents.

Name	Size	Date Modified	Kind
AeroApp-Windows-1.2012-UserManual	9,952 KB	11/4/2020 4:49 PM	Microsoft Edge P...
aviation_instructors_handbook	141,705 KB	11/19/2020 2:11 PM	Microsoft Edge P...

7. Drag and drop desired document(s) onto Aero App files.

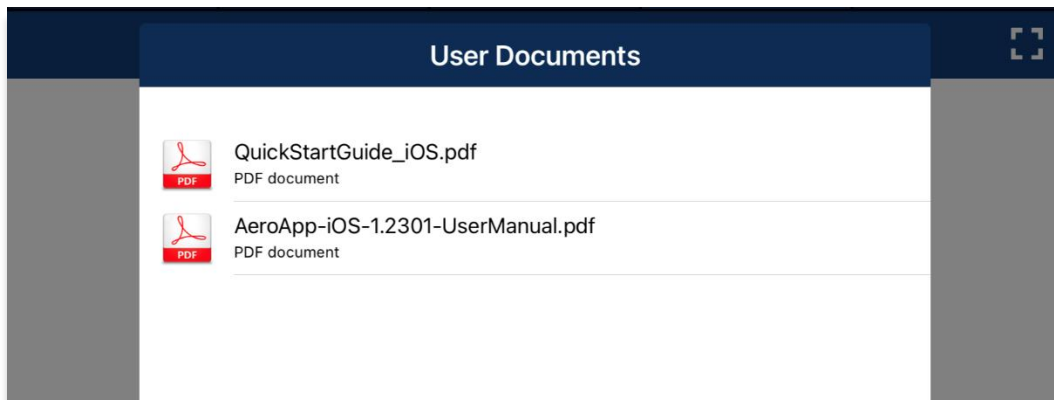




8. To confirm if the files were properly transferred, open **Aero App** on your tablet.
9. Tap **General** on the **Main Menu**.
10. Tap **Docs** on the **Secondary Menu**.
11. Tap the **actions ribbon** to select a document.



12. The loaded PDF file(s) will be listed.



**NOTE:** Alternatively, users can view user documents from a split screen view. For more information, refer to [Section 15.3.10.2](#).

## 11.9 Sideload KML/KMZ

Aero App enables users to sideload KML/KMZ files. Users can add KML/KMZ routes onto their route panel. Refer to [Section 15.3.14.3.1.1](#) for more information.

Ways to sync device:

- On Windows, open iTunes
- On macOS, open Finder and select device under Locations

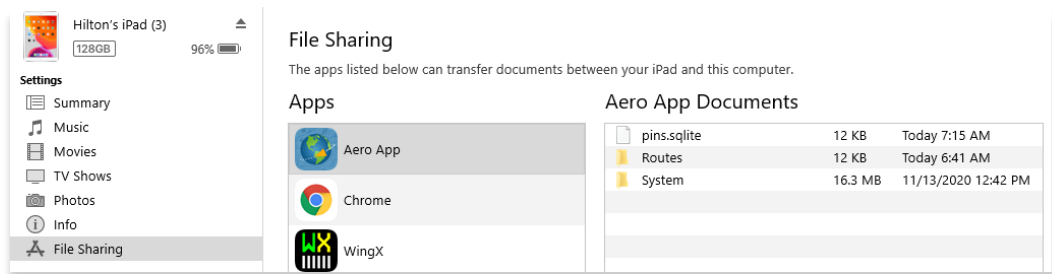
### 11.9.1 Sideload KML/KMZ Files Using iTunes

1. Connect your Apple device to a USB or USB-C port of a Windows computer.
2. Open **iTunes**.



**NOTE:** Alternatively, users can enable the **Automatically sync when this iPad is connected** option on iTunes. Go to *Summary* > scroll down to *Options* > enable *Automatically sync when iPad is connected*. iTunes will automatically open once you connect your device to your computer.

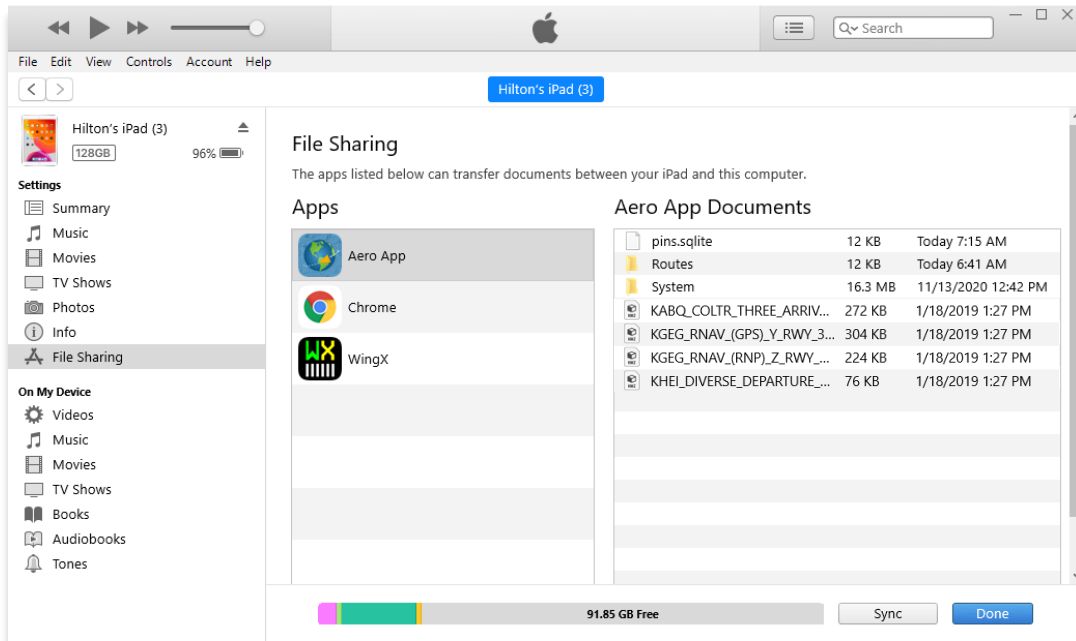
3. Allow your computer to recognize your device. Once recognized, an iPad icon will appear. Click the iPad icon and your device information will display.
4. In the left sidebar, click **File Sharing**.
5. Select **Aero App** from the File Sharing section.



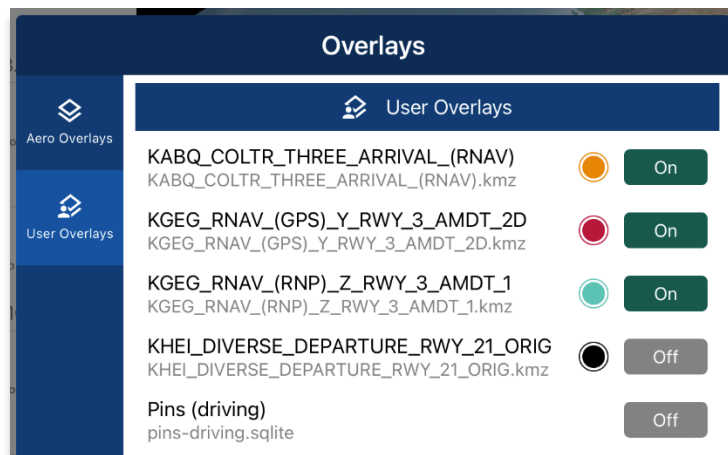
6. Navigate to the file containing KML/KMZ files.

KABQ_COLTR_THREE_ARRIVAL_(RNAV)	1/18/2019 1:27 PM	KMZ File	269 KB
KGEG_RNAV_(GPS)_Y_RWY_3_AMDT_2D	1/18/2019 1:27 PM	KMZ File	301 KB
KGEG_RNAV_(RNP)_Z_RWY_3_AMDT_1	1/18/2019 1:27 PM	KMZ File	221 KB

7. Drag and drop desired KML/KMZ file(s) onto Aero App files.



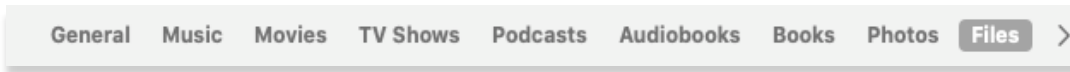
8. To confirm if the files were properly transferred, open **Aero App** on your tablet.  
 9. Tap **Moving Map** on the **Main Menu**.  
 10. Tap **Overlays**.  
 11. Tap **User Overlays** from the side menu. Your sideloaded KML/KMZ files will be shown below.  
 12. Tap desired KML/KMZ file and it will overlay on the Moving Map.



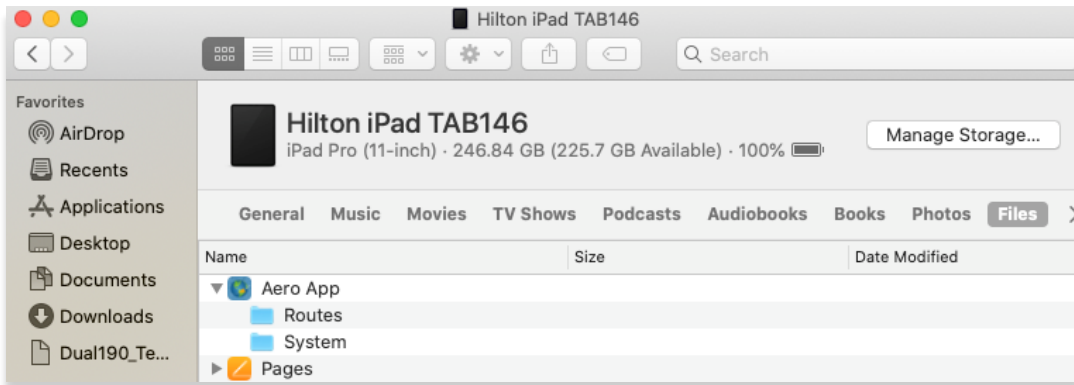
13. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

## 11.9.2 Sideload KML/KMZ Files Using macOS Catalina or Later

1. Connect your Apple device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. On the Finder window, your device will display in the sidebar. Click your device.
4. The top of the screen will display menu options. Click **Files**.



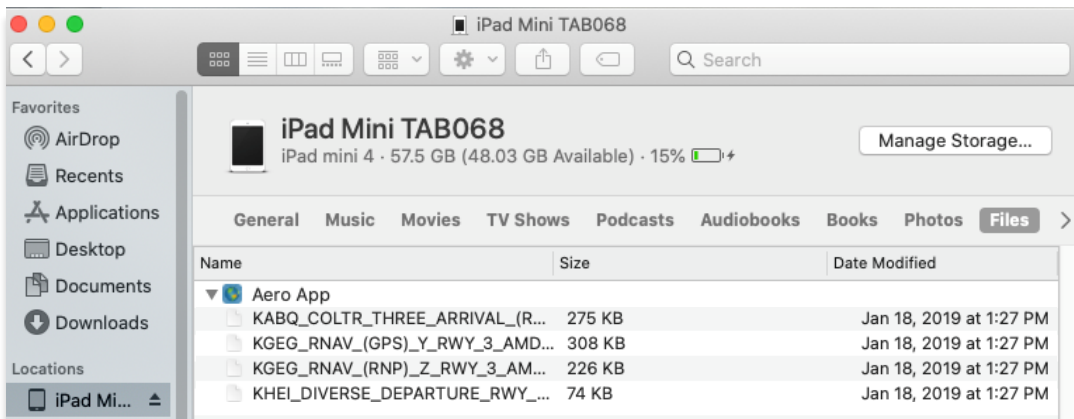
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



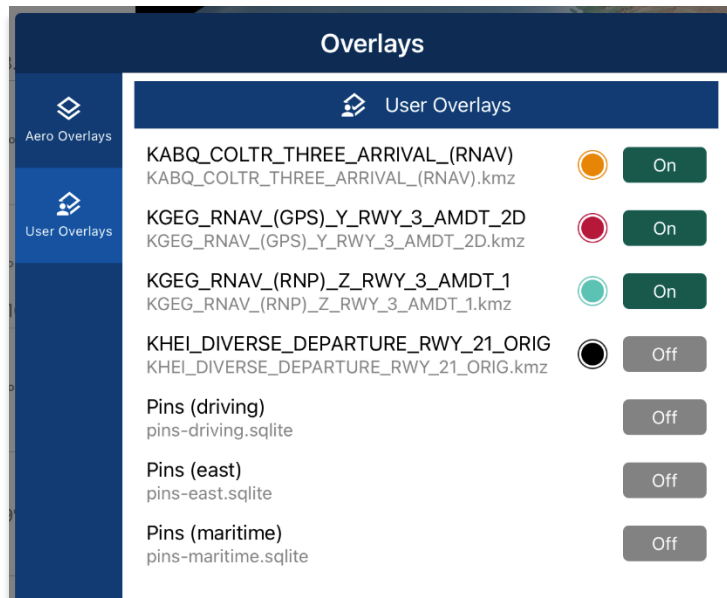
6. Navigate to the file containing KML/KMZ files.

Name	Size	Date Modified	Type
KABQ_COLTR_THRE...RRIVAL_(RNAV).kmz	275 KB	Jan 18, 2019 at 1:27 PM	Document
KGEG_RNAV_(GPS)...Y_3_AMDT_2D.kmz	308 KB	Jan 18, 2019 at 1:27 PM	Document
KGEG_RNAV_(RNP)...RWY_3_AMDT_1.kmz	226 KB	Jan 18, 2019 at 1:27 PM	Document
KHEI_DIVERSE_DEP...E_RWY_21_ORIG.kmz	74 KB	Jan 18, 2019 at 1:27 PM	Document

7. Drag and drop desired KML/KMZ file(s) onto Aero App files.



8. To confirm if the files were properly transferred, open **Aero App** on your tablet.
9. Tap **Moving Map** on the **Main Menu**.
10. Tap **Overlays**.
11. Tap **User Overlays** from the side menu. Your sideloaded KML/KMZ files will be shown below.
12. Tap desired KML/KMZ file and it will overlay on the Moving Map.



13. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

## 12 Updating Aero App Data

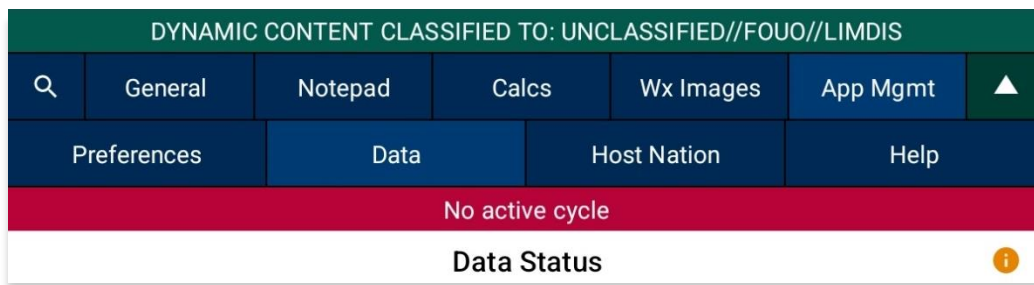
Aero App Data updates are released periodically. Users can load and manage up to two data cycles at a time. Aero App data cycle releases every 28-days, thereby users will need to download the latest data cycle, respectively.

### 12.1 Data Notification

Aero App provides data notifications to identify the status of the data cycle loaded on your device. The notifications inform users that there is no active cycle loaded, or if the active data cycle is not current.

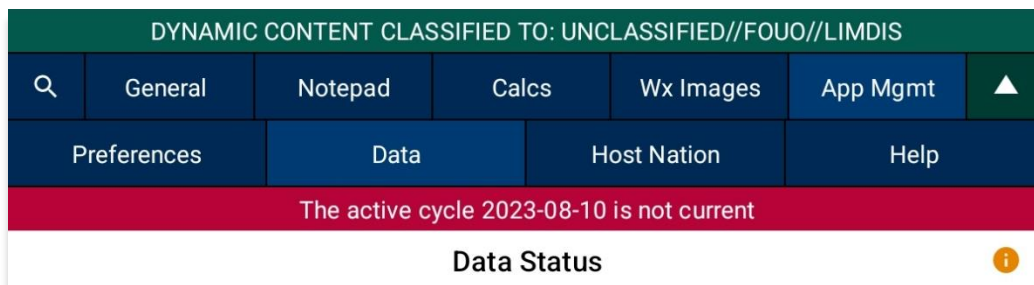
#### No active cycle

Aero App displays airport information, FLIP charts and other data for the Active Cycle. If no Active Cycle is selected, Aero App will display the following notification. If there is data in the Standby Cycle, then tap **Swap Cycles** on the Data Status screen to move the data to the Active Cycle. If there is no data in either cycle, then data must be downloaded or sideloaded.



#### Active cycle is not current

Aero App will display a data notification if the Active Cycle is not current. In this configuration, Aero App will not display current information and it is recommended to ensure that the Active Cycle is always current.



## 13 Manage Data

Aero App has several platforms to load data. This section will explain the different ways to load data and view data status.

### 13.1 Data Status

The Data Status page allows users to view information pertaining to the data cycle. There are options to download, view, and delete data cycles, view effective dates, swap cycles, import data, and load downloaded data to make them active or to keep them on standby. This page also includes the option to share data with your team members.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu** to view data information. The *Data Status* screen will display.
3. The effective cycle dates of the Active Cycle are displayed on the left, and the Standby Cycle are displayed on the right. From this screen, you can also download new data when they become available.

Active Cycle Effective Dates

Standby Cycle Effective Dates

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Preferences Data Host Nation Help

**Data Status**

Active Cycle **Delete** **View** Standby Cycle **Delete** **View**

Effective 2023-10-05 through 2023-11-01 (2310) Effective 2023-09-07 through 2023-10-04 (2309)

Download Delta files (faster) **On** **Share**

**Download** **Refresh** **Import** **Load all data**

**Swap Cycles** **Delete from Documents**

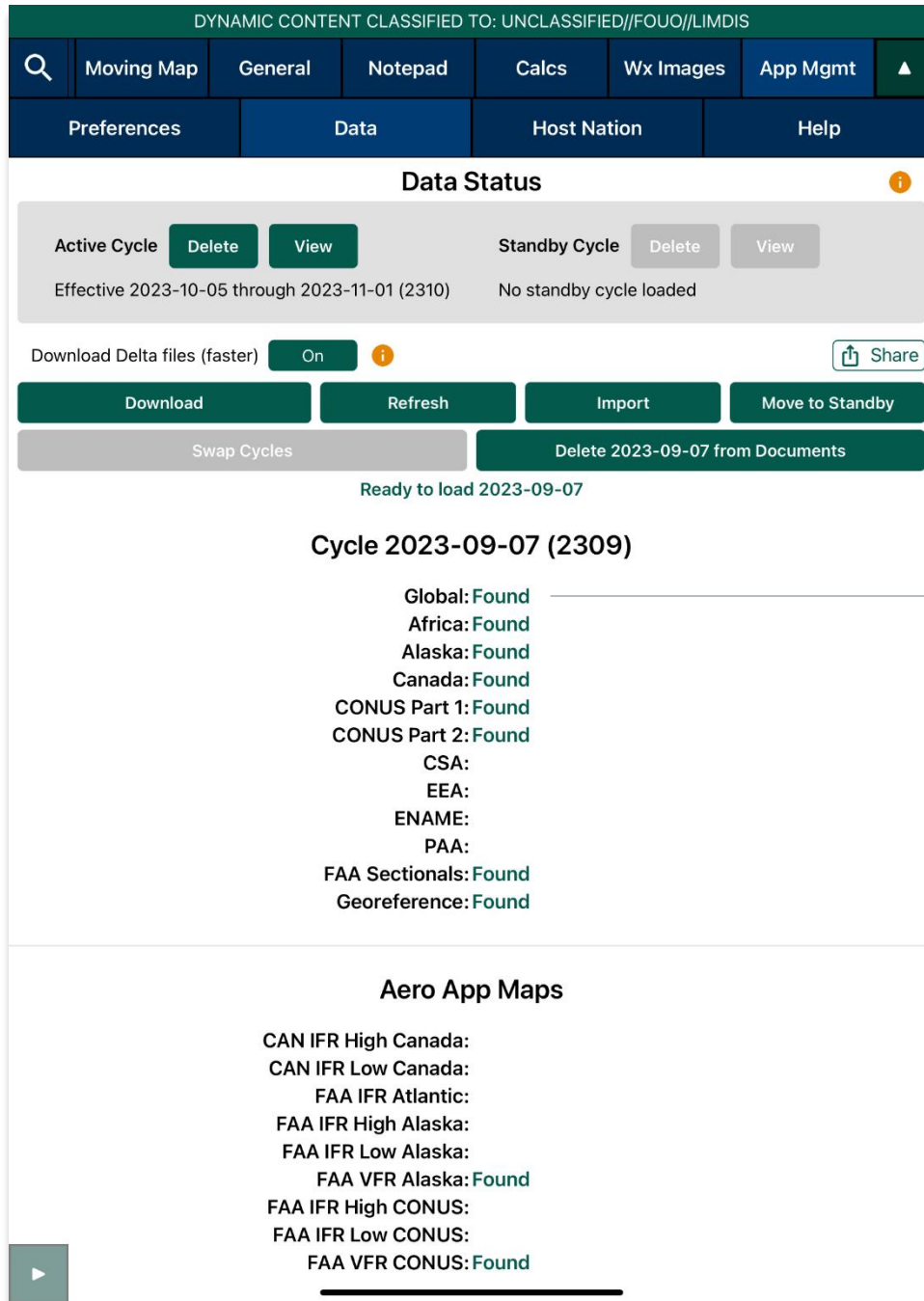
No files to load. Sideload files using Finder or iTunes, or download files wirelessly.



**NOTE:** Core data files are current for 28 days after the effective date.

## 13.2 Manage Data on Device

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu** to view data information.
3. Tap **Refresh**. All the available data files will display **Found**

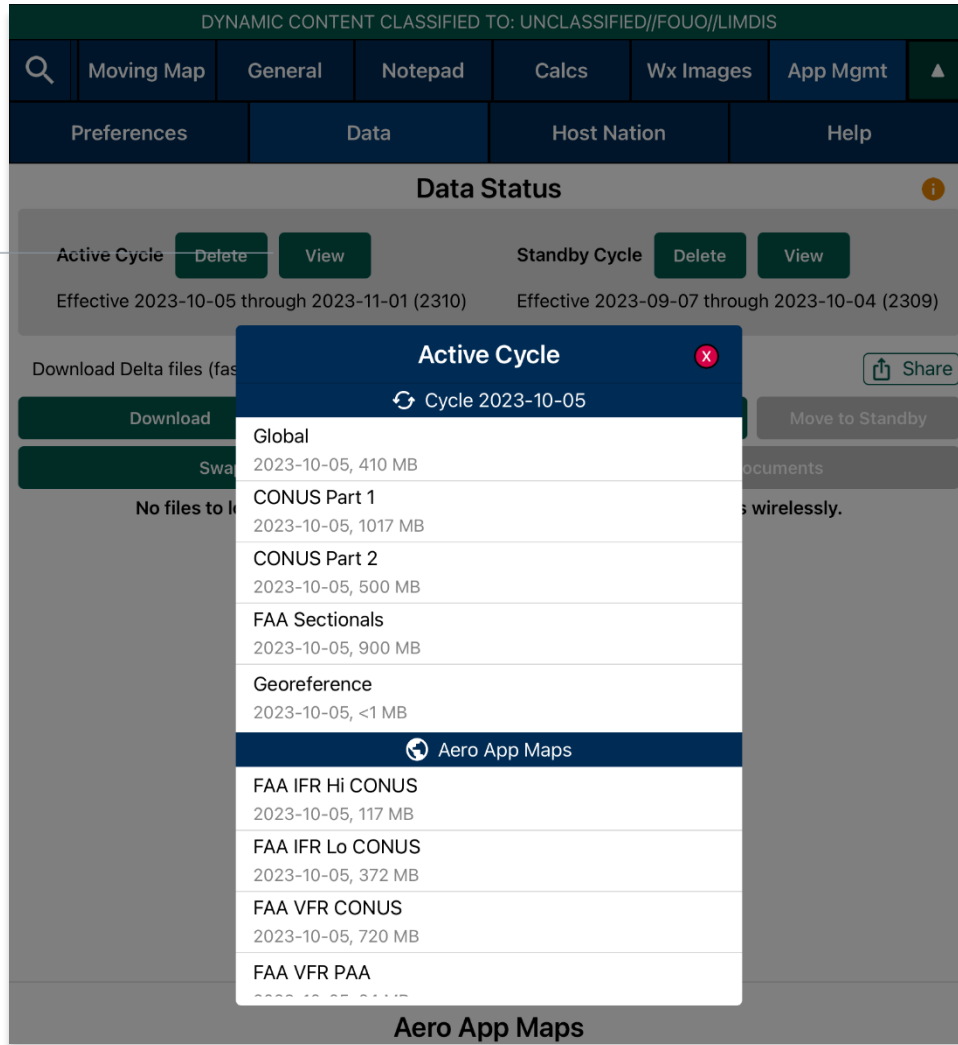


Available data files will display **Found**



4. Tap **Move to Standby** to load data onto Standby Cycle.
5. Tap **Swap Cycles** to load data onto Active Cycle which activates current data.
6. After the data has been swapped, notice the effective dates of the data located below Active Cycle.
7. The downloaded maps will enable the *Load Maps* button to become selectable. Tap **Load Maps**.
8. Tap **View** to display loaded Active Cycle or Standby Cycle.

View Active Cycle Data



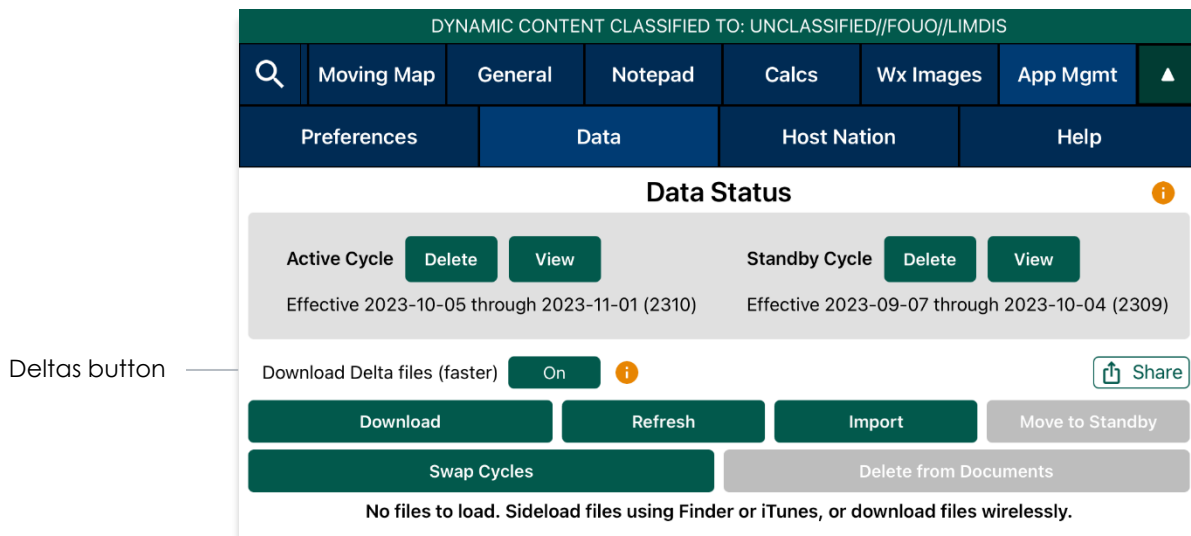
## 13.3 Data Status and Deltas

Aero App enables users to download delta files which are significantly smaller files. To upload files to ADS from Aero App, users must download a full data cycle and ensure that **Download Data files (faster)** option is disabled.

### 13.3.1 Download Delta Files (Faster)

Deltas are defined as the core data changes between cycles. Instead of downloading a full cycle, users have the option to download the changes and apply them to a previous cycle. This results in smaller file sizes reducing the download time. To download Delta files, the previous data cycle must be in Active or Standby cycle.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap the **Download Delta files (faster)** button to enable option.
4. Tap **Download**.



5. Log in to AWS using Aero User Database (AUD) or GEOAxis credentials, set up your device with Mobile Device Management (MDM), or select Aero Data Server.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Done Data Sources

AWS Aero Data Server File Manager

### AWS - Fast Cloud Downloading

Aero User Database GEOAxis MDM

Username:

Password:

Connect

6. Users will be prompted to the Data Cycle Download screen. Users are provided with options to download Cycles or Map Library. Select **Cycles**.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Done Data Sources

AWS Aero Data Server File Manager

Back

### AWS (United States)

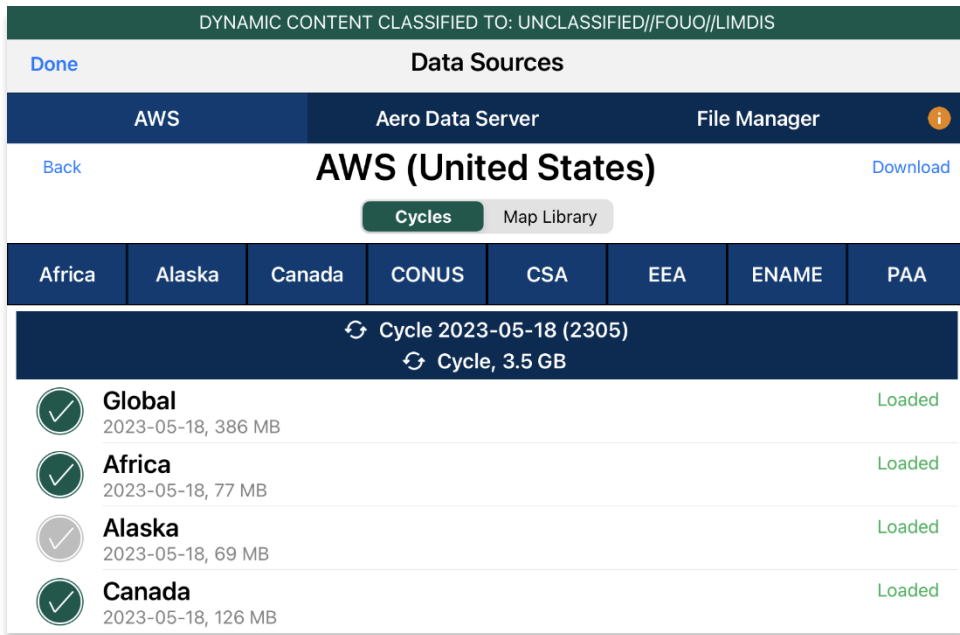
Cycles Map Library

↻ Cycles

- 2022-12-29 (2213) >
- 2022-12-01 (2212) >
- 2022-11-03 (2211) >

7. Available data pertaining to that cycle will be displayed. Select individual data files or select region Easy Buttons for faster data selection.
8. Tap **Download** once desired data files have been selected.

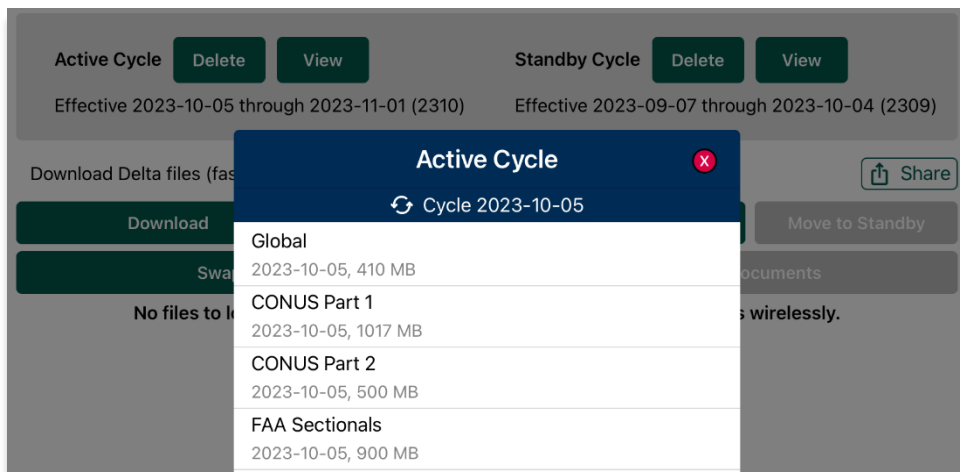
9. Tap **Done** once download is complete.



10. On the Data Status screen, tap **Move to Standby** and an Applying Deltas popup will display.

11. Tap **Swap Cycles** to load data onto Active Cycle which activates current data.

12. Tap **View** to verify the data in Active Cycle.

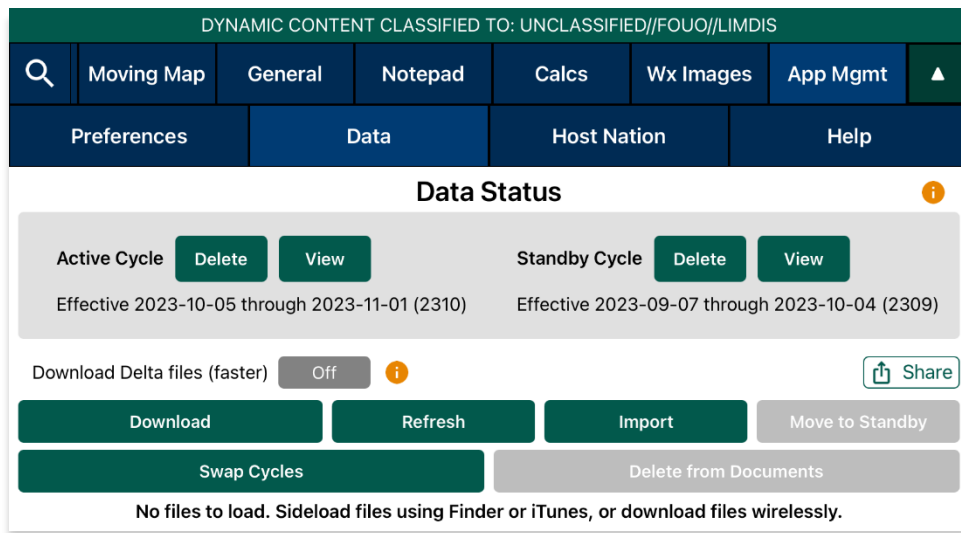


**NOTE:** A warning will display as users attempt to load Delta files onto Standby Cycle while **Download Delta files (faster)** is enabled. Selecting **Load Delta files** from the warning enables users to move Delta files to Standby Cycle.

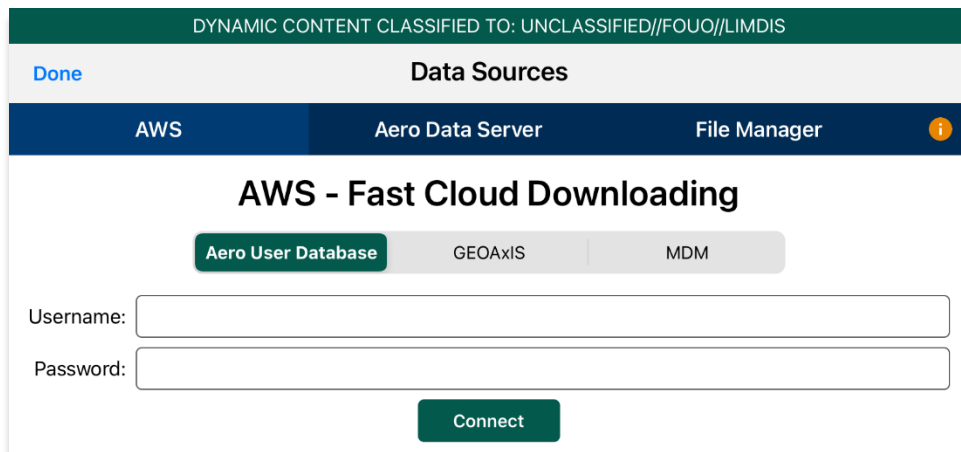
### 13.3.2 Download Compatible Files

To AirDrop or upload files to ADS, a full data cycle, without Deltas, is required. If Download Delta files (faster) option was enabled at the time of download, Delta files will be inaccessible when sharing files via AirDrop and Upload to ADS as Delta files are not compatible.

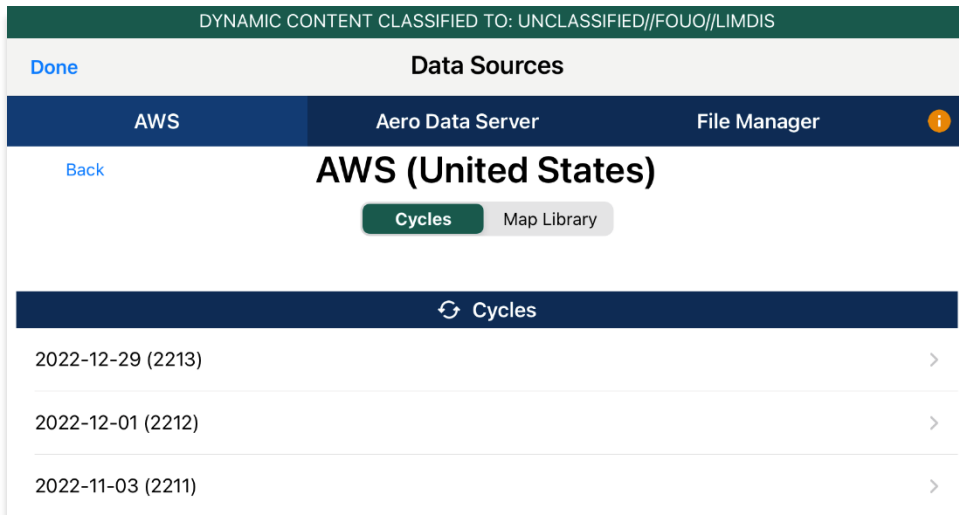
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Ensure that the Download Delta files (faster) option is disabled. Tap **Download**.



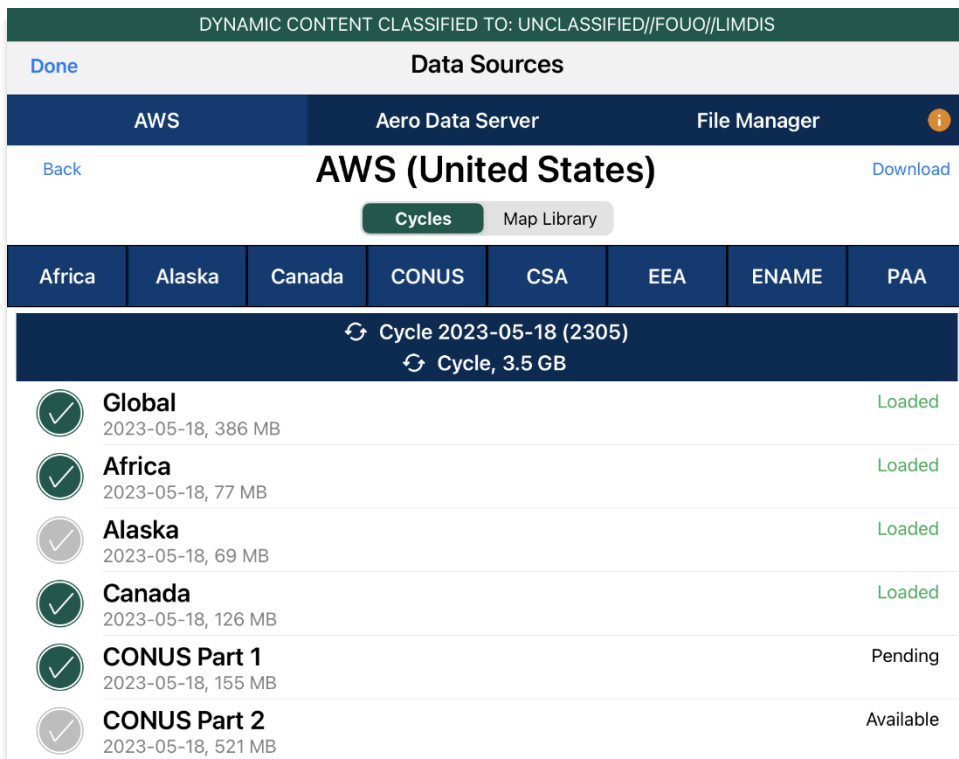
4. Log in to AWS using Aero User Database (AUD) or GEOAxis credentials, set up your device with Mobile Device Management (MDM), or select Aero Data Server.



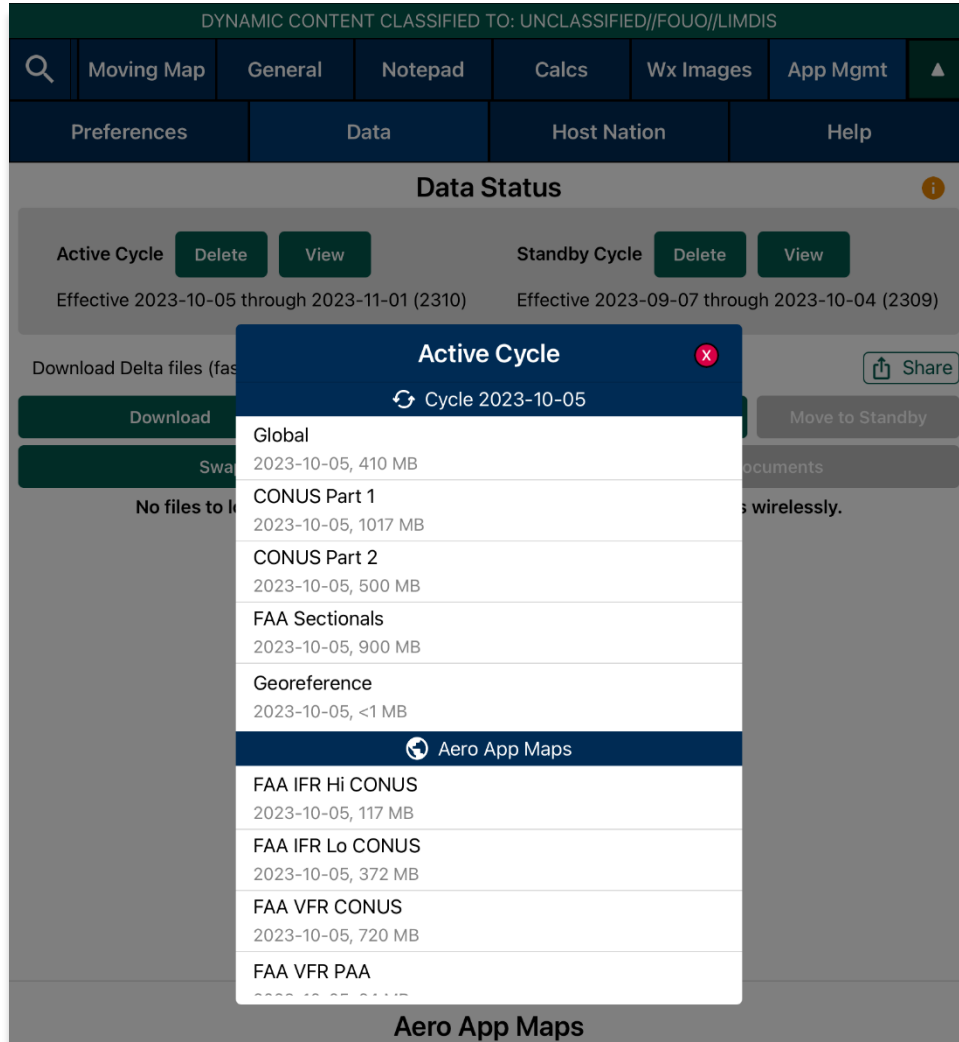
- Users will be prompted to the Data Cycle Download screen. Users are provided with options to download Cycles or Map Library. Select **Cycles**.



- Available data pertaining to that cycle will be displayed. Select individual data files or select region Easy Buttons for faster data selection.
- Tap **Download** once desired data files have been selected.
- Tap **Done** when download is complete.



9. On the Data Status screen, tap **Move to Standby**.
10. Tap **Swap Cycles** to load data into Active Cycle which activates current data.
11. Tap **View** to verify the data in Active Cycle.

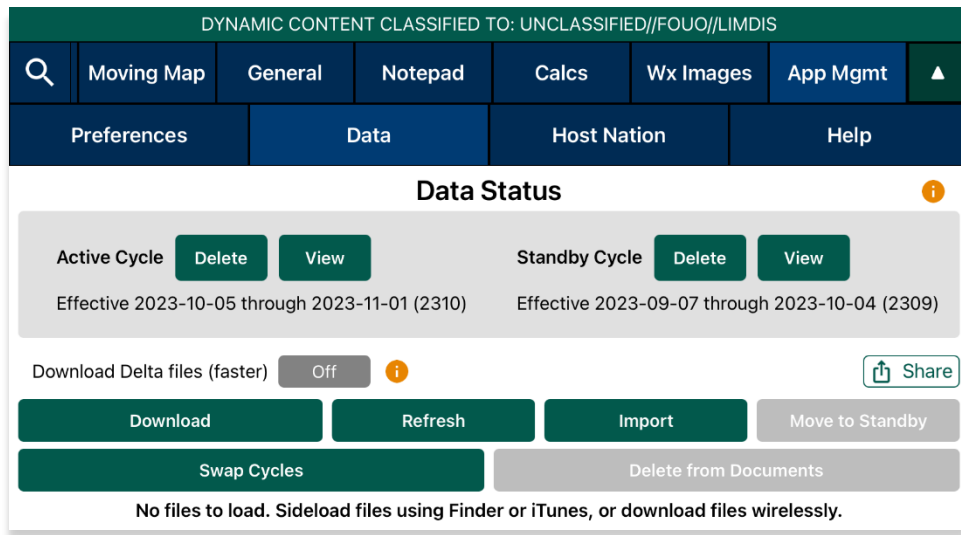


**NOTE:** A warning will display as users attempt to load Delta files onto Standby Cycle while **Download Delta files (faster)** is enabled. Selecting **Load Delta files** from the warning enables users to move Delta files to Standby Cycle.

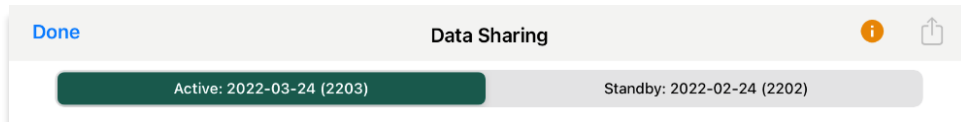
## 13.4 Share Data Through AirDrop or ADS

Aero App enables users to share Data Cycles, Maps, and additional files with another device if the Download Delta files (faster) option is disabled. Users can select to share individual or multiple files at a time.

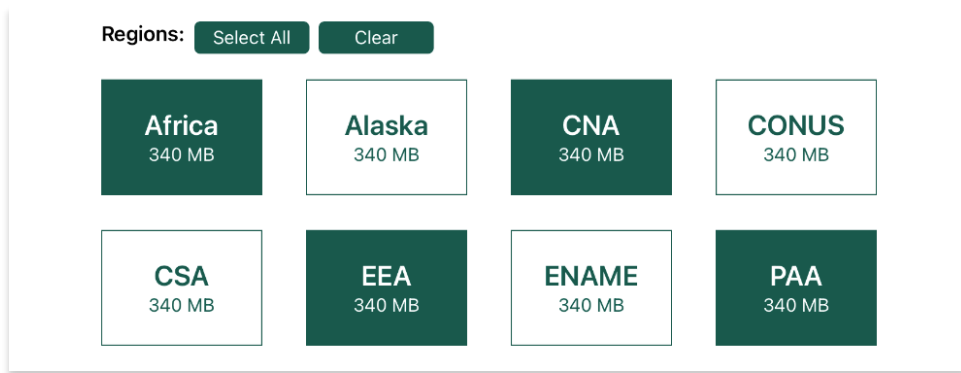
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap the **Share** button and the Data Sharing screen will display.



4. Select from **Active** or **Standby** cycle to share data.

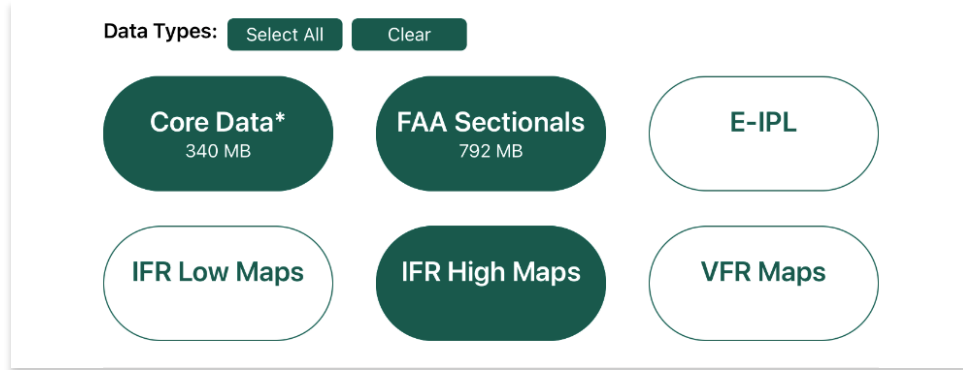


5. Select desired **Regions** to share.

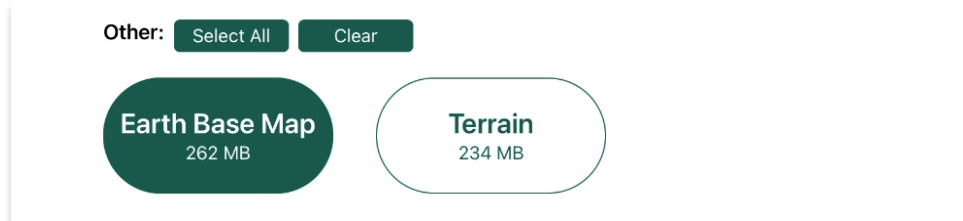




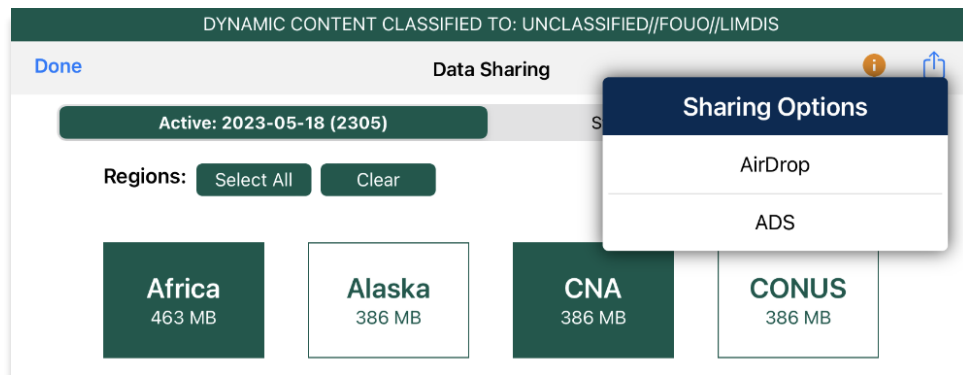
6. Select desired **data types** to share.



7. Select desired **additional files** to share.



8. Once all required files are selected, the Share icon will be selectable. Tap **Share**.  
9. The *Sharing Options* popup will appear. Select from **AirDrop** or **ADS**.



**NOTE:** Users can tap **Select All** to highlight all files or tap **Clear** to deselect all selected files.



**NOTE:** If AirDrop fails, close the Data Sharing screen, reopen, and try again. This is a known Apple AirDrop issue.

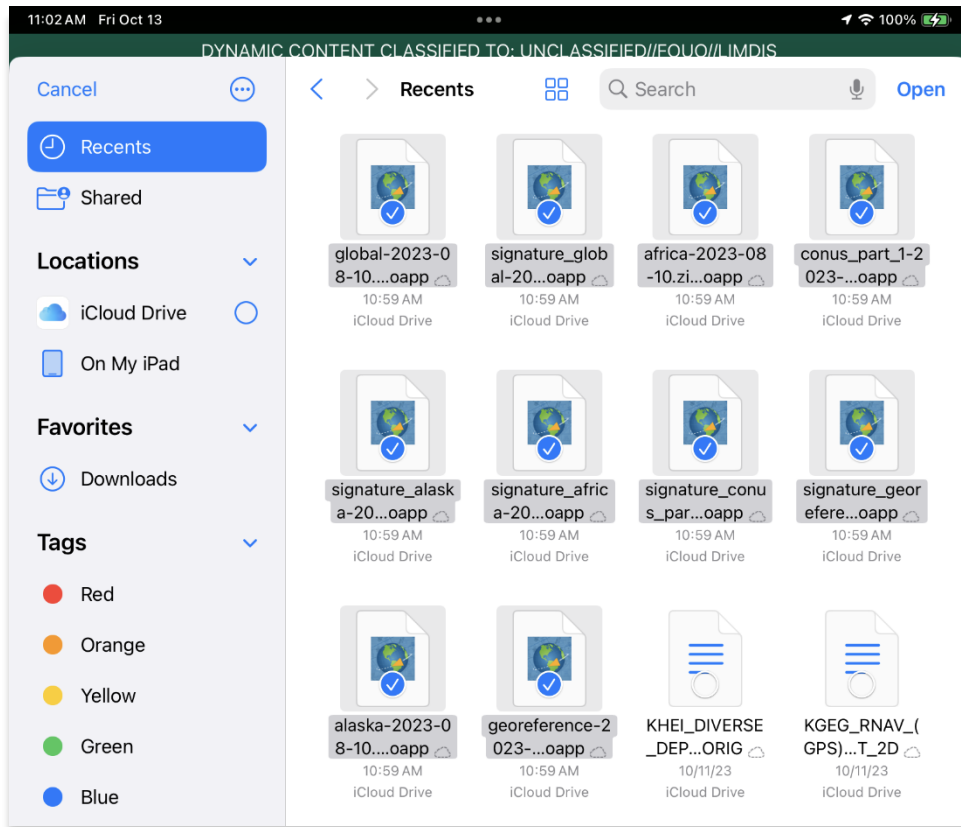


**NOTE:** The **Core Data\*** data type includes Global and Georeference files.

### 13.4.1 Receiving Map/Cycle Files Through AirDrop

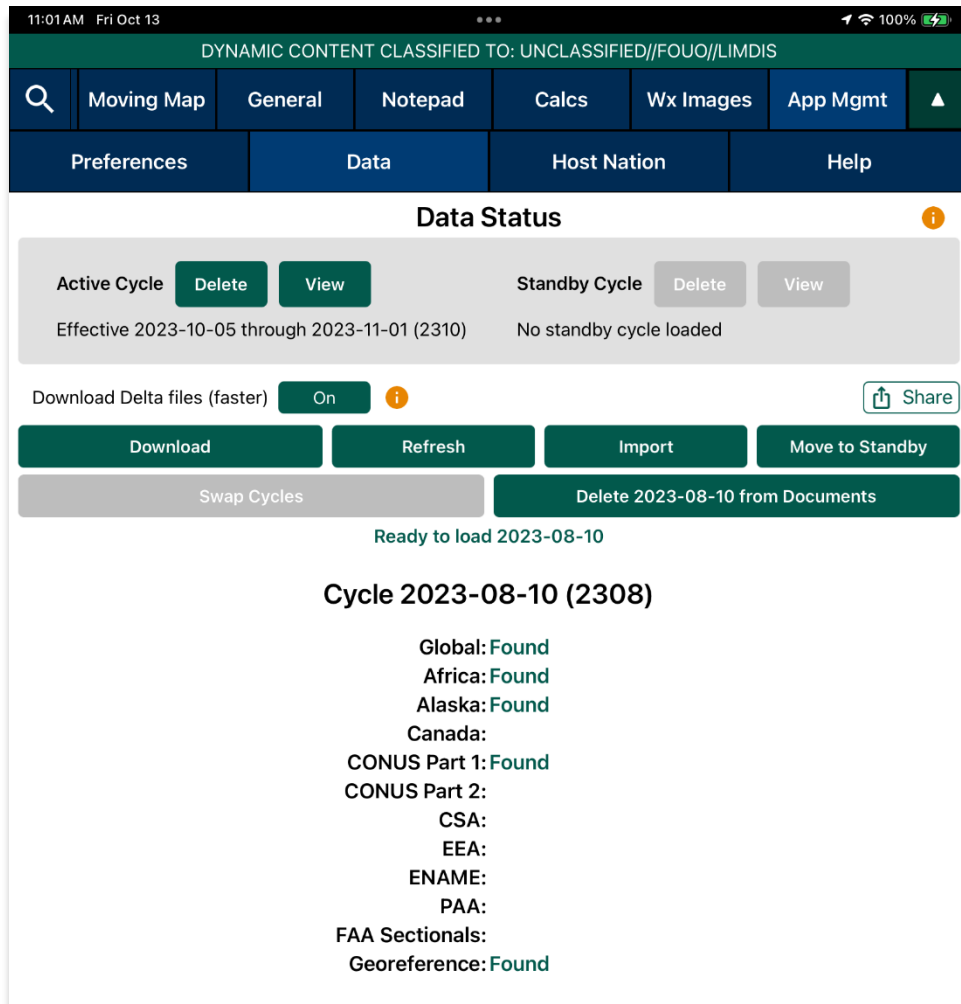
Users can view the Airdropped Map/Cycle files on Aero App. The person receiving the files must have their AirDrop *enabled* prior to receiving any files. Different behaviors will occur depending on the device's operating system. Refer to [support.apple.com](https://support.apple.com) for additional information on AirDrop.

1. Once the AirDrop is complete, open the files using Aero App. iOS 17 users can open files through the Import button on the Data Status page.
2. A popup to select an application to import the Airdropped files will display. Select **Aero App**.
3. The *document picker* will display. Select desired files to import.
4. Tap **Open** once desired files have been selected.



**NOTE:** The document picker only applies to device's running iOS 17 or later.

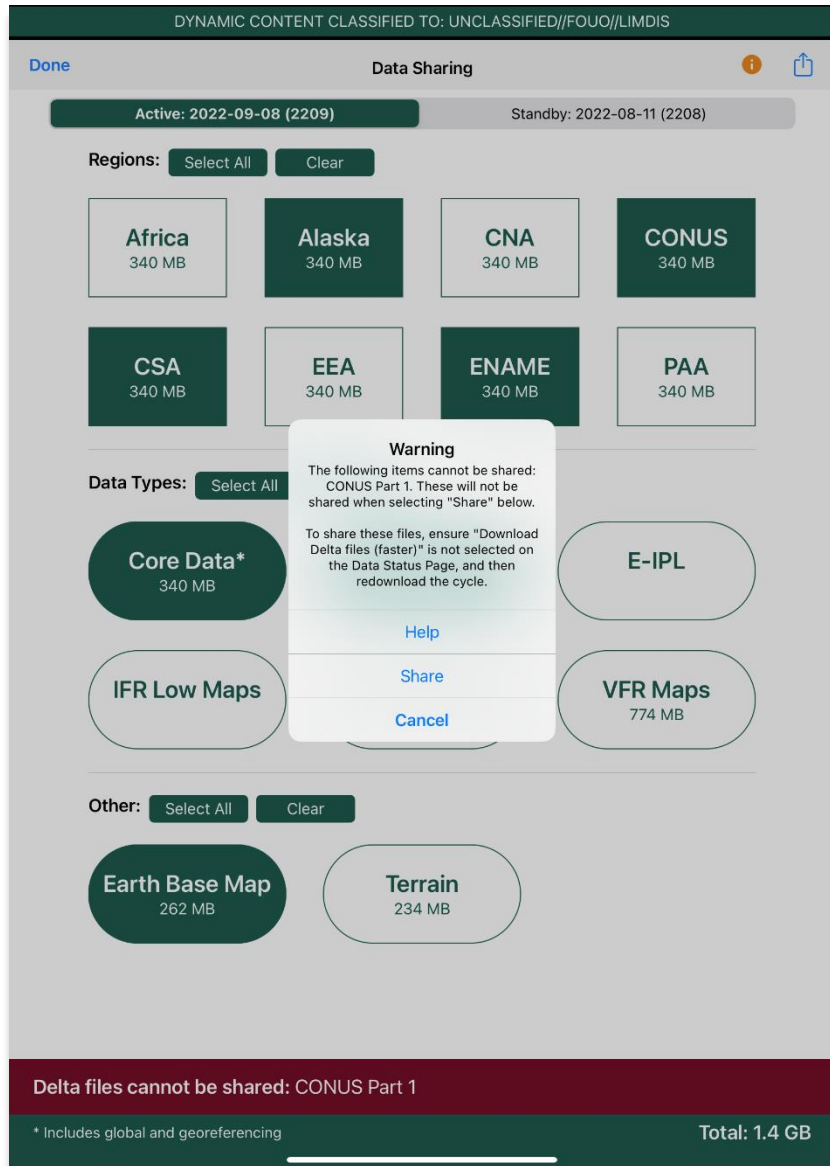
5. Navigate to the *Data Status* page.
6. The Airdropped files will be loaded on the Data Status page. Tap **Move to Standby** or **Add Files to Cycle** if a cycle is already loaded in Standby Cycle.



7. An *Import* button is available for users who missed a file to import. Tap **Import** to display the document picker.
8. Select desired file to import into Aero App.

### 13.4.2 Sharing Incompatible Files

Warnings will be displayed as a result of attempting to share incompatible files such as Delta files. When users select files containing Delta files, a red bar will appear at the bottom of the Data Sharing screen listing the Delta files which cannot be shared. If users proceed to share files, a warning message will appear where they can select Help, Share, or Cancel. Selecting Help displays Contextual Help. Selecting Share will only share the compatible files and exclude delta files.

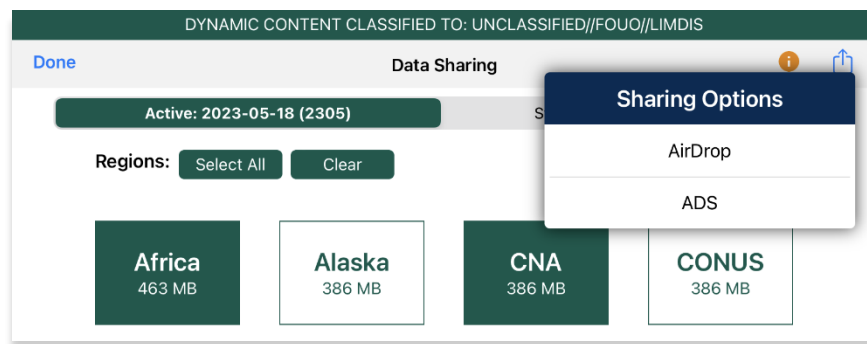


**NOTE:** Refer to [Section 13.4](#) redownload AirDrop-compatible files.

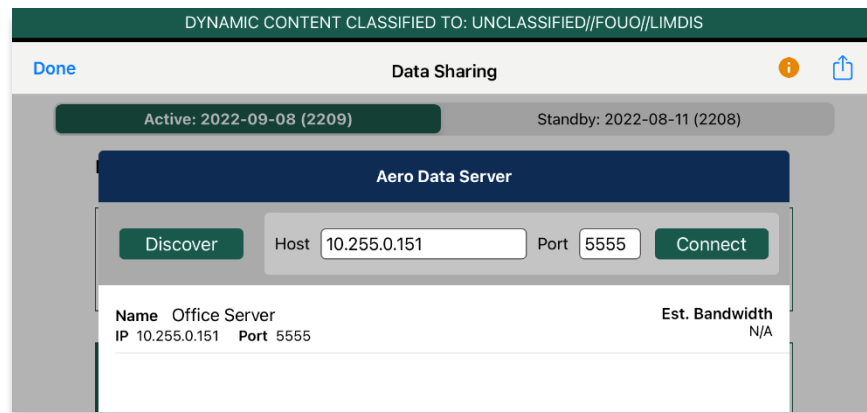
## 13.5 Upload to ADS

Aero App enables users to share Data Cycles, Maps, and additional files to ADS. Once desired files are shared, the files will be available to other users.

1. Log in to ADS on a Mac or Windows computer.
2. On the **Settings Menu**, select a window of time from the options of 15 Minutes, 30 Minutes, or 1 Hour.
3. Once a window of time is selected, return to the **Data Sharing** screen on Aero App.
4. Select **ADS** from Sharing Options list. The Aero Data Server screen will display.



5. Select the appropriate server or enter the IP Address and Port of the server to connect.
6. Once connected, the files will upload to ADS.

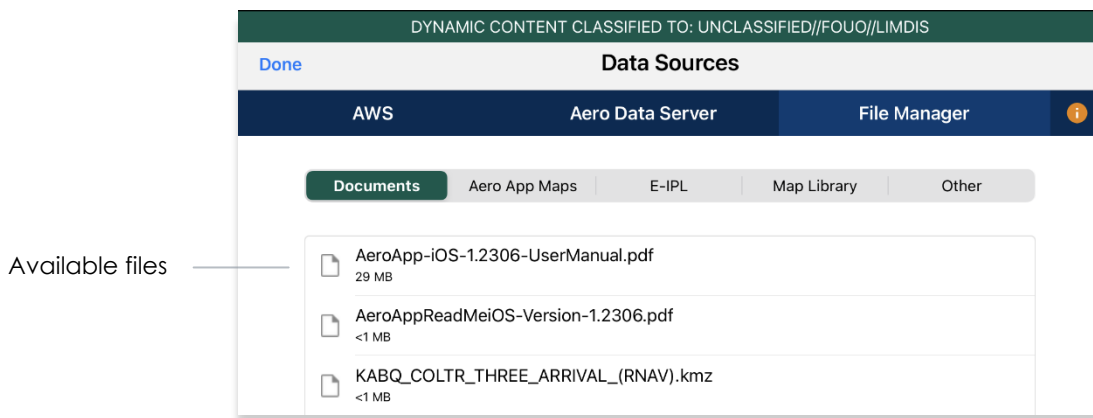


**NOTE:** Refer to [Section 13.4](#) for guidance on how to load desired Data Cycles, Maps, and Additional files to share.

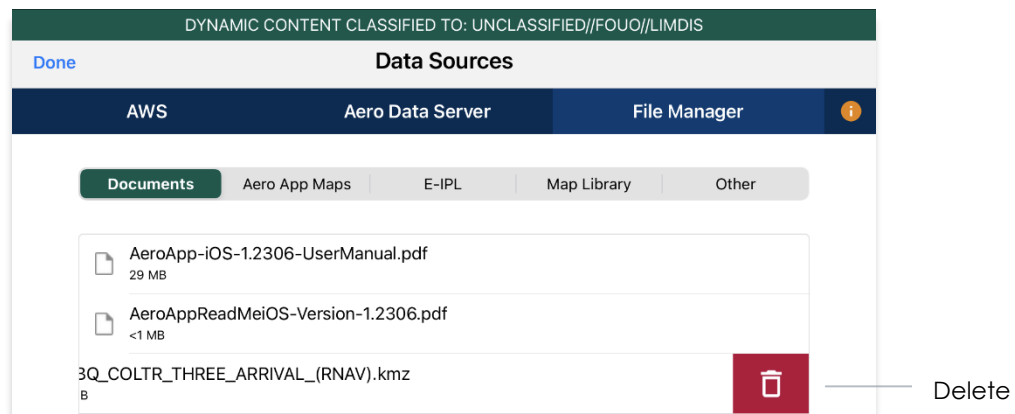
## 13.6 File Manager

File Manager is responsible for storing, managing, and making modifications to files there were downloaded and loaded onto Aero App.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Tap **File Manager**.
5. To view all loaded files, select from the following:
  - Documents
  - Aero App Maps
  - Electronic – Instrument Procedure Library (E-IPL)
  - Map Library
  - Other



6. Swipe left to reveal the delete button for the files that you wish to permanently remove from Aero App. Tap **Delete**. The selected file will be removed from the list.












## 14 Introduction to Aero App Menus

The initial launch of Aero App will land on the About screen, which includes the app's version number and licensing information. The Main Menu is located above the Help screen and includes options to access features throughout Aero App. Data is required to access the Moving Map. The Secondary Menu is placed directly below the Main Menu. The following sections will elaborate on the different menus and their functionalities.

### 14.1 Main Menu Options





Aero App enables users to select an option from the Main Menu. The selected menu option will be highlighted to indicate selection. If necessary, scroll left-to-right to view hidden menu buttons.

	<p>Search – The Search option is used to perform a search of different identifiers such as Airports, NavAids, Waypoints, User Waypoints, and Pins. A search can be refined by setting a minimum runway length, which can be done through preferences. Other actions such as adding identifier to Favorites as well as viewing the Giant Report of the searched identifier.</p>
	<p>Active Point – Once the search is completed, the identifier will become an active point. The active point will show its General Information such as Giant Reports and Chart Supplements, AQP images (if applicable), Communications, Runways, and Remarks. Additional information such as APD, procedure charts, Host Nation charts, weather, and others, can be viewed through the Secondary Menu for searched Airports. To load a new active point, simply tap on the search icon and enter a desired point, then tap <b>Search</b> on your device's on-screen keyboard. The new identifier will load as the new active point.</p>
	<p>Moving Map – The Moving Map displays a high-performance whirly globe, which provides various settings and overlays to customize its display. Charts such as VFR Sectionals, High and Low Enroutes, and many more are available.</p>
	<p>General – General provides users access to a large library of material such as Charts, Supplements, Area Planning documents, User PDF documents and Terminal Legend Procedures.</p>
	<p>Notepad – The notepad allows users to create up to three pages of notes using their fingertips or a stylus.</p>
	<p>Calcs – Calcs is inclusive of options such as E6B and Fuel Check. The E6B calculator is used to perform a variety of navigation calculations for Altitude, Cold Wx, Conversions, Coordinates, Descent, Distance, IFR Climb, Rwy Winds, and Winds Aloft. Fuel Check measures the fuel burn usage of the ownship.</p>

	<p>Wx Images – Wx Images provides access to real-time weather images, including RADAR, Satellite, Icing, Weather Forecast, AIRMETs and SIGMETs, Prog Charts, Convective SIGMETs and Outlooks, Current Convective Watches, and Alaska.</p>
	<p>App Mgmt – App Management enables users to download and manage data, configure Aero App preferences, and view additional information such as Help files and application details.</p>
	<p>Collapsible Menu Button – Tapping on the arrow will hide or show the Main and Secondary Menus.</p>

## 14.2 Route Menu Options

Aero App enables users to select an option from the Route Panel. The options include Add Airport, NavAid, or Waypoint, Edit Route, display Route Options menu, and a collapsible route button.

	<p>Collapsible Route Panel – The collapsible route panel is used to hide or show the Route Panel, enabling users to free up space on the screen when not in use.</p>
	<p>Add – Add allows users to search and add Airports, NavAids, Waypoints, Airways, User Waypoints, Pins, and MTRs to the route. Other actions such as adding identifier to Favorites can be performed on the Add popup.</p>
	<p>Edit – Edit allows users to reorder and delete entries from the route.</p>
	<p>Route – Route provides various options that can be added as enhancements to the route. Options include Air Refueling Routes, Search and Rescue Patterns, and more.</p>



## 14.3 Identifier Options

The selected identifier will appear to the left of the **Main Menu**. When users tap on **Active Point**, the **Secondary Menu** will be displayed as illustrated below.

Info	Info – Displays detailed information about the selected Airport, including General Info, AQP, Giant Report, Communications, Runways, Chart Supplements, and Remarks.
APD	APD – Displays the Airport Diagram for the selected identifier.
IAP	IAP – Displays the Instrument Approach Procedures for the selected identifier.
Dep	Dep – Displays the Departure Procedures for the selected identifier.
Arr	Arr – Displays the Arrival Procedures for the selected identifier.
Min	Min – Displays charts for Alternate, RADAR, and Takeoff Minimums for the selected identifier.
Other	Other – Displays charts otherwise not displayed under the remaining tabs. They may include special procedures and RNAVs among others.
Host Nation	Host Nation – Displays the APD, IAP, SID, STAR, Visual Approach, and other charts such as Docking/ Parking and VFR AIPs for airports outside of USA. Host Nation Charts are downloaded through App Mgmt.
Wx	Wx – Displays options for viewing METARs/TAFs and a button redirecting to the NOTAMs web browser.

## 14.4 General Menu Options

By tapping **General** on the **Main Menu**, users can access a large library of material such as FAA data, FLIP Charts, Supplements, Area Planning Books, PDFs loaded into Aero App and Terminal Legend Procedures.

Charts	Charts – Displays a dialog box list from which you can select High and Low Enroute Charts, Area Charts, Graphic Charts, CONUS Chart Graphics, Military Training Routes (MTRs), and others. Charts can be selected through the drop-down menu or by swiping left and right.
Supplements	Supplements – Displays a dialog box list from which users can select the appropriate Supplements Book in the FLIP Chart Library. Supplement Books are in PDF format.
Planning	Area Planning Documents – Displays a dialog box list from which users can select the Area Planning Documents in PDF format. The General Planning Book is listed in this menu from the FLIP Area Planning Library.
Docs	User Documents – Displays access to user-defined content loaded into the Documents library.
Legend	Terminal Procedure Legend – Displays the Terminal Procedure Legend.

---

## 14.5 Application Management (App Mgmt) Menu Options

The **Application Management (App Mgmt)** Menu Option allows users to select preferences, load and refresh data, load Host Nation charts, and access detailed information about Aero App.

<b>Preferences</b>	Preferences is a tool that enables users to customize the behavior of Aero App. Various setting options include Miscellaneous, Reset, Route, and User Interface.
<b>Data</b>	Data Status screen allows users to manage cycles.
<b>Host Nation</b>	Displays the Host Nation Charts Manager screen with an option to download the charts for the selected ICAO.
<b>Help</b>	Displays additional information for Aero App such as What's New, Web Links, link to User Manual, and About.

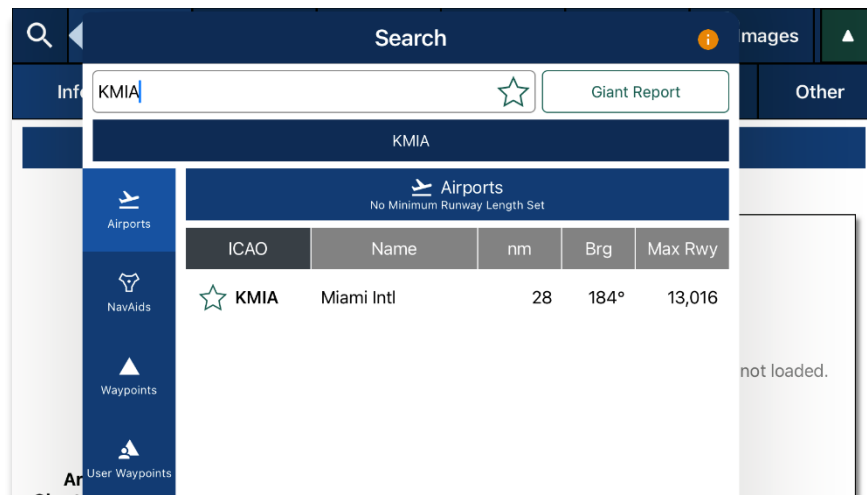
## 15 Using Aero App's Main Menu

The Main Menu is utilized to display the main functions of Aero App and is located either on the top or bottom of the screen (user-configurable).

### 15.1 Search Identifiers or Terms

Aero App enables users to enter identifiers or search terms by tapping the search icon from the Main Menu. The Search menu returns the results for a searched identifier such as Airports, NavAids, Waypoints, User Waypoints, Airways, and Pins. Users can then navigate to other tabs to display its information, Airport Diagram, Instrument Approach Procedures, and more.

1. Tap the **search icon** on the **Main Menu**.
2. The Search popup will appear. Tap the **text box** to open your device's keyboard.
3. Enter an identifier or search term.
4. If necessary, select from Airports, NavAids, Waypoints, User Waypoints, Airways, or Pins to display results.



**NOTE:** The last 5 Airport searches will be listed below the search text box.



**NOTE:** An error message will appear indicating that data has not been downloaded.

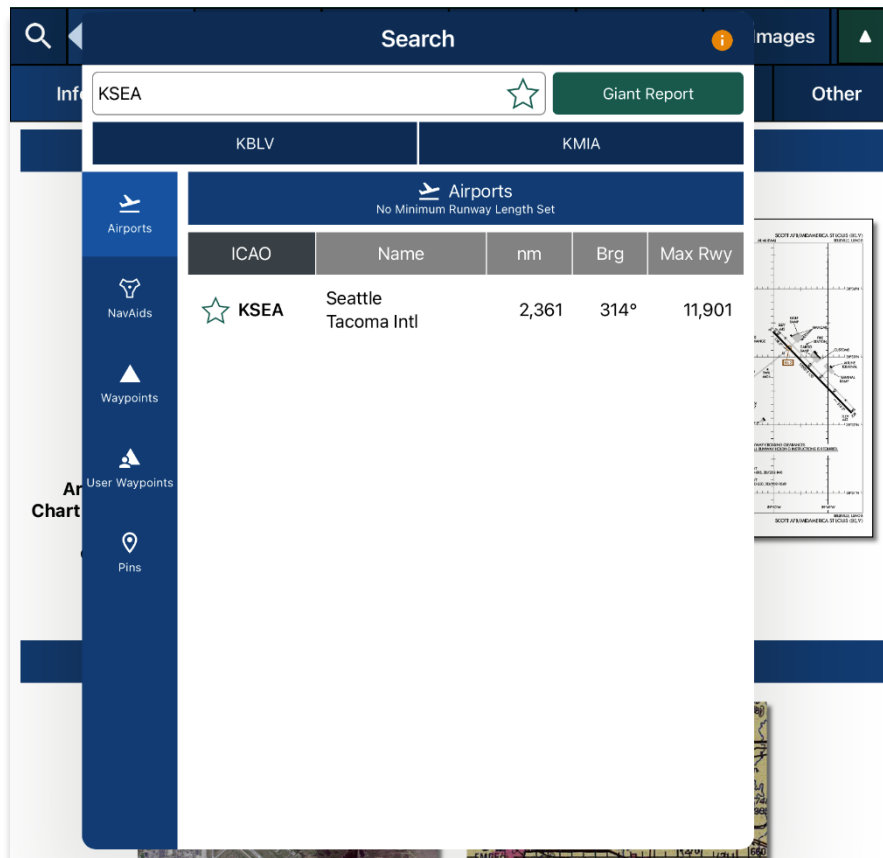


**NOTE:** Users can add an identifier to their *Favorites* list as explained in [Section 15.1.2](#).

### 15.1.1 Giant Report

Aero App allows users to shortcut to the airport's Giant Report if data is available for the searched ICAO.

1. Enter a desired identifier or search term in the search box.
2. Tap the **Giant Report** button to enable the option.
3. Select the appropriate airport provided below.
4. The respective Giant Report for the selected airport will be displayed.

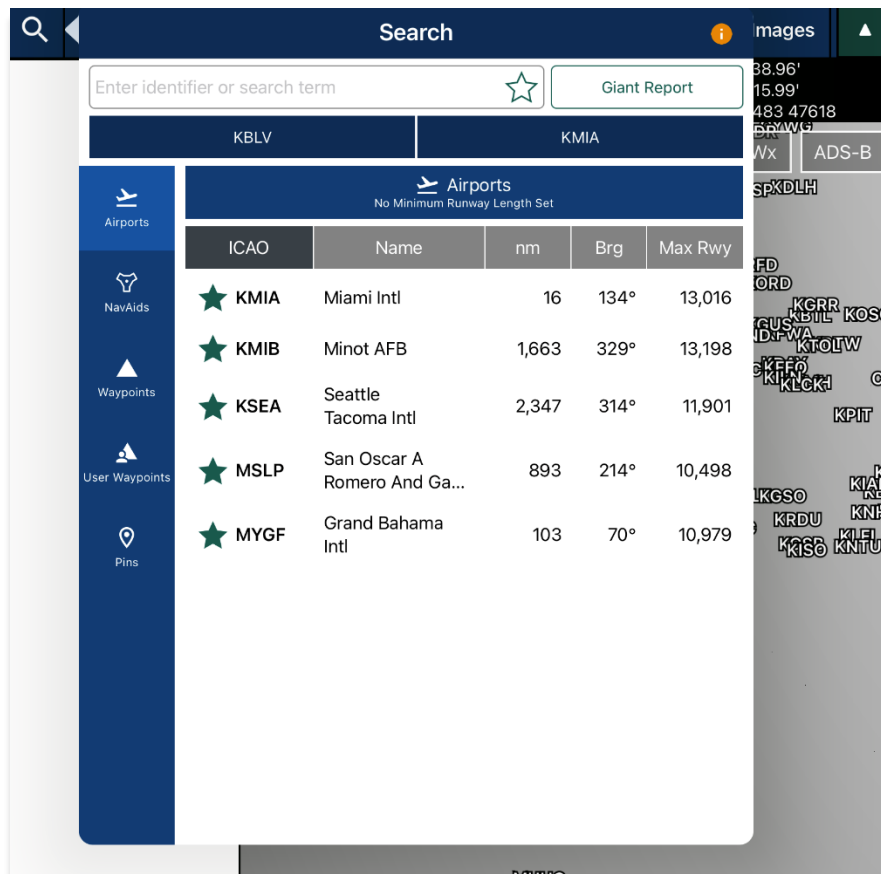


**NOTE:** Giant Report data must be downloaded to view document.

### 15.1.2 Add an Identifier to Favorites

Aero App enables users to add identifiers such as Airports, NavAids, and Waypoints to their *Favorites* list.

1. Enter a desired identifier in the search text box.
2. After three characters are entered, an auto search will begin. Locate desired identifier that you wish to add to *Favorites*.
3. Tap the **Star** located next to the identifier; the Star will switch to green.
4. To remove an identifier from *Favorites*, tap the **Star** the second time and the identifier will be removed from *Favorites*.
5. To view all identifiers marked as favorite, remove all characters from the search box. The Favorites list will display respective to the type of identifier that was selected (e.g., Airports, NavAids, and Waypoints).



**NOTE:** Users can add their desired identifiers to *Favorites* directly from the Add to Route feature, Active Point search, or Move Map to Location.

## 15.2 Information

The Info submenu displays detailed airport information of the searched airport. Airport information includes General Information, AQPs, Communications, Runways, and Remarks. The Airport Diagram, Chart Supplement, and Giant Report are in the General Information section.

General and other relevant information for identifiers such as NavAids, Waypoints, and User Waypoints are available to users. Global is required to access identifier information.

The Info page can be viewed in various locations within Aero App. Users can tap an Active Point on the Main Menu or in the Moving Map Route Panel, or by simply long pressing on a point on the Moving Map.

**General Information** contains identifier details such as the ICAO, name, location, region, elevation, latitude, longitude, magnetic variance, and more. The General Information section includes Airport Diagram, Chart Supplement, and Giant Report. To view charts, users must download the respective region files and Global.

General Information	
ICAO	KBLV
Name	Scott Afb Midamerica St Louis
Location	Belleville, Illinois United States
Region	CONUS
Elevation	459'
Latitude	N38°32.71' 38.545178°
Longitude	W89°50.11' -89.835211°
Magnetic Variance	-2.1°
Rot Beacon	Yes
Arresting Gear	No
Chart Supplement	Yes
In DAFIF	Yes
Giant Report	Yes (2023-04-02)

**Airport Qualification Program (AQP)** is available for select airports.

**Communications** includes tower frequencies, remarks, and call signs for the selected airport.

📡 Communications	
126 ARW COMD POST	138.55, 277.7
375 AMW COMD POST	139.9, 349.4
ATIS	128.7, 256.7 Opr 1200-0600Z++.
CLNC DEL	119.875, 263.025
GND	119.2, 275.8

**Runways** contain airport runway information such as the runway dimensions, surface, condition, PNC, LCN, and more.

/ \ Runways	
<b>Runway 14L/32R</b>	
<b>Dimensions</b>	10,000' x 150'
<b>Surface</b>	Concrete
<b>Condition</b>	Good
<b>PCN</b>	82
<b>LCN</b>	108
<b>Runway 14L</b>	
<b>Heading</b>	138.0° magnetic 136.6° true
<b>Runway 32R</b>	
<b>Heading</b>	318.0° magnetic 316.6° true

**Remarks** provides airport conditions, fuel type, and other cautionary advice.

📌 Remarks	
<b>CAUTION</b> Dense civ air tfc all quad, all alt. Unexpected bumps occur on Twy G btn rwys when crossing bridges and tunnels. Use min speed when opr in area. Use caution when utilizing Twy G, 0.25 NM E of Rwy 14R-32L int, grad chg of 3° and a 70° turnpresent. On coming tfc may not be vis due to terrain. Bird and wildlife haz.	
<b>CSTM/AG/IMG NAV</b> CSTMS avbl. Ctc base OPS 72 hrs prior to exp arr to coord. Civ acft must be cleared by US CSTMS if given a min 72 hr ntc prior to acft arr.	
<b>FLUID</b> SP(Mil) PRESAIR(Mil) LHOX(Mil) LOX(Mil)	

### 15.2.1 Airport Charts

Aero App enables users to view charts such as Airport Diagrams, Instrument Approach Procedures, Departure Procedures, Arrival Procedures, Alternate Minimums, RADAR Minimums, Takeoff Minimums, Others – displays special procedures and RNAVs among others, and Host Nation charts.



**NOTE:** Users can tap the **actions ribbon**, displayed below the Secondary Menu, to select and display specific chart types.



### 15.2.1.1 Draw on Airport Diagram (APD) and Instrument Approach Procedure (IAP) Charts

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **APD** or **IAP** on the **Secondary Menu** and the selected chart will display.
3. The pencil symbol allows the user to draw on the chart. There are options to Clear, Undo, Exit, display Contract Fuel Locations, rotate chart by 90 degrees, and expand view.

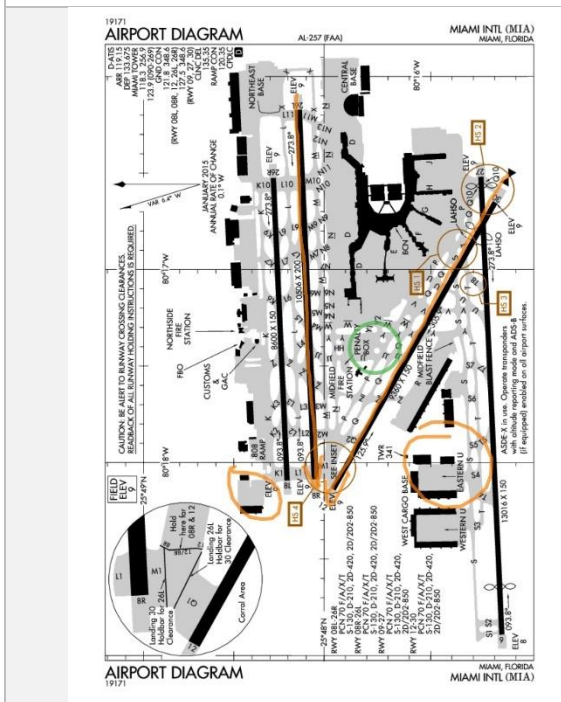


**NOTE:** Drawings on Charts persist across cycles for 6 months.

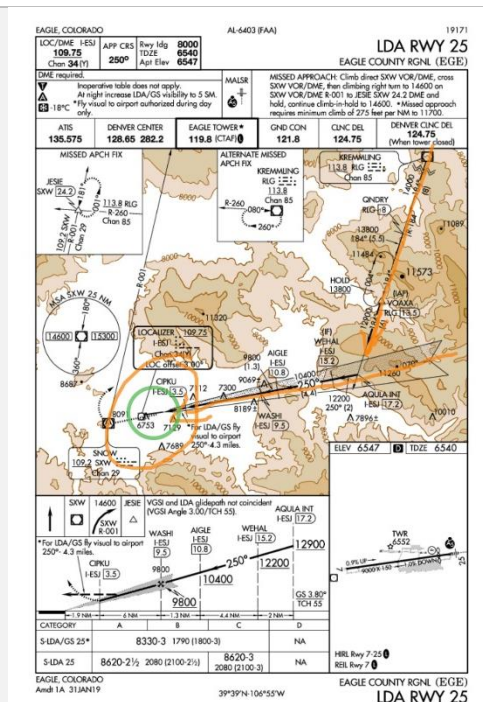


**NOTE:** Draw on Charts is available on Airport Diagrams and Instrument Approach Procedures.

Airport Diagram (APD)



Instrument Approach Procedures (IAPs)

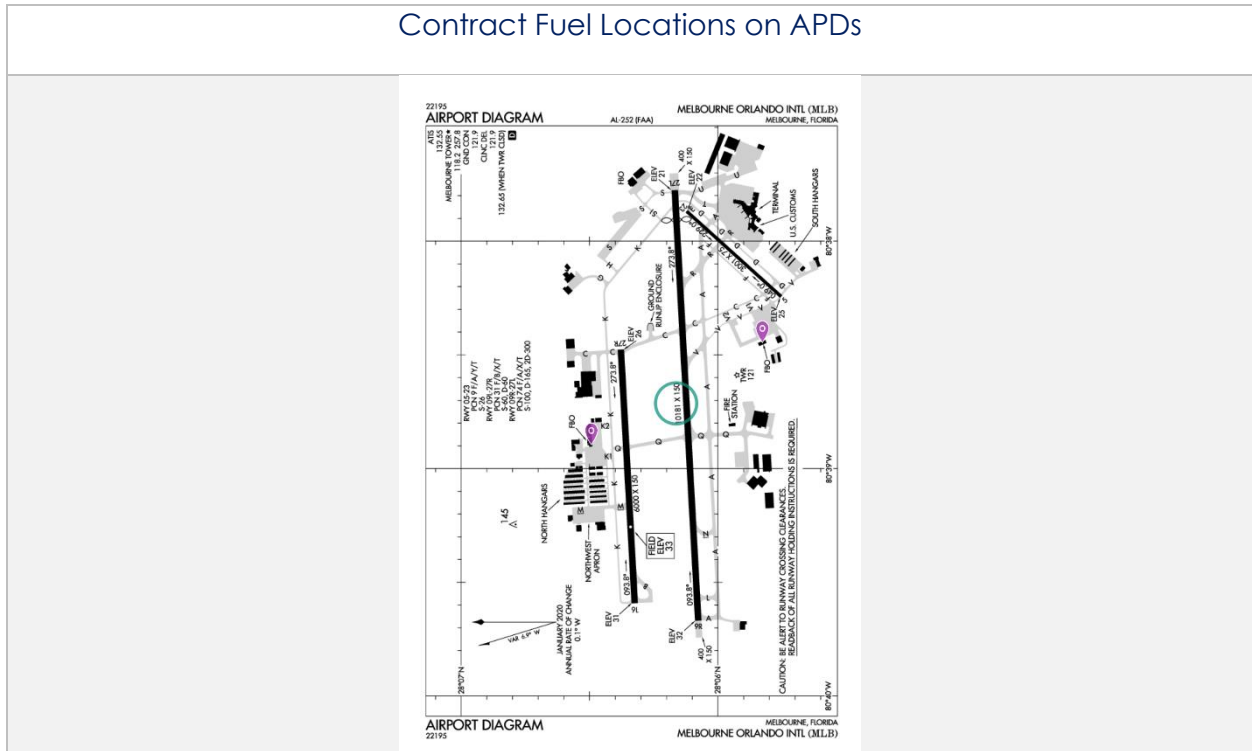


### 15.2.1.2 Contract Fuel Locations on APDs

Aero App enables users to view Contract Fuel Locations in various ways. Users can overlay the Contract Fuel Locations on an Airport Diagram directly from the Active Airport APD view or the split screen feature on the Moving Map.

1. Tap the **Active Point** on the **Main Menu**.
2. Select **APD** on the **Secondary Menu**.
3. A gas pump icon will display on the actions ribbon. Tap the **gas pump** icon. Icons for contract and non-contract fuel locations will populate on the screen.
4. To remove the contract and non-contract fuel locations, from the actions ribbon, tap the **gas pump** icon the second time and the icons will be removed.

#### Contract Fuel Locations on APDs



**NOTE:** Only fuel locations that have known latitude and longitude information will be shown on the charts.



**NOTE:** Georeference is required to view Contract Fuel Locations on APDs.

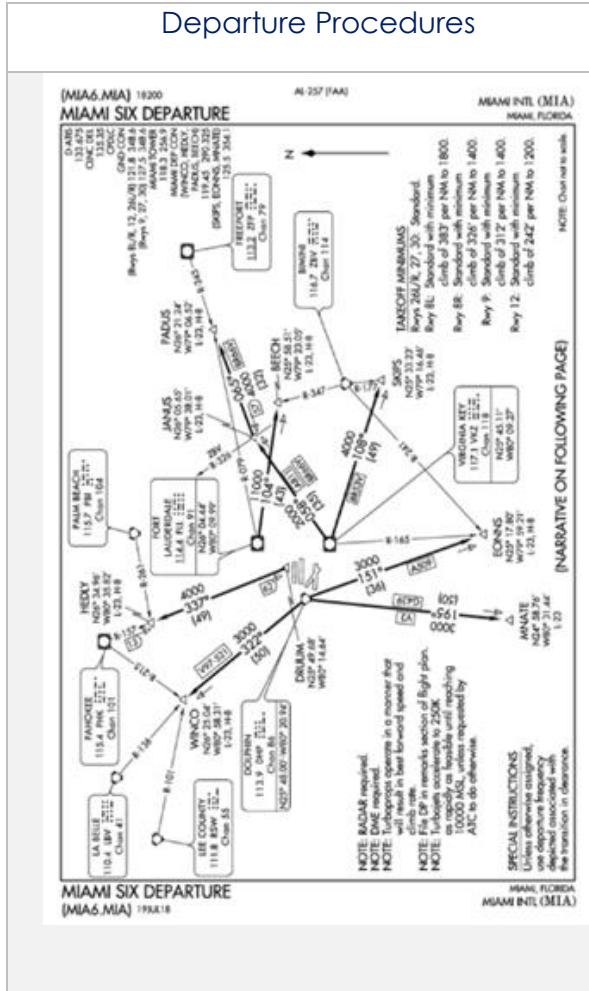


**NOTE:** Users can overlay Contract Fuel Locations on APDs with the split screen. Refer to [Section 14.3.10](#).

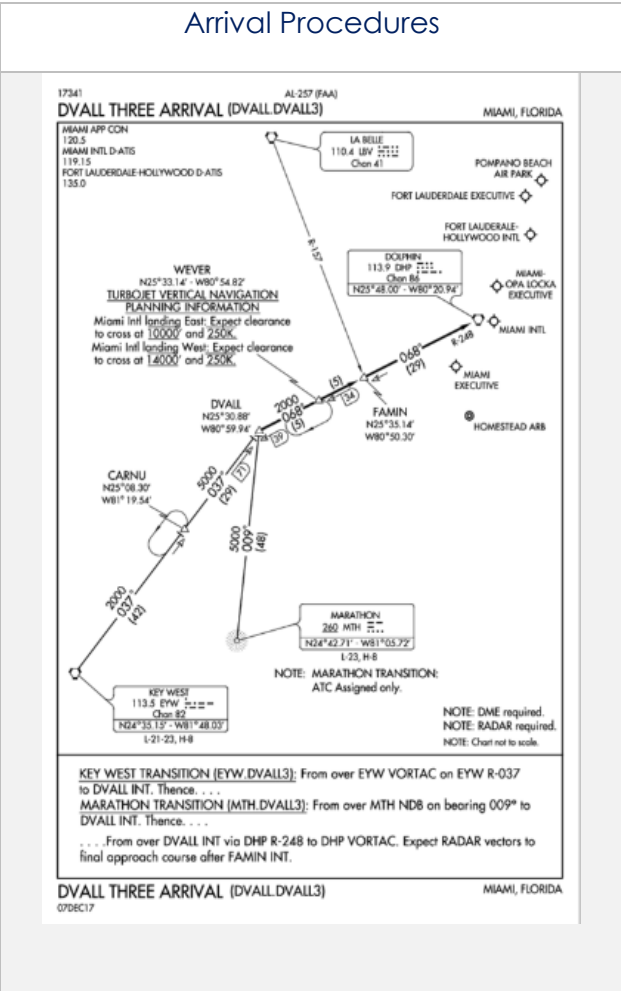
### 15.2.2 Continuation of Charts

1. Tap the **Active Point** on the **Main Menu**.
2. Select desired chart type on the **Secondary Menu**. The selected chart will display.
3. Tap on the **action ribbon** to display additional chart selection.

Departure Procedures



Arrival Procedures



Alternate/ RADAR/ Takeoff Minimums

Other

ALTERNATE MINS		ALTERNATE MINIMUMS	
<b>SAN JUAN, PR</b> LUIS MUNIZ MARIN INTL (SJU) (TJSJ).....ILS or LOC Rwy 8 <sup>12</sup> ILS or LOC Rwy 10 <sup>12</sup> NDB Rwy 8 <sup>14</sup> RNAV (GPS) Rwy 8 <sup>8</sup> RNAV (GPS) Rwy 10 <sup>4</sup> RNAV (GPS) Rwy 26 <sup>4</sup> RNAV (GPS) Rwy 28 <sup>4</sup> VOR or TACAN Rwy 8 <sup>15</sup> VOR or TACAN Rwy 10 <sup>15</sup> VOR or TACAN Rwy 26 <sup>15</sup> <sup>1</sup> ILS, LOC, Category D, 1000-3. <sup>2</sup> NA when local weather not available. <sup>3</sup> ILS, LOC, Category D, E, 1000-3. <sup>4</sup> Category D, E, 1000-3.	<b>TAMPA, FL</b> PETER O KNIGHT (TPF).....RNAV (GPS) Rwy 22 RNAV (GPS) Rwy 36 NA when local weather not available. TAMPA EXEC (VDF).....ILS or LOC Rwy 23 <sup>1</sup> RNAV (GPS) Rwy 5 <sup>2</sup> RNAV (GPS) Rwy 18 RNAV (GPS) Rwy 23 <sup>2</sup> NA when local weather not available. LOC, Category C, 800-2¼. <sup>2</sup> Category C, 800-2¼. TAMPA INTL (TPA).....ILS or LOC Rwy 1L <sup>1</sup> ILS or LOC Rwy 19L <sup>2</sup> LOC Rwy 1R <sup>1</sup> RNAV (GPS) Rwy 1L <sup>4</sup> RNAV (GPS) Rwy 19R <sup>4</sup> RNAV (GPS) Rwy 18 <sup>4</sup> RNAV (GPS) Rwy 19R <sup>4</sup> RNAV (GPS) Z Rwy 19R <sup>4</sup> <sup>1</sup> ILS, Category C, 700-2; Categories D, E, 1000-3; LOC Categories D, E, 1000-3. <sup>2</sup> ILS, Category C, 700-2; Category D, 1000-3; LOC Category D, 1000-3. <sup>3</sup> Categories A, B, 1300-2; Categories C, D, 1300-3. <sup>4</sup> Categories D, E, 1000-3.		
<b>SARASOTA/BRADENTON, FL</b> SARASOTA/BRADENTON INTL (SRQ).....ILS or LOC Rwy 14 ILS or LOC Rwy 32 NA when control tower closed. <b>SEBRING, FL</b> SEBRING RGNL (SEF).....RNAV (GPS) Rwy 14 <sup>1</sup> RNAV (GPS) Rwy 32 Category D, 900-2¼. NA when local weather not available. <b>STUART, FL</b> WITHAM FLD (SUA).....RNAV (GPS) Rwy 30 NA when local weather not available. <b>TALLAHASSEE, FL</b> TALLAHASSEE INTL (TLH).....ILS or LOC Rwy 27 <sup>12</sup> ILS or LOC Rwy 36 <sup>13</sup> RADAR-1 RNAV (GPS) Rwy 9 <sup>4</sup> RNAV (GPS) Rwy 18 <sup>4</sup> RNAV (GPS) Rwy 27 <sup>4</sup> RNAV (GPS) Rwy 36 <sup>4</sup> VOR/DME or TACAN Rwy 36 <sup>4</sup> VOR Rwy 18 <sup>4</sup> <sup>1</sup> NA when control tower closed. <sup>2</sup> ILS, Categories A, B, C 800-2; Category D, 800-2¼; Category E, 1000-3; LOC, Category D, 800-2¼; Category E, 1000-3. <sup>3</sup> ILS, Category D, 700-2¼; LOC, Category D, 800-2¼. <sup>4</sup> Category D, 800-2¼. <sup>5</sup> Category D, 800-2¼; Category E, 1000-3. <sup>6</sup> NA when local weather not available.	<b>TITUSVILLE, FL</b> SPACE FLORIDA LAUNCH AND LANDING FACILITY (TTS).....RNAV (GPS) Rwy 15 <sup>1</sup> RNAV (GPS) Rwy 33 <sup>2</sup> NA when local weather not available. <sup>1</sup> Categories D, E, 1000-3. <sup>2</sup> Category C, 1000-2¼; Category D, E, 1000-3. SPACE COAST RGNL (TX).....ILS or LOC Rwy 36 <sup>1</sup> RNAV (GPS) Rwy 9 <sup>2</sup> RNAV (GPS) Y Rwy 18 <sup>2</sup> RNAV (GPS) Z Rwy 18 <sup>2</sup> RNAV (GPS) Rwy 36 <sup>2</sup> NA when local weather not available. <sup>1</sup> NA when control tower closed.		
<b>VENICE, FL</b> VENICE MUNI (VNC).....RNAV (GPS) Rwy 5 RNAV (GPS) Rwy 13 RNAV (GPS) Rwy 22 RNAV (GPS) Rwy 31 NA when local weather not available. Category D, 1000-3.			

RNNAV DEPARTURE AAUP		RNNAV DEPARTURE AAUP	
21224 AL 257 (FAA)	MIAMI INTL (MIA) MIAMI, FLORIDA		
<b>ATTENTION ALL USERS PAGE (AAUP)</b>			
<p><b>1. PREFLIGHT:</b> All aircraft capable of conducting Terminal RNAV procedures should expect an RNAV SID clearance. If unable to accept the RNAV SID clearance, advise Clearance Delivery. Upon assignment of an RNAV SID, crosscheck the charted RNAV SID with the aircraft navigation system against the ATC clearance. Consider the following cross items:</p> <ul style="list-style-type: none"> <li>• Preplan Runway, ensure expected departure runway is selected/displayed</li> <li>• Ensure all transitions are selected/displayed correctly</li> <li>• Ensure sequence of waypoints match the appropriate charts</li> <li>• Use the LEGS page to verify routing (for navigation systems with ROUTE and LEGS pages)</li> <li>• Ensure altitude set in the altitude window matches the TOP ALTITUDE of the SID or altitude assigned by ATC</li> <li>• Advise ATC prior to takeoff if unable to verify correct loading or if unable to comply with the SID</li> <li>• Do not modify or manually construct RNAV procedures</li> </ul> <p><b>2. BEFORE TAKEOFF:</b> Ensure that the Departure Runway assigned is displayed on the navigation system.</p> <ul style="list-style-type: none"> <li>• Verify all modification, including runway changes, in the navigation system with the RNAV SID</li> <li>• Verify aircraft symbol relative to the runway symbol, lateral track, and displayed route agree with the ATC clearance (electronic navigation map displays)</li> <li>• Confirm proper navigation/FMS selection are displayed when runway or route changes are issued by ATC</li> </ul> <p><b>3. LINE UP/TAKEOFF:</b> Pilots can expect a takeoff clearance from ATC that will include *RNAV to* the first waypoint on the SID, or a heading. If tower issues an initial departure heading in take-off clearance, DO NOT DELETE the ATC issued RNAV SID from active FMS, and expect ATC DIRECT/JOIN clearance to resume RNAV SID during departure.</p> <ul style="list-style-type: none"> <li>• <b>SAMPLE PHRASEOLOGY</b> <ol style="list-style-type: none"> <li>Clearance: *RNAV to CSALT, Runway 8R, Cleared for Takeoff*</li> <li>Response: *RNAV to CSALT, Runway 8R, Cleared for Takeoff*</li> </ol> </li> <li>• Verify the correct runway and SID are selected/displayed and the correct lateral navigation mode is available and ready for use after takeoff</li> <li>• If the takeoff clearance does not match the selected/displayed procedure, request an initial heading from tower or refuse the takeoff clearance until the discrepancy is resolved</li> </ul> <p><b>4. AFTER TAKEOFF:</b> Unless instructed to fly a heading by ATC, engage lateral navigation Right guidance as soon as practical but no later than 400 feet AGL, and fly the departure. Strict compliance with the lateral and vertical tracks and charted speed restrictions is imperative.</p> <ul style="list-style-type: none"> <li>• Once established on the procedure, maintain route centerline, as depicted by onboard lateral navigation indicators</li> <li>• Manually intervene if necessary, to stay on track to avoid transgressing in the direction of a parallel runway, track, or aircraft</li> <li>• If unable to comply with the SID profile, either laterally or vertically, immediately notify ATC</li> </ul> <p><b>5. SPECIFIC INFORMATION:</b> 0700 - 2300 local runway 8L/R, 9, 26L/R, 27 simultaneous departures, all RNAV equipped aircraft departing MIA should expect to fly a MIA RNAV DEPARTURE SID. In the event of weather or other non-standard events, headings may be issued in lieu of an RNAV off the ground take off clearance.</p> <ul style="list-style-type: none"> <li>• Final runway assignments will be issued on initial contact with Ground Control</li> </ul>			
RNNAV DEPARTURE AAUP Orig 12AUG21	25°48'N 80°17'W	MIAMI, FLORIDA MIAMI INTL (MIA)	



**NOTE:** The Min tab includes Alternate, RADAR, and Takeoff Minimums to select from.

### Host Nation

#### AIRPORT

EFFECTIVE UPON PUBLICATION UNLESS OTHERWISE NOTED BY AN EFFECTIVE DATE

---

NFDD #: 210 - 12  
NFDD Date: 30 OCT 2018  
City, State: BELLEVILLE , ILLINOIS  
AirField Info: SCOTT AFB/MIDAMERICA - (04413.A)  
Ident: BLV

---

**Data**

LATITUDE -	38-32-42.6 N	LONGITUDE -	89-50-06.7 W
USER FEE APPT	YES	ACRCD	

Page 1 out of 1



**NOTE:** To zoom in and out of the airport diagram, at the upper-right corner of your screen there are options to maximize or minimize diagram. Alternatively, users can use the pinch in and out method to perform this action.



**NOTE:** Host Nation includes a slider that allows users to select individual pages. Alternatively, users can tap the left or right arrows to turn the page.



**NOTE:** A blank state message will appear indicating that there is no data downloaded.

### 15.2.3 Weather and Potential Hazard Information

An internet connection is required for users to view weather and potential flight hazard information of the provided ICAO.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Weather (Wx)** on the **Secondary Menu**.
3. The following options are available to users:
  - Internet
  - METARs
  - TAFs
  - Winds
  - Temps
  - PIREPs
  - NOTAMs

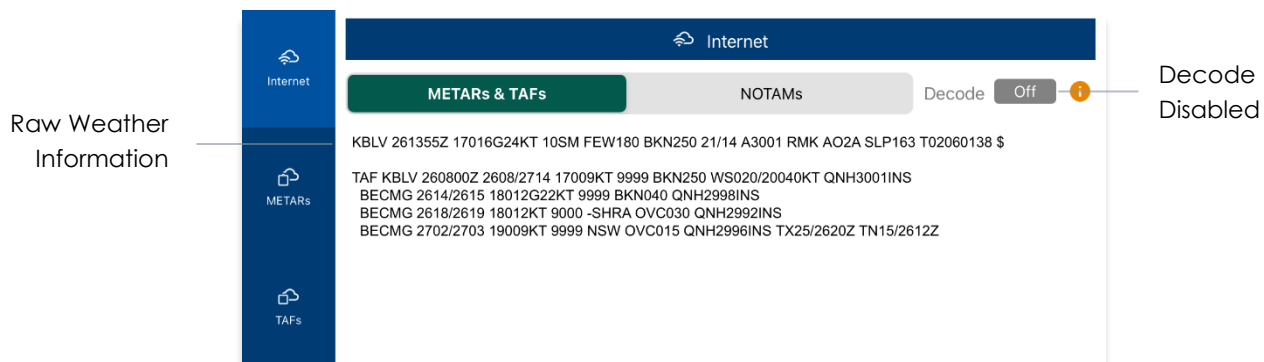
#### 15.2.3.1 Internet

This section describes how to retrieve METARs, Terminal Aerodrome Forecasts (TAFs), and NOTAMs information.

##### 15.2.3.1.1 METARs and Terminal Aerodrome Forecasts (TAFs)

Aero App displays METARs and Terminal Aerodrome Forecasts (TAFs) weather information from the Aviation Weather Center. In addition, Aero App provides users the option to be redirected to the NOTAMs web browser.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **Internet** from the side menu, if necessary.
4. Select **METARs & TAFs** to view information for the selected airport.



5. Tap the **Decode** button to enable the option located at the upper-right corner to view raw or decoded weather information.

The screenshot shows a mobile application interface for weather information. At the top, there is a blue header with the text "Internet" and a signal strength icon. Below the header, there are two tabs: "METARs & TAFs" (which is active and highlighted in green) and "NOTAMs". To the right of these tabs is a "Decode" button, which is currently set to "On" and has a small orange information icon next to it. A line points from the text "Decode Enabled" to this button. On the left side, there is a vertical blue sidebar with several icons and labels: "Internet", "METARs", "TAFs", "Winds", "Temps", "PIREPs", and "NOTAMs". A line points from the text "Decoded Weather Information" to the "METARs" icon. The main content area displays weather data for KBLV (Belleville/Scott AFB, IL, US) observed at 1355 UTC 26 Oct 2023. It includes a METAR text block and a TAF text block, both with their respective forecast periods and types. The text is as follows:

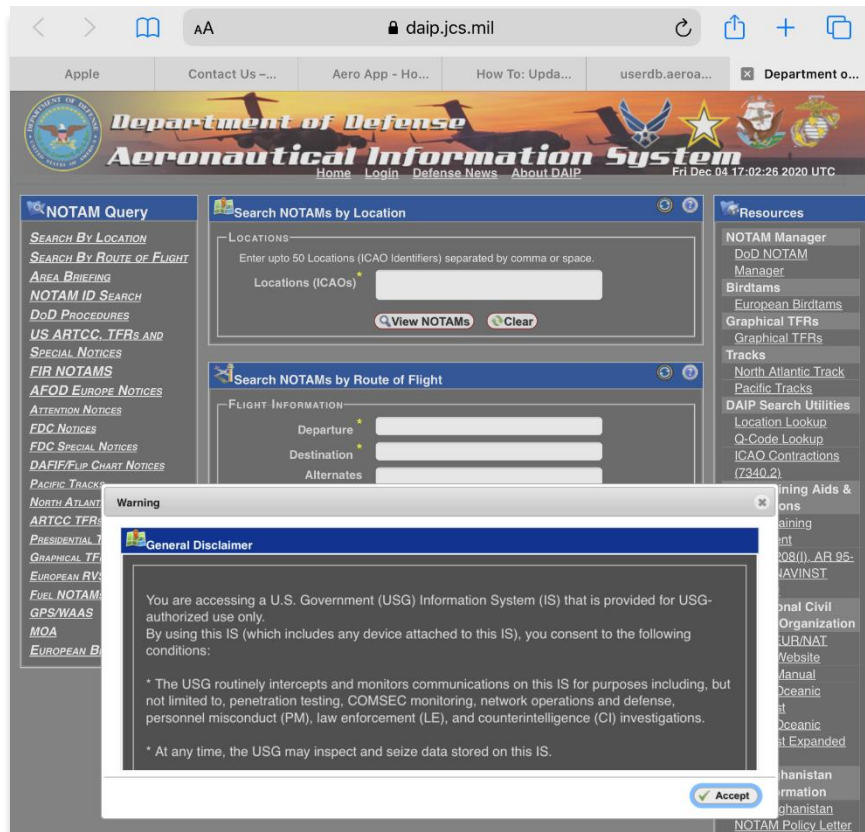
METAR for KBLV (Belleville/Scott AFB, IL, US) observed at 1355 UTC 26 Oct 2023  
Text: KBLV 261355Z 17016G24KT 10SM FEW180 BKN250 21/14 A3001 RMK AO2A SLP163 T02060138 \$  
Temperature: 20.6C (69.1 F)  
Dewpoint: 13.8C (56.8 F)  
Altimeter: 30.01 inches Hg (1016.3 mb)  
Sea level pressure: 1016.3 mb  
Winds: from 170 degrees at 16 knots gusting to 24 knots  
Visibility: 10+ sm  
Ceiling: 25000 feet AGL  
Clouds: few clouds at 18000 feet AGL, broken clouds at 25000 feet AGL

TAF for: KBLV (Belleville/Scott AFB, IL, US) issued at 0800 UTC 26 Oct 2023  
Text: TAF KBLV 260800Z 2608/2714 17009KT 9999 BKN250 WS020/20040KT QNH3001INS  
Forecast period: 0800 UTC 26 Oct 2023 to 1400 UTC 26 Oct 2023  
Forecast type: FM  
Winds: from 170 degrees at 9 knots  
Visibility: 6 or more sm (10+ km)  
Ceiling: 25000 feet AGL  
Clouds: broken clouds at 25000 feet AGL  
Text: BECMG 2614/2615 18012G22KT 9999 BKN040 QNH2998INS  
Forecast period: 1400 UTC 26 Oct 2023 to 1800 UTC 26 Oct 2023  
Forecast type: BECMG  
Winds: from 180 degrees at 12 knots gusting to 22 knots  
Visibility: 6 or more sm (10+ km)  
Ceiling: 4000 feet AGL  
Clouds: broken clouds at 4000 feet AGL  
Text: BECMG 2618/2619 18012KT 9000 -SHRA OVC030 QNH2992INS  
Forecast period: 1800 UTC 26 Oct 2023 to 0200 UTC 27 Oct 2023  
Forecast type: BECMG  
Winds: from 180 degrees at 12 knots  
Visibility: 6 sm (9 km)  
Ceiling: 3000 feet AGL  
Clouds: overcast cloud deck at 3000 feet AGL  
Weather: -SHRA (light rain showers)  
Text: BECMG 2702/2703 19009KT 9999 NSW OVC015 QNH2996INS TX25/2620Z TN15/2612Z  
Forecast period: 0200 UTC 27 Oct 2023 to 1400 UTC 27 Oct 2023  
Forecast type: BECMG  
Winds: from 190 degrees at 9 knots  
Visibility: 6 or more sm (10+ km)  
Ceiling: 1500 feet AGL  
Clouds: overcast cloud deck at 1500 feet AGL  
Weather: NSW (no significant weather)

### 15.2.3.1.2 Notice of Airmen (NOTAM) Website

Notice of Airmen (NOTAM) are notices to alert pilots of potential hazards along a flight route or at a location that can affect the safety of the flight.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **Internet** from the side menu, if necessary.
4. Tap **NOTAMs** and users will be redirected to the DOD Aeronautical Information System browser.





### 15.2.3.2 METARs

The METARs tab displays raw weather information for ADS-B and Air Force Weather (AF Wx) data that may include temperature, precipitation, visibility, barometric pressure, and other information of interest to pilots.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **METARs** from the side menu. Aero App will display ADS-B data information.

### 15.2.3.3 Terminal Aerodrome Forecasts (TAFs)

Terminal Aerodrome Forecasts (TAFs) highlight the expected meteorological conditions at an airport during a specific period, typically 24 hours.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **TAFs** from the side menu. Aero App will display the TAFs data.

METARs	TAFs



**NOTE:** Refer to [Section 15.3.3](#) for additional information for Air Force Weather (AF Wx).

### 15.2.3.4 Winds and Temps

Winds and Temps are forecasts of specific atmospheric conditions in terms of wind and temperature at certain altitudes; typically measured in feet above mean sea level. Wind direction is always in reference to true north. The wind speed is measured in knots and the temperature is measured in Celsius.

1. Tap the **Active Point** on the **Main Men**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **Winds** from the side menu. Aero App will display winds data.
4. Select **Temps** from the side menu. Aero App will display temperature data.

#### Winds

Valid: 051800Z							
ID	3K	6K	9K	12K	18K	24K	30K
KEYW	200@14	210@21	210@31	210@38	250@34	230@38	230@58
KMLB	140@24	170@23	220@22	250@28	250@38	230@57	220@91

Valid: 061200Z							
ID	3K	6K	9K	12K	18K	24K	30K
KPIE	310@47	280@51	270@49	260@39	220@55	230@60	220@77

#### Temps

Valid: 051800Z								
ID	FZL	6K	9K	12K	18K	24K	30K	34K
KEYW	13800	14	9	3	-7	-17	-33	
KMLB	13000	12	7	2	-10	-19	-35	

Valid: 061200Z								
ID	FZL	6K	9K	12K	18K	24K	30K	34K
KPIE	12800	7	6	2	-12	-23	-32	3

### 15.2.3.5 Pilot Reports (PIREPs)




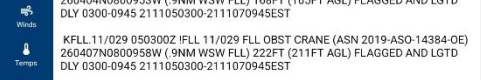







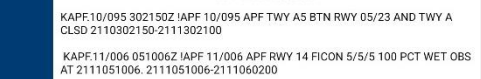


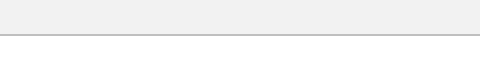


Pilot Reports (PIREPs) are reports of actual weather conditions encountered by an ownship in flight.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **PIREPs** from the side menu. Aero App will display PIREPs data.

### 15.2.3.6 Notice of Airmen (NOTAM)

Notice to Airmen (NOTAM) alerts pilots of potential hazards along a flight route that could affect safety.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **NOTAMs** from the side menu. Aero App will display NOTAMs data.

PIREPs	NOTAMs
	
	
	
	
	
	
	
	
	
	

## 15.3 Moving Map

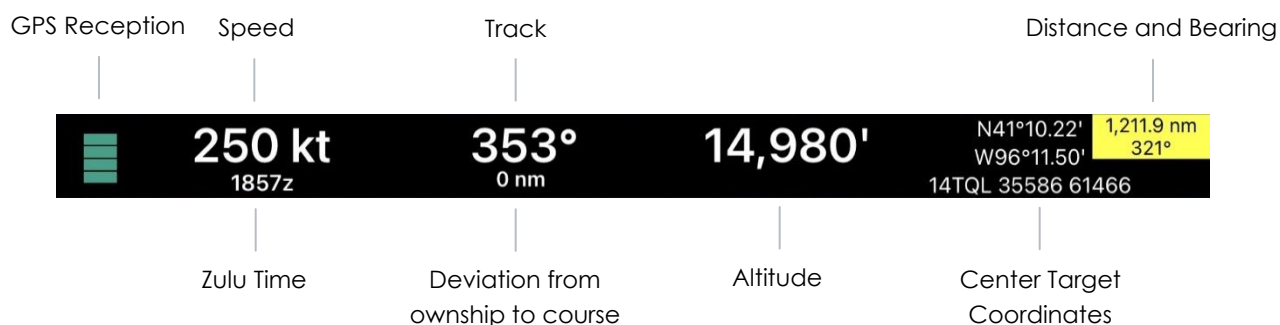
The Moving Map is an essential and powerful tool that provides a highly customizable and comprehensive worldwide map. With a variety of overlays available, it is effortless to navigate and stay informed while in-flight.

The following are map-related overlays, features, and tools available to users on the Moving Map:

- Flight Information Panel
- Timer
- Air Force Weather (AF Wx)
- Automatic Dependent Surveillance – Broadcast (ADS-B)
- Maps
- Overlays
- Options
- Crosshair Icon (Snap to Location)
- Move Map to Location
- Split Screen
- Collapsible Route Panel

### 15.3.1 Flight Information Panel

The Flight Information Panel, located directly above the Moving Map, displays details of the user's current flight. The Flight Information Panel contains details such as the ownship's GPS reception connection status, Speed, Zulu Time, Track, Altitude, Center Target Coordinates, and the Distance and Bearing.



---

### 15.3.1.1 GPS Reception Connection Status

Aero App enables users to view their current GPS reception connection status. The GPS reception connection status is located at the upper-left corner of the Flight Information Panel. There are different ranges that indicate GPS reception. The ranges are as follows:

- **4 bars** = WASS
- **3 bars (green)** = +/- 10 meters
- **2 bars (orange)** = +/- 20 meters
- **1 bar (red)** = +/- 50 meters



**NOTE:** If there is no GPS connection, **No GPS Data** will display on the Flight Information Panel.

---

### 15.3.1.2 Speed

The Flight Information Panel displays the speed of the ownship located at the left side of the panel view. The indicated airspeed is measured in knots (kt) and will adjust accordingly to the rate of the ownship.

### 15.3.1.3 Zulu Time

Aero App uses Zulu time, which is based on the 24-hour clock and is represented by a four-digit number, with the first two digits indicating the hour and the last two digits indicating the minutes. Zulu time is located directly below the ownship's speed of the panel view.

### 15.3.1.4 Track

Aero App measures the Track, which is the *actual* direction of the ownship's course above the ground. The Track value is based on the GPS. The value below the track is the deviation from your ownship to the course, which is measured in nm or km, respective to which distance unit format users have set in their Preferences. The orientation of the arrow is direction to get back to course.



**NOTE:** The arrow points toward the route and not in the direction of the deviation.

---

### 15.3.1.5 Altitude

The pilot's ownship GPS altitude does not synchronize with the altitude it displays on your altimeter. To correct this, users can manually adjust the calibration altitude to allow uniformity of the two.

1. Tap **Altitude** on the black ribbon from the Moving Map screen.
2. Tap the **+/-** buttons to adjust your calibrated altitude by increments or decrements of 100' or 500', respectively.
3. Tap **Set** to complete the calibration.
4. The ownship altitude is displayed below the *GPS* section. Tap **Use GPS** to use your current GPS altitude.

### 15.3.1.6 Center Target Coordinates

The Flight Information Panel displays the latitude, longitude, and MGRS of the Center Target. The Center Target is activated once the Moving Map is moved. As the Moving Map is moved, the Latitude, Longitude, and MGRS values update respective to the placement of the center target. Refer to [Section 15.3.1.1](#) for additional information.

### 15.3.1.7 Distance and Bearing

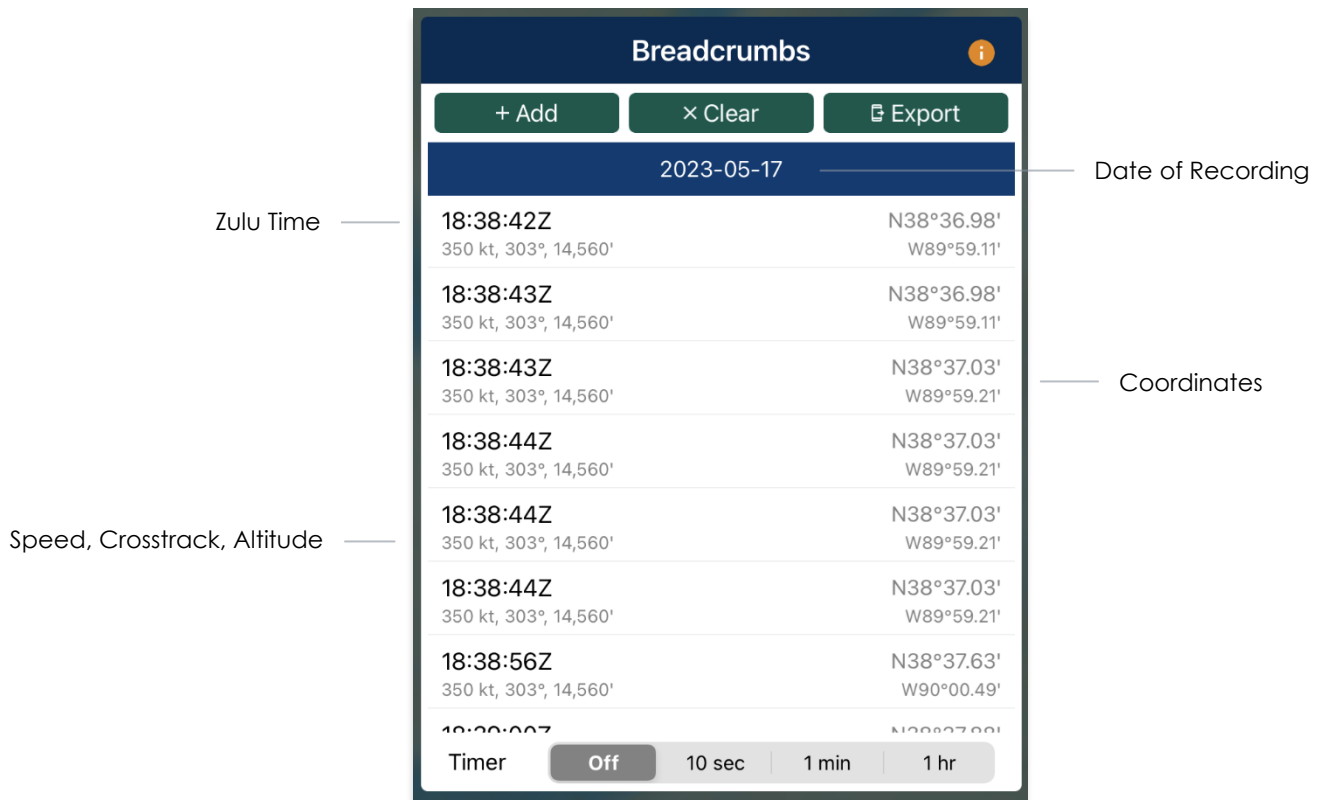
Distance is the range between your ownship's location and where the center target is placed. Bearing is the angle between your ownship and the center target. As the Moving Map is moved, the distance and bearing updates respective to the placement of the Center Target, provided the GPS is on.

When the center target is activated, a yellow tag is shown on the Information Panel and displays the *distance* in nm or km, respective to which distance unit format users have set in their Preferences and *bearing* (in degrees) relative to current location. Refer to [Section 15.3.1.1.1](#) for additional information.

### 15.3.1.8 Breadcrumbs

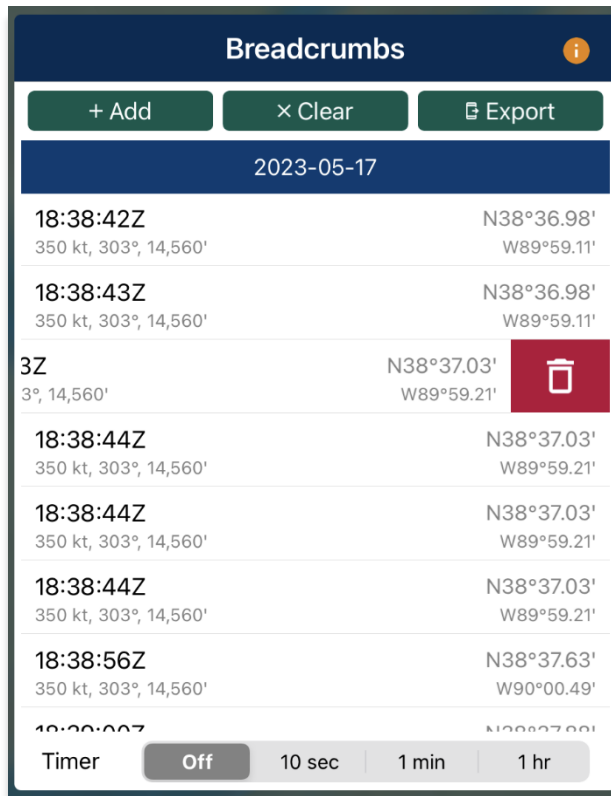
Breadcrumbs enables users to record coordinates throughout their course. A GPS connection is required. To view the recorded Breadcrumbs on the Moving Map, users must enable the option as described in [Section 14.3.7.2.1](#).

1. Tap the **coordinates** located at the upper-right corner of the Moving Map's Flight Information Panel.
2. A dialog window will appear displaying the recorded breadcrumbs.

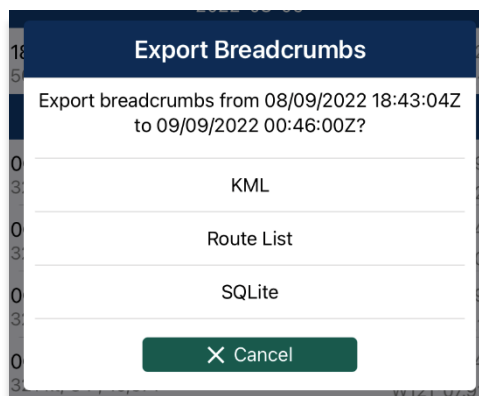


3. Tap **Add** to save coordinates. Users have the option to set a timer to automatically add coordinates for every 10 seconds, 1 minute, or every hour.

- To delete individual breadcrumbs, swipe left on the selected breadcrumbs to reveal the delete button then tap **Delete**.



- Tap **Clear** to delete all breadcrumbs.
- To export and save breadcrumbs, tap **Export**. Users can export as a KML file, Route List or to SQLite file.

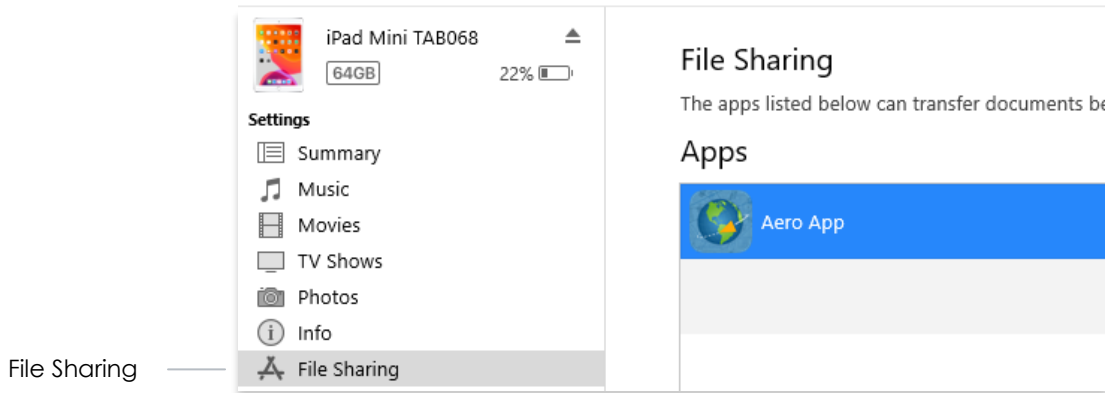


**NOTE:** Breadcrumbs are logged by individual days.



### 15.3.1.8.1 View Breadcrumbs in KML

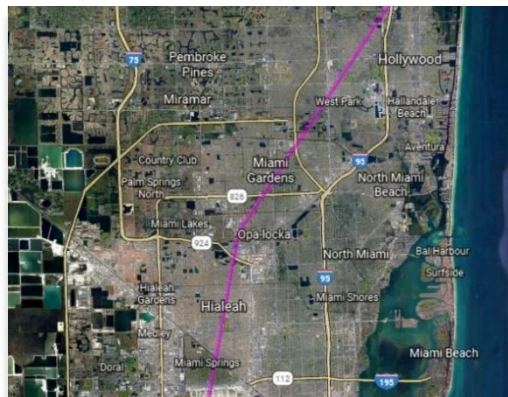
1. Export Breadcrumbs to KML.
2. Connect your iPad to a USB or USB-C port of a Mac or Windows computer.
3. iTunes will display on the screen.
4. Click the **iPad icon** and your device information will display.
5. Locate *Aero App* under File Sharing.



6. Your exported breadcrumbs will be listed. Copy KML files and create a folder on your desktop, specifically for KML files.



7. Open Google Earth to Export KML files, and your points will appear.



### 15.3.1.8.2 View Breadcrumbs in Route List

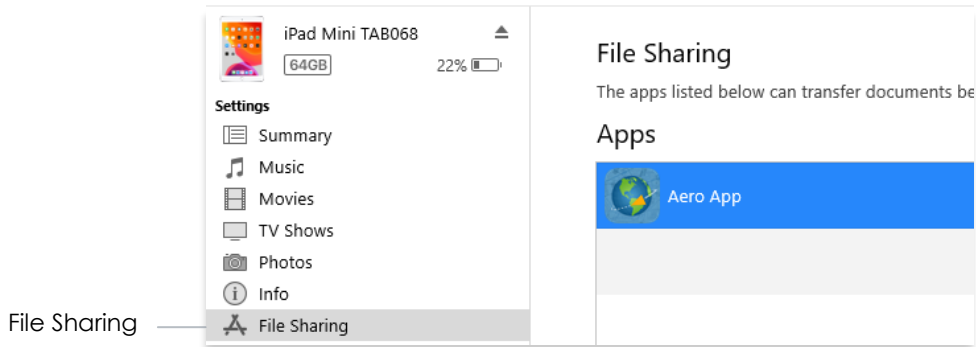
1. Export Breadcrumbs to Route List.
2. The **Export to Route List** popup will display.
3. Users will be prompted to name their route name. Enter the desired name then tap **Save**.
4. To view your saved route, tap the **Route Tab**.
5. Tap **Route**.
6. Tap **Actions** from the side menu.
7. Select **Load** and locate the route in which you would like to load into your Route Panel.






### 15.3.1.8.3 View Breadcrumbs in SQLite File

Aero App enables users to view Breadcrumbs in SQLite File. A database viewer is required to view Breadcrumbs in SQLite file.

1. Export Breadcrumbs to SQLite Database.
2. Connect your iPad to a USB or USB-C port of a Mac or Windows computer.
3. iTunes will display on the screen.
4. Click the **iPad** icon and your device information will display.
5. Locate *Aero App* under File Sharing.



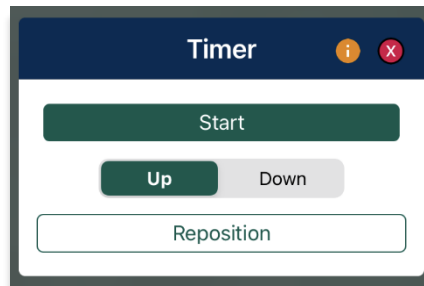
6. Your exported breadcrumbs will be listed.

	AeroBreadcrumbs-201902121...	12 KB	2/12/2019 2:17 PM
	AeroBreadcrumbs-201903101...	4 KB	Today 6:27 PM
	AeroBreadcrumbs-201903101...	24 KB	Today 6:00 PM

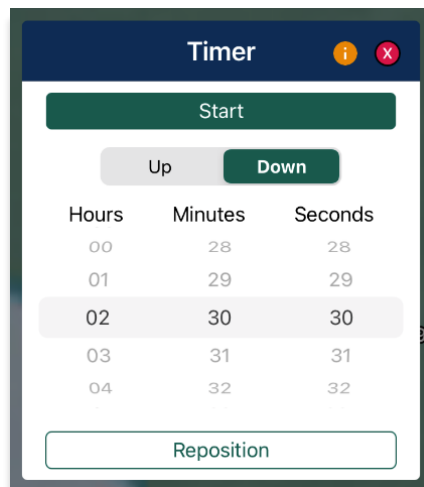
### 15.3.2 Timer

The Timer feature is a general use chronometer that can be used to time flights or any other activity.

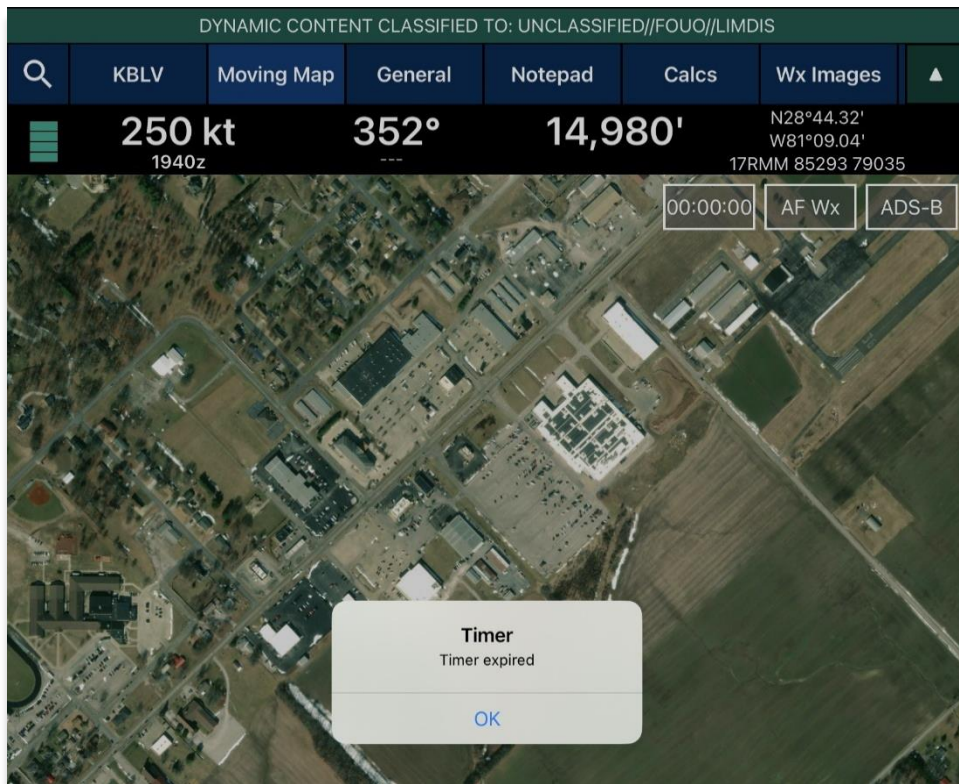
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Timer** located at the upper-right corner of the screen. The timer menu will display.
3. The Timer has two modes:
  - **Count Up** – Starts the timer at zero then begins counting.
  - **Count Down** – Timer counts down based on the selected hours, minutes, and seconds the timer was set to.
4. By default, *Count Down* is selected. Tap to select or slide the segmented control to the left to select **Count Up** mode.
5. Tap **Start** to begin the timer.



6. To count down, tap to select or slide the segmented control to **Count Down** mode.
7. Adjust the timer's **Hours**, **Minutes**, and **Seconds** to desired duration.
8. Tap **Start** to begin timer.



9. The Timer box switches between the following colors to indicate the time remaining on the timer:
  - **Green** – If input is greater than 1 minute
  - **Yellow** –Timer box will start flashing yellow with 1 minute remaining on the timer.
  - **Orange** – Timer box will start flashing orange with 30 seconds remaining on the timer.
  - **Red** – Timer box will start flashing red with 10 seconds remaining on the timer.
10. An alert will appear on the screen once the timer is completed. If the device is locked, a notification will display in the device notification bar.



11. To force the timer to end, tap **Stop**.
12. Tap **Reset** to restart timer.

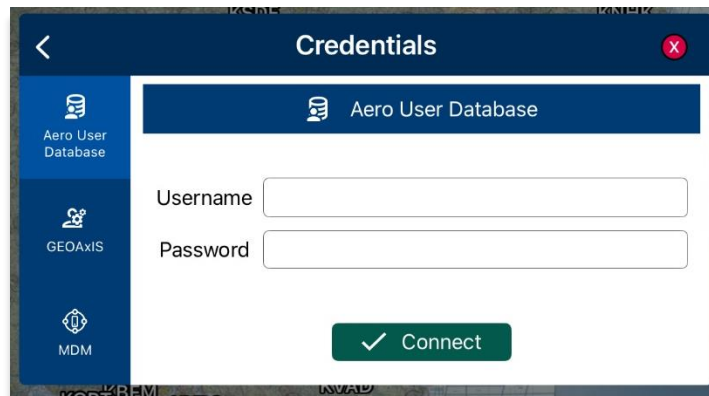


**NOTE:** Tap **Reposition** to move the Timer button from the current position to below the ADS-B button.

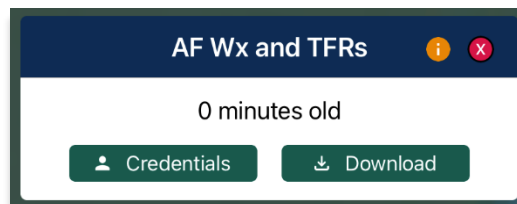
### 15.3.3 Air Force Weather (AF Wx)

Air Force Weather (AF Wx) displays METARs and TAFs in Aero App. This information can be viewed from an ICAO on the Moving Map, Route Panel, and Wx tab. Air Force Weather data is only available to DOD crews and select partners.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **AF Wx** located at the upper-right corner of the **Moving Map**.
3. The AF Wx and TFRs popup will display. Tap **Credentials**.
4. Select desired credentials to authenticate using any of the following options:
  - a. Aero User Database
  - b. GEOAxis
  - c. MDM



5. Tap **Connect** when done.
6. The AF Wx and TFRs popup will display the currency of the weather.
7. Tap **Download** to retrieve the latest Air Force Weather data.



**NOTE:** Credentials will be cleared when the user closes Aero App.

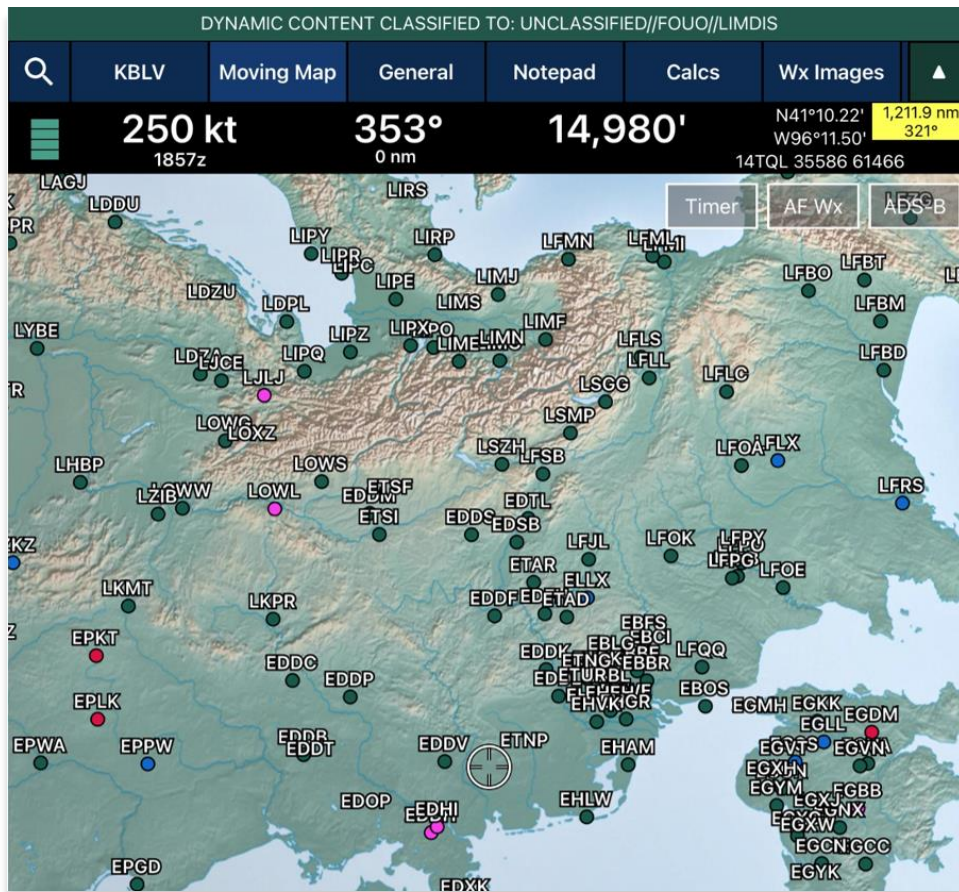


**NOTE:** Air Force Weather (AF Wx) is only available via internet. However, if ADS-B weather information becomes available; whichever source has the latest data will show as the current weather.

### 15.3.3.1 Air Force Weather (AF Wx) on the Moving Map

Air Force Weather can be viewed on the Moving Map. Once the METARs option is enabled, different color dots (depicted as airport flight rules) will populate on the Moving Map. Additional Air Force weather information can be viewed from the Wx menu as explained below.

1. Tap the **Options** tab on the **Moving Map**.
2. Select **Weather** from the side menu.
3. Tap **METARs** to enable the option. The different color dots depict the airport flight rules for their designated airport which are populated on the Moving Map once enabled.
4. The different color dots indicate the following airport flight rules:
  - **Green:** VFR
  - **Blue:** MVFR
  - **Red:** IFR
  - **Magenta:** LIFR



5. Additional Air Force weather information can be viewed by tapping an ICAO from the Moving Map. Tap an **ICAO** from the map.
6. The Moving Map popup will appear. Tap **Show** from the side menu.
7. Select **Info and Wx**.
8. The airport information will be displayed. Swipe the menus to the left to view additional airport menus. Tap **Wx**.
9. Select **METARs** from the side menu to display METAR data that includes AF Wx.
10. Select **TAFs** from the side menu to display TAF data that includes AF Wx.

METARs		TAFs	
Internet	METARs	Internet	TAFs
METARs	<b>VFR</b> <b>EDDN</b>	METARs	<b>EDDN - Nuernberg</b>
TAFs	<b>AF Wx</b> EDDN 081620Z AUTO 26011KT CAVOK 21/10 Q1012 BECMG 24005KT=	<b>AF Wx</b> EDDN 081100Z 0812/0912 24010KT 9999 SCT030 PROB30 TEMPO 0813/0816 25015G25KT SHRA BKN025TCU BECMG 0816/0818 24005KT BECMG 0820/0822 14004KT BECMG 0908/0910 24009KT PROB30 TEMPO 0911/0912 24015G25KT SHRA BKN040CB=	
Winds	<b>VFR</b> <b>ETEB</b>	Winds	<b>ETEB - Ansbach Ahp</b> <b>21nm SW</b>
Temps	<b>AF Wx</b> ETEB 081555Z AUTO 28007KT 9999 BKN046 19/12 A2989 RMK AO2 SLP124 T01940122 \$=	Temps	<b>AF Wx</b> ETEB 081500Z 0815/0921 25010G15KT 9999 SCT040 BKN050 QNH2989INS BECMG 0818/0819 21009KT 9999 SCT050 QNH2992INS BECMG 0903/0904 21009KT 9999 SCT030 BKN070 QNH2991INS
PIREPs	<b>VFR</b> <b>ETIK</b>	PIREPs	<b>ETIK - Illesheim Ahp</b> <b>27nm W</b>
NOTAMs	<b>AF Wx</b> ETIK 081555Z 26011KT 9999 SCT050 21/10 A2988 RMK AO2A SLP110 T02080100 \$=	NOTAMs	<b>ETIH - Hohenfels Aaf</b> <b>34nm ESE</b>
	<b>VFR</b> <b>ETIH</b>		<b>AF Wx</b> TEMPO 0910/0914 23012G18KT 8000 -SHRA BKN030 TX20/0815Z



**NOTE:** METAR information on the Moving Map expires 3 hours after becoming available.



**NOTE:** Air Force Weather information can be viewed directly from the Active Point menu. Refer to [Section 15.3.3.3](#) for additional information.



### 15.3.3.2 Air Force Weather (AF Wx) on the Route Panel

Air Force weather can be viewed on the Route Panel. Additional Air Force weather information can be viewed from the Wx menu as explained below.

1. Tap the **Options** tab on the **Moving Map**.
2. Select **Weather** from the side menu.
3. Tap **METARs** to enable the option. The different color dots depict the airport flight rules for their designated airport which will populate on the Route Panel once enabled.
4. Tap the **Route Tab** to expand the **Route Panel**.
5. METAR information will be displayed for each ICAO on your route.
6. The different color dot indicates the airport flight rules:
  - **Green:** VFR
  - **Blue:** MVFR
  - **Red:** IFR
  - **Magenta:** LIFR

<b>KLAX</b>	Los Angeles Intl 1865.5nm, 74°	Magenta dot
TWR: 119.8, 120.95, 133.9,...		
<b>KJAX</b>	Jacksonville Intl 285.1nm, 171°	Green dot
TWR: 118.3, 317.7		
<b>KOPF</b>	Miami Opa Locka Executive 6.8nm, 192° ETE: 00:02:01, ETA: 17:34:2...	Red dot
TWR: 134.675		
<b>KMIA</b>	Miami Intl Destination ETE: 00:03:39, ETA: 17:35:5...	Blue dot
TWR: 118.3, 123.9, 256.9		

7. Additional Air Force weather information can be viewed by tapping an ICAO from the Route Panel. Tap an **ICAO** from the Route Panel.
8. The Moving Map popup will appear. Tap **Show** from the side menu.
9. Select **Info and Wx**.
10. The airport information will be displayed. Swipe the menus to the left to view additional airport menus. Tap **Wx**.
11. Select **METARs** from the side menu to display METAR data that includes AF Wx.
12. Select **TAFs** from the side menu to display TAF data that includes AF Wx.

METARs		TAFs	
<ul style="list-style-type: none"> <li>Internet</li> <li>METARs</li> <li>TAFs</li> <li>Winds</li> <li>Temps</li> <li>PIREPs</li> <li>NOTAMs</li> </ul>	<p style="text-align: center;">METARs</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>VFR</b> <b>EDDN</b></p> <p style="text-align: center;"><b>EDDN - Nuernberg</b> <span style="float: right;"><b>AF Wx</b></span></p> <p>EDDN 081620Z AUTO 26011KT CAVOK 21/10 Q1012 BECMG 24005KT=</p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>VFR</b> <b>ETEB</b></p> <p style="text-align: center;"><b>ETEB - Ansbach Ahp</b> 21nm SW <span style="float: right;"><b>AF Wx</b></span></p> <p>ETEB 081555Z AUTO 28007KT 9999 BKN046 19/12 A2989 RMK AO2 SLP124 T01940122 \$=</p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>VFR</b> <b>ETIK</b></p> <p style="text-align: center;"><b>ETIK - Illesheim Ahp</b> 27nm W <span style="float: right;"><b>AF Wx</b></span></p> <p>ETIK 081555Z 26011KT 9999 SCT050 21/10 A2988 RMK AO2A SLP110 T02080100 \$=</p> </div> <div style="border: 1px solid #ccc; padding: 5px;"> <p style="text-align: center;"><b>VFR</b> <b>ETIH</b></p> <p style="text-align: center;"><b>ETIH - Hohenfels Aaf</b> 34nm ESE <span style="float: right;"><b>AF Wx</b></span></p> </div>	<ul style="list-style-type: none"> <li>Internet</li> <li>METARs</li> <li>TAFs</li> <li>Winds</li> <li>Temps</li> <li>PIREPs</li> <li>NOTAMs</li> </ul>	<p style="text-align: center;">TAFs</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>EDDN - Nuernberg</b> <span style="float: right;"><b>AF Wx</b></span></p> <p>EDDN 081100Z 0812/0912 24010KT 9999 SCT030 PROB30 TEMPO 0813/0816 25015G25KT SHRA BKN025TCU BECMG 0816/0818 24005KT BECMG 0820/0822 14004KT BECMG 0908/0910 24009KT PROB30 TEMPO 0911/0912 24015G25KT SHRA BKN040CB=</p> </div> <div style="border: 1px solid #ccc; padding: 5px;"> <p style="text-align: center;"><b>ETEB - Ansbach Ahp</b> 21nm SW <span style="float: right;"><b>AF Wx</b></span></p> <p>ETEB 081500Z 0815/0921 25010G15KT 9999 SCT040 BKN050 QNH2989INS BECMG 0818/0819 21009KT 9999 SCT050 QNH2992INS BECMG 0903/0904 21009KT 9999 SCT030 BKN070 QNH2991INS TEMPO 0910/0914 23012G18KT 8000 -SHRA BKN030 TX20/0815Z</p> </div>



**NOTE:** METAR information on the Moving Map expires 3 hours after becoming available.



**NOTE:** Air Force Weather information can be viewed directly from the Active Point menu. Refer to [Section 15.3.3.3](#) for additional information.

### 15.3.3.3 Air Force Weather (AF Wx) Information on the Wx Menu

Air Force weather information can be viewed by accessing the Wx menu for the Active Point, or by selecting Info and Wx for an ICAO on the Moving Map or the Route Panel.

1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Weather (Wx)** on the **Secondary Menu**.
3. The following options to view AF Wx information will be available to users:
  - METARs
  - TAFs

METARs		TAFs	
Internet	<p>Internet</p> <p>METARs</p> <p>TAFs</p> <p>Winds</p> <p>Temps</p> <p>PIREPs</p> <p>NOTAMs</p>	Internet	<p>Internet</p> <p>METARs</p> <p>TAFs</p> <p>Winds</p> <p>Temps</p> <p>PIREPs</p> <p>NOTAMs</p>
VFR EDDN	<p>EDDN - Nuernberg</p> <p>EDDN 081620Z AUTO 26011KT CAVOK 21/10 Q1012 BECMG 24005KT=</p>	VFR EDDN	<p>EDDN - Nuernberg</p> <p>EDDN 081100Z 0812/0912 24010KT 9999 SCT030 PROB30 TEMPO 0813/0816 25015G25KT SHRA BKN025TCU BECMG 0816/0818 24005KT BECMG 0820/0822 14004KT BECMG 0908/0910 24009KT PROB30 TEMPO 0911/0912 24015G25KT SHRA BKN040CB=</p>
VFR ETEB	<p>ETEB - Ansbach Ahp 21nm SW</p> <p>ETEB 081555Z AUTO 28007KT 9999 BKN046 19/12 A2989 RMK AO2 SLP124 T01940122 \$=</p>	VFR ETEB	<p>ETEB - Ansbach Ahp 21nm SW</p> <p>ETEB 081500Z 0815/0921 25010G15KT 9999 SCT040 BKN050 QNH2989INS BECMG 0818/0819 21009KT 9999 SCT050 QNH2992INS BECMG 0903/0904 21009KT 9999 SCT030 BKN070 QNH2991INS TEMPO 0910/0914 23012G18KT 8000 -SHRA BKN030 TX20/0815Z</p>
VFR ETIK	<p>ETIK - Illesheim Ahp 27nm W</p> <p>ETIK 081555Z 26011KT 9999 SCT050 21/10 A2988 RMK AO2A SLP110 T02080100 \$=</p>	VFR ETIK	
VFR ETIH	<p>ETIH - Hohenfels Aaf 34nm ESE</p>	VFR ETIH	



**NOTE:** Air Force Weather is only available via the internet. However, if ADS-B weather information becomes available, whichever source has the latest data will show the current weather.



**NOTE:** METAR information on the Wx tab expires 3 hours after becoming available. TAF information on the Wx tab expires 12 hours after becoming available.

### 15.3.4 Automatic Dependent Surveillance – Broadcast (ADS-B)

The user's ownship has an Automatic Dependent Surveillance—Broadcast receiver. The ADS-B tool receives NEXRAD, METARs, TAFs, and other textual data as well as ownship location. For non-proprietary ADS-B and GPS receiver compatibility with Aero App, refer to this link: [ADS-B/GPS Compatibility List](#)

#### 15.3.4.1 Connecting to ADS-B Receiver via Wi-Fi

To establish a connection with an ADS-B receiver via Wi-Fi, you must ensure to connect your Wi-Fi network to the receiver.

1. Open the iPad's *settings app* and select **Wi-Fi**.
2. Enable the **Wi-Fi** option to display all available networks.
3. Search and tap the ADS-B receiver in the *OTHER NETWORKS* section.
4. Ensure the ADS-B receiver's connection is established. For additional information, refer to [Section 15.3.4.2.1](#).

#### 15.3.4.2 Connecting to ADS-B Receiver via Bluetooth

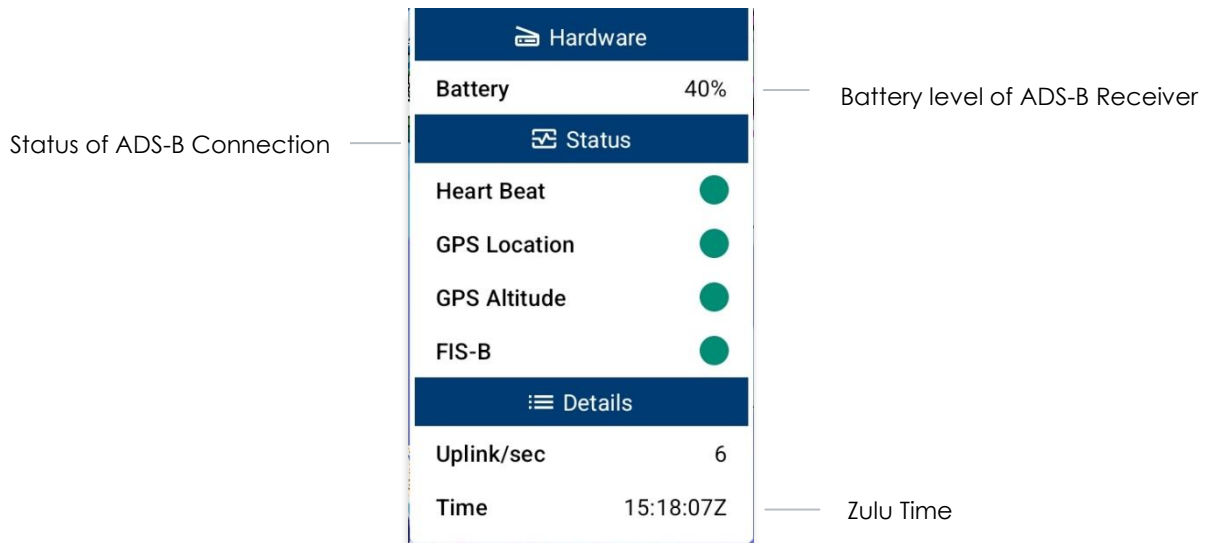
To establish a connection with an ADS-B receiver via Bluetooth, you must ensure to connect your Bluetooth to the receiver.

1. Open the iPad's *settings app* and select **Bluetooth**.
2. Enable the **Bluetooth** option to display all available devices.
3. Search and tap the ADS-B receiver in the *OTHER DEVICES* section.
4. Ensure the ADS-B receiver's connection is established. For additional information, refer to [Section 15.3.4.2.1](#).

### 15.3.4.2.1 ADS-B Information

Aero App provides an ADS-B popup that includes details on ADS-B battery, connection statuses, and additional ADS-B information.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap the **ADS-B** button located at the upper-right corner of your screen.
3. The green status indicates that the ADS-B connection is established to receive the data for Heart Beat, GPS Location, GPS Altitude, and FIS-B Data. If the status displays red, then there is no connection.
  - **Battery** – displays ADS-B battery percentage.
  - **Heart Beat** – indicates the connection status of the ADS-B device.
  - **GPS Location** – indicates the connection status of the ownship's GPS location.
  - **GPS Altitude** – indicates the connection status of the ownship's GPS altitude.
  - **FIS-B** – indicates the connection status in receiving weather from FIS-B towers.
  - **Uplink/sec** – indicates the occurrence of the ADS-B data messages Aero App receives from ADS-B towers during the previous second.
  - **Time** – displays the Zulu time.



4. The ADS-B button on the Moving Map will display a green line above the text when an ADS-B receiver is connected successfully.



**NOTE:** If the user's ADS-B is disconnected, the ADS-B button on the Moving Map will not display a green status connection.

## 15.3.5 Maps

Maps contain a library of mutable charts stored within Aero Maps, Base Map, Maxar (offline), Helicopter and TAC Maps, Map Library, User GeoPackages, and User Maps menus.

### 15.3.5.1 Aero Maps

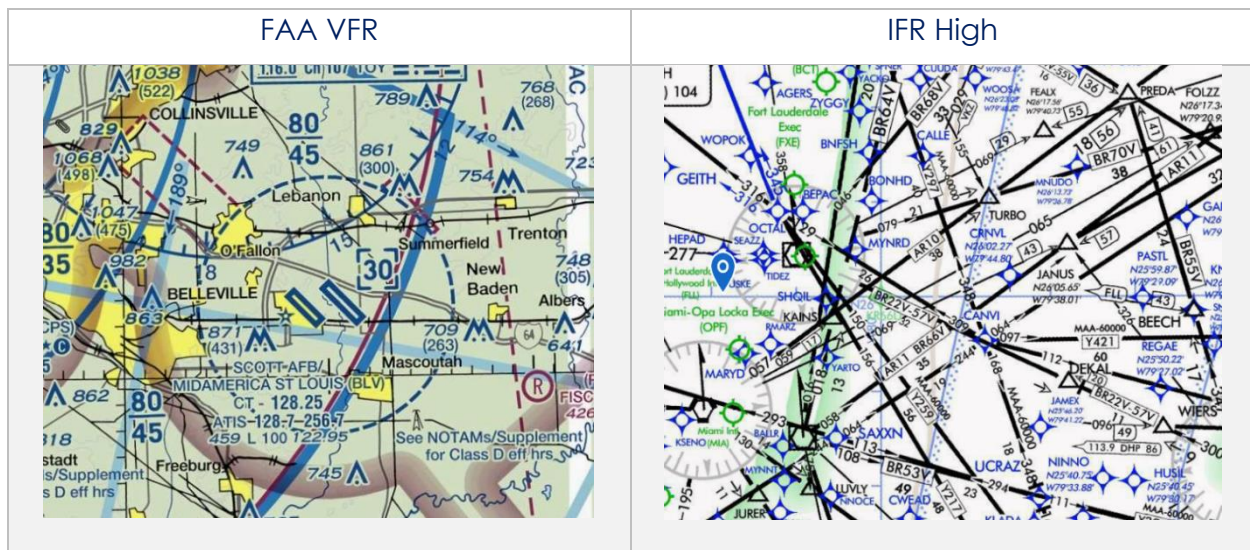
The Aero Maps section provides access to current VFR Sectionals, worldwide IFR High and Low Enroutes, and Maxar (online).

#### 15.3.5.1.1 FAA Visual Flight Rule (VFR) Sectionals

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Aero Maps** from the side menu, if necessary.
4. Tap **FAA VFR** to enable the option. The VFR sectional will be displayed on the map.

#### 15.3.5.1.2 Instrument Flight Rule (IFR) High Enroute

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Aero Maps** from the side menu, if necessary.
4. Tap **IFR High** to enable the option. The high-altitude IFR Enroute charts will be displayed on the map.



### 15.3.5.1.3 Instrument Flight Rule (IFR) Low Enroute

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Aero Maps** from the side menu, if necessary.
4. Tap **IFR Low** to enable the option. The low-altitude IFR Enroute charts will be displayed on the map.

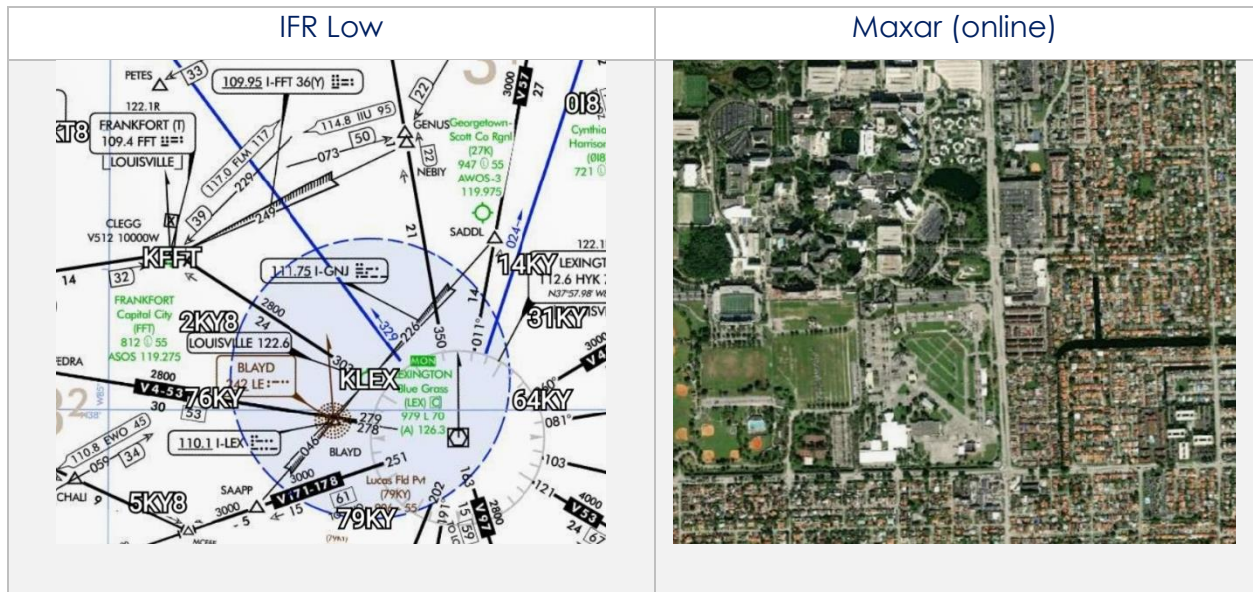
### 15.3.5.1.4 Maxar (online)

Maxar (online) requires internet connection to view real-time satellite imagery. Users with GEOAxis and specific partners with Aero User Database credentials can access Maxar (online).

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Aero Maps** from the side menu, if necessary.
4. Tap **Maxar (online)** to enable the option. A satellite imagery will be displayed on the map.



**NOTE:** Credentials will be cleared when users close Aero App. Thereby, users must log in again to view the Maxar (online).



### 15.3.5.2 Base Map

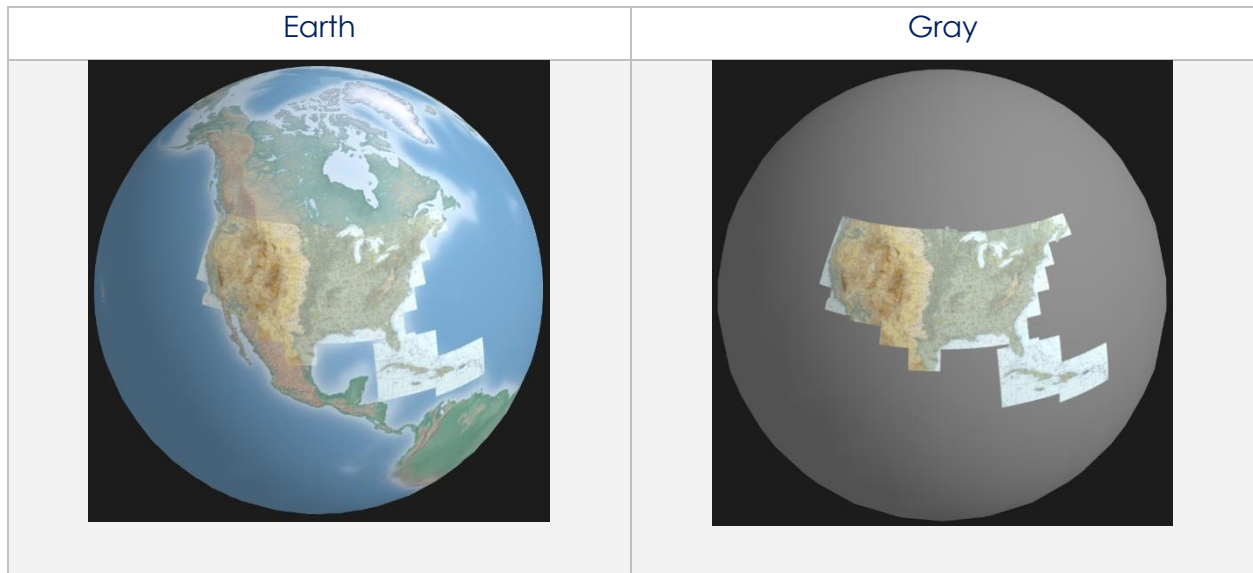
The Base Map provides worldwide Earth and Gray Base maps to choose from.

#### 15.3.5.2.1 Earth Base Map

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Base Map** from the side menu.
4. Tap **Earth** to enable the option. The earth base map will display.

#### 15.3.5.2.2 Gray Base Map

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Base Map** from the side menu.
4. Tap **Gray** to enable the option. The gray base map will display.



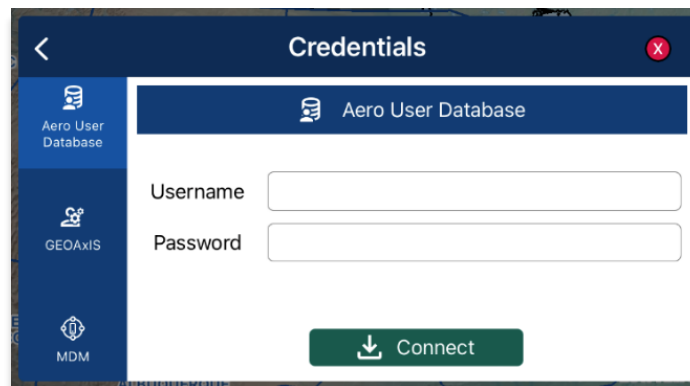


### 15.3.5.3 Maxar (offline)

Maxar (online) allows users to download cache images to be displayed on the Moving Map. The Maxar (offline) feature is available to users logged in using their GEOAxis credentials or to select government foreign partners. The initial download of Maxar (offline) cache images requires internet connection. Once the images are downloaded, internet connection is no longer required and can be displayed on the Moving Map at any time.

#### 15.3.5.3.1 Maxar (Offline)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Maxar (offline)** from the side menu.
4. Tap **Download**.
5. The credentials popup will display. Log in using Aero User Database or GEOAxis credentials or set up your device with Mobile Device Management (MDM).



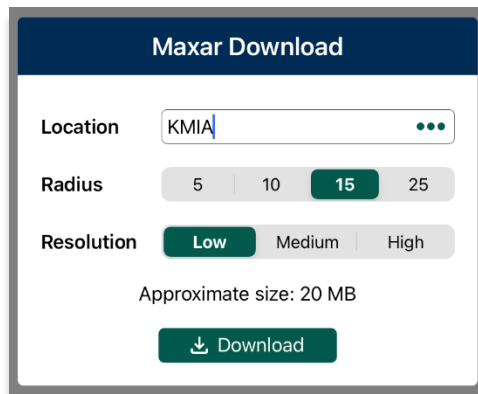
The screenshot shows a mobile application interface for entering credentials. At the top, there is a dark blue header with a back arrow on the left, the title "Credentials" in the center, and a red close button (X) on the right. Below the header is a side menu with three options: "Aero User Database" (which is selected and highlighted in blue), "GEOAxis", and "MDM". The main content area is white and contains a form for "Aero User Database". The form has two input fields: "Username" and "Password". Below the input fields is a green button with a white download icon and the text "Connect".

6. The Maxar Download popup will display the following fields:

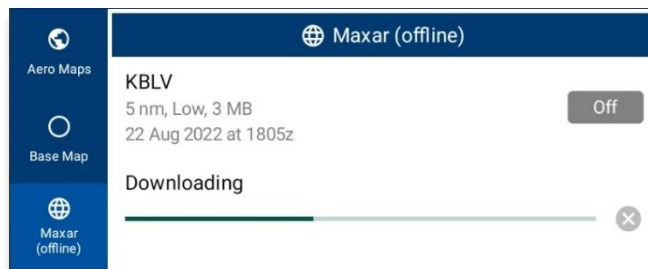
- **Location** – Tap the ellipsis button to display the Search popup. Enter Airport, NavAid, Waypoint, User Waypoint, or Pin inside the text box. Radial Off NavAid, GARS, MGRS and all other identifiers will be converted to coordinates. Alternatively, users can manually enter the identifier name in the provided text box.



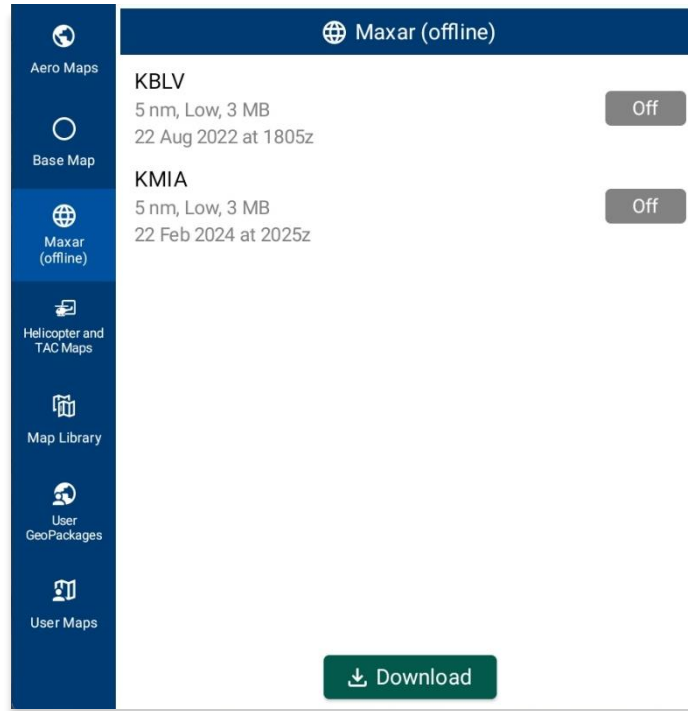
- **Radius** – Select options of 5, 10, 15, 25.
- **Resolution** – Select options of Low, Medium, High.



7. Once all fields have been filled, tap **Download** and the cached image will begin to download.



8. Downloaded files will be listed below the Maxar (offline) section.



9. Select desired file to display on the Moving Map.

10. To delete a cache image, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.



### 15.3.5.4 Helicopter and Terminal Area Chart (TAC) Maps

Helicopter and Terminal Area Chart (TAC) Maps provide access to Helicopter (Gulf Coast), Helicopter (Routes), and Terminal Area Charts (TACs) to overlay on the Moving Map.

#### 15.3.5.4.1 Helicopter (Gulf Coast)

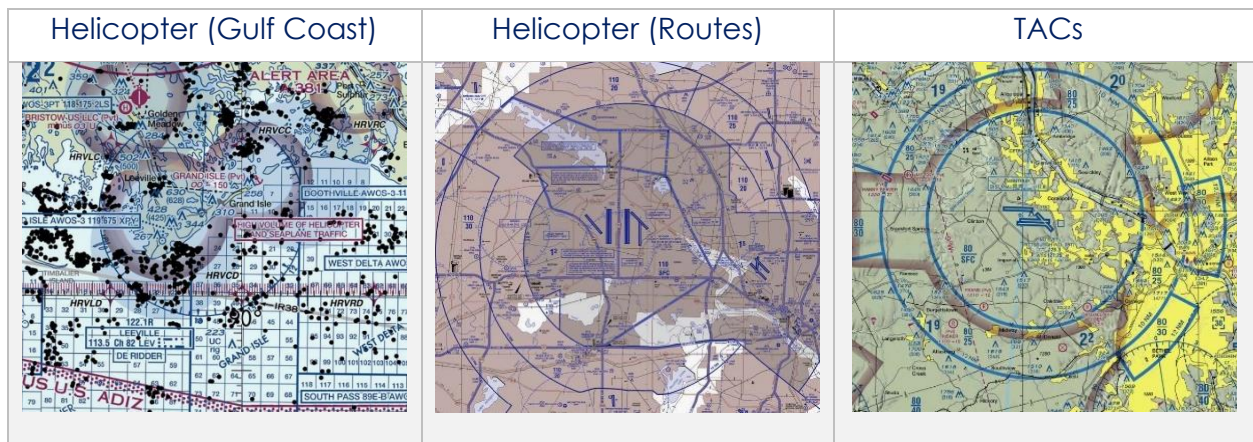
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Helicopter and TAC Maps** from the side menu.
4. Tap **Helicopter (Gulf Coast)** to enable the option. The gulf coast chart will overlay on the map.

#### 15.3.5.4.2 Helicopter (Routes)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Helicopter and TAC Maps** from the side menu.
4. Tap **Helicopter (Routes)** to enable the option. The helicopter chart will overlay the map.

#### 15.3.5.4.3 Terminal Area Charts (TACs)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Helicopter and TAC Maps** from the side menu.
4. Tap **TACs** to enable the option. The terminal area chart will overlay on the map.



### 15.3.5.5 Map Library

The Map Library section provides users the option to download Map Library charts to display on the Moving Map. Map Library includes maps for emergencies, NavPlan charts, range charts, and others. The Aero App team is the distributor of these charts.

#### 15.3.5.5.1 Map Library

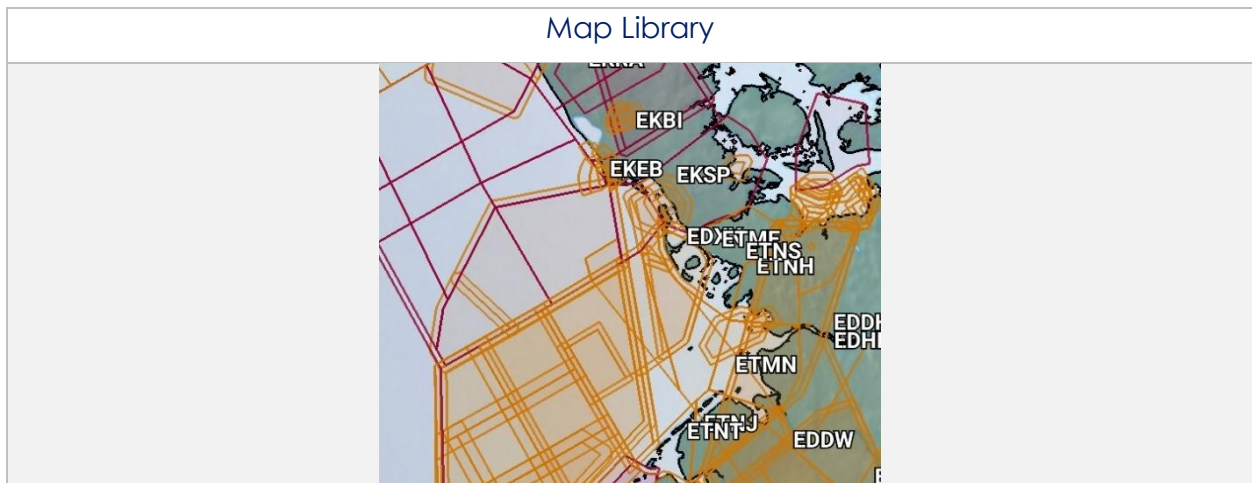
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Map Library** from the side menu.
4. The files are grouped by categories, tap on the desired folders to expand, or collapse to reveal or hide files.
5. Tap desired **Map** and the chart will overlay on the map.



**NOTE:** Users must have Map Library charts loaded to view desired map to overlay on the Moving Map. To download Map Library charts, refer to [Section 10.2.1.1](#) or [Section 10.3.1.1](#).



**NOTE:** Map Library charts can be deleted from File Manager or from the Maps popup in the Moving Map by swiping left and tapping the **Delete** button.



### 15.3.5.6 User GeoPackages

Aero App supports GeoPackages to be viewed and accessed on the Moving Map. GeoPackages must be sideloaded onto Aero App. Refer to [Section 11.3](#) for additional information.

#### 15.3.5.6.1 User GeoPackages

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **User GeoPackages** from the side menu.
4. The files are grouped by categories, tap on the desired folders to expand, or collapse to reveal or hide files.
5. Select desired file(s) and the overlay will display on the Moving Map.
6. To delete a user GeoPackage, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

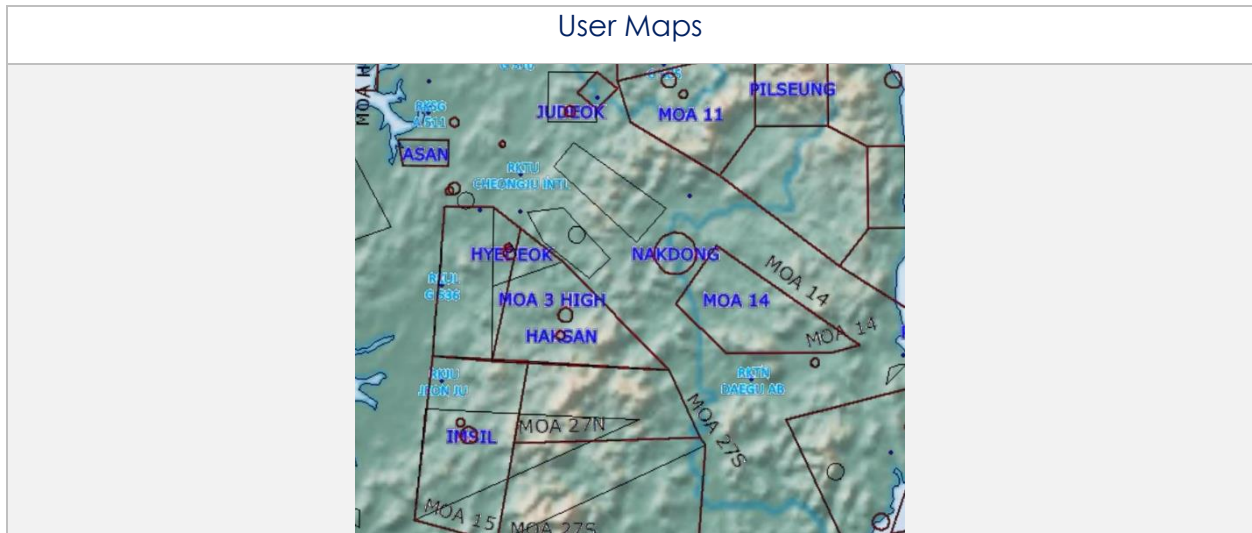


### 15.3.5.7 User Maps

Aero App supports User Maps to be viewed and accessed on the Moving Map. User Maps must be sideloaded onto Aero App. Refer to [Section 11.2](#) for additional information.

#### 15.3.5.7.1 User Maps

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **User Maps** from the side menu.
4. The loaded files will display under User Maps.
5. Select desired file(s) and the overlay will display on the Moving Map.
6. To delete a user map, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.



## 15.3.6 Overlays

Aero App provides various configurable map view overlays. The sections ahead will expand on the different Moving Map overlay options to choose from.

### 15.3.6.1 Aero Overlays

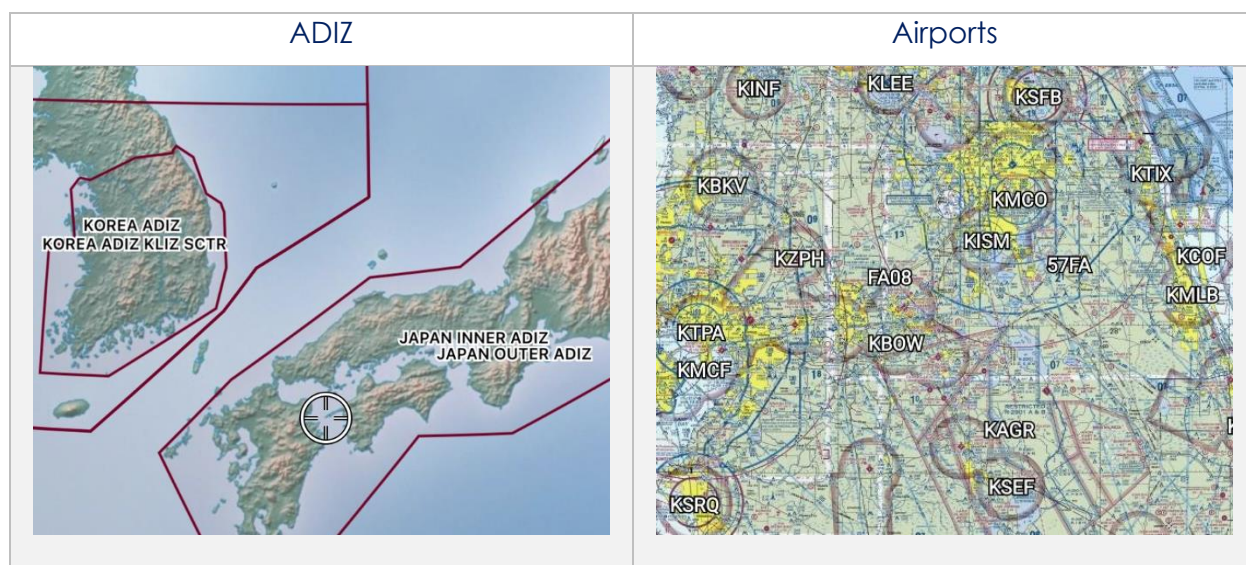
Aero Overlays include various options that enable pilots to customize their map view.

#### 15.3.6.1.1 Air Defense Identification Zone (ADIZ)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **ADIZ** to enable the option. ADIZ sectors will populate the map.
5. Tap an ADIZ sector of choice on the Moving Map. A popup containing an overview of the specified area will be displayed.

#### 15.3.6.1.2 Airports

6. Tap **Moving Map** on the **Main Menu**.
7. Tap **Overlays** located at the bottom of the Moving Map.
8. Select **Aero Overlays** from the side menu, if necessary.
9. Tap **Airports** to enable the option. Airport identifiers will populate the map; respective to the minimum runway length users have set in their Preferences.



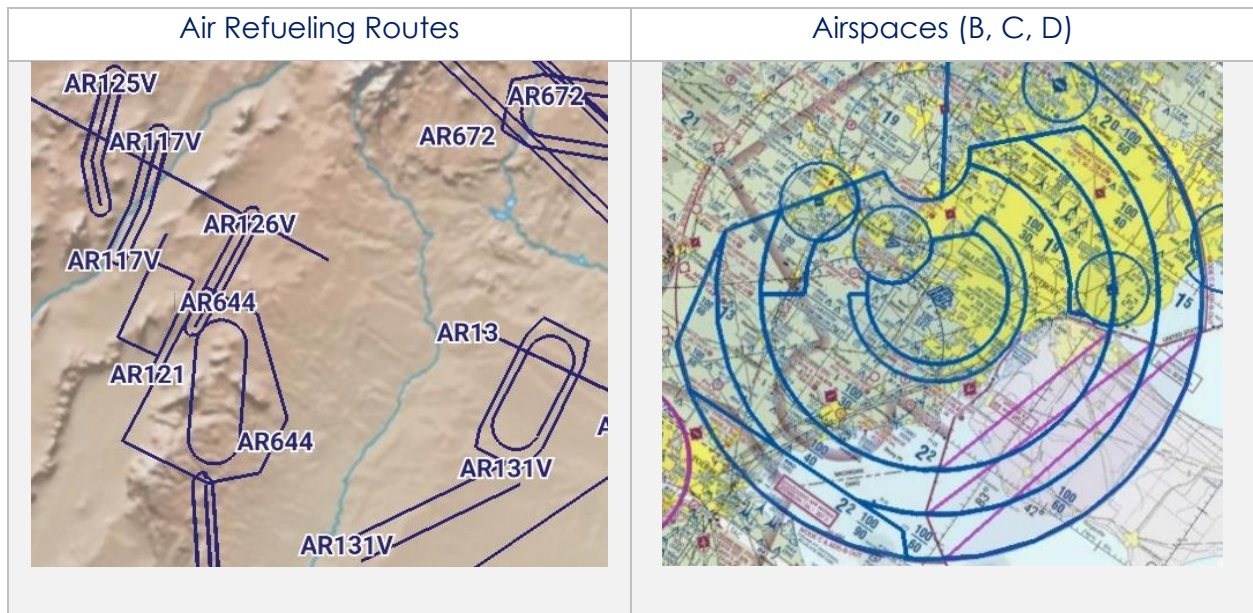


### 15.3.6.1.3 Air Refueling Routes

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Air Refueling Routes** to enable the option. Air refueling routes will populate on the map.
5. Tap an AR label on the Moving Map. A popup with air refueling route information will be displayed.

### 15.3.6.1.4 Airspaces (B, C, D)

1. Tap the **Moving Map** on **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Airspaces (B, C, D)** to enable the option. The airspace classes will populate on the map.
5. Tap an Airspace of choice on the Moving Map. A popup with airspace class information will be displayed.



### 15.3.6.1.5 Airways – Low

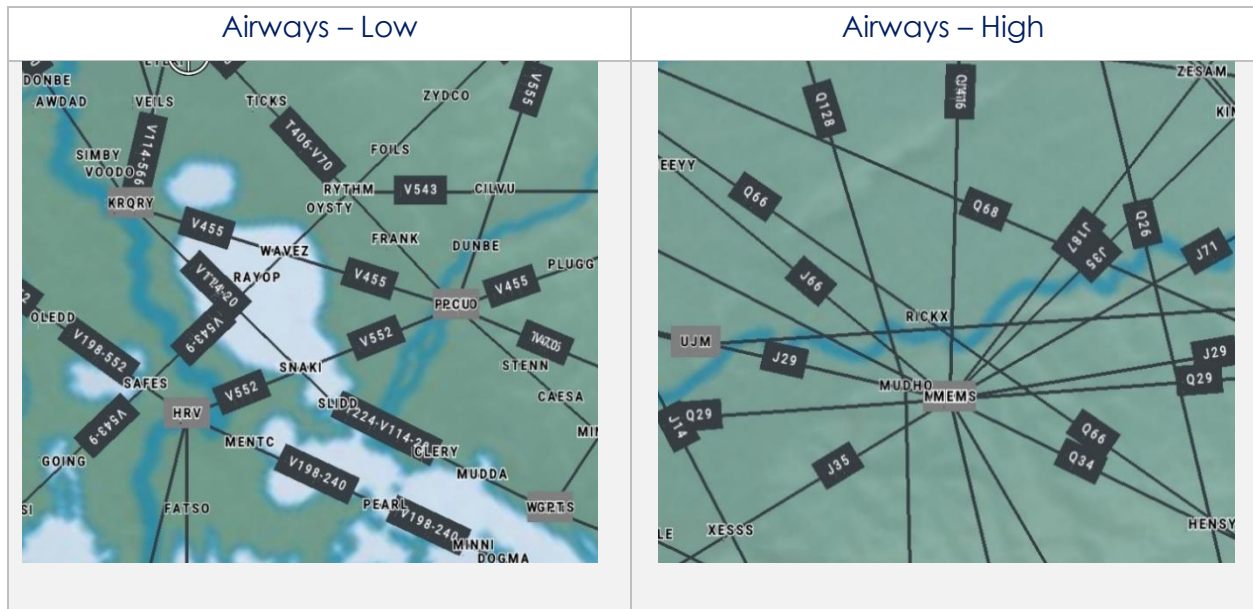
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **Low** from the Airways segmented control. The low-altitude airways that are below 18,000 ft will populate the map.

### 15.3.6.1.6 Airways – High

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **High** from the Airways segmented control. The high-altitude airways that are between 18,000 ft and 45,000 ft will populate on the map.



**NOTE:** Refer to [Section 15.3.14.1.2](#) on how to add Airways to route.



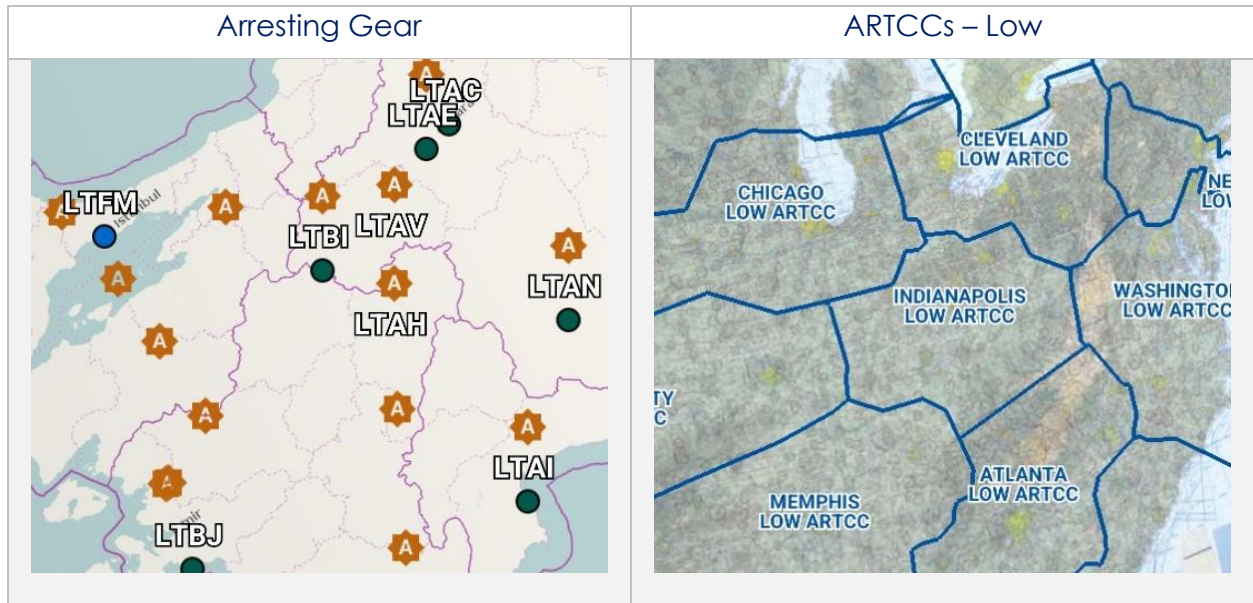
### 15.3.6.1.7 Arresting Gear

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Arresting Gear** to enable the option. Arresting gear will populate on the map.
5. Tap an arresting gear of choice on the Moving Map. A popup with arresting gear information such as its identifier name, absorbing system, engagement type, and command will be displayed.

### 15.3.6.1.8 Air Route Traffic Control Centers (ARTCCs) – Low

Air Route Traffic Control Centers (ARTCCs) low and high, is primarily to provide air traffic service for pilots that are operating on an IFR flight plan.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **Low** from the ARTCCs segmented control. The map will overlay regions of low ARTCCs.

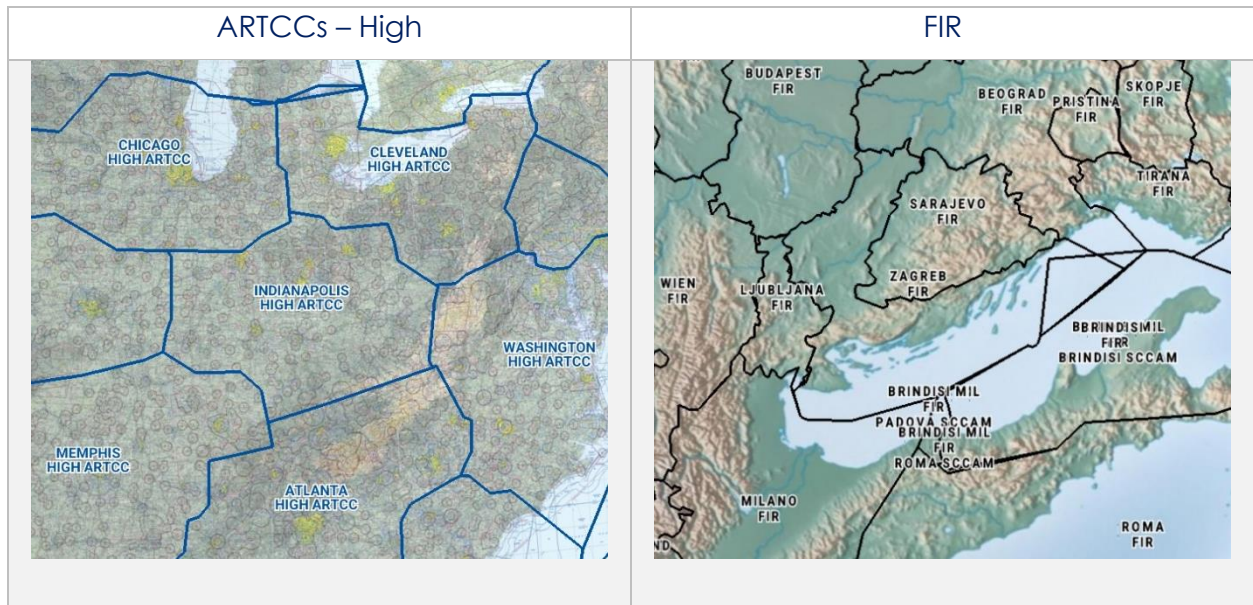


### 15.3.6.1.9 Air Route Traffic Control Centers (ARTCCs) – High

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **High** from the ARTCCs segmented control. The map will overlay regions of high ARTCCs.

### 15.3.6.1.10 Flight Information Regions (FIR)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **FIR** from the FIRs segmented control. The map will be divided into specified regions of airspace.
5. Tap a region of choice on the Moving Map. A popup containing an overview of the flight information region will be displayed.



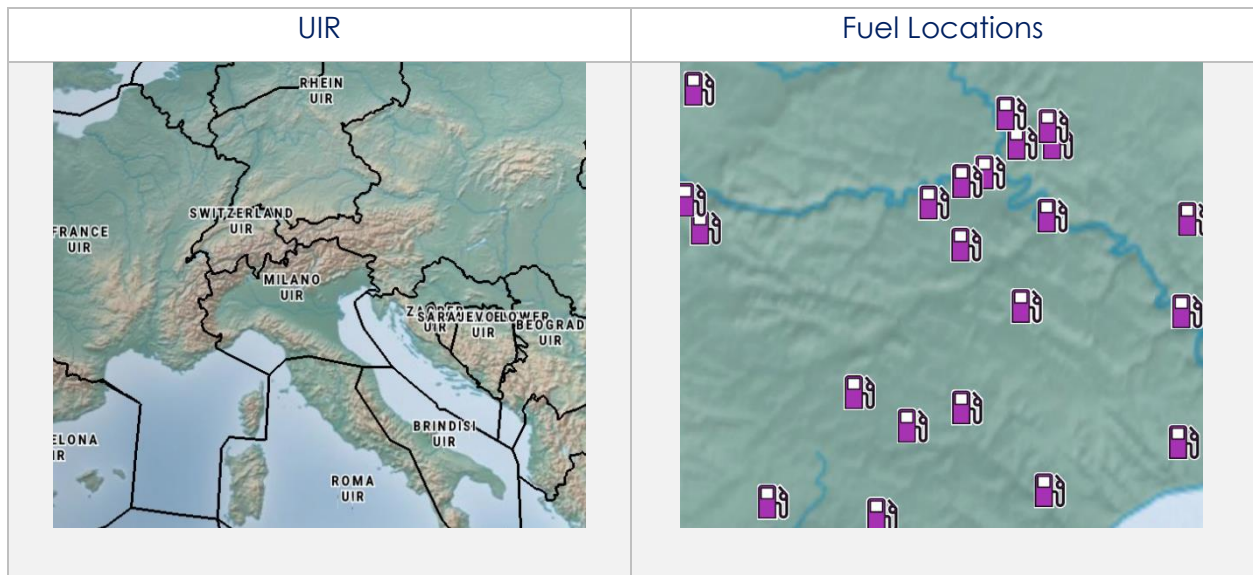
### 15.3.6.1.11 Upper Flight Information Region (UIR)

1. Tap **Moving Map** on the **Main menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **UIR** from the *FIRs* segmented control. The map will be divided into specified regions of airspace.
5. Tap a region of choice on the Moving Map. A popup containing an overview of the upper flight information region will be displayed.

### 15.3.6.1.12 Fuel Locations

Contract fuel locations are available to users to populate on the Moving Map. The contract fuel icons are selectable and contain FBO information for the respective location.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Fuel Locations** to enable the option. Contract fuel locations will populate on the map.
5. Tap a fuel pump of choice on the Moving Map. A popup containing information on the respective fuel location will be displayed.



### 15.3.6.1.13 Hazards

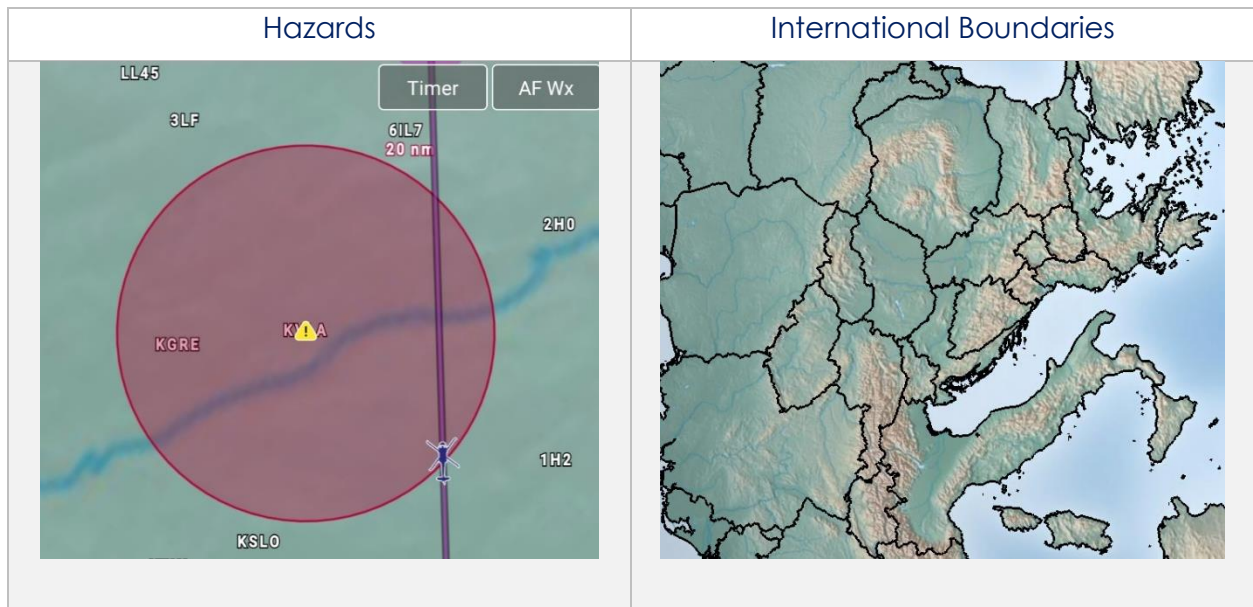
Hazards are marked locations on the Moving Map that were dropped by users. This option must be enabled to view dropped hazards. If no hazards were dropped, refer to [Section 15.3.13.1.4](#) for additional information.

1. Tap **Moving Map** in the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Hazards** to enable the option. Dropped Hazards will populate on the map.
5. Tap a hazard of choice on the Moving Map. The Moving Map popup will display.
6. To view hazard information, tap **Show** from the side menu.
7. Tap **Info and Wx** and hazard information will be displayed.

### 15.3.6.1.14 International Boundaries

International Boundaries delineate the space between sovereign states.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **International Boundaries** to enable the option. Divisions of the sovereign states will overlay on the map.

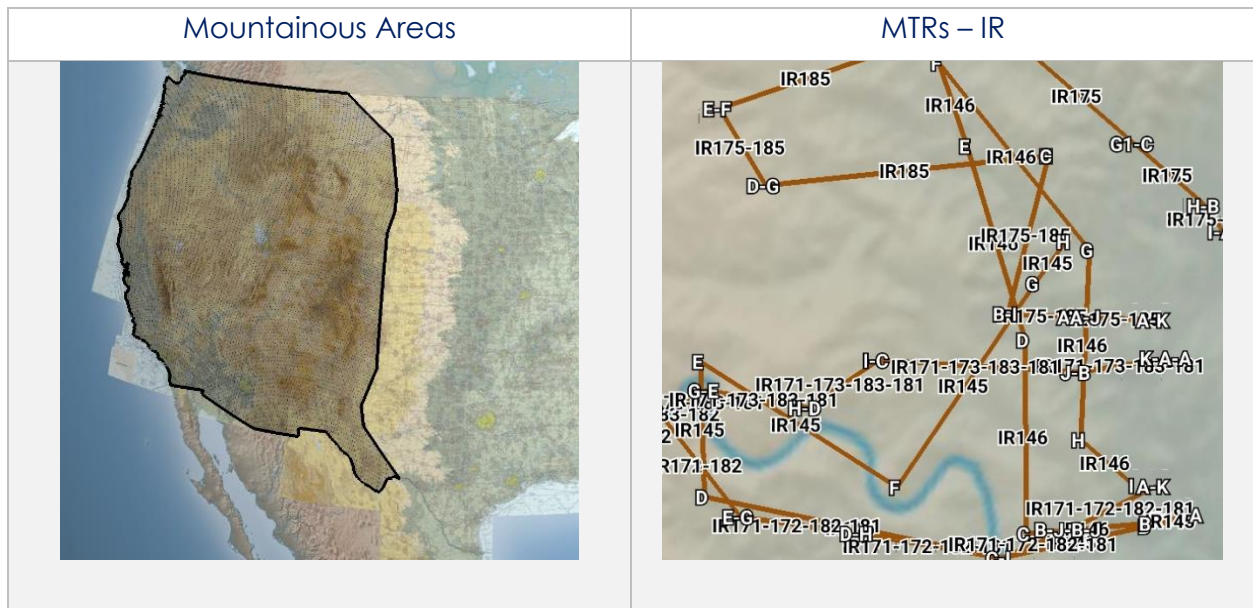


### 15.3.6.1.15 Mountainous Areas

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Mountainous Areas** to enable the option. Mountainous terrain will overlay on the map.

### 15.3.6.1.16 Military Training Routes (MTRs) Instrument Route (IR)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **IR** from the MTRs segmented control. Instrument military training routes will populate on map.
5. Tap an MTR of choice on the Moving Map. A popup containing information on the MTR will be displayed.



### 15.3.6.1.17 Military Training Routes (MTRs) Visual Route (VR)

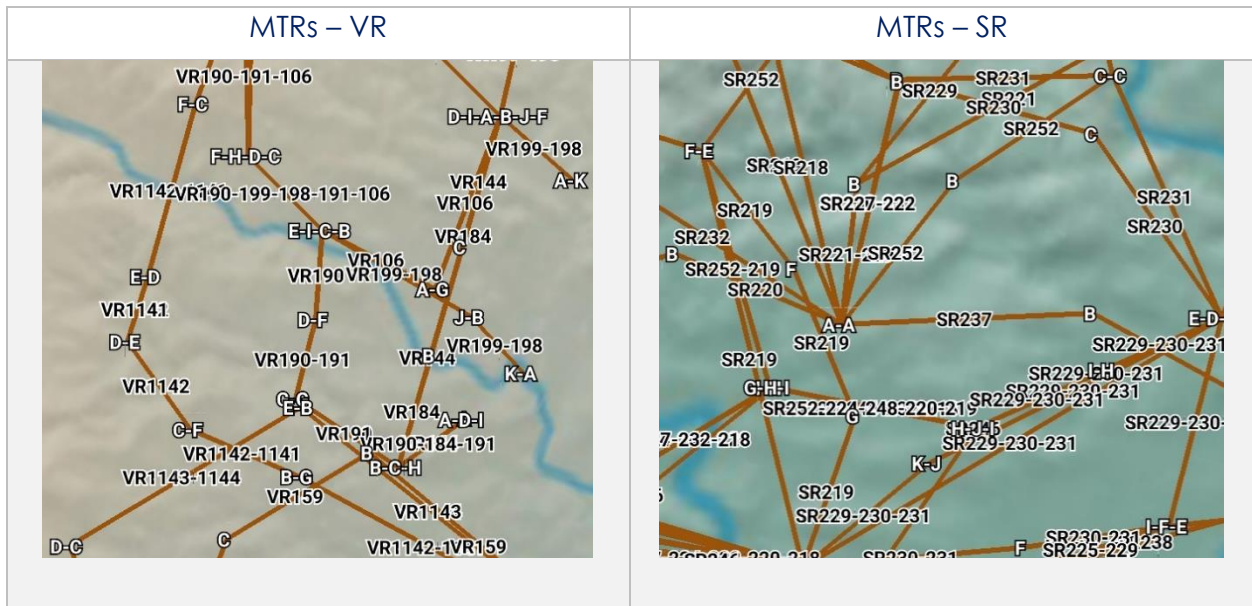
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **VR** from the MTRs segmented control. Visual military training routes will populate the map.
5. Tap an MTR of choice on the Moving Map. A popup containing information on the MTR will be displayed.

### 15.3.6.1.18 Military Training Routes (MTRs) Slow Speed Route (SR)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **SR** from the MTRs segmented control. Slow speed military training routes will populate the map.
5. Tap an MTR of choice on the Moving Map. A popup containing information on the MTR will be displayed.



**NOTE:** Refer to [Section 15.3.14.1.1](#) on how to add MTRs to route.





### 15.3.6.1.19 Pins

Pins are marked locations on the Moving Map that were dropped by users. The Pins overlay is Pin. This option must be enabled to view dropped pins. If no pins were dropped, refer to [Section 15.3.13.1.3](#) for additional information.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Pins** to enable the option. Dropped pins will populate on the map.
5. Tap a pin of choice on the Moving Map. The Moving Map popup will display.
6. To view pin information, tap **Show** from the side menu.
7. Tap **Info and Wx** and pin information will be displayed.

### 15.3.6.1.20 Runways

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Runways** to enable the option. Runways will populate on the map.



### 15.3.6.1.21 Search and Rescue (SAR) Grids

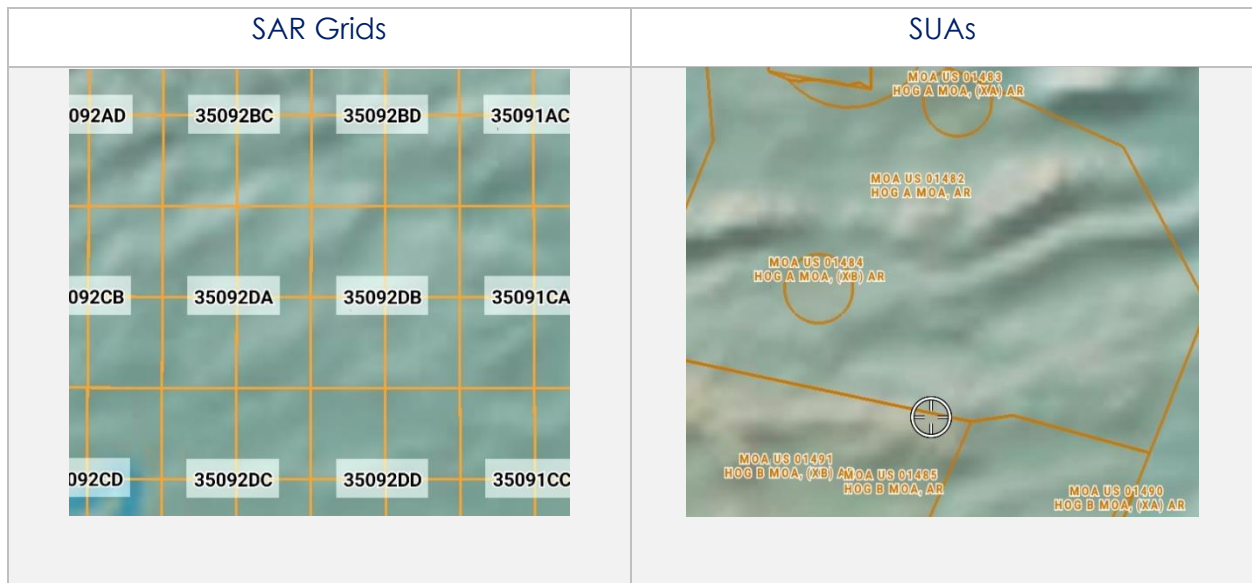
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **SAR Grids** to enable the option. World-wide SAR grids will overlay on the map.



**NOTE:** If SAR grids have been enabled but are not displaying, try zooming in on the Moving Map screen to view the grids.

### 15.3.6.1.22 Special Use Airspaces (SUAs)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **On** from the SUAs segmented control. Special airspaces will be displayed on the map.
5. Tap to select **+Labels** from the segmented control to display labels on special use airspaces.
6. Tap an SUA of choice on the Moving Map. A popup containing SUA information will be displayed.



### 15.3.6.1.23 Terrain

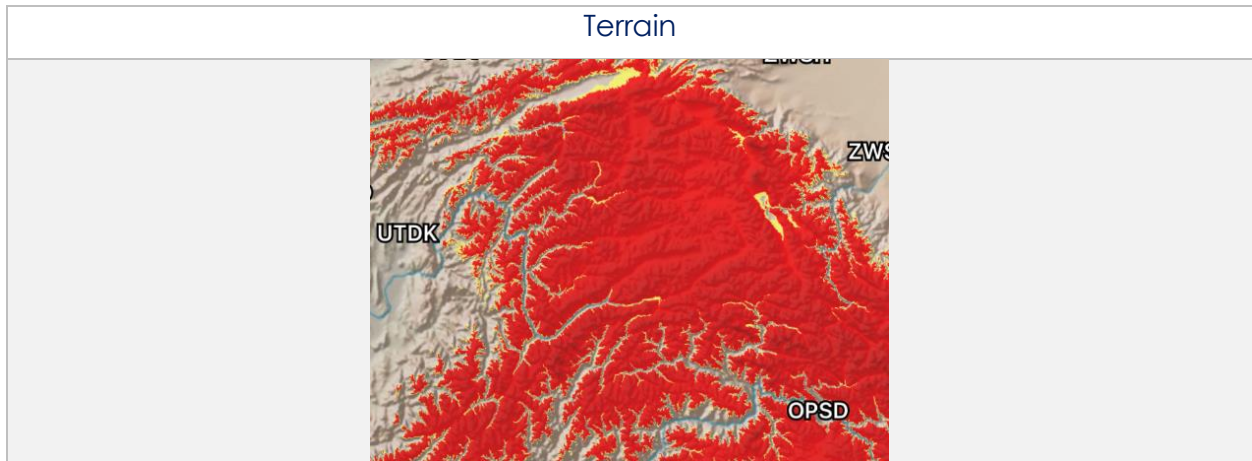
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Terrain** to enable the option. Terrain coloring will overlay on the map.
5. The overlay will display red and yellow coloring which depicts the proximity of the pilot's ownship relative to terrain. The different colors indicate the following:
  - **Red:** Ownship is less than or equal to 100 feet above terrain
  - **Yellow:** Ownship is 100 to 1,000 feet above terrain
6. By default, the transparency is set to 100%. Drag the slider to adjust the route transparency to any value between 20% to 100%.



**NOTE:** Terrain Coloring data must be loaded to view the Terrain overlay. Refer to [Section 9.13](#) for additional information.



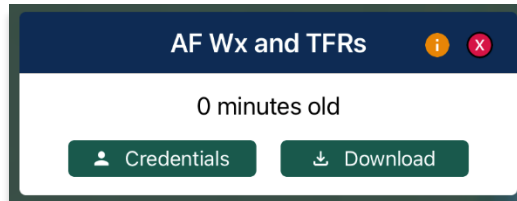
**NOTE:** The elevation of the water is the water's true elevation, therefore, the terrain coloring for water will range from red to yellow depending on the ownship's altitude.



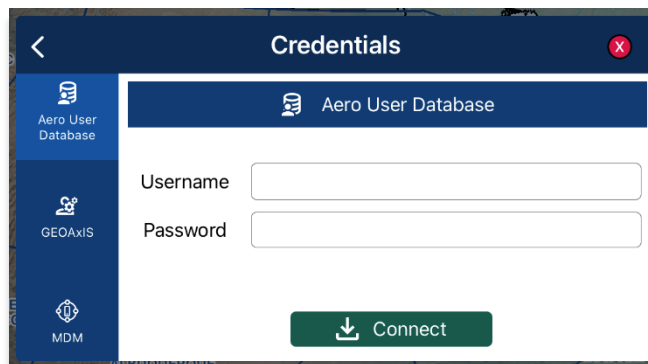
### 15.3.6.1.24 View Temporary Flight Restrictions (TFRs) From the Moving Map

Temporary Flight Restrictions (TFRs) can be overlaid on the Moving Map. By tapping on a TFR overlay, the TFR textual data will display for that specific TFR selection.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **TFRs** to enable the option.
5. Exit from the Overlays popup and navigate to the AF Wx button on the Moving Map.
6. The AF Wx and TFRs popup will display. Select **Credentials**.

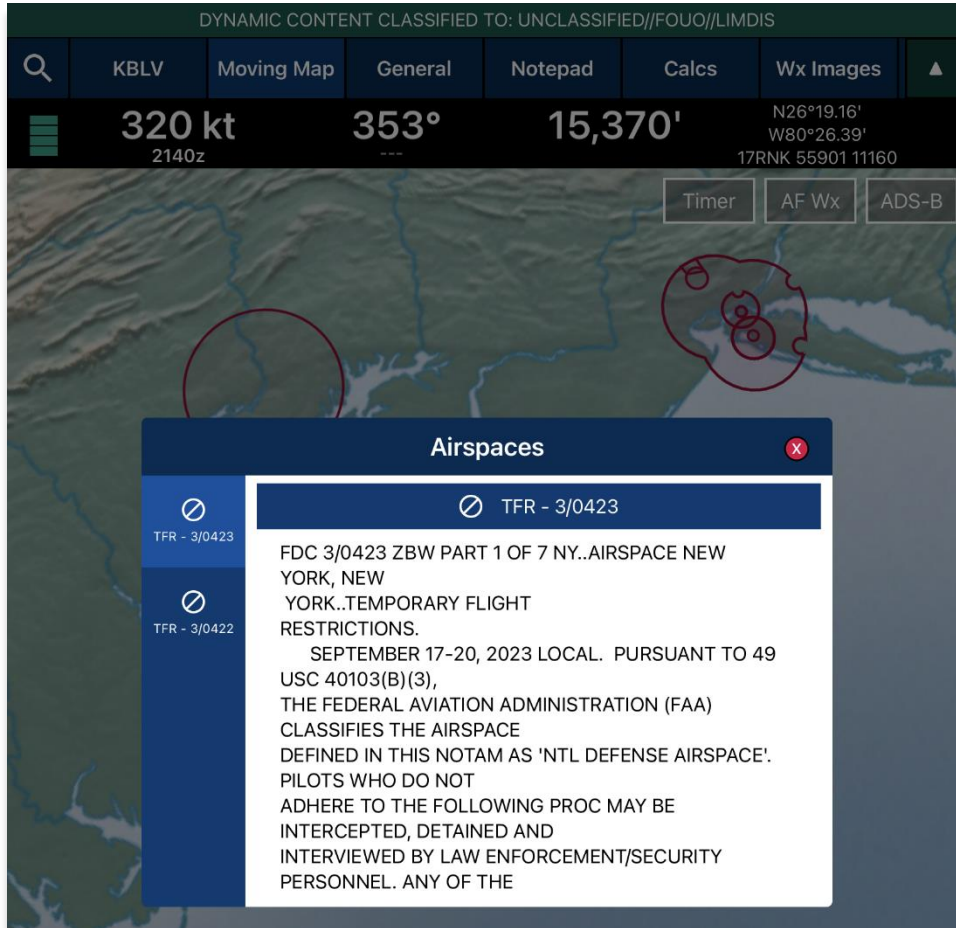


7. Select desired credentials to authenticate using any of the following options:
  - a. Aero User Database
  - b. GEOAxis
  - c. MDM



**NOTE:** Alternatively, users can display textual TFR data by tapping the document icon on the Overlays menu. Refer to [Section 15.3.6.1.24.1](#) for additional information.

8. Tap **Connect** when done.
9. The TFRs will populate on the Moving Map.
10. Tap on a TFR to display TFR information.

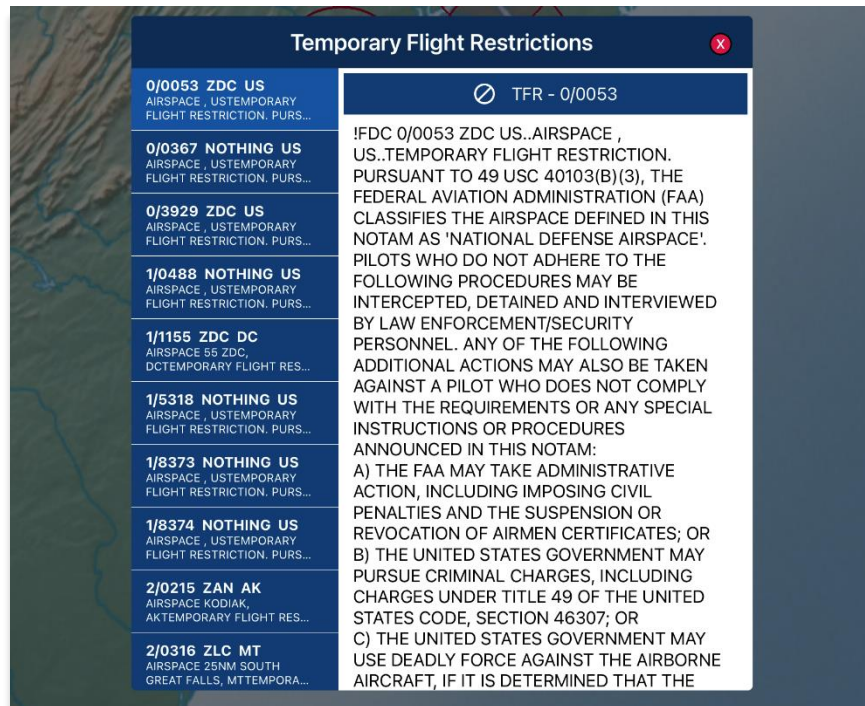


**NOTE:** In the case where a TFR overlaps another TFR, a Which One popup will appear to confirm selection.

### 15.3.6.1.24.1 View Temporary Flight Restrictions (TFRs) From the Overlays Menu

Textual Temporary Flight Restrictions (TFRs) can be viewed from the Overlays Menu. TFRs including presidential TFRs, will be listed on the popup.

1. Prior to viewing textual TFRs, users must ensure that they are logged in using their Aero User Database or GEOAxis credentials.
2. Navigate to **Overlays** on the Moving Map.
3. Tap **Aero Overlays**, if necessary.
4. Scroll to the bottom of the Overlays menu to view additional overlays. Locate *TFRs* and tap the **document** icon beside the option.
5. The Temporary Flight Restrictions popup will display with all TFR data including presidential TFRs. Scroll down to view additional TFRs.



### 15.3.6.1.25 Time Zones

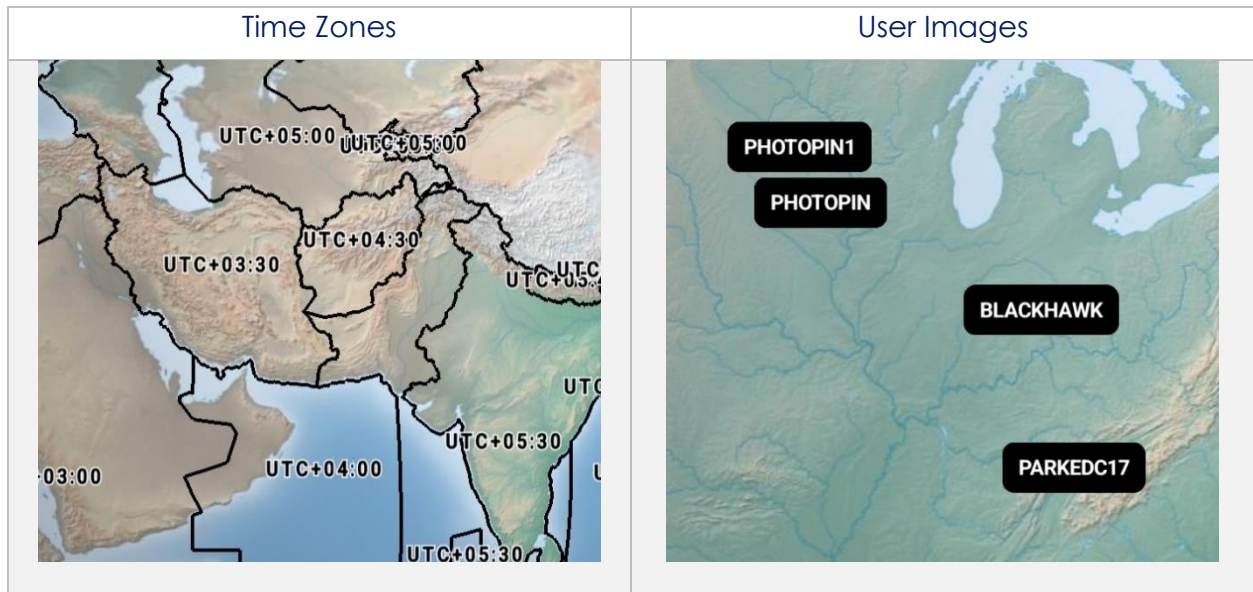
Time Zones are shown on the Moving Map with lines separating the longitudinal divisions. Labels display the time offset for each time zone.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Time Zones** to enable the option. The map will display lines separating longitudinal divisions.

### 15.3.6.1.26 User Images

User Images are Photo Pins that were dropped by users. The User Images overlay is exclusive to Photo Pins. This option must be enabled to view dropped photo pins. If no pins were dropped, refer to [Section 15.3.13.1.3.1](#) for additional information.

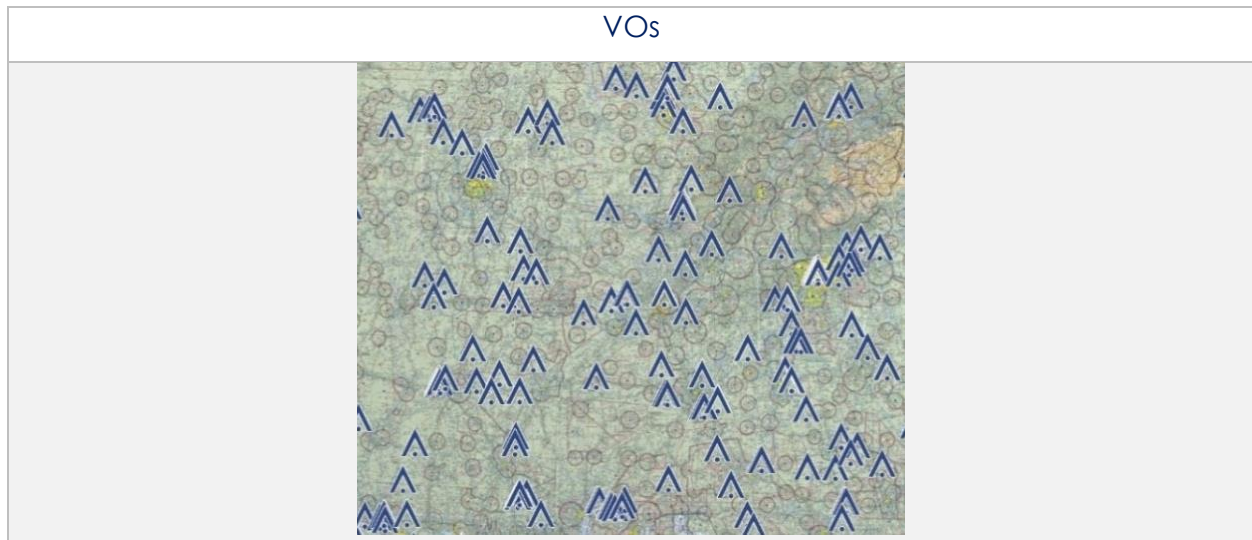
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **User Images** to enable the option. Dropped photo pins will populate on the map.



### 15.3.6.1.27 Vertical Obstructions (VOs)

Vertical Obstructions (VOs) will provide information including towers, buildings, and bridges at or over 150' with additional information including coordinates, AGL, and MSL.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **VOs** to enable the option. Vertical obstructions will populate the map.
5. Tap a vertical obstruction of choice on the Moving Map. A popup containing VO information will be displayed.



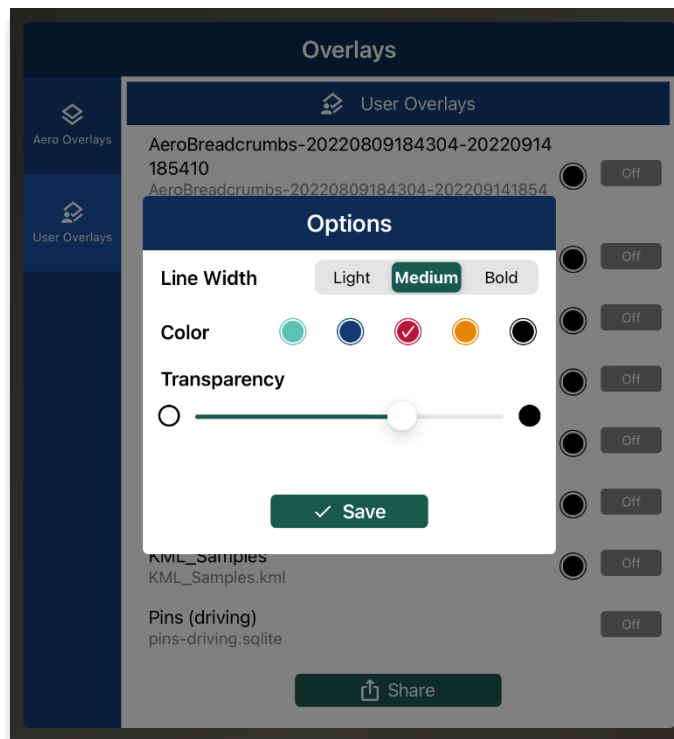


### 15.3.6.2 User Overlays

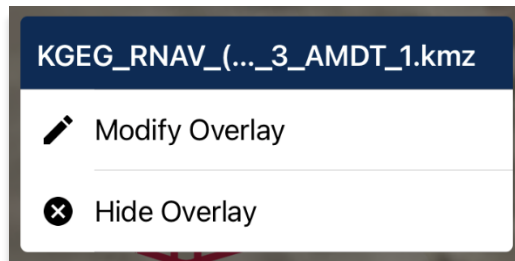
Aero App enables users to sideload User Overlays such as Shapefiles, GeoJSON, and KML/KMZ files to their Aero App directory. Refer to [Section 11](#) for additional information. Aero App provides an additional feature to share KML/KMZ files with other users.

#### 15.3.6.2.1 User Overlays

1. Tap **Moving Map** on **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map screen.
3. Select **User Overlays** from the side menu.
4. Tap one or multiple **User Overlays** from the sideloaded Shapefiles, GeoJSON, and KML/KMZ files to load onto the map.
5. Users will have the option to configure their User Overlays by tapping the radio button located to the right of the selected user overlay.
6. An *Options* popup will display, select desired *Line Width*, *Color*, and adjust *Transparency* to desired preference.
7. Tap **Save** once desired settings have been selected.



8. Locate and tap user overlay from the Moving Map. Users are presented with options to *Modify Overlay* or *Hide Overlay*.
  - **Modify Overlay** – returns to the overlay configuration popup to make changes to the user overlay.
  - **Hide Overlay** – hides the user overlay.



9. To delete an overlay, from the *User Overlays* popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.



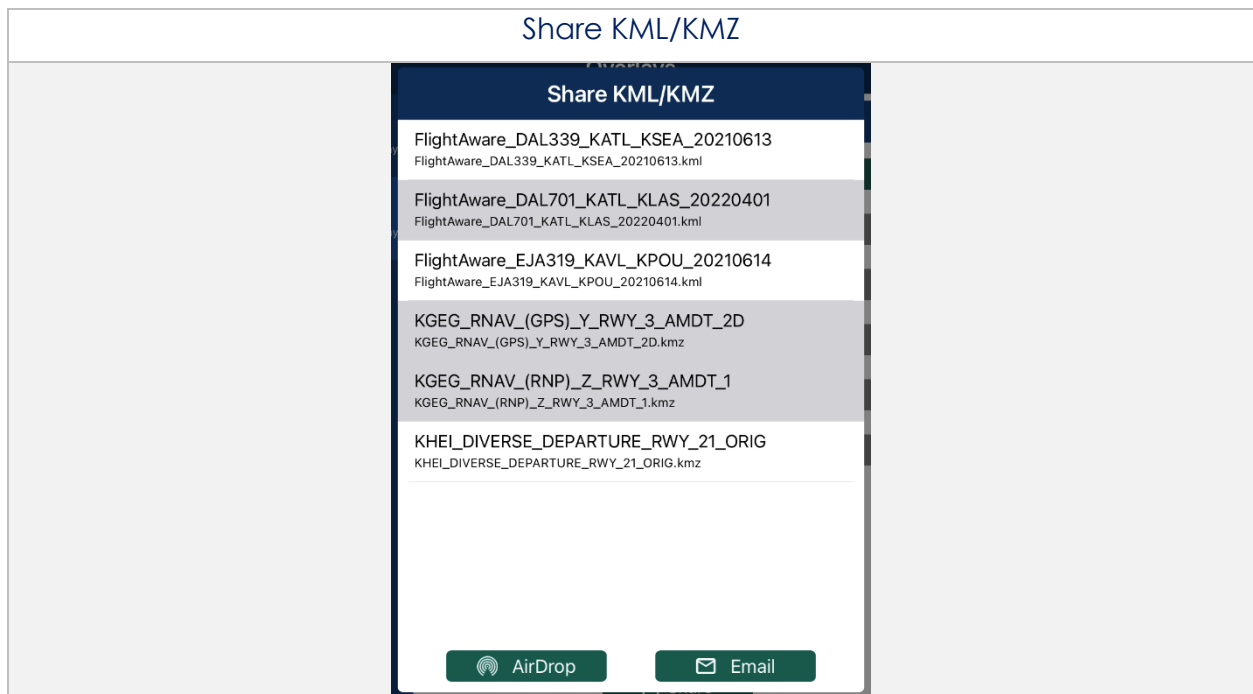
**NOTE:** Users can sideload User Overlays by connecting to a computer via USB and storing Shapefiles, GeoJSON, and/or KML/KMZ files in [mounted root]/AeroApp/MovingMaps directory.



### 15.3.6.2.2 Share KML/KMZ

KML/KMZ files can be shared between Aero App users via AirDrop or Email.

1. Tap **Moving Map** on **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map screen.
3. Select **User Overlays** from the side menu.
4. Tap **Share** and the Share KML/KMZ popup will display.
5. Select desired **file(s)** to share.
6. Select desired **method of sharing**.
7. By selecting **AirDrop**, the AirDrop popup will appear with the KML/KMZ files attached. Refer to [Section 15.3.6.2.2.1](#) for additional information.
8. By selecting **Email**, the email provider in which you have set your device to share files to, will appear with the KML/KMZ files loaded as an attachment. Refer to [Section 15.3.6.2.2.3](#) for additional information.



**NOTE:** Beginning with Aero App version 1.2209, AirDrop KML/KMZ files are fully supported.

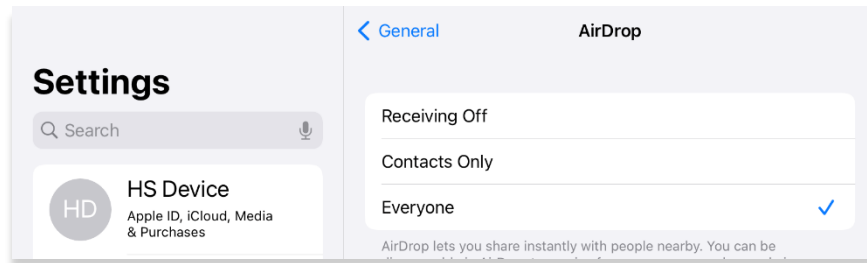


**NOTE:** The share options will be disabled if no files have been selected.

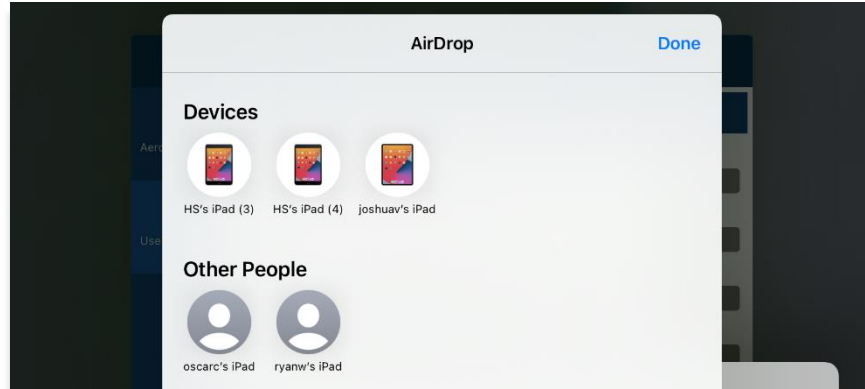
### 15.3.6.2.2.1 Sharing KML/KMZ Files Through AirDrop

KML/KMZ files can be shared with another Apple device through AirDrop. Users must have their AirDrop *enabled* on *both* devices prior to sharing or receiving any files. Refer to [support.apple.com](https://support.apple.com) for additional information on AirDrop.

1. On the sharing device, the AirDrop popup will display. Ensure the receiving device has their AirDrop enabled to allow the sharing device to select the device in which the KML/KMZ files will be sent to.



2. Your device will begin to scan for nearby devices. Select a device listed below the *Devices* section.



3. The sharing process will begin, and the receiving device will follow prompts to accept the files that are being shared.

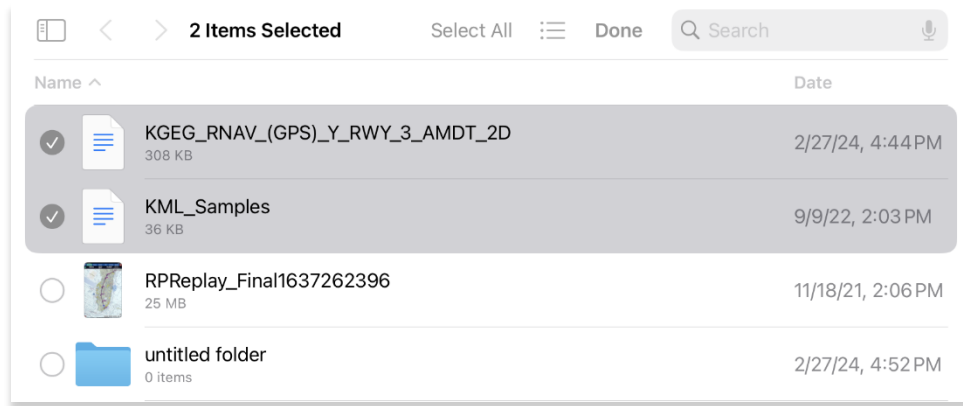
### 15.3.6.2.2 Receiving KML/KMZ Files Through AirDrop

Users receiving the files via AirDrop must follow the prompts to accept the files being sent. Users must have their AirDrop *enabled* to avoid receiving interruption. Different behaviors will occur depending on the device's operating system. Refer to [support.apple.com](https://support.apple.com) for additional information on AirDrop.

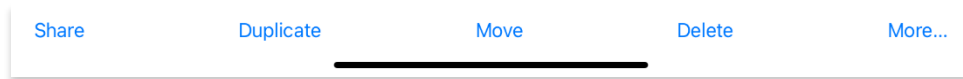
1. Ensure your device's AirDrop is enabled.
2. An AirDrop notification will appear with options to *Decline* or *Accept*. Tap **Accept**.

The KML/KMZ file is stored in your device's Files app. To view the files on Aero App, users must transfer the files to Aero App and open them through the document picker.

3. From the document picker view, locate and select the received KML/KMZ files.

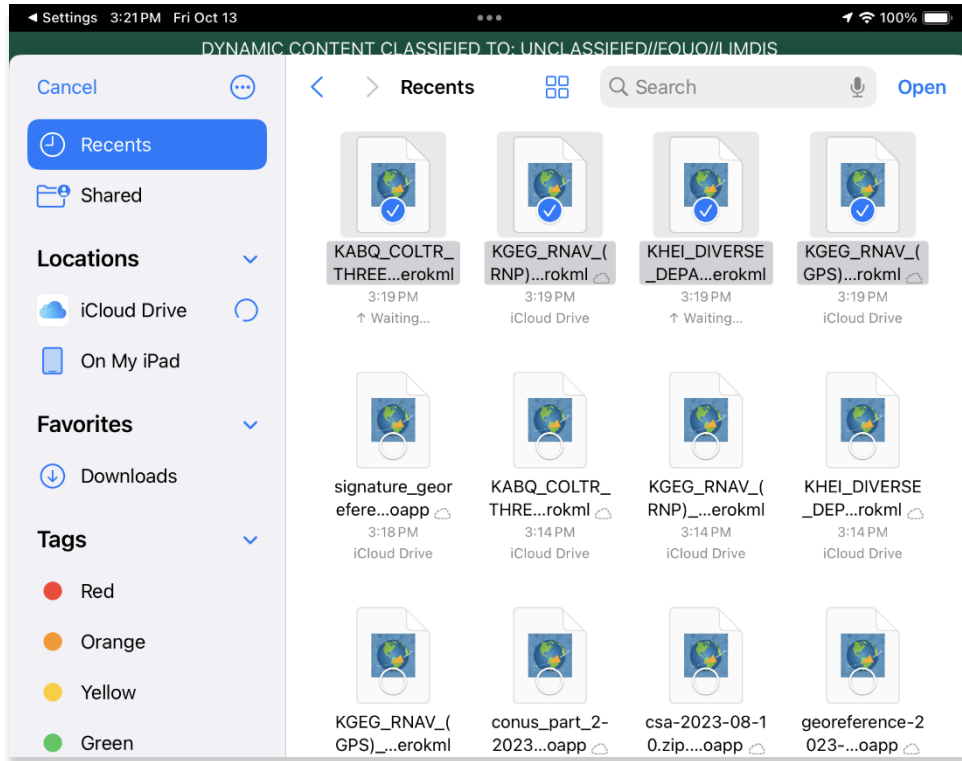


4. Selecting files will trigger the additional actions at the bottom of the page to become selectable. Select **Share**.



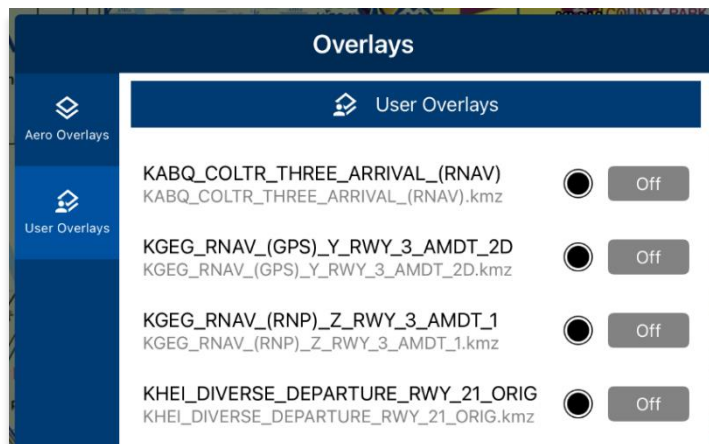
5. Select **Aero App**. Aero App's document picker will display.

6. Select desired KML/KMZ files to load onto Aero App then tap **Open**.



**NOTE:** The document picker only applies to device's running iOS 17 or later.

7. The Airdropped files will be loaded in the Overlays popup of the Moving Map. Select desired files to overlay on the map view.

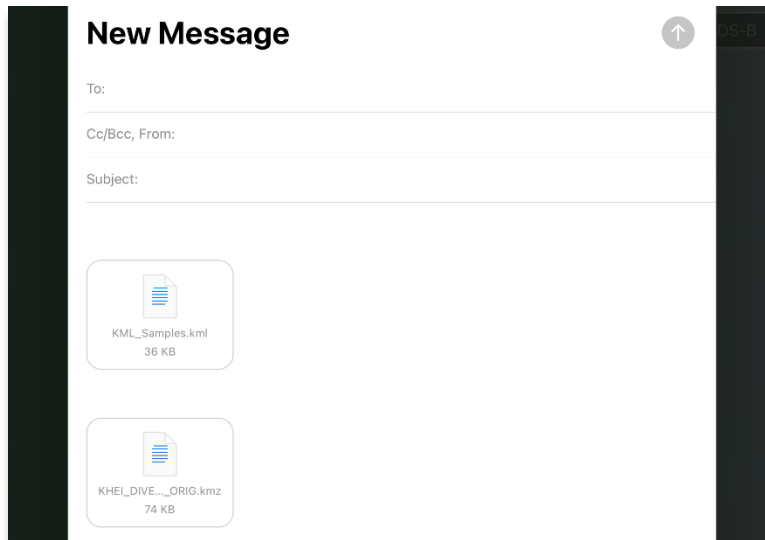


8. Aero App provides users the option to import missed files into Aero App. Navigate to the Date Status page and select **Import** to load the files that you wish to view on Aero App.

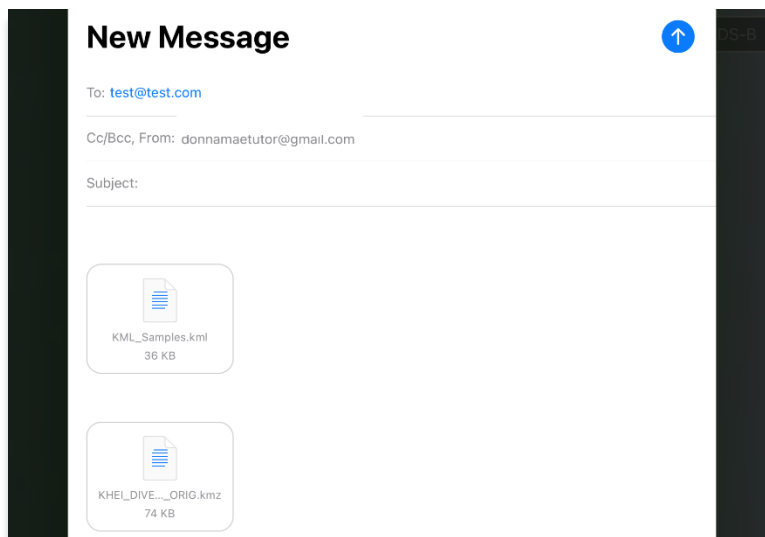
### 15.3.6.2.2.3 Sharing KML/KMZ Files Through Email

KML/KMZ files can be shared through email. Users must set their *device setting* to their desired email provider for *both* devices prior to sharing or receiving any files.

1. On the sharing device, the email provider in which you have set your device to share files to, will display with the KML/KMZ files attached.

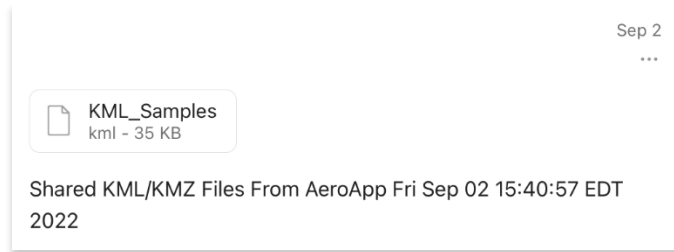


2. Enter the recipient's email address to which you would like to share the KML/KMZ files.
3. Once a valid email address has been entered, the *send button* will become selectable. Tap the **Send** button and the receiving device will follow prompts in downloading the files onto their device.

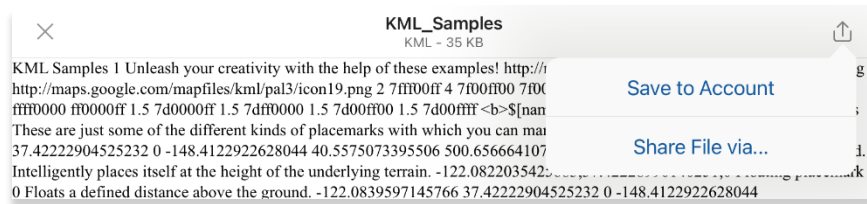


### 15.3.6.2.2.4 Receiving KML/KMZ Files Through Email

1. On the receiving device, navigate to the email provider in which the KML/KMZ files were sent to.



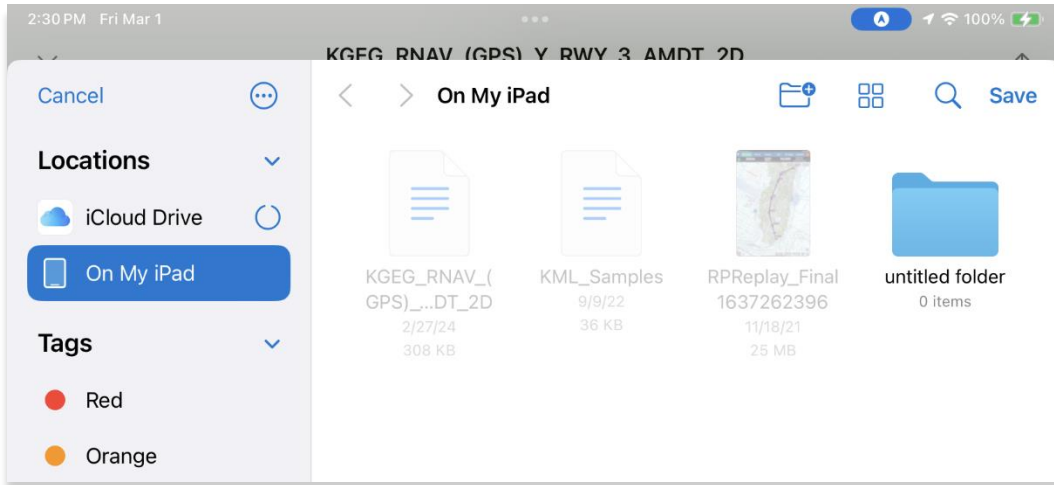
2. From the email provider, tap the **Download** button.
3. Users will be presented with options to **Save to Account** and **Share File via....** Select **Share File via....**



4. Tap **Save to Files** from the list of actions.

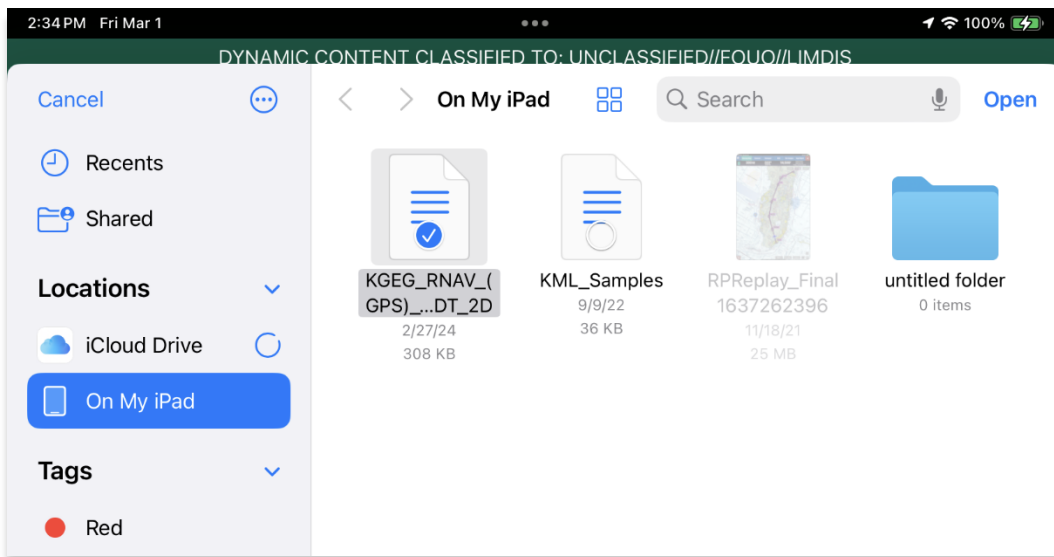


5. Select **On My iPad** for the location to store the files, then tap **Save**.

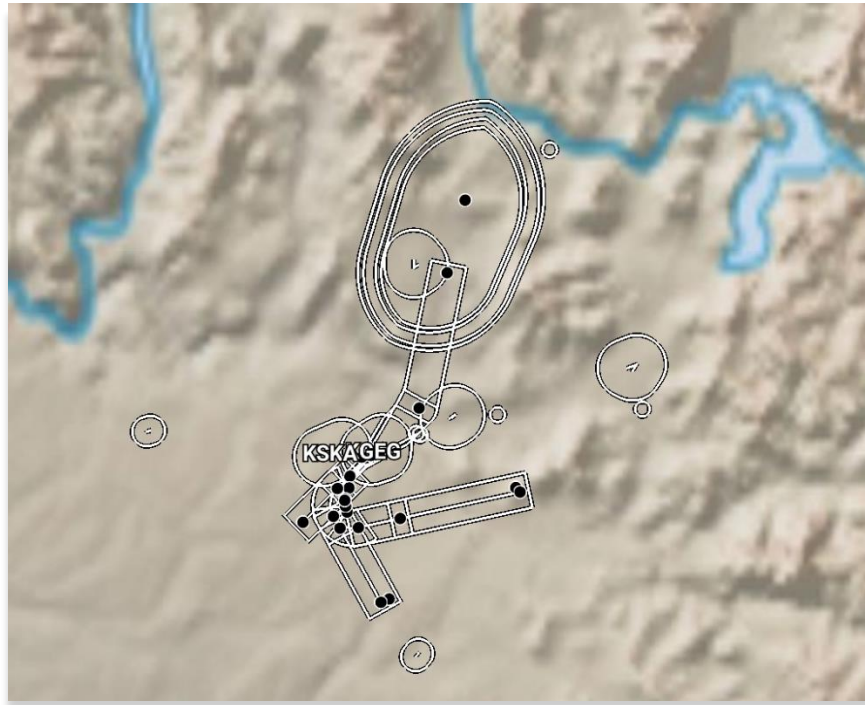


The KML/KMZ file is stored in your device's Files app. To view the files on Aero App, users must import the files into Aero App through the *Import* feature on the Data Status page. Alternatively, users can import files into Aero App directly from the device's Files app.

6. Open **Aero App**.
7. Navigate to **App Mgmt**.
8. Select **Data** to display the Data Status page.
9. Tap **Import** and the system file picker will appear.
10. Locate and tap the KML/KMZ file.
11. Tap **Open**. The KML/KMZ file will begin to load onto Aero App.



12. The KML/KMZ file can now be viewed on Aero App. Navigate to the **Moving Map**.
13. Tap **Overlays**.
14. Tap **User Overlays** from the side menu.
15. Locate and tap to enable the KML/KMZ file from the *User Overlays* collection.  
The KML/KMZ file will overlay on the Moving Map.



16. To delete the overlay, from the **User Overlays** popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

## 15.3.7 Options

The Options menu provides Ownship and Location features to assist users in preflight or inflight operations.

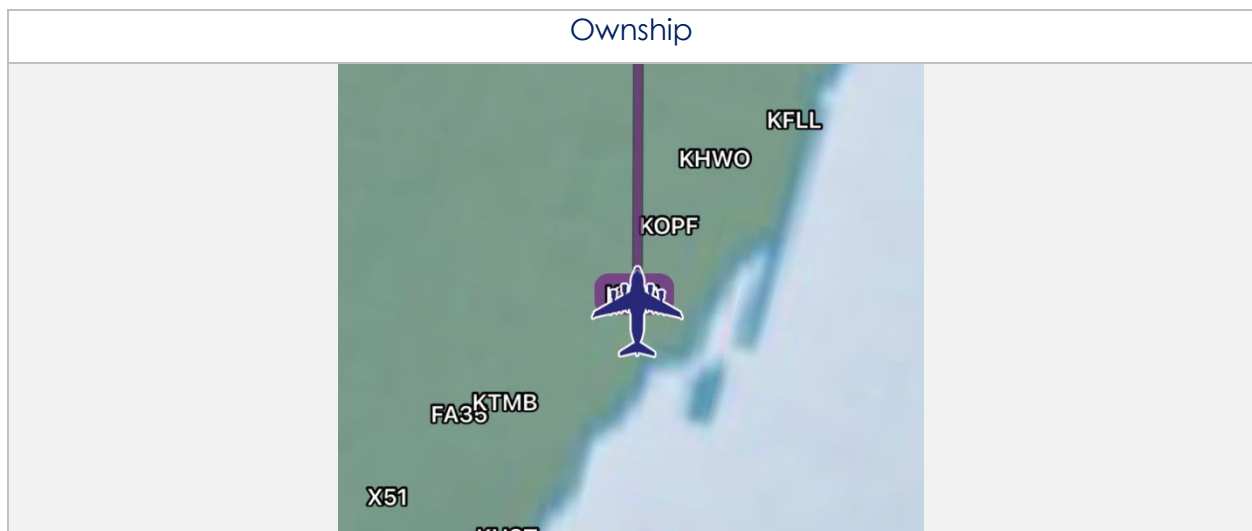
### 15.3.7.1 Ownship

The Ownship menu provides users options to customize their ownship. Users can show or hide their Ownship from the map view, Snap to Location, and choose North Up as the orientation on the Moving Map.

#### 15.3.7.1.1 Show Ownship and Ownship Icon

The location of your device is relative to the position of the ownship being displayed on the Moving Map. If your device is connected to an ADS-B or GPS receiver, Aero App will display the GPS location of your receiver. Refer to [Section 15.3.4](#) for additional information.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Ownship** from the side menu, if necessary.
4. Tap **Ownship** to enable the option. An ownship will display on the map respective to the location of your device, ADS-B, or GPS receiver.
5. Tap the **Ownship Icon** options to display the selection of ownship icons.
6. Select the desired ownship to display the user's current location on the Moving Map.



### 15.3.7.1.2 Snap to Location

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Ownship** from the side menu, if necessary.
4. Tap **Snap to Location** to enable the option. The map will automatically snap to your current location after 15 seconds.



**NOTE:** Alternatively, users can access their Snap to Location feature by tapping the *crosshair* icon on their Moving Map as explained in [Section 15.3.8](#).

### 15.3.7.1.3 North Up

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Ownship** from the side menu, if necessary.
4. Tap **North Up** to enable the option. The map will be repositioned to a north-up orientation which keeps a fixed point of reference.



## 15.3.7.2 Location

The Location menu provides options to show the recorded ownship's path and to include configurable distance rings around your ownship.

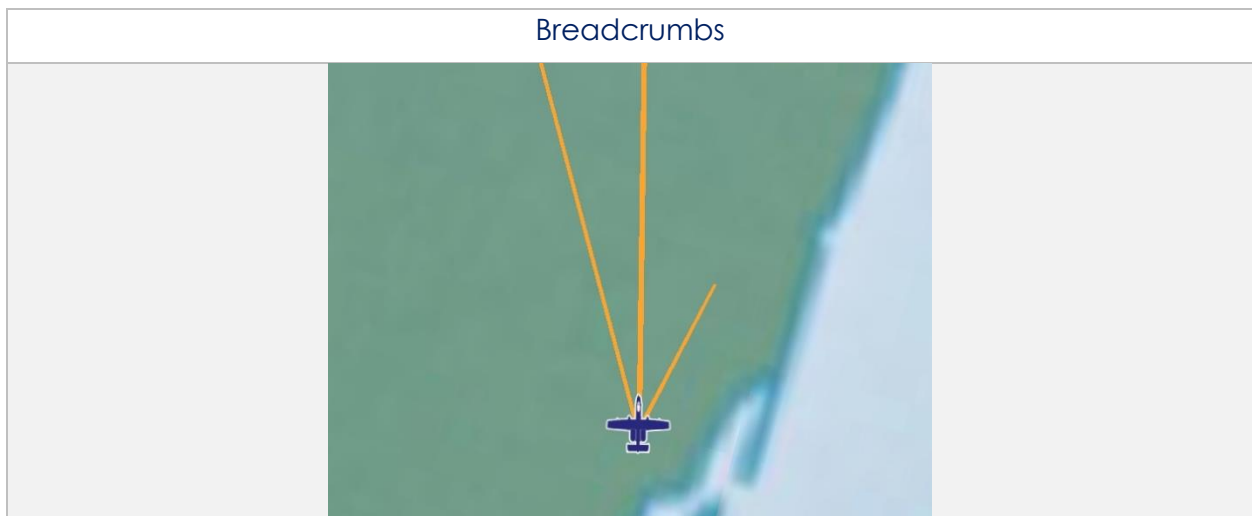
### 15.3.7.2.1 Breadcrumbs

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Location** from the side menu.
4. Tap **Breadcrumbs** to enable the option. The breadcrumb trail tracks will be displayed in orange on the map.



**NOTE:** Refer to [Section 15.3.1.8](#) for additional information regarding Breadcrumbs.

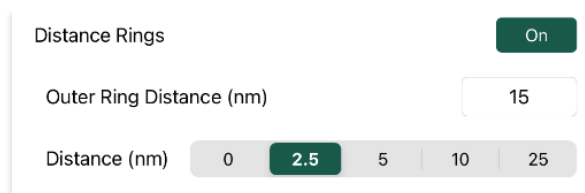
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### 15.3.7.2.2 Distance Rings

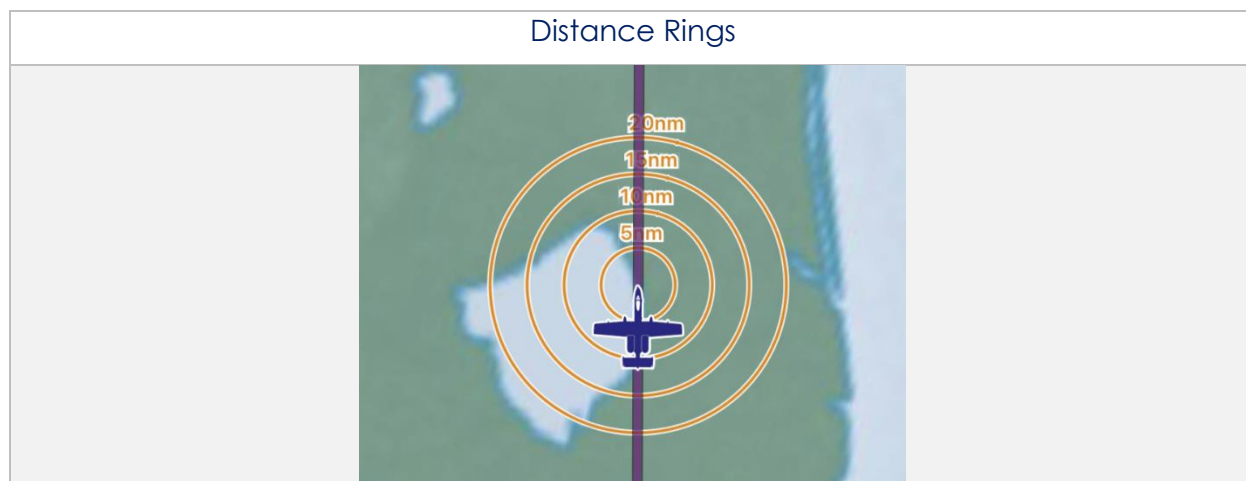
Distance Rings are a series of rings surrounding the pilot's ownship. It is a tool that determines how far away something is from the location of your ownship. The distance rings' default settings can be modified to your preference. The Outer Ring Distance setting represents the farthest distance from the ownship, and Distance setting is the length between each ring.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Location** from the side menu.
4. Tap **Distance Rings** to reveal additional options for distance rings.
5. Tap the **Outer Ring Distance** text box and enter desired outer ring distance in km or nm, respective to which distance unit format users have set in their Preferences.



**NOTE:** The maximum outer ring distance is 999. Any values entered that are greater than 999 or invalid characters (e.g., emojis, special characters, or letters) will display an error.

6. Use the segmented control to select desired distance between rings from the options of 0, 2.5, 5, 10, and 25 km or nm; respective to which distance unit format users have set in their Preferences.

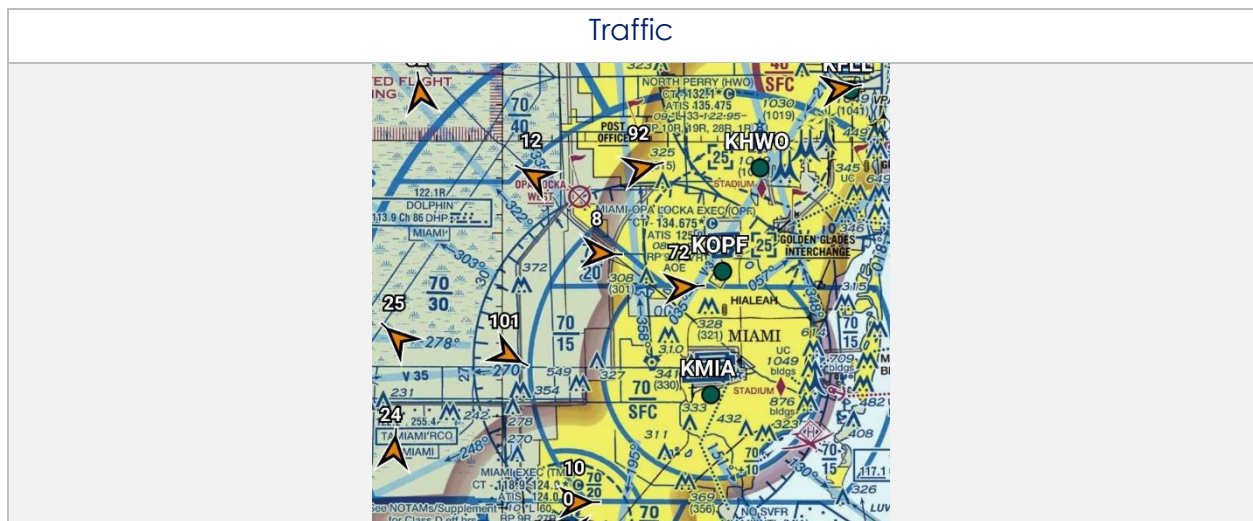


### 15.3.7.3 Traffic

Air traffic can be displayed on Aero App based on the given information provided from your ADS-B receiver. A successful connection to an ADS-B receiver is required to view traffic on the Moving Map. Refer to [Section 15.3.4](#) for additional information.

#### 15.3.7.3.1 Traffic

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Traffic** from the side menu.
4. Tap **Traffic** to enable the option. ADS-B traffic will populate on the map.



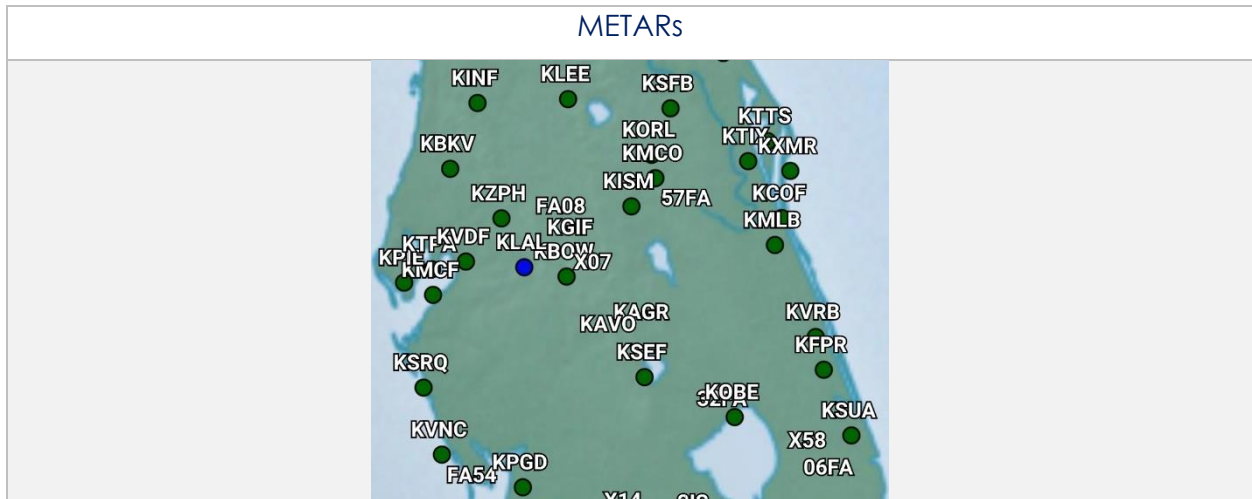
### 15.3.7.4 Weather

Aero App Weather has various options that enable pilots to display the overlay of METARs and ADS-B weather. Users can modify ADS-B flight altitude and ADS-B overlay transparency.

#### 15.3.7.4.1 METARs

This option must be enabled to view the latest ADS-B or AF Weather METARs on the Moving Map.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Weather** from the side menu.
4. Tap **METARs** to enable the option. The flight rules will overlay on the map.

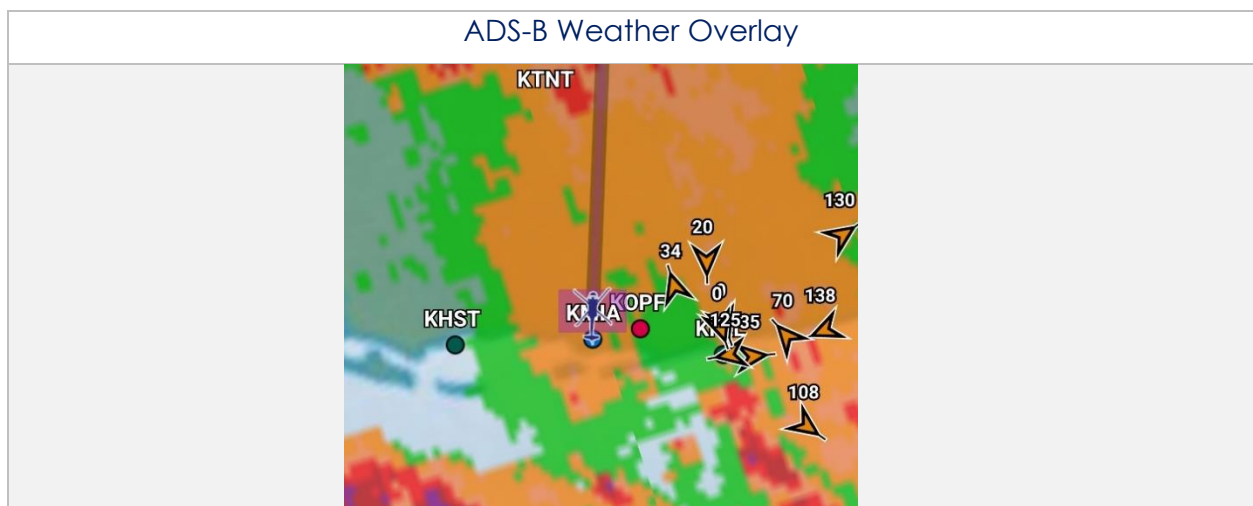




### 15.3.7.4.2 ADS-B Weather

Aero App provides animated ADS-B weather such as Lightning, Cloud Tops, Icing Probability, Icing Severity, Icing SLD Potential, NEXRAD, and Turbulence. User must establish an ADS-B connection. For additional information, refer to [Section 15.3.4](#).

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Options** located at the bottom of the Moving Map screen.
3. Select **Weather** from the side menu.
4. Tap **ADS-B** to enable the option. The menu will expand and provide all available ADS-B weather overlay.
5. Tap **Lightning** to enable the option.
6. Tap the radio buttons of the desired ADS-B weather overlay.
7. A Flight Altitude slider displays below all the ADS-B weather overlay options. The Flight Altitude slider is enabled when a required weather overlay option is selected. These weather overlays have an asterisk as listed below:
  - Icing Probability\*
  - Icing Severity\*
  - Icing SLD Potential\*
  - Turbulence\*
8. By default, the flight altitude value is set to 10,000'. Adjust the flight altitude slider to any value between 2,000' to 24,000'.
9. By default, the ADS-B overlay transparency value is set to 50%. Adjust the ADS-B overlay transparency slider to any value between 0% to 100%.



### 15.3.8 Snap to Location

By tapping on the **Crosshair** icon, located at the bottom-right corner of the Moving Map screen, your location will snap to your current GPS location.

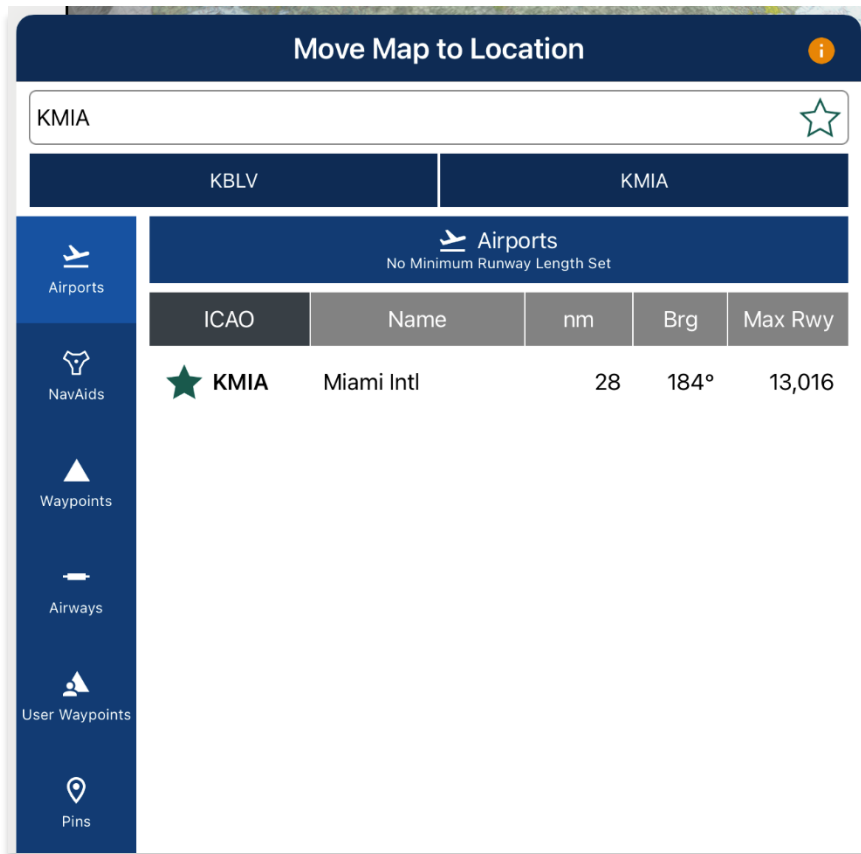


**NOTE:** Users can enable a Snap to Location feature, which returns to the user's current location after 15 seconds as explained in [Section 15.3.7.1.2](#).

### 15.3.9 Move Map to Location

The Move Map to Location feature enables users to search Airports, NavAids, Waypoints, User Waypoints, and Pins by its identifier name, search term, MGRS, or latitude and longitude.

1. Tap the **search icon** located at the bottom-right corner of the screen.
2. Enter an identifier, search term, MGRS, or latitude and longitude.
3. Tap **Go** on the device's on-screen keyboard and the screen will pan to its location.



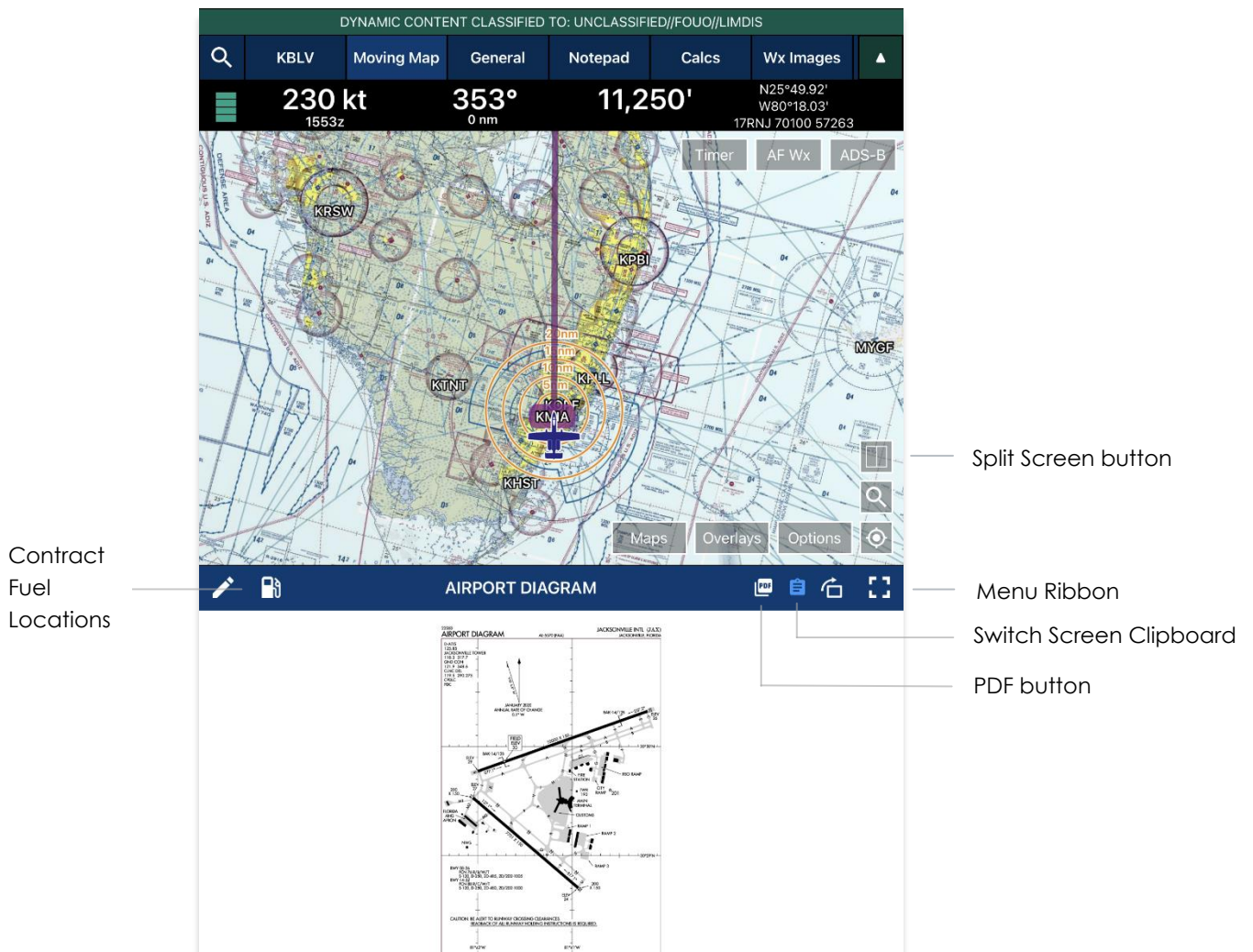
### 15.3.10 Split Screen

Split Screen allows users to view IAP and APD charts, and user PDF documents simultaneously with the Moving Map on the same screen.

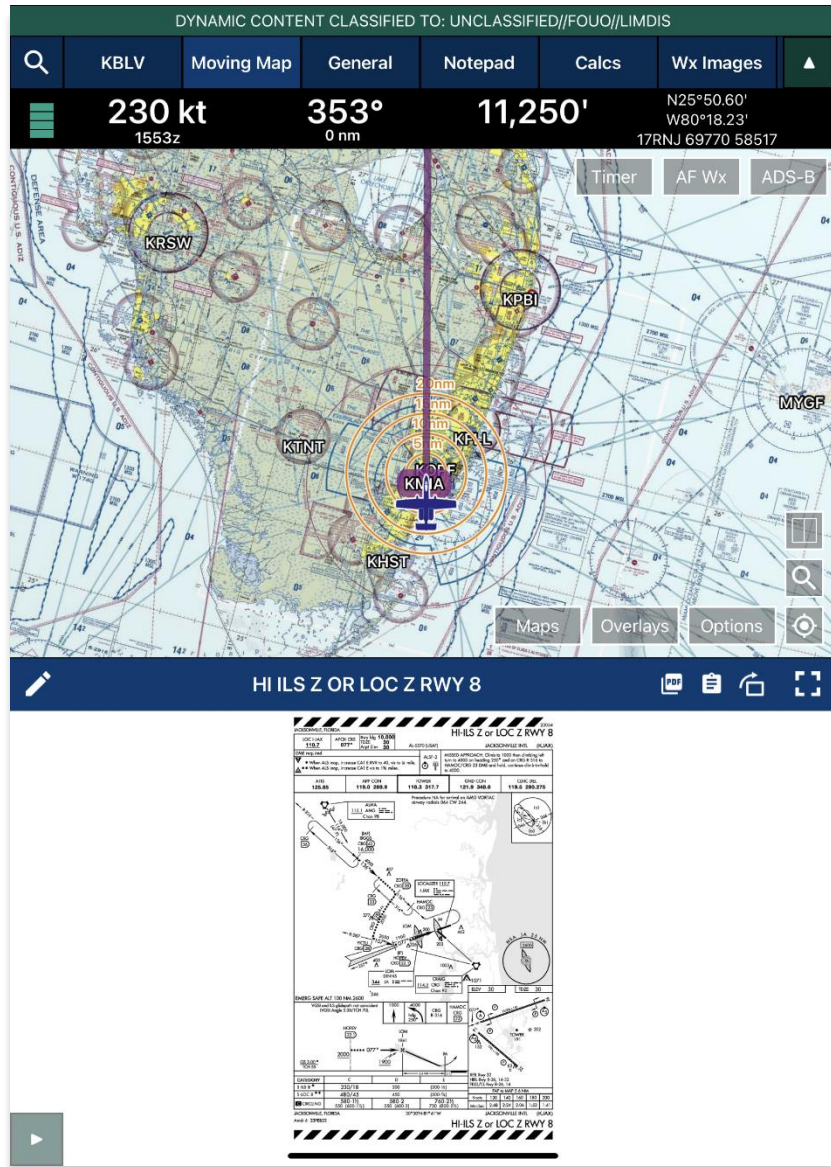
#### 15.3.10.1 APD and IAP for Destination Airport

The APD or IAP charts for the route's destination airport can be displayed simultaneously with the Moving Map on the split screen.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap on the **split screen** icon located at the bottom-right corner of the screen. By default, the destination IAP chart is shown.
3. Tap the **actions ribbon**.
4. Select a chart from the popup menu.



- To switch to your destination APD, tap the document button located directly above the PDF button and the IAP will switch to APD.



**NOTE:** Refer to [Section 15.2.1.2](#) for steps on how to overlay Contract Fuel Locations on an Airport Diagram.



**NOTE:** Refer to [Section 15.2.1.1](#) on how to draw on APD and IAP charts.

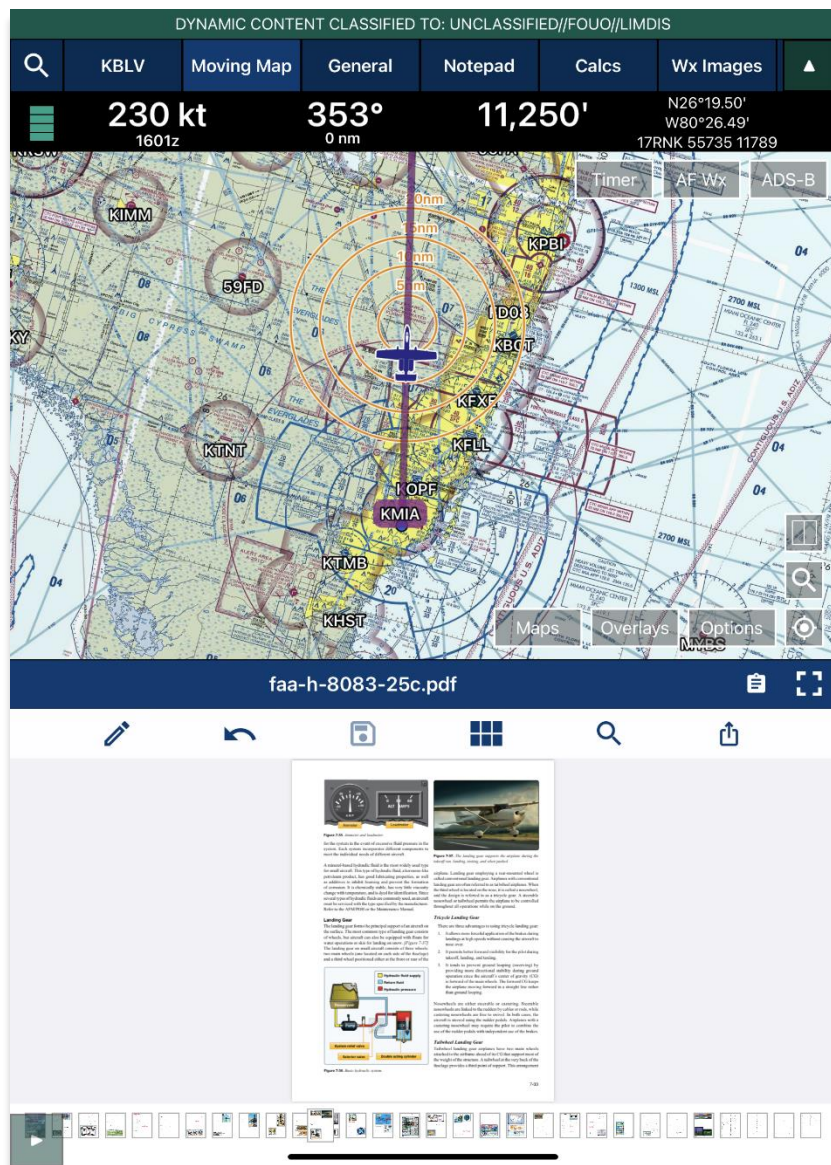


**NOTE:** A blank state message will appear indicating that there is no available APD or IAP for the selected airport.

### 15.3.10.2 PDF Support

PDF Support is available through the Moving Map's split screen view. User documents must be sideloaded onto Aero App to appear in the document selection popup. Refer to [Section 11.8](#) for additional information.

1. Tap the **PDF** icon on the split screen.
2. Tap the **actions ribbon** and the *User Documents* popup will appear.
3. Select desired document. Your document will display on the split screen view.
4. To return to the IAP chart view, tap the **clipboard** icon.



### 15.3.11 Center Target

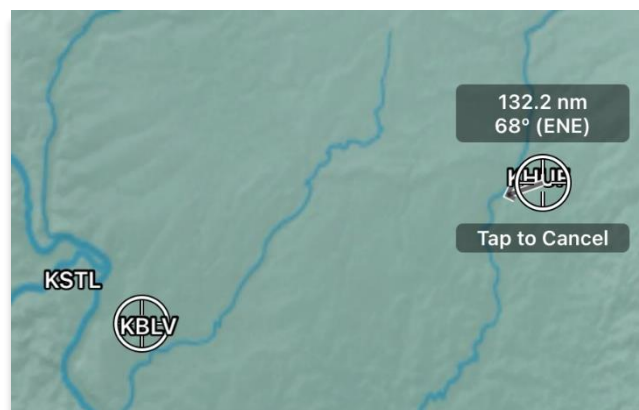
The Center Target retrieves the latitude, longitude, and MGRS values of the area in which the target is placed. As the Moving Map moves, a yellow tag would briefly display containing information on the Distance and Bearing, respective to the placement of the target.



#### 15.3.11.1 Measure Distance and Bearing Between Points

Aero App provides a tool that calculates the distance and bearing between two points on the Moving Map.

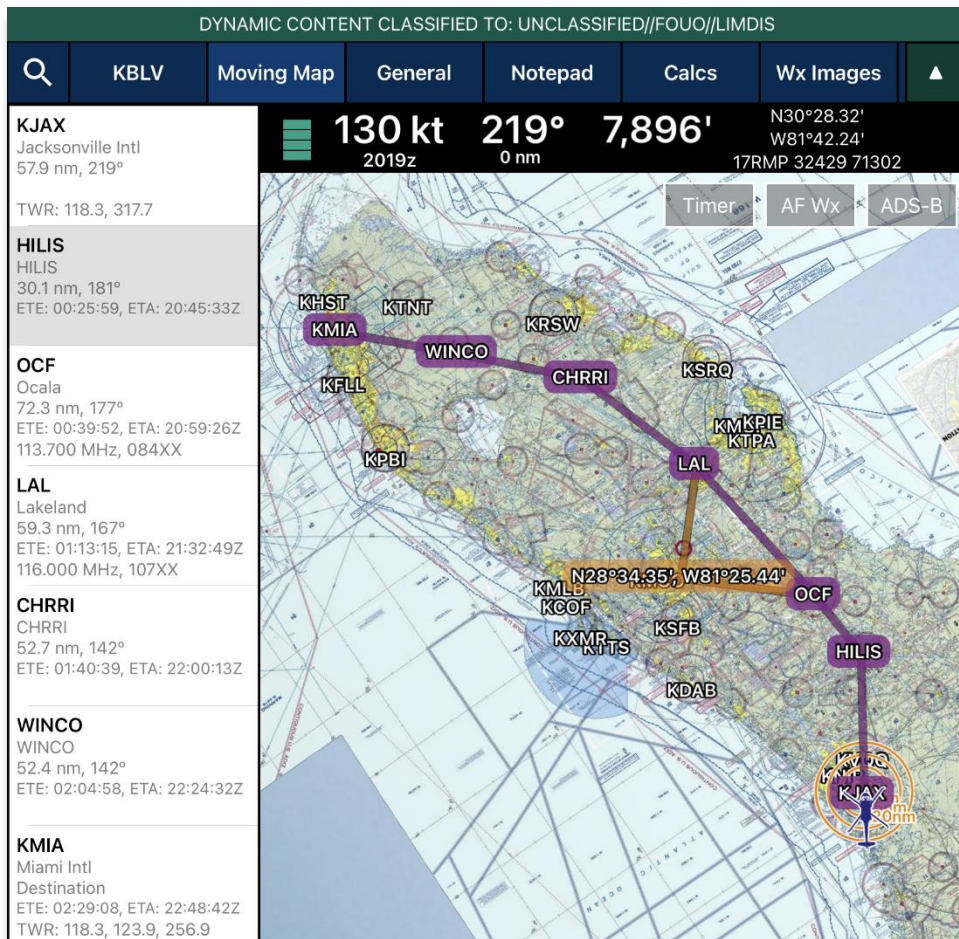
1. Move the *Moving Map* to activate the center target.
2. Choose a *starting point* and tap the **target icon** to set the starting point.
3. Move the *Moving Map* to a desired end point. The measurement is displayed above the end point. The values displayed are the distance and bearing of the starting point and end point.



### 15.3.12 Drag and Drop

The Drag and Drop feature is a tool for users who would like to make quick modifications to their current route. Users can drag any point or segment of the current route and drop it to their desired location.

1. Navigate to the **Route Panel**.
2. Tap the **Plus** button on the **Route Panel**.
3. The Add popup will display.
4. Enter a desired route using its identifier name, search term, or route, including MGRS or latitude and longitude.
5. Route will be displayed on the Moving Map.
6. Tap and hold to drag a point or segment in the route and drag it to a desired point that you wish to add to the route.



7. The Nearest popup will appear displaying the latitude and longitude of the selected point with 10 nearest Airports, NavAids, Waypoints, and User Waypoints.

8. Select which you wish to add.
9. A new point will be added to the current route.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

🔍
KBLV
Moving Map
General
Notepad
Calcs
Wx Images
▲

<p><b>KJAX</b> Jacksonville Intl 57.9 nm, 219°</p> <p>TWR: 118.3, 317.7</p>	<div style="display: flex; justify-content: space-between; font-size: large; font-weight: bold;"> <span>130 kt</span> <span>219°</span> <span>7,896'</span> </div> <div style="display: flex; justify-content: space-between; font-size: small;"> <span>2019z</span> <span>0 nm</span> <span>N29°20.79' 114.6 nm W79°55.40' 133°</span> </div> <div style="text-align: right; font-size: x-small;">17RPN 04521 46865</div>
---	--

**HILIS**  
HILIS  
30.1 nm, 181°  
ETE: 00:25:44, ETA: 20:45:33Z

Timer
AF Wx
ADS-B

<p><b>OCF</b> Ocala 60.3 nm, 135° ETE: 00:39:37, ETA: 20:59:26Z 113.700 MHz, 084XX</p>	
<p><b>KORL</b> Exec 49.2 nm, 234° ETE: 01:07:28, ETA: 21:27:17Z TWR: 118.7, 239</p>	
<p><b>LAL</b> Lakeland 59.3 nm, 167° ETE: 01:30:11, ETA: 21:50:00Z 116.000 MHz, 107XX</p>	
<p><b>CHHRI</b> CHHRI 52.7 nm, 142° ETE: 01:57:34, ETA: 22:17:23Z</p>	
<p><b>WINCO</b> WINCO 52.4 nm, 142° ETE: 02:21:53, ETA: 22:41:42Z</p>	
<p><b>KMIA</b> Miami Intl Destination ETE: 02:46:04, ETA: 23:05:53Z TWR: 118.3, 123.9, 256.9</p>	
<p>361.9 nm</p>	

+
Edit
Route

Maps
Overlays
Options



**NOTE:** Warning popups will appear when users try to drag and drop points that belong to a route with a DP, STAR, SAR pattern, Airway, or MTR.



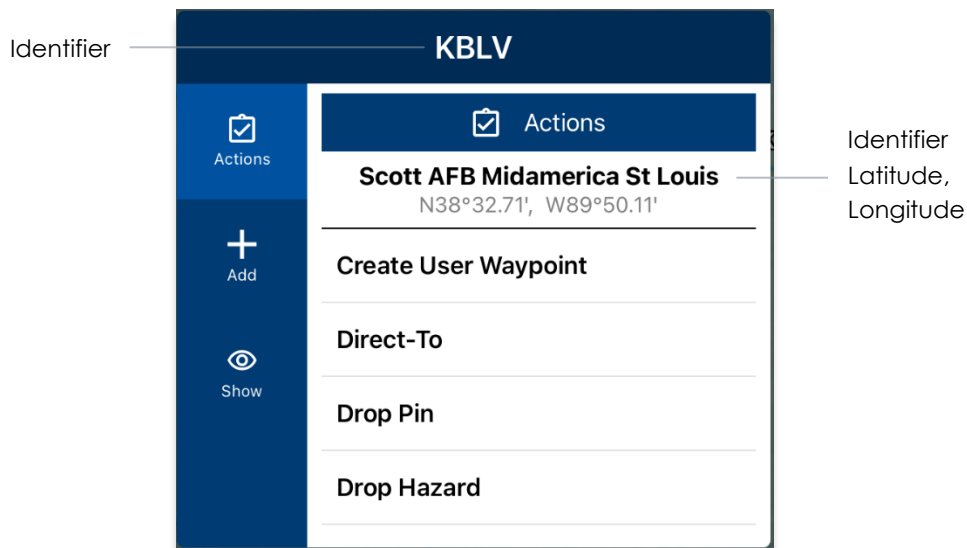
### 15.3.13 Moving Map Popup Menu

Aero App enables users to perform actions to their Moving Map. Users can display the popup in three simple ways:

- Long pressing any point on the Moving Map
- Tapping an existing point on the Moving Map
- Tapping any point on the Route Panel

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will display. Tap an identifier or an ICAO. The Moving Map's popup menu will display with each option grouped by Actions, Add, and Show.

The Moving Map's popup menu will include identifier information such as the identifier name, and its latitude and longitude. In the case where NavAid is selected, additional information will be available to users such as its identifier name, bearing, distance, and frequency.



### 15.3.13.1 Actions

The Actions submenu provides users with the following options:

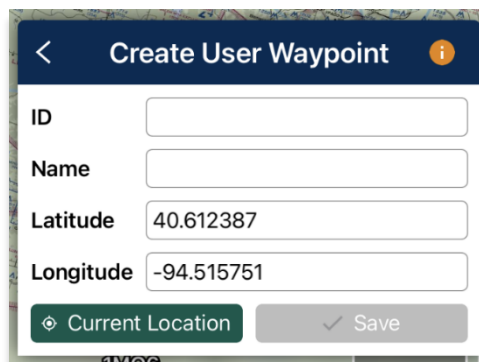
- Create User Waypoint
- Direct-To
- Drop Pin
- Drop Hazard
- Add to Route or Remove from Route

#### 15.3.13.1.1 Create User Waypoint

Aero App enables users to create user waypoints using a unique ID, Name, Latitude, and Longitude. The Current Location option is available to users when using their current location's coordinates.

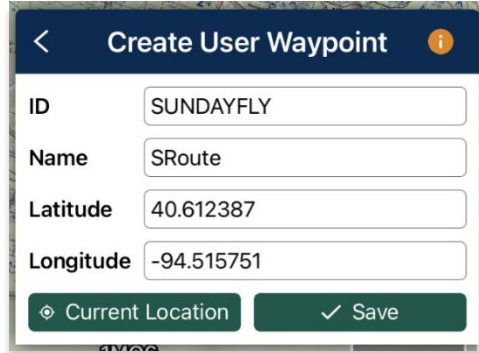
Alternatively, users can sideload user overlays. Refer to [Section 11.4](#) for additional information.

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear. Select your desired point.
4. The Moving Map popup will appear. Select **Actions** from the side menu, if necessary.
5. Tap **Create User Waypoint**.
6. The Create User Waypoint popup will appear with fields to enter an Identifier, Name, Latitude, and Longitude. The latitude and longitude fields are auto filled with the point's current coordinates. Fill in the necessary information.
7. Tap **Current Location** to use your present location's coordinates.



The screenshot shows a mobile application interface for creating a user waypoint. The title bar is dark blue with a back arrow on the left, the text 'Create User Waypoint' in the center, and an information icon on the right. Below the title bar, there are four text input fields: 'ID' (empty), 'Name' (empty), 'Latitude' (containing the value '40.612387'), and 'Longitude' (containing the value '-94.515751'). At the bottom of the form, there are two buttons: a green button labeled 'Current Location' with a location pin icon, and a grey button labeled 'Save' with a checkmark icon.

8. Once fields are filled, the Save button will be selectable. Tap **Save** and the waypoint is added to the User Waypoint list.



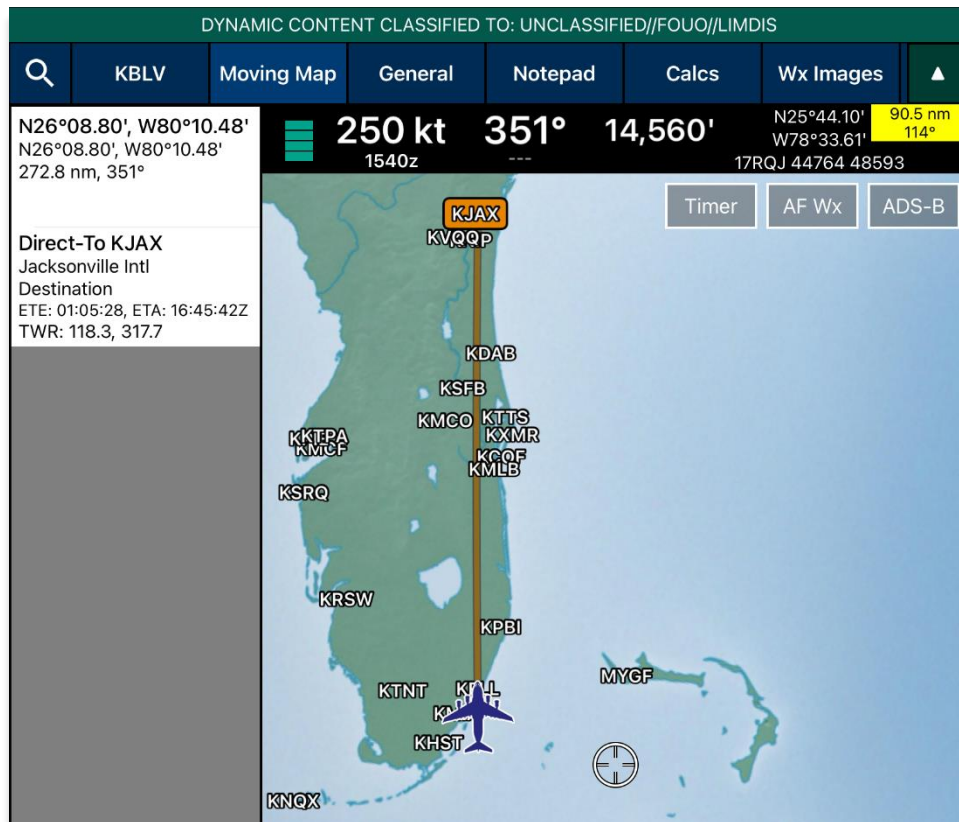
**NOTE:** Refer to [Section 15.3.14.3.4.6](#) to view all saved user waypoints.

---

### 15.3.13.1.2 Direct-To on Empty Route

Aero App provides a Direct-To feature that enables users to fly directly to their desired destination. The sections ahead will provide different variations for utilizing the Direct-To feature.

1. Tap **Moving Map** on the **Main Menu**.
2. Ensure that the route is empty.
3. Long-press a desired point on the Moving Map. Alternatively, users can tap on an identifier from the Moving Map.
4. The *Nearest* popup will appear, select your desired point.
5. The *Actions* popup will display. Select **Actions** from the side menu, if necessary.
6. Tap **Direct-To**.
7. A new route will contain two points, your ownship point and the Direct-To point. The ownship point will be added to the Route Panel as the first point and the Direct-To point will be added as the next point.



8. To cancel the Direct-To, tap on the Direct-To point from the Route Panel or from the Moving Map. The Actions popup will appear, select **Cancel Direct-To**.

### 15.3.13.1.2.1 Direct-To on Existing Route

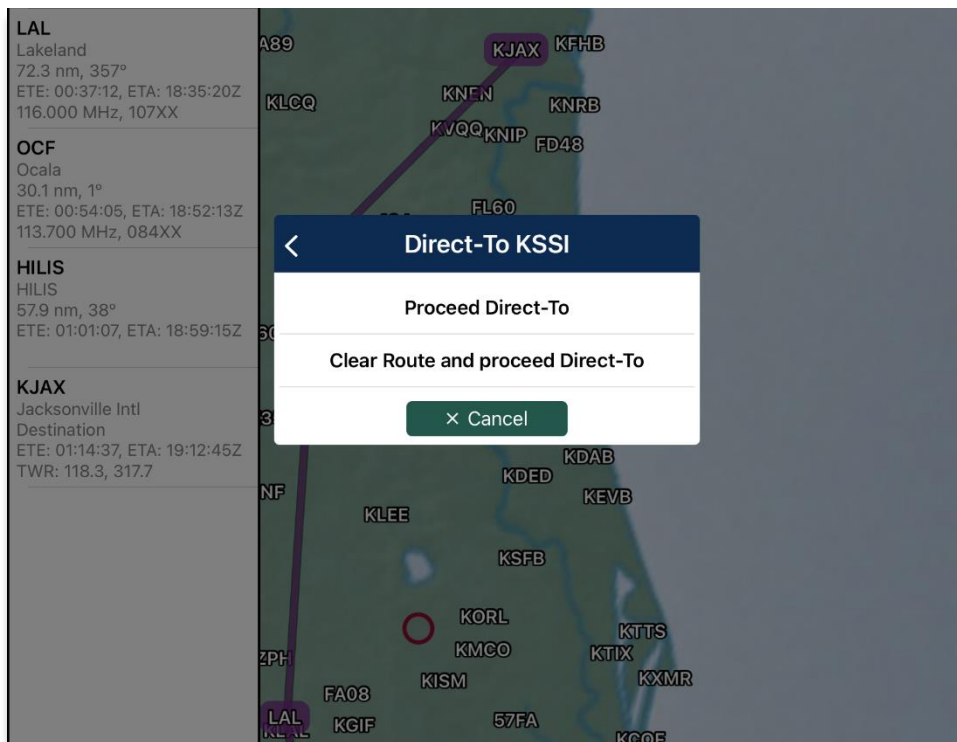
Users can use the Direct-To feature on an existing route.

1. Tap **Moving Map** on the **Main Menu**.
2. Ensure that the route includes one or more points.

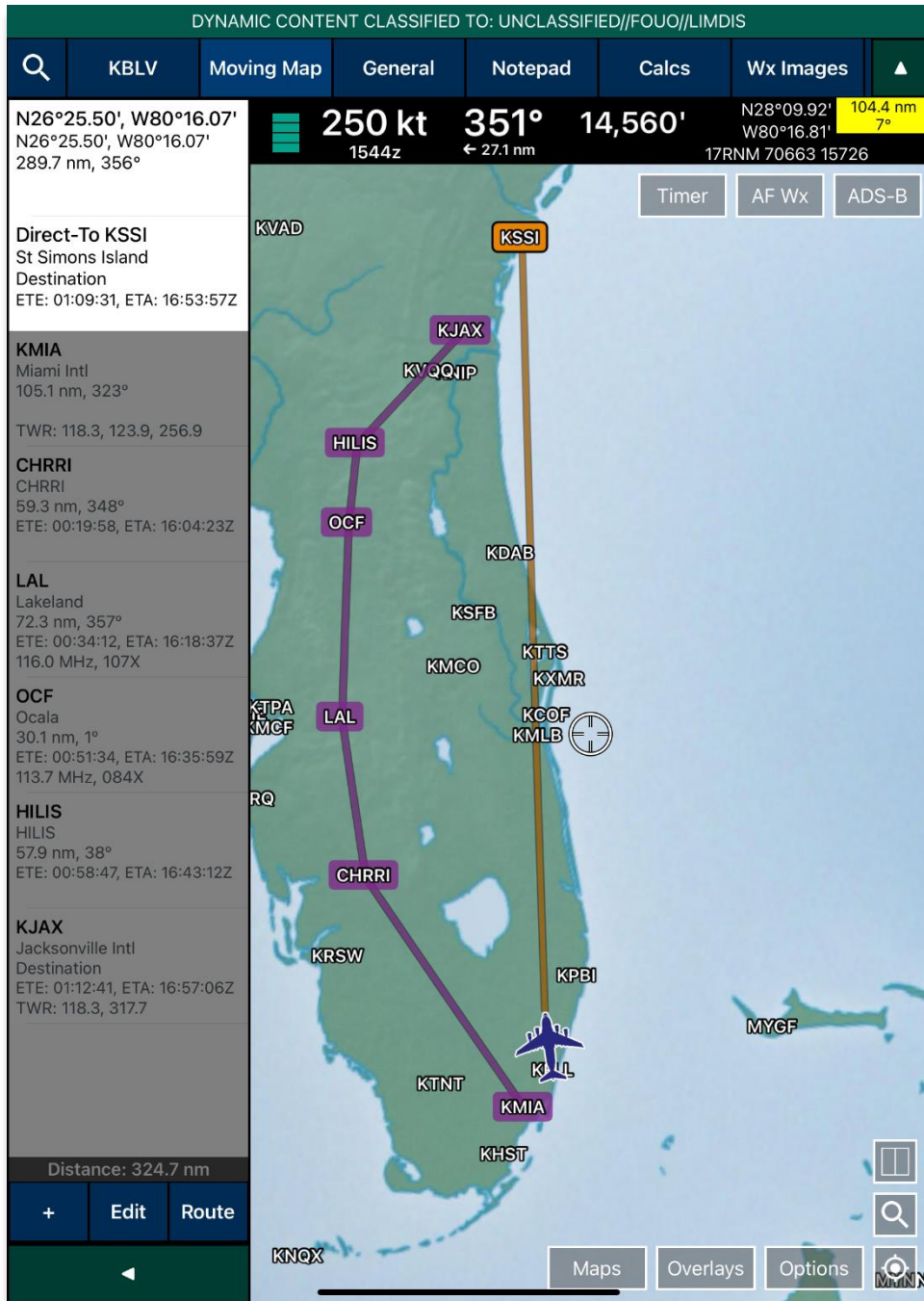


**NOTE:** During the Direct-To course, users will be able to continue adding additional points to the route. The Direct-To enroute will not be interrupted.

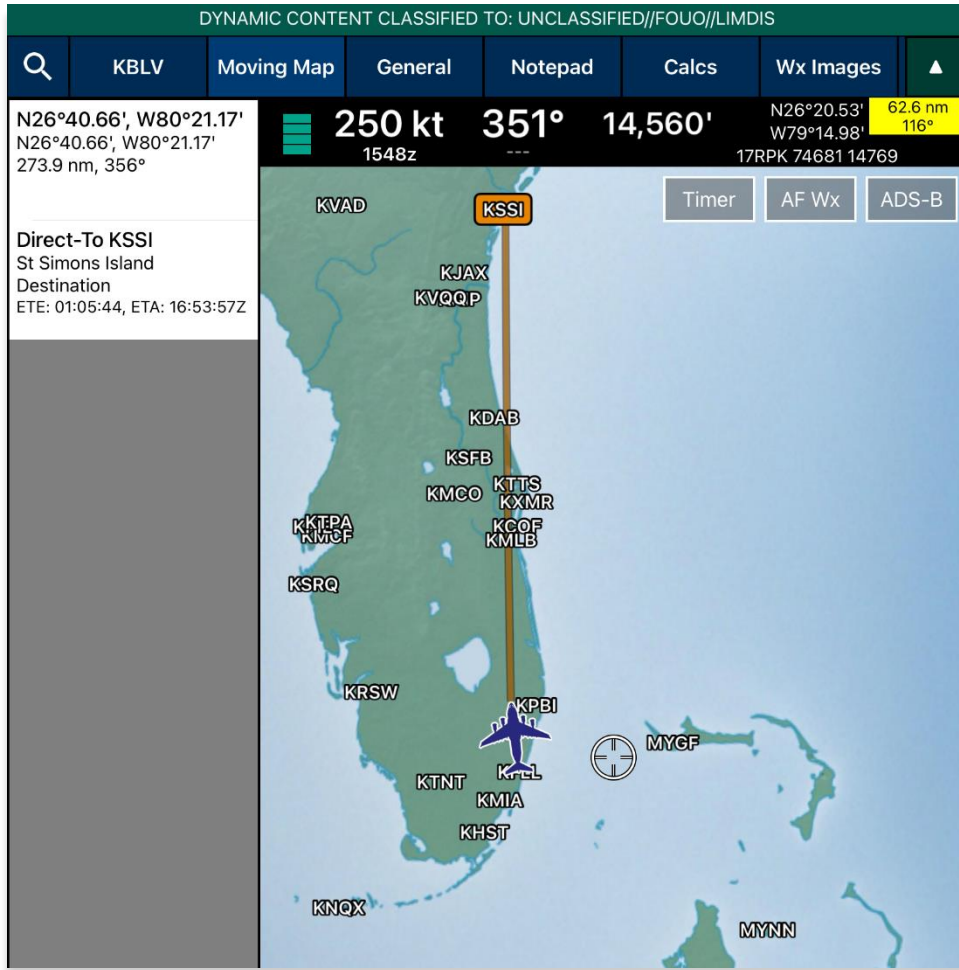
3. Select a point using one of the following methods:
  - Long pressing any point on the Moving Map
  - Tapping an existing point on the Moving Map
  - Tapping any point on the Route Panel
4. Once selected, the Actions popup will display. Select **Direct-To**. The Direct-To options popup will display the following options:



- Proceed Direct-To** – The new enroute will continue from the ownship's point to the Direct-To point. The existing route will be grayed out and the ETA and ETE will be updated in correspondence to the ownship's speed.



- Clear Route and proceed Direct-To** – Clears the existing route and will continue enroute from the ownship point to the Direct-To point. ETA and ETE will be updated in correspondence to the ownship's speed.



- Cancel** – dismisses the action.
- To cancel the Direct-To, tap on the Direct-To point from the Route Panel or from the Moving Map. The Actions popup will appear, select **Cancel Direct-To**. Your route will revert to the original route.



**NOTE:** Once the existing route has been cleared, users cannot revert to the original route when canceling Direct-To.

### 15.3.13.1.3 Drop Pin

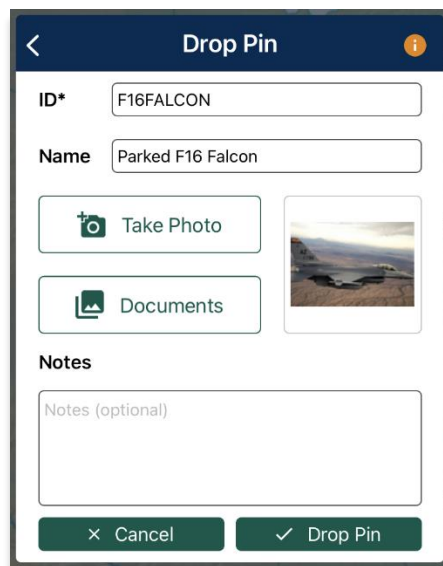
The Drop Pin feature enables pilots to drop geographic pins in any specified area on the Moving Map, view relevant information about pins, and add dropped pins to the current route. Aero App provides pins such as Photo Pin and Pin.

In addition, Aero App enables users to sideload pins into Aero App. Refer to [Section 11.6](#) for additional information.

#### 15.3.13.1.3.1 Photo Pin

A Photo Pin is a designated location on the Moving Map that incorporates user-generated images. Fields containing an asterisks are required.

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear, select your desired point.
4. A popup for the selected point will be displayed. Select **Actions** from the side menu, if necessary.
5. Tap **Drop Pin**.
6. Tap **Photo Pin**.
7. The Photo Pin popup will appear with fields for ID\*, Name, Images, and Notes. Fill in the required fields.



**NOTE:** Uploading an image is required for Photo Pins.

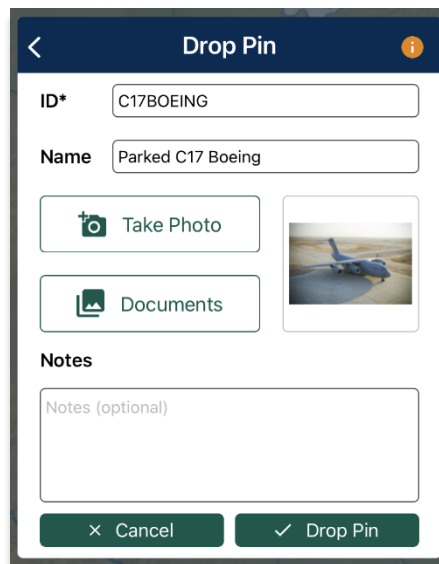


8. Once the required fields have been filled, the Drop Pin button will be selectable. Tap **Drop Pin** and your pin will display on the Moving Map.
9. Tap **Cancel** to dismiss the action.

### 15.3.13.1.3.2 Pin

A Pin is used to mark a location on the Moving Map. Fields containing an asterisk are required.

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear, select your desired point.
4. A popup for the selected point will be displayed. Select **Actions** from the side menu, if necessary.
5. Tap **Drop Pin**.
6. Tap **Pin** from the following drop pin options.
7. The Pin popup will appear with fields such as ID\*, Name, Documents, and Notes. Fill in the necessary information.



8. Once the required fields have been filled, the Drop Pin button will be selectable. Tap **Drop Pin** and your pin will display on the Moving Map.
9. Tap **Cancel** to discard the action.

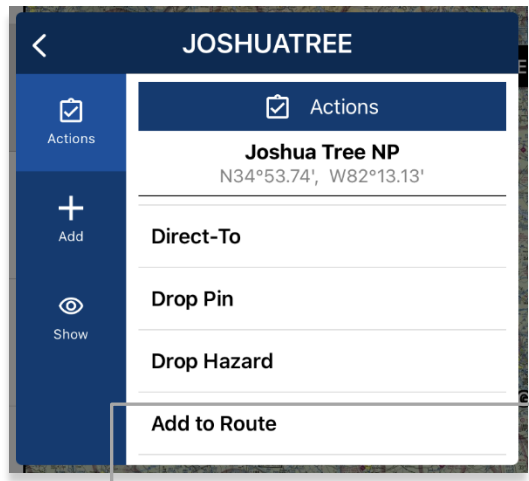


**NOTE:** Creating Pins will require a unique identifier. Existing Pins will be assigned auto-generated identifiers (e.g., PIN1, PIN2, PIN3, etc.).

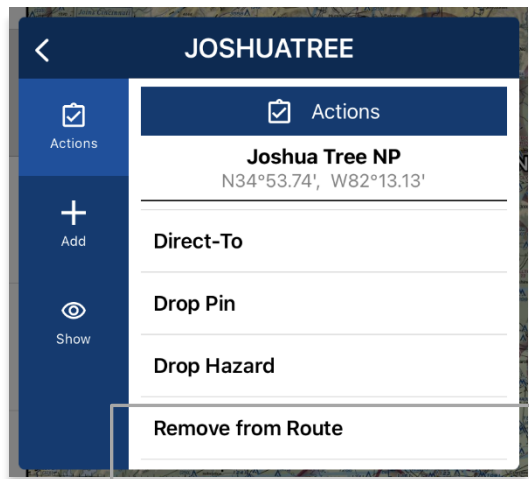
### 15.3.13.1.3.2.1 Add Pin to Route

Add to Route gives users the ability to add dropped pins directly to their current route.

1. Ensure that the Pins overlay is enabled.
2. Navigate to the Moving Map and tap on your desired **Pin**.
3. The Moving Map popup menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Add to Route**.



5. The selected dropped pin will populate to your current route on the Moving Map and the Route Panel.
6. To delete from your current route, tap **Edit** then tap the minus symbol or swipe left then tap the delete button.
7. To delete from the Moving Map, tap the dropped pin and select **Remove from Route**.

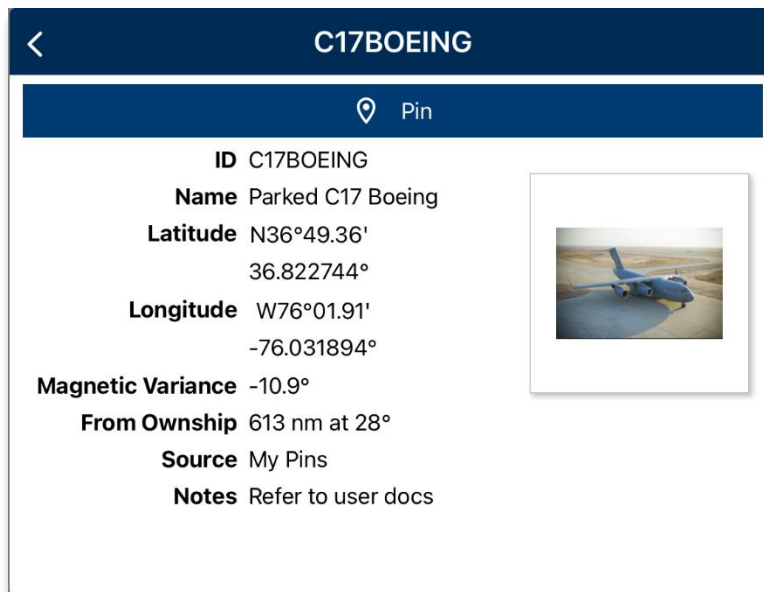


### 15.3.13.1.3.2.2 View Pin Information

Aero App provides users a display to view Pin information. The pin information is relevant to the pins that were dropped or pins that were sideloaded by users.

Pin Information is available under Information and Wx. Each pin contains relevant information such as its ID, Name, Latitude, Longitude, Magnetic Variance, From Ownship, Source, Notes, and any associated attachments.

1. Navigate to the Moving Map and tap on your desired **Pin**.
2. The Moving Map popup menu will appear. Select **Show** from the side menu.
3. Tap **Info and Wx** to view any information associated with the pin.



**NOTE:** Creating Pins will require a unique identifier. Existing Pins will be assigned auto-generated identifiers (e.g., PIN1, PIN2, PIN3, etc.).



**NOTE:** Alternatively, users can search their dropped pin by selecting the **Plus** button on the Route Panel and searching the dropped pin by their unique identifier.

### 15.3.13.1.4 Drop Hazard

The Drop Hazards feature enables pilots to drop hazards at a specified location on the Moving Map to identify potential hazards to avoid during flight. Fields containing an asterisk are required.

Aero App enables users to sideload Hazards into Aero App. Refer to [Section 11.7](#) for additional information.

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a **point** on the **Moving Map**.
3. The Nearest popup will appear, select your desired point.
4. A popup for the selected point will be displayed. Select **Actions** from the side menu, if necessary.
5. Tap **Drop Hazard**.
6. The Hazard popup will appear with fields for Name\*, Radius in nm or km (based on which distance unit is set in Preferences), Alert on Intersection, Latitude\*, Longitude\*, and Notes. Fill in the required fields.

**Hazard**

Name\* Gun Threat H...

Radius in km 25  
Radius of the Ring

Alert on Intersection On  
Alert when ring is intersected

Latitude\* 46.920639

Longitude\* -96.815750

Notes

Create a circle around a hostile threat. The radius of the circle is dependant on the weapon.

Current Location Drop Hazard



**NOTE:** When users have Preferences set to MGRS, the Latitude and Longitude fields are disabled.



**NOTE:** If an invalid MGRS is entered, the Latitude and Longitude fields will be left blank.

7. Tap **Current Location** to set your current position as the coordinates.
8. Once the required fields have been filled, the Drop Hazard button will be selectable. Tap **Drop Hazard** and your hazard will display on the Moving Map.

### 15.3.13.1.5 Add to Route

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a desired point on the Moving Map.
3. The Nearest popup will appear. Select a desired point.
4. The Moving Map's popup menu will display. Select **Actions** from the side menu, if necessary.
5. Tap **Add to Route**.
6. A new point will be added to the current route.
7. Once the point has been added, the popup changes to *Remove from Route*. By tapping **Remove from Route**, the point will be deleted from the route.



### 15.3.13.2 Add

The Add submenu provides users the option to add the following procedures to their route:

- Departure Procedure (DP)
- Standard Terminal Arrival Procedure (STAR)

#### 15.3.13.2.1 Add Departure Procedure (DP) or Standard Terminal Arrival Route (STAR) to Route

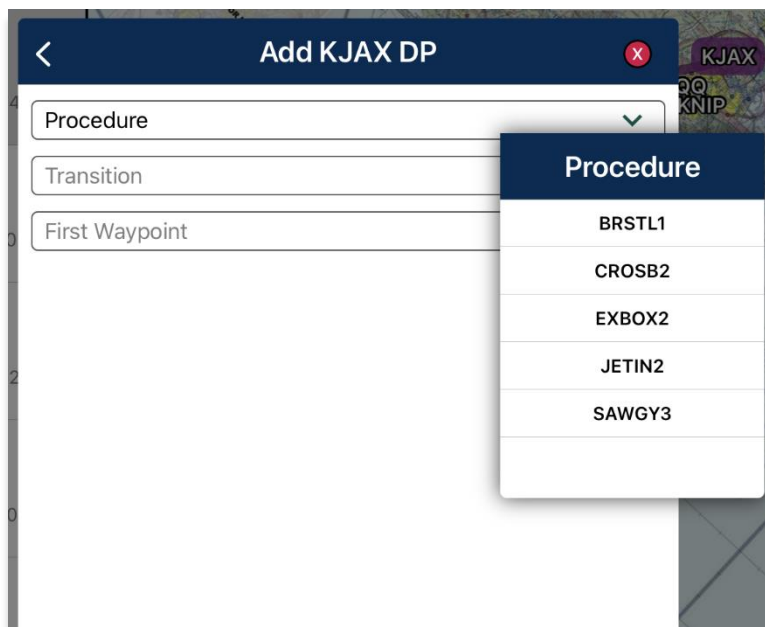
Aero App enables users to add Departure Procedure (DP) and Standard Terminal Arrival Route (STAR) to their current route.

1. Select an airport from the Route Panel or the map.
2. The Moving Map's popup menu will appear. Select **Add** from the side menu.
3. Select **DP** or **STAR**.



**NOTE:** If both options, DP and STAR, are disabled, it is due to the position of the selected airport. Select the appropriate departure and/or arrival airports to display procedure options.

4. The procedure selection popup will display. Tap the Procedure drop-down and select desired **Procedure**.



5. Transition will become selectable. Tap the Transition drop-down and select desired **Transition** point.
6. First Waypoint will become selectable. Tap the First Waypoint drop-down and select desired **First Waypoint**.
7. The Procedure preview will appear and Add to Route will become selectable. Tap **Add to Route**.

<
Add KJAX DP
✕

Procedure: EXBOX2
▼

Transition: OMN
▼

First Waypoint: SAWGY
▼

(EXBOX2.EXBOX) 22083
AL 5570 (FAA)
JACKSONVILLE INTL (JAX)  
JACKSONVILLE, FLORIDA

**EXBOX TWO DEPARTURE (RNAV)**

D-ATIS 125.85

COM 136

119.5 290.375

CRIC

GNB CDN

121.9 348.4

JACKSONVILLE TOWER 118.3 317.7

JACKSONVILLE DEP CON 124.9 308.4

**TOP ALTITUDE:**  
3000

**TAKEOFF MINIMUMS:**  
Rwy 8, 14, 26, 32: Standard with minimum climb of 500' per NM to 540.

**NOTE: RNAV 1.**  
NOTE: Turbojets only.  
NOTE: DME/DME/RU or GPS Required.  
NOTE: RADAR Required.  
NOTE: If unable to accept climb rate, advise ATC on initial contact.

NOTE: Chart not to scale.

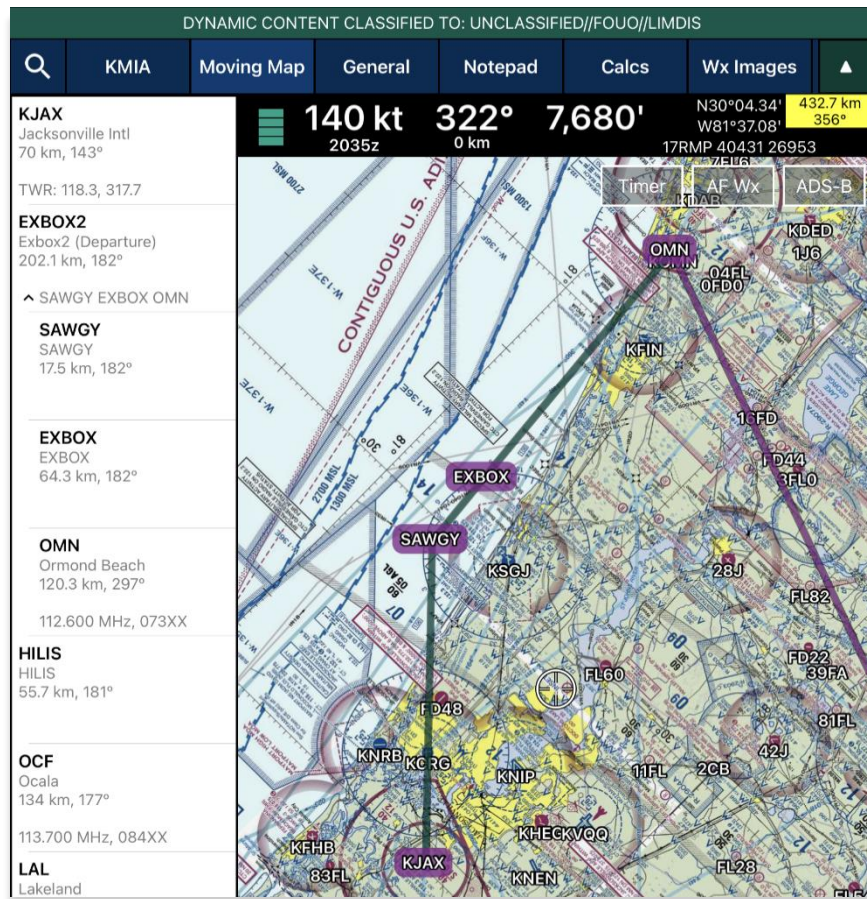
DEPARTURE ROUTE DESCRIPTION

**TAKEOFF RUNWAY 8:** Climb heading 077° to 540, then climb to assigned altitude on heading 077° or as assigned by ATC, thence . . .  
**TAKEOFF RUNWAY 14:** Climb heading 137° to 540, then climb to assigned altitude on heading 137° or as assigned by ATC, thence . . .  
**TAKEOFF RUNWAY 26:** Climb heading 257° to 540, then climb to assigned altitude on heading 257° or as assigned by ATC, thence . . .  
**TAKEOFF RUNWAY 32:** Climb heading 317° to 540, then climb to assigned altitude on heading 317° or as assigned by ATC, thence . . .  
 . . . expect radar vectors to SAWGY, then on track 181° to EXBOX. Maintain 3000 or as assigned by ATC, expect clearance to filed altitude within ten (10) minutes after departure.

EXBOX TWO DEPARTURE (RNAV)  
(EXBOX2.EXBOX) 08AN15
JACKSONVILLE, FLORIDA  
JACKSONVILLE INTL (JAX)

✓ Add to Route

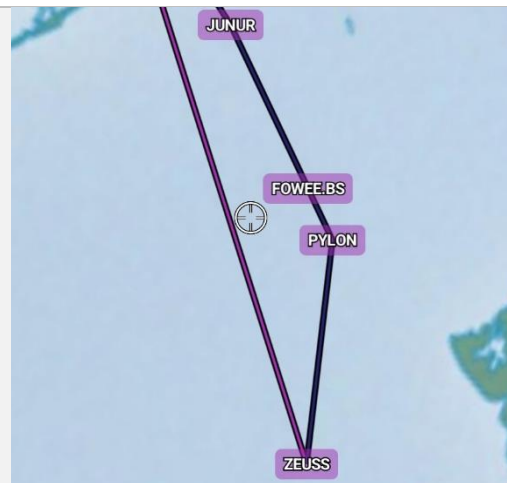
8. The procedure will be added to the current route and on the Moving Map.



Add DP to Route



Add STAR to Route





### 15.3.13.3 Show

The Show submenu provides users the following options to display on the Moving Map:

- Show on Map
- IAP on Map
- Info and Wx
- MVA
- Nearest
- Orbit

#### 15.3.13.3.1 Show on Map

Show on Map pans the map view to the selected point or identifier.

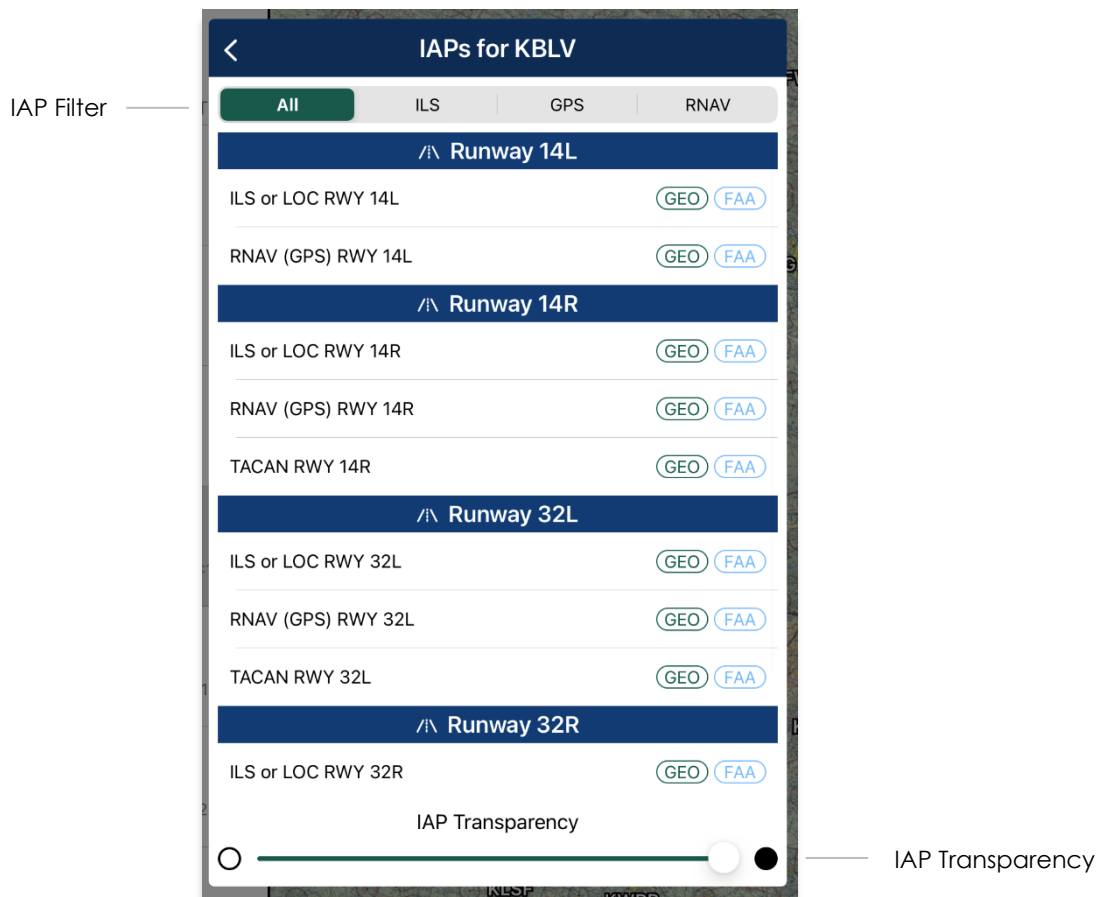
1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a desired point or identifier on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear. Select your desired point.
4. The Moving Map popup will appear. Select **Show** from the side menu.
5. Tap **Show on Map**.
6. The screen will pan to the selected location.



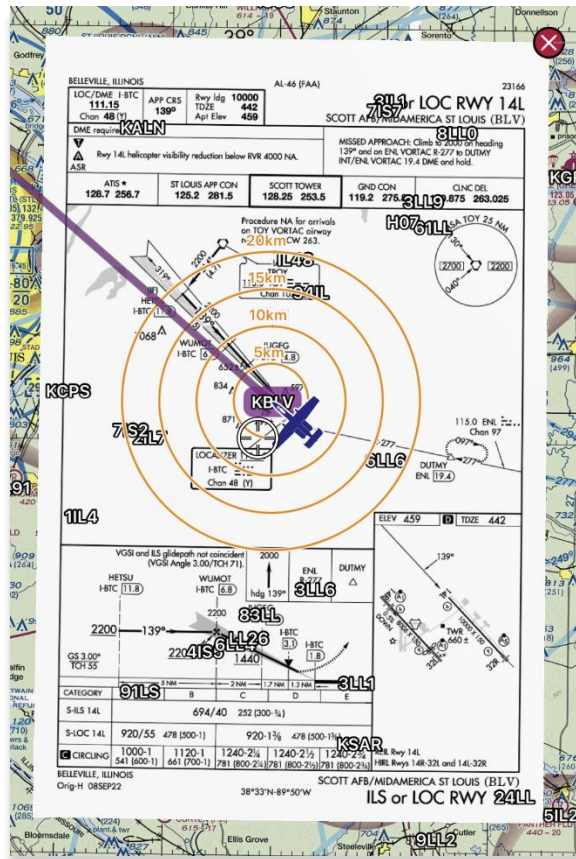
### 15.3.13.3.2 Instrument Approach Procedure (IAP) on Map

Aero App enables users to display Instrument Approach Procedures (IAPs) on the Moving Map, perfectly georeferenced. Overlaying the IAPs provides an additional level of situational awareness.

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear. Select your desired point.
4. The Moving Map's popup will appear. Select **Show** from the side menu.
5. Tap **IAP on Map**.
6. A list of IAPs for the identifier will be displayed. Select an **IAP filter** from the segmented button group.
7. IAPs are grouped by runways. Select desired **IAP** then the IAP will overlay on the Moving Map.
8. To adjust the transparency of the IAP, tap on the chart and drag the slider from left to right. By default, IAP transparency is set to 100%.



- To remove the IAP from the Moving Map, tap the red popup X.



Remove IAP



**NOTE:** A small number of Instrument Approach Procedures (IAPs) are not georeferenced and therefore cannot be shown on the Moving Map.

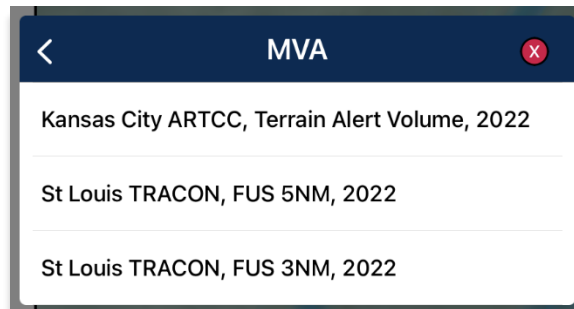
### 15.3.13.3 Info and Wx (Information and Weather)

The Information and Weather (Info and Wx) option can be accessed when tapping an identifier from the Moving Map or the Route Panel. When tapping an ICAO from the Moving Map or the Route Panel, additional airport information such as Info, APD, IAP, Dep, Arr, Min, Other, Host Nation, and Wx can be viewed. Refer to [Section 15.2](#) for additional information. Identifiers that are not an airport such as NavAids, Waypoints, User Waypoints, Pins, and others, will display only that identifier's information.

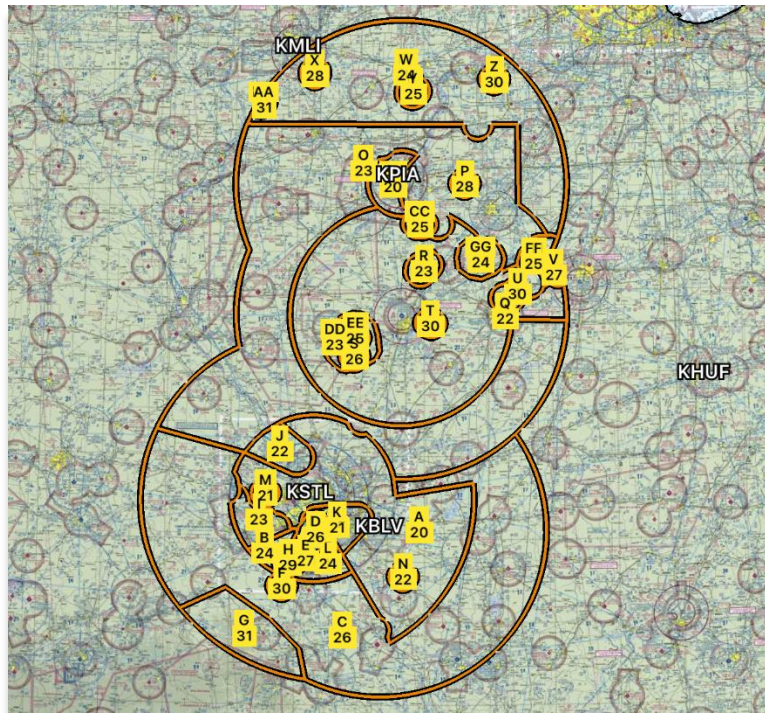
### 15.3.13.3.4 Minimum Vectoring Altitude (MVA)

Aero App enables users to overlay Minimum Vectoring Altitude (MVA) on the Moving Map.

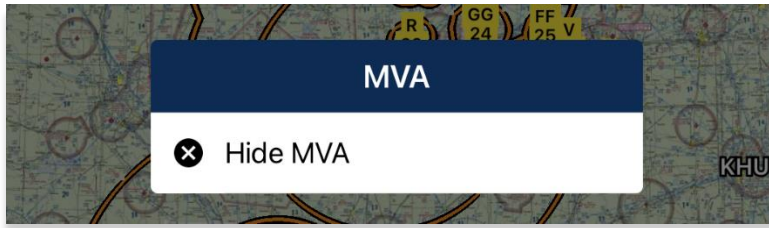
1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear. Select your desired point.
4. The Moving Map's popup menu will appear. Select **Show** from the side menu.
5. Tap **MVA**.
6. Select an **MVA** from the list provided.



7. The respective **MVA** will overlay on the Moving Map.



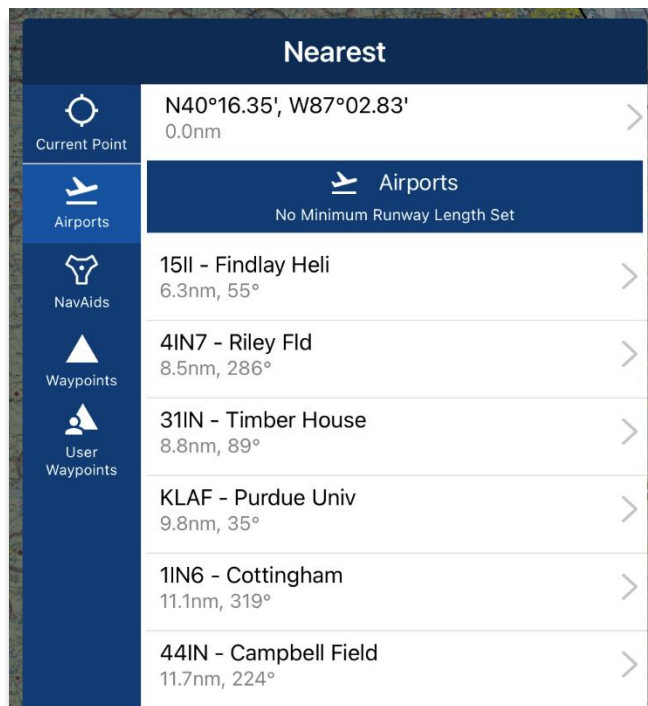
8. Tap inside area to hide MVA.
9. Tap **Hide MVA**.



### 15.3.13.3.5 Nearest

The Nearest feature enables users to view nearby Airports, NavAids, Waypoints, and User Waypoints. Once the desired new point is selected, the Moving Map's popup menu will display.

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. Your current point and a list of the nearest Airports, NavAids, Waypoints, and User Waypoints will display, select desired point.
4. Select desired point and a new Moving Map menu will display for your new point.



### 15.3.13.3.6 Orbit

The Orbit feature provides awareness to pilots flying their mission. Users can select a point on the Moving Map, set their desired configuration, then the orbit will surround the selected point. Certain fields will be pre-populated using the location's values. If necessary, modify pre-populated fields to desired preference.

1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or on the Route Panel.
3. The Nearest popup will appear. Select your desired point.
4. The Moving Map's popup will appear. Select **Show** from the side menu.
5. Tap **Orbit**.
6. The Orbit popup will appear. Each field has pre-filled values based on the selected point.

The screenshot shows the 'Orbit' configuration screen. It has a dark blue header with a back arrow, the title 'Orbit', and an information icon. Below the header are several sections, each with a title and a set of controls:

- Alignment:** A toggle switch between 'Magnetic' (selected) and 'True'.
- Magnetic Variance:** A text input field containing '0E'.
- Range Rings:** A section with a radio button selected. It includes 'Orbit Distance (nm)' set to '40' and 'Distance (nm)' with a row of buttons: '0' (selected), '2.5', '5', '10', and '25'.
- Azimuth:** A section with a radio button selected. It includes 'Azimuth' with an 'Off' toggle and 'Degrees' with a row of buttons: '10', '30' (selected), '45', and '90'.
- Altitude:** A section with a radio button selected. It includes 'Altitude Calculation' with an 'Off' toggle.
- Options:** A section with a radio button selected. It includes 'Line Width' with buttons for 'Light', 'Medium' (selected), and 'Bold'. It also includes 'Color' with four circular swatches (teal, blue, red, orange) and 'Transparency' with a horizontal slider.

At the bottom of the screen is a green button with a checkmark and the text 'Show'.

7. *Alignment* determines the direction in which the orbit is pointing. Set the desired direction to **Magnetic** or **True**.
8. *Magnetic Variance* is pre-populated, and the value is based on the selected point. If necessary, enter desired value in the text box.



**NOTE:** Users can enter a positive or negative value followed by a cardinal direction, e.g., N, S, E, or W.



**NOTE:** If the point selected is a NavAid, the Magnetic Variance field will be automatically filled with the slaved magnetic variance. However, if the NavAid does not have a slaved magnetic variance, the normal magnetic variance will be displayed instead.

9. *Range Rings* determines the number of rings for the selected point and the distance between each ring. Select desired value for each field.
10. *Azimuth* determines the angle or distance from a point. Select desired degrees.



**NOTE:** Azimuth is enabled if the number of rings selected is not set to 0.

**Orbit**

Orbit

Alignment **Magnetic** True

Magnetic Variance 5W

**Range Rings**

Orbit Distance (nm) 50

Distance (nm) 0 2.5 5 **10** 25

**Azimuth**

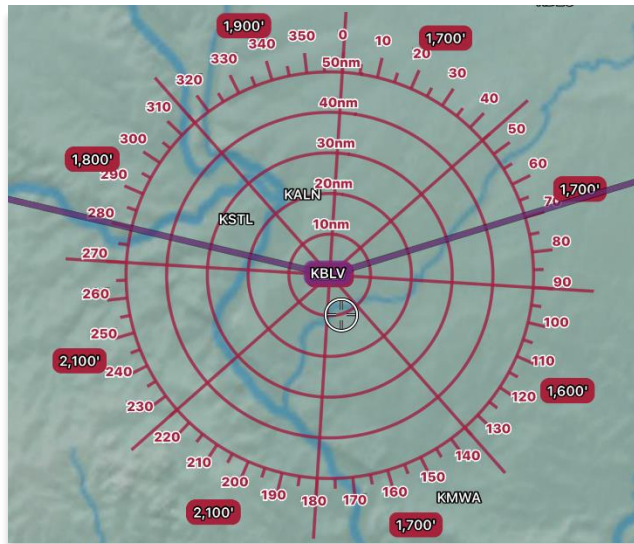
Azimuth **On**

Degrees 10 30 **45** 90

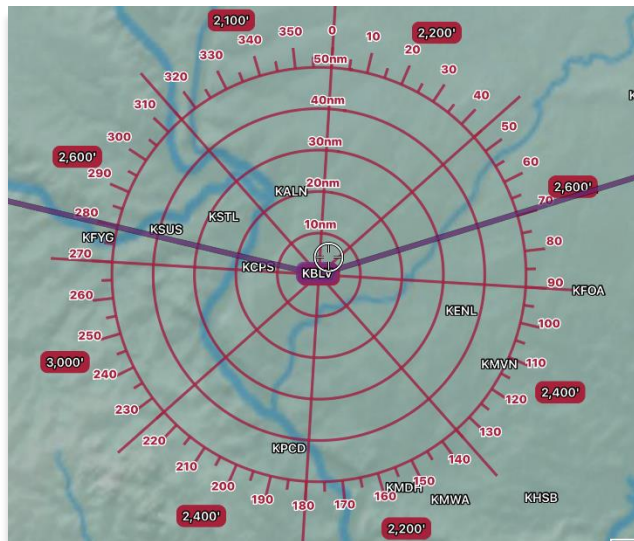
### 15.3.13.3.6.1 Orbit Altitude

Orbit Altitude enables users to configure their orbit to have visuals on the highest altitude of mountainous terrain and vertical obstructions. Options for Coverage and Line of Sight are available. Global and Terrain Analysis data is required for downloading prior to use.

1. Enable **Altitude Calculations** to expand options.
2. Orbit Coverage provides two options, *Coverage* and *Line of Sight*. The *Coverage* option is selected by default.
3. Users can select to view **Terrain** or **Terrain + VOs** coverage.
  - **Terrain** – displays the terrain elevation for each sector.

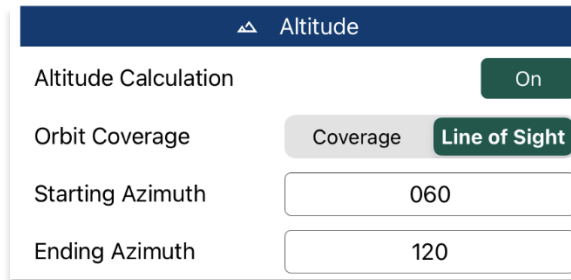


- **Terrain + VOs** – displays the terrain and VOs elevation for each sector.





4. Tap to select or toggle the segmented control to **Line of Sight** coverage. Additional fields will be displayed.
5. Fields for Starting Azimuth and Ending Azimuth will display. Values entered will be shaded on the Orbit. Enter the starting and ending azimuth for the line of sight coverage.



Altitude

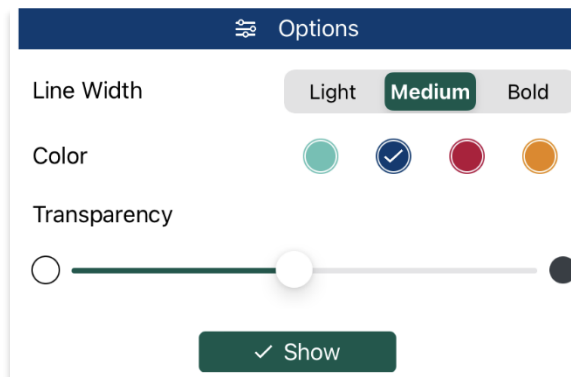
Altitude Calculation  On

Orbit Coverage  Coverage  Line of Sight

Starting Azimuth

Ending Azimuth

6. *Options* are additional options used to configure your orbit to the desired display on the Moving Map. Modify each field to desired configuration.
7. *Transparency* modification is available to users. Adjust transparency using the slider to the desired value.



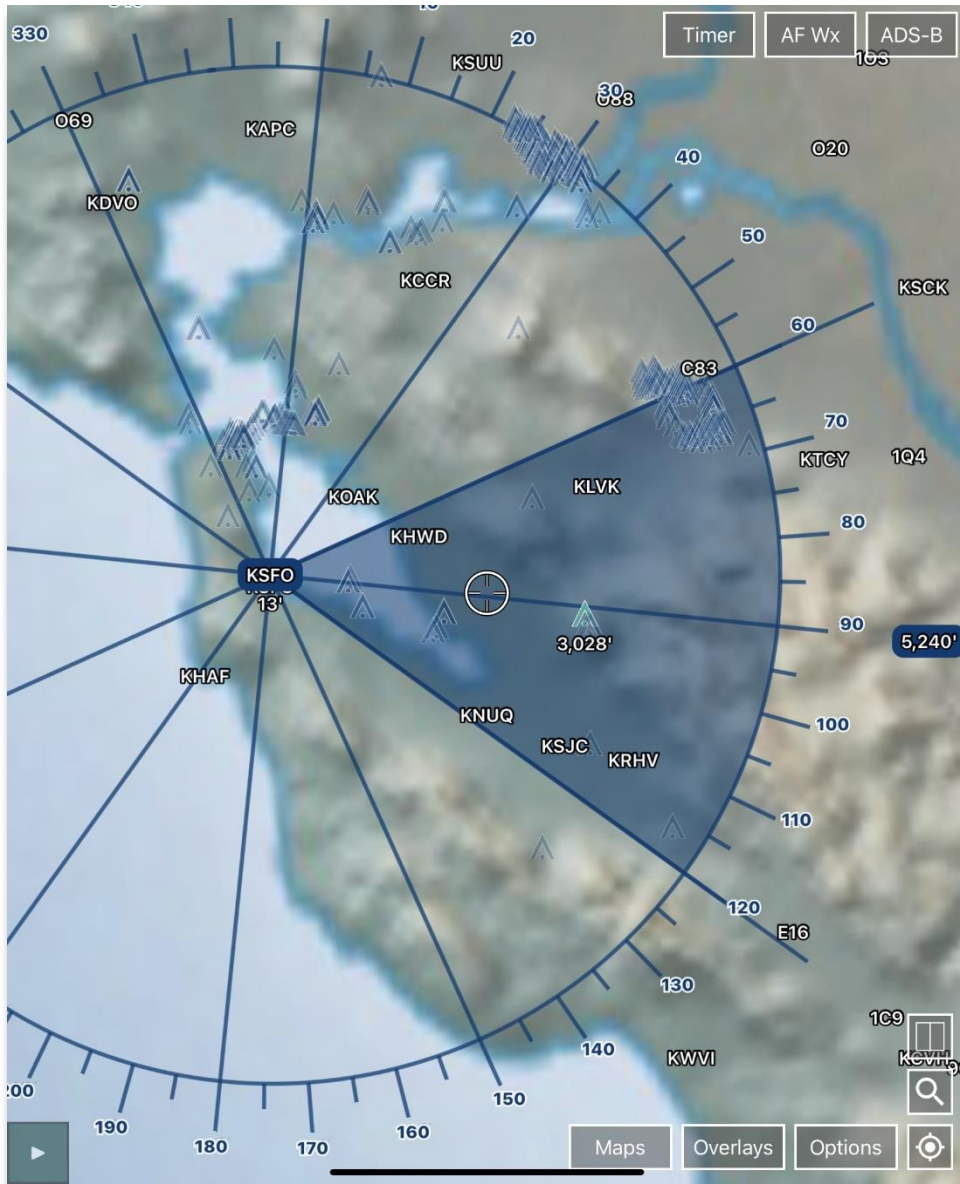
Options

Line Width  Light  Medium  Bold

Color

Transparency

8. Tap **Show** once all fields are set to the desired values.



**NOTE:** The value placed beside the shaded area represents the line of sight for that sector.

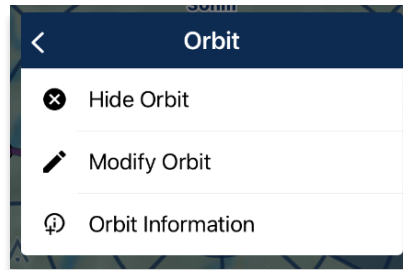


**NOTE:** The value located below the selected point represents the elevation of that identifier.

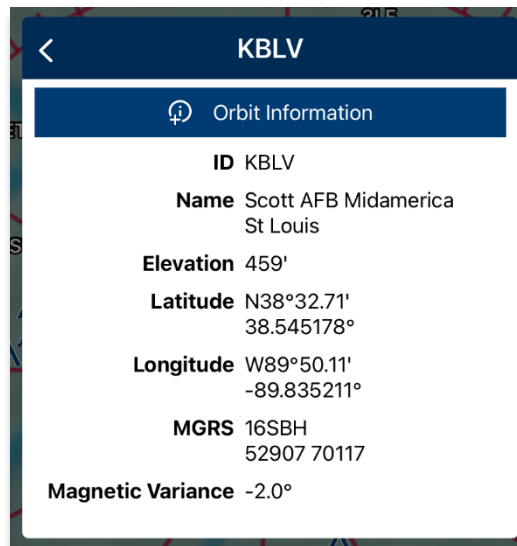


**NOTE:** VOs are visible and will populate within the displayed orbit. The highlighted VOs are the highest elevation VOs.

9. To modify the orbit, tap on the Orbit displayed on the Moving Map.
10. Users are given the following options:



- **Hide Orbit** – hides the Orbit from the Moving Map.
- **Modify Orbit** – displays the Orbit popup to make desired modifications.
- **Orbit Information** – displays relevant Orbit information.



**NOTE:** Only one orbit can be displayed at one time on the Moving Map.



**NOTE:** Distance is measured in nm or km, respective to which distance unit users have set in their Preferences.



**NOTE:** If the point selected is a NavAid, the Magnetic Variance field will be automatically filled with the slaved magnetic variance. However, if the NavAid does not have a slaved magnetic variance, the normal magnetic variance will be displayed instead.

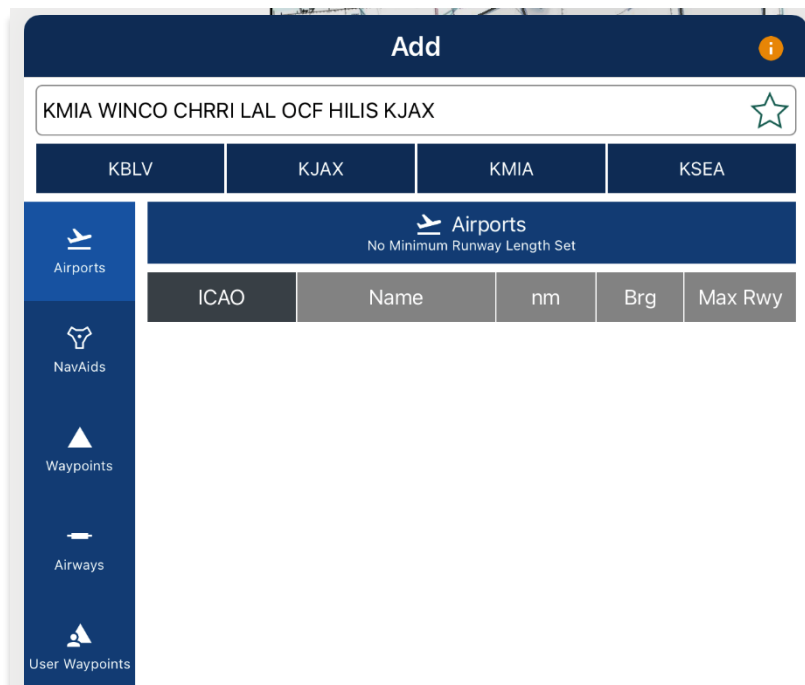
### 15.3.14 Collapsible Route Panel

The collapsible Route Panel enables users to hide or show the Route Panel to free up space on the screen when not in use. To expand the Route Panel, tap the route tab located at the bottom-left corner of the screen. Once expanded, the following options are available in addition to route information:

- **Add** – enables users to add Airports, NavAids, Waypoints, Airways, User Waypoints, and Pins to the route.
- **Edit** – enables users to delete and/or reorder entries within the route.
- **Route** – enables users to perform actions pertaining to the route or display additional features on the map.

#### 15.3.14.1 Add to Route

1. Tap **Moving Map** on the **Main Menu**.
2. Navigate to the **Route Panel**.
3. Tap the **Plus** button and a dialog box will display.
4. Search by entering an identifier, search term, or route including MGRS or Lat, Lon in the search box.
5. Tap **Go** from the device's on-screen keyboard and the entries will be added to the route. All entries will be displayed in the route panel in the order that they were entered.





**NOTE:** Aero App displays the individual route legs of Departure Procedures (DPs), Standard Terminal Arrival Routes (STARs), Instrument Approach Procedures (IAPs), Airways, and Jetways. The point information includes ICAO, frequency information (when appropriate), as well as distance, bearing, Estimated Time Enroute (ETE) and Estimated Time of Arrival (ETA) to the next point in the route.



**NOTE:** To enter a route with multiple points, enter each identifier separated by a space. The entries will display in the given order.

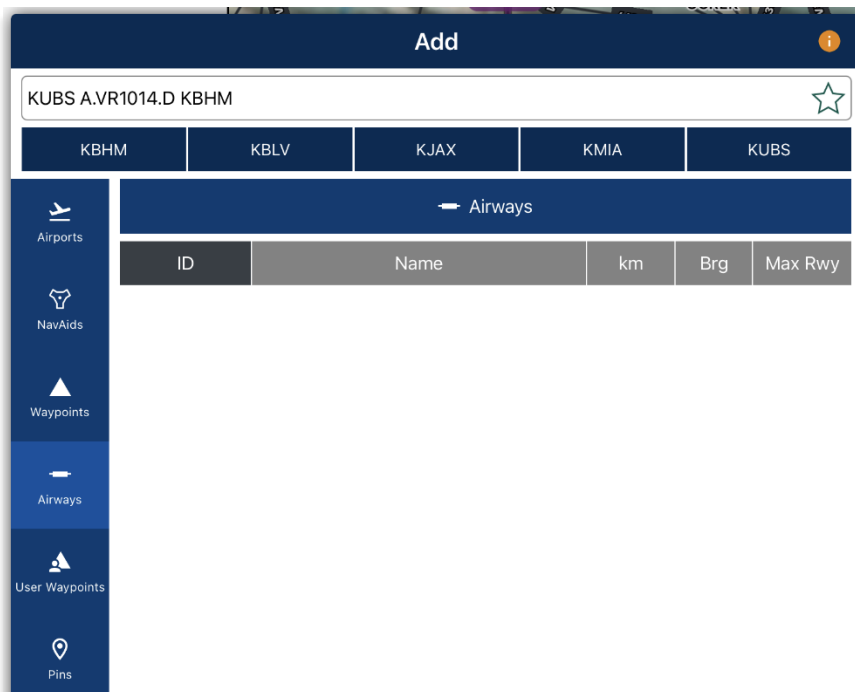


**NOTE:** When adding a new point (e.g., ICAO, Waypoint, etc.) to an existing route, the new point is automatically added to the route in its geographically optimal position and not simply at the end of the route.

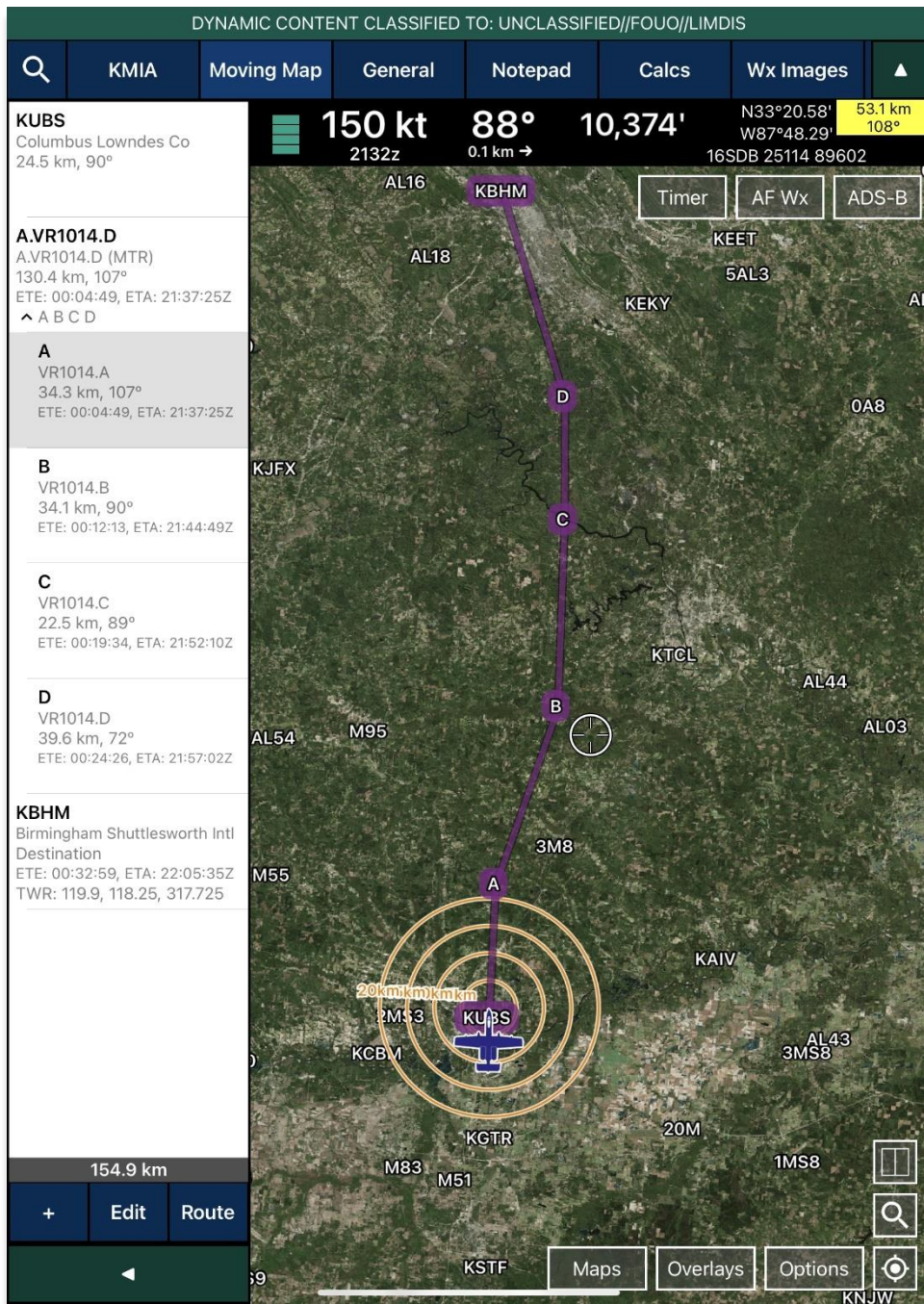
### 15.3.14.1.1 Add Military Training Routes (MTRs) to Route

Users can add Military Training Routes (MTRs) to the route.

1. Navigate to the **Route Panel**.
2. Tap the **Plus** button on the **Route Panel**.
3. The Add popup will display.
4. Use your keypad to enter desired MTRs to add to route following the format: **{starting point}.{MTR}.{endpoint}**.



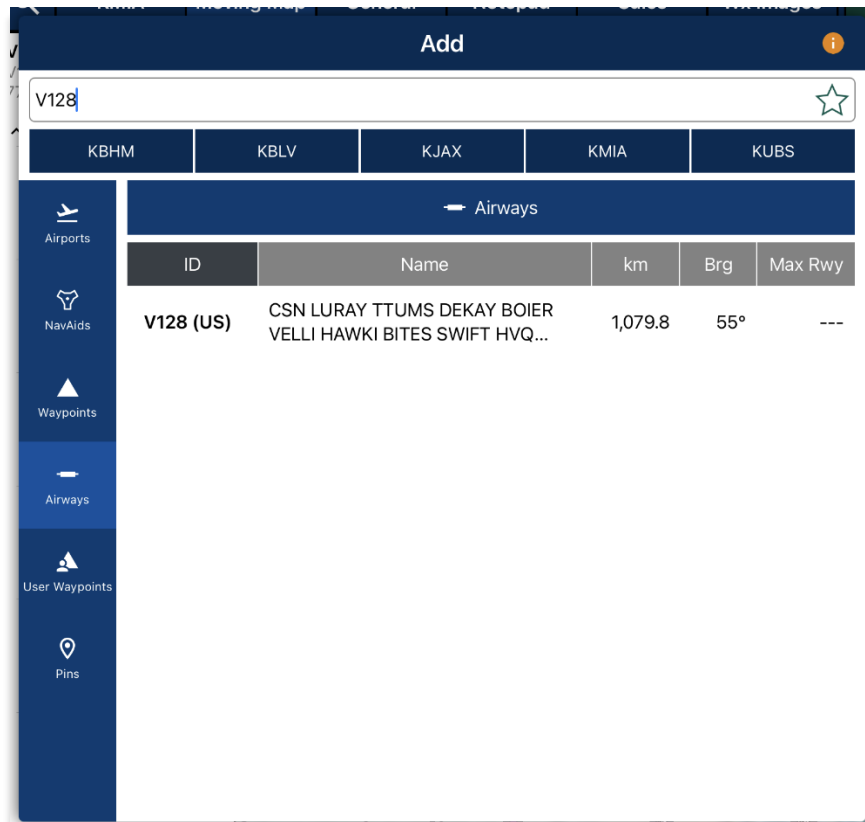
5. Your MTR will be displayed on the Route Panel.



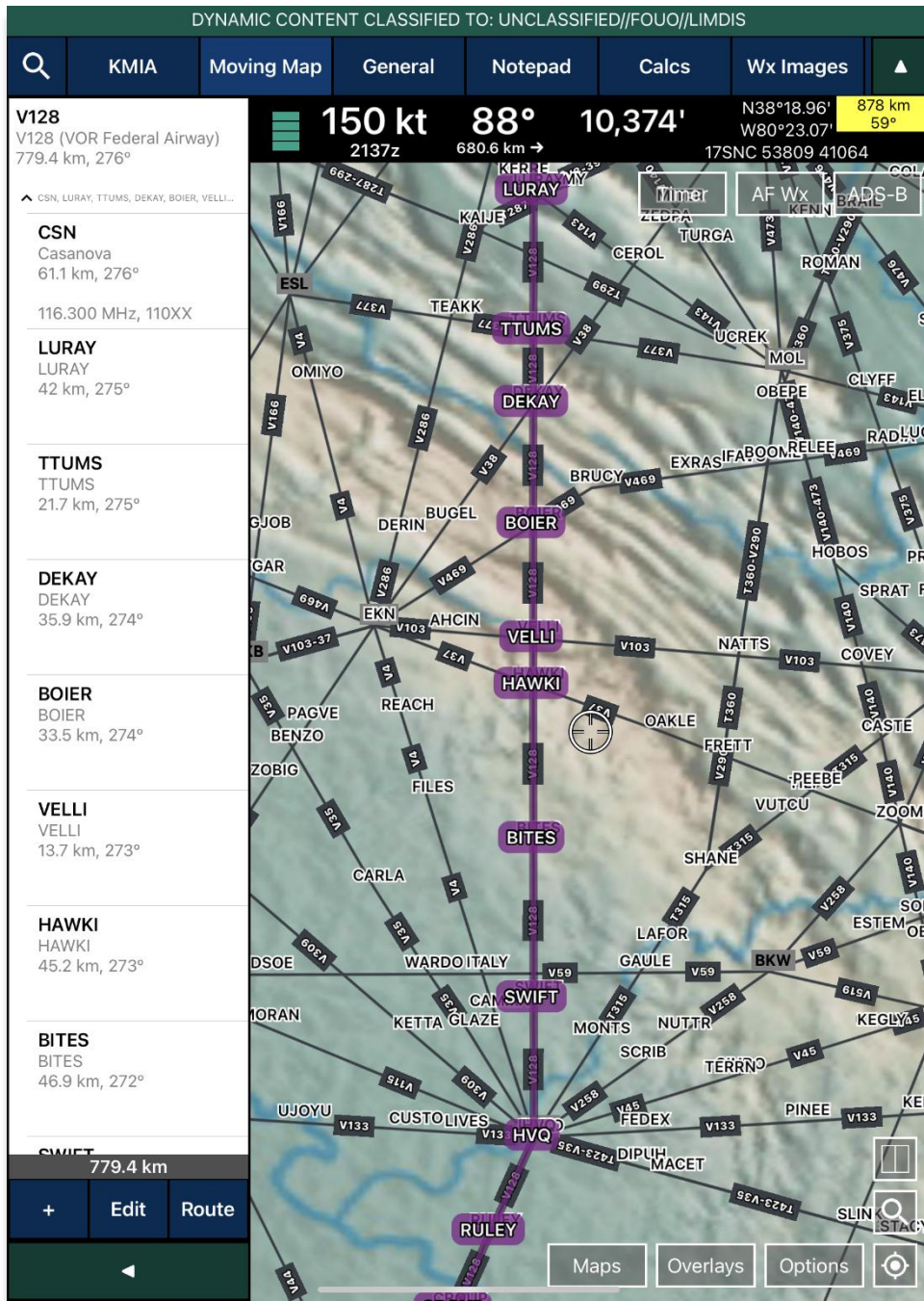
### 15.3.14.1.2 Add Airways to Route

Users can add Airways to the route.

1. Navigate to the **Route Panel**.
2. Tap the **Plus** button on the **Route Panel**.
3. The Add popup will display.
4. Use your device's keypad to search and select desired Airways to add to route.



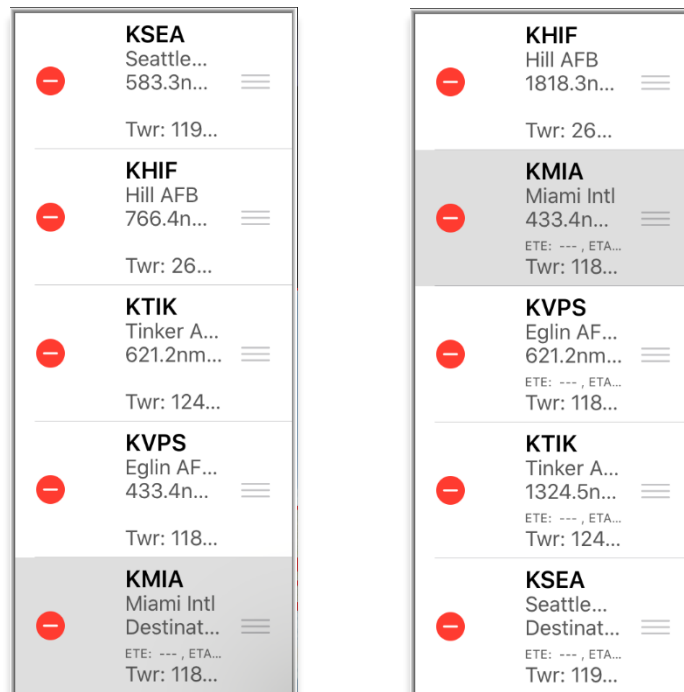
5. Your Airway route will display on the Route Panel.





### 15.3.14.2 Edit Route

1. Navigate to the **Route Panel**.
2. Tap **Edit**.
3. Hold the **Hamburger** button next to the identifier that you wish to move.
4. Swipe up or down to place the identifier in the desired route position.
5. Tap on the red circle next to the entry that you wish to delete.
6. Tapping **Delete** will remove that entry from the route panel.



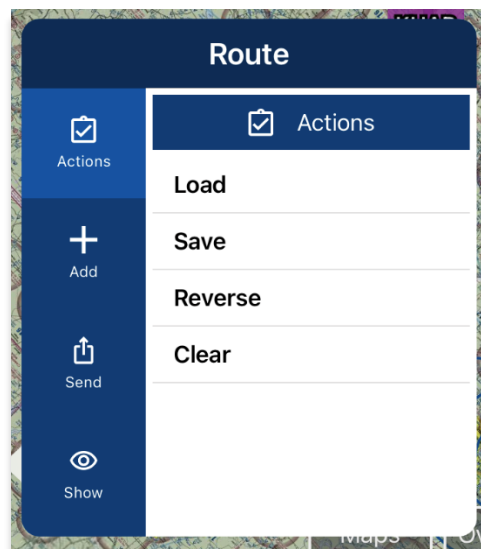
### 15.3.14.3 Route Menu Options

The Route Menu Options are a useful tool for users as it is used to enhance the user's route capabilities. This menu allows users to expand on their route planning and additional options to configure their current route.

#### 15.3.14.3.1 Actions

Actions provide users the capability to configure their route by providing the following options:

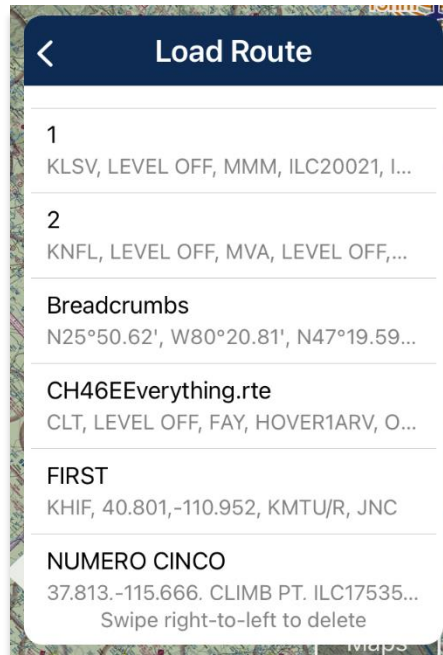
- Load
- Save
- Reverse
- Clear



### 15.3.14.3.1.1 Load Route

The Load feature enables users to load sideloaded files such as Breadcrumbs, CRD files, KML/KMZ files, and any saved routes. Refer to the sections ahead for reference in loading specific routes into the Route Panel.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Load**.
5. Select the route that you wish to load.
6. The route will be displayed in the **Route Panel** as the current route.



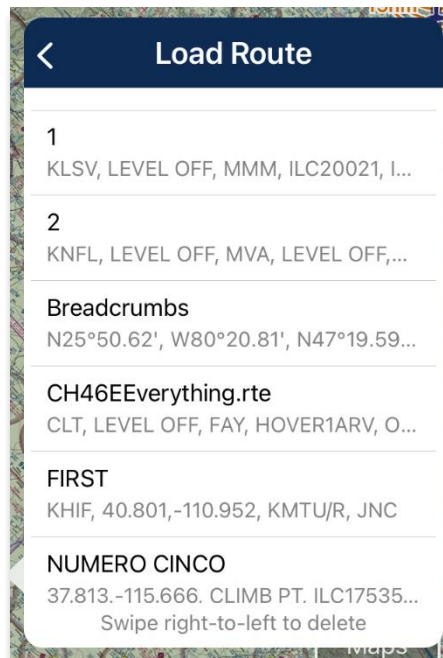
**NOTE:** When loading an invalid route into Aero App, an error message will appear informing users that the route cannot be loaded. Users will be given options to *Save or Remove and Continue*.

---

### 15.3.14.3.1.1.1 Load Common Route Definition (CRD) File

Aero App enables users to load CRD files into Aero App. Refer to [Section 11.5](#) for guidance on how to sideload CRD files.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Load**.
5. Locate and tap the CRD files that were loaded into Aero App. The CRD files will show on the **Route Panel** as the current route.

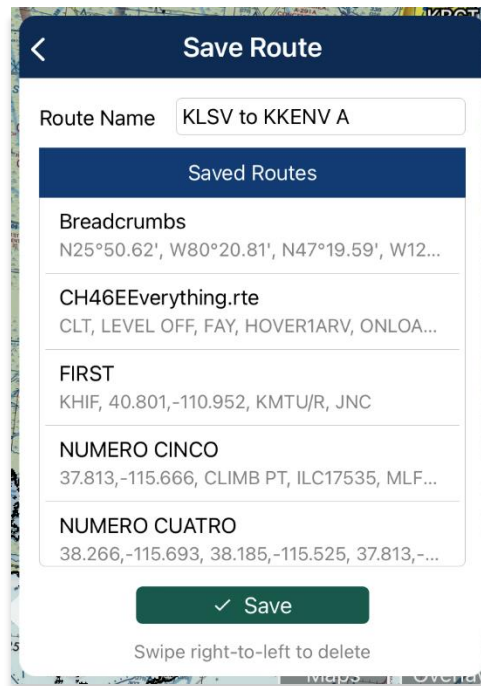


**NOTE:** When loading an invalid CRD file onto Aero App, an error message will appear to inform the users that the points cannot be loaded. Users will be given options to *Save* or *Remove and Continue*.

---

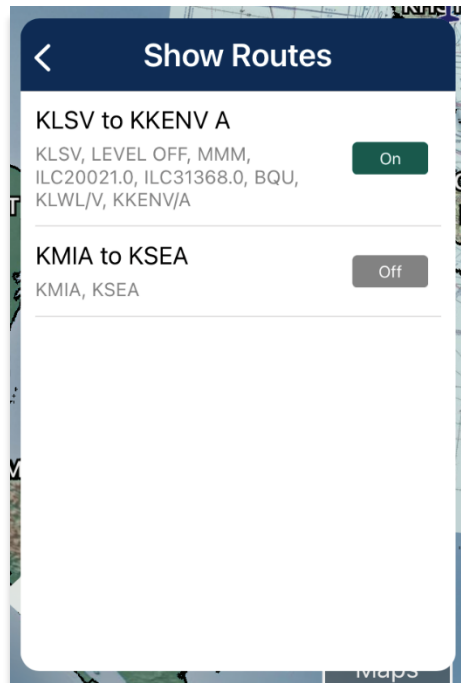
### 15.3.14.3.1.1.2 Save a CRD File

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Save**.
5. Tap in the *Route Name* text box and change the route's name to desired name.
6. Once the CRD file has been renamed, tap **Save**. The changes will be added to the Saved Routes list.



### 15.3.14.3.1.1.3 View a CRD File

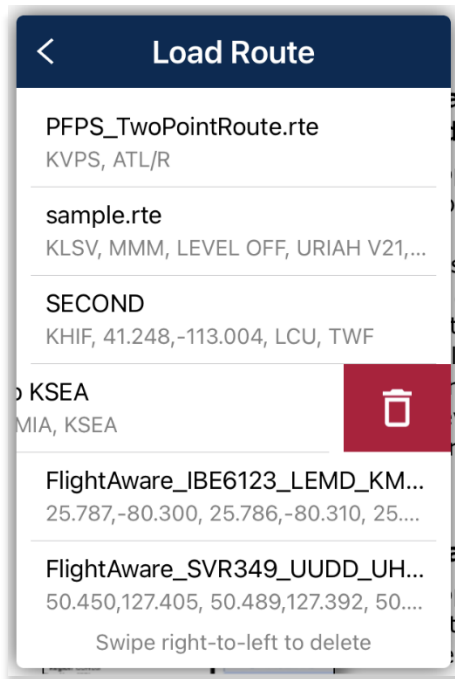
1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Show** from the side menu.
4. Tap **Routes**.
5. A list of saved CRD files will be listed. Tap to select a desired CRD file and the route will display on the map.



---

#### 15.3.14.3.1.1.4 Delete a CRD File

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Load**.
5. Swipe right-to-left to reveal the *Delete* button. Tap **Delete** and the route will be permanently removed.



6. Tap **Delete** and a warning message will pop up.
7. Tap **Delete** to agree with the warning message and continue the action.
8. Tap **Cancel** to void action.



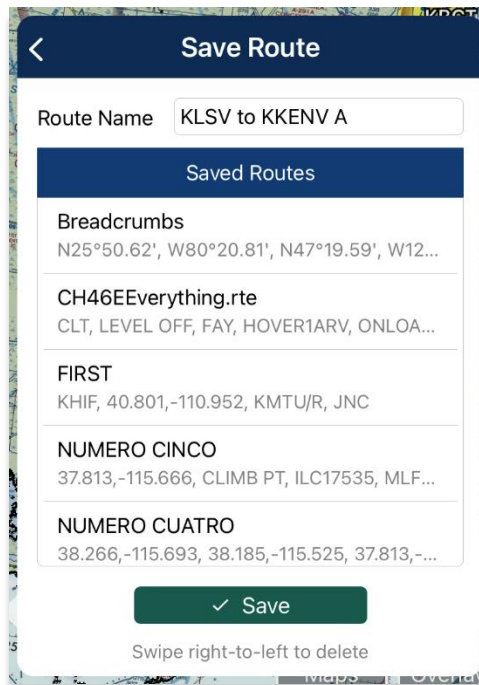
---

**NOTE:** Users can delete single CRD files when a single CRD route is sideloaded onto Aero App. Multiple routes will be deleted if the CRD route has associated routes.

---

### 15.3.14.3.1.2 Save Route

1. Create a route by loading desired points to the Route Panel.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Save**.
5. The Route Name will display a preselected name, containing the <Departure> to <Arrival> points. If necessary, rename the route name to the desired name.
6. Tap **Save**. The route will be saved and be added to the *Load Route* table.

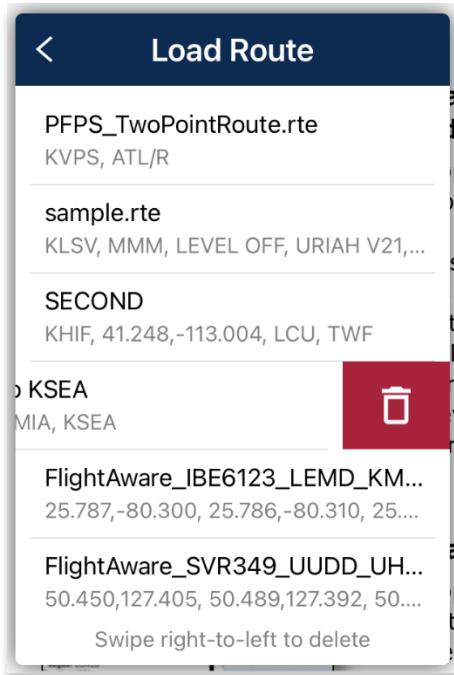


**NOTE:** When entering a new route name, the name can only contain alphanumeric (lower and upper case) characters, spaces, and hyphens.



### 15.3.14.3.1.2.1 Delete Route

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap the options **Load** or **Save**.
5. Swipe right-to-left to reveal the *Delete* button. Tap **Delete** and the route will be permanently removed.



**NOTE:** Alternatively, users can delete a route from the Save Route view.

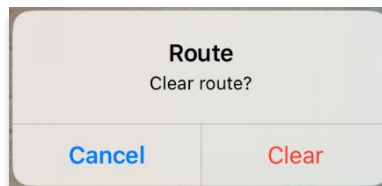
### 15.3.14.3.1.3 Reverse Route

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Reverse**.
5. The departure point shifts to arrival and the arrival point shifts to departure.

<b>KMIA</b> Miami Intl 52.1nm, 289°  Twr: 118.3, 123.9, 256.9	<b>KMKY</b> Marco Island Executive 23.7nm, 98°
<b>DEEDS</b> DEEDS 23.7nm, 279° ETE: 00:10:16, ETA: 18:15:03Z	<b>DEEDS</b> DEEDS 52.1nm, 108°
<b>KMKY</b> Marco Island Executive Destination ETE: 00:15:01, ETA: 18:19:48Z	<b>KMIA</b> Miami Intl Destination ETE: 00:00:14, ETA: 18:05:07Z Twr: 118.3, 123.9, 256.9

### 15.3.14.3.1.4 Clear Route

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Actions** from the side menu, if necessary.
4. Tap **Clear**.
5. A confirmation popup will appear. Tap **Clear** to confirm action.
6. Tap **Cancel** abort action.



**NOTE:** Clearing a route clears the current route. It does not delete any saved routes.

### 15.3.14.3.2 Add

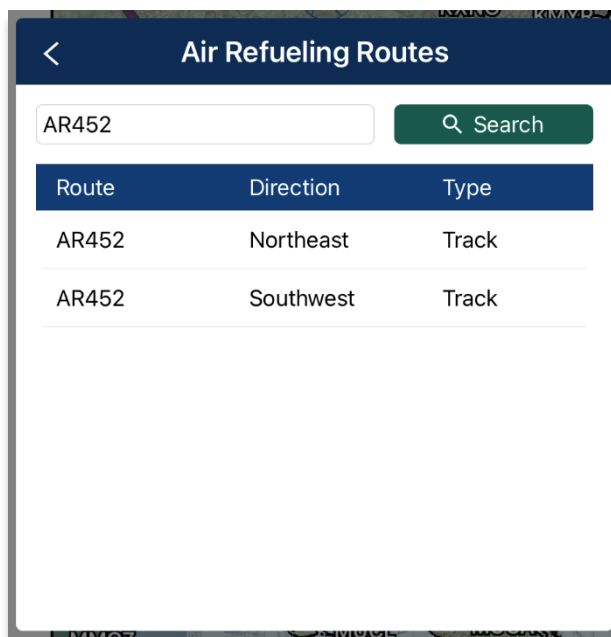
Add allows users to optimize their planning and provide the ability to predefine their routes to ensure their mission runs smoothly. The following options are available and will be further elaborated in the sections to follow:

- Air Refueling Route
- Flight Plan
- Preferred Route
- Search and Rescue (SAR)

#### 15.3.14.3.2.1 Add Air Refueling Route

Air Refueling Route can be added to your current flight plan. If an existing route is listed in your Route Panel, Aero App will append the air refueling route to where it fits.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Add** from the side menu.
4. Tap **Air Refueling Route**.
5. An Air Refueling Route popup will display. In the text box, enter an air refueling route. After three characters are entered, an auto search will begin.
6. Tap **Search** once desired route is entered. Alternatively, users can select a route from the routes that appear under the search box.



- The points listed displays columns for Usage, Waypoint, NavAid/Radial and Lat/Lon.

Usage	Waypoint	NavAid/Radial	Lat/Lon
IP	---	DLN.US.4.1 14.1nm, 171°	N45°01.00' W112°36.00'
CP	---	BOI.US.2.1 63.2nm, 62°	N43°45.00' W114°46.00'
NC	---	BOI.US.2.1 38.0nm, 158°	N42°55.00' W116°07.00'

- Tap on a row to select an *entry point*. The row will be shaded gray to indicate a point is selected.
- Tap on a row to select an *exit point*. The points between the selected entry point and exit point will be shaded gray. The shaded points are the points to your air refueling route.



**NOTE:** To reselect new entry and exit points, tap on another point, and repeat the steps.

- Once selections are completed, the Add to Route button will be selectable. Tap **Add to Route**.

Usage	Waypoint	NavAid/Radial	Lat/Lon
IP	---	DLN.US.4.1 14.1nm, 171°	N45°01.00' W112°36.00'
CP	---	BOI.US.2.1 63.2nm, 62°	N43°45.00' W114°46.00'
NC	---	BOI.US.2.1 38.0nm, 158°	N42°55.00' W116°07.00'
NC	---	REO.US.4.1 47.0nm, 81°	N42°27.00' W116°49.00'
FX	---	REO.US.4.1	N41°46.00'

✓ Add to Route

Tap to select entry and exit points.  
 All points between will also be added to the route.

11. The points will populate to the current route and displayed on the Moving Map.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Q KBLV Moving Map General Notepad Calcs Wx Images ▲

**KBTM**  
Bert Mooney  
56.5 nm, 172°  
ETE: 07:08:17, ETA: 01:41:43Z

**AR452**  
AR Southwest  
239 nm, 231°  
ETE: 07:21:28, ETA: 01:54:54Z  
▲ IP CP NC NC

**AR452 - IP**  
DLN  
120 nm, 231°  
ETE: 07:21:28, ETA: 01:54:54Z

**AR452 - CP**  
BOI  
77.3 nm, 230°  
ETE: 07:49:29, ETA: 02:22:55Z

**AR452 - NC**  
BOI  
41.7 nm, 228°  
ETE: 08:07:31, ETA: 02:40:57Z

**AR452 - NC**  
REO  
Destination  
ETE: 08:17:15, ETA: 02:50:41Z

295.4 nm

+ Edit Route

257 kt 357° 13,478'  
1833z 1,815.9 nm → N44°18.02' 1,863.3 nm  
W114°11.07' 298°  
11TQK 24589 09091

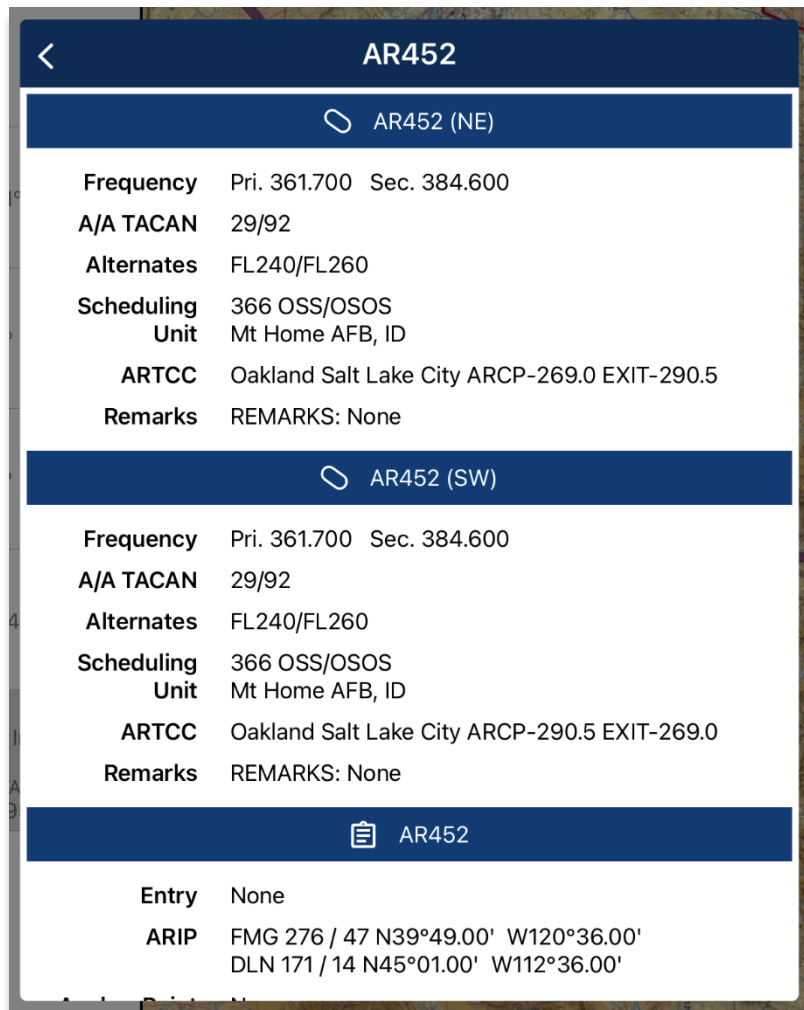
Timer AF Wx ADS-B

Maps Overlays Options

### 15.3.14.3.2.1.1 View Air Refueling Route

Pilots can tap an Air Refueling Route on the Moving Map to view additional information such as its Frequency, A/A Tacan, Alternatives, Scheduling Unit, ARTCC, and its Remarks.

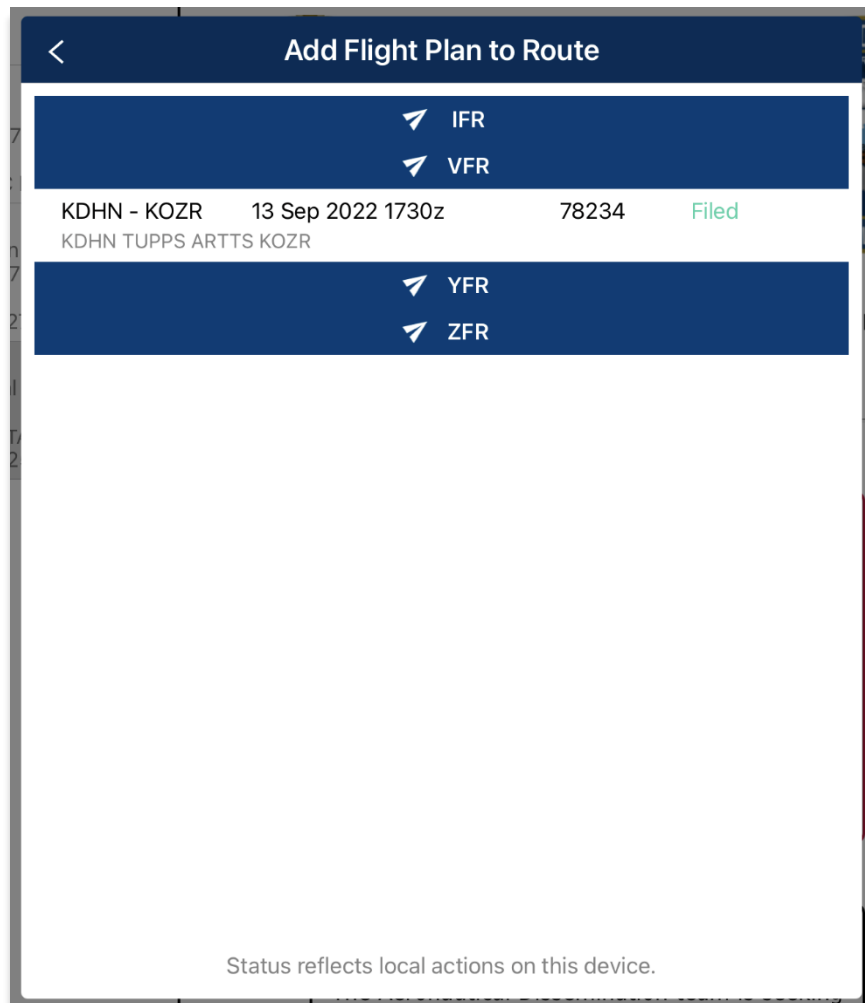
1. Navigate to the **Moving Map** and select a refueling route point.
2. The Moving Map's popup menu will display. Select **Show** from the side menu.
3. Tap **Info and Wx**.
4. The Information view will display additional information such the refueling route's Frequency, A/A Tacan, Alternatives, Scheduling Unit, ARTCC, and its Remarks.



### 15.3.14.3.2.2 Flight Plan

Flight Plan is a collection of filed flight plans. Pilots can choose to add the flight plan to their current route.

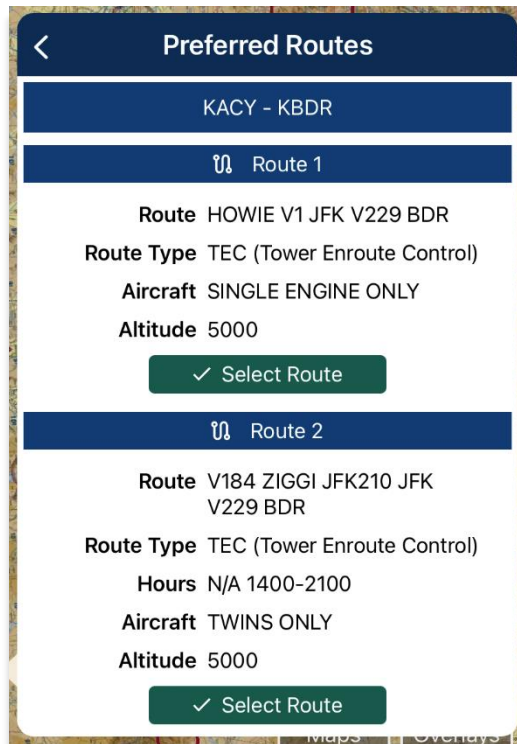
1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Add** from the side menu.
4. Tap **Flight Plan**.
5. The *Add Flight Plan to Route* popup will display. Tap desired flight plan and the filed route will populate to the current route.



### 15.3.14.3.2.3 Preferred Route

Aero App enables users to select a preferred route when planning a route. While entering a route with an origin and destination, Preferred Route will be enabled with a list of preferred routes available for users.

1. Navigate to the **Route Panel**.
2. Ensure that a route is entered in the route panel.
3. Tap **Route**.
4. The Route menu will appear. Select **Add** from the side menu.
5. Tap **Preferred Route**.
6. A list of preferred routes will be displayed. Tap **Select Route** once desired route is found, and the new route will display on the route panel.



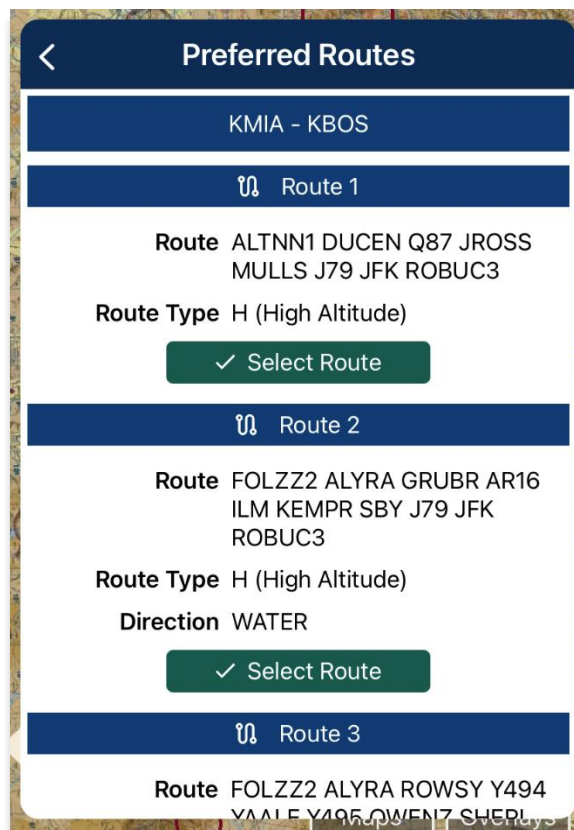
7. When selecting an alternative preferred route, a dialog box will appear. Tap **Use Preferred Route** and a new route will apply to your flight route.
8. Tap **Cancel** to discard all changes.



### 15.3.14.3.2.3.1 Preferred Route With DP and STAR

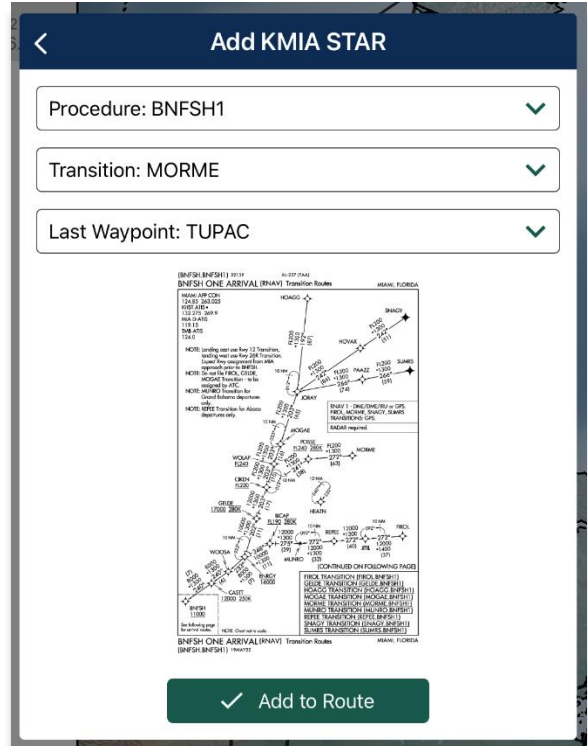
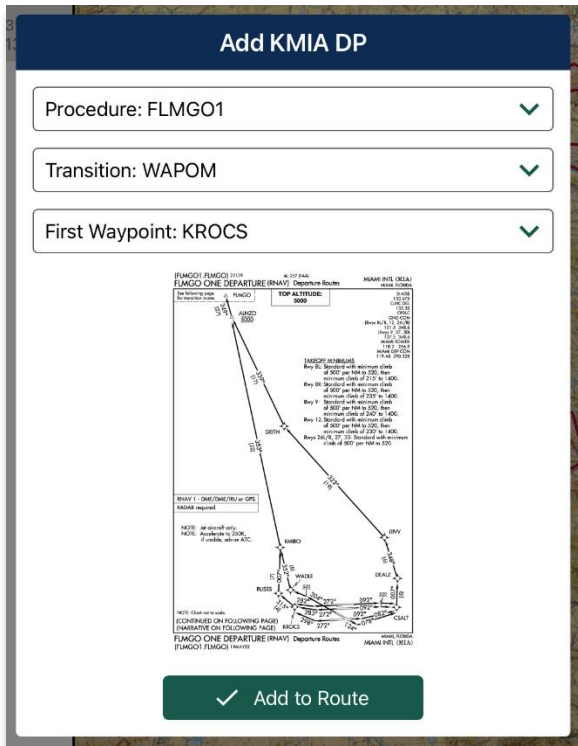
Aero App enables users to select any DPs or STARs, if applicable.

1. Navigate to the **Route Panel**.
2. Ensure that a route is entered in the route panel.
3. Tap **Route**.
4. The Route menu will appear. Select **Add** from the side menu.
5. Tap **Preferred Route**.
6. A list of preferred routes will be displayed. Select a desired route.



7. Select **DP** or **STAR**, if applicable.

8. Tap **Add to Route** when selections are completed.



9. A Preferred Route dialog box will appear. Tap **Use Preferred Route** a new route will apply to your flight route.
10. Tap **Cancel** to discard all changes.



**NOTE:** The Preferred Route option will be disabled if there are no available preferred routes.

### 15.3.14.3.2.4 Add Search and Rescue (SAR) Pattern

Search and Rescue (SAR) provides pilots and rescue missions with search patterns within the searched area. These search patterns, such as creeping, parallel, sector, and square are displayed on the Moving Map and can be added to the current route.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Add** from the side menu.
4. Tap **SAR**.
5. Tap to select or slide the segmented control to **Creeping**, **Parallel**, **Sector**, or **Square**. Respective to the selection, different fields will be available to specific *Pattern* options.

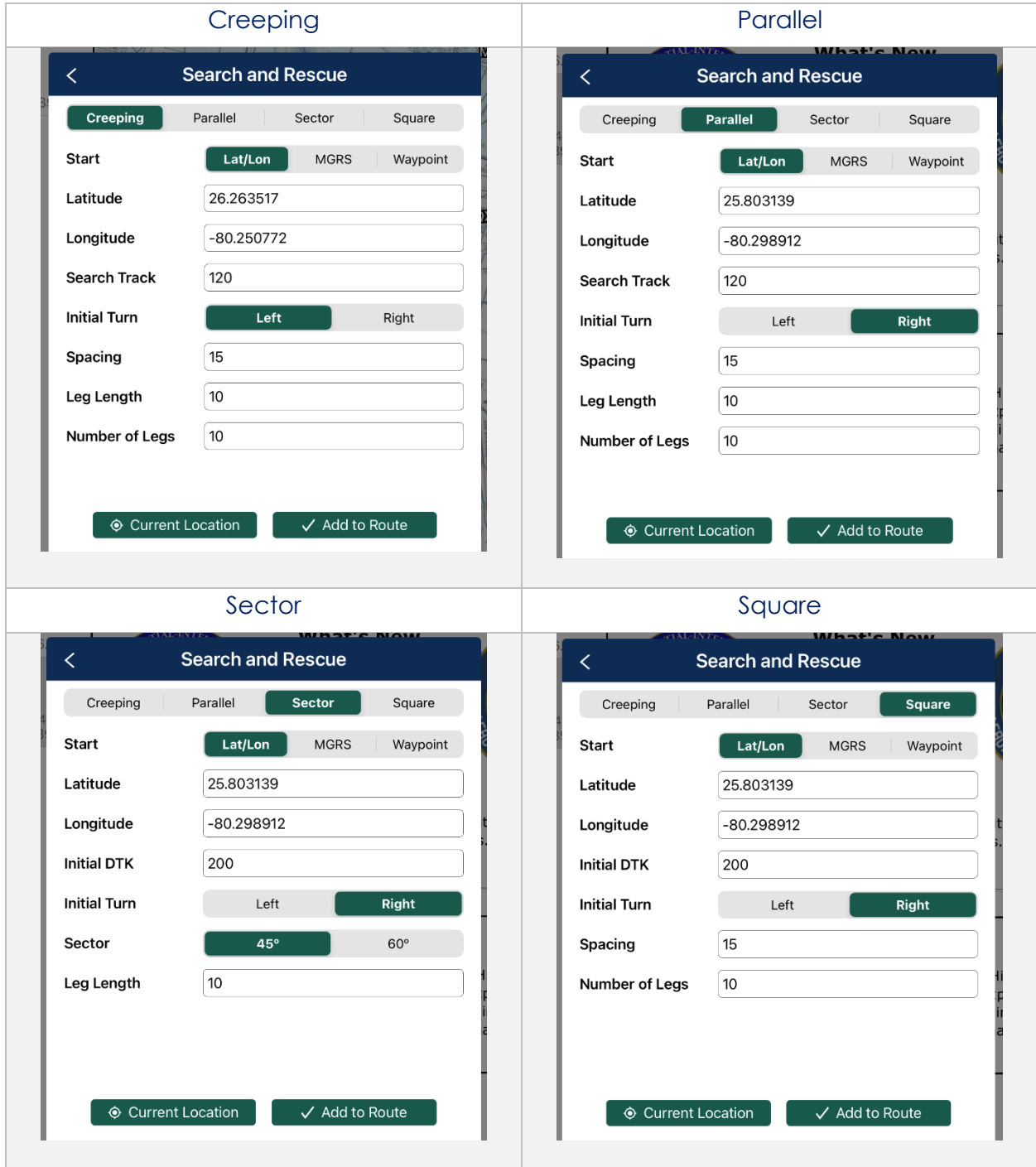
SAR Patterns

6. Tap to select or slide the segmented control to **Lat/Lon**, **MGRS**, or **Waypoint**.
7. Users can tap **Current Location** to set their current position as the coordinates or manually enter them in the Latitude and Longitude fields.
8. All fields are required; therefore, all fields must be filled.



**NOTE:** When a decimal number is entered in the Number of Legs field, the field will revert to 1. To prevent this action from occurring, enter only whole numbers in the Number of Legs field.

- Add to Route will become selectable once all required fields are filled. Tap **Add to Route**.



### 15.3.14.3.3 Send

The Send option enables users to share preloaded routes with their fellow pilots for enhanced collaboration and mission planning. The following options are available to users and will be further elaborated in the sections to follow:

- AirDrop
- File Flight Plan

#### 15.3.14.3.3.1 AirDrop Route

Pilots can share routes with nearby teammates. The person receiving the files must have their device's AirDrop settings set to Everyone for 10 Minutes (or set to Everyone for those running iOS 16.2 or earlier) prior to receiving any files. Different behaviors will occur depending on the device's operating system.

##### 15.3.14.3.3.1.1 Send Route Using AirDrop

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Send** from the side menu.
4. Tap **AirDrop**.
5. Select the iPad to receive the route.

##### 15.3.14.3.3.1.2 Receive Route Through AirDrop

1. The receiving iPad will receive a notification that a route is being sent via AirDrop.
2. Select **Set Route** to replace the current route by the route being received.
3. Select **Cancel** to dismiss the action.

### 15.3.14.3.3.2 Flight Plans

Flight Plans can be filed directly from Aero App. Users can access filed flight plans, file a new flight plan, and add or edit Aircraft information providing ease of access when filing a new flight plan. In addition, users can enter or update their Flight Service credentials. This feature is available to only FAA and DOD users.

#### 15.3.14.3.3.2.1 Credentials

Users must possess Flight Service credentials to utilize Flight Plans' offerings. Users must log in to their Flight Service account prior to filing a flight plan. Refer to [Section 6.3](#) for additional information.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Send** from the side menu.
4. Tap **File Flight Plan**.
5. The Flight Plans view will appear. Select **Credentials** from the navigational bar.
6. From the Credentials view, tap **Edit**, and the text boxes will become selectable.

The screenshot displays the 'Credentials' screen in the Aero App. At the top, there is a dark blue navigation bar with a back arrow on the left and three menu items: 'Flight Plans', 'Aircraft', and 'Credentials'. Below the navigation bar, the 'Username\*' field is populated with 'email@email.com'. A dark blue section header 'Pilot Information' with an information icon is followed by three text input fields: 'Name' (John Doe), 'Address' (123 Street), and 'Phone' (123-456-7890).

7. To associate your filings with your flight service account, enter your Flight Service username in the username text box.
8. Tap **Save** once necessary fields are filled.

The screenshot shows a mobile application interface for entering credentials. At the top, there is a navigation bar with a back arrow, the title 'Credentials', and three menu items: 'Flight Plans', 'Aircraft', and 'Credentials'. Below the navigation bar, there is a 'Username\*' field with the text 'test@test.com'. Underneath is a section titled 'Pilot Information' with a circular icon containing an 'i'. This section contains three text input fields: 'Name' with 'Joe Johnson', 'Address' with '3456 NW 8th st', and 'Phone' with '222-333-4444'. At the bottom of the screen, there is a green button with a checkmark and the text 'Save'.

9. Tap **Edit** to modify the information entered.



**NOTE:** Pilot information is not required but can be useful as previously established pilot information will auto-populate in the Pilot Information fields when filing a flight plan.

### 15.3.14.3.3.2.2 New Aircraft

Users can save aircraft information for ease of access when filing a flight plan.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Send** from the side menu.
4. Tap **File Flight Plan**.
5. The Flight Plans popup will appear. Select **Aircraft** from the navigational bar.
6. From the Aircraft screen, tap **+ New**, located at the bottom of the view, and the **Aircraft** form will appear.
7. Fields will contain hint text in each text box, and others may include an ellipsis button that displays other available options to choose from.

The screenshot shows the 'Aircraft' form in the 'Flight Plans' application. The form is titled 'Aircraft' and is part of the 'Flight Plans' section. It contains several fields for entering aircraft information, including Tail, Type of Aircraft, Equipment, Surveillance Equipment, Cruising Speed, Color, Wake Turbulence, Emergency Radio, Survival Equipment, Jackets, Other Info, and Dinghies. The form is organized into sections with blue headers.

Aircraft	
Tail*	Enter N-Number/Call Sign
Type of Aircraft*	ICAO Aircraft Type Designator
Equipment*	Equipment <span>⋮</span>
Surveillance Equipment*	Surveillance Equipment <span>⋮</span>
Cruising Speed*	True Airspeed <input type="text"/> <b>Knots</b> <input type="text"/> Mach <input type="text"/>
Color	Aircraft Color; e.g. W:B (for White/Blue) <input type="text"/>
Wake Turbulence*	Light <input type="text"/> Medium <input type="text"/> Heavy <input type="text"/> <b>Auto</b> <input type="text"/>
Supplementary Information	
Emergency Radio	Emergency Radio <span>⋮</span>
Survival Equipment	Survival Equipment <span>⋮</span>
Jackets	Jackets <span>⋮</span>
Other Info	e.g. TYP/ COM/ DAT/ <input type="text"/> <b>View</b> <input type="text"/>
Dinghies	
Number	Number of dinghies <input type="text"/>
Capacity	Capacity of the dinghies <input type="text"/>



**NOTE:** Asterisks denote required fields.



8. Once the fields are filled, tap **Save**.

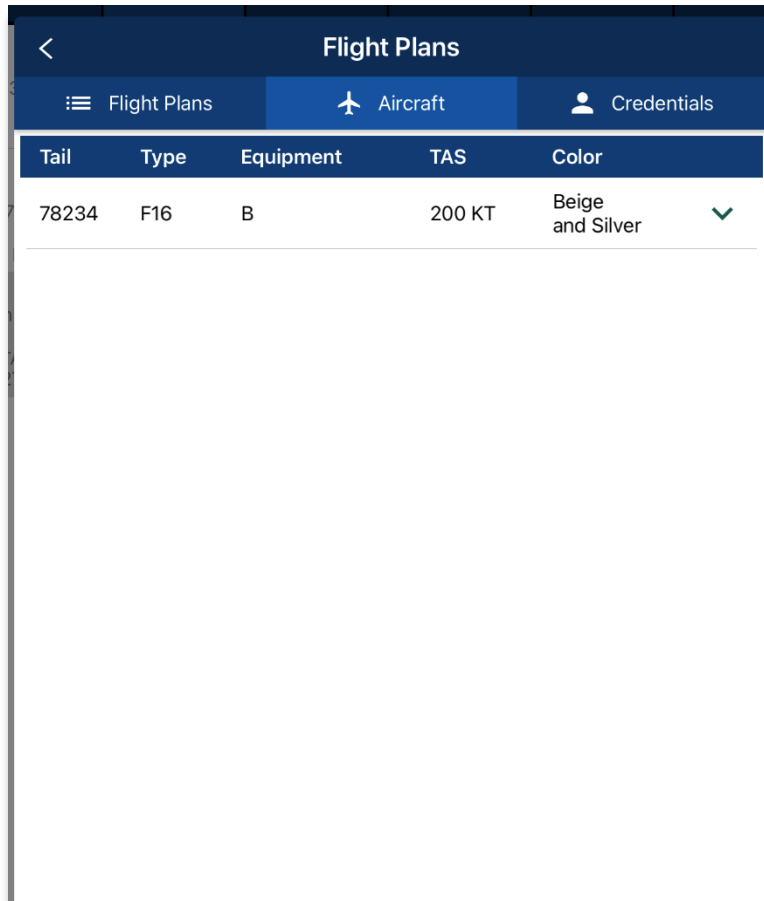
9. Your aircraft will be added to the Aircraft screen.

Tail	Type	Equipment	TAS	Color	
78234	F16	B	200 KT	Beige and Silver	✓

### 15.3.14.3.3.2.3 Aircraft

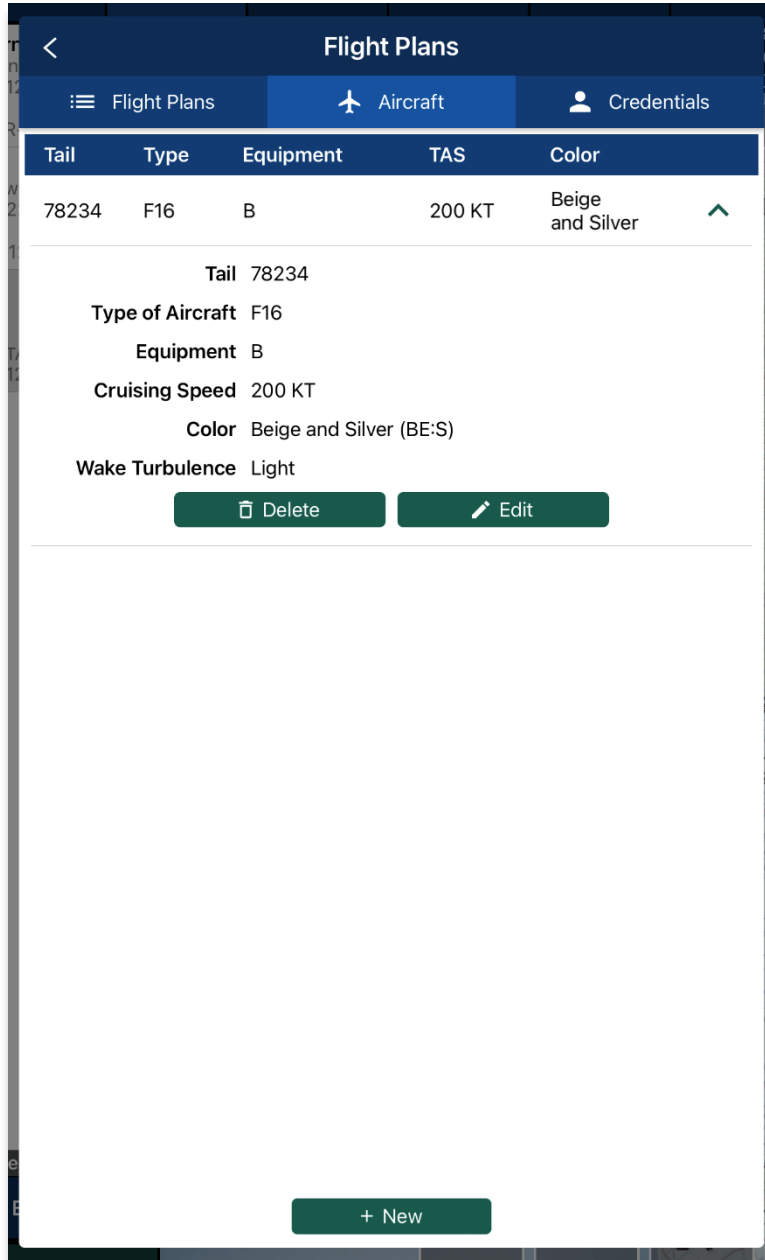
Users can view previously saved aircraft information such as its tail number, type, equipment, true airspeed, and color.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Send** from the side menu.
4. Tap **File Flight Plan**.
5. The Flight Plans view will appear. Select **Aircraft** from the navigational bar.
6. The Aircraft table will appear listing all the saved aircraft.



Tail	Type	Equipment	TAS	Color	
78234	F16	B	200 KT	Beige and Silver	✓

7. Tap the drop-down arrow to expand your aircraft information.
8. Tap **Edit** to modify an aircraft.
9. Tap **Delete** to remove an aircraft.



**NOTE:** Predefined aircraft, such as those obtained directly from the FAA, cannot be modified. Therefore, the **Delete** and **Edit** buttons will be disabled.

### 15.3.14.3.3.2.4 New Flight Plan

Users can file flight plans directly from Aero App.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Send** from the side menu.
4. Tap **File Flight Plan**.
5. The Flight Plans view will appear. Tap **+ New** and the **New Flight Plan** form will appear.
6. The form is broken up into sections for *Aircraft*, *Route*, *Supplementary Information*, *Dinghies*, and *Additional Information*.
7. Fields will contain hint text in each text box, and some may include an ellipsis button that displays other available options to choose from.

The screenshot shows the 'Flight Plans' form with the following fields and options:

- Header:** Flight Plans, Save Form (checked)
- Navigation:** Flight Plans, Aircraft, Credentials
- Aircraft Section:**
  - Tail\*: Enter N-Number/Call Sign (with ellipsis)
  - Flight Rules\*: IFR (selected), VFR, YFR, ZFR
  - Type of Flight\*: e.g. G (for General) (with ellipsis)
  - Number of Aircraft: Number of Aircraft
  - Type of Aircraft\*: ICAO Aircraft Type Designator
  - Wake Turbulence\*: Light, Medium, Heavy, Auto (selected)
  - Equipment\*: Equipment (with ellipsis)
  - Surveillance Equipment\*: Surveillance Equipment (with ellipsis)
- Route Section:**
  - Departure\*: Identifier; e.g. KSJC
  - Departure Time (Zulu)\*: 12 Sep 2022 1559z
  - Cruising Speed\*: True Airspeed, Knots (selected), Mach
  - Level/Altitude\*: Cruise Altitude, Feet (selected)



**NOTE:** Users can auto-fill aircraft information by tapping the ellipsis icon in the Aircraft field and selecting a saved aircraft.



**NOTE:** Asterisks denote required field.

8. Once the fields are filled, tap **Send**, located at the bottom of the view, to file your flight plan.

**Flight Plans** ✓ Save Form

Flight Plans Aircraft Credentials

**Aircraft**

Tail\* 78234

Flight Rules\* IFR **VFR** YFR ZFR

Type of Flight\* G

Number of Aircraft 1

Type of Aircraft\* F16

Wake Turbulence\* Light **Medium** Heavy Auto

Equipment\* B

Surveillance Equipment\* A

**Route**

Departure\* KDHN

Departure Time (Zulu)\* 12 Sep 2022 1730z

Cruising Speed\* 200 **Knots** Mach

Level/Altitude\* 3000 **VFR**

Route TUPPSARTTS

Destination\* KOZR

Total EET\* 0230

Alternates Identifier; e.g. KSJC Identifier; e.g. KSJC

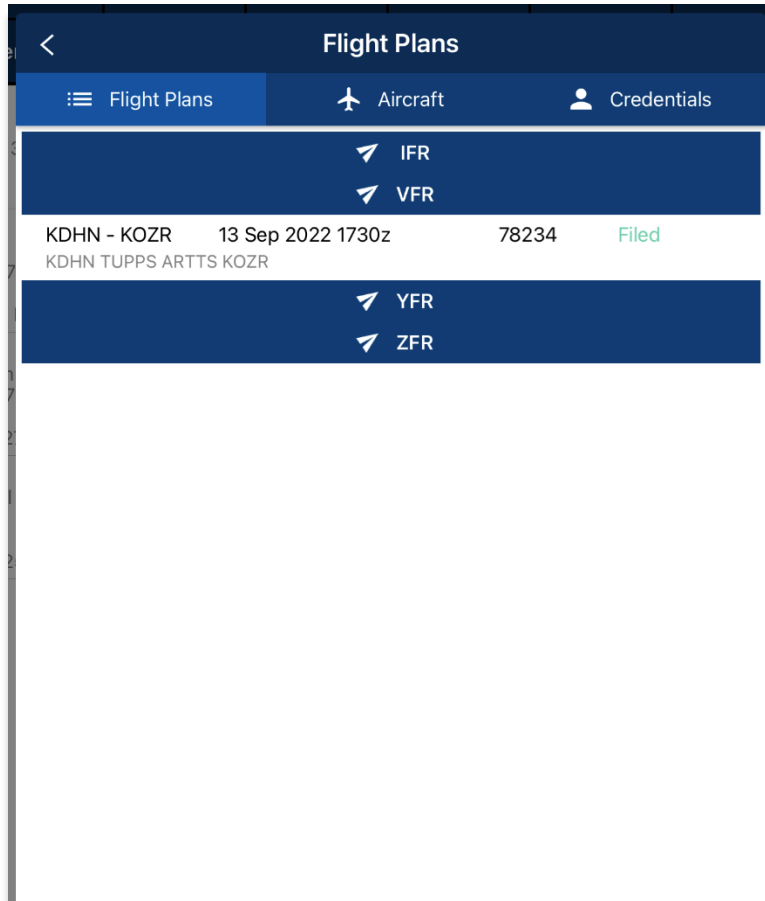
Other Info NAV/ **View**

**Send**



**NOTE:** The Save Form button placed on the header of the Flight Plan form saves any entered data for ease of access upon returning to the screen. Aero App will automatically save entered data whenever the view has accidentally been closed.

9. Your filed flight plan will appear on the Flight Plans view previewing your flight information such as the entire route, the entered departure time in which the flight plan was filed, the aircraft's tail number, and the status of the plan.

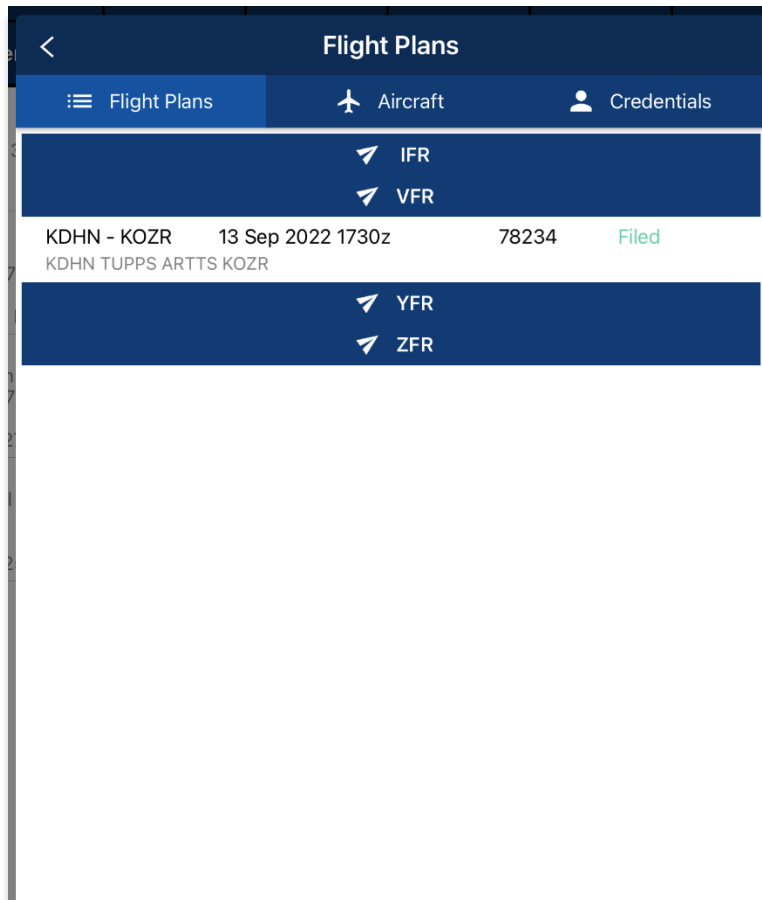


**NOTE:** Users must enter credentials prior to filing a flight plan.

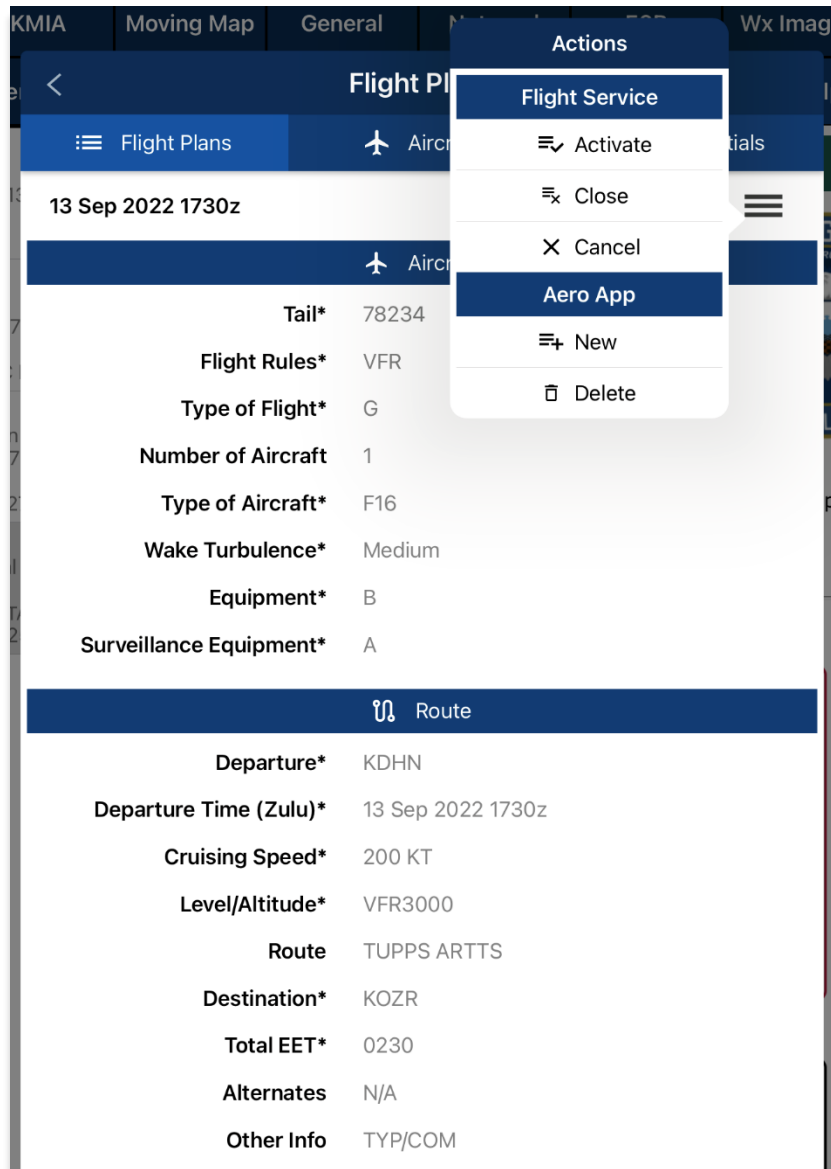
### 15.3.14.3.3.2.5 Flight Plans

By default, Flight Plans will be the first page that is visible to users. Filed flight plans are listed and sorted by IFR, VFR, YFR, and ZFR. Each filed flight plan previews the route, the entered departure time in which the flight plan was filed, the aircraft's tail number, and the status of the plan.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Send** from the side menu.
4. Tap **File Flight Plan**.
5. The Flight Plans page will appear and display a table containing the list of all filed flight plans. Select your desired filed flight plan.



6. The Filed Flight Plan screen will display with your flight plan information. Tap the hamburger button and the Actions menu will display with the following options:
- **Activate** – initiates the filed flight plan
  - **Close** – closes previously activated flight plan
  - **Cancel** – dismisses the flight plan
  - **New** – redirects view to the New Flight Plan screen
  - **Delete** – permanently removes the filed flight plan from the table



**NOTE:** Flight Plans such as IFR and YFR cannot be activated. However, IFR and YFR can be canceled.

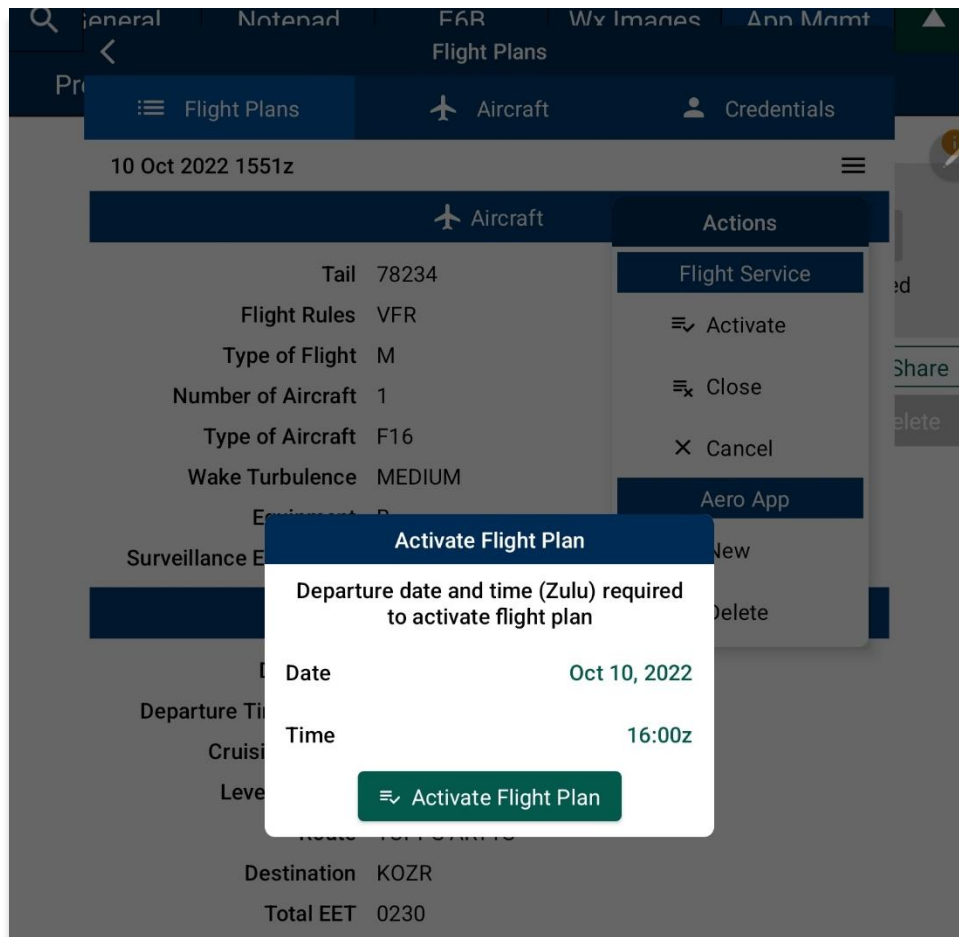


### 15.3.14.3.3.2.5.1 Actions for Filed Flight Plans

Actions for Filed Flight Plan provides operations such as the ability to Activate, Close, and Cancel the pilot's filed Flight Plan directly from Aero App. The request to Activate, Close, and Cancel will reflect the Flight Service provider, but actions made through the provider will NOT reflect on Aero App.

Additional options such as New and Delete are used to file a new Flight Plan or delete the selected plan. When selecting New, the selected plan's information will populate onto the new Flight Plan form.

1. Tap the **hamburger** button to display the Actions Menu.
2. To initiate the flight plan, tap **Activate**.
3. The Activate Flight Plan popup will display. Select the **departure date** and **time** (Zulu) in which you would like to activate the flight plan.
4. Tap **Activate Flight Plan** once completed.



5. To close the flight plan, tap **Close**.

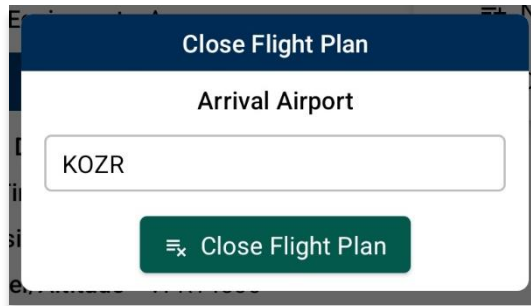


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**NOTE:** The flight plan must be activated to **Close** the plan.

---

6. The Close Flight Plan popup will display. Enter the **arrival airport** of your flight plan. The nearest airport will be suggested as the arrival airport. To remove the suggested airport, tap the text box and enter desired arrival airport.
7. Tap **Close Flight Plan** to confirm the action.



8. To dismiss the flight plan, tap **Cancel**.

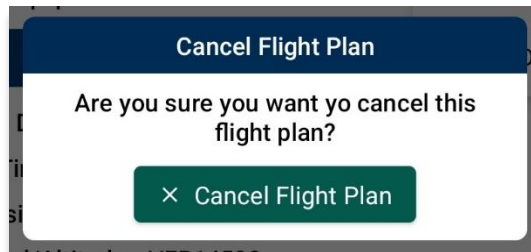


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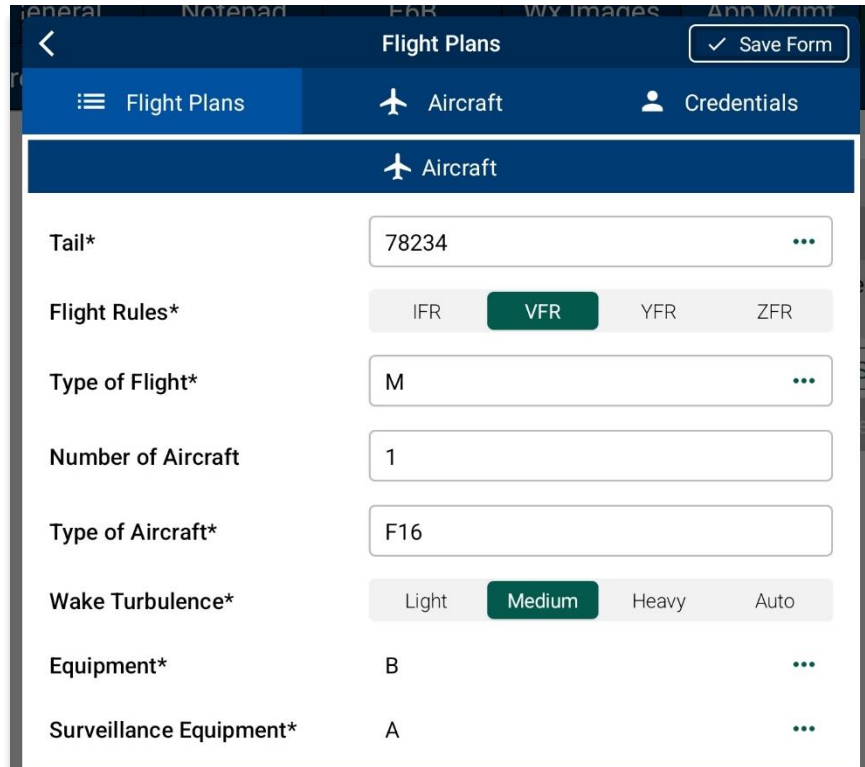
**NOTE:** A flight plan can only be cancelled if it has not yet activated.

---

9. The Cancel Flight Plan popup confirmation will be displayed. Tap **Cancel Flight Plan** to confirm action.
10. Tap outside of the popup to cancel the action.



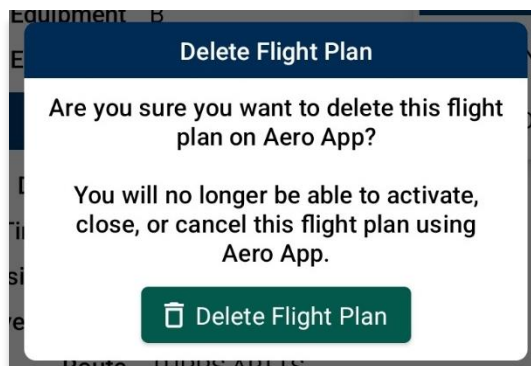
11. To create a new Flight Plan, tap **New**.
12. Users will be redirected to the New Flight Plan's form. The selected Flight Plan's information will populate onto the form. Users can keep the same information or modify the form in whichever way they would like. Refer to [Section 15.3.14.3.3.2.4](#) for additional information.



The screenshot shows the 'Flight Plans' form in the Aero App. The form is titled 'Flight Plans' and has a 'Save Form' button in the top right corner. The form is divided into sections: 'Flight Plans', 'Aircraft', and 'Credentials'. The 'Aircraft' section is currently active and contains the following fields:

Tail*	78234
Flight Rules*	IFR <input checked="" type="radio"/> VFR <input type="radio"/> YFR <input type="radio"/> ZFR <input type="radio"/>
Type of Flight*	M
Number of Aircraft	1
Type of Aircraft*	F16
Wake Turbulence*	Light <input type="radio"/> Medium <input checked="" type="radio"/> Heavy <input type="radio"/> Auto <input type="radio"/>
Equipment*	B
Surveillance Equipment*	A

13. To permanently remove the flight plan from Aero App, tap **Delete**.
14. The Delete Flight Plan popup confirmation will be displayed. Tap **Delete Flight Plan** to confirm action.
15. Tap outside of the popup to cancel the action.



#### 15.3.14.3.4 Show

The Show menu provides features that offer additional situational awareness to pilots. Features are as follows and will be further elaborated in the sections to follow:

- Doghouses
- Dropped Pins
- Dropped Hazards
- Point Shapes
- Routes
- User Waypoints
- Route Line Transparency

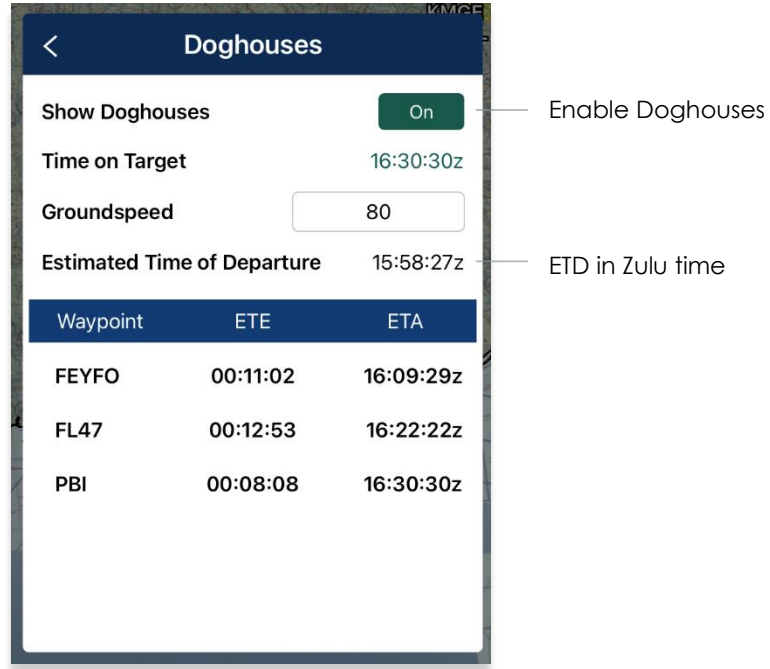
##### 15.3.14.3.4.1 Doghouses

Doghouses enables users to display their route information such as their next point, heading, distance, time (MM+SS), and time ahead/behind/on schedule in order from top to bottom. Doghouses can display when entering Airports, Coordinates, MGRS, GARS, and Radial Off NavAids.

Once a route is entered, doghouses will populate on each point of the route. Once the user has passed a point on the active route, the doghouses will disappear from the screen.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Tap **Doghouses**.
5. From the *Doghouses* popup, enable **Show Doghouses**.
6. Tap on the **Time on Target** time selection and scroll through the time format until desired time is met using the format of HH:MM:SS.

7. Tap on the **Groundspeed** text box and enter your groundspeed in knots. When a decimal number is entered, the number will be rounded to the nearest whole number.



8. The Estimated Time of Departure (ETD) will adjust based on the entered values for Time on Target and Groundspeed. Your ETD will be calculated in Zulu time.

- Tap outside of the Doghouses popup and Doghouses will populate on the Moving Map.



**NOTE:** Users may need to zoom in at least 40 miles to view Doghouses.

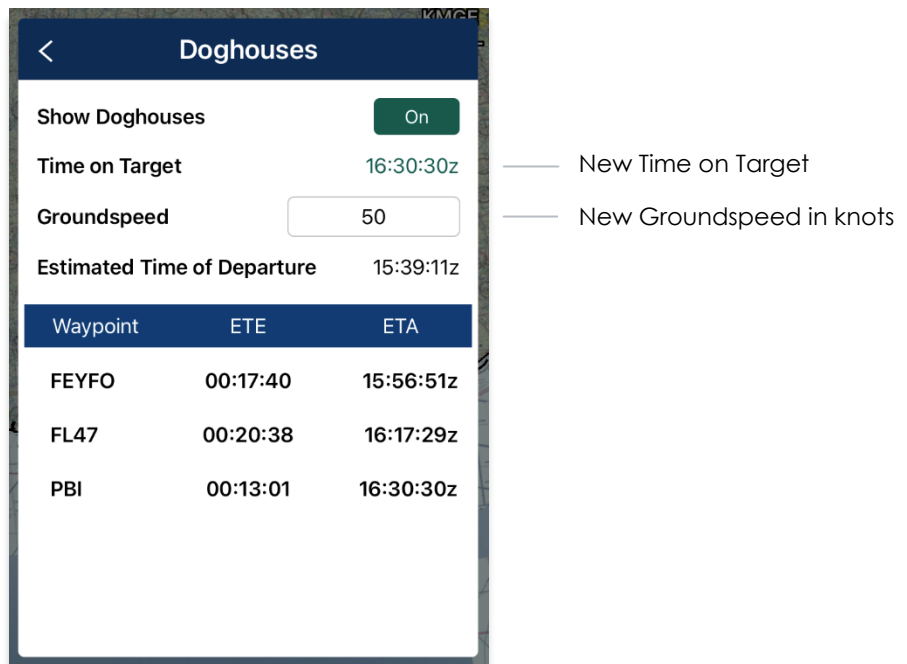


**NOTE:** If users are behind, ahead, or on schedule, the field below your fixed time will display the calculated difference of the time that was entered for your set time following the format **+/- {Minutes}m{Seconds}s**. If the calculated differences are an hour behind or ahead, the format will be **> + {Hours}h** or **> - {Hours}h**. If the user is on schedule, it will display "0".

### 15.3.14.3.4.1.1 Edit Doghouses

Users can adjust their time on target and groundspeed. The fields such as your fixed time, ETA/ETE, and the calculated differences will automatically update with the new values.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Tap **Doghouses**.
5. From the Doghouses popup, tap the **Time on Target** time selection and scroll through the time format until the new desired time is met using the format of HH:MM:SS.
6. Tap on the **Groundspeed** text box and enter your new groundspeed in knots.



7. The Estimated Time of Departure will adjust based on the entered values for Time on Target and Groundspeed fields.
8. Tap outside of the Doghouses popup and the Doghouses will recalculate based on the adjusted time and groundspeed.

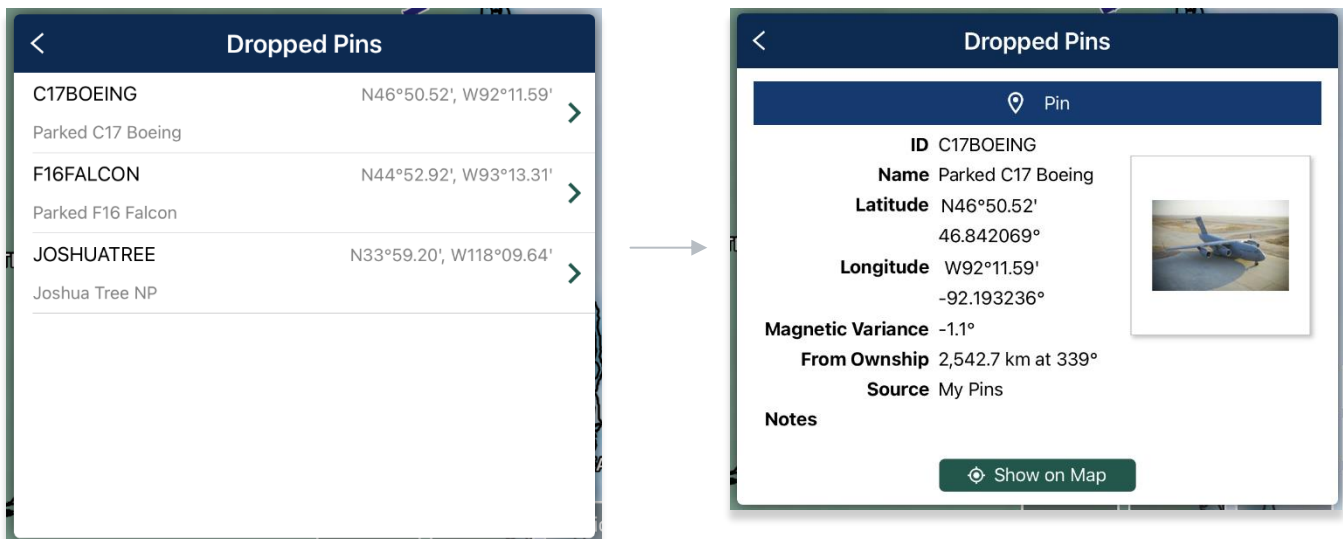


**NOTE:** Alternatively, users can tap on the Doghouses displayed on the Moving Map to view the Doghouses popup.

### 15.3.14.3.4.2 Dropped Pins

Dropped Pins is a collection of pins that were dropped by users. Each pin contains information regarding the pin such as its ID, Name, Latitude, Longitude, Magnetic Variance, From Ownship, Source, Notes, and any associated attachments.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Tap **Dropped Pins**.
5. A collection of dropped pins will appear. Tap on desired pin.
6. Dropped Pins popup will display information pertaining to the selected pin.



7. Tap **Show on Map** and the map view will pan to the location of the dropped pin.



**NOTE:** To view the dropped pins on the Moving Map, users must enable Pins from the Overlays menu. Refer to [Section 15.3.6.1.19](#) for additional information. This is exclusive to Pin. Refer to [Section 15.3.6.1.26](#) for Photo Pins.



**NOTE:** Users can add pins to their route. Refer to [Section 15.3.13.1.3.2.1](#) for guidance on how to add pins to route.

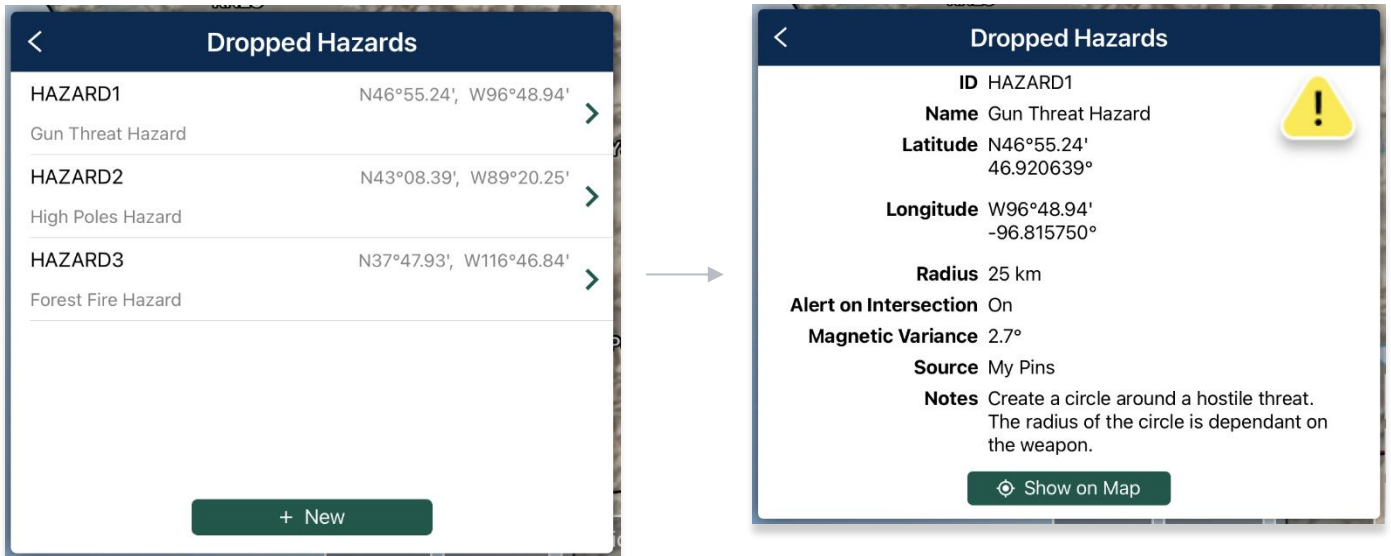


### 15.3.14.3.4.3 Dropped Hazards

Dropped Hazards is a collection of hazards that were dropped by users. Each hazard contains information regarding the marked hazard such as its ID (auto-generated by Aero App), Name, Latitude, Longitude, Radius, Alert on Intersection, Magnetic Variance, Source, and Notes.

Aero App enables users to drop a new hazard directly from the Dropped Hazards screen. Tap **+ New** and follow the prompts. Refer to [Section 15.3.13.1.4](#) for additional information.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Tap **Dropped Hazards**.
5. A collection of dropped hazards will appear. Tap on desired hazard.



6. Tap **Show on Map** and the map view will pan to the location of the dropped hazard.



**NOTE:** To view the dropped hazards on the Moving Map, users must enable Hazards from the Overlays menu. Refer to [Section 15.3.6.1.13](#) for additional information.

#### 15.3.14.3.4.4 Point Shapes

Aero App offers Point Shapes which are used to track individual points of the pilot's flight path. Point shapes include triangles, squares, and circles, respective to the number of points that pilots have in their current route.

The following scenarios are displayed below:

- **6 or more points:** The first and last points display triangles, second and second to last points display squares, and points between the second and second to last points display circles.
- **3-4 points:** The first and last points display triangles, second and second to last points display squares, and no circles will display.
- **1-2 points:** The first and last points display triangles, and no squares or circles will display.

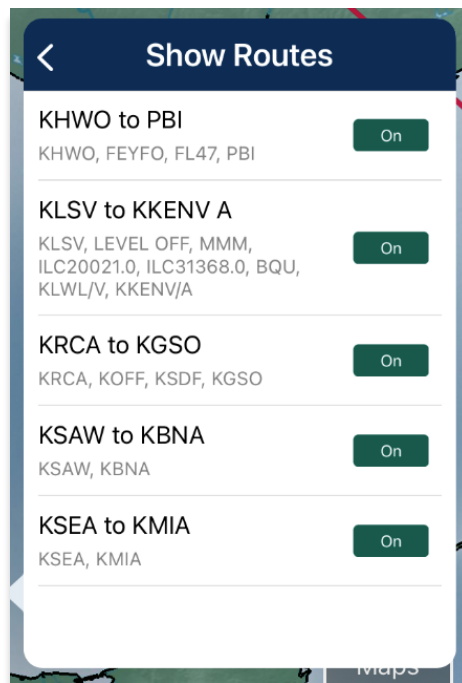
1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Tap **Point Shapes** to enable the option.
5. The respective point shapes will appear on the Moving Map.



### 15.3.14.3.4.5 Routes

Routes stores exported Breadcrumbs, saved routes, saved CRD files, and sideloaded routes. Multiple routes can be enabled and displayed on the Moving Map.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Tap **Routes**.
5. A list of saved routes will be shown below. Locate desired route then tap to enable selection and display them on the Moving Map.



6. Various routes can be displayed simultaneously. If you have a current route in the route panel, the route will show in a magenta line.

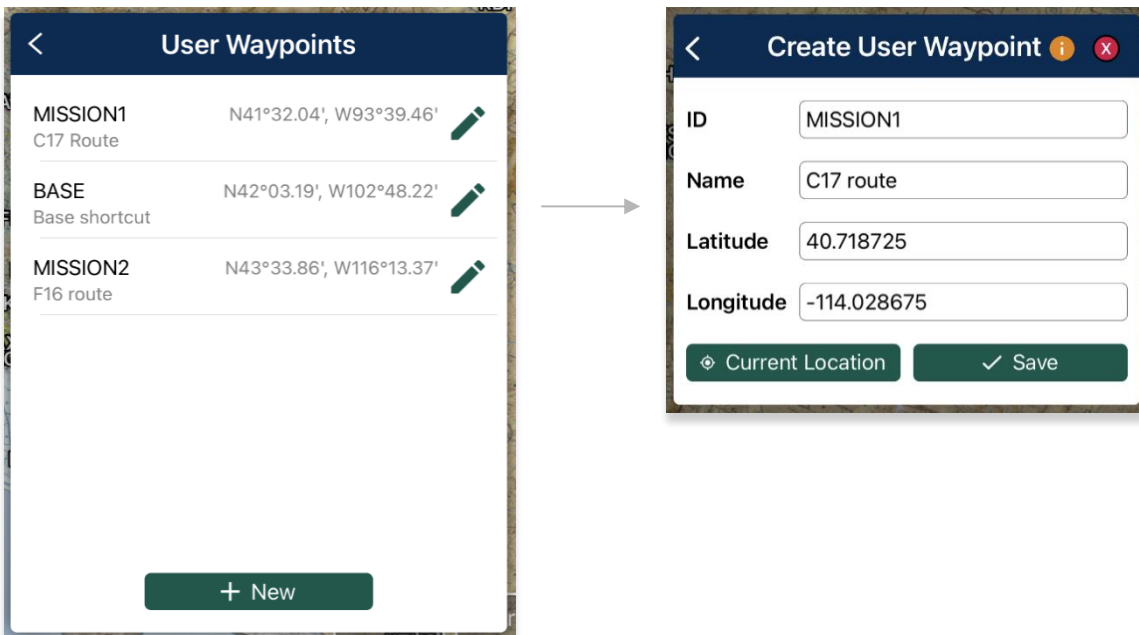


### 15.3.14.3.4.6 User Waypoints

User Waypoints are a collection of waypoints that were created by users through Aero App. Each waypoint contains information such as its ID, Name, Latitude, and Longitude.

Aero App enables users to create User Waypoints directly from the User Waypoints screen. Tap **+ New** and follow the prompts. Refer to [Section 15.3.13.1.1](#) for additional information. Alternatively, users can sideload User Waypoints. Refer to [Section 11.4](#) for additional information.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Tap **User Waypoints**.
5. A list of User Waypoints will be shown below. Tap **+ New** to create a new Waypoint.
6. Fill in the necessary information such as the ID, Name (optional), Latitude and Longitude of the waypoint.
7. Tap **Current Location** to use your present location's coordinates.
8. Tap **Save** when done and your Waypoint will list under User Waypoints.

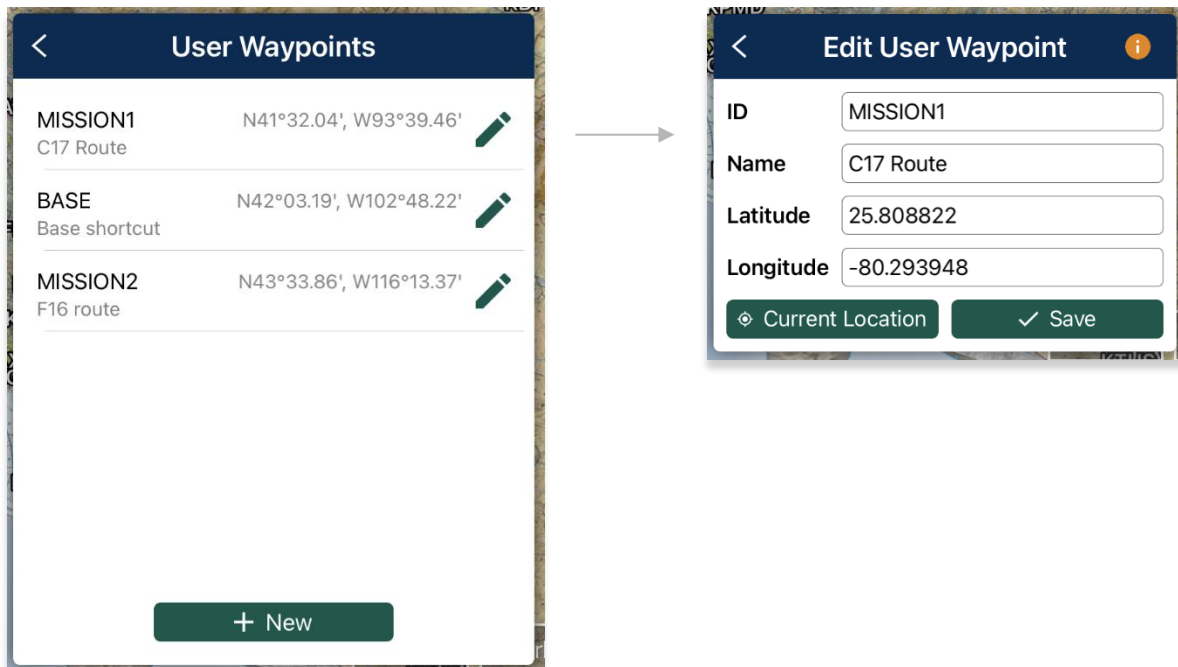


**NOTE:** The Name field is optional. When creating a name for User Waypoints, the name can only contain alphabetical characters (upper and lower cases), space, and hyphens. An error message will display if the name is not valid.

### 15.3.14.3.4.6.1 Edit User Waypoint

Users can modify their user waypoints by providing a new unique ID, Name, Latitude, and Longitude directly from the Moving Map or from the Route Panel.

1. Navigate to your **User Waypoint**.
2. Tap on your desired User Waypoint and a popup menu will appear.
3. Tap on the **pencil icon**.
4. Tap on the desired field to enter the desired new values.
5. Tap **Current Location** to use your present location's coordinates.
6. When all changes have been finalized, tap **Save** and your changes will reflect on the Moving Map, Route Panel, and all areas in which your User Waypoint appears.

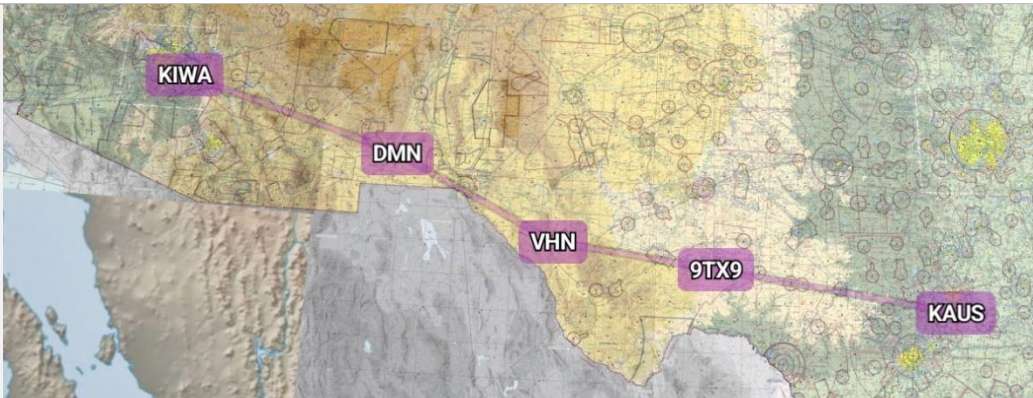


### 15.3.14.3.4.7 Route Line Transparency

Route Line Transparency allows users to adjust the translucency of their flight path displayed on the Moving Map.

1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Tap **Show** from the side menu.
4. Navigate to the Route Line Transparency slider.
5. By default, the Route Line Transparency value is set to 50%. Drag the slider to adjust the route transparency to any value between 20% to 100%.

Transparency value of 20%



Transparency value of 100%

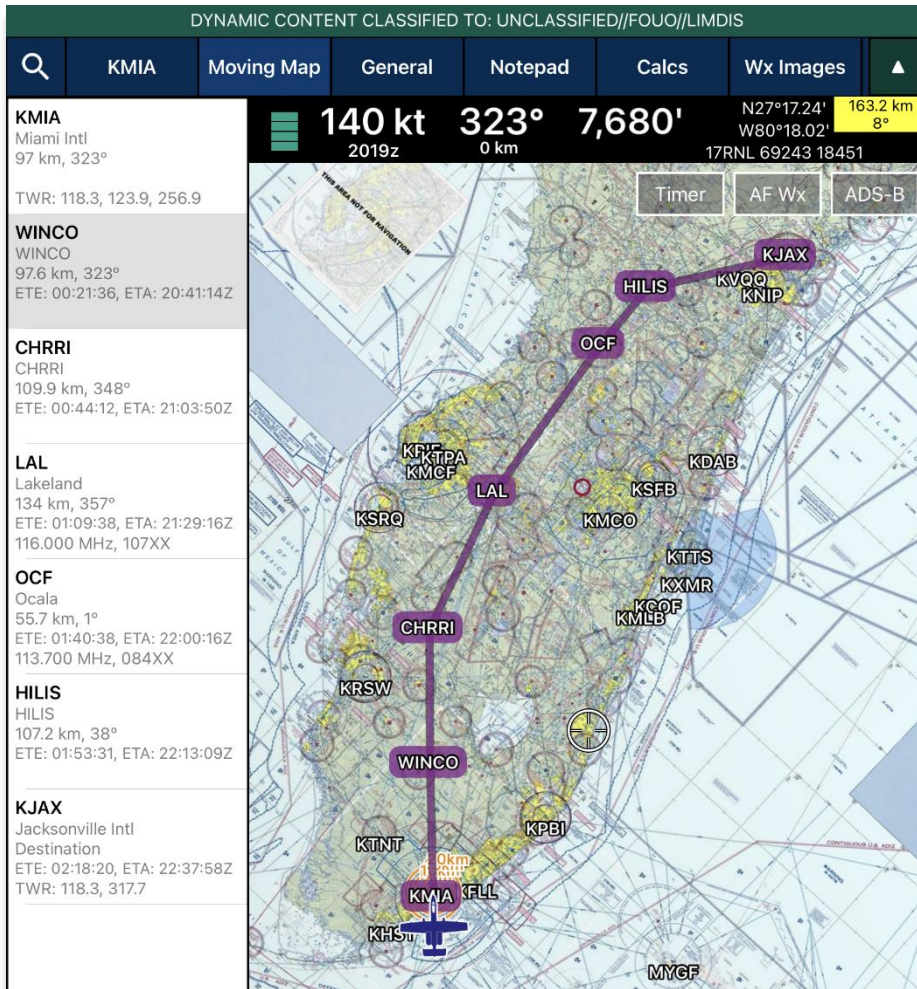


### 15.3.15 Estimated Time Enroute (ETE) and Estimated Time of Arrival (ETA)

Estimated Time Enroute (ETE) and Estimated Time of Arrival (ETA) are calculated for each segment of a flight route. ETE is the estimated time it takes to reach a point from your current location. The time gets updated as you move closer to the point. ETA is the estimated time you will arrive at the designated location.

In addition, users can add Departure and/or Arrival waypoints that will include ETE and ETA.

1. Tap **Moving Map** on the **Main Menu**.
2. Navigate to the **Route Panel**.
3. Each segment of the flight's route will display its ETE and ETA.



**NOTE:** Estimated Time of Arrival (ETA) will display in Zulu time. Under Preferences, users have the option to automatically snap to their current leg.



## 15.4 General

The General menu provides access to Charts, Supplements, Planning, Docs, and Legend.

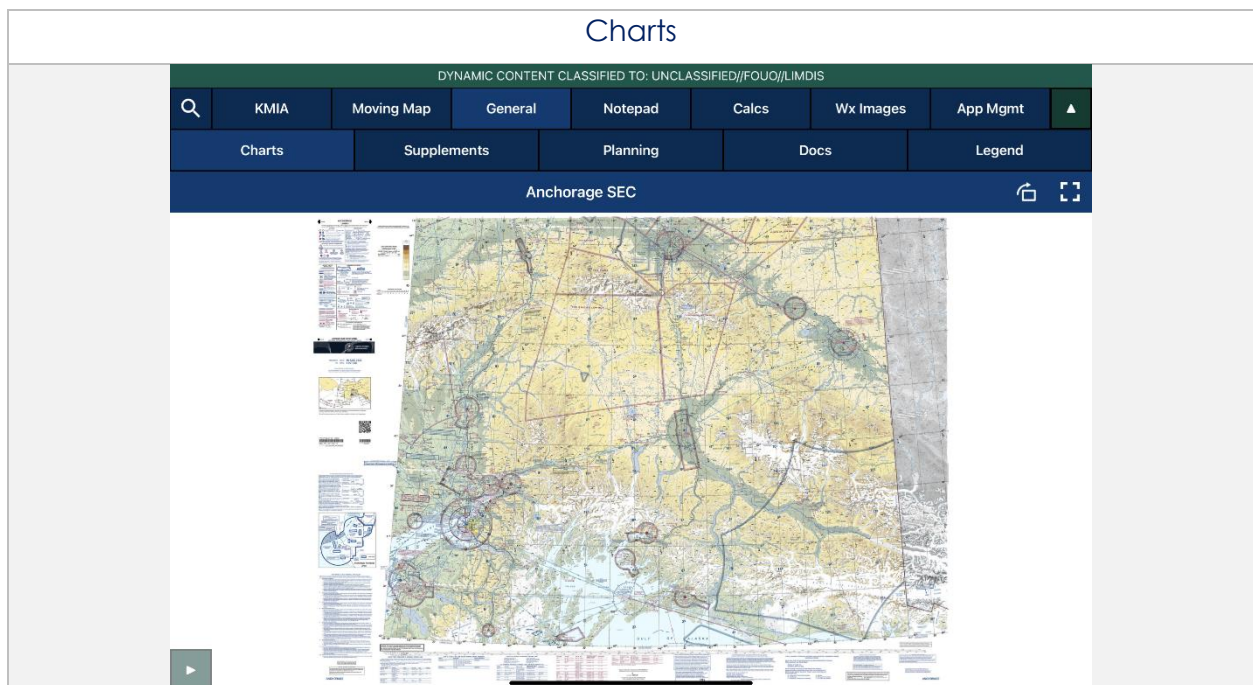
### 15.4.1 Charts

Aero App enables users to view Charts, Supplements, Planning, Documents, and Legend.

1. Tap **General** on the **Main Menu**.
2. Select from Charts, Supplements, Planning, Documents, and Legend on the **Secondary Menu**.
3. Tap on the **actions ribbon** and select desired chart, document, or legend, based on the respective selection.
4. A menu will display from which you can select High and Low Enroute Charts, Area Charts, Graphic Charts, CONUS Chart Graphics, Military Training Routes (MTR), and other charts.



**NOTE:** The thumbnail slider below all documents will allow users to select individual screens for Supplements, Planning, Docs, and Legend charts. Alternatively, users can tap the left or right arrows to turn the page.



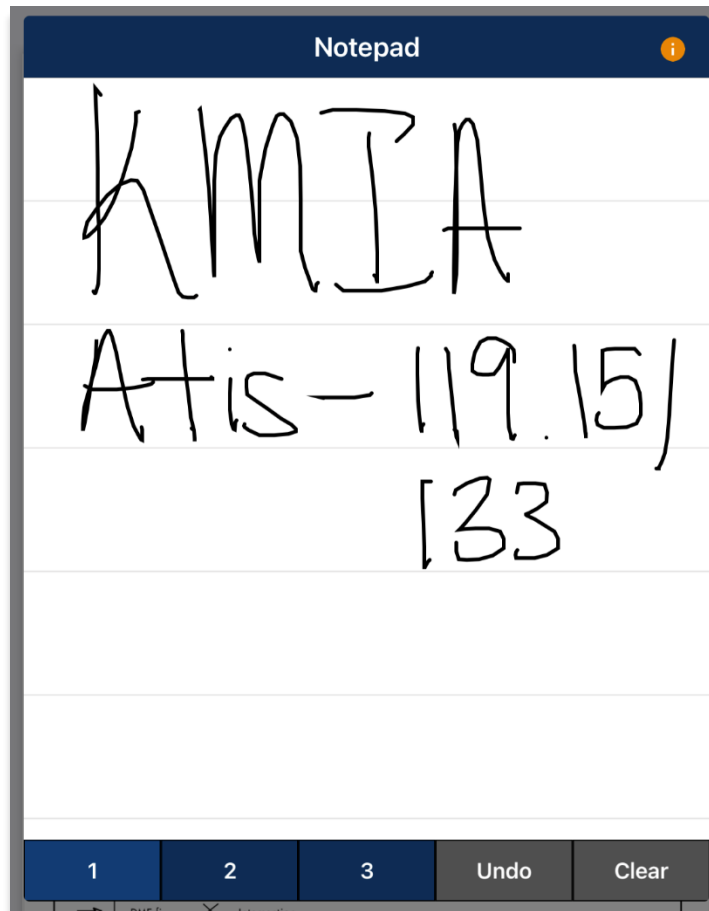




## 15.5 Notepad

The Notepad feature is a handy tool that creates up to three pages of notes. Notes can be drawn with your fingertips or with a stylus. The notepad view includes Undo and Clear options.

- **Undo** – Undoes the most recent markings on the notepad
- **Clear** – Erases all markings from the selected notepad page



**NOTE:** The latest markups will automatically be saved when exiting the notepad view.

## 15.6 Calcs (Calculations)

The Calcs menu, also referred to as Calculations, contains features for E6B and Fuel Check. To access these features, tap the Calcs button.

### 15.6.1 E6B Calculator

The electronic calculator enables pilots to perform a variety of calculations for preflight or inflight planning.

#### Altitude

**Altitude** calculates the Pressure Altitude and Density Altitude by entering the Elevation or the Airport ICAO, Altimeter, and Temperature.

E6B

Altitude Cold Wx Conversions Coordinates Desc

PA=5,877' DA=8,541'

Elevation or Airport: 5250

Altimeter: 29.25

Temperature in °F: 80.6

Celsius: Off

#### Cold Weather (Wx)

**Cold Wx** corrects Altitude for cold temperature operations. Users can switch between Celsius and Fahrenheit.

E6B

Altitude Cold Wx Conversions Coordinates Desc

Correction = 21'

Height Above Altimeter: 200

Temperature in °F: 13

Celsius: Off

#### Conversions

**Conversions** are divided into Distance, Pressure, Temperature, and Weight. Tap to select or slide the segmented control to desired conversion category.

1. Tap to select the current unit in the left column and select the desired unit in the right column.
2. Enter a value in the text box.

E6B

Altitude Cold Wx Conversions Coordinates Desc

Distance Pressure Temperature Weight

10

10 m = 32.808 ft

From	To
ft	ft
in	in
km	km
m	m
nm	nm
sm	sm

## Coordinates

**Coordinates** allows users to get a reading on Lat, Lon, MGRS (Military Grid Reference System), GARS (Global Area Reference System), and Radial Off NavAid when you enter coordinates.

1. Select an option from **Lat, Lon, MGRS, GARS, or Radial** by tapping or sliding the segmented control left-to-right.
2. Enter coordinates in the text box.
3. Results will populate below.
4. **+ Insert into Route** and **+ Insert at end of Route** will be selectable. Select **+ Insert into Route** and the entered coordinates will be added to your current route.
5. Select **+ Insert at end of Route** and the entered coordinates will be added at the end of your current route.

Once the coordinates have been entered in for one of the tabs, you can tap an output field to automatically switch to the mode with those field values automatically populated.

For example, from the Lat, Lon tab, you can tap on the MGRS output field and the MGRS tab is displayed with the field values from Lat, Lon.

**NavAid Radial Distance** calculates the coordinates using three inputs: namely a NavAid, Radial and Distance.

E6B

Altitude Cold Wx Conversions **Coordinates** Descent Distance

GARS **Lat, Lon** MGRS Radial

Lat, Lon

N3832.71,W8950.11

+ Insert into Route + Insert at end of Route

DD.DDD: N38.545167°, W89.835167°

DD MM.MM: N38°32.71', W89°50.11'

DD MM SS.SSS: N38°32'42.600", W89°50'6.600"

MGRS: 16SBH 52911 70116

GARS: 181LT38

Radial Off NavAid: SKE 093 0.77

E6B

Altitude Cold Wx Conversions **Coordinates** Descent Distance

GARS Lat, Lon MGRS **Radial**

NavAid Radial Distance

SJC09012.3

+ Insert into Route + Insert at end of Route

DD.DDD: N37.317985°, W121.697052°

DD MM.MM: N37°19.08', W121°41.82'

DD MM SS.SSS: N37°19'4.747", W121°41'49.387"

MGRS: 10SFG 15449 30944

GARS: 117LQ27

Radial Off NavAid: SJC09012.3

## Descent

**Descent Rate** is calculated in feet per minute, enter the Descent Angle in degrees and Groundspeed in knots.

E6B

Conversions Coordinates **Descent** Distance IFR Climb

Descent Rate

**1,329**

Feet Per Minute

Descent Angle:

Groundspeed:

## Distance

**Distance** calculates the Total Fuel by Distance measured in kilometers or nautical miles, respective to which Distance Unit users have set in their Preferences. Speed which is measured in knots and Time following the format (hh:mm:ss). Tap or slide the segmented control to the desired distance calculation type.

**Distance** is calculated by the Speed, Time, and Fuel Burn Per Hour. The expected output is Distance measured in kilometers or nautical miles; respective to which distance unit format user have set in their Preferences and the Total Fuel in gallons.

E6B

Coordinates **Descent** **Distance** IFR Climb Rwy Winds

Distance Speed Time

**Distance**

**181 nm**

Speed:

Time (hh:mm:ss):

Fuel Burn Per Hour:

Total Fuel: 22.6

**Speed** is calculated by Distance, Time, and Fuel Burn Per Hour. The expected output is Speed measured in knots and the Total Fuel in gallons.

E6B

Coordinates **Descent** **Distance** IFR Climb Rwy Winds

Distance Speed **Time**

**Speed**

**120**

Distance (nm):

Time (hh:mm:ss):

Fuel Burn Per Hour:

Total Fuel: 22.6

**Time** is calculated by Distance, Speed, and Fuel Burn Per Hour. The expected output is Time following the format (hh:mm:ss) and the Total Fuel in gallons.

E6B

Coordinates **Descent** **Distance** IFR Climb Rwy Winds

Distance Speed **Time**

**Time**

**1h 30m 30s**

Distance (nm):

Speed:

Fuel Burn Per Hour:

Total Fuel: 22.6

### Instrument Flight Rules (IFR) Climb

**IFR Climb** calculates the Climb Angle measured in Degrees and Climb Rate measured in Feet per Minute by providing the Climb in ft/km and ft/nm; respective to which Distance Unit users have set in their Preferences. As well as providing the Groundspeed measured in knots.

E6B				
Descent	Distance	IFR Climb	Rwy Winds	Winds Aloft
Climb Angle		Climb Rate		
1.9°		1,333		
Degrees		Feet Per Minute		
Feet/NM Climb:				<input type="text" value="200"/>
Groundspeed:				<input type="text" value="400"/>

### Runway (Rwy) Winds

**Runway Winds** calculates Headwind and Crosswind by typing in Runway Direction in degrees, and Wind Direction/Speed.

E6B				
Descent	Distance	IFR Climb	Rwy Winds	Winds Aloft
Headwind		Crosswind		
↓ 9		← 12		
Knots		Knots		
Runway Direction:				<input type="text" value="29"/>
Wind Dir/Spd:				<input type="text" value="80"/> @ <input type="text" value="15"/>

### Winds Aloft

**Winds Aloft** calculates Heading (Hdg), Ground Speed (GS), and Wind Correction Angle (WCA) by typing in Nearby Airport (ICAO), Course (degrees), True Airspeed (knots), and Wind Direction/Speed.

E6B				
Descent	Distance	IFR Climb	Rwy Winds	Winds Aloft
HDG		GS		WCA
40°		441		41°
Degrees		Knots		Degrees
Nearby Airport:				<input type="text" value="KBLV"/>
Course:				<input type="text" value="5"/>
True Airspeed:				<input type="text" value="250"/>
Wind Dir/Spd:				<input type="text" value="150"/> @ <input type="text" value="300"/>



**NOTE:** See reference notes located at the bottom of the E6B popup.



## 15.6.2 Fuel Check

The Fuel Check feature enables users to calculate fuel burn and the time remaining to burn the rest of their fuel. Fuel Check includes fields for Duration (hh:mm), Starting Fuel (lbs), and Remaining Fuel (lbs). The Remaining Fuel field becomes accessible only after the timer is up.

1. Navigate to **Calcs** on the **Main Menu**.
2. Tap **Fuel Check**. The Fuel Check popup will appear.
3. Tap the **Duration** field. Enter desired duration for the fuel check in hours and minutes.
4. Enter your current fuel's amount in the **Starting Fuel** field.
5. Tap **Start** to begin the timer.
6. Tap **Cancel** to stop the timer.

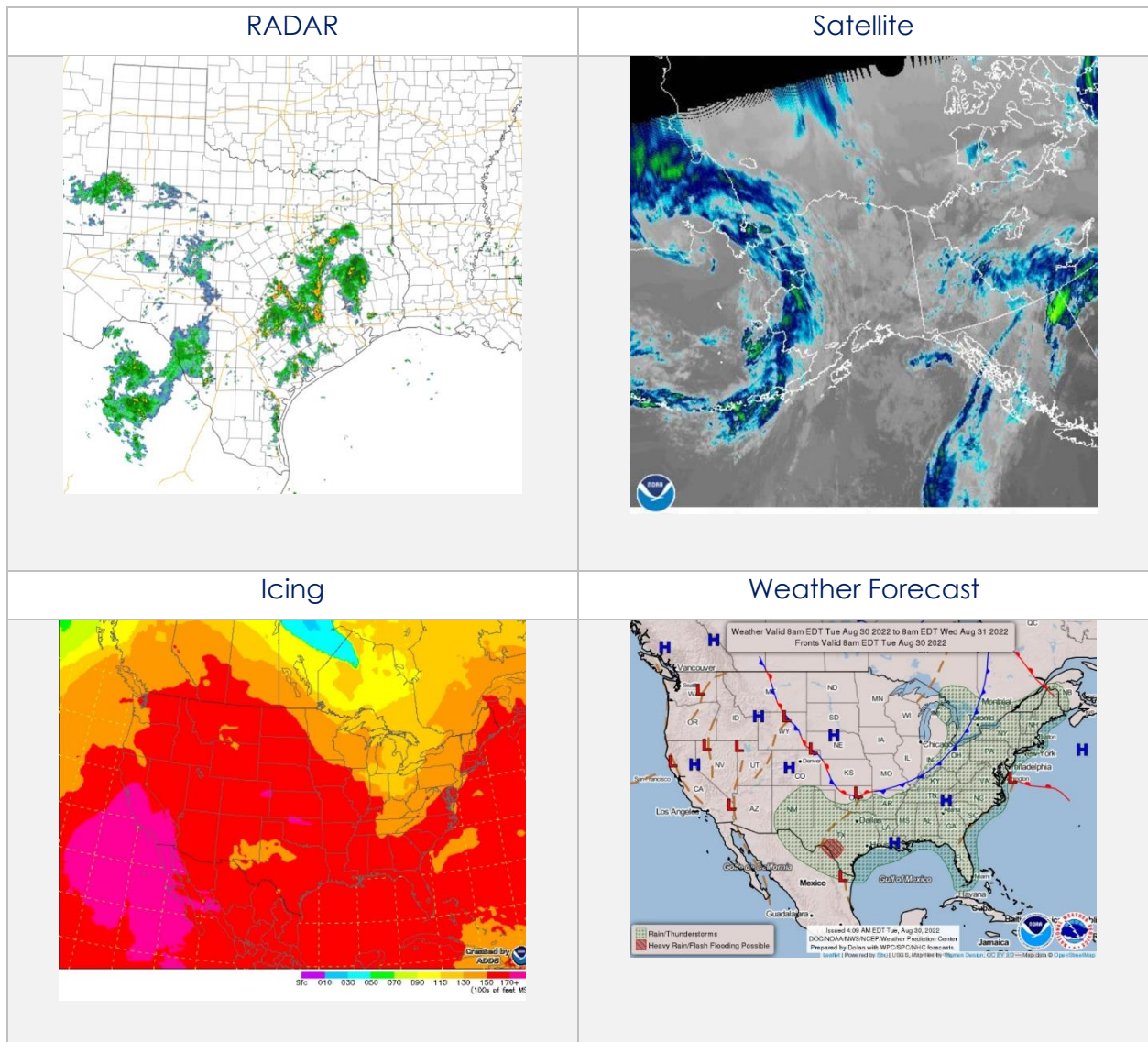
The screenshot shows the 'Fuel Check' popup with a dark blue header. Below the header, it displays 'Time remaining: 00:29:57'. There are three input fields: 'Duration (hh:mm)' with the value '00:30', 'Starting Fuel (lbs)' with the value '1350', and 'Remaining Fuel (lbs)' which is currently empty. At the bottom, there are two buttons: 'Fuel Burn (lbs/hr)' showing a question mark '?' and 'Time Remaining' also showing a question mark '?'. A red 'Cancel' button is located at the very bottom.

7. Once the timer has ended, the Remaining Fuel (lbs) field will become accessible. Enter the remaining fuel in pounds.
8. The calculations will populate in the Fuel Burn and Time Remaining results field. Tap **Reset** to clear the calculations.

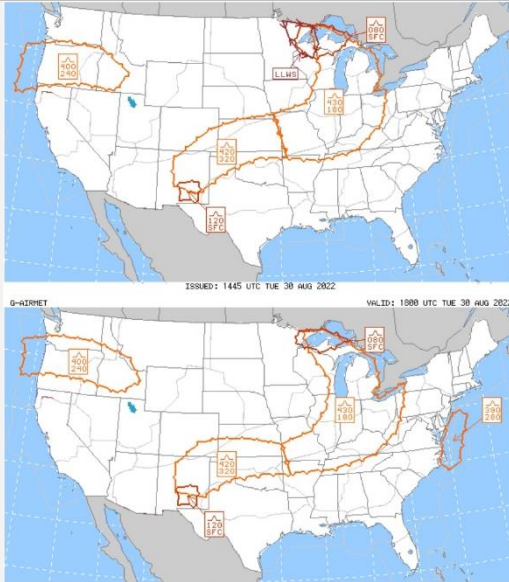
The screenshot shows the 'Fuel Check' popup with a dark blue header. Below the header, it displays 'Enter remaining fuel'. There are three input fields: 'Duration (hh:mm)' with the value '00:30', 'Starting Fuel (lbs)' with the value '1350', and 'Remaining Fuel (lbs)' with the value '950'. At the bottom, there are two buttons: 'Fuel Burn (lbs/hr)' showing the value '800' and 'Time Remaining' showing the value '01h 11m 15s'. A green 'Reset' button is located at the very bottom.

## 15.7 Weather (Wx) Images

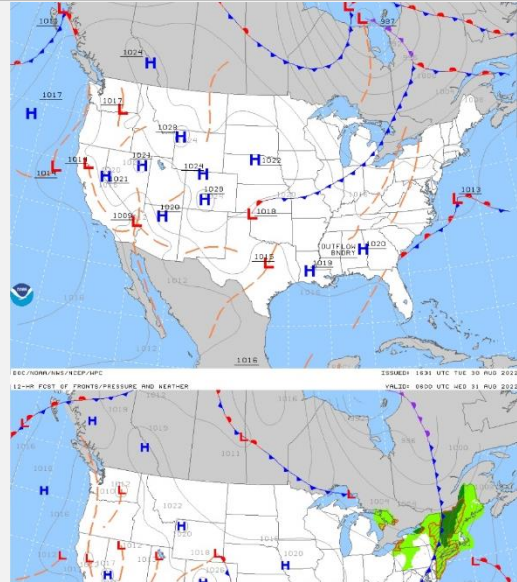
The Weather (Wx) Images are from the National Oceanic and Atmospheric Administration (NOAA) providing access to weather, hydrologic, and climatic forecasts and warnings for the U.S. and adjoining areas. The images can be panned and zoomed. An internet connection is required to view real-time weather images. Wx images are provided below:



### AIRMETS and SIGMETs



### Prog Charts



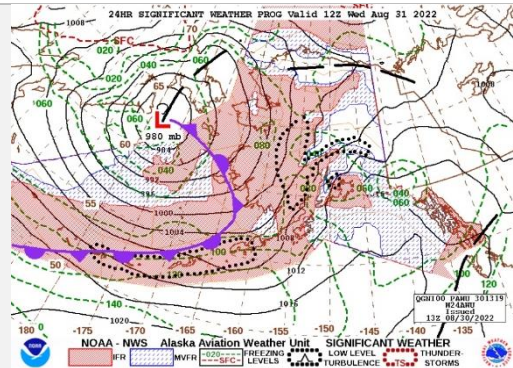
### Convective SIGMETs and Outlooks



### Current Convective Watches



### Alaska



## 15.8 Application Management (App Mgmt)

Application Management is a useful tool for pilots as it is used to configure their application's settings, manage data, retrieve charts, as well as the accessibility to the User Manual, informational weblinks, and beneficial information available to users. Sections are as follows and will be further elaborated in the sections to come:

- Preferences
- Data
- Host Nation
- Help

### 15.8.1 Preferences

Preferences is a tool that enables users to customize the behavior of Aero App. Various setting options include Miscellaneous, Reset, Route, and User Interface.

#### 15.8.1.1 Miscellaneous

Miscellaneous contains the setting options to customize select Aero App features and views.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Preferences** on the **Secondary Menu**.
3. The following options are available:
  - **Airport Ring on APD and IAP** – provides the option to verify the georeferencing by showing a small ring around the Airport center.
  - **Home Field** – provides the option to set an ICAO as the default location if GPS is not available. This feature will take effect when the app is either rebooted or reopened.
  - **Minimum Runway Length (ft)** – provides the option to filter Airports based on runway length. The value must be in ft.
  - **Ownship on APD and IAP** – provides the option to show ownship on FAA Airport Diagrams and Instrument Approach Procedures.

- **Secret** – provides the option to designate device as containing SECRET material.



**NOTE:** Once Aero App has been updated to SECRET, the action cannot be undone.



**NOTE:** Aero App must be uninstalled and reinstalled to revert to UNCLASSIFIED.

---

- **Switch to APD on Landing** – provides the option to switch view to APD upon landing. When this feature is enabled, Speed (ft) will display. Enter desired value in kt. Once your ownship has reached the specified speed, the screen will switch to ADP.



**NOTE:** On the Moving Map screen, the APD will appear on a split screen, perfectly georeferenced.

---

### 15.8.1.2 Reset

Reset clears all chart markups.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Preferences** on the **Secondary Menu**.
3. The following options are available:
  - **Clear All Chart Markups** – provides the option to clear all APD and IAP markups.
  - **Clear All PDF Markups** – provides the option to clear all Supplement, Planning Document, Legend, Giant Report, and Host Nation markups.

### 15.8.1.3 Route

Route contains setting options regarding your route.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Preferences** on the **Secondary Menu**.
3. The following option is available:
  - **Snap Route to Current Leg** – provides the option to automatically scroll to the current leg in route and highlight the current flight leg on the Route Panel.

### 15.8.1.4 User Interface

User Interface contains setting options to customize specific views and enhance the experience of Aero App.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Preferences** on the **Secondary Menu**.
3. The following options are available:
  - **Big Buttons on Main Menu** – provides the option to increase the Menu button size; useful when wearing gloves.
  - **Confirm on Delete** – provides the option to confirm deletion of item in route.
  - **Coordinates Unit** – provides the option to show coordinates in Military Grid Reference System or Lat/Lon format.
  - **Distance Unit** – provides the option to show distance in km or nm.
  - **Main Menu at Top** – provides the option to display the Main Menu at the top or bottom of the screen.
  - **Popup Close on X** – provides the option to close popups by tapping outside the popup or by tapping an X.

## 15.8.2 Data

The Data Status screen enables users to manage cycles. Refer to [Section 13](#) for additional information.

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

Navigation: Moving Map, General, Notepad, Calcs, Wx Images, App Mgmt

Sub-navigation: Preferences, Data, Host Nation, Help

### Data Status

Active Cycle: Effective 2023-10-05 through 2023-11-01 (2310) [Delete] [View]

Standby Cycle: No standby cycle loaded [Delete] [View]

Download Delta files (faster) [On] [Share]

[Download] [Refresh] [Import] [Move to Standby]

[Swap Cycles] [Delete 2023-09-07 from Documents]

Ready to load 2023-09-07

### Cycle 2023-09-07 (2309)

- Global: Found
- Africa: Found
- Alaska: Found
- Canada: Found
- CONUS Part 1: Found
- CONUS Part 2: Found
- CSA:
- EEA:
- ENAME:
- PAA:
- FAA Sectionals: Found
- Georeference: Found

### Aero App Maps

- CAN IFR High Canada:
- CAN IFR Low Canada:
- FAA IFR Atlantic:
- FAA IFR High Alaska:
- FAA IFR Low Alaska:
- FAA VFR Alaska: Found
- FAA IFR High CONUS:
- FAA IFR Low CONUS:
- FAA VFR CONUS: Found

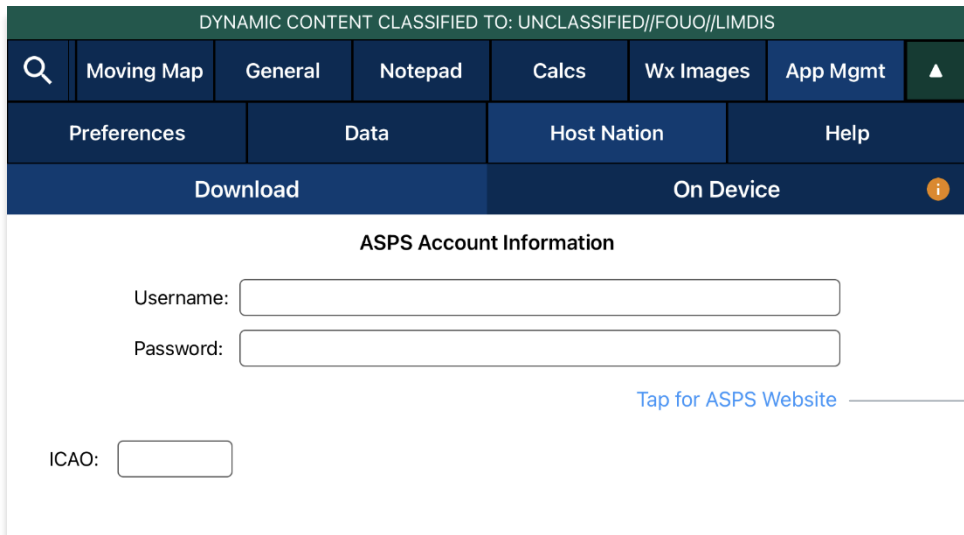
### 15.8.3 Host Nation

Pilots can download and view worldwide Host Nation charts for desired airports.

#### 15.8.3.1 Download Host Nation Charts

Users are required to possess an ASPS account to utilize the Host Nation feature. Users must log in to their ASPS account to download charts. Refer to [Section 6.4](#) for additional information.

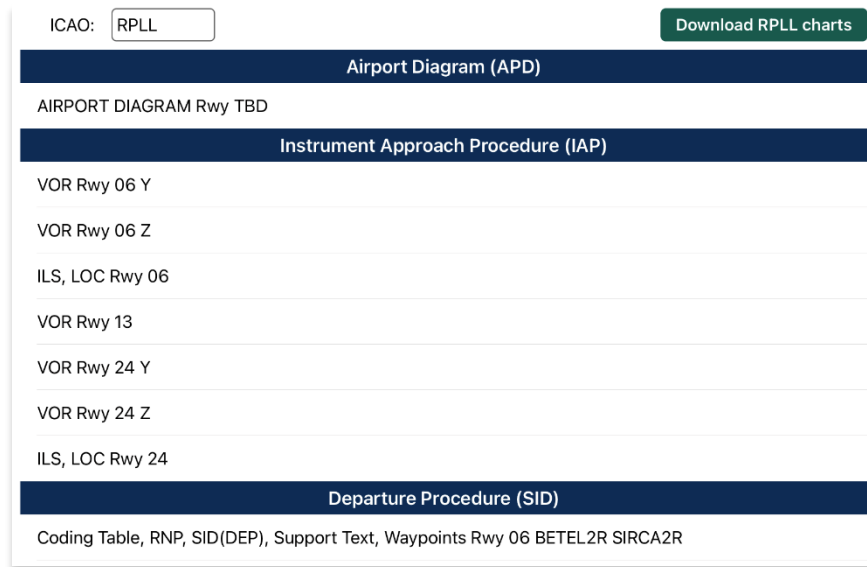
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Host Nation** on the **Secondary Menu**.
3. Log in with your ASPS credentials.
4. Enter the ICAO for the desired Host Nation charts then tap **Return** from the device's on-screen keyboard.
5. The chart list available for the ICAO will be displayed.



The screenshot displays the 'Host Nation' section of an application. At the top, a green banner reads 'DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS'. Below this is a dark blue navigation bar with icons for 'Moving Map', 'General', 'Notepad', 'Calcs', 'Wx Images', and 'App Mgmt'. A secondary menu below the navigation bar includes 'Preferences', 'Data', 'Host Nation', and 'Help'. The 'Host Nation' menu item is selected, leading to a screen with two main sections: 'Download' and 'On Device'. The 'On Device' section is active and contains the 'ASPS Account Information' form. This form includes fields for 'Username:', 'Password:', and 'ICAO:'. A blue link labeled 'Tap for ASPS Website' is positioned to the right of the password field, with a line pointing to it from the label 'ASPS Website Link' on the right side of the image.



6. Tap the **Download ICAO charts** button to download the charts to your device.



7. To verify that the Host Nation charts have been downloaded, tap **On Device**.
8. To view downloaded charts, refer to [Section 15.4.1](#).

Download	On Device <span style="float: right;">i</span>
KBLV	2022-09-16
RPLL	2022-09-16



**NOTE:** In order to load Host Nation charts, an Active Cycle must be selected.

## 15.8.4 Help

The Help menu provides users with the following options to select from:

- What's New (Must have the global file loaded in Active Cycle)
- Web Links (Must have the global file loaded in Active Cycle)
- User Manual
- About

DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS

🔍	Moving Map	General	Notepad	Calcs	Wx Images	App Mgmt	▲
Preferences		Data		Host Nation		Help	

What's New

Web Links

User Manual

About

### What's New Aero App for iOS

This page contains information about new features, improvements to Aero App, other useful and important updates and is updated with each data cycle.

Tap the link below for all the latest information about Aero App and for fast and secure database downloads.

[aeroapp.info](http://aeroapp.info)

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### Currently in Aero App for iOS Version 1.2306

Aero App for iOS Version 1.2306 requires iOS 15.0 or later

#### Coverage and Line of Sight Orbit Altitudes

Aero App introduces Coverage and Line of Sight configurations to the existing Orbit feature. Coverage and Line of Sight Altitudes caution and inform pilots of the highest altitude of mountainous terrain and vertical obstructions. This information is useful for pilots flying in mountainous areas or areas in which there are high spot elevations. This will allow team members to fly safely on their mission.

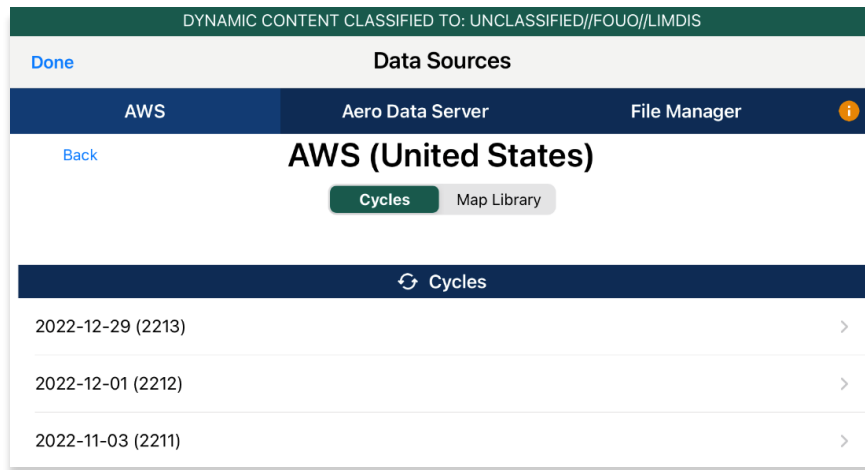
#### Multitasking

Aero App now supports multitasking capabilities for pilots to interact with multiple apps simultaneously in Split View configuration. Pilots can switch away from their current app to perform other tasks on another app while seamlessly restoring the same view once they switch back. This provides an interruption-free user experience.

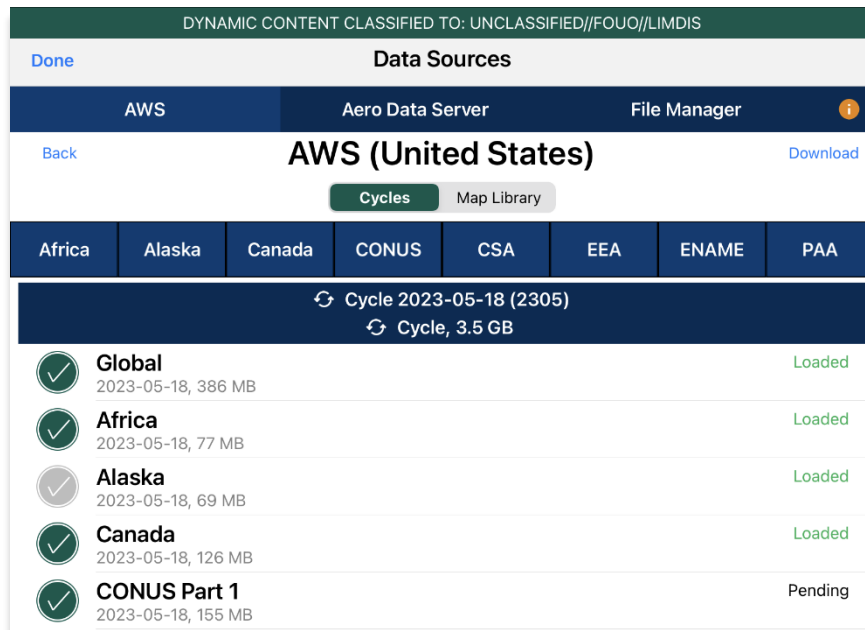
### 15.8.4.1 What's New Popup

The What's New page will pop up when a new cycle has been successfully loaded into Active Cycle.

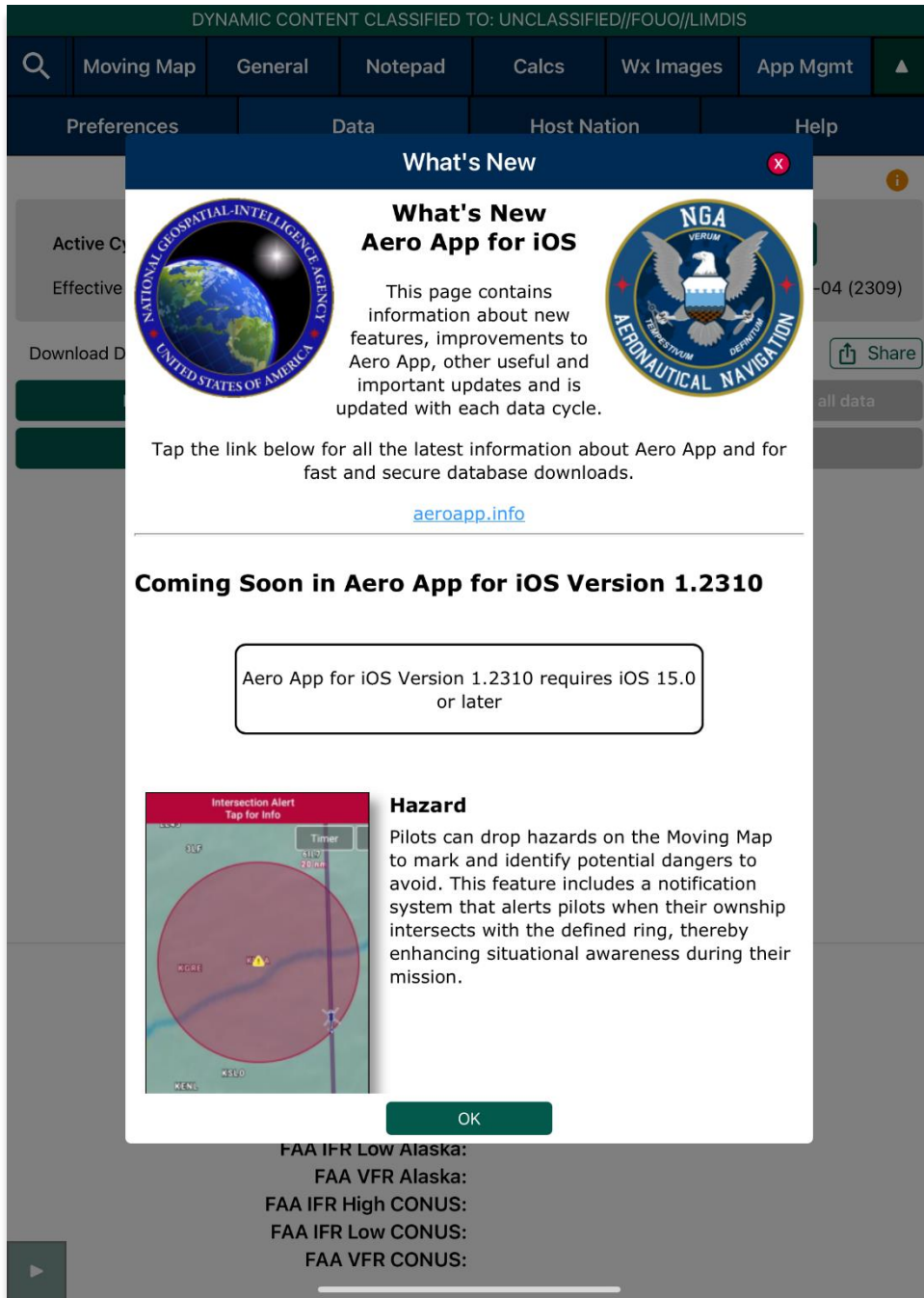
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select preferred authentication from **AWS** and **ADS**.
5. Select desired **data cycle**.



6. Select desired **data** to download.
7. Tap **Download** to begin download.



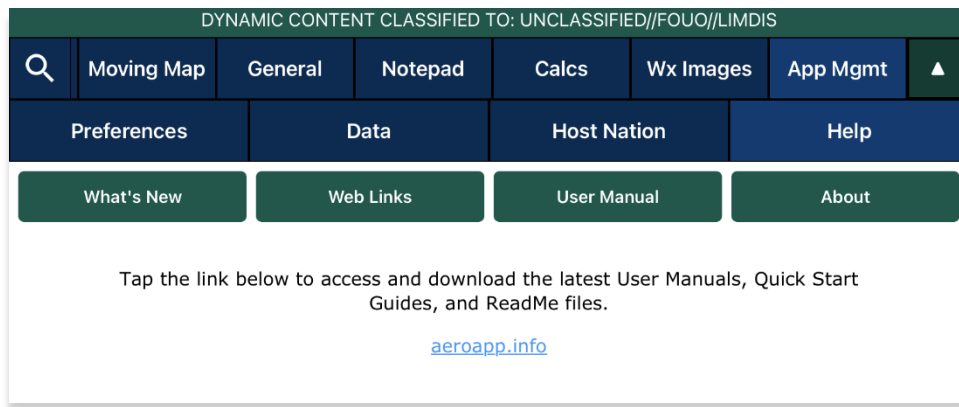
8. Navigate back to the **Data Status** page.
9. Tap **Move to Standby**.
10. Tap **Swap Cycles**.
11. The What's New popup will display.
12. Tap **OK** to dismiss the popup.



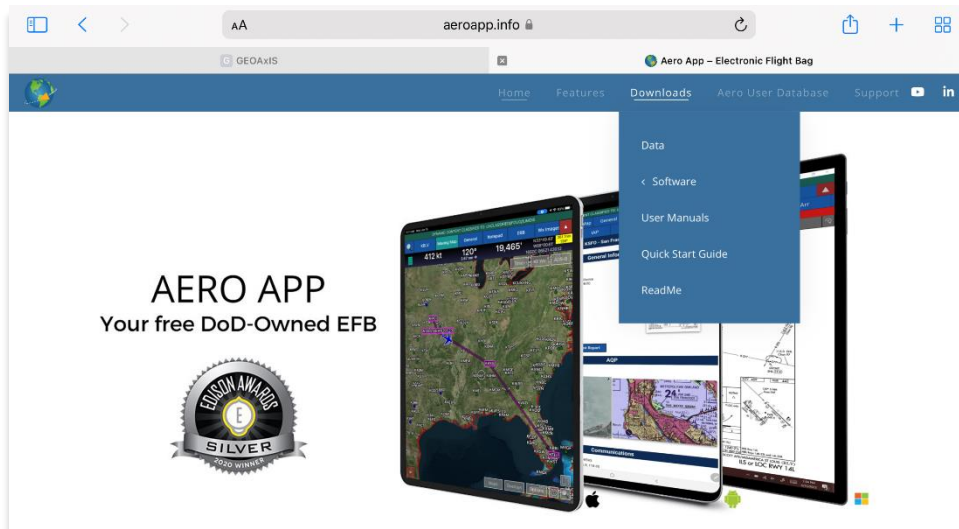
### 15.8.4.2 User Manual Access

The User Manual tab includes a link that redirects users to the Aero App (aeroapp.info) website.

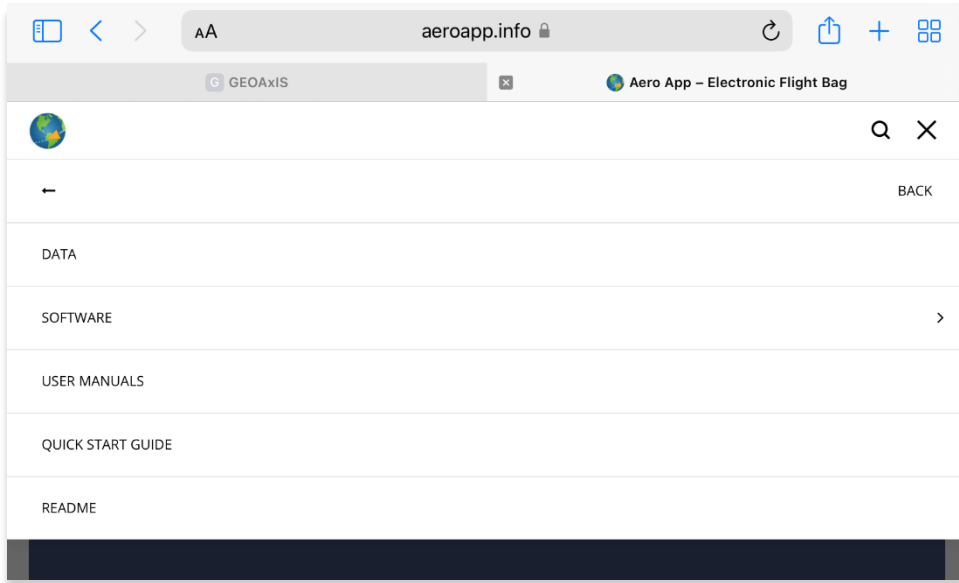
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Help** on the **Secondary Menu**.
3. Tap the **User Manual** tab.
4. Tap the **aeroapp.info** link and users will be redirected to the Aero App homepage.



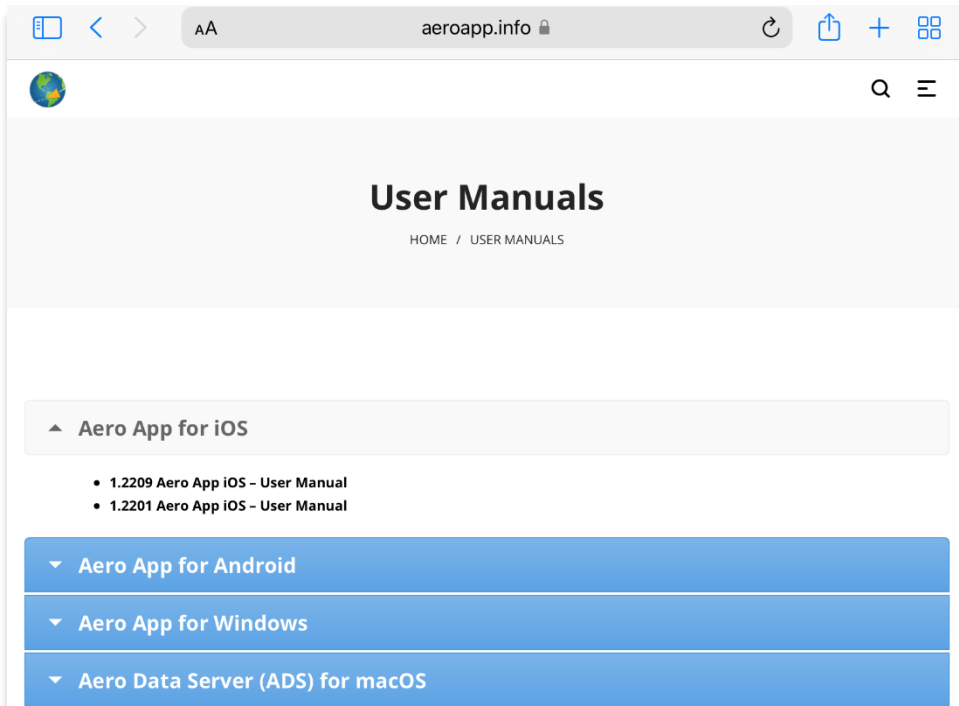
5. Navigate to the *Downloads* menu. Option placement will vary depending on display size.
  - On large screens, hover over **Downloads** from the menu ribbon to reveal additional download options.



- On smaller screens, tap the hamburger button and select **DOWNLOADS** to display additional download options.



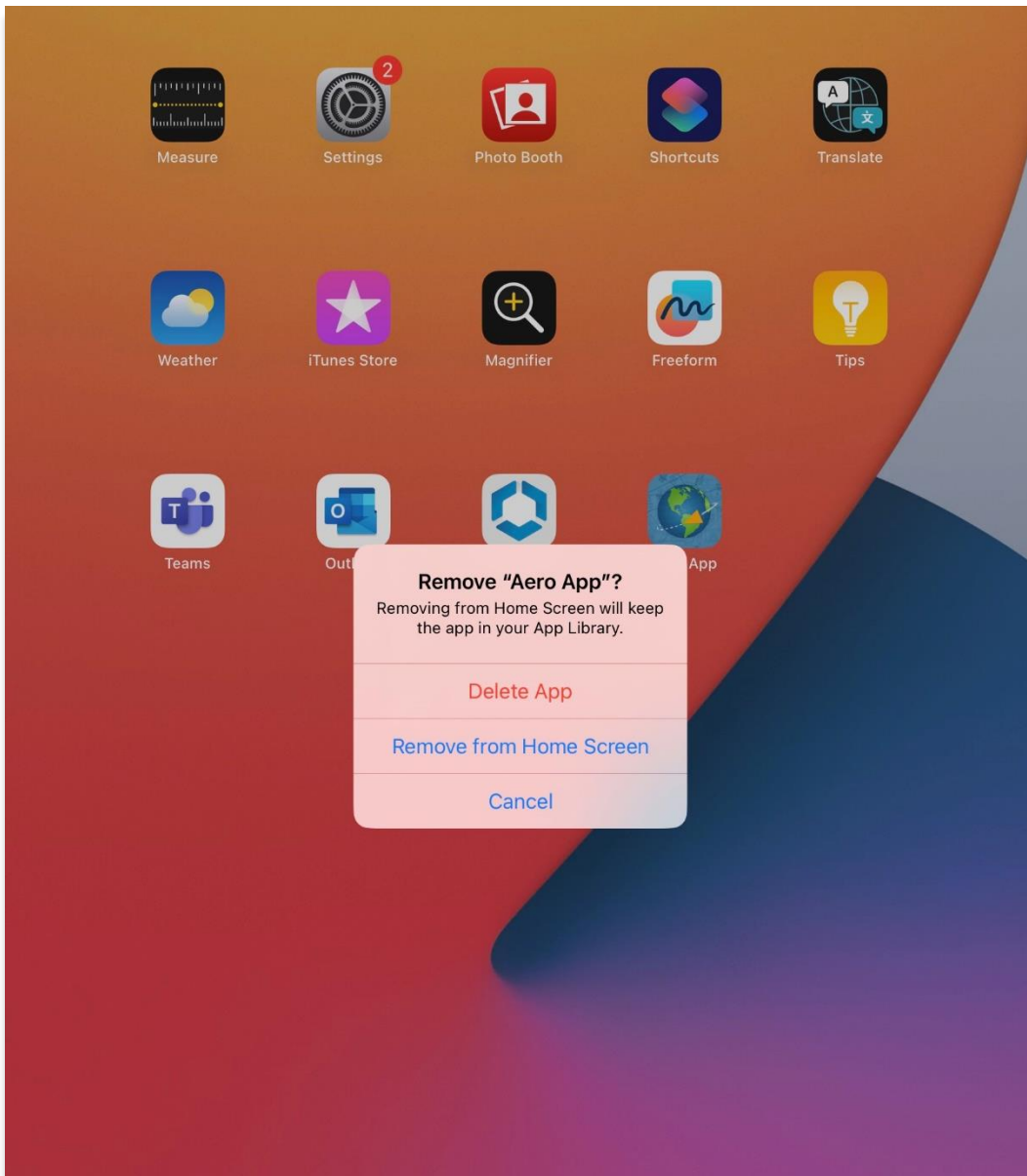
6. Select **Documentation** then **User Manual**.
7. Users are provided with several platforms to choose from. Tap **Aero App for iOS** to reveal related user manuals.
8. Select desired user manual version and you will be redirected to the PDF.



## 16 Appendix A | Uninstall Aero App

This section will describe how to uninstall Aero App from your iPad.

1. Navigate to the *Home Screen* from your iPad.
2. Located and hold Aero App until the *Remove App* button displays.
3. Tap on the **Remove App** button. A confirmation popup will display.
4. Select **Delete App** from the given options.



## 17 Appendix B | User Waypoints and Coordinates

Enter Waypoints using Latitude and Longitude coordinates.

Coordinate formats include:

<b>DD.DDD,DDD.DDD</b>		<b>DDMM.MM,DDMM.MM</b>	
Input Example	Means	Input Example	Means
37.12345, -121.12345	37.12345°N, 121.12345°W	3723.45, -11834.45	37°23.45N, 118°34.45W
<b>NDD.DDD,WDDD.DDD</b>		<b>NDDMM.MM,WDDDMM.MM</b>	
Input Example	Means	Input Example	Means
N37.12345, W121.12345	37.12345°N, 121.12345°W	N3713.4536, W12145.901	37°13.4536°N, 121°45.901W
<b>DD.DDDN,DDD.DDDW</b>		<b>DDMM.MMN,DDDMM.MMW</b>	
Input Example	Means	Input Example	Means
37.12345N, 121.12345W	37.12345°N, 121.12345°W	3713.4536N, 12145.901W	37°13.4536°N, 121°45.901W



**NOTE:** If you enter the values in degrees and decimal minutes, you need to ensure that there are at least four digits before the decimal point, e.g., for 1 degree and 12.5 minutes use 0112.5 because 112.5 will be interpreted as 112.5 degrees.



**NOTE:** When using E6B, you can leave spaces between degrees and decimal minutes. This is not possible when utilizing search boxes for the creation of routes.



**NOTE:** When adding MGRS to route, a minimum of six characters is required for a valid MGRS entry.



## 18 Appendix C | Hazards and Pins SQLite Files

This appendix includes key specifications, schemas, and examples of SQLite databases for Hazards and Pins. Aero App uses a structured database, or SQLite file, comprised of two tables: mapPins and hazards, to read and display pins and hazards on the Moving Map.

In addition to dropping their own pins and hazards on the Moving Map, users can create or modify SQLite files to share their pins and/or hazards with others to display on their Aero App. This SQLite file must be saved as *pins-{name}.sqlite*, where *{name}* is replaced by the user. If the file does not follow that naming convention, Aero may not read the file, or it may cause existing Pins and Hazards to overwrite on Aero App. The sections ahead provide further details on creating a SQLite file.

### 18.1 Specifications for Hazards

The following specifications apply to Hazards.

- **NOT NULL** – denotes the field is required
- **UNIQUE** – denotes the value must be distinct
- **INTEGER** – whole numbers only
- **REAL** – allows decimal numbers
- **TEXT** – allows alphanumeric character data

Key	Key Type	Definition
id	INTEGER PRIMARY KEY AUTOINCREMENT	The id column serves as the primary key, and the "AUTOINCREMENT" attribute ensures that a unique value is automatically assigned to this column for each new row inserted into the table.
identifier	TEXT NOT NULL UNIQUE	The identifier field is required and must differ from other identifiers in this column. It is recommended to follow a naming convention such as <i>HAZARD#</i> (starting from 1), where "#" represents a unique number. Users should avoid using white spaces or leaving the field blank.
name	TEXT NOT NULL	The name column can contain any character from the ASCII table. However, it is recommended to limit it to alphanumeric characters and spaces.

radius	REAL	The radius column represents the distance from the center of the ring to its outer edge that pilots should avoid when flying. If the radius column is left empty or a negative value is entered, the radius of the ring will be automatically adjusted to 0.
alert	INTEGER NOT NULL	The alert column indicates whether Intersection Alert is active or not. 1 is used to represent true while 0 is used to represent false.
notes	TEXT	The notes column is intended for additional information or context regarding hazards.
lat	REAL NOT NULL	The lat column represents the latitude of the hazard. Latitude cannot be greater than 90 or less than -90 but can be equal to either value.
lon	REAL NOT NULL	The lon column represents the longitude of the hazard. Longitude cannot be greater than 180 or less than -180 but can be equal to either value.
mgrs	TEXT	The mgrs column can contain any alphanumeric characters, symbols, or spaces. It is used solely for display purposes and is not used to derive a location, since the location is determined solely by the lat/lon values.

Here's the schema for the Hazards table. This schema includes the keys for each column mentioned earlier, with the necessary data types and constraints.

```
CREATE TABLE IF NOT EXISTS hazards (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    identifier TEXT NOT NULL UNIQUE,
    name TEXT NOT NULL,
    radius REAL,
    alert INTEGER NOT NULL,
    notes TEXT,
    lat REAL NOT NULL,
    lon REAL NOT NULL,
    mgrs TEXT);
```

### 18.1.1 Hazards SQLite Table

Here's an example of a SQLite table for Hazards:

The screenshot shows a SQLite database browser interface with the 'hazards' table selected. The table has the following structure and data:

id	identifier	name	radius	alert	notes	lat	lon	mgrs
1	0 HAZARD1	Gun threat hazard	10.0	1	Create a circle around a hostile threat...	33.434278	-112.011583	null

### 18.2 Specifications for Pins

Users must refer to the provided schema to create a table and input the desired values for each column. For Pins, the following specifications apply.

- **NOT NULL** – denotes the field is required
- **UNIQUE** – denotes the value must be unique
- **INTEGER** – whole numbers only
- **REAL** – allows decimal numbers
- **TEXT** – allows alphanumeric character data
- **BLOB** – stores large objects such as images

Key	Key Type	Definition
id	INTEGER PRIMARY KEY AUTOINCREMENT	The id column serves as the primary key, and the "AUTOINCREMENT" attribute ensures that a unique value is automatically assigned to this column for each new row inserted into the table.
pinType	INTEGER NOT NULL	The pinType field serves to indicate the type of geographic pin. Specifically, 0 is used to represent pin, 1 represents landmark, 2 represents emergency marker, and 3 represents photo pin. Landmark and avoidance point share the same pinType value, which is 1. If connectToOwship is enabled, then it's landmark, otherwise it is avoidance point.
identifier	TEXT NOT NULL	The identifier field is required and must differ from other identifiers in this column. It is recommended to follow a naming

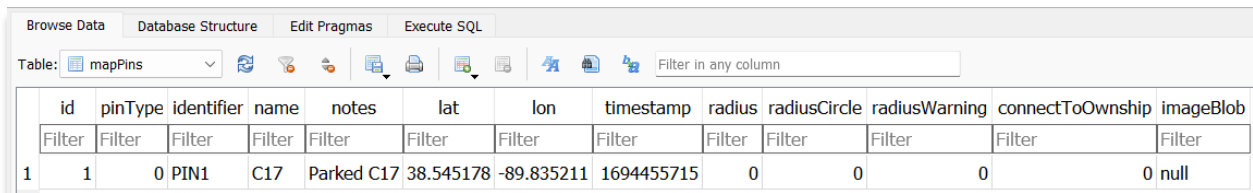
	UNIQUE	convention such as <i>PIN#</i> (starting from 1), where "#" represents a unique number. Users should avoid using white spaces or leaving the field blank.
name	TEXT NOT NULL	The name column can contain any character from the ASCII table. However, it is recommended to limit it to alphanumeric characters and spaces.
notes	TEXT	The notes column is intended for additional information or context regarding pins.
lat	REAL NOT NULL	The lat column represents the latitude of the pin. Latitude cannot be greater than 90 or less than -90 but can be equal to either value.
lon	REAL NOT NULL	The lon column represents the longitude of the pin. Longitude cannot be greater than 180 or less than -180 but can be equal to either value.
timestamp	INTEGER NOT NULL	The timestamp column indicates the number of seconds since epoch time of when the pin was created.
radius	REAL	Option is set to 0 and are not read from.
radiusCircle	INTEGER NOT NULL	Option is set to 0 and are not read from.
radiusWarning	INTEGER NOT NULL	Option is set to 0 and are not read from.
connectToOwnship	INTEGER NOT NULL	Option is set to 0 and are not read from.
imageBlob	BLOB	The imageBlob column is intended to associate pins to relevant photos and can be viewed through Aero App. This field is required for Photo Pins.

Here's the schema for the Pins table. This schema includes the keys for each column mentioned earlier, with the necessary data types and constraints.

```
CREATE TABLE IF NOT EXISTS mapPins (  
    id INTEGER PRIMARY KEY AUTOINCREMENT,  
    pinType INTEGER NOT NULL,  
    identifier TEXT NOT NULL UNIQUE,  
    name TEXT,  
    notes TEXT,  
    lat REAL NOT NULL,  
    lon REAL NOT NULL,  
    timestamp INTEGER NOT NULL,  
    radius REAL,  
    radiusCircle INTEGER NOT NULL,  
    radiusWarning INTEGER NOT NULL,  
    connectToOwnship INTEGER NOT NULL,  
    imageBlob BLOB);
```

## 18.2.1 Pins SQLite Table

Here's an example of a SQLite table for Pins.



The screenshot shows a SQLite database browser interface. The table 'mapPins' is selected, and its structure is displayed in a table format. The columns are: id, pinType, identifier, name, notes, lat, lon, timestamp, radius, radiusCircle, radiusWarning, connectToOwnship, and imageBlob. A single row of data is shown with the following values: id=1, pinType=1, identifier=0 PIN1, name=C17, notes=Parked C17, lat=38.545178, lon=-89.835211, timestamp=1694455715, radius=0, radiusCircle=0, radiusWarning=0, connectToOwnship=0, and imageBlob=null.

id	pinType	identifier	name	notes	lat	lon	timestamp	radius	radiusCircle	radiusWarning	connectToOwnship	imageBlob
1	1	0 PIN1	C17	Parked C17	38.545178	-89.835211	1694455715	0	0	0	0	0 null

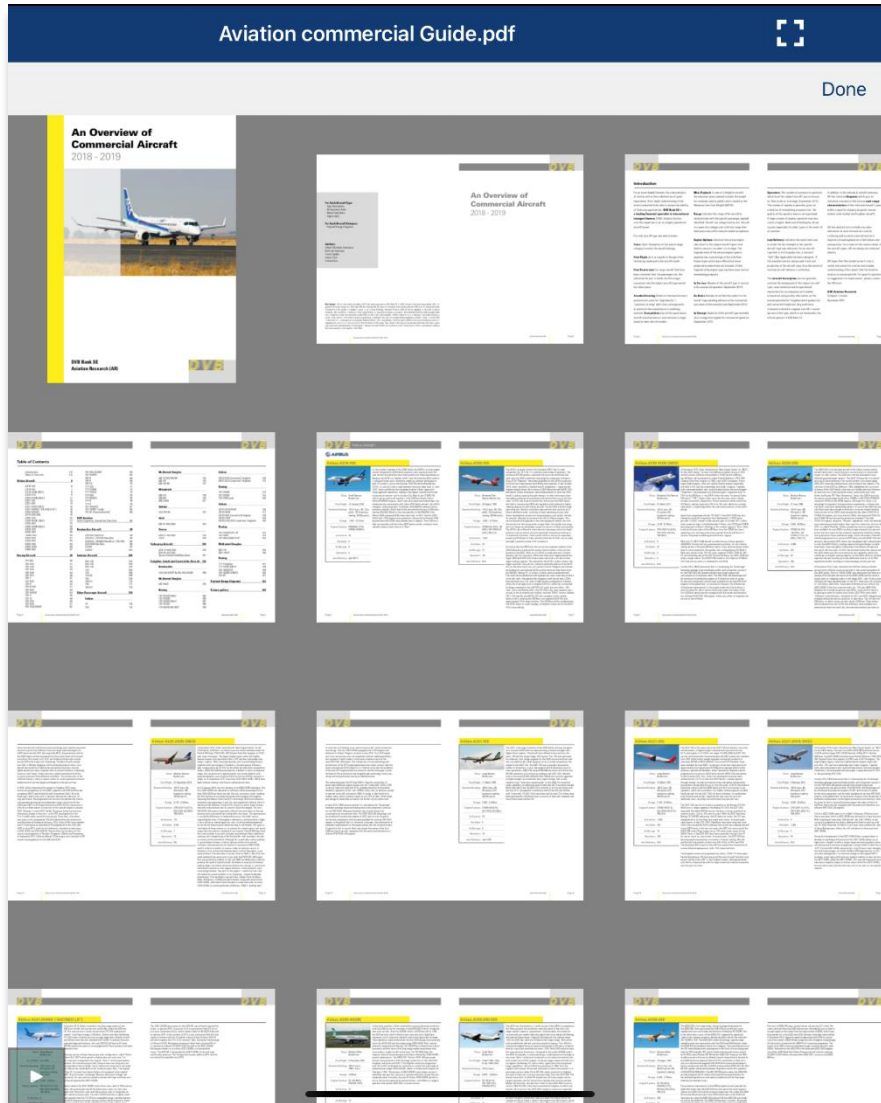
## 19 Appendix D | PDF Viewer

Aero App users have access to a PDF file that includes Chart Supplements, Giant Reports, Planning Books, Legends, or User Documents.

### 19.1 Multiple Page

There are multiple instances where users will have access to a PDF, including Chart Supplements, Giant Reports, Planning Books, Legends, or user documents.

1. Open a PDF from the options mentioned above.
2. Tap on the **grid view** icon.
3. Swipe up or down to see all pages.



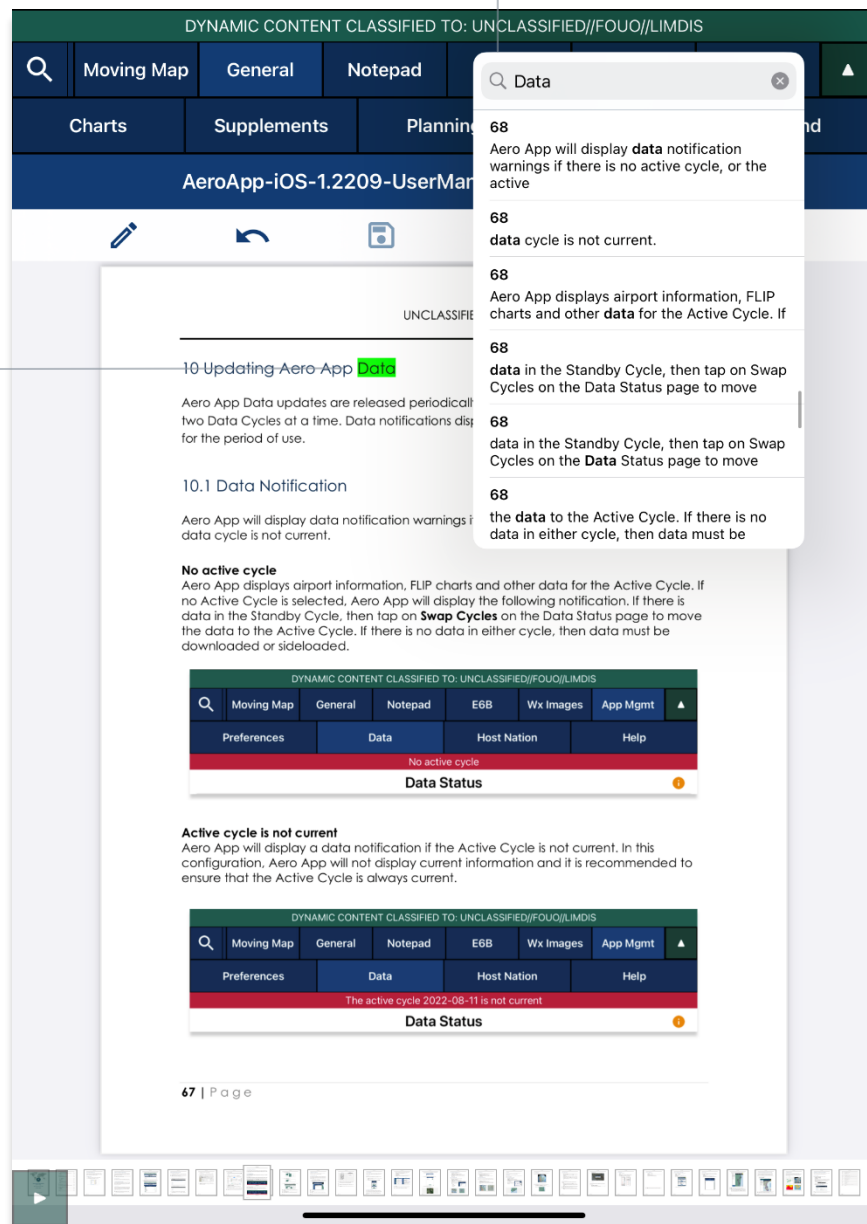
## 19.2 PDF Search

The PDF Search feature enables users to search keywords in a PDF file.

1. Navigate to desired PDF file.
2. Tap the **PDF Search** button.
3. Enter keyword(s) to search.
4. Select from the results.
5. The keyword will be highlighted on the selected page.

PDF Search icon

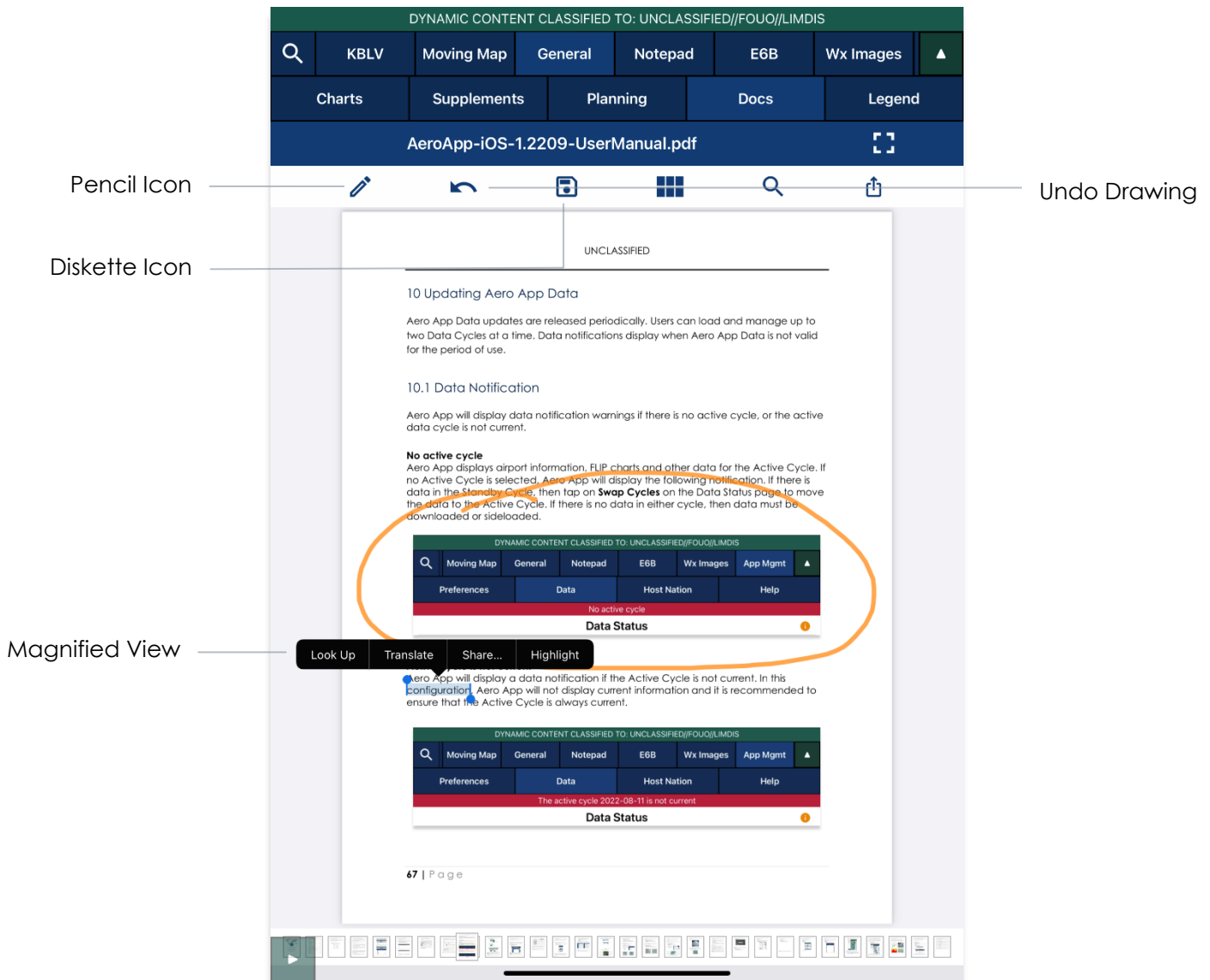
Keyword is Highlighted



## 19.3 PDF Markup

Users can draw and highlight text on a PDF. The markings will be saved on Aero App and can be later accessed.

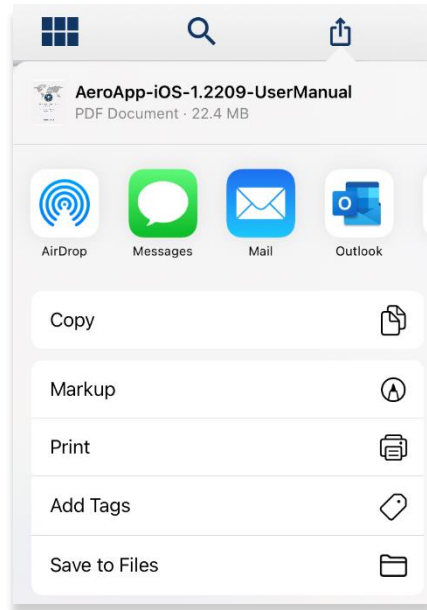
1. Navigate to your desired PDF file.
2. Tap on the **Pencil** Icon to enable drawing mode.
3. Make the desired markings anywhere on the PDF file.
4. Tap the **Pencil** Icon again to disable drawing mode.
5. Tap the **Reverse** Icon to undo your recent markup.
6. Tap the **Diskette** Icon to save all markups on your PDF file.
7. Long-press on your desired text in the body of your document.
8. A magnified view will appear, select **Highlight** and your text will be highlighted.





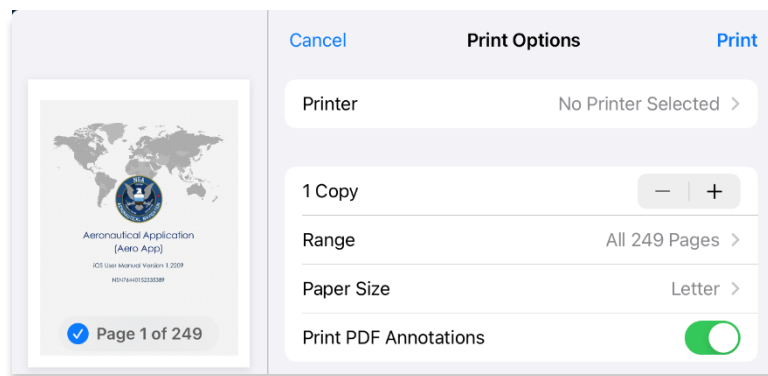
## 19.4 Share or Copy

1. Display desired PDF.
2. Tap on the **Share** icon.
3. Users will be presented with additional PDF options such as Copy, Markup, Print, Add Tags, and Save to Files. Select desired option.



## 19.5 Print

1. Display selected PDF.
2. Tap on the **printer** icon.
3. Select printer, number of copies, and range.
4. Tap **Print**.



## 20 Appendix E | FAA Addendum

The sections ahead will elaborate on the additional features Aero App offers FAA users.

### 20.1 Downloading FAA Uncertified Data

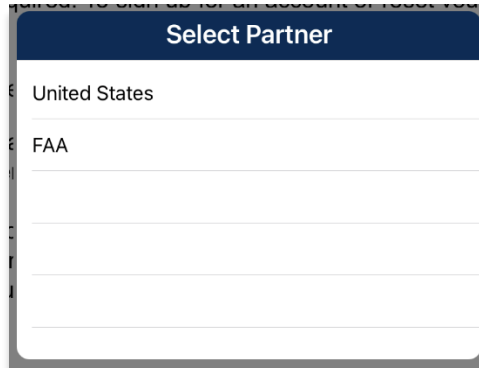
Pilots with Aero User Database (AUD) credentials and who have access to FAA as their government foreign partner will have access to the FAA data. FAA partner data is available to select users. To obtain FAA features, FAA Global must be included when downloading data.

1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **AWS** option, if necessary.
5. Tap the **Aero User Database** option.
6. Enter user's credentials then tap **Connect**.

User's Credentials

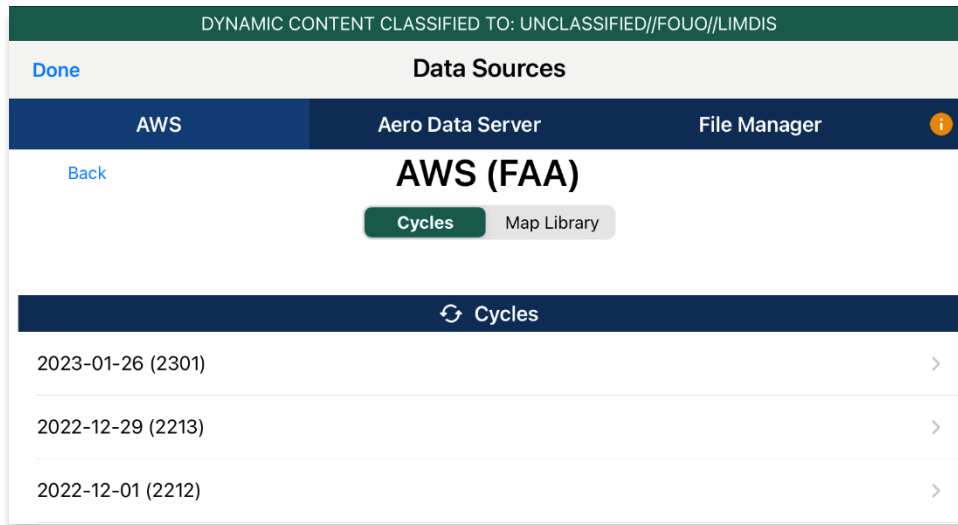
The screenshot shows a mobile application interface. At the top, a dark green header contains the text "DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS". Below this is a light gray bar with "Done" on the left and "Data Sources" in the center. A dark blue navigation bar contains three options: "AWS", "Aero Data Server", and "File Manager", with an information icon on the right. The main content area is titled "AWS - Fast Cloud Downloading" and features three tabs: "Aero User Database" (highlighted in dark green), "GEOAXIS", and "MDM". Below the tabs are two input fields: "Username:" and "Password:". A dark green "Connect" button is positioned at the bottom center of the form area.

7. The Select Partner popup will display. Select **FAA** from partners list.

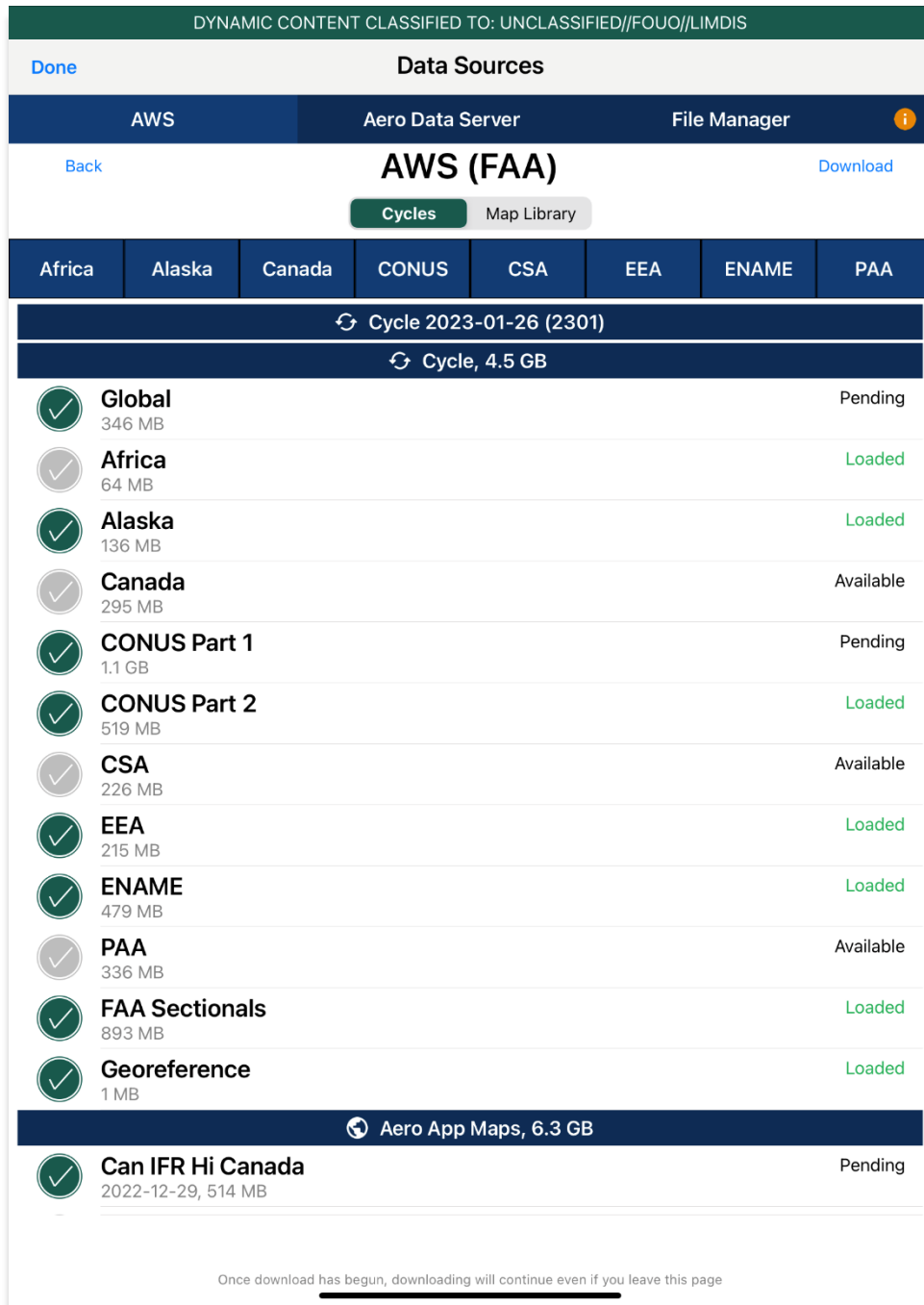


**NOTE:** The Select Partner popup will appear to those who have access to multiple government foreign partners.

8. Users will be prompted to the Data Cycle Download screen. Users are provided with options to download Cycles or Map Library. Select **Cycles**.



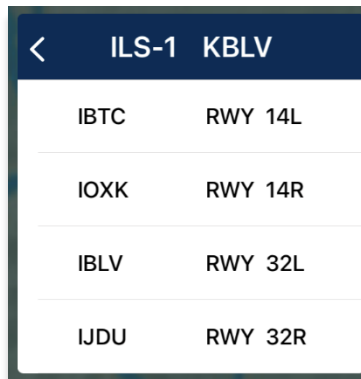
9. Available data pertaining to that cycle will be displayed. Select individual data files or select region Easy Buttons for faster data selection.
10. Tap **Download** once desired data files have been selected.



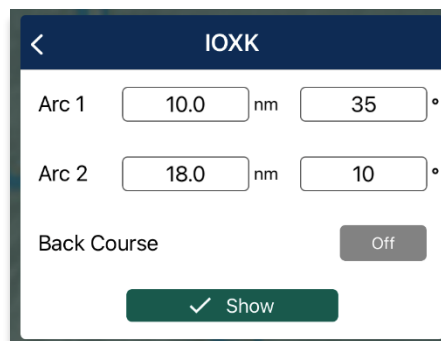
## 20.2 ILS-1 Maneuvers

Aero App supplies an Instrument Landing System (ILS-1) to FAA users which provides short-range assistance when approaching a runway.

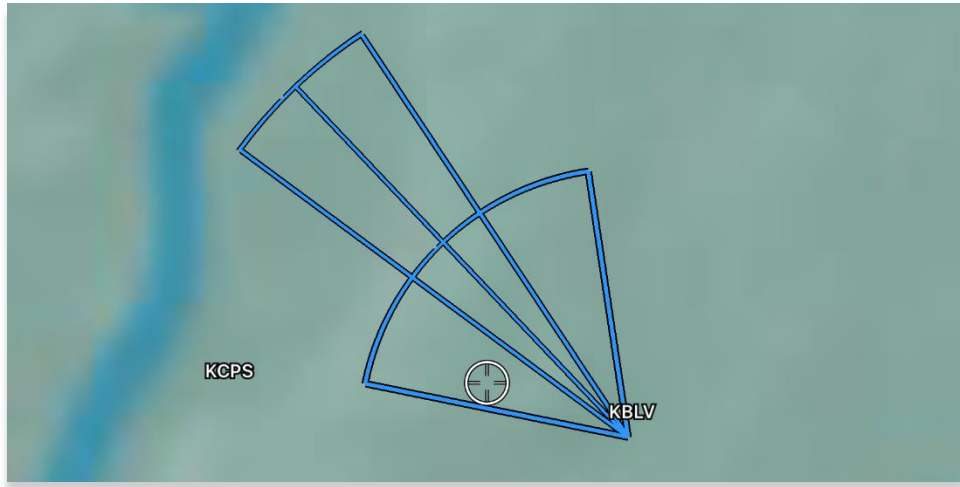
1. Aero App enables users to perform actions to their Moving Map. Users can display the popup in three simple ways:
  - Long pressing a point on the Moving Map
  - Tapping an ICAO on the Moving Map
  - Tapping an ICAO on the Route Panel
2. The Nearest popup will display. Tap an ICAO. The Moving Map's popup menu will display with each option grouped by Actions, Add, and Show.
3. Tap **Show** from the side menu.
4. Tap **ILS-1**.
5. The ILS-1 popup will appear with a list of runways. Select desired runway and the ILS-1 creation popup will display.



6. Enter values in their respective text boxes.
7. Tap to enable Back Course to reverse the position of the ILS-1.



8. Tap **Show** and the ILS-1 will overlay on the Moving Map.



9. To remove the pattern, tap on the ILS-1 maneuver on Moving Map and tap **Hide ILS-1**. The overlay will disappear from the Moving Map.



## 20.3 Add Instrument Approach Procedure (IAP) to Route

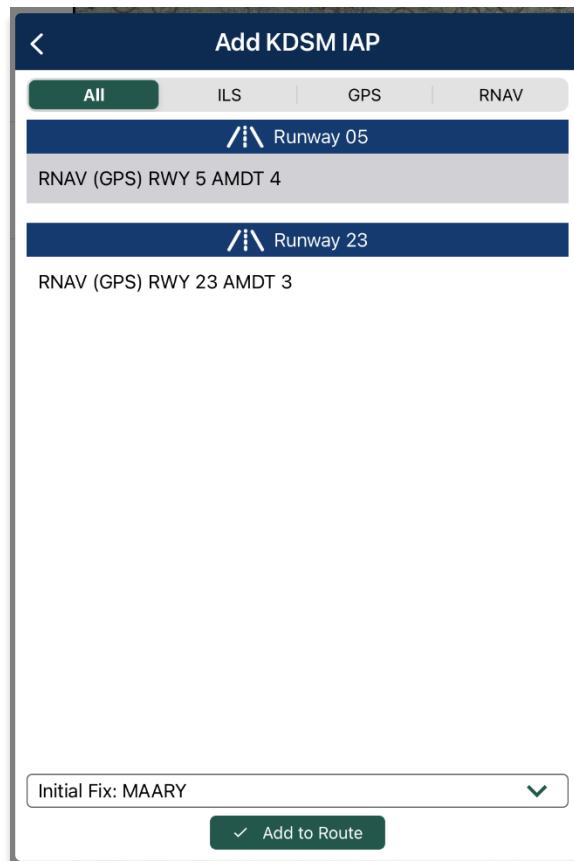
Aero App enables users to add Instrument Approach Procedures (IAP) to their route.

1. Tap **Moving Map** on the **Main Menu**.
2. Ensure that a route is loaded in the Route Panel. Select the destination airport from the **Route Panel** or the **Moving Map**.

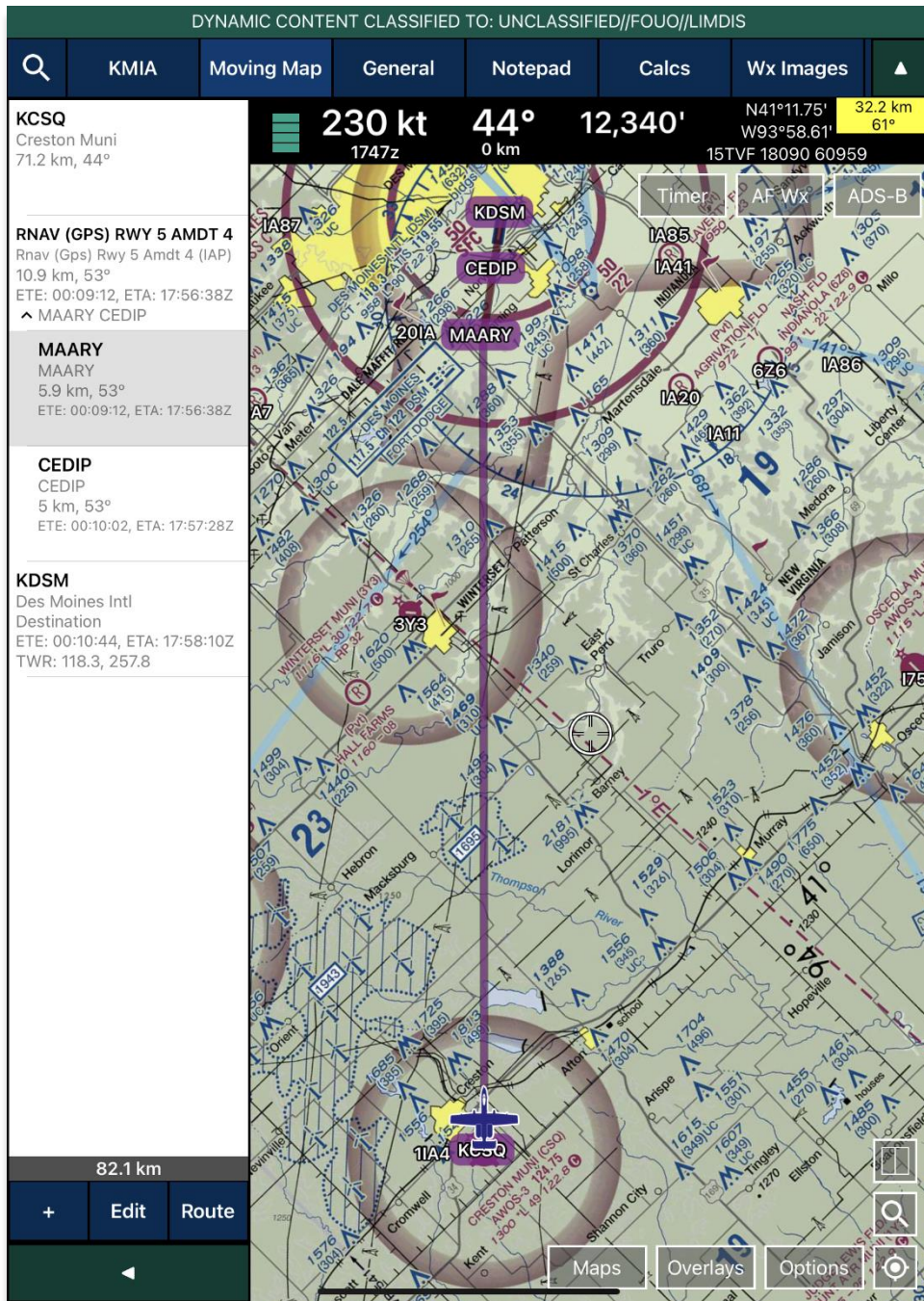


**NOTE:** Select airports will have IAPs available.

3. Tap **Add** from the side menu.
4. Tap **IAP**.
5. A list of IAPs for the identifier will be displayed. Select an **IAP filter** from the segmented control.
6. IAPs are grouped by runways. Select desired **runway**.
7. Once selected, the Initial Fix will become selectable. Tap the drop-down button and select an **initial fix**.
8. Tap **Add to Route**.



9. The procedure will populate to the Route Panel and the Moving Map.





## 20.4 Show DPs and STARs

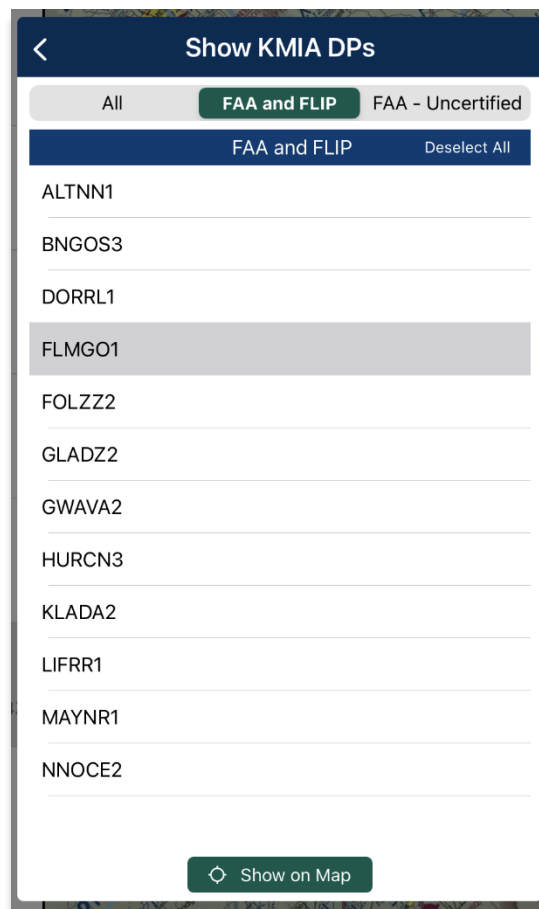
Aero App enables users to display Departure Procedures (DPs) and Standard Terminal Arrival Route (STARs) on the Moving Map.

1. Tap **Moving Map** on the **Main Menu**.
2. Ensure that a route is loaded in the Route Panel. Select a destination or an arrival airport from the **Route Panel** or the **Moving Map**.

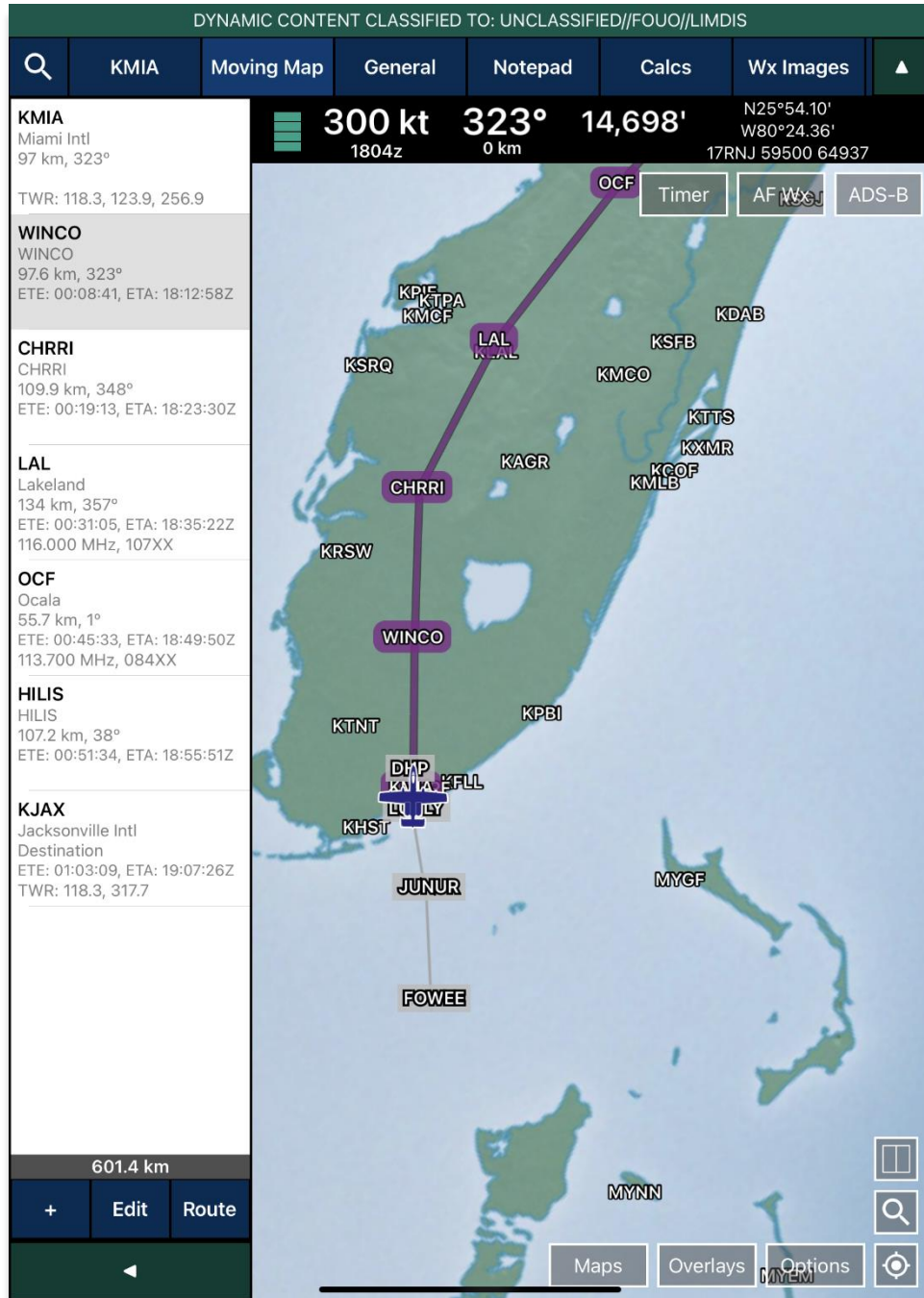


**NOTE:** Select airports will not have DPs or STARs available.

3. The Moving Map popup will appear. Tap **Show** from the side menu.
4. Scroll to the bottom of the popup to display additional options. Select **DPs** or **STARs**.
5. The Show <identifier> DPs or Show <identifier> STARs popup will appear, respective to the selected procedure. Tap to select or slide the segmented control to *FAA and FLIP*, *FAA – Certified*, or *All* for procedure type selection.



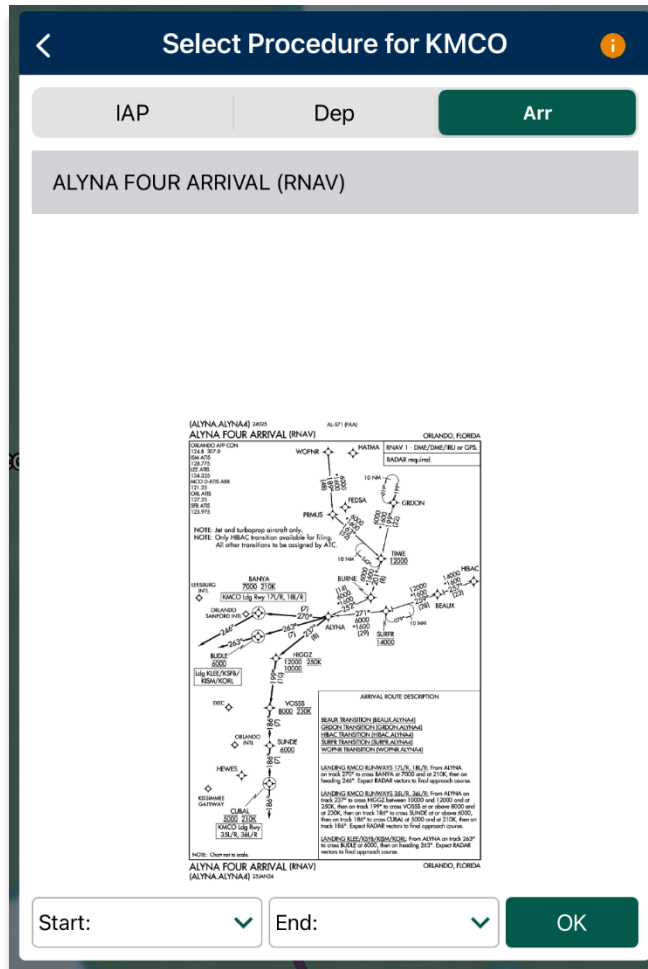
6. Tap **individual procedures** or tap **Select All**.
7. The Show on Map button will become selectable. Tap **Show on Map**.
8. The procedure will be displayed on the Moving Map.



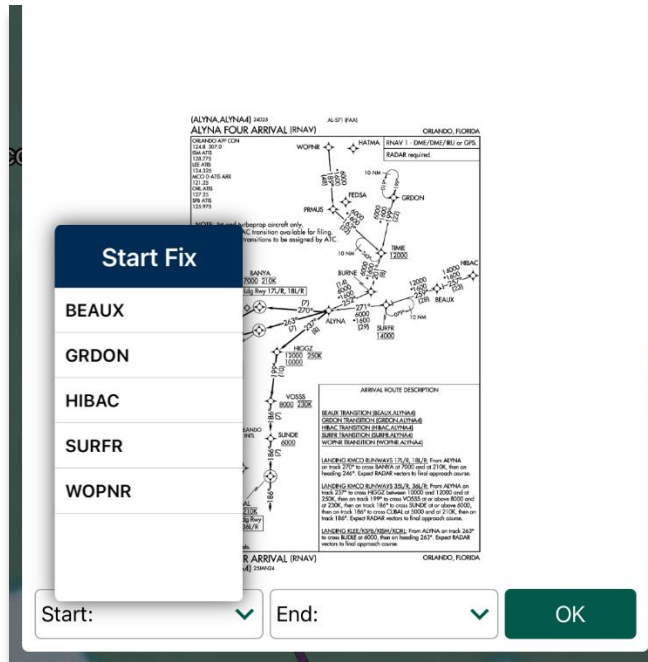
## 20.5 Controlling Obstacle

Controlling Obstacle includes FAA Procedures, Circling, Runways, Obstacles, and Fixes to aid pilots of potential obstructions that may pose a threat to their ownship.

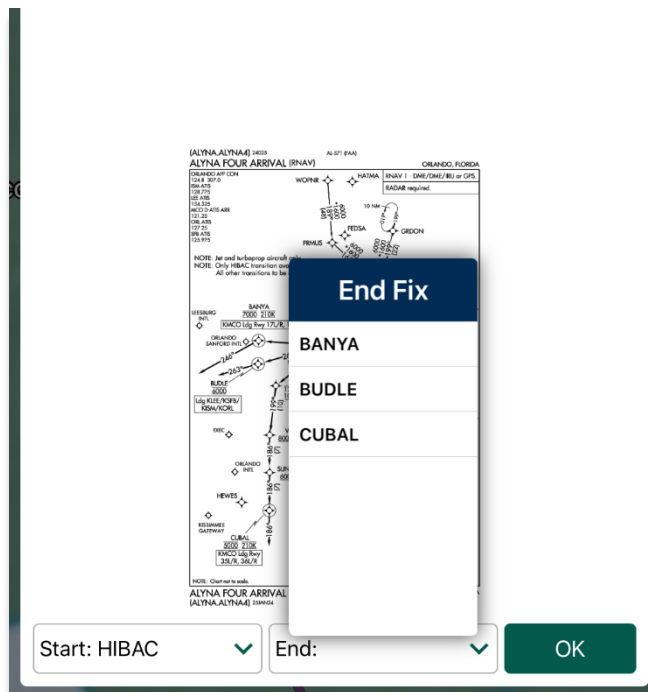
1. Tap **Moving Map** on the **Main Menu**.
2. Ensure that a route is loaded in the Route Panel.
3. Select a desired point from your route. The Moving Map popup menu will appear.
4. Select **Add** from the side menu.
5. Select **Controlling Obstacle**. The Select Procedure popup menu will appear.
6. Tap to select or slide the segmented controller to desired procedure (IAP, Dep, or Arr).
7. Select desired chart.



- Notice the *Start* and *End* dropdown buttons become selectable. Tap **Start** to display *Start Fix* options. Select desired **Start Fix**.



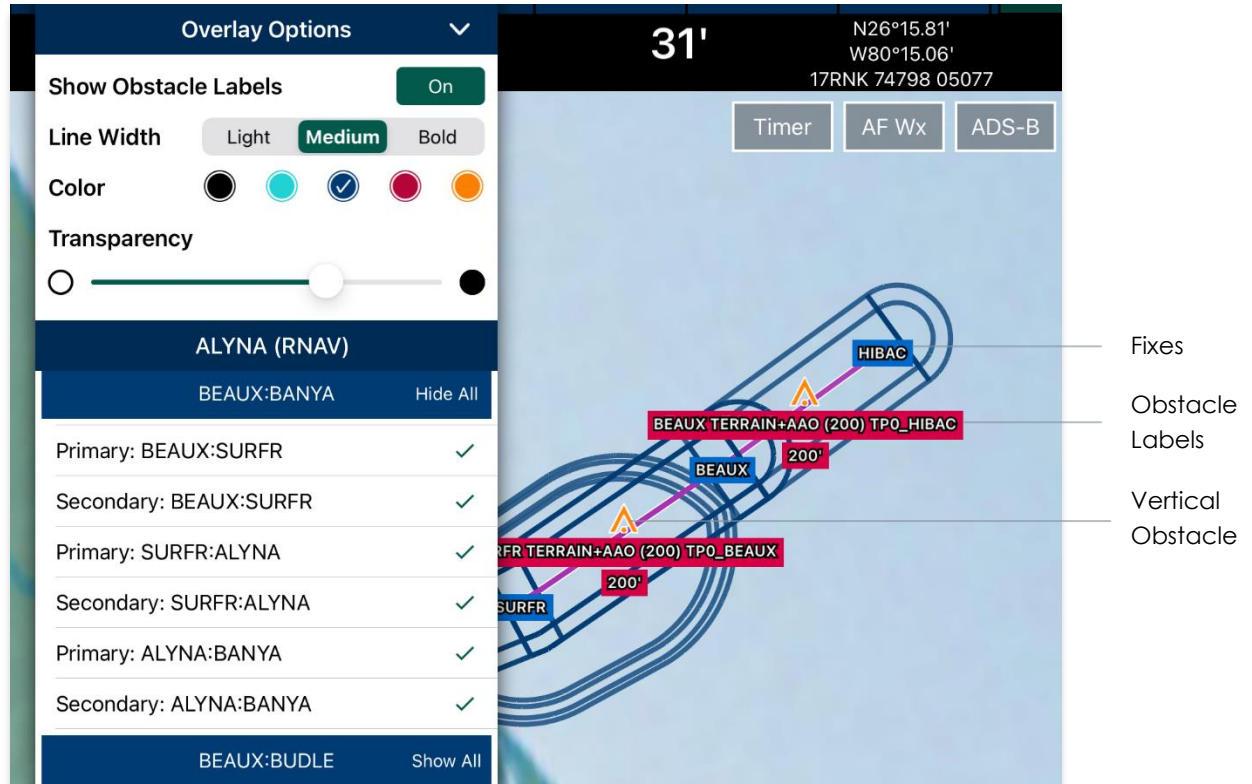
- Tap **End** to display *End Fix* options. Select desired **End Fix**.





The controlling obstacle will display all its respective points. Users have the option to select and deselect desired points to show on the map. Tap the Controlling Obstacle overlay, and the following options will display:

- **Modify Overlay** – provides overlay configuration options such as:
  - **Show Obstacle Labels** – when enabled, each VO will display a red label containing its respective name and height in feet.



**NOTE:** Selecting a vertical obstacle (orange obstacle icon) will display its respective obstacle information.

- **Line Width** – options to adjust the line weight
- **Color** – options to switch the overlay's line color
- **Transparency** – options to adjust the translucency of the overlay display

- **Hide All/ Show All/ or individual selections** – Hide All deselects all points and Show All selects all points for the respective category. Users have the option to individually select desired points. Every action will update the display on the map in real-time.

The screenshot shows a mobile application overlay with three sections:

- ALYNA (RNAV)**: A blue header with a 'Hide All' button. Below it are six items, each with a checkmark:
  - Primary: BEAUX:SURFR ✓
  - Secondary: BEAUX:SURFR ✓
  - Primary: SURFR:ALYNA ✓
  - Secondary: SURFR:ALYNA ✓
  - Primary: ALYNA:BANYA ✓
  - Secondary: ALYNA:BANYA ✓
- BEAUX:BUDLE**: A blue header with a 'Show All' button. Below it are six items, none with checkmarks:
  - Primary: BEAUX:SURFR
  - Secondary: BEAUX:SURFR
  - Primary: SURFR:ALYNA
  - Secondary: SURFR:ALYNA
  - Primary: ALYNA:BUDLE
  - Secondary: ALYNA:BUDLE
- BEAUX:CUBAL**: A blue header with a 'Hide All' button. Below it are three items, each with a checkmark:
  - Primary: BEAUX:SURFR ✓
  - Secondary: BEAUX:SURFR ✓
  - Primary: SURFR:ALYNA

At the bottom of the overlay is a green button with a checkmark and the text 'OK'. Annotations on the right side of the image point to the 'Hide All' button of the first section, the 'Show All' button of the second section, and the checkmarks of the third section.

- **Hide Overlay** – stores away overlay
- **Overlay Info** – provides a collection of obstacles that includes its respective segment, entry and exit fix, AGL, MSL, and type.

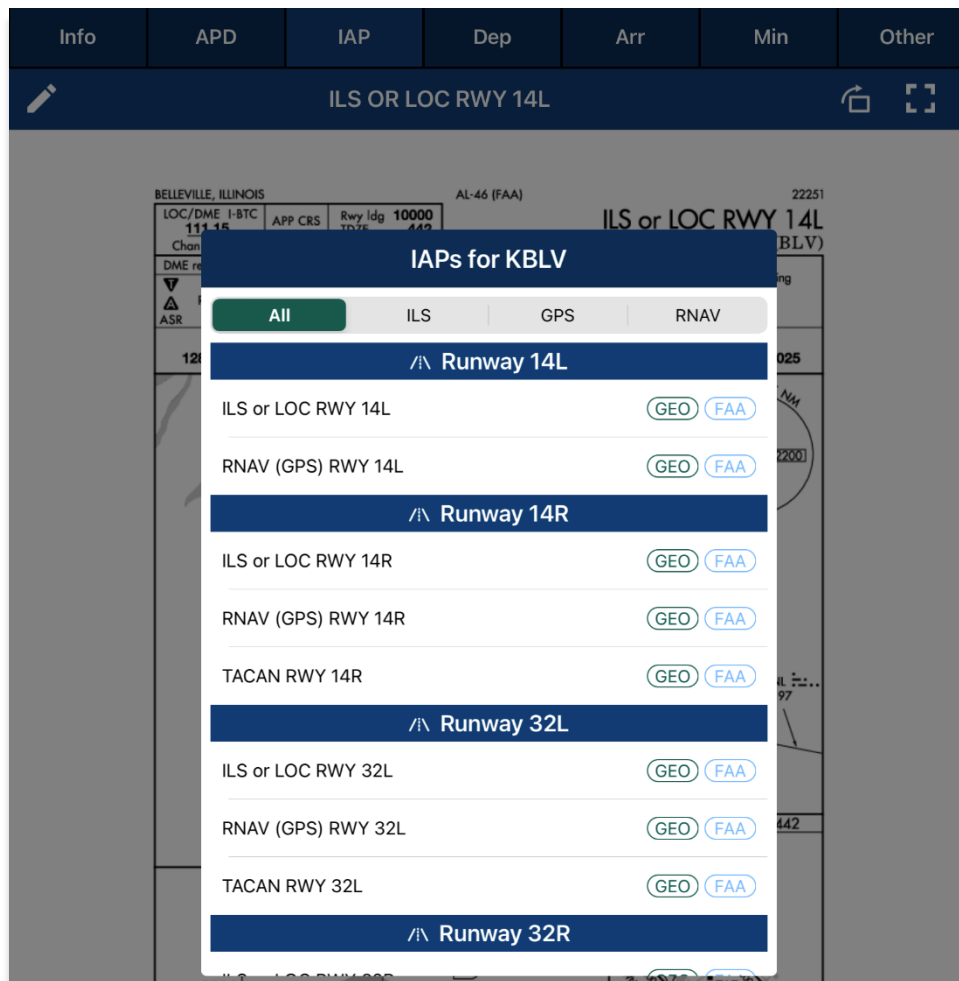


**NOTE:** The blue labels on the overlay are the names of the fixes.

## 20.6 FAA Special Procedure

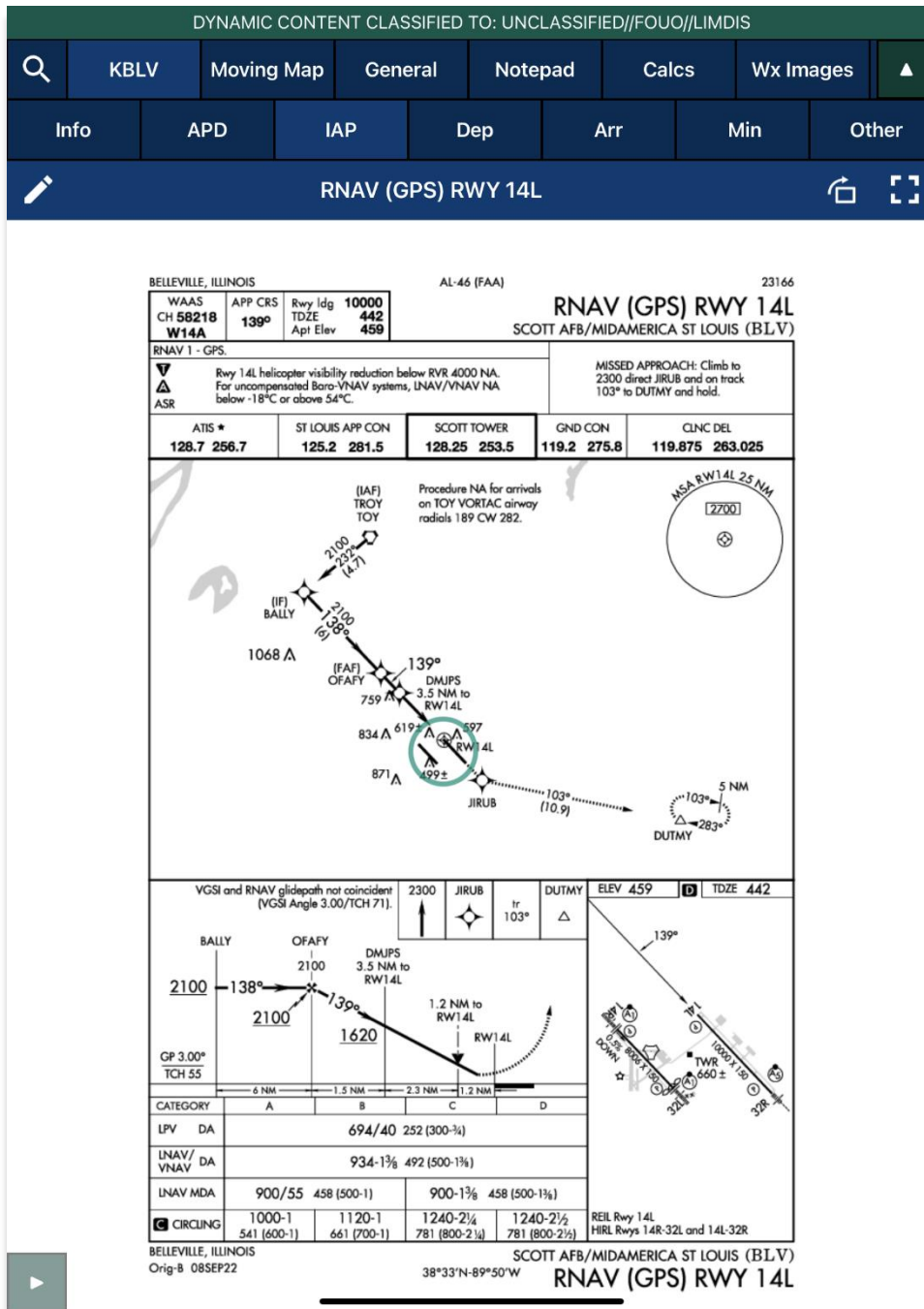
Aero App enables FAA users to have access to FAA procedures.

1. Ensure that you have an ICAO loaded on the Active Point by tapping **Search** and entering desired ICAO.
2. Tap the **Active Point** on the **Main Menu**.
3. Tap **IAP** on the **Secondary Menu**.
4. Tap the action ribbon and the IAP selection popup will display.
5. A list of IAPs for the identifier will be displayed. Select an **IAP filter** from the segmented control.





- The FAA Special procedures will list and are grouped by runways. Select desired procedure and the chart will display on the screen.

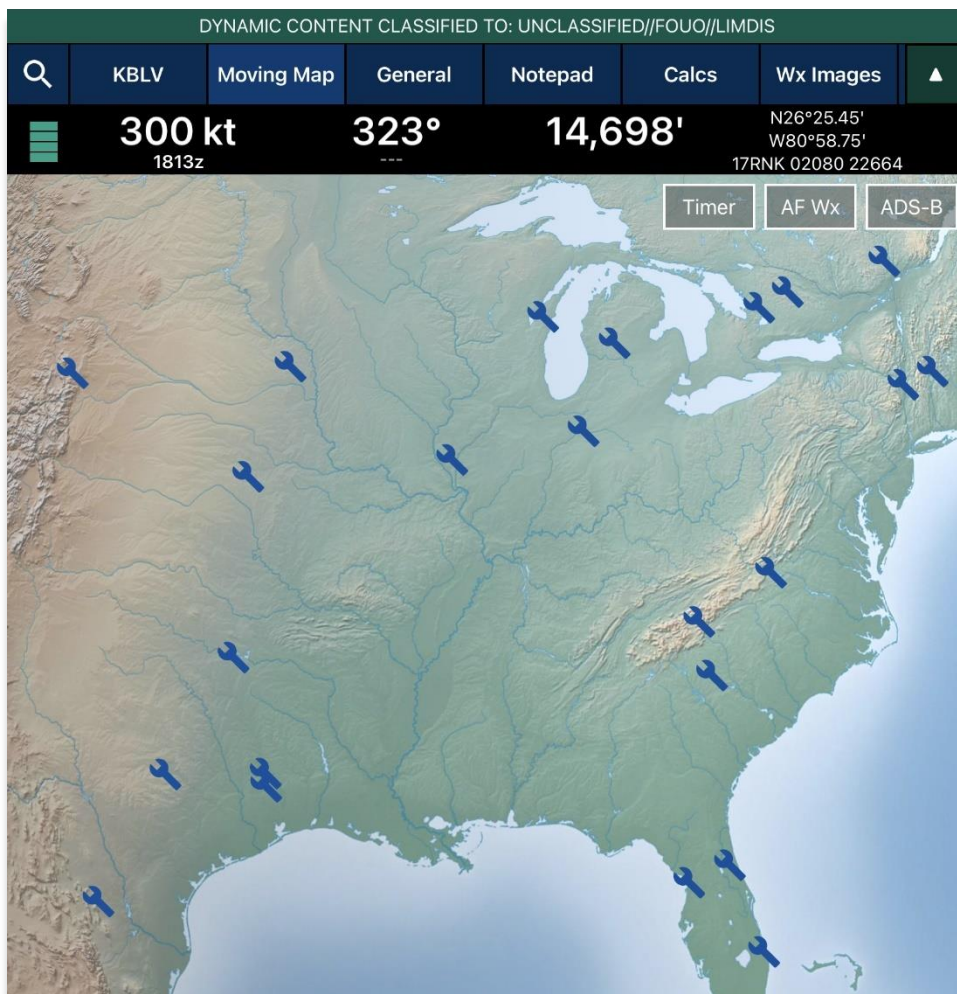


**NOTE:** FAA Special procedures are only available for select airports.

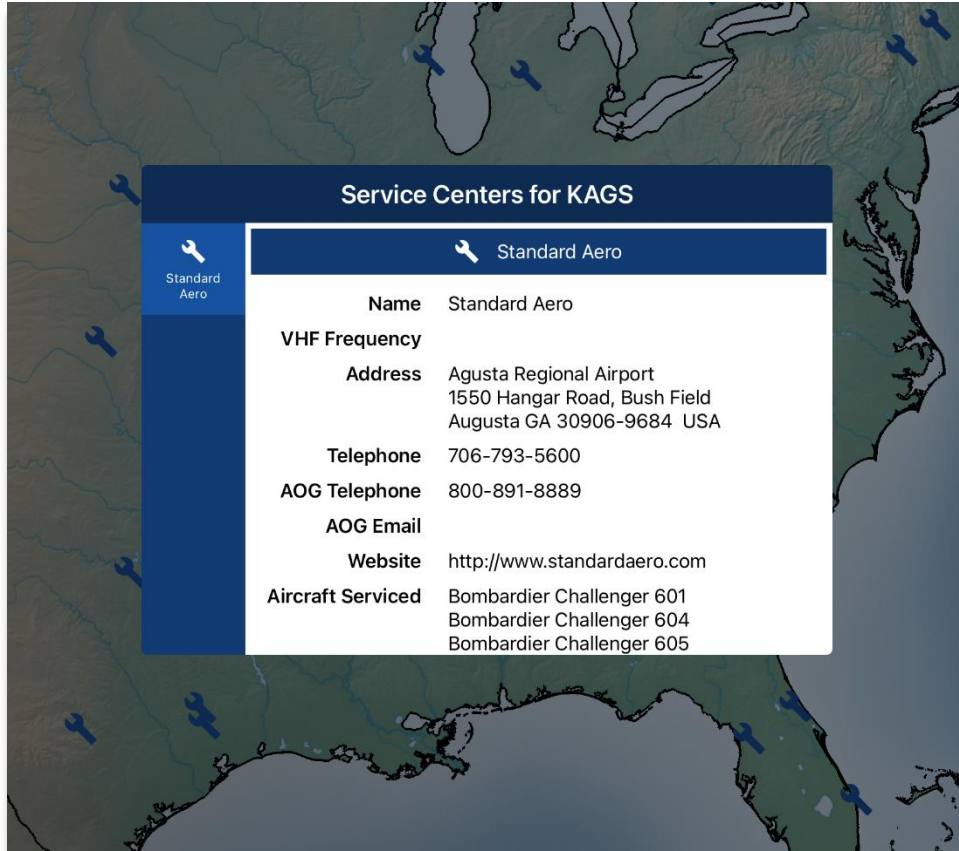
## 20.7 Authorized Aircraft Service Centers

Aero App enables users to overlay Authorized Aircraft Service Centers on the Moving Map. Authorized Aircraft Service Centers are locations where aviation services supply immediate transportation to emergency and non-emergency situations from locations globally. Authorized Aircraft Service Centers are presented by blue wrench icons populated on the Moving Map.

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map screen.
3. Tap **Aero Overlays** from the side menu, if necessary.
4. Tap to enable **Service Centers** and wrench icons will populate on the available locations of the Moving Map.



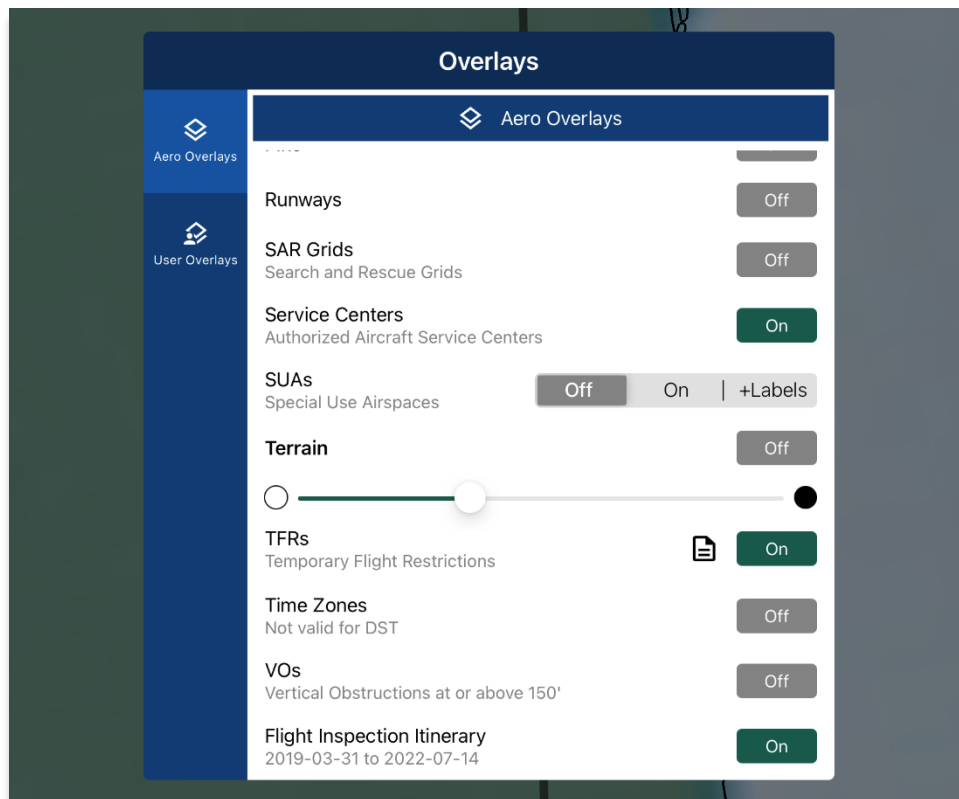
- By tapping the **Service Centers** icon, a popup will display with the respective service center information.



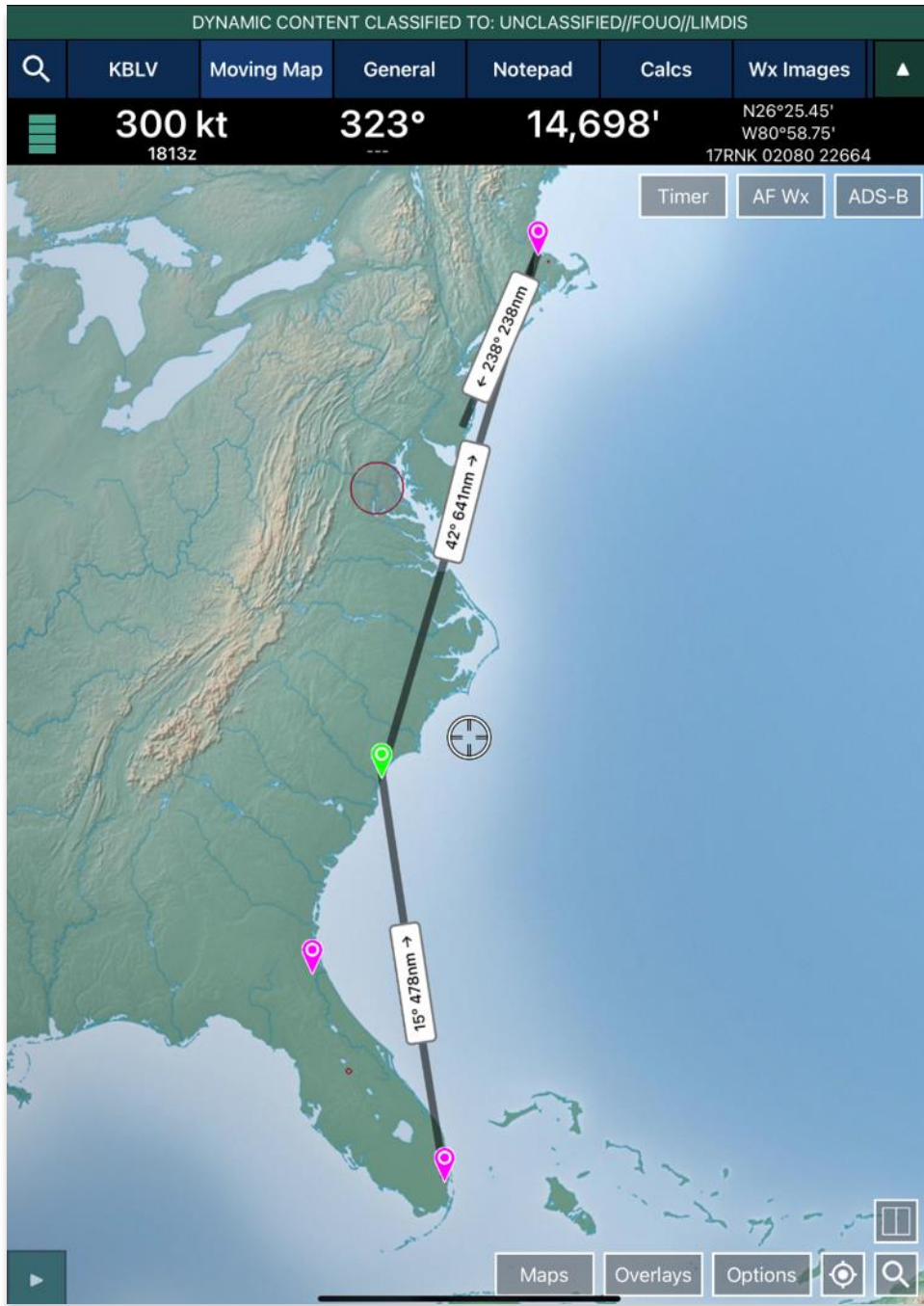
## 20.8 Import and Display Scheduled Flight Inspection Itineraries

Aero App enables users to import their Flight Operations Management Systems (FOMS) itineraries to Aero App which grants users the ability to overlay the route on the Moving Map.

1. To share an itinerary with Aero App, launch the FOMS app and navigate to an itinerary item.
2. Tap on the **Share** button and select desired method of sharing.
3. From your device, navigate to the appropriate platform which the itinerary item was shared to.
4. Tap **Save** and select **Aero App**.
5. To verify if the files have been properly imported, navigate to the **Overlays** tab on the Moving Map screen.
6. Tap **Aero Overlays** from the side menu.



7. Locate the Flight Inspection Itinerary then tap to enable the option. The route will be displayed on the Moving Map.

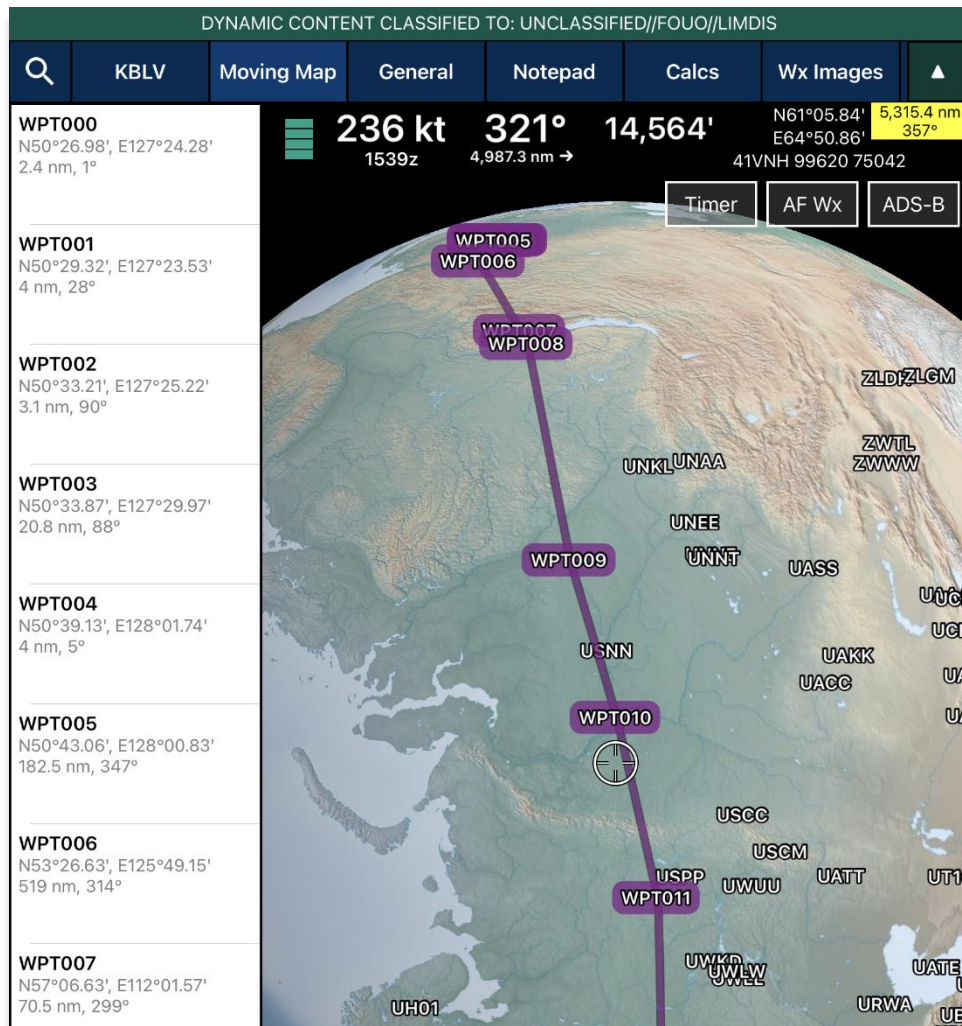


**NOTE:** One Flight Inspection Itinerary can be loaded at a time. Loading a new Flight Inspection Itinerary will result in deleting the previous itinerary.

## 20.9 Add KML Coordinates to Route

Aero App enables users to add KML coordinates to route. KML routes can be obtained from [flightaware.com](http://flightaware.com) then sideloaded into Aero App.

1. Tap **Moving Map** on the **Main Menu**.
2. Navigate to the *Collapsible Route Panel*. The Route Panel will expand.
3. Tap **Route**.
4. Tap **Actions** from the side menu, if necessary.
5. Tap **Load**.
6. Locate and tap the desired KML route. The route will populate to the *Route Panel* and on the *Moving Map*.



7. To delete a KML route, swipe right-to-left- to reveal the delete button. Tap **Delete**.

## 20.9.1 Show KML Coordinates in Show Routes

Users can display KML coordinates in Show Routes. Ensure that KML coordinates are sideloaded into Aero App.

1. Tap **Moving Map** on the **Main Menu**.
2. Navigate to the *Collapsible Route Panel*. The Route Panel will expand.
3. Tap **Route**.
4. Tap **Show** from the side menu.
5. Select **Routes**. The *Show Routes* will be displayed.
6. Select desired KML route. The route will populate to the *Route Panel* and on the *Moving Map*.



## 21 Appendix F | Acronyms and Glossary

.ask	Android package file format for distribution and installation of mobile apps and middleware
A/FD	Airport Facility Directory
ADDS	Aviation Digital Data Service
ADS	Aero Data Server
ADS-B	Automatic Dependent Surveillance-Broadcast
AF Wx	Air Force Weather
AirDrop	Ad-hoc service in Apple's macOS and iOS operating systems which enables the transfer of files among supported Apple computers
AIRMET	Airmen's Meteorological Information
Alt Min	Alternate Minimums
AP	Area Planning
APD	Airport Diagram
App Mgmt	Application Management
AQP	Advanced Qualification Program
AR	Air Refueling Route
ARR	Airport Arrival Procedure
ARTCC	Air Route Traffic Control Center
ASPS	Aeronautical Source Packaging Service
AUD	Aero User Database
AvGas	Aviation Gasoline
AWS	Amazon Web Services
Breadcrumbs	GPS points along a flight path
CAC Card	Common Access Card
CONUS	Contiguous United States
CRD	Common Route Definition
CSA	Caribbean and South America
Delta	Upgrades from previous data cycles that only include changes
Dep	Airport Departure Procedures
DINS	Defense Internet NOTAM Service
DLA	Defense Logistics Agency
Docs	User-defined content loaded into document library
DOD	Department of Defense
DP	Departure Procedures
DSN	Defense Switched Network
DVD	Digital Versatile Disc
E6B	Aviator's calculator
EEA	Eastern Europe and Asia
EFB	Electronic Flight Bag
E-IPL	Electronic – Instrument Procedure Library
ENAME	Europe, North Africa, and Middle East
ETA	Estimated Time of Arrival
ETE	Estimated Time Enroute
FAA	Federal Aviation Administration
FIR	Flight Information Region



FIS-B	Flight Information Services-Broadcast
FLIP	Flight Information Publications and Flight Information Products
Ft	Foot
GARS	Global Area Reference System
GB	Gigabyte
GEOAxis	Credentials authentication provider for the government
GEOINT	Geospatial Intelligence
GPS	Global Positioning System
GS	Ground Speed
Hdg	Heading
IAP	Instrument Approach Procedures
iBook	E-book application by Apple
ICAO	International Civil Aviation Organization that assigns airport code or location indicator as an alphanumeric code designating aerodromes around the world
IFR	Instrument Flight Rules
iOS	Mobile operating system created by Apple
IP	Internet Protocol
IPA	iOS application archive file which stores an iOS app
IR	Instrument Routes
KG	Kilogram
KM	Kilometer
KML	Keyhole Markup Language
KMZ	Keyhole Markup Language Zipped
Kt	Knot
LAHSO	Land and Hold Short Operations
Lat, Lon	Latitude and Longitude
Lbs	Pounds
LIFR	Low Instrument Flight Rules
M	Meter
macOS	Current series of Unix-based graphical operating systems by Apple
MDM	Mobile Device Management
METAR	Meteorological Aerodrome Report. Aviation Routine Weather Report, a format for reporting weather information
Mgmt	Management
MGRS	Military Grid Reference System
Moving Map	Navigation system displaying the receiver's current location at the center of a map
MTR	Military Training Routes
NavAid	A device or system that provides a navigator with navigational data
NEXRAD	Next-Generation Radar
NGA	National Geospatial-Intelligence Agency
NGA GEOINT	NGA web-based capabilities for online, on-demand discovery, and access to geospatial intelligence
NIPRnet	Non-Secure Internet Protocol Router Network
NM	Nautical Mile
NOAA	National Oceanic and Atmospheric Administration
NOTAM	Notice to Airmen
NSN	National Stock Number
OCONUS	Outside Contiguous US

PAA	Pacific, Australasia, and Antarctica
PDF	Adobe Portable Document
PIREP	Pilot Report
PKI	Public Key Infrastructure
POC	Point of Contact
Prog Chart	A map displaying the likely weather forecast for a future time
RNAV	Area navigation, a method of IFR navigation
SAR	Search and Rescue
SD Card	Secure Digital High-Capacity card
Shapefile	Geospatial vector data format for geographic information system (GIS) software
SID	Standard Instrument Departure
SIGMET	Significant Meteorological Information
SM	Statute Mile
SQLite	Relational database management system
SR	Slow Speed Low Altitude Routes
STAR	Standard Terminal Arrival Route
SUA	Special Use Airspace
TAC	Terminal Area Chart
TAF	Terminal Aerodrome Forecast
TFRs	Temporary Flight Restrictions
TO Min	Takeoff Minimums
UIR	Upper Information Region
USB	Universal Serial Bus
VFR	Visual Flight Rules
VO	Vertical Obstruction
VR	Visual Routes
Waypoint	A set of coordinates that identify a point in physical space
WCA	Wind Correction Angle
Wx	Weather
XTK	Crosstrack