



# Aeronautical Application (Aero App)

iOS User Manual Version 1.2310

NSN76440152335389

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## Acknowledgements

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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.

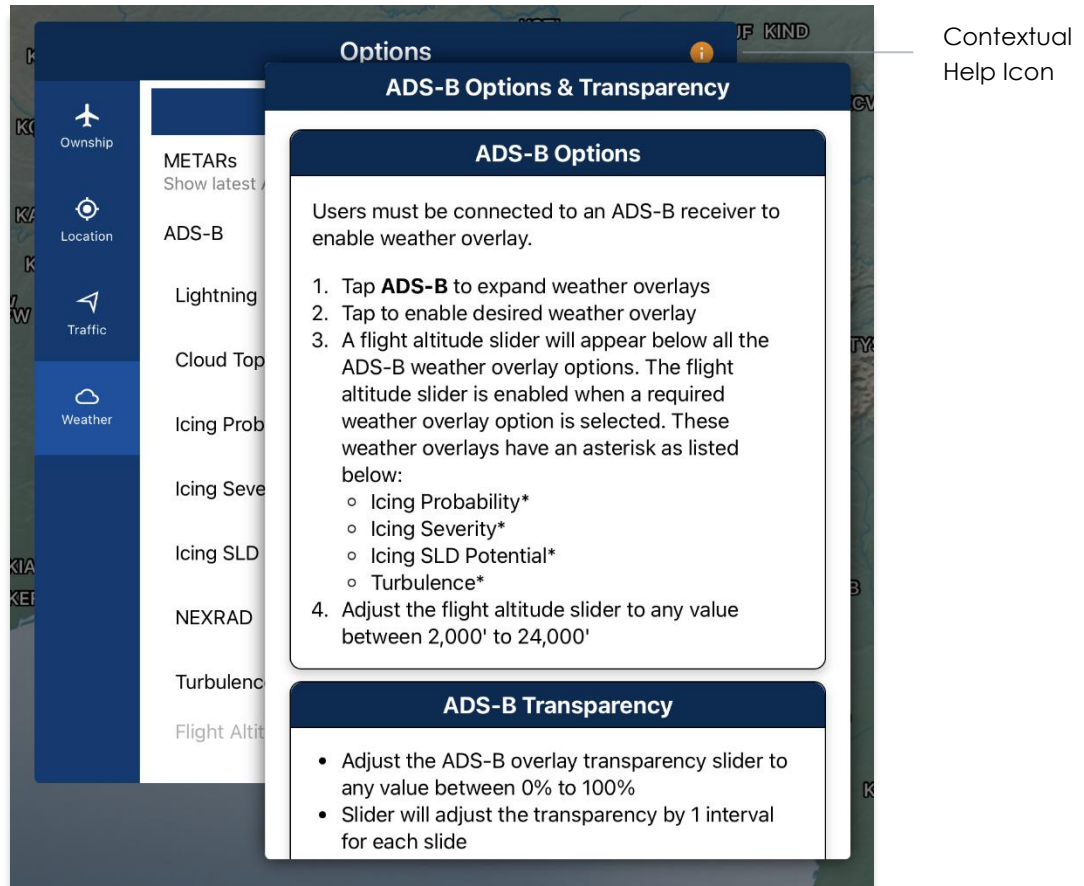
### 3.2.3 Enable Dark Mode Through Device Settings

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

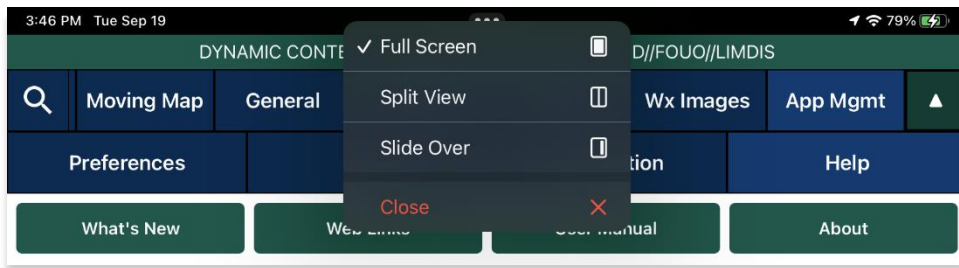
Aero App's contextual help provides a great first-time experience for users to get familiar with certain tools and features within Aero App. The views in Aero App that support contextual help have an orange  icon that displays relevant feature information when tapped. Contextual Help is located all around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

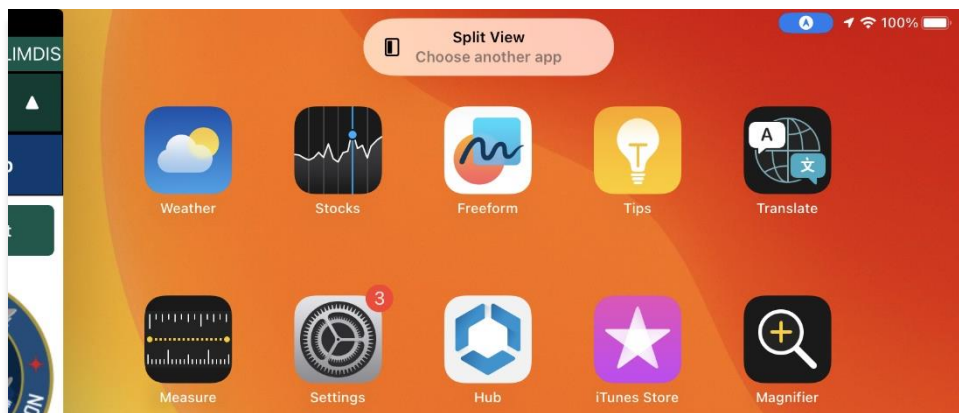


3. Select **Split View**.



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

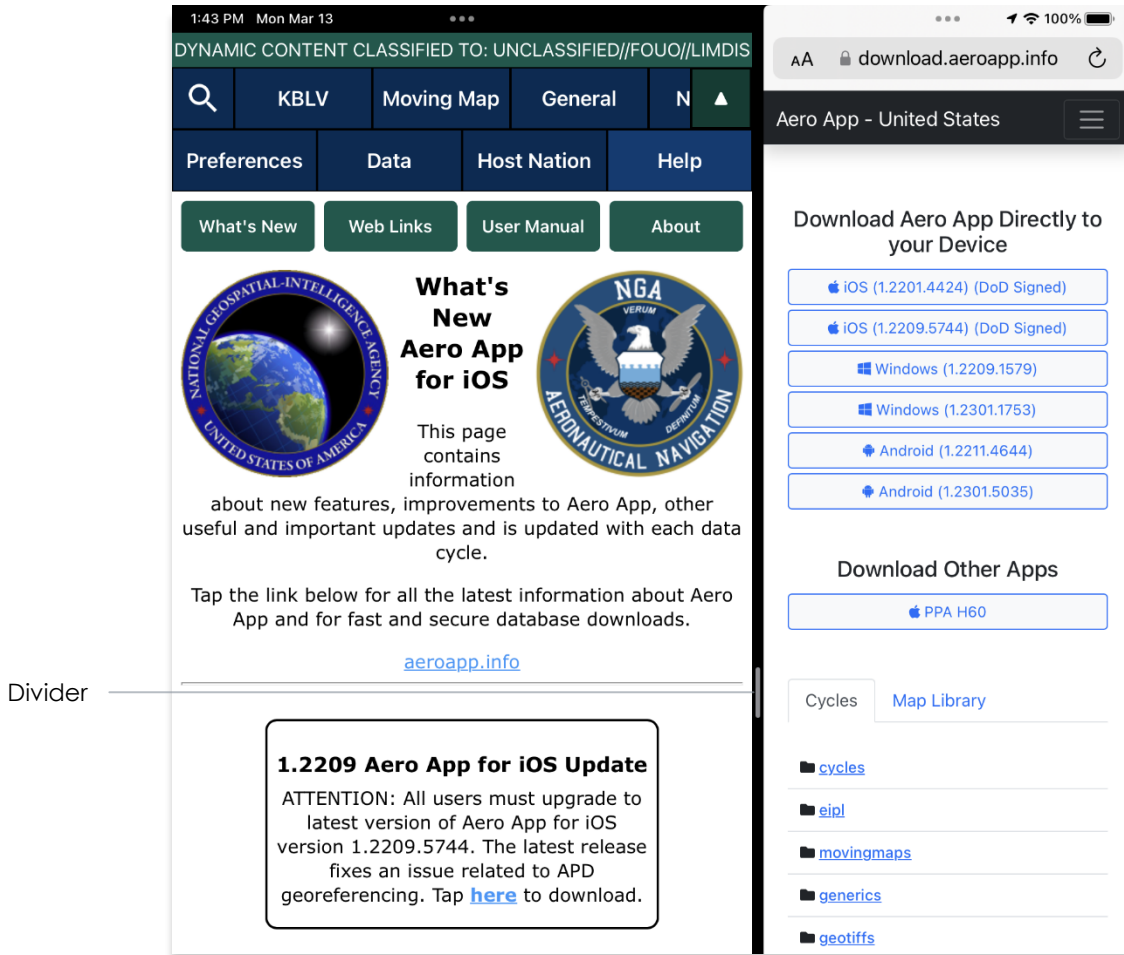
4. Aero App will be pushed to the left side of the screen. Users will be prompted to choose another app. Select desired app for side-by-side app experience.



**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

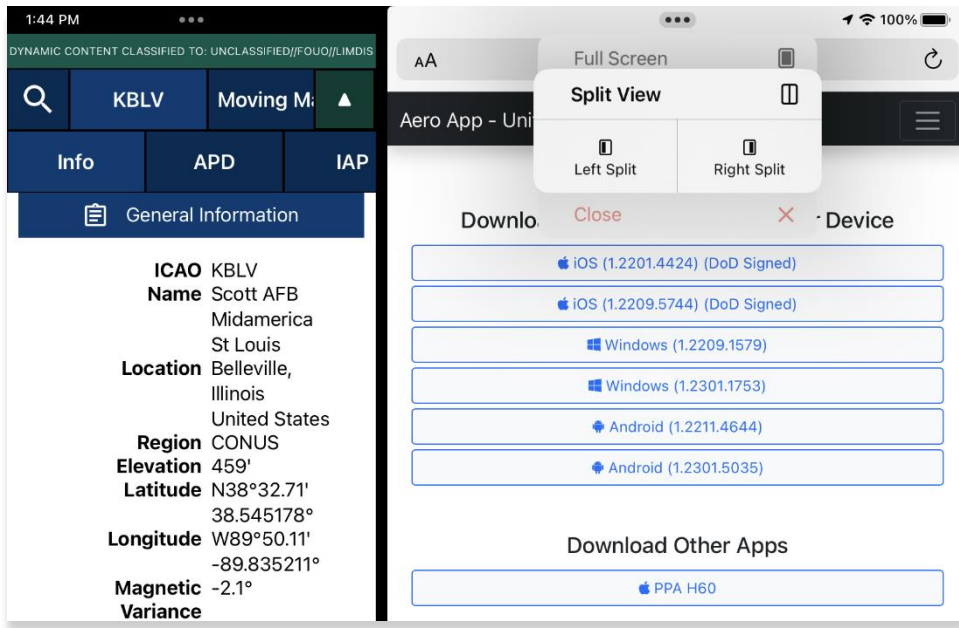


**NOTE:** For best practice, Aero App should be at 60/40 size to allow seamless user experience.

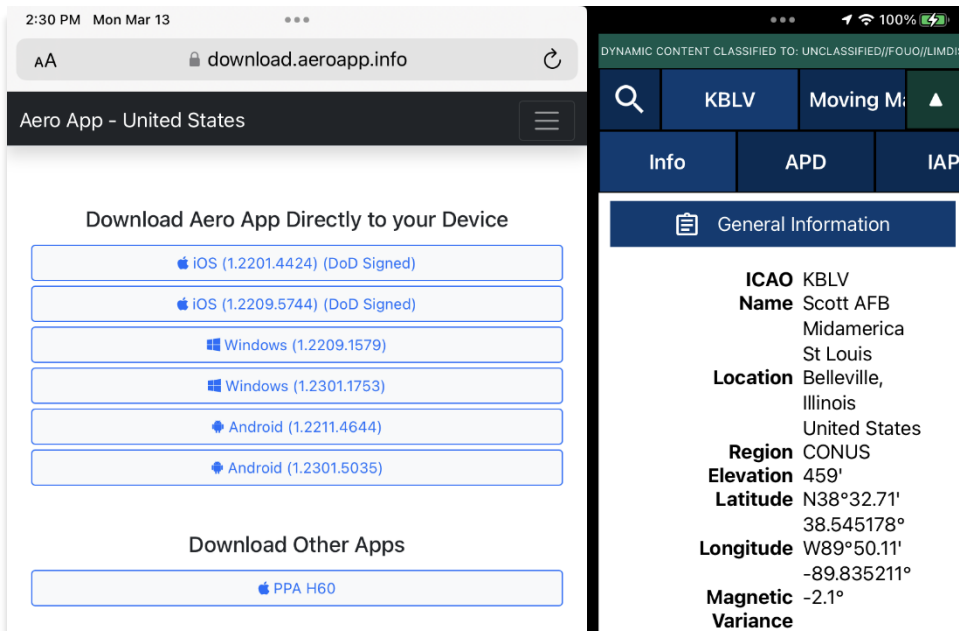


**NOTE:** Multitasking is available on both portrait and landscape mode.

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.



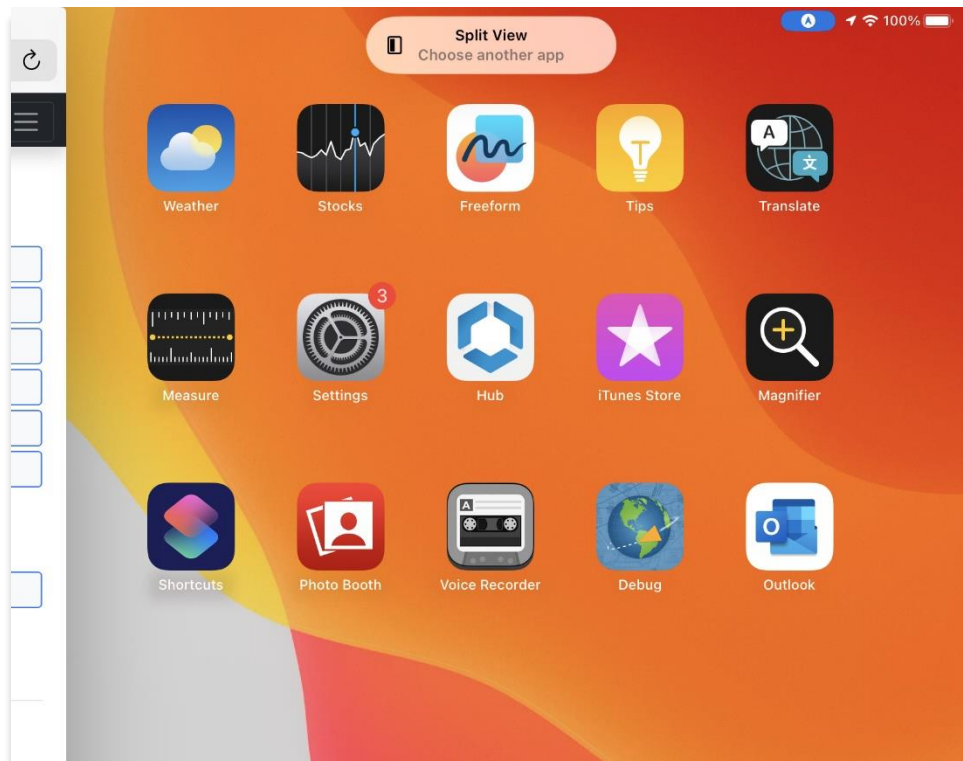
8. Alternatively, users can hold and drag the **three dots** to the desired side of the screen.



## 4.1 Switch Between Apps in Split View

Users can switch between different apps of their choosing.

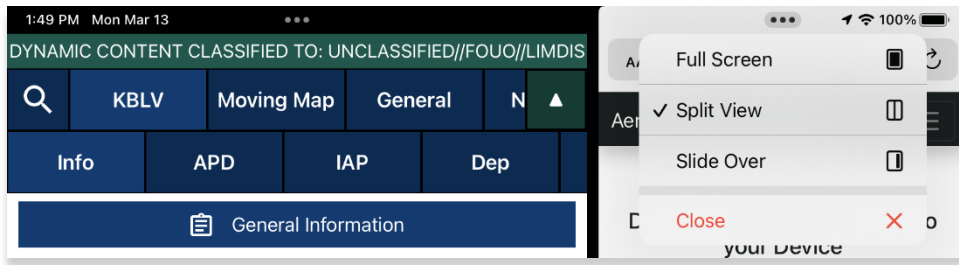
1. To switch to another app in Split View, hold and drag the **three dots** to the bottom edge of the screen.
2. Users will be prompted to choose another app. Select desired app for side-by-side app experience.



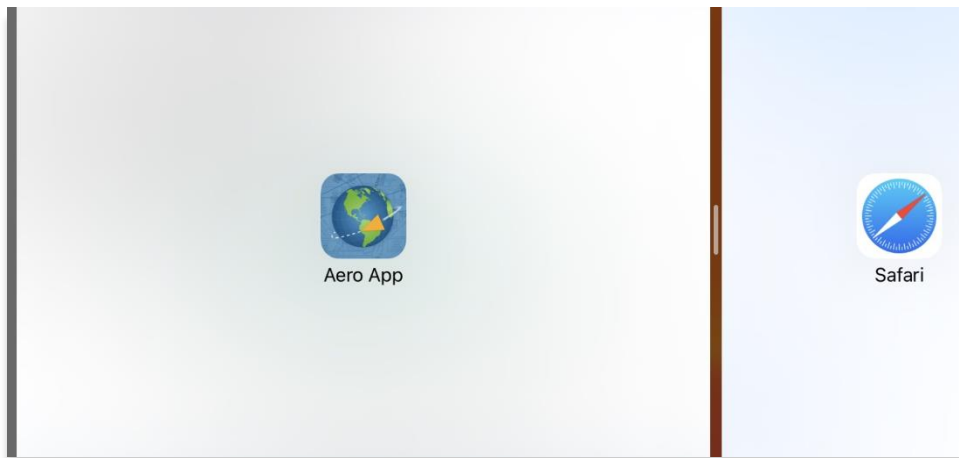
## 4.2 Close Apps in Split View

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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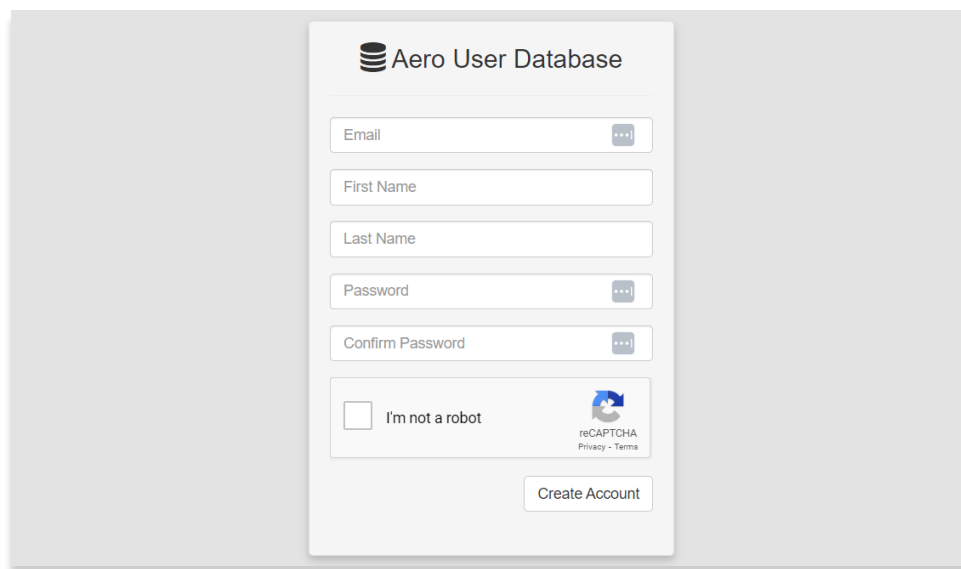
## 6 Accounts

In order to utilize Aero App, it is imperative to possess an active account for Aero User Database or GEOAxis authentications. 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](http://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 will be 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.

**GEOAxis** ENTERPRISE IDENTITY & ACCESS MANAGEMENT

**GEOAxis Authentication**

Please provide one of the following credentials to Authenticate

PKI CERTIFICATE

PKI Certificate

IDENTITY FEDERATION

ID.me

NASA

DHS

Which credential should I choose?

You are attempting to access a resource protected by GEOAxis.

**U.S. Government Warning**

This is a United States Government Computer System. Use of this U.S. Government system, authorized or unauthorized, constitutes consent to monitoring of this system.

For technical assistance, please contact the NGA Enterprise Service Center: 1-800-455-0899 (Commercial), 578-5555 (Secure)



**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.

## 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.

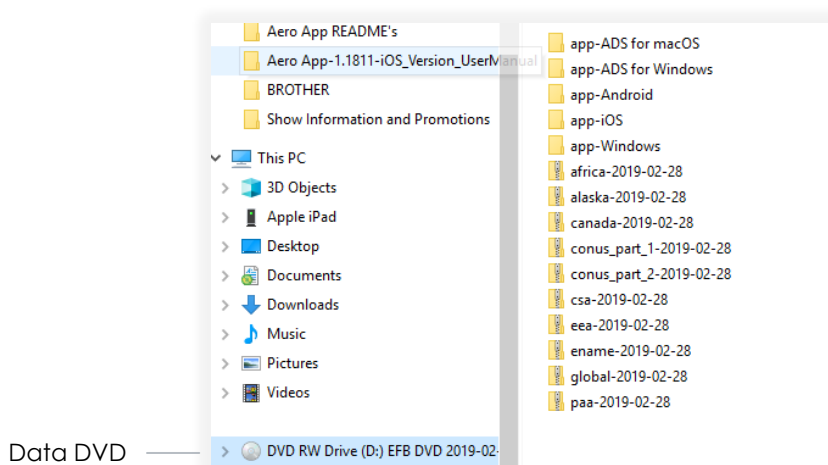
### 7.1 Where to Obtain Aero App

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 more 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 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

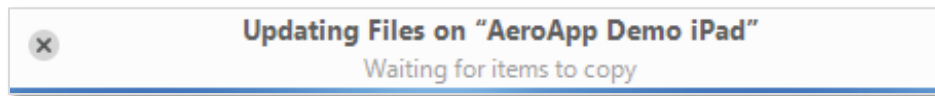
The iTunes application is used to install Aero App. Users with a Windows computer and users who have not updated their Apple Mac to macOS Catalina must use iTunes to install Aero App. Users who have macOS Catalina, refer to [Section 7.1.1.2](#).

#### 7.1.1.1.1 iTunes Version 12.7

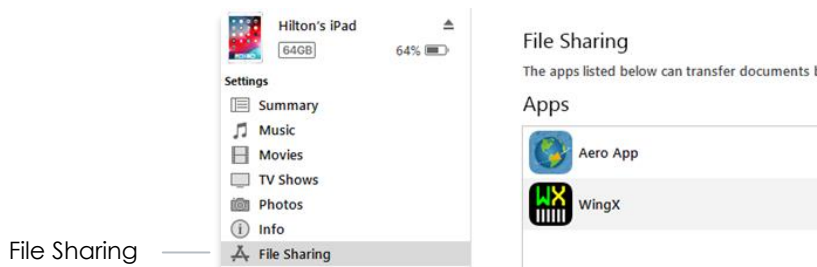
1. Connect iPad to a USB or USB-C port of a Windows computer.
2. Once your iPad is connected, iTunes will display on your screen.
3. Click the **iPad** icon and your iPad information will display.
4. Drag and drop the **AeroApp-<version-number>.ipa** file from your DVD file onto the On My Device section.



5. A status bar will confirm that Aero App is being successfully loaded.

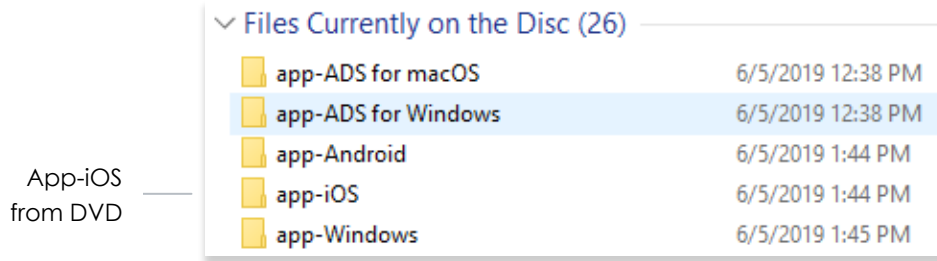


6. Click **File Sharing** and the apps that are listed below are the apps that transfer documents between the user's iPad and user's computer.

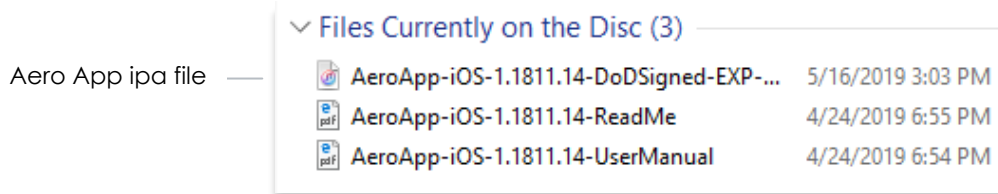


### 7.1.1.1.2 iTunes Pre-12.7 Version

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.

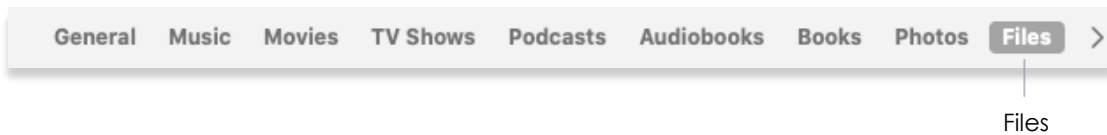


Aero App

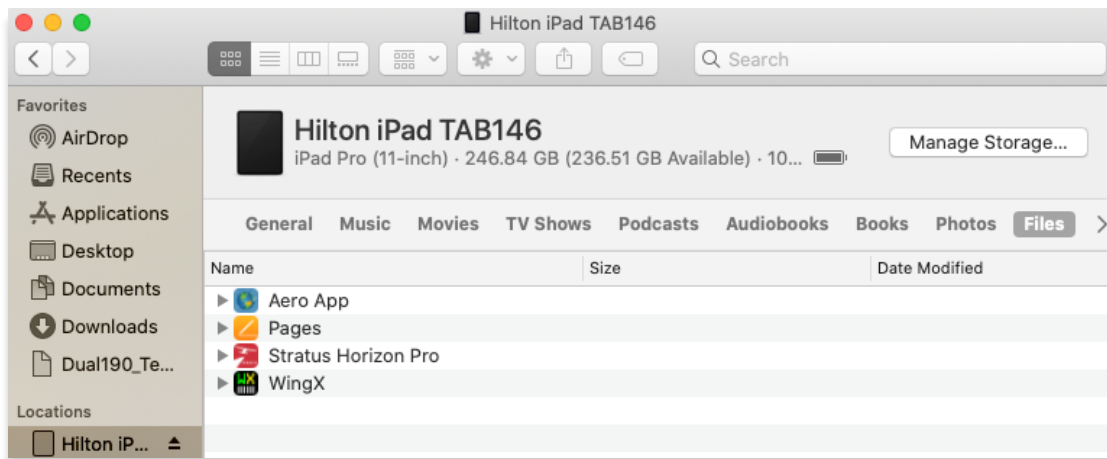
### 7.1.1.2 Install from macOS Catalina or Later

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.



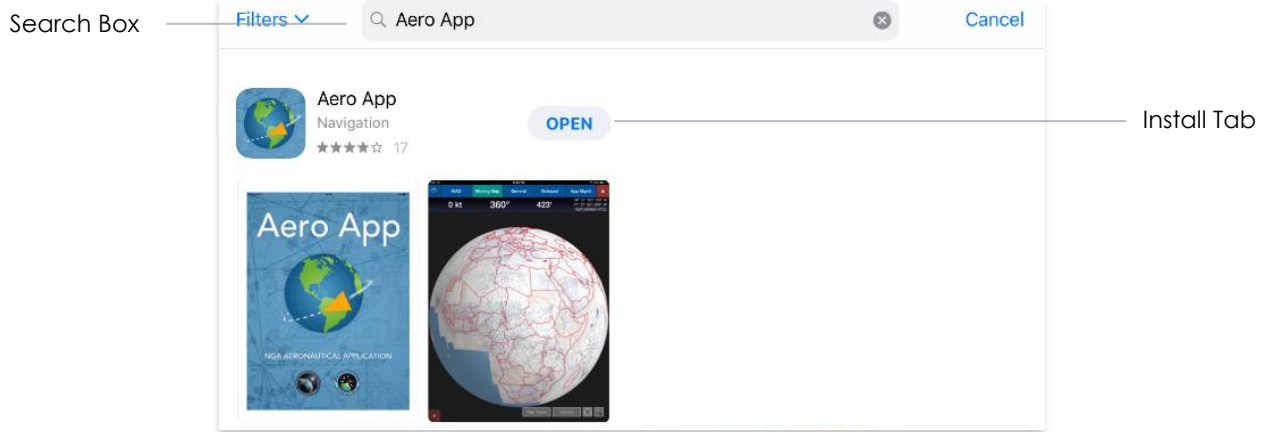
7. To ensure that you have properly installed Aero App, return to the home screen of your tablet and the Aero App icon should be displayed as shown.



Aero App

### 7.1.2 Install From Apple App Store

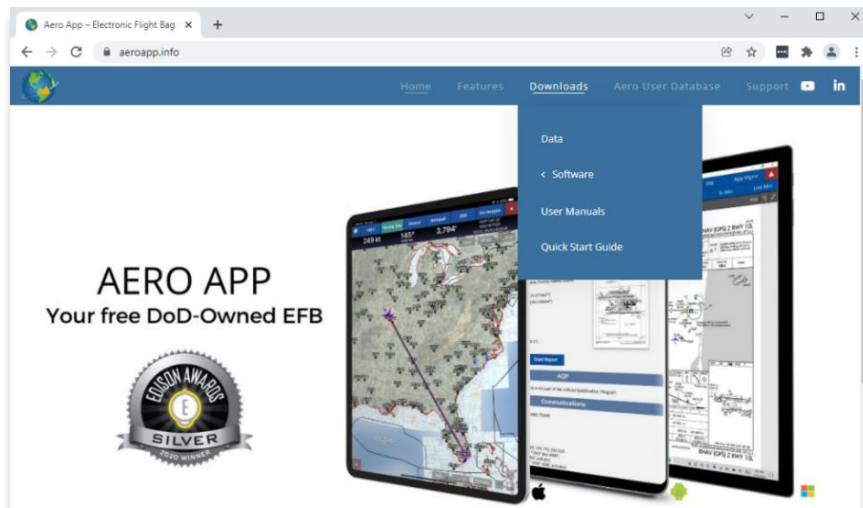
1. Go to the Apple App store on your iPad.
2. Locate the search box and enter **Aero App** in the space provided.
3. Tap **Install**.



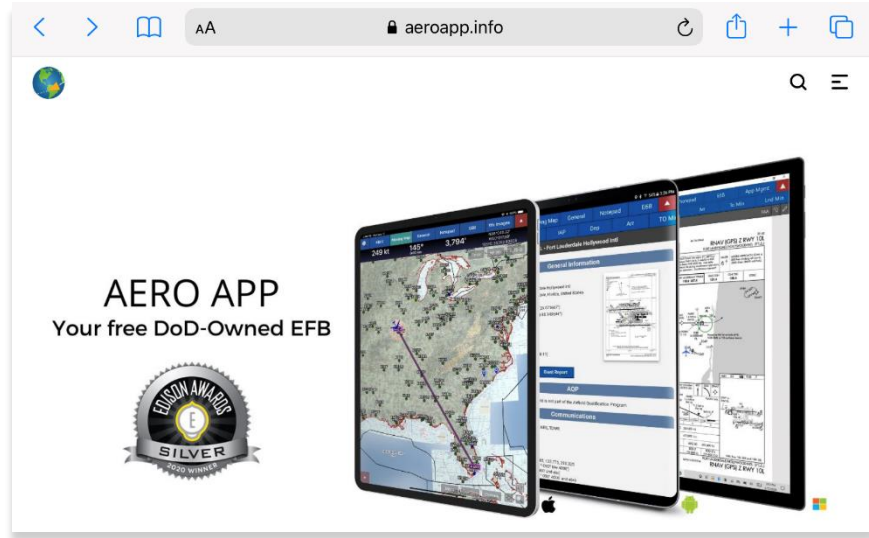
**NOTE:** Downloading Aero App from the Apple App Store will result in users being required to authorize DOD enterprise in the iPad settings.

### 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. Hover over Downloads. Option placement will vary depending on display size.
  - On larger screens, the **Downloads** option will be displayed on the ribbon located at the top of the page.



- On smaller screens, click the hamburger button and select **Downloads**.



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.

**Download Aero App Directly to your Device**

iOS (1.2012.1543) (DoD Signed)	iOS (1.2201.4424) (DoD Signed)
Windows (1.2012.483)	Windows (1.2201.1165)
Android (1.2012.2327)	Android (1.2201.3434)



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

## 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
- DigitalGlobe
- 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, DigitalGlobe 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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### 9.1.1 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.

---

## 9.1.2 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 are 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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## 9.1.3 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.

## 9.1.4 DigitalGlobe

DigitalGlobe is satellite imagery that supplies a visual percept of the ground conditions to improve situational awareness. DigitalGlobe can be zoomed and panned.

DigitalGlobe images can be viewed using internet connection or, downloaded for use offline. Refer to [Section 15.3.5.1.4](#) for guidance in enabling the option.

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

## 9.1.5 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).



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### 9.1.6 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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### 9.1.7 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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### 9.1.8 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.

### 9.1.9 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 guidance in locating Giant Reports.

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### 9.1.10 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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### 9.1.11 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](#).

### 9.1.12 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 15.3.6.1.23](#) for additional information on displaying TFRs on the Moving Map.

### 9.1.13 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 15.3.6.1.22](#). 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.

### 9.1.14 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

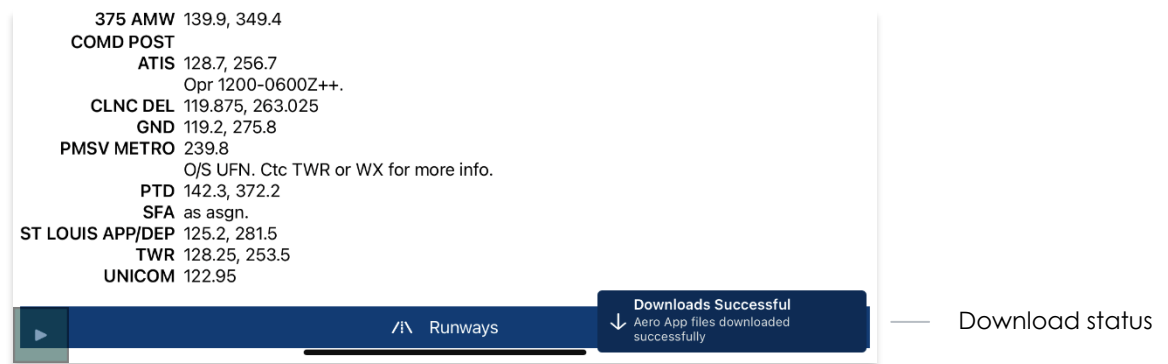
Aero App provides access for users to download data directly from the app. Sources such as Amazon Web Services (AWS) and Aero Data Server (ADS) are accessible within Aero App. Alternatively, users can visit the Aero App website (aeroapp.info) and download data directly to their devices.

An active internet connection 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 downloading data.
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 and notice the files in which you have selected to download display **Found** indicating 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 set up your device with Mobile Device Management (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.

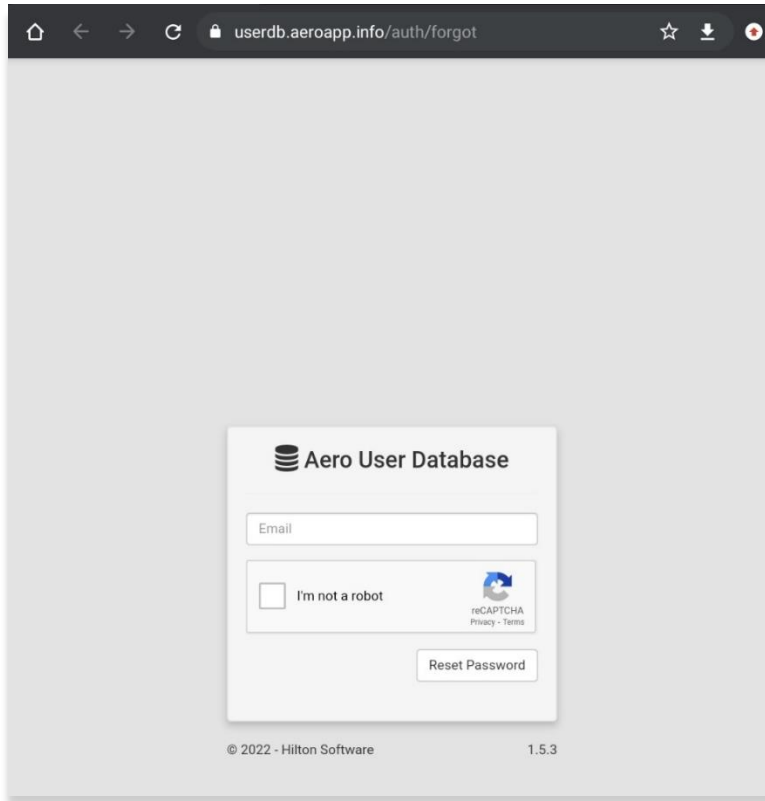
Sign Up For An Account Reset Password

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

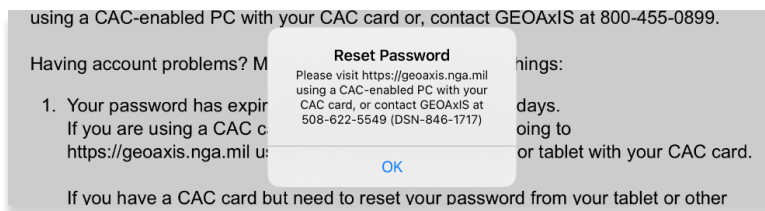
7. Tap **Sign Up for An Account** to create an Aero User Database (AUD) or GEOAxis account.

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 user's credentials then tap **Connect**.

The screenshot shows a mobile application interface. At the top, there is a green header with the text 'DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS'. Below this is a white bar with a blue 'Done' button on the left and the title 'Data Sources' in the center. Underneath is a dark blue navigation bar with three options: 'AWS', 'Aero Data Server', and 'File Manager'. The 'Aero Data Server' option is currently selected. Below the navigation bar is a white card titled 'AWS - Fast Cloud Downloading'. Inside this card, there are three tabs: 'Aero User Database' (which is highlighted in green), 'GEOAXIS', and 'MDM'. Below the tabs are two input fields: 'Username:' and 'Password:'. At the bottom of the card is a green 'Connect' button. To the left of the 'Username:' and 'Password:' fields, there is a label 'User's Credentials' with a horizontal line pointing to the input fields.

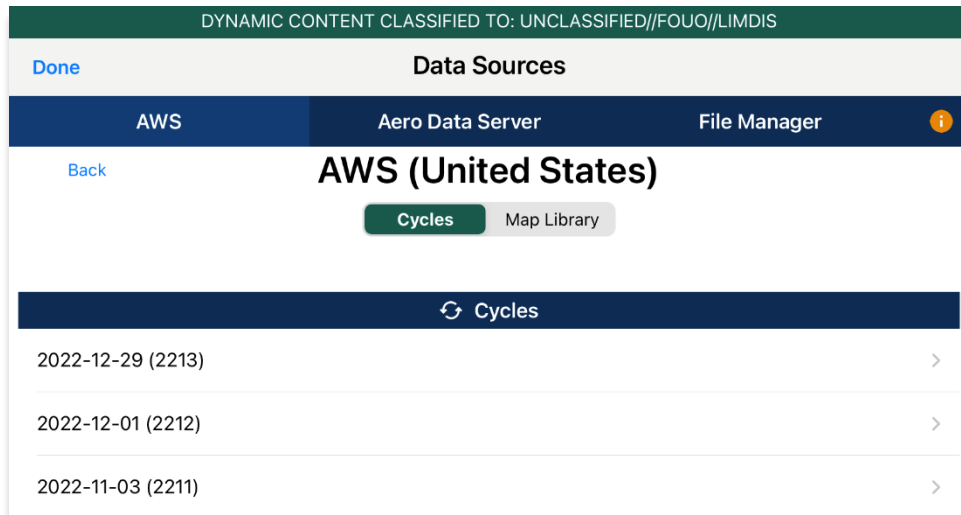
7. The Select Partner popup will display. Select from partners list.

The screenshot shows a 'Select Partner' popup window. The title bar is dark blue with the text 'Select Partner' in white. The main area is white and contains a list of partner names. The first two items are 'United States' and 'FAA'. There are several empty lines below these, suggesting a scrollable list. The popup has a dark blue border.

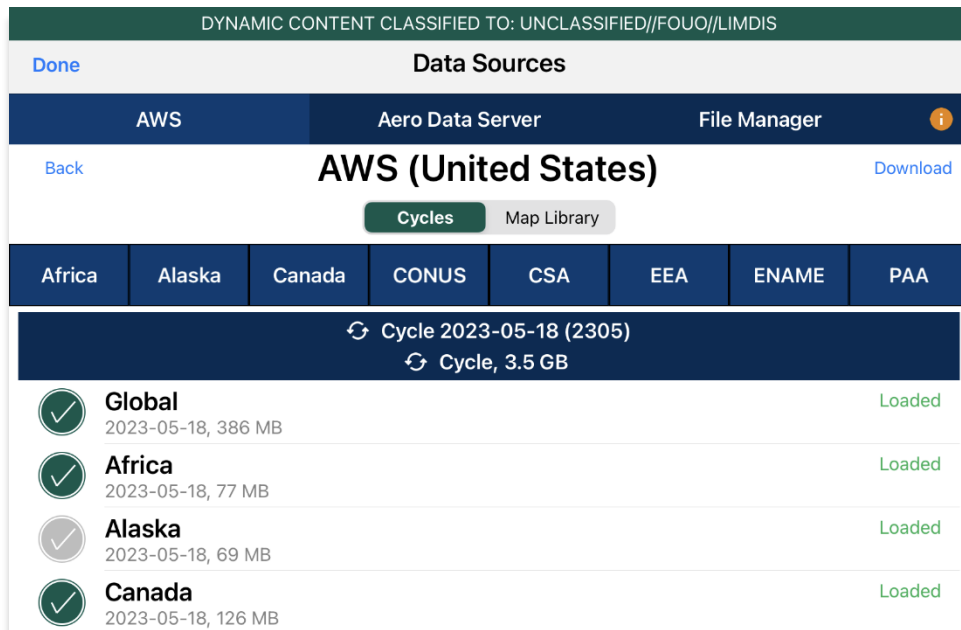


**NOTE:** The Select Partner popup will appear to those who have access to multiple government foreign partners.

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 on the screen. Select individual data files or select region Easy Buttons for faster data selection.
10. 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)

1. Once credentials have been entered and the appropriate government foreign partner has been selected, users will be redirected to the Data Download screen.
2. From the Data Download screen, select **Map Library** from segmented controller.
3. Available charts will be displayed. The files are grouped by categories, tap on the desired folders to expand, or collapse to reveal or hide files.
4. 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".

5. Select desired map file(s).
6. 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 **macmini** Download All

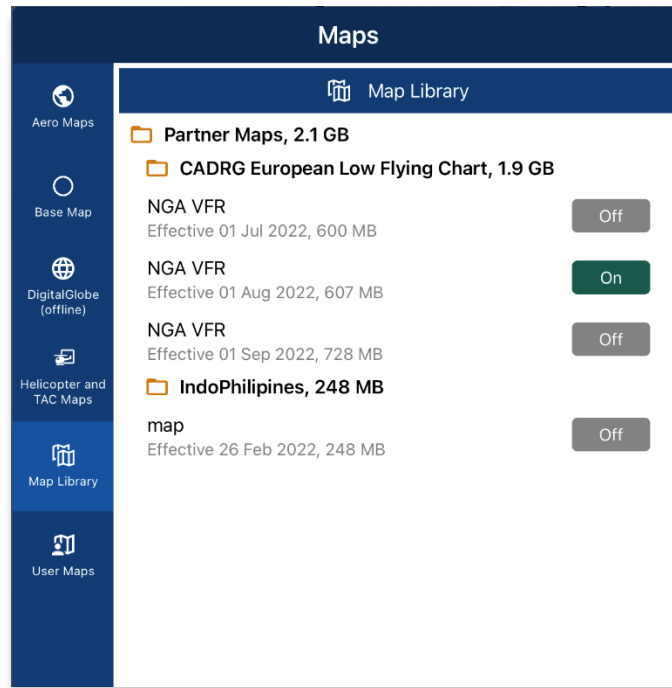
Host: 192.168.98.17 HTTP Port: 5555

Cycles **Map Library**

**Map Library** i

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

7. To verify that Map Library files were successfully downloaded, navigate to the **Moving Map** from the Main Menu.
8. Tap **Maps**.
9. 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.

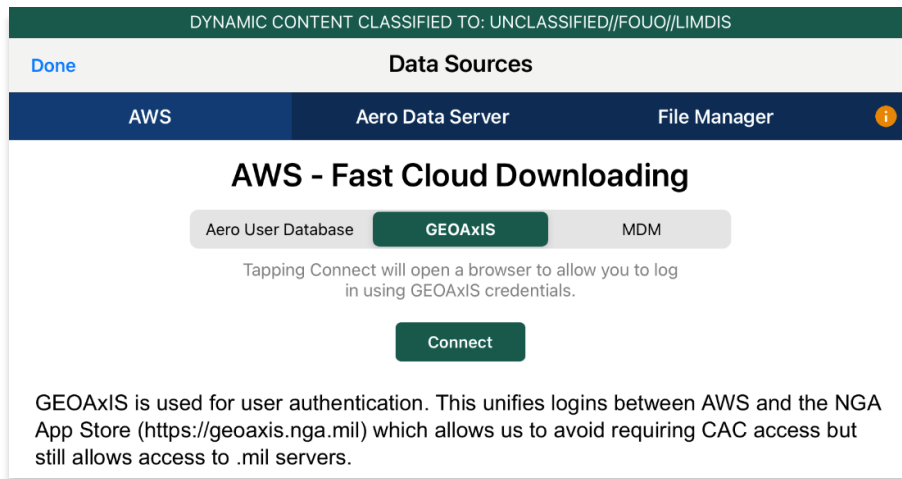


**NOTE:** Users can display Map Library charts on the Moving Map. Refer to [Section 15.3.5.5](#) on how to display Map Library charts on the Moving Map.

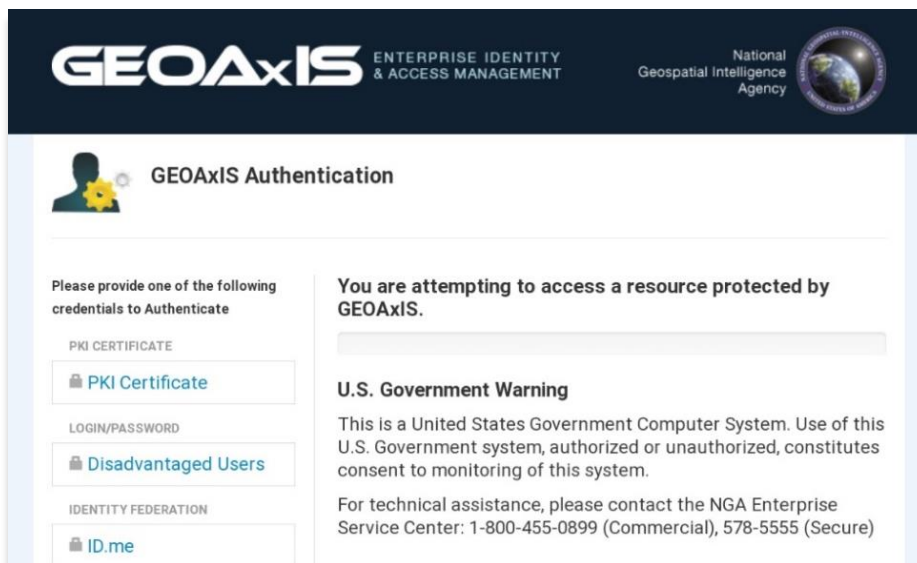
## 10.2.2 Download Data Using GEOAxis

GEOAxis allows for authentication of Disadvantage Users – users without a CAC card. A GEOAxis account is required when GEOAxis authentication is selected.

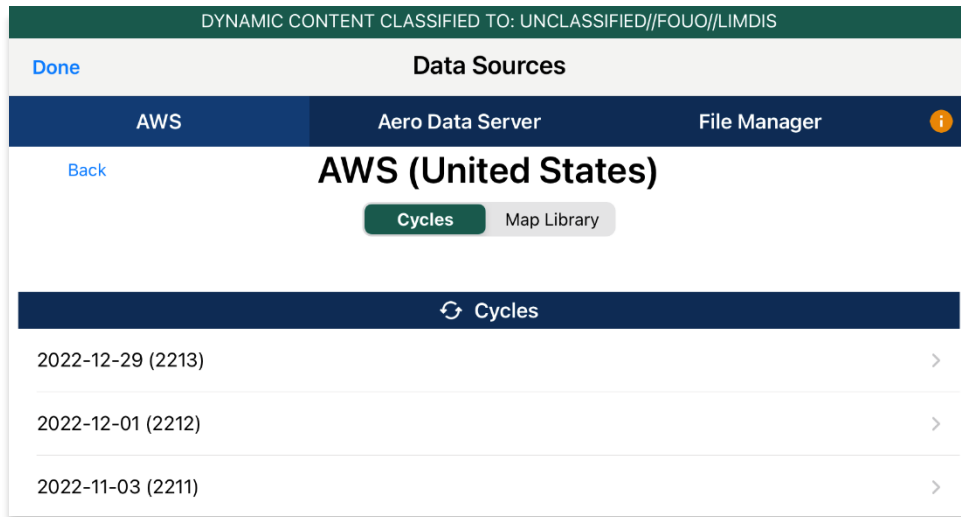
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select the **AWS** option, if necessary.
5. Tap the **GEOAxis** option.



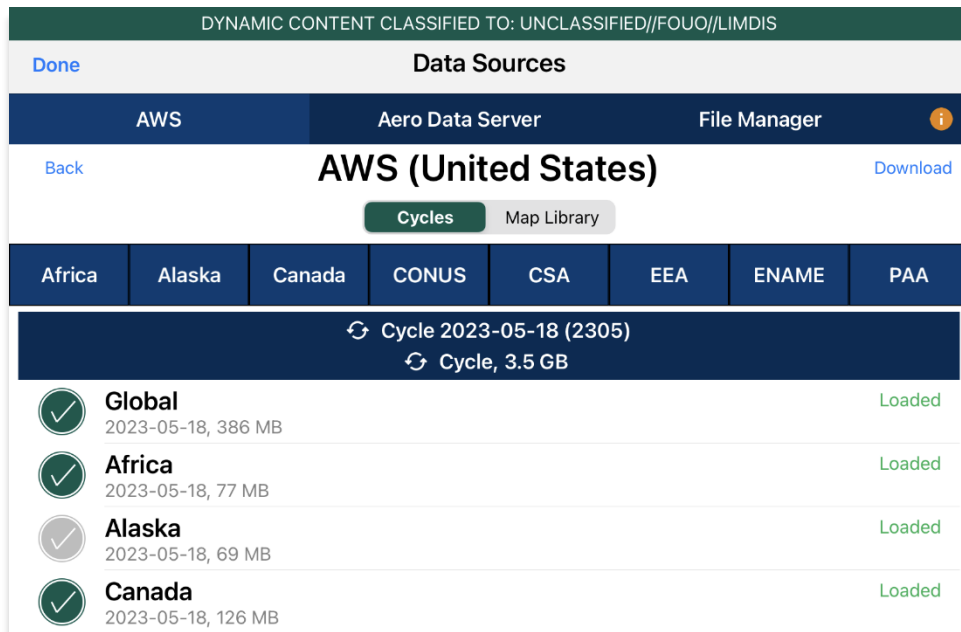
6. Tap **Connect** and users will be redirected to the GEOAxis webpage.
7. Select desired authentication method.



8. Once authenticated, users will be prompted to the AWS 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 on the screen. Select individual data files or select region Easy Buttons for faster data selection.
10. Tap **Download** once desired data files have been selected.

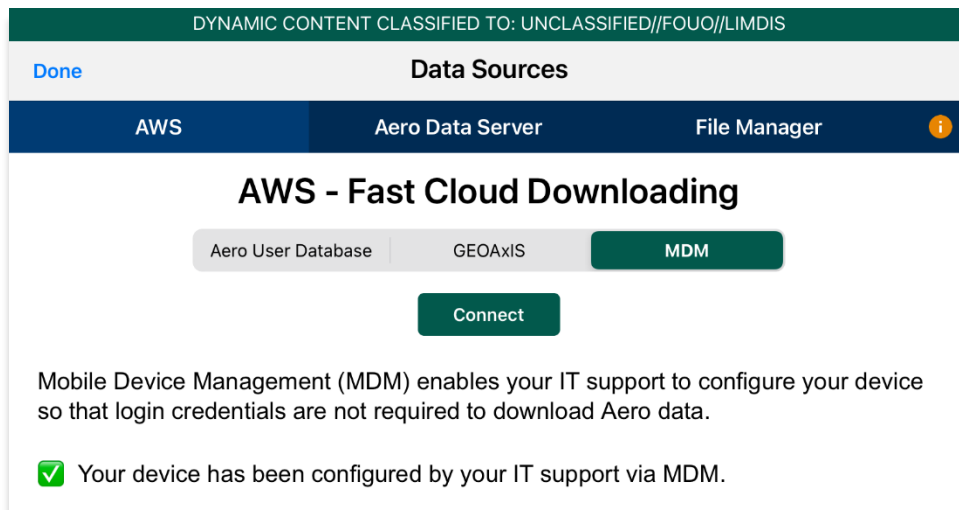


**NOTE:** Refer to [Section 6](#) for additional information regarding registering for a GEOAxis account.

### 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 enables devices to be automatically authenticated, therefore, does not require login credentials to be entered.

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.

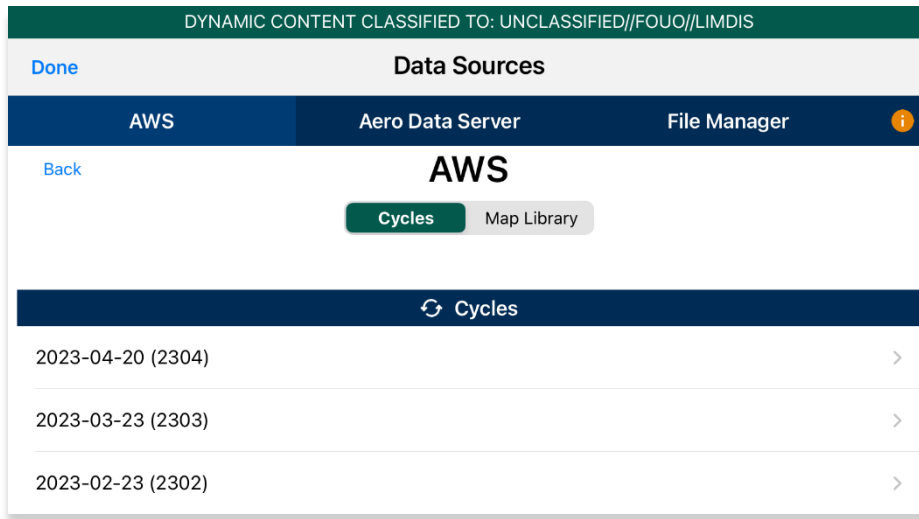


**NOTE:** IT administrator must be contacted to retrieve key value pairs for MDM configuration prior to downloading data; otherwise, the following message will appear as displayed below.

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

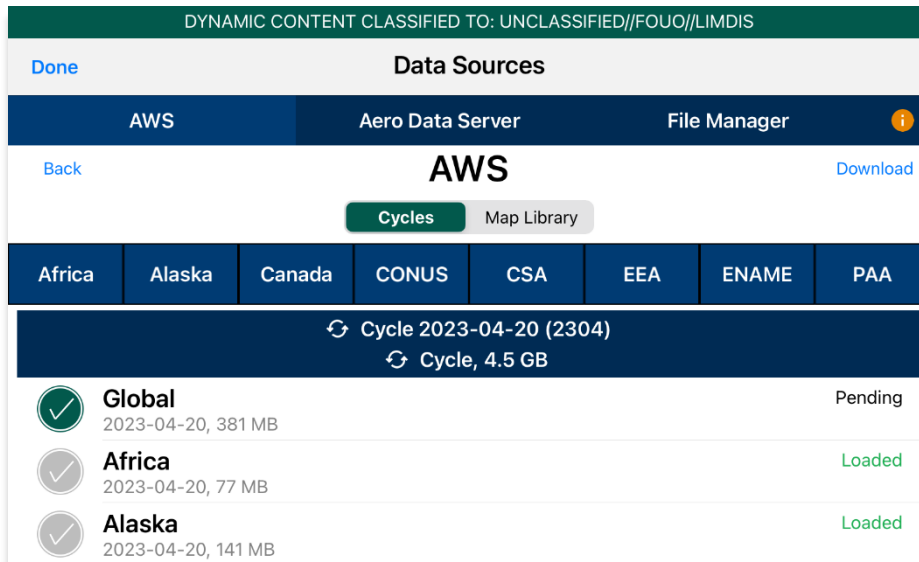
6. Tap **Connect**. Users will be redirected to the *Data Download* page.

- 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:** DigitalGlobe cannot be accessed through MDM. To access DigitalGlobe (online) and/or download DigitalGlobe (offline) files, user must be authenticated via *Download Page* 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.

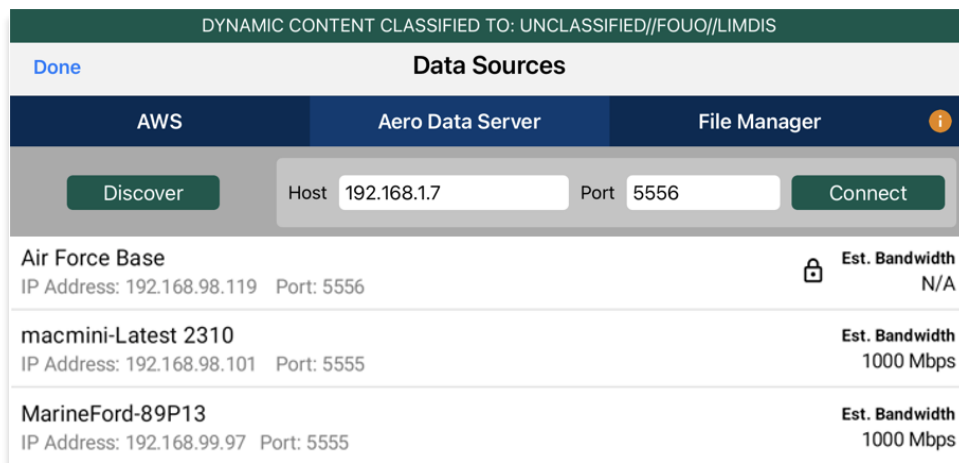


**NOTE:** The Background Downloading feature allows users to continue downloading data while switching screens within Aero App or while using another application. Refer to [Section 10.1](#) for additional information.

### 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.

Region	File Name	Size	Status
Global	2023-05-18, 386 MB	386 MB	Loaded
Africa	2023-05-18, 77 MB	77 MB	Loaded
Alaska	2023-05-18, 69 MB	69 MB	Loaded
Canada	2023-05-18, 126 MB	126 MB	Loaded
CONUS Part 1	2023-05-18, 155 MB	155 MB	Pending



**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 to ADS.

1. Once the desired server has been selected, users will be redirected to the *Data Download* screen.
2. From the Data Download screen, select **Map Library** from segmented controller.
3. Available charts will be displayed. The files are grouped by categories, tap on the desired folders to expand, or collapse to reveal or hide files.
4. 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”.

5. Select desired map file(s).
6. 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

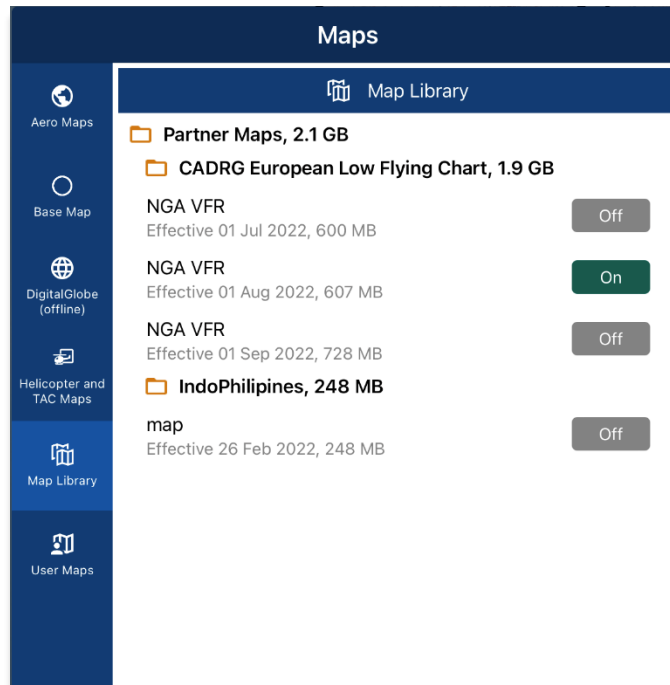
Host: 192.168.98.17    HTTP Port: 5555

Cycles
Map Library

Map Library i

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

7. To verify that Map Library files were successfully downloaded, navigate to the **Moving Map** from the Main Menu.
8. Tap **Maps**.
9. 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.



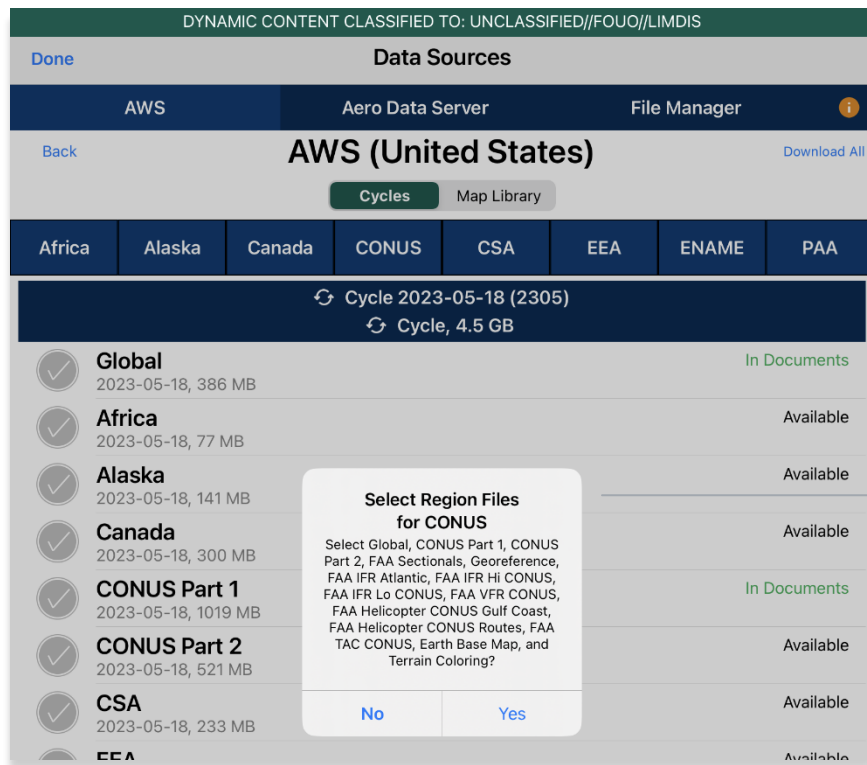
**NOTE:** Users can display Map Library charts on the Moving Map. Refer to [Section 15.3.5.5](#) how to display Map Library charts on the Moving Map.

## 10.4 Easy Buttons

Easy Button bundle are related region files for the preferred regions and can be selected to prepare for download. One or more Easy Buttons can be selected until all desired data files are selected for download. Easy Buttons are available on the AWS – GEOAxis, Aero User Database, and MDM, and Aero Data Server (ADS).

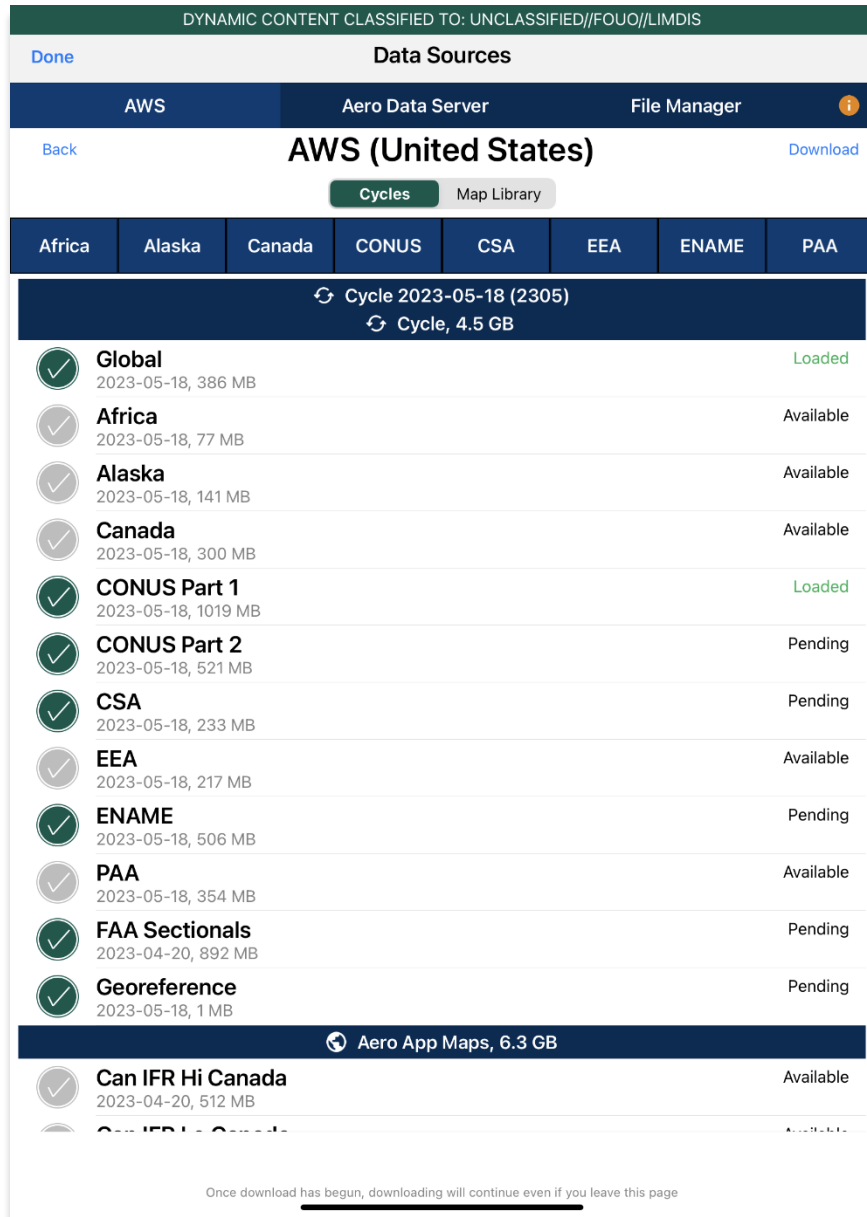
1. Once the user has selected the appropriate Data Source and the desired cycle, users will be prompted to the Data Cycle Download screen.
2. Tap one or more desired **Easy Button(s)**:
  - Africa
  - Alaska
  - Canada
  - CONUS
  - CSA
  - EEA
  - ENAME
  - PAA
3. A dialog box displays all region files 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.



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.
4. Aero User Database users will be prompted to select a partner upon login.
5. 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's a navigation bar with "Aero App - United States", "Refresh", "Change Partner", and "Logout". The main heading is "Download Aero App Directly to your Device". Below this, there are six buttons for different operating systems: iOS (1.2201.4424) (DoD Signed), iOS (1.2209.5744) (DoD Signed), Windows (1.2209.1579), Windows (1.2301.1753), Android (1.2209.4390), and Android (1.2211.4644). Underneath, there's a section "Download Other Apps" with a button for "PPA H60". At the bottom, there's a "Cycles" tab selected, showing a list of folders: "cycles", "eipl", "movingmaps", "generics", and "geotiffs".

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

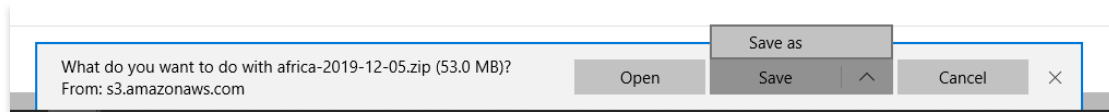
The screenshot shows the Aero App website interface. At the top, there's a navigation bar with "Aero App - United States", "Refresh", "Change Partner", and "Logout". Below the navigation bar, there's a "Home" breadcrumb. The main content area shows a list of data cycles: "2023-01-26", "2022-12-29", and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

7. 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.
8. Once the data type has been selected, click on the **ZIP** and **SIG** buttons to desired region of choice: **Africa, Alaska, Canada, CONUS, CSA, EEA, ENAME**, and/or **PAA**, and other files.

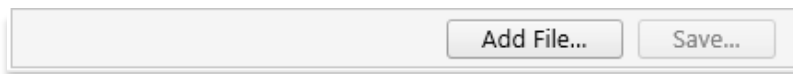


**NOTE:** Global files must be included when downloading a full data cycle.

9. 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**.

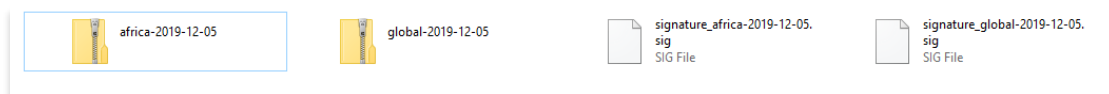


10. Once the data has completed the download, select from options to **Open**, **Open folder**, or **View downloads**.
11. Connect your iPad to a Mac or Windows computer.
12. Locate device storage on the computer:
  - On Windows, open iTunes
  - On macOS, open Finder and select device under Locations.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



Add File

16. 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 onto Aero App. Data such as User Maps, User Waypoints, CRD files, Pins, Documents, and KML/KMZ files can be sideloaded and loaded onto Aero App.

### 11.1 Sideload Data Using DVD

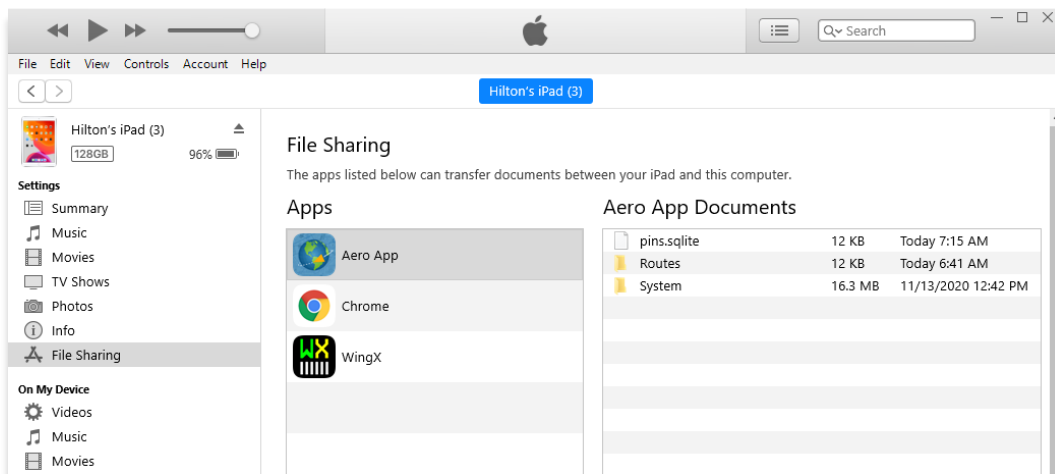
Aero App enables users to sideload data from the data DVD to their iPads.

1. Ways to sync device:
  - On Windows, open iTunes
  - On macOS, open Finder and select device under Locations.
2. Insert the data DVD into computer.
3. Locate and double click on the DVD drive from File Explorer.

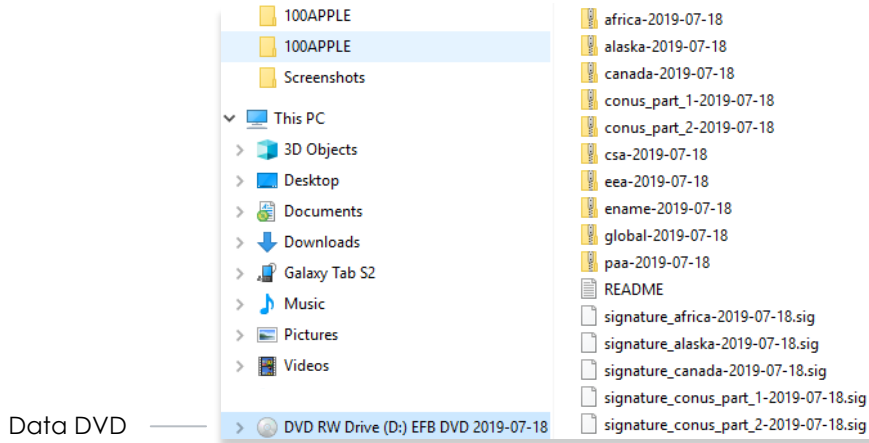
#### 11.1.1 Sideload Data Using iTunes

Aero App data can be sideloaded using Apple iTunes.

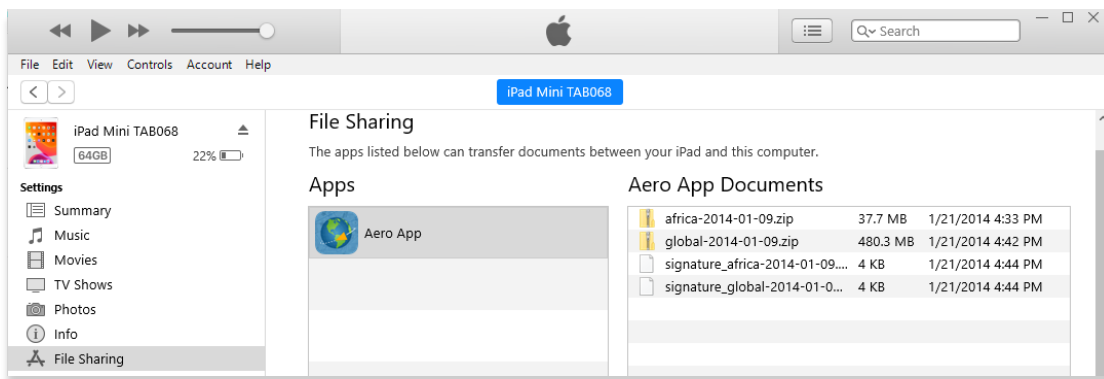
1. Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
2. Click the **iPad** icon and your device information will display.
3. Located below *Settings*, click **File Sharing**.
4. File Sharing will display, click **Aero App**. The screen will display Aero App Documents.



5. Locate the DVD containing the data files.



6. Drag the desired data from your DVD into Aero App Documents.



7. The files are copied onto Aero App Documents.
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:** Global is required to be loaded when sideloading data onto Aero App.



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



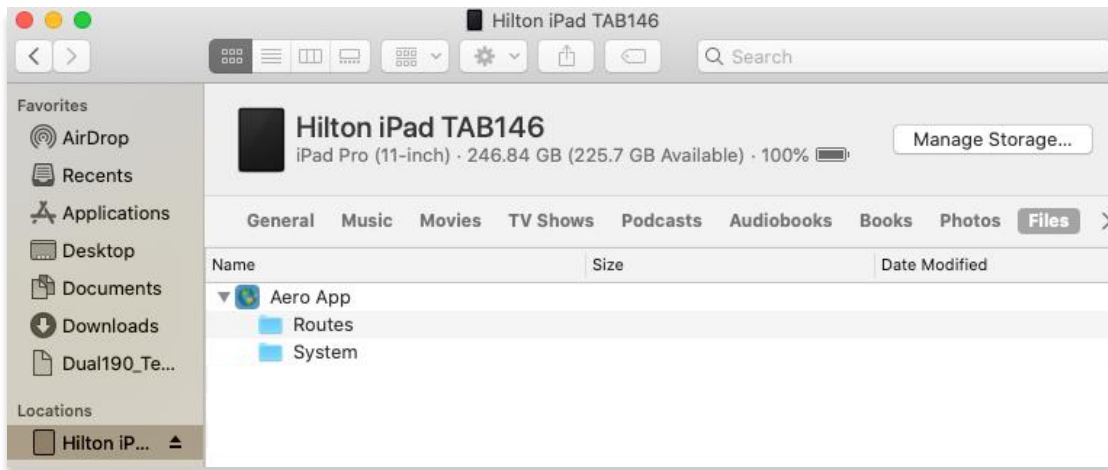
### 11.1.2 Sideload Data Using macOS Catalina or Later

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.

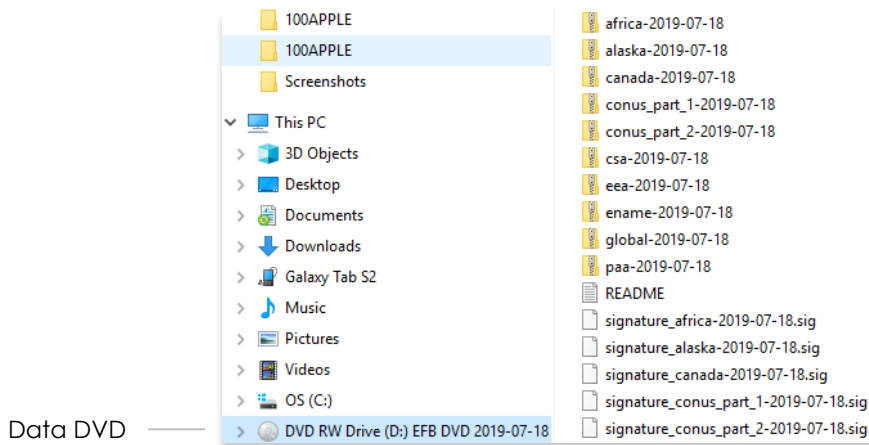
1. Connect your device to a USB or USB-C port of a Mac computer.
2. Click the **Finder** icon in the Dock.
3. Locate your iPad on the left side of the Finder screen under Locations.
4. The top of the screen will display menu options. Click **Files**.



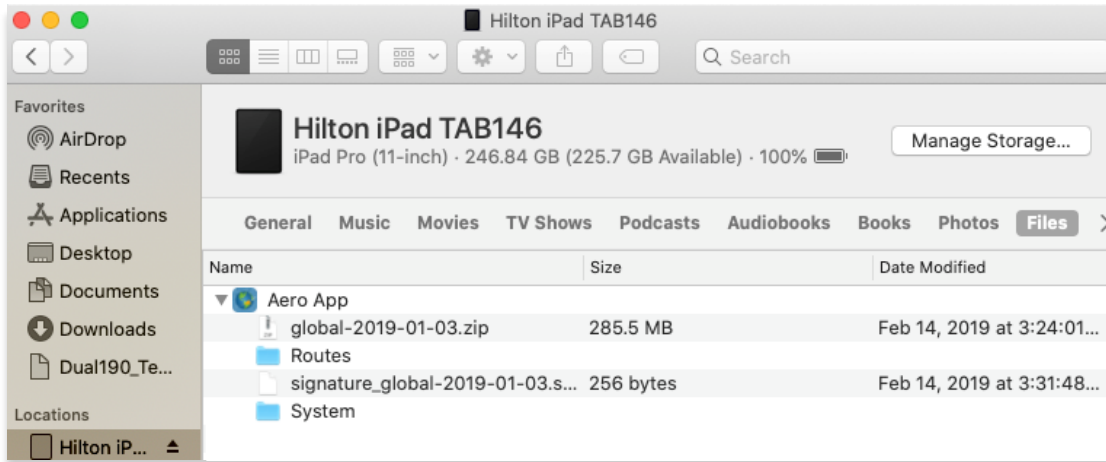
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to expand all available folders.



6. Locate DVD containing the data files.



7. Drag desired data cycles from the DVD onto Aero App.



8. The files will be copied onto Aero App Documents.

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

10. Tap **App Mgmt** on the **Main Menu**.

11. Tap **Data** on the **Secondary Menu**.

12. The loaded data files will display **Found** if both zip and sig files are present.



**NOTE:** Global is required to be loaded when sideloading data onto Aero App.



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

## 11.2 Sideload User Maps

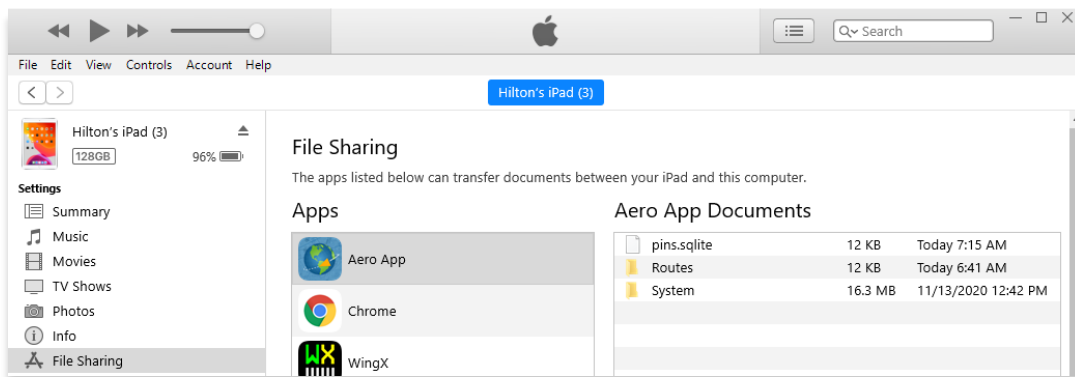
Aero App enables users to sideload User Maps. Refer to [Section 15.3.5.6](#) for more information on how to overlay User Maps on the Moving Map.

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

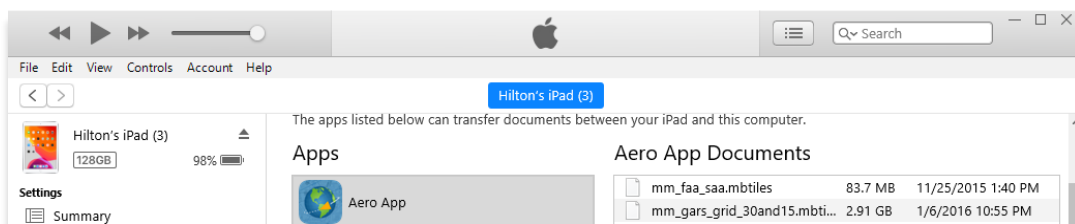
1. Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
2. Click the **iPad** icon and your device information will display.
3. Located below *Settings*, click **File Sharing**.
4. The File Sharing page will appear, click **Aero App**. The screen will display Aero App Documents.



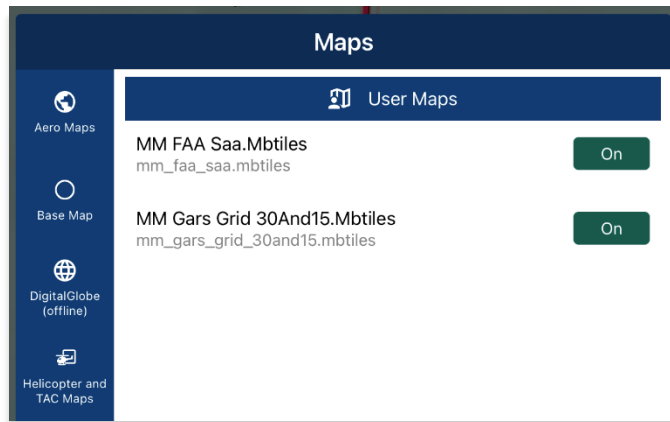
5. Locate the file containing User Maps.

	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

6. Drag desired User Map files onto Aero App Documents.



7. To confirm if the files were properly transferred, open **Aero App** on your iPad.
8. Tap **Moving Map** on the **Main Menu**.
9. Tap **Maps**.
10. Tap **User Maps** from the side menu. The loaded User Maps will be shown below.
11. Tap to select desired imported user maps file and your map will overlay on the Moving Map.

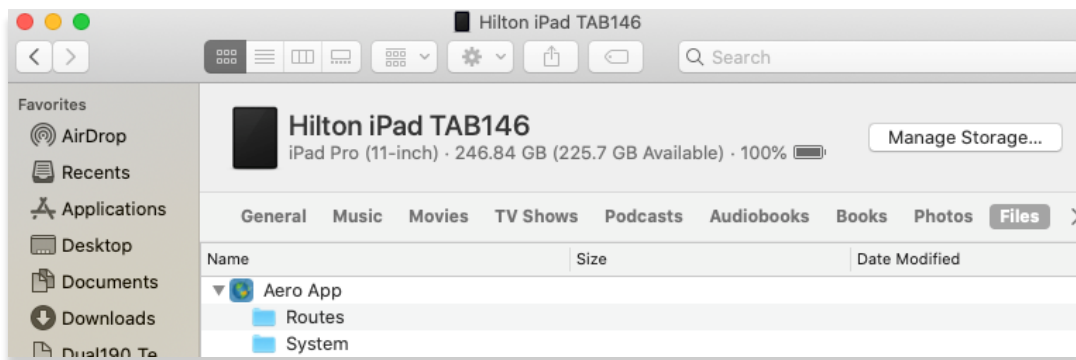


### 11.2.2 Sideload User Maps Using macOS Catalina or Later



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 on the sidebar. Click your device.
4. The top of the page will display menu options. Click **Files**.



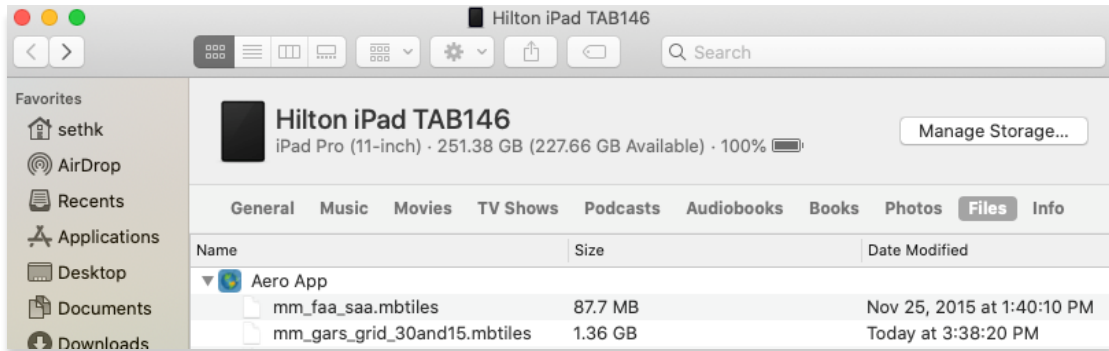
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



6. Locate the files that you wish to sideload onto Aero App.

	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 desired User Map files into the Aero App folder and the files will display under Aero App.



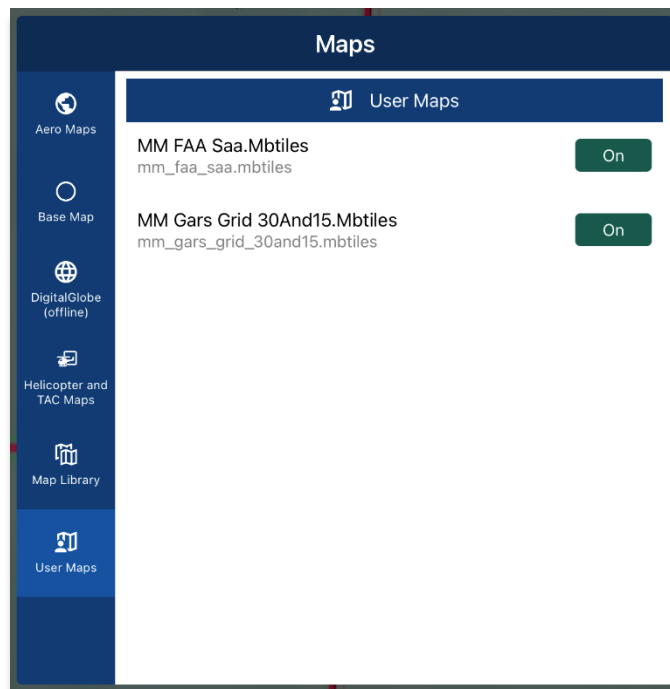
8. To confirm if the files were properly transferred, open **Aero App** on your iPad.

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

10. Tap **Maps**.

11. Tap **User Maps** from the side menu. The loaded User Maps will be shown below.

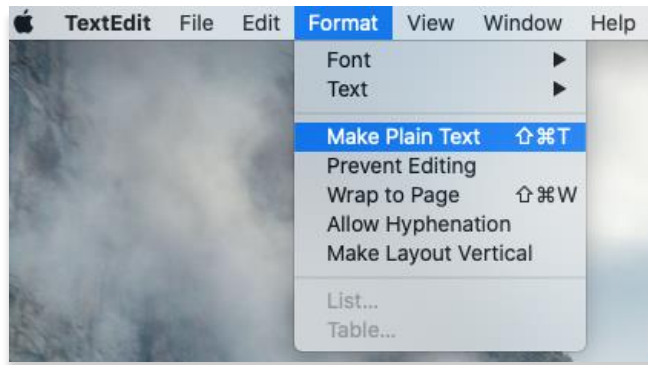
12. Tap to select desired imported user maps file and your map will overlay on the Moving Map.



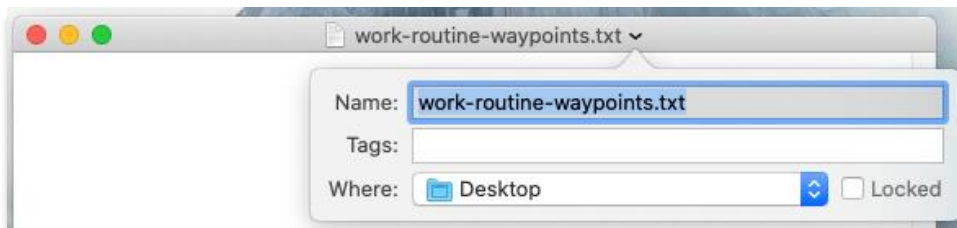
## 11.3 Sideload User Waypoints

Aero App enables users to load User Waypoints and overlay them on the Moving Map. Users can sideload or create User Waypoints. Refer to [Section 15.3.13.1.1](#) for guidance on how to create User Waypoints.

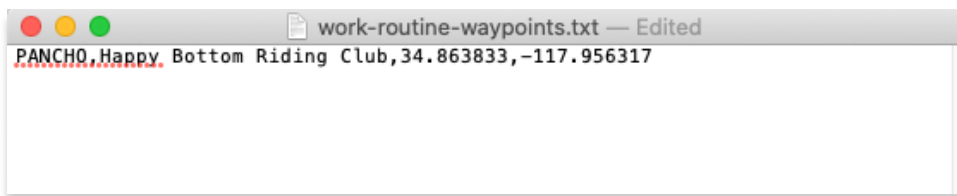
1. Connect iPad to a USB or USB-C port of a Mac or Windows computer.
2. Locate device storage on the computer:
  - On Windows, open iTunes
  - On macOS, open Finder and select device under Locations.
3. Create a folder in your desktop named User Waypoints.
4. Right-click on the folder and open **TextEdit** 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>**.



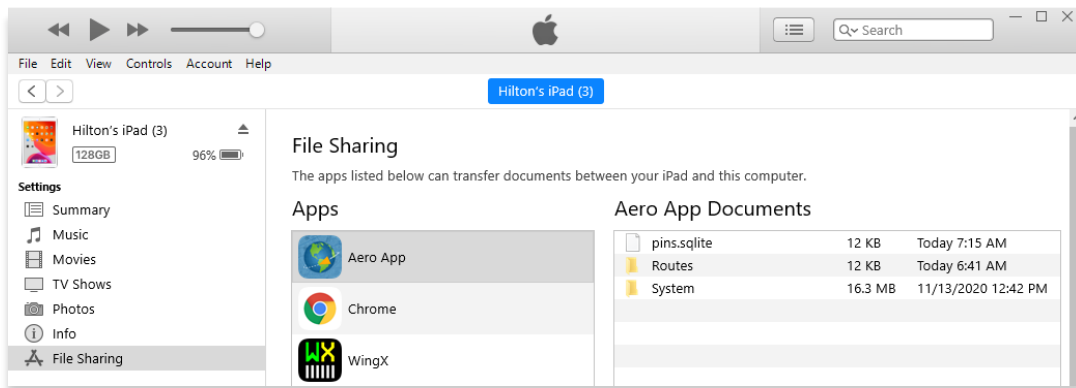
- Once the User Waypoint has been created, click the **exit** button to quit the app. Your data will automatically be saved.



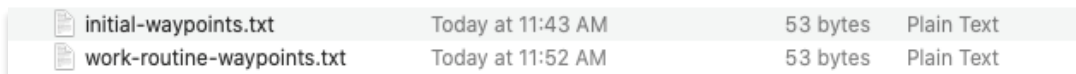
**NOTE:** To create User Waypoints, pilots can use TextEdit on a Mac and Notepad on Windows.

### 11.3.1 Sideload User Waypoints Using iTunes

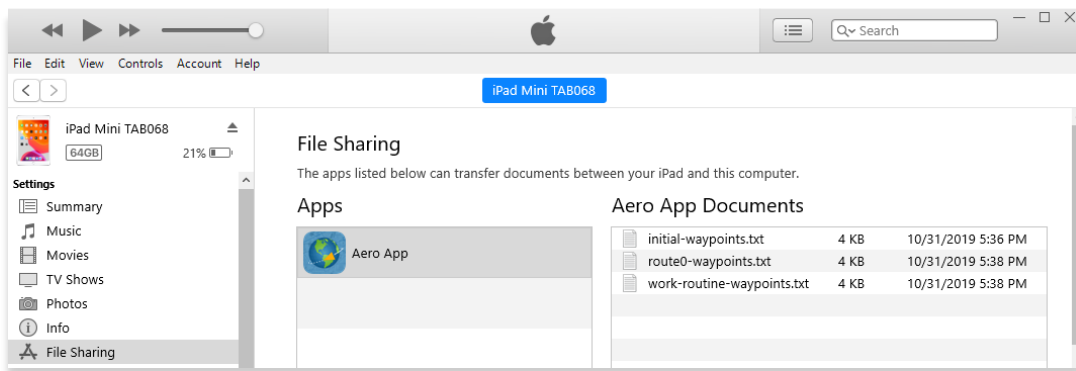
- Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
- Click the **iPad** icon and your device information will display.
- Located below *Settings*, click **File Sharing**.
- The File Sharing page will appear, click **Aero App**. The screen will display Aero App Documents.



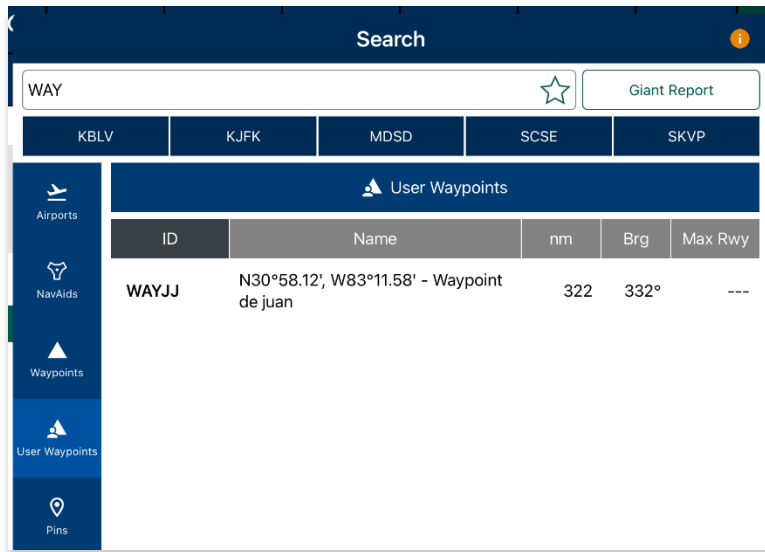
- Locate the User Waypoints textfiles.



- Drag desired User Waypoints textfiles onto Aero App Documents.



7. To confirm if the files were properly transferred, open **Aero App** on your iPad.
8. Tap the **magnifying glass** on the **Main Menu**.
9. Tap the **text box** and search for the loaded Waypoints textfile. Your loaded Waypoint will appear under User Waypoints.

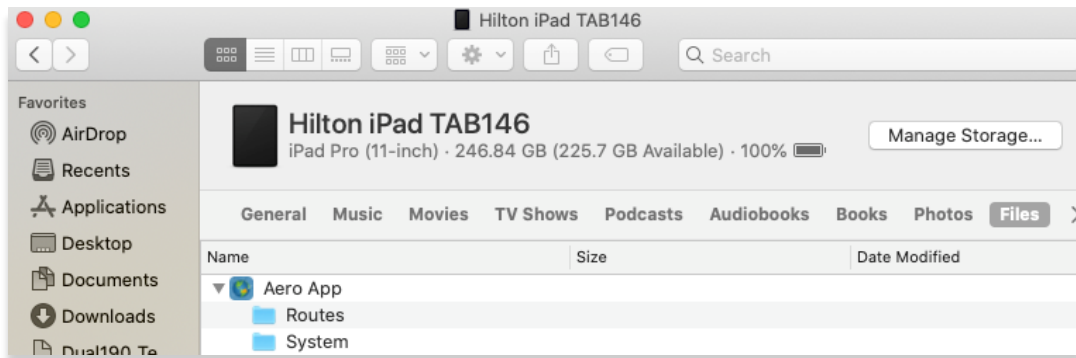


### 11.3.2 Sideload User Waypoints Using macOS Catalina or Later

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.





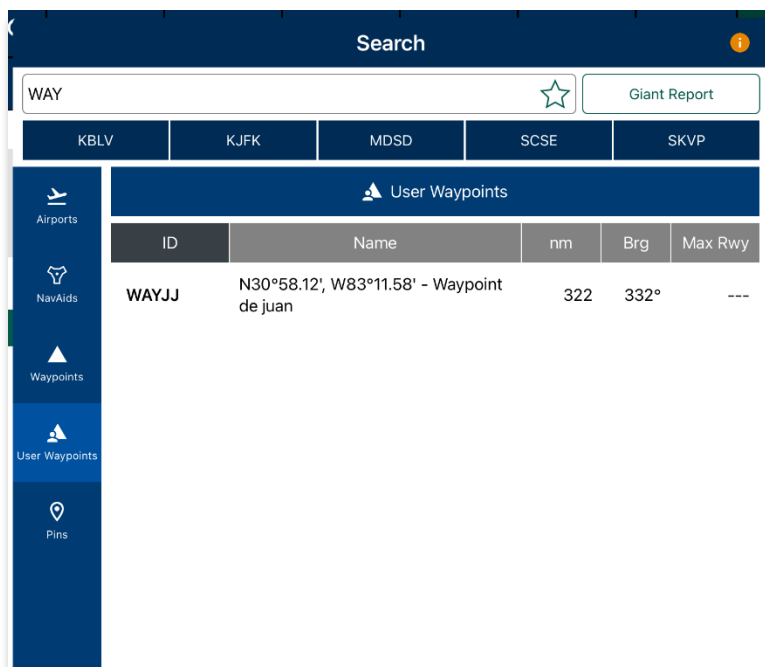
6. Locate the files that you wish to sideload onto Aero App.

 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 desired User Waypoint textfiles into the Aero App folder and the files will display under Aero App.



8. To confirm if the files were properly transferred, open **Aero App** on your iPad.
9. Tap the **magnifying glass** on the **Main Menu**.
10. Tap the **text box** and search for the loaded Waypoints textfile. Your loaded Waypoint will appear under User Waypoints.



## 11.4 Sideload Common Route Definition (CRD) Files

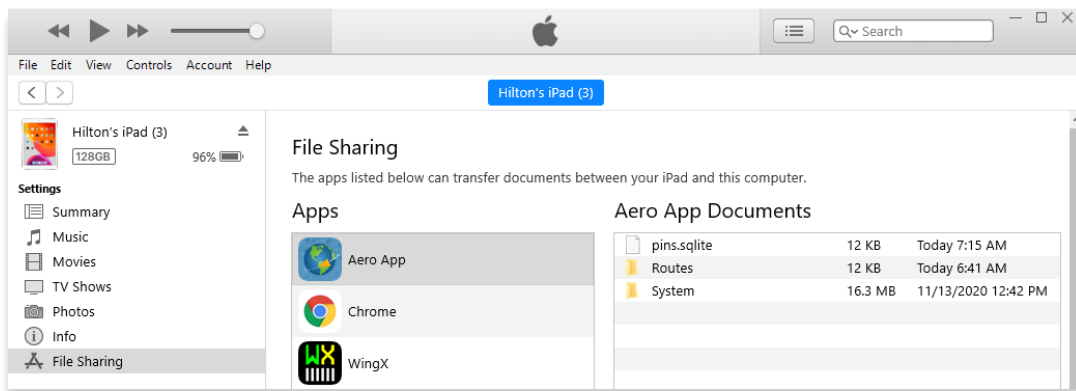
Aero App enables users to sideload and import routes using Common Route Definition (CRD) files. Refer to [Section 15.3.14.3.1.1.1](#) for guidance on how to load CRD files to Aero App.

Ways to sync device:

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

### 11.4.1 Sideload CRD Files Using iTunes

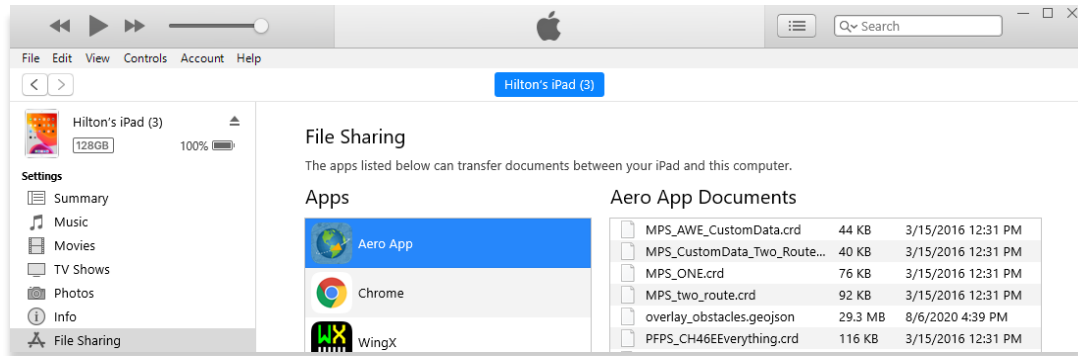
1. Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
2. Click the **iPad** icon and your device information will display.
3. Located below *Settings*, click **File Sharing**.
4. The File Sharing page will appear, click **Aero App**. The screen will display Aero App Documents.



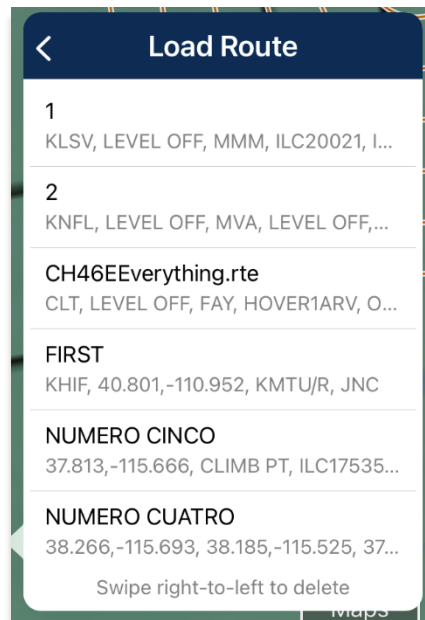
5. Locate the CRD files.

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

6. Drag desired **CRD** file into Aero App Documents.

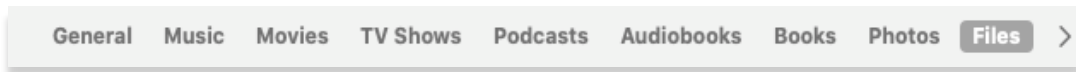


7. To confirm if the files were properly transferred, open **Aero App** on your iPad.
8. Tap **Moving Map** on the **Main Menu**.
9. Navigate to the **Route Panel**.
10. Tap **Route**.
11. The Route menu will appear. Select **Actions** from the side menu, if necessary.
12. Tap **Load** and your CRD files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

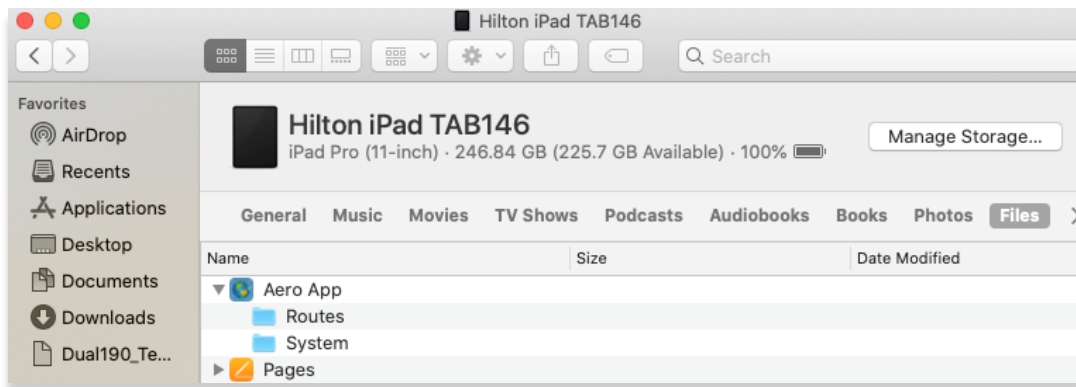


## 11.4.2 Sideload CRD Files Using macOS Catalina or Later

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**.



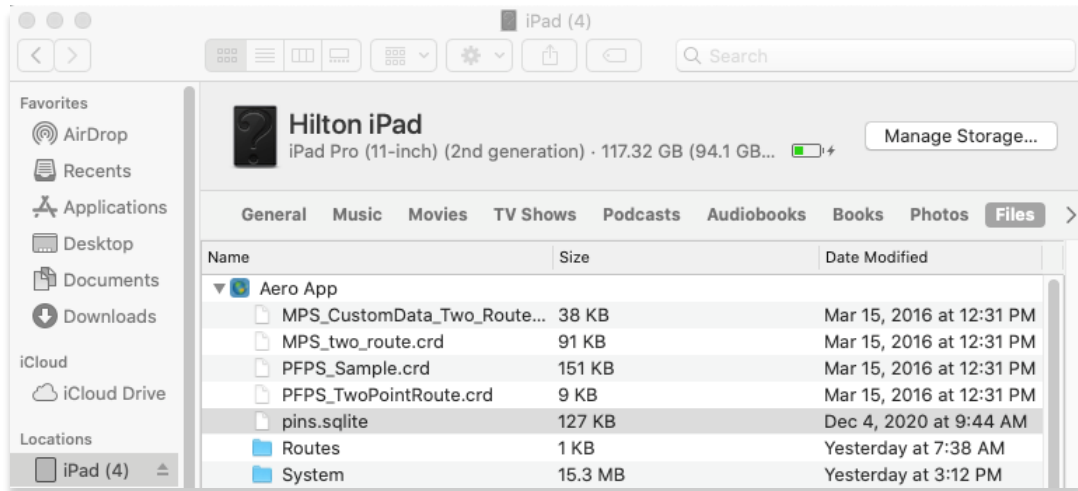
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



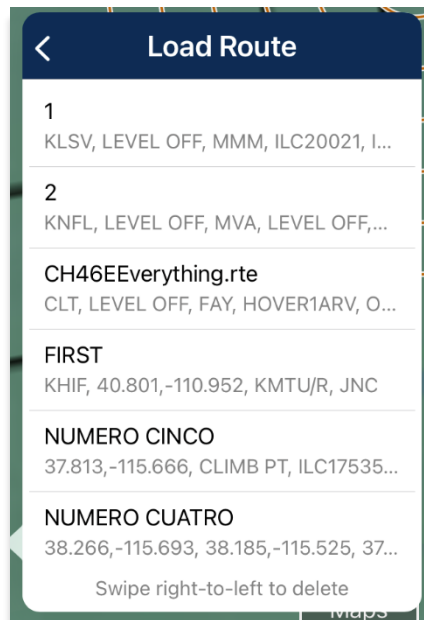
6. Locate the CRD files.

Name	Size	Date Modified	Type	File Size
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 the desired User Waypoints textfiles into the Aero App folder and the files will display under Aero App.



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 shown below.



## 11.5 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.

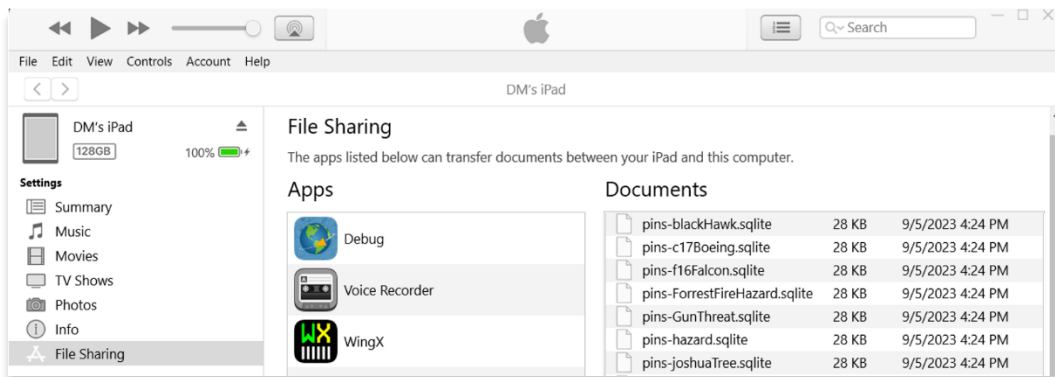
A file with the format *pins.sqlite* contains stored pins that were created through the app. These pins are viewed in the Dropped Pins table on Aero App. Refer to [Section 15.3.14.3.4.2](#) for additional information.

Ways to sync device:

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

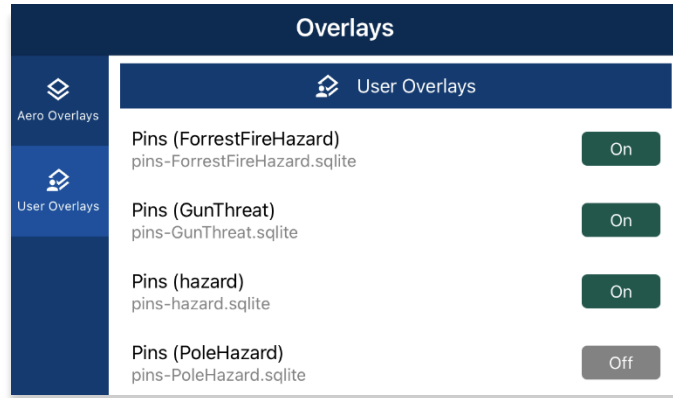
### 11.5.1 Sideload Pins Using iTunes

1. Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
2. Click the **iPad** icon and your device information will display.
3. Located below *Settings*, click **File Sharing**.
4. The File Sharing page will appear, click **Aero App**. The screen will display Aero App Documents.
5. Locate the pins.sqlite files you wish to sideload onto Aero App. Rename the sqlite file to the format, *pins-{name}.sqlite*.
6. Drag the pins sqlite file into the Aero App folder. The files will be displayed under Aero App Documents.



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

7. To confirm if the files were properly imported, open **Aero App** on your iPad.
8. Tap **Moving Map** on the **Main Menu**.
9. Tap **Overlays** located at the bottom-right corner of the Moving Map screen.
10. Tap **User Overlays** from the side menu.
11. 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 15.3.6.1.18](#) 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 15.3.6.1.25](#) for additional information.

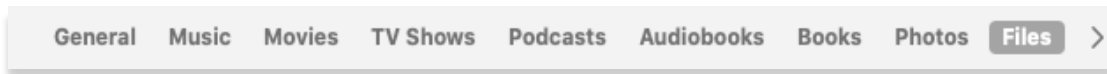
12. Tap your desired imported pins file and your pin will overlay on the Moving Map.



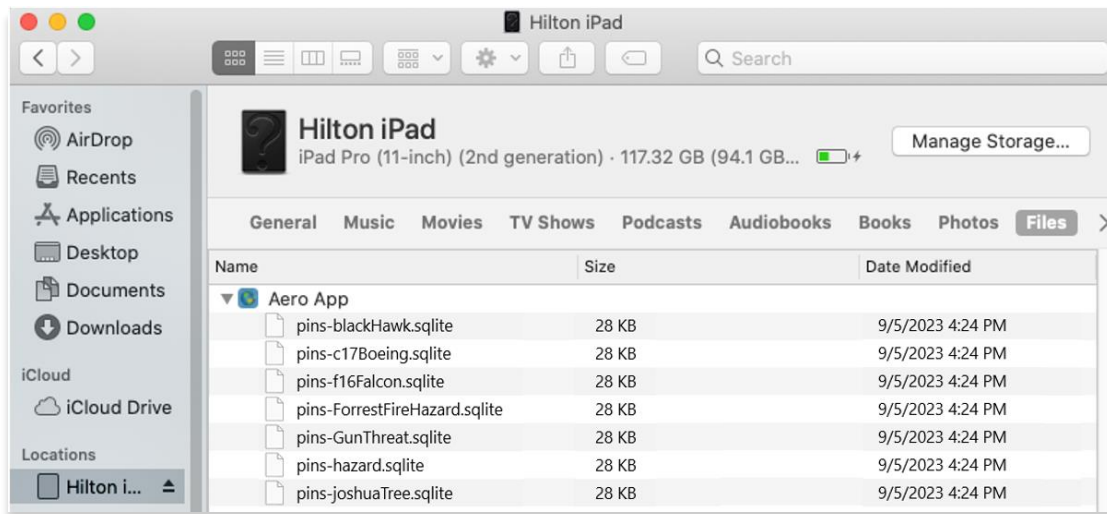
13. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the *delete* button of the file that you choose to permanently remove. Tap **Delete**.

## 11.5.2 Sideload Pins 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**.



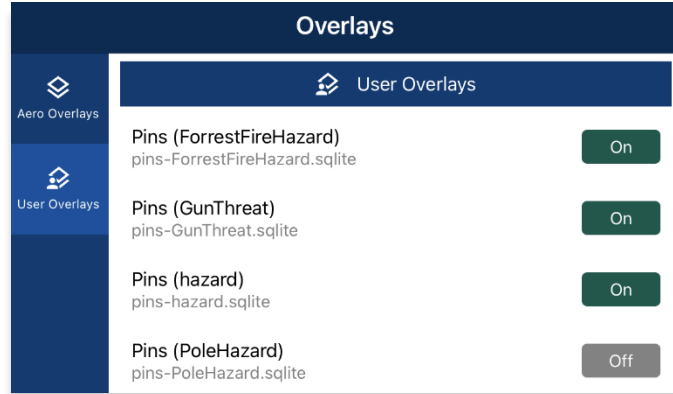
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.
6. Locate the pins.sqlite files that you wish to sideload onto Aero App. Rename the sqlite file to the format, *pins-{name}.sqlite*.
7. Drag the pins sqlite file into the Aero App folder. The files will be displayed under 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 15.3.6.1.18](#) 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 15.3.6.1.25](#) 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 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.

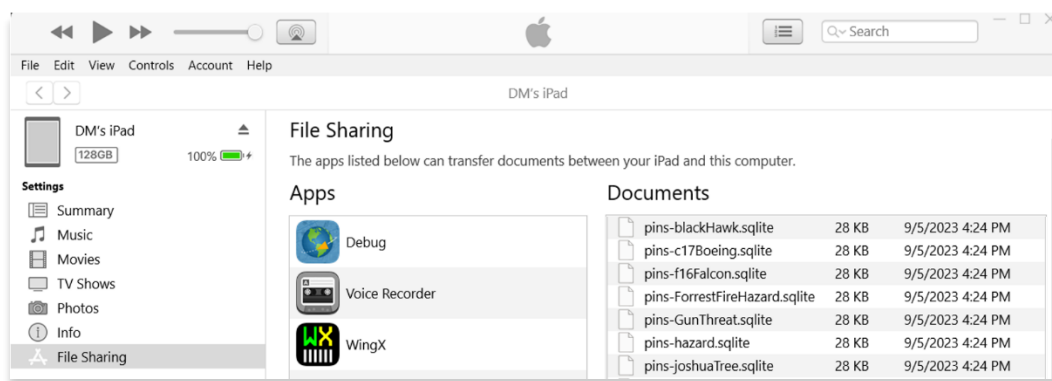
A file with the format *pins.sqlite* contains stored hazards that were created through the app. These hazards are viewed in the Dropped Hazards table on Aero App. Refer to [Section 15.3.14.3.4.3](#) for additional information.

Ways to sync device:

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

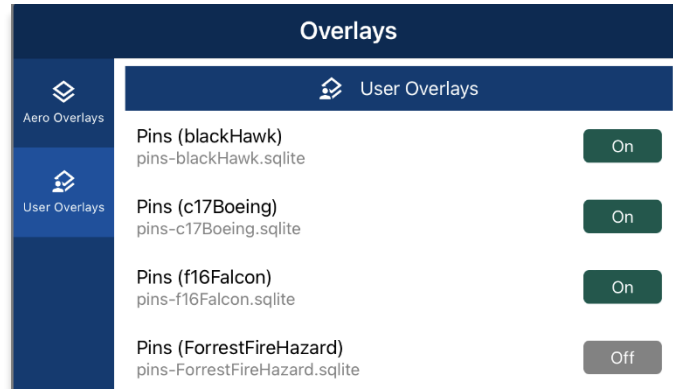
### 11.6.1 Sideload Hazards Using iTunes

1. Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
2. Click the **iPad** icon and your device information will display.
3. Located below *Settings*, click **File Sharing**.
4. The File Sharing page will appear, click **Aero App**. The screen will display Aero App Documents.
5. Locate the pins.sqlite files you wish to sideload onto Aero App. Rename the sqlite file to the format, *pins-{name}.sqlite*.
6. Drag the pins sqlite file into the Aero App folder. The files will be displayed under Aero App Documents.

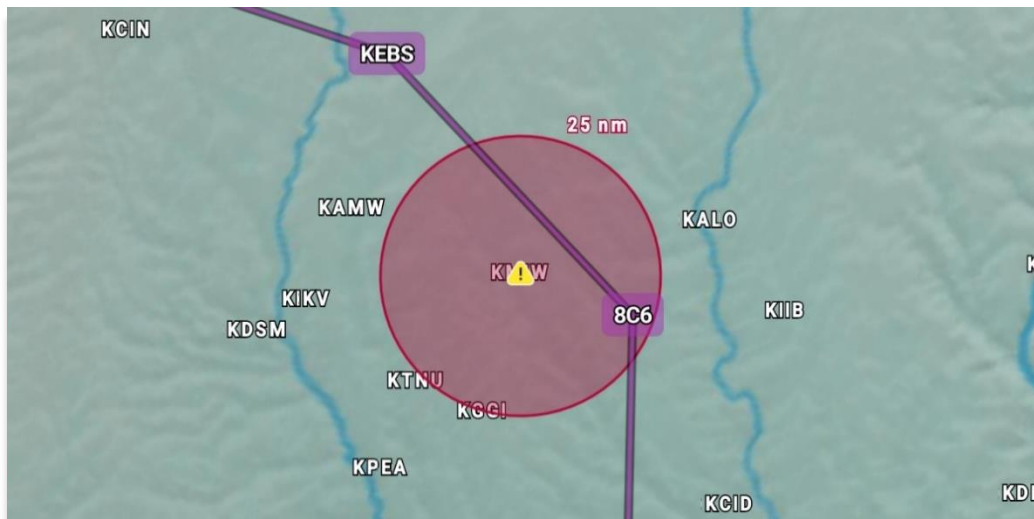


**NOTE:** If the imported file is not renamed, any pins stored in pins.sqlite will be overwritten.

7. To confirm if the files were properly imported, open **Aero App** on your iPad.
8. Tap **Moving Map** on the **Main Menu**.
9. Tap **Overlays**.
10. Tap **User Overlays** from the side menu.
11. 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 15.3.6.1.12](#) for additional information.



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



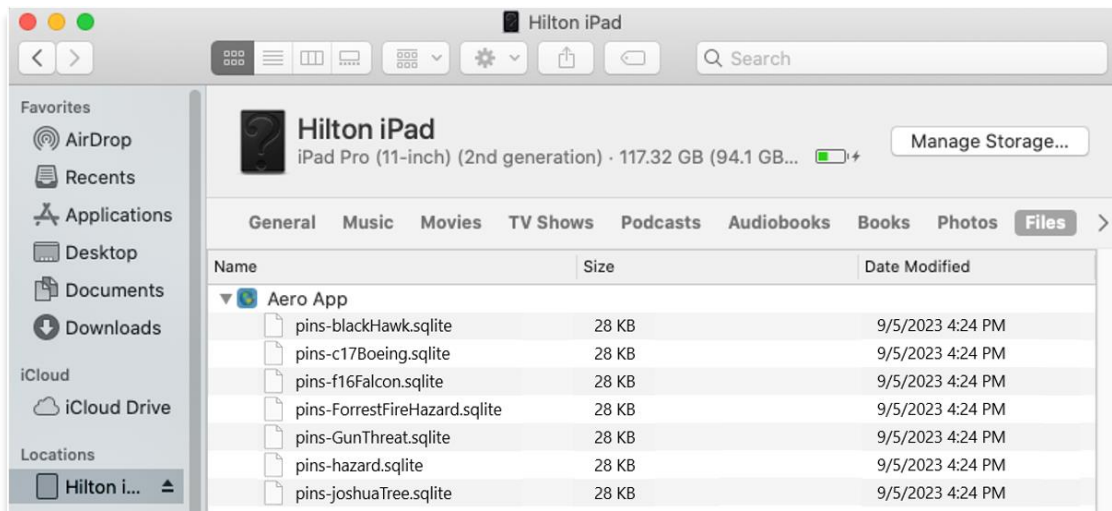
13. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

## 11.6.2 Sideload Hazards 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**.

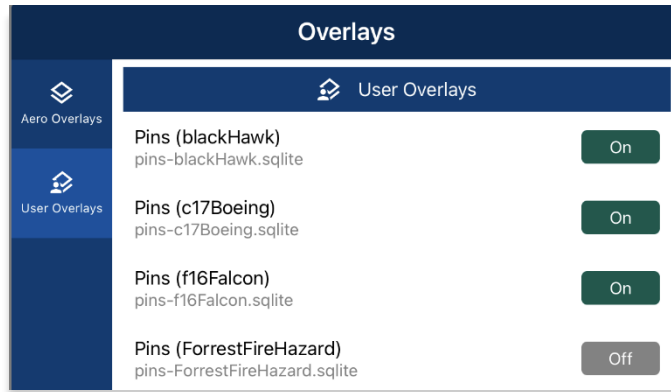


5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.
6. Locate the pins.sqlite files that you wish to sideload onto Aero App. Rename the sqlite file to the format, *pins-{name}.sqlite*.
7. Drag the pins sqlite file into the Aero App folder. The files will be displayed under Files.

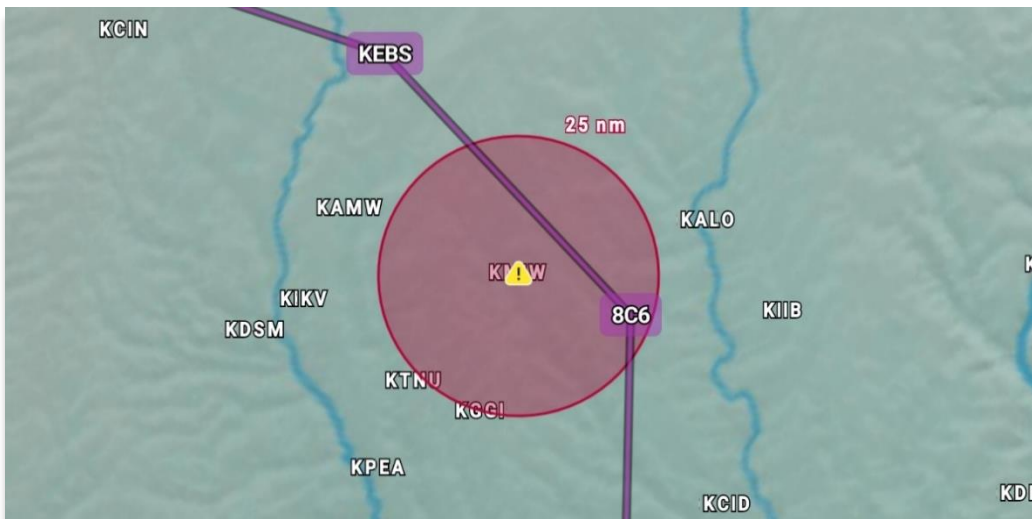


8. To confirm if the files were properly imported, open **Aero App** on your iPad.
9. Tap **Moving Map** on the **Main Menu**.
10. Tap **Overlays**.
11. Tap **User Overlays** from the side menu.

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 15.3.6.1.12](#) 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 Sideload Documents

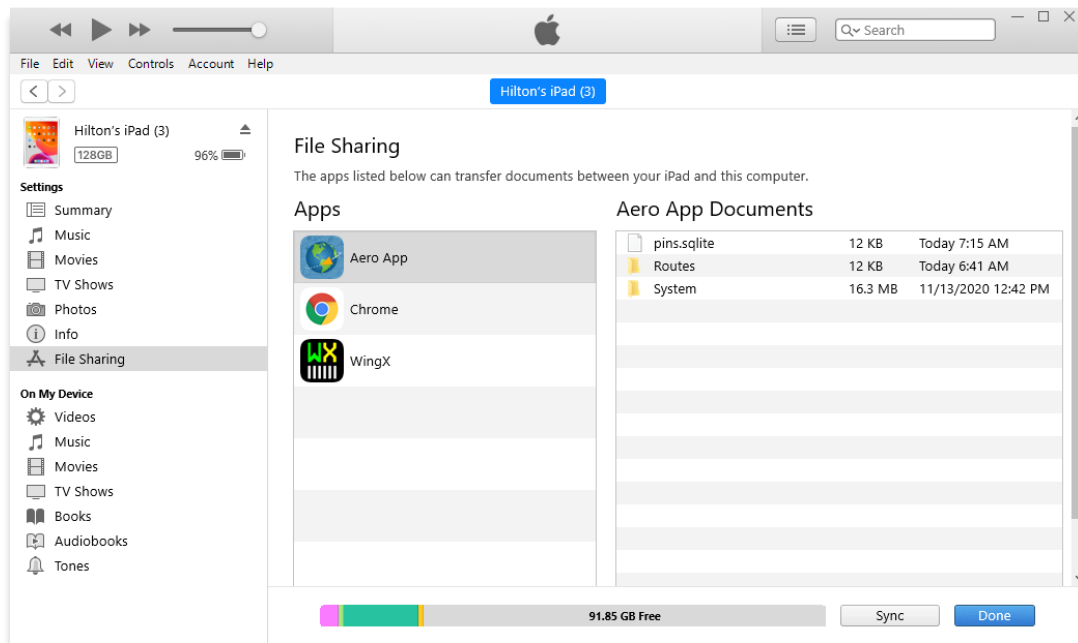
Aero App enables users to sideload user documents.

Ways to sync device:

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

### 11.7.1 Sideload Documents Using iTunes

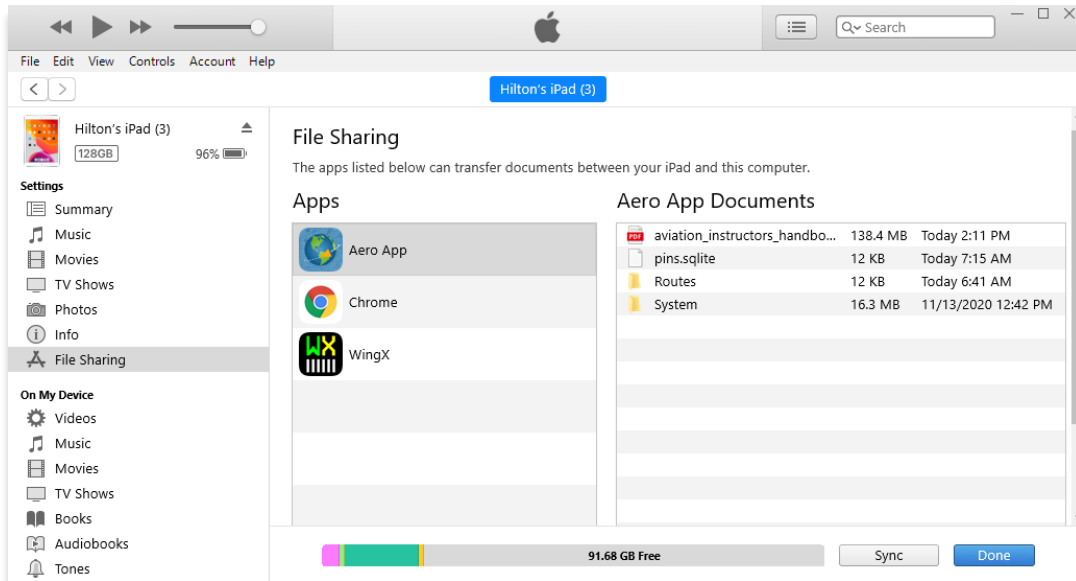
1. Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
2. Click the **iPad** icon and your device information will display.
3. Located below *Settings*, click **File Sharing**.
4. The File Sharing page will appear, click **Aero App**. The screen will display Aero App Documents.



5. Locate the documents that you wish to sideload onto Aero App.

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

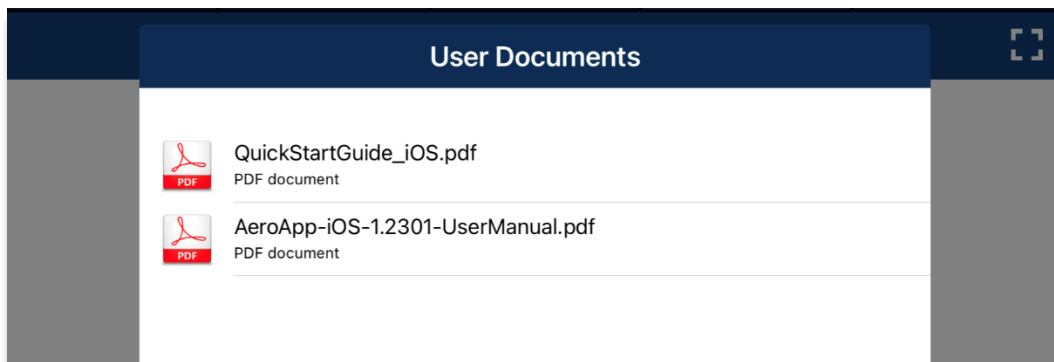
6. Drag the desired documents into Aero App Documents.



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



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



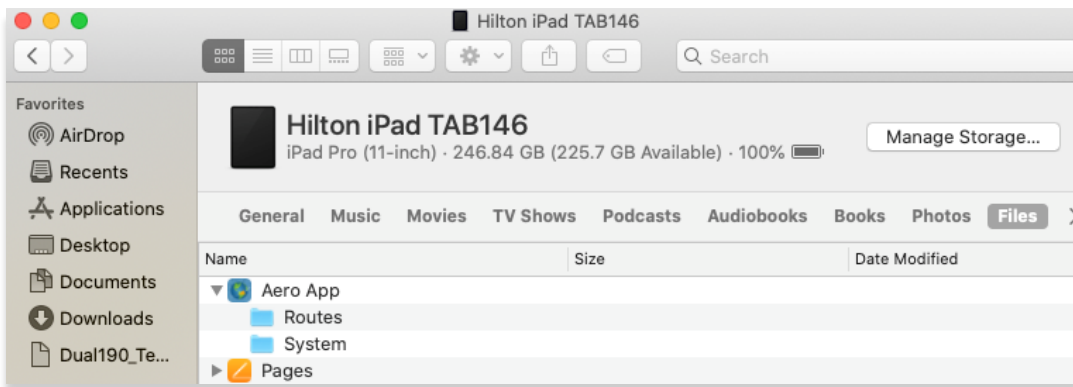
**NOTE:** Alternatively, users can view user documents from a split screen view. For more information, refer to [Section 15.3.10.2](#).

## 11.7.2 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**.



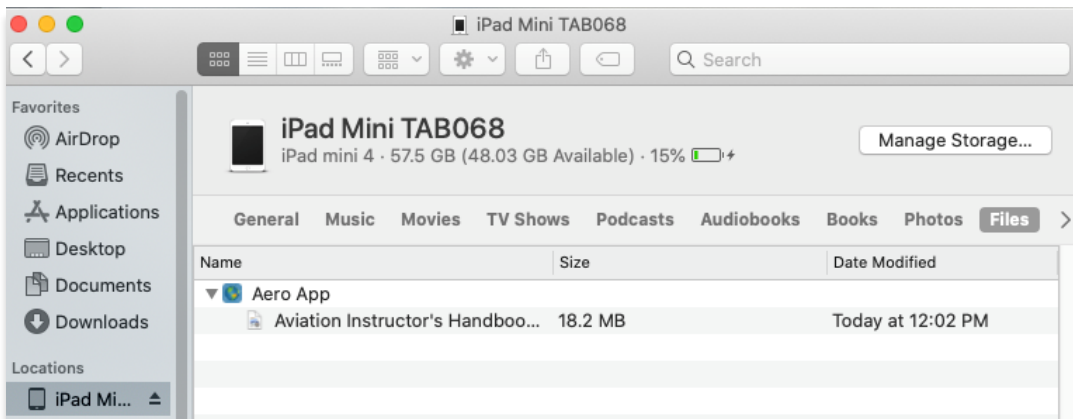
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



6. Locate the documents that you wish to sideload onto Aero App.

	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 the desired documents into Aero App Documents.

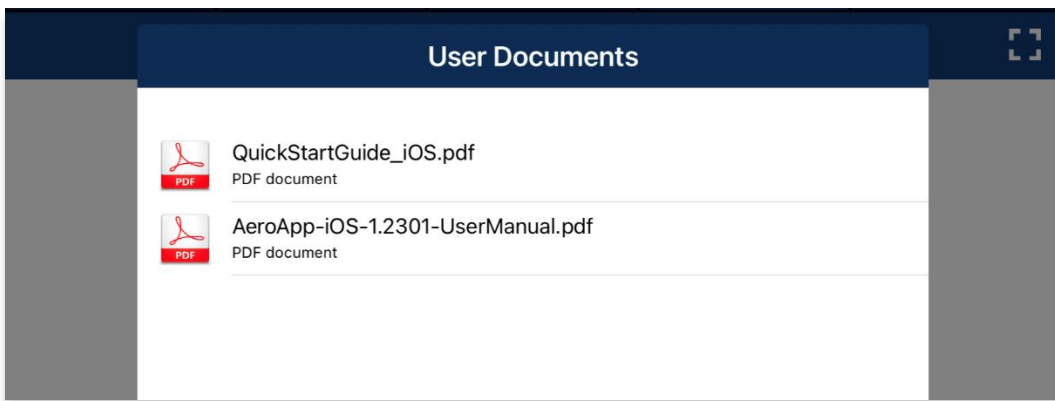




8. To confirm if the files were properly transferred, open **Aero App** on your tablet.
9. Tap **General** on the **Main Menu**.
10. Tap **Docs** on the **Secondary Menu**.
11. Tap the **actions ribbon** to select a document.



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](#).

## 11.8 Sideload KML/KMZ

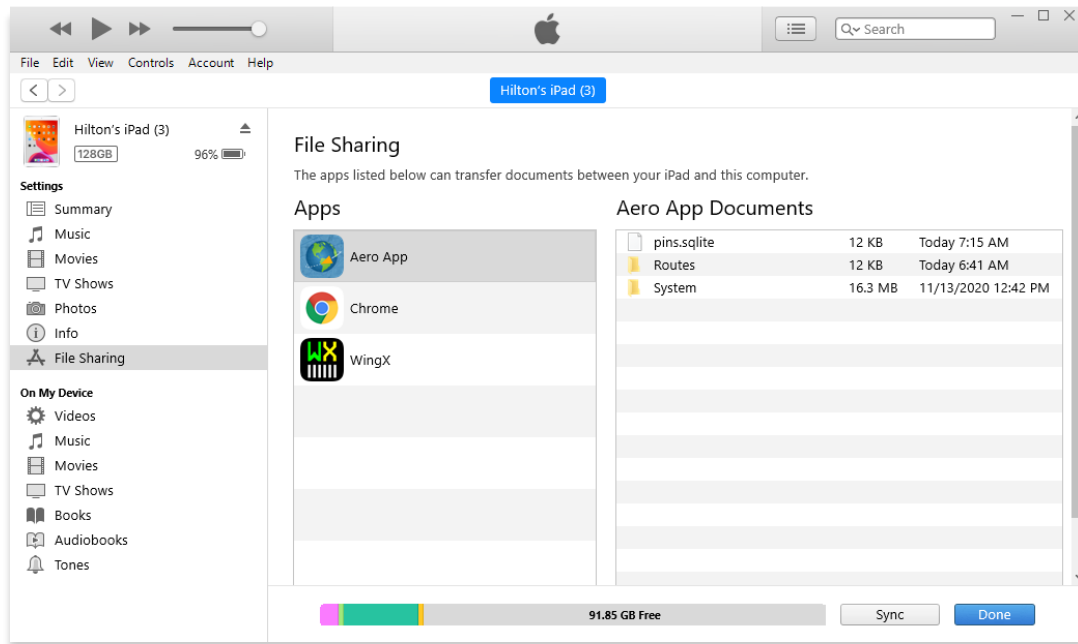
Aero App enables users to sideload KML/KMZ files. Users can add KML/KMZ routes onto their route panel. Refer to [Section 15.3.14.3.1.1](#) for more information.

Ways to sync device:

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

### 11.8.1 Sideload KML/KMZ Files Using iTunes

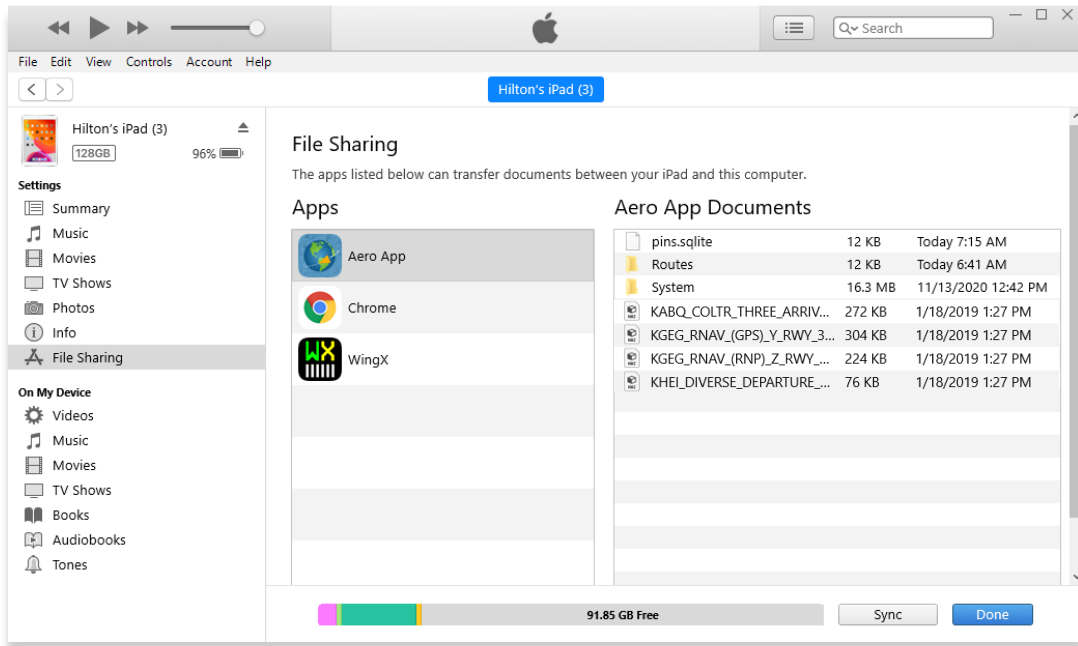
1. Connect your device to a USB or USB-C port of a Windows computer. iTunes will display on the screen.
2. Click the **iPad** icon and your device information will display.
3. Located below *Settings*, click **File Sharing**.
4. The File Sharing page will appear, click **Aero App**. The screen will display Aero App Documents.



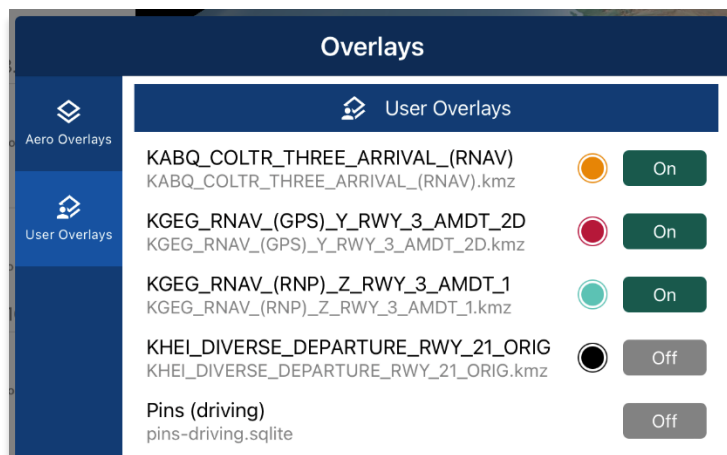
5. Locate the KML/KMZ files that you wish to sideload onto Aero App.

	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

6. Drag the KML/KMZ file into the Aero App folder and the files will display under Aero App.



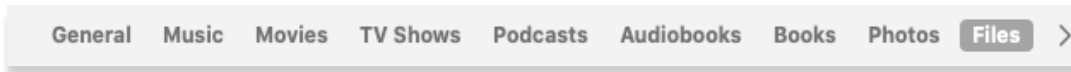
7. To confirm if the files were properly transferred, open **Aero App** on your tablet.
8. Tap **Moving Map** on the **Main Menu**.
9. Tap **Overlays**.
10. Tap **User Overlays** from the side menu. Your sideloaded KML/KMZ files will be shown below.
11. Tap your desired imported KML/KMZ file and it will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



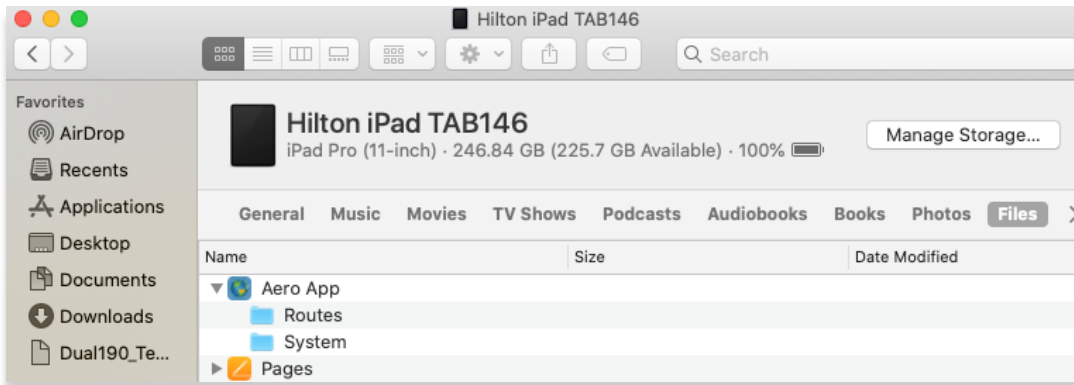
12. To delete an overlay, from the **User Overlays** popup, swipe left to reveal the delete button of the file that you choose to permanently remove. Tap **Delete**.

## 11.8.2 Sideload KML/KMZ Files 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**.



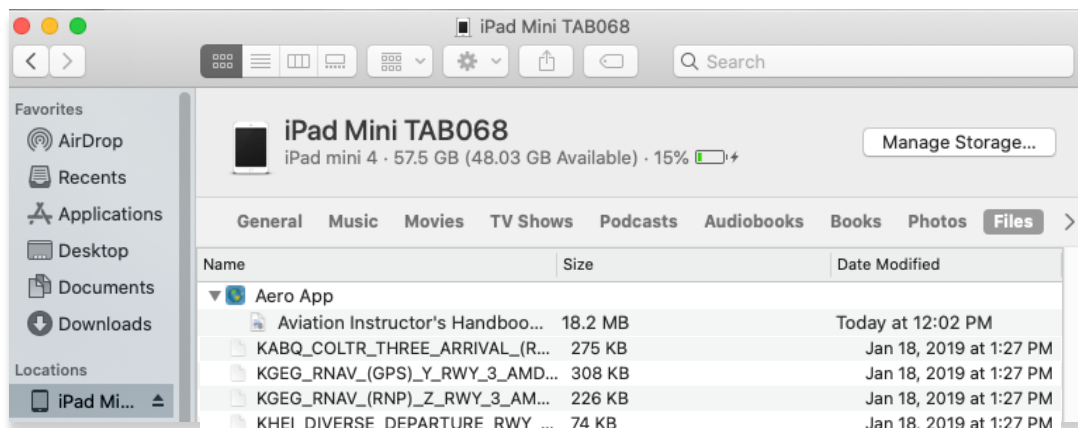
5. Aero App will display under Files. Click the **drop-down arrow** on the left side of Aero App to display all available folders.



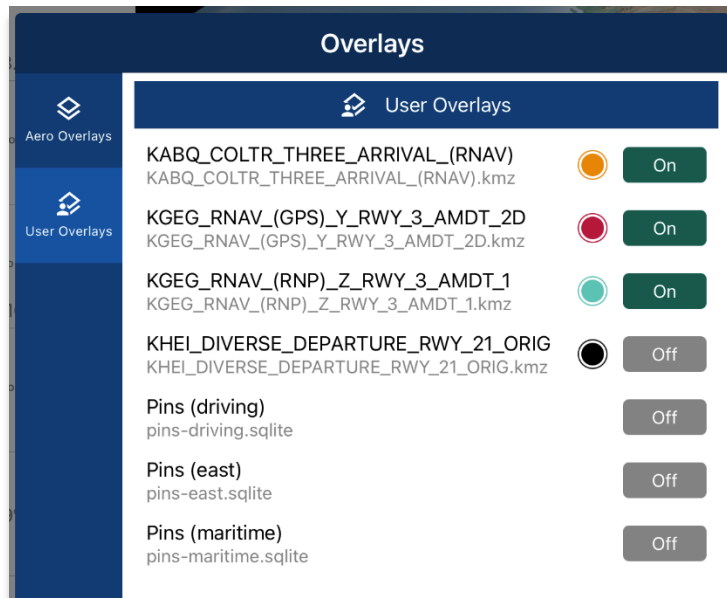
6. Locate the KML/KMZ files that you wish to sideload onto Aero App.

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

7. Drag the KML/KMZ files into the Aero App folder and the files will display under Aero App.



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 your desired imported 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

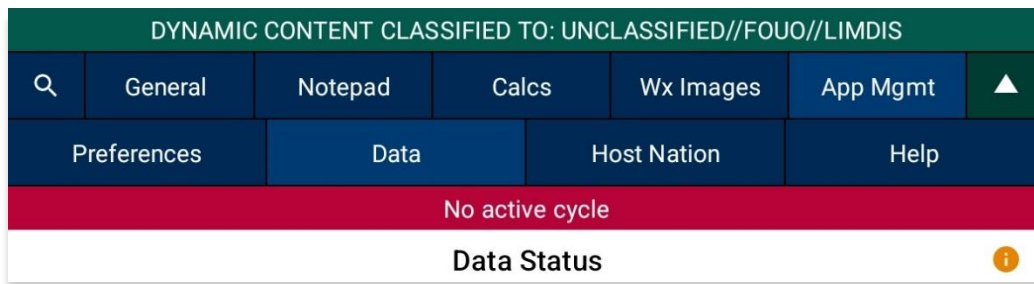
Aero App Data updates are released periodically. Users can load and manage up to two Data Cycles at a time. Data notifications are displayed when Aero App Data is not valid for the period of use.

### 12.1 Data Notification

Aero App will display data notification warnings if there is no active cycle, or if the active data cycle is not current.

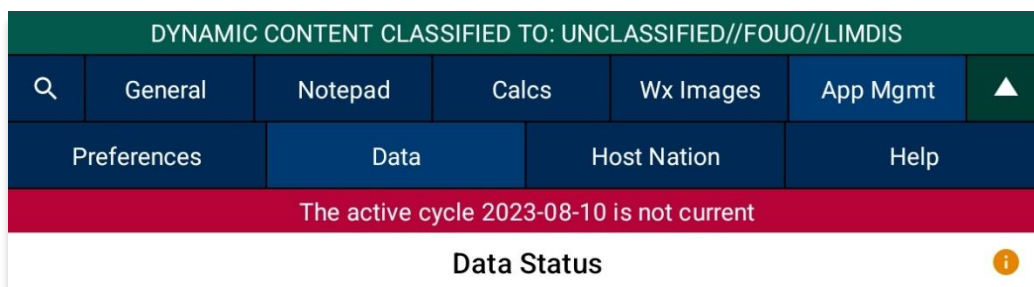
#### No active cycle

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.

The screenshot shows the 'Data Status' screen with the following elements:

- Header:** 'DYNAMIC CONTENT CLASSIFIED TO: UNCLASSIFIED//FOUO//LIMDIS' and a navigation bar with 'App Mgmt' selected.
- Sub-headers:** 'Preferences', 'Data', 'Host Nation', and 'Help'.
- Data Status Section:**
  - Active Cycle:** Effective 2023-10-05 through 2023-11-01 (2310). Buttons: Delete, View.
  - Standby Cycle:** Effective 2023-09-07 through 2023-10-04 (2309). Buttons: Delete, View.
- Controls:** 'Download Delta files (faster)' toggle (On), 'Share' button, 'Download', 'Refresh', 'Import', 'Load all data', 'Swap Cycles', and 'Delete from Documents' buttons.
- Footer:** 'No files to load. Sideload files using Finder or iTunes, or download files wirelessly.'

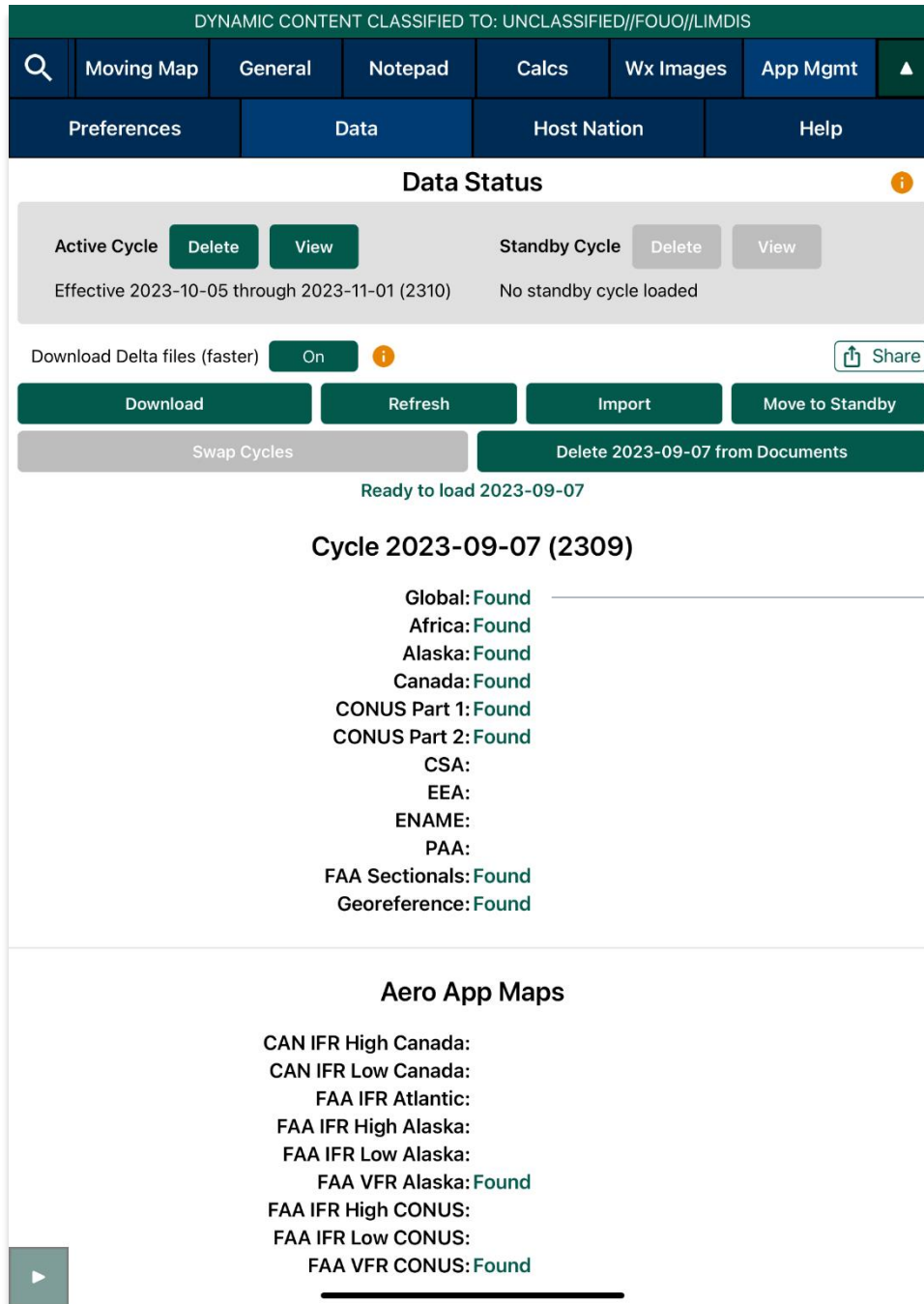
Annotations in the image point to the 'Active Cycle Effective Dates' on the left and the 'Standby Cycle Effective Dates' on the right.



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

## 13.2 Manage Data on Device

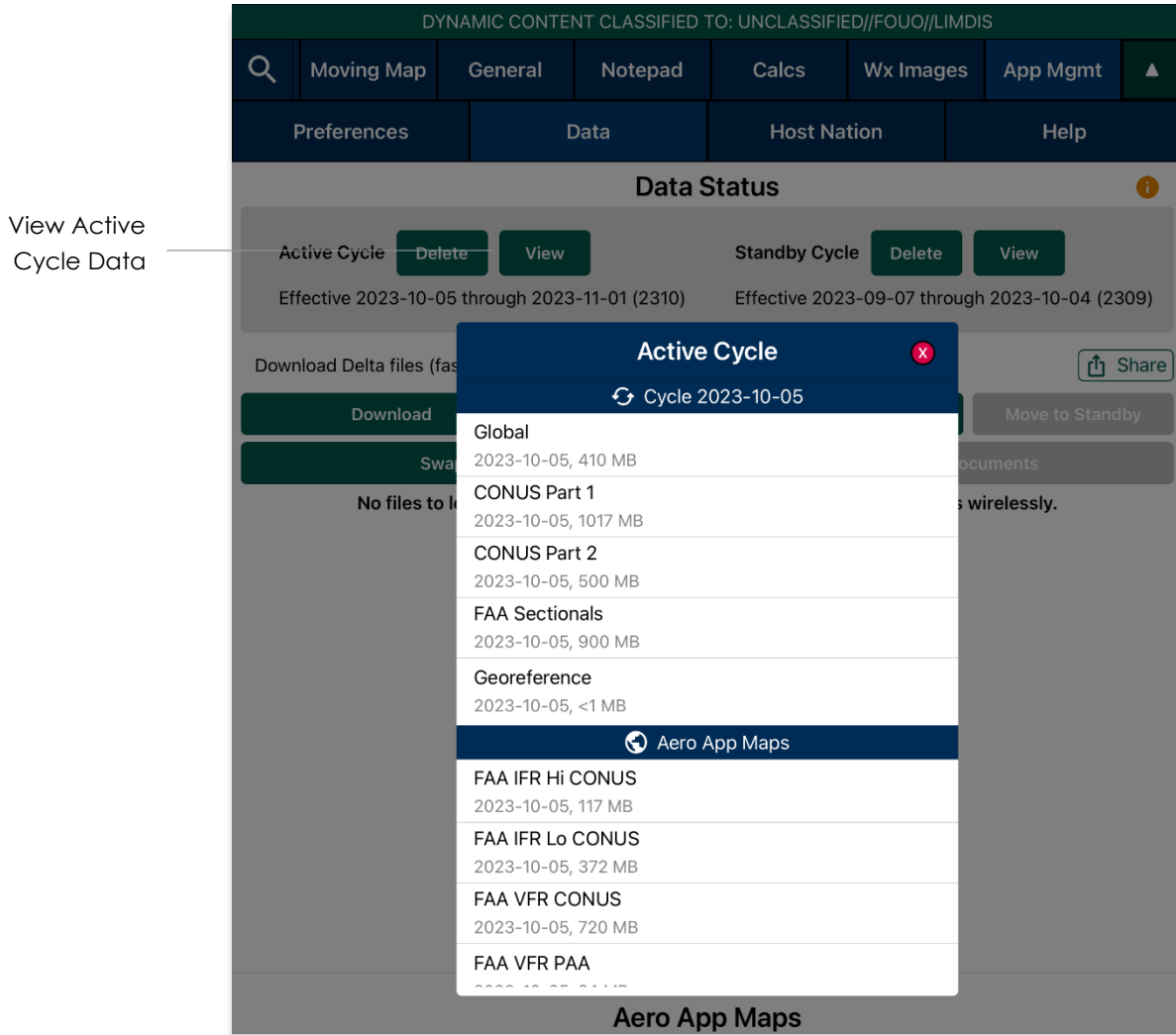
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu** to view data information.
3. Tap **Refresh**. All the available data files will display **Found**



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.



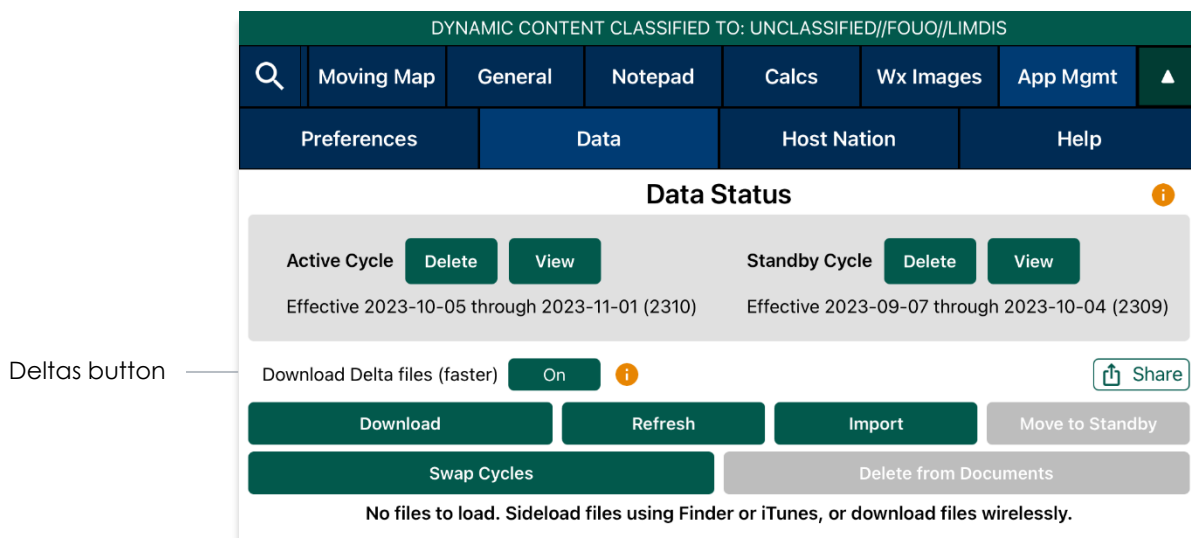
## 13.3 Data Status and Deltas

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.

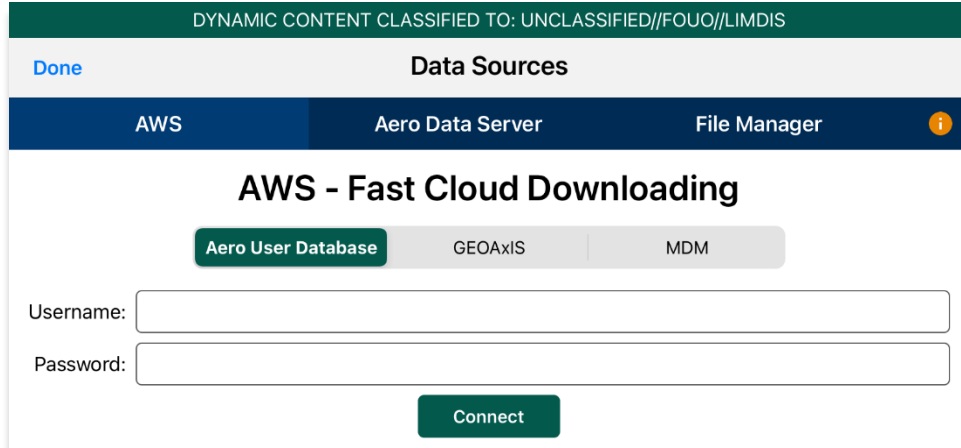
### 13.3.1 Download Delta Files (Faster)

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.

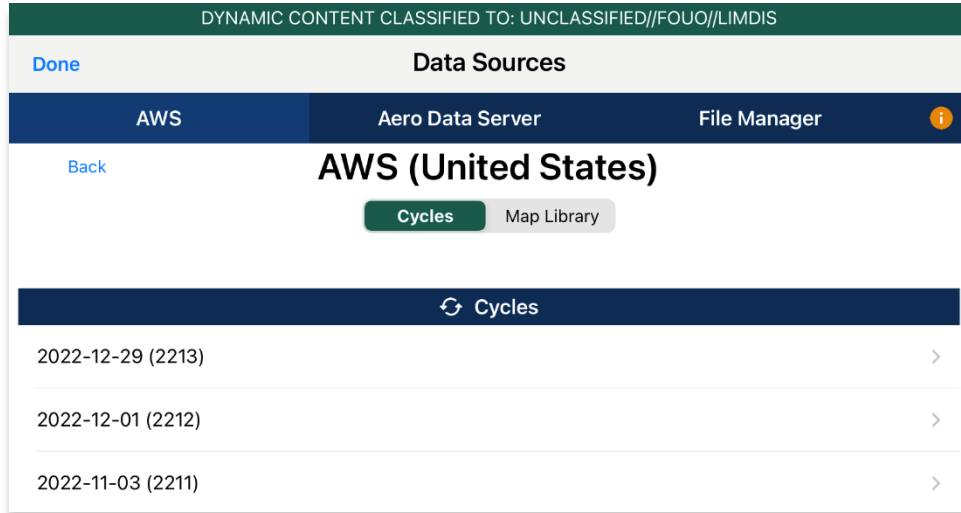
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap the **Download Delta files (faster)** button to enable option.
4. Tap **Download**.



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.

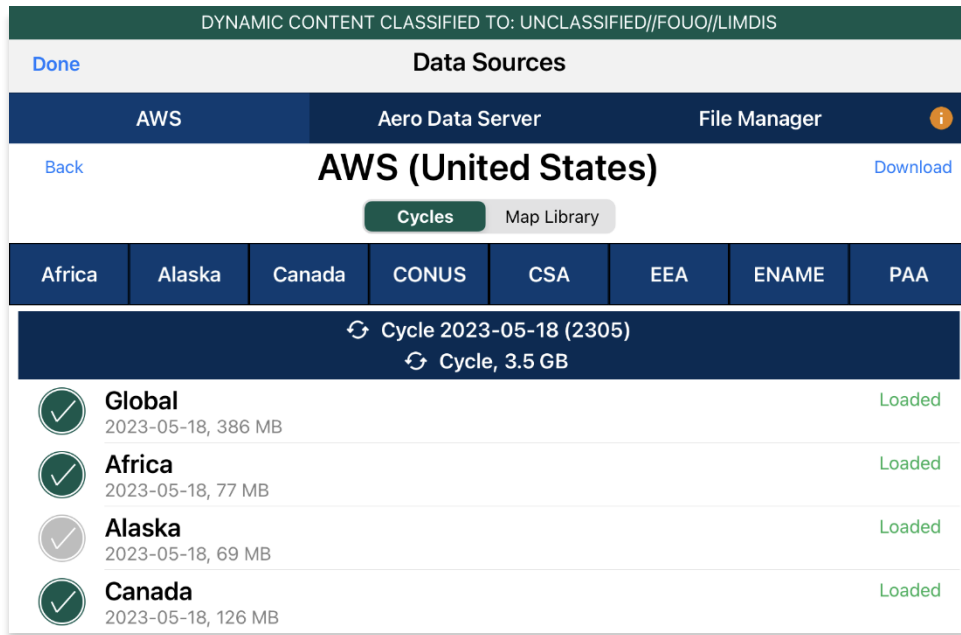


6. Users will be prompted to the Data Cycle Download screen. Users are provided with options to download Cycles or Map Library. Select **Cycles**.



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.

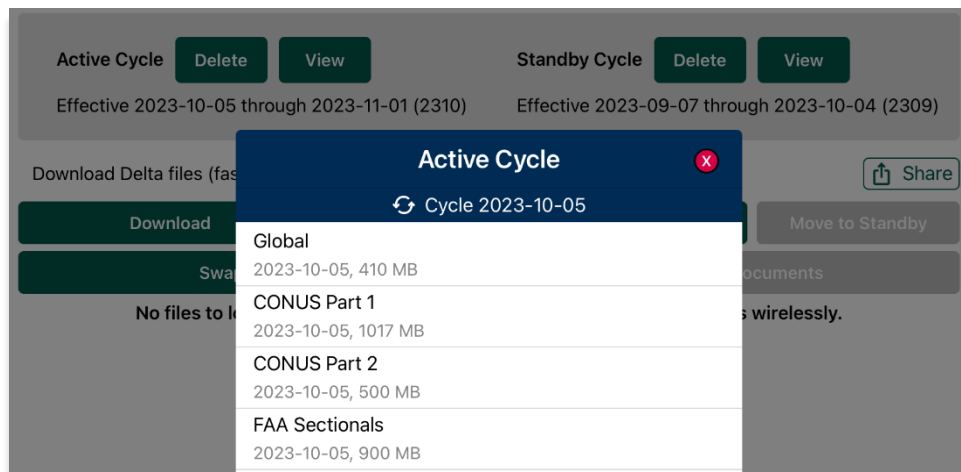
9. Tap **Done** when download is complete.



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.

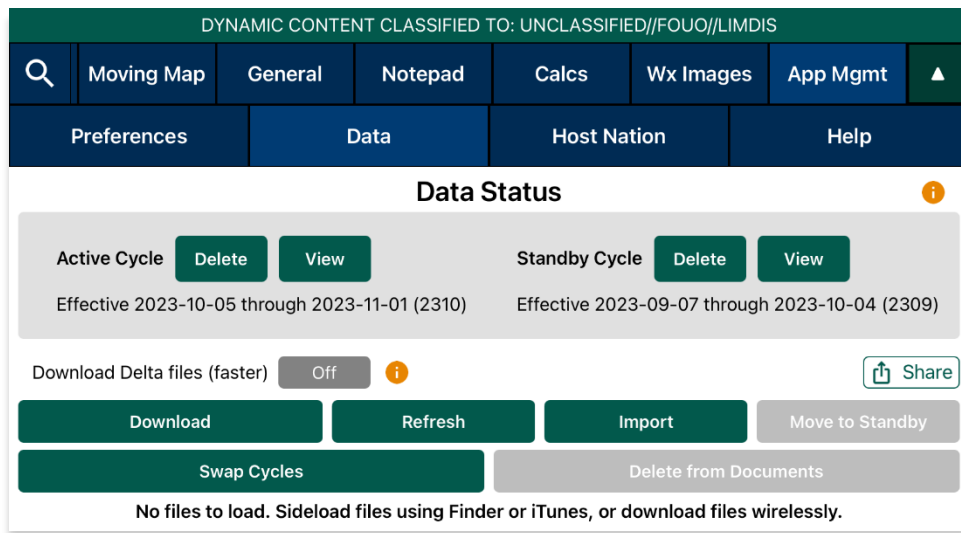


**NOTE:** A warning will display as users attempt to load Delta files onto Standby Cycle while **Download Delta files (faster)** is enabled. Selecting **Load Delta files** from the warning enables users to move Delta files to Standby Cycle.

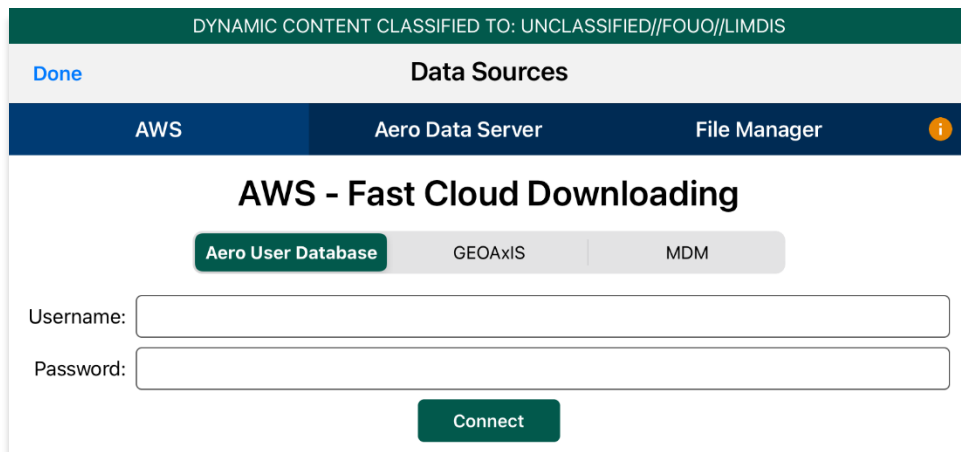
### 13.3.2 Download Compatible Files

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.

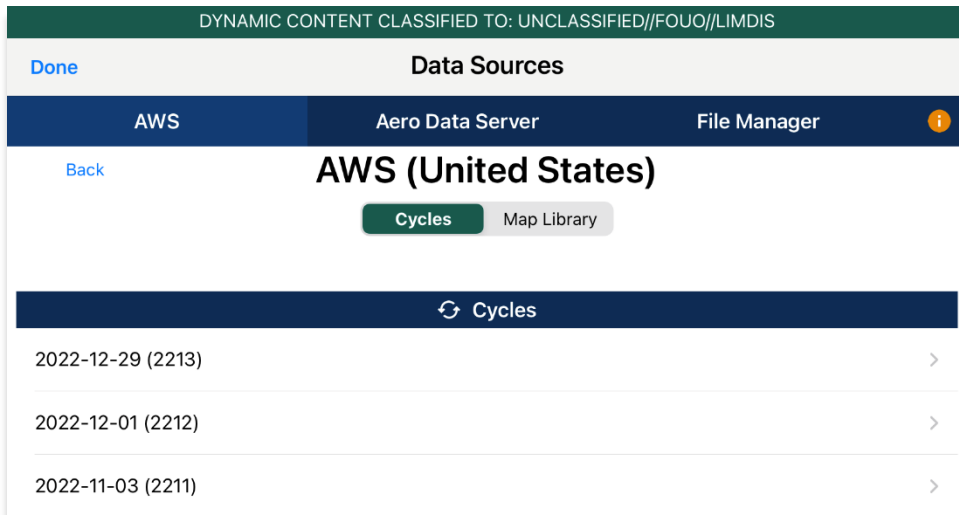
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Ensure that the Download Delta files (faster) option is disabled. Tap **Download**.



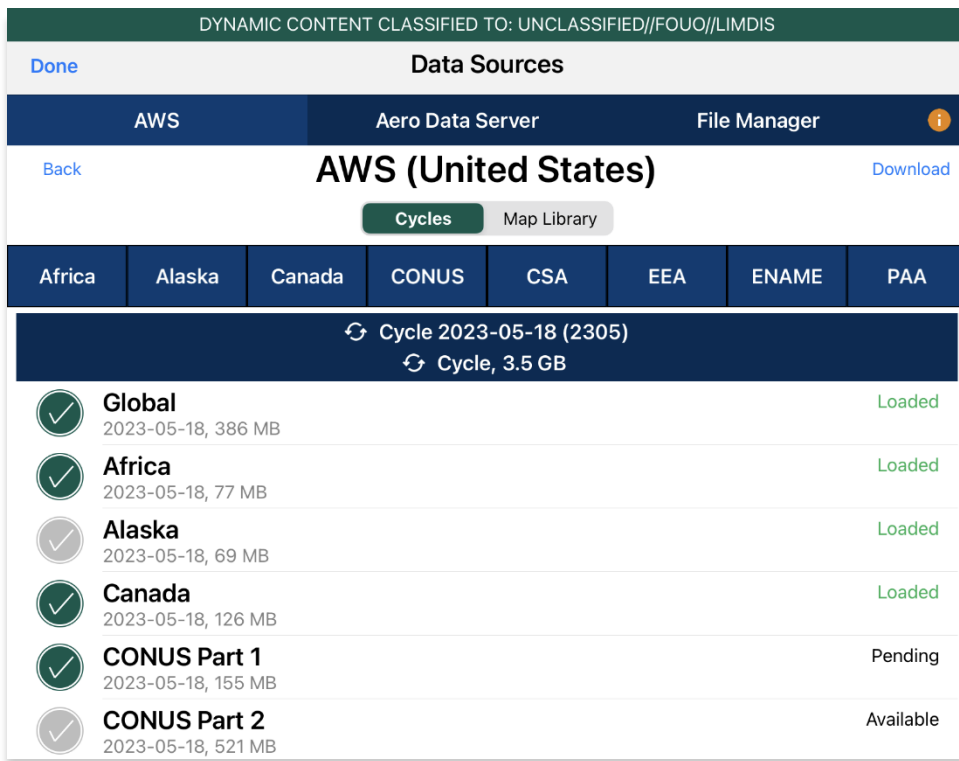
4. Log in to AWS using Aero User Database (AUD) or GEOAxis credentials, set up your device with Mobile Device Management (MDM), or select Aero Data Server.



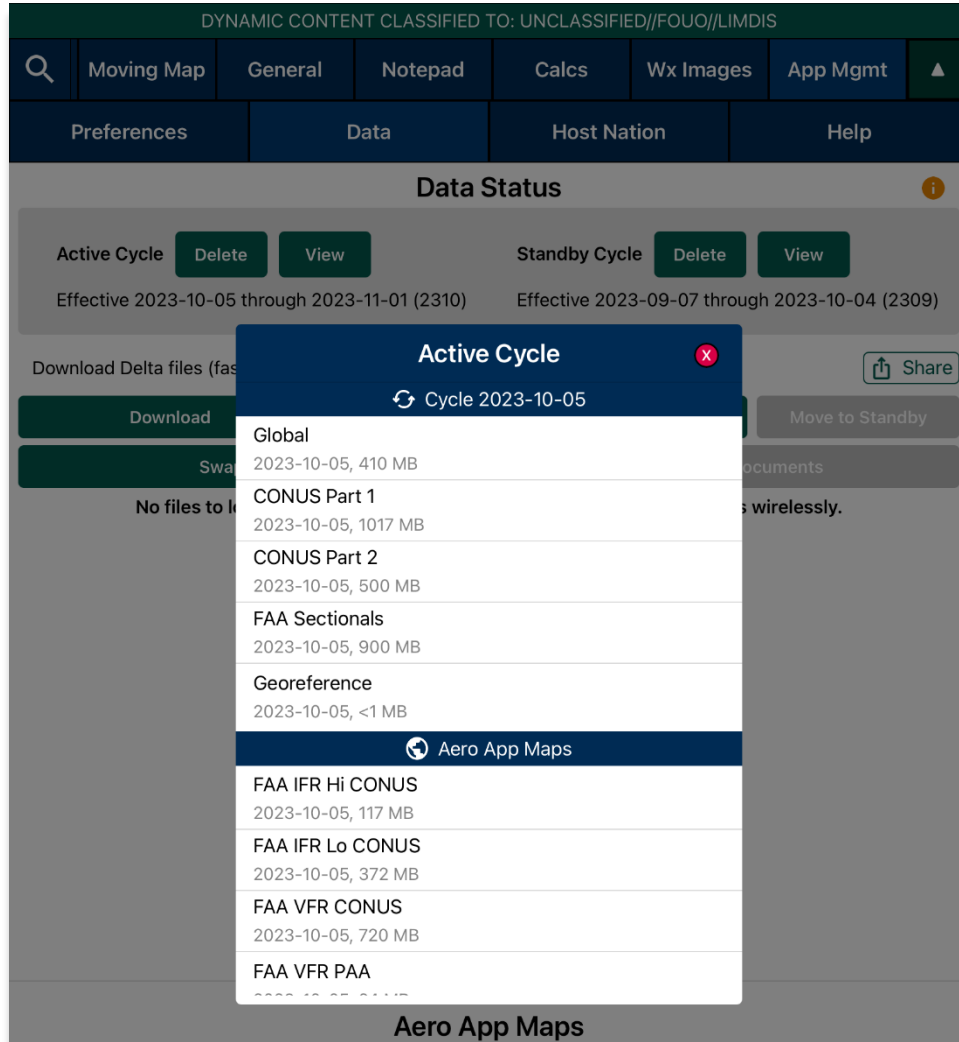
- Users will be prompted to the Data Cycle Download screen. Users are provided with options to download Cycles or Map Library. Select **Cycles**.



- 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 onto Active Cycle which activates current data.
11. Tap **View** to verify the data in Active Cycle.

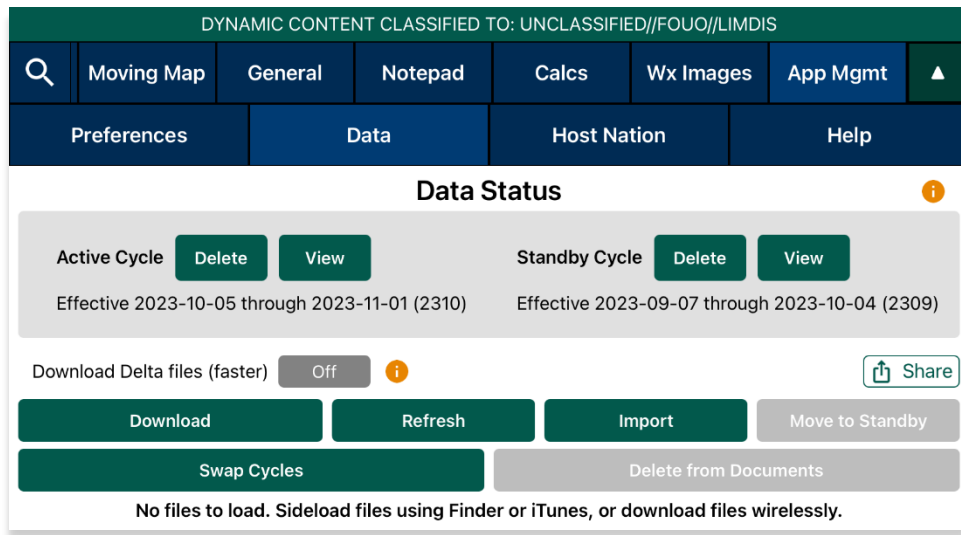


**NOTE:** A warning will display as users attempt to load Delta files onto Standby Cycle while **Download Delta files (faster)** is enabled. Selecting **Load Delta files** from the warning enables users to move Delta files to Standby Cycle.

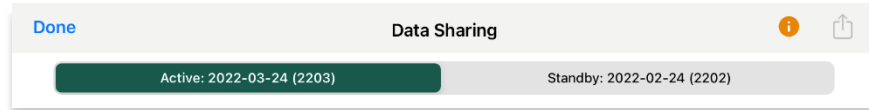
## 13.4 Share Data Through AirDrop or ADS

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.

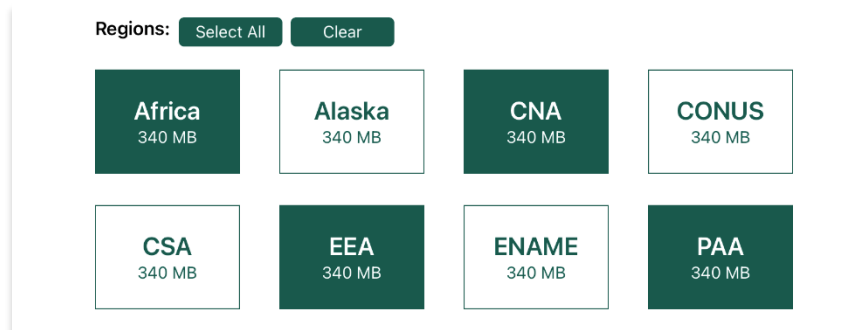
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap the **Share** button and the Data Sharing screen will display.



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

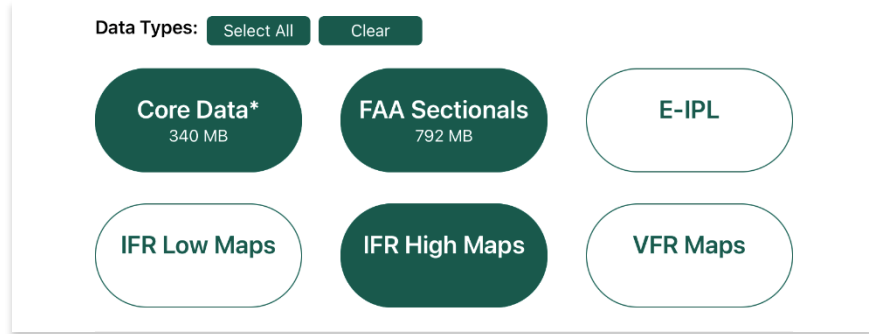


5. Select desired **Regions** to share.

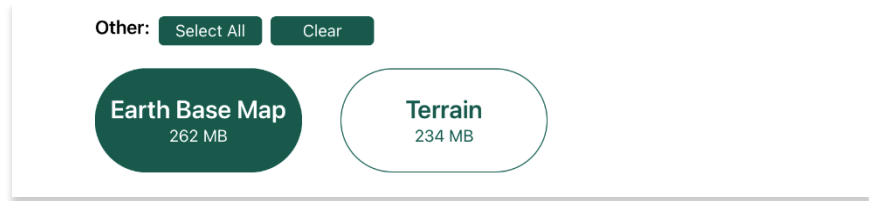




6. Select desired **data types** to share.

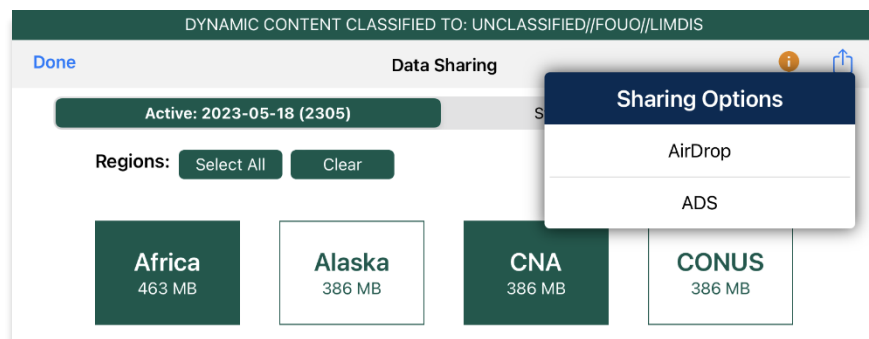


7. Select desired **additional files** to share.





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.

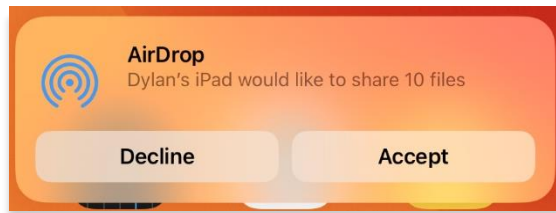
 **NOTE:** The **Core Data\*** data type includes Global and Georeference files.

### 13.4.1 Receiving Map/Cycle Files Through AirDrop

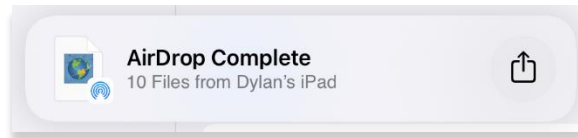
Users can view the Airdropped Map/Cycle files on Aero App. The person receiving the files must have their device's AirDrop settings set to *Everyone for 10 Minutes* (or set to *Everyone* for those running iOS 16.2 or earlier) prior to receiving any files. Different behaviors will occur depending on the device's operating system.

#### 13.4.1.1 Receiving Map/Cycle Files for Devices With iOS 17 or Later

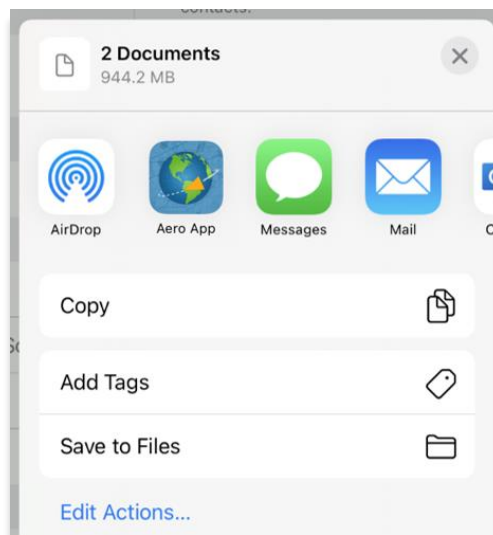
1. An AirDrop notification will appear that prompts users to *Decline* or *Accept*. Tap **Accept**.



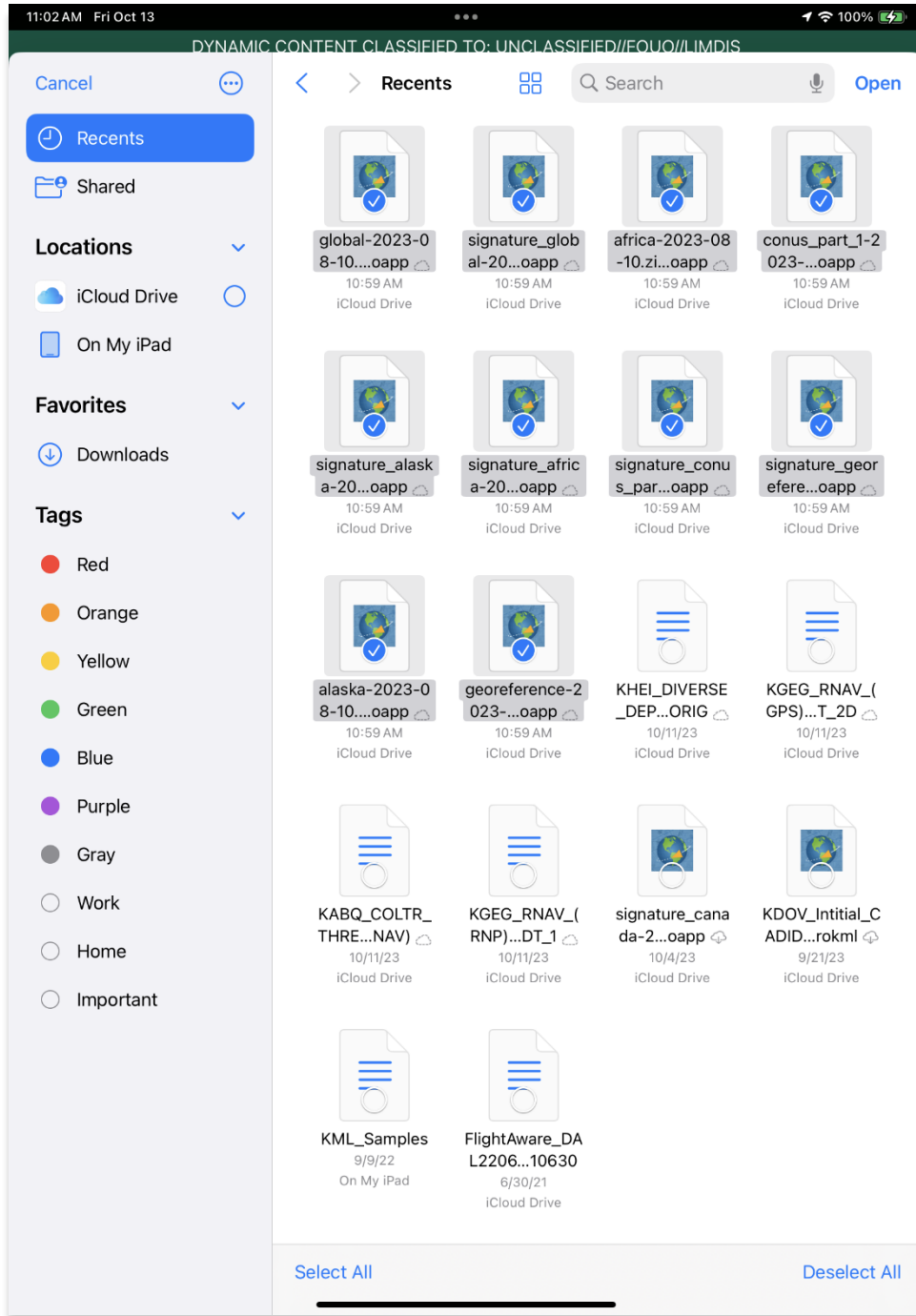
2. Once the AirDrop is complete, a popup will display at the top of the screen. Tap the **Share** button.



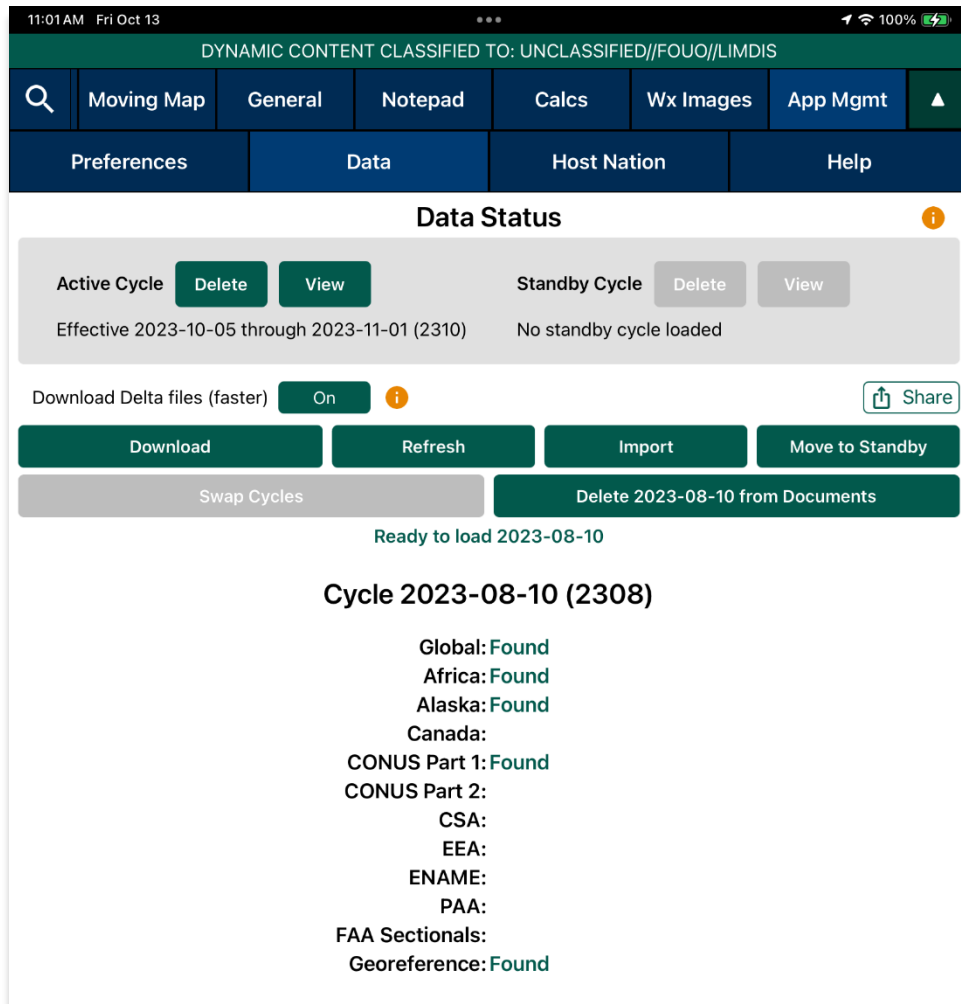
3. A popup to select an application to import the Airdropped files will display. Select **Aero App**.



4. Aero App will open, and the *document picker* will display. Select desired files to import.
5. Tap **Open** once desired files have been selected.



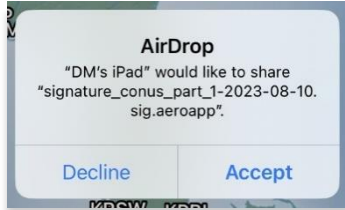
6. Navigate to the *Data Status* page, if necessary.
7. The Airdropped files will be loaded into the Data Status page. Tap **Move to Standby** or **Add Files to Cycle** if a cycle is already loaded in Standby Cycle.



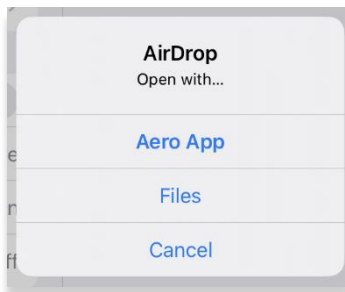
8. An *Import* button is available for users who missed a file to import. Tap **Import** to display the document picker.
9. Select desired file to import into Aero App.

### 13.4.1.2 Receiving Map/Cycle Files for Devices With iOS 17 or Earlier

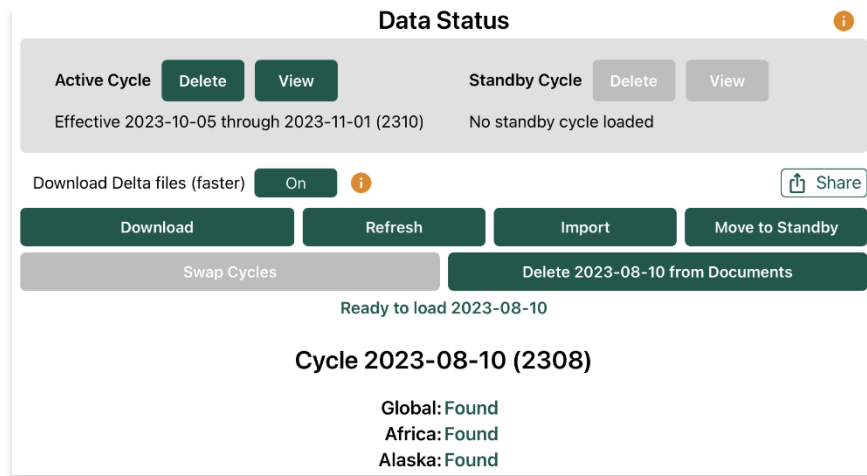
1. An AirDrop notification will appear that prompts users to *Decline* or *Accept*. Tap **Accept**.



2. Once the AirDrop is complete, a popup to open the Airdropped files will display. Select **Aero App**.



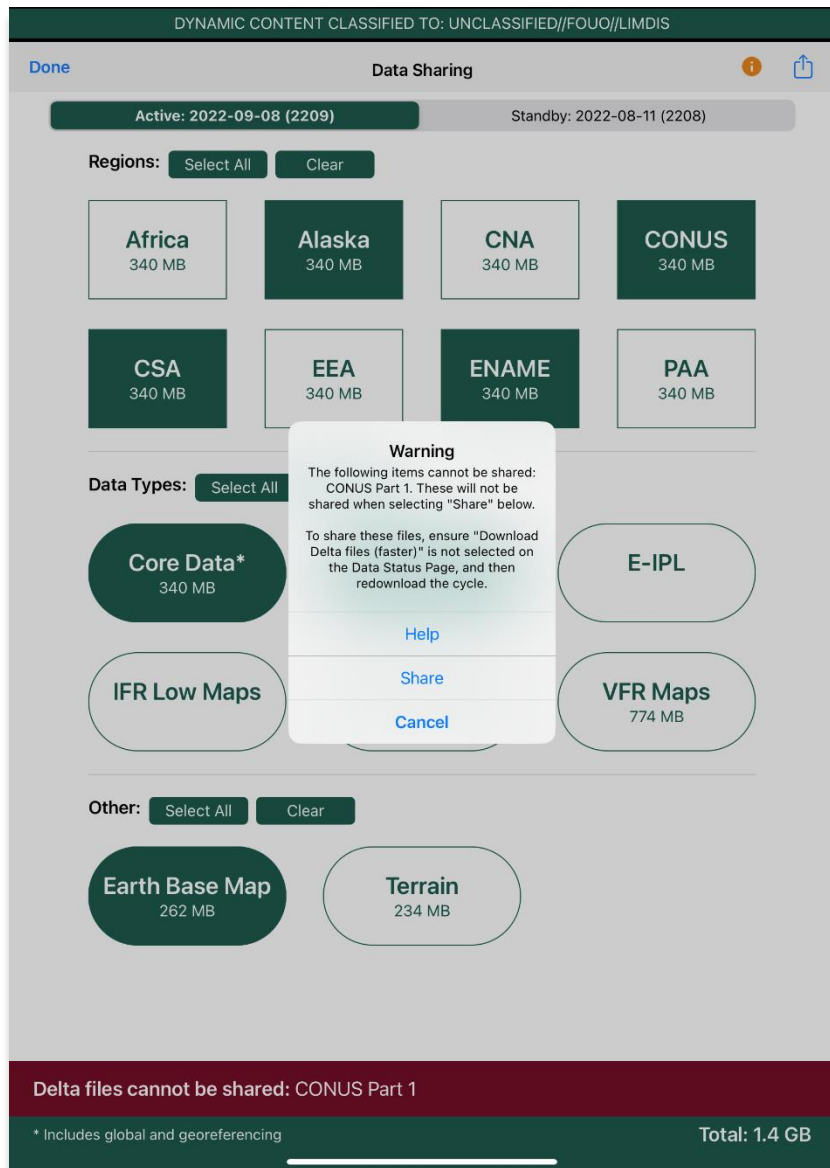
3. Aero App will open to the Data Status page and the Airdropped files will be loaded. Tap **Move to Standby** or **Add Files to Cycle** if a cycle is already loaded in Standby Cycle.



4. An *Import* button is available for users who missed a file to import. Tap **Import** to display the document picker.
5. 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.

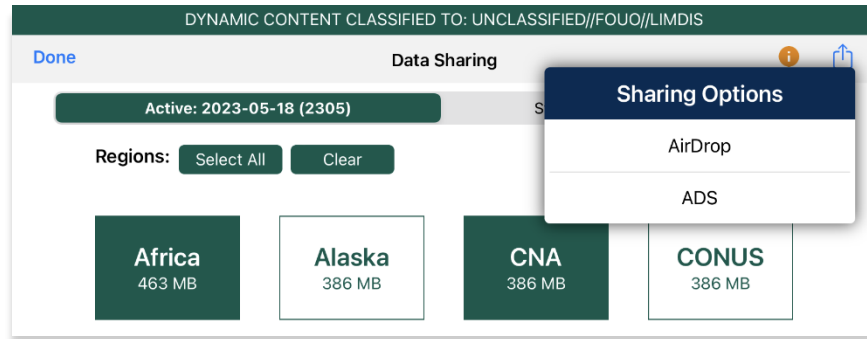


**NOTE:** Refer to [Section 13.3.2](#) to redownload AirDrop-compatible files.

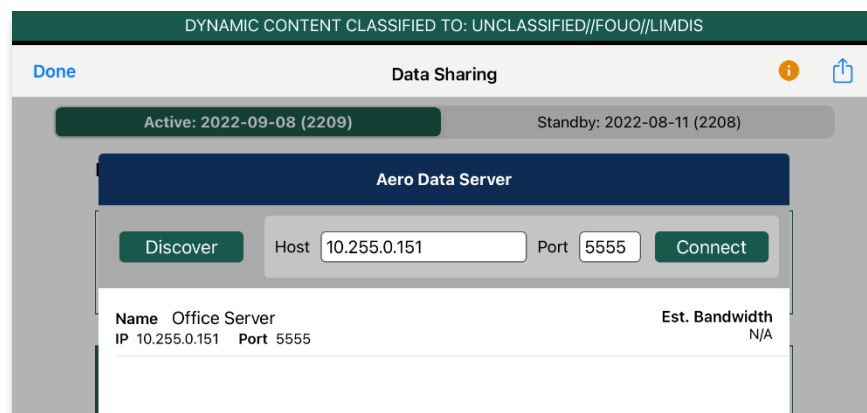
## 13.5 Upload to ADS

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 for Upload to ADS, return to the **Data Sharing** screen on Aero App.
4. Once **ADS** is selected from Sharing Options, 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.

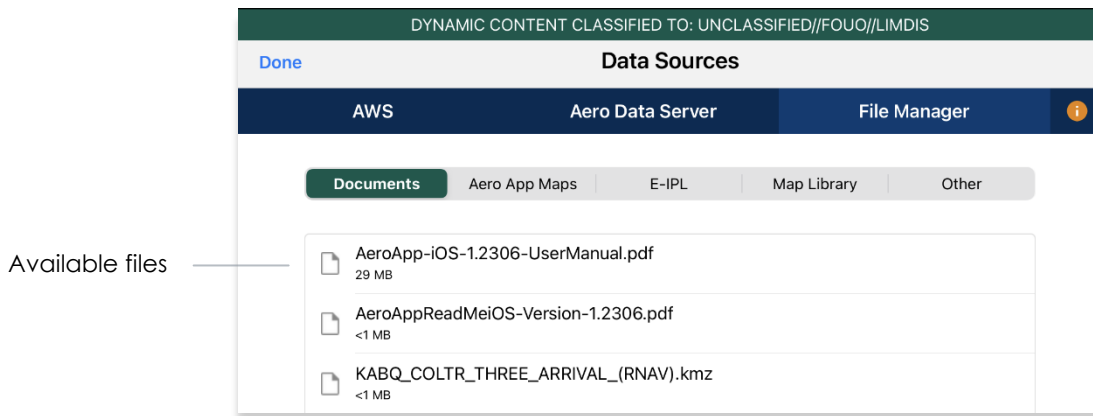


**NOTE:** Refer to [Section 13.4](#) for guidance on how to load desired Data Cycles, Maps, and Additional files to share.

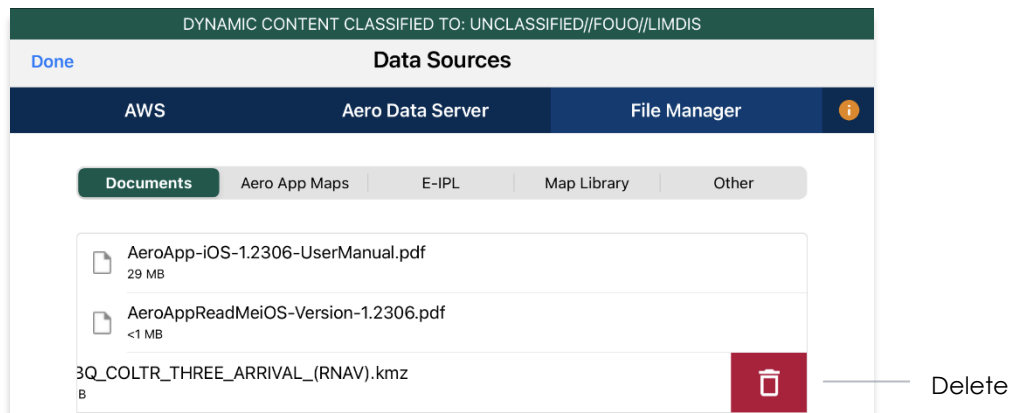
## 13.6 File Manager

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 the files that you want deleted to the left then tap **Delete**. The file will be removed from the list.








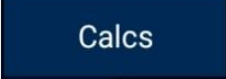





## 14 Introduction to Aero App Menus

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 precipitation, storm, icing, freezing levels, winds aloft, forecasts, and many more.</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 the 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.

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## 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.

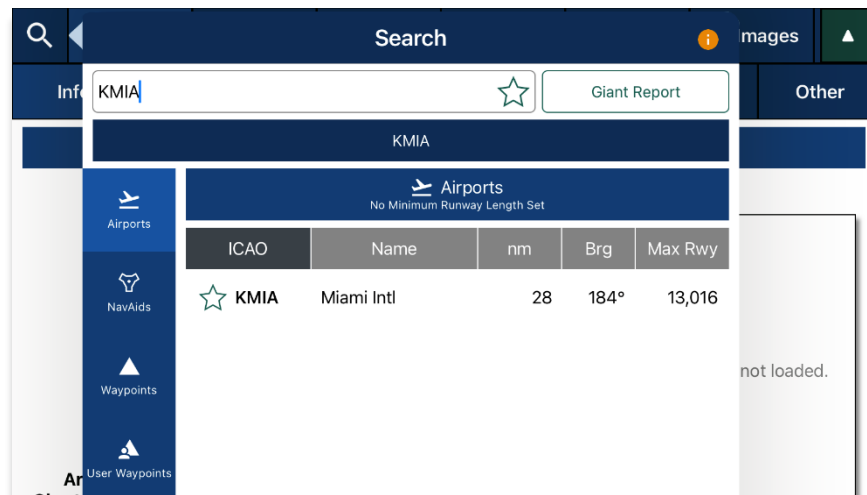
## 15 Using Aero App's Main Menu

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 Magnifying Glass on 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 **magnifying glass** 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.

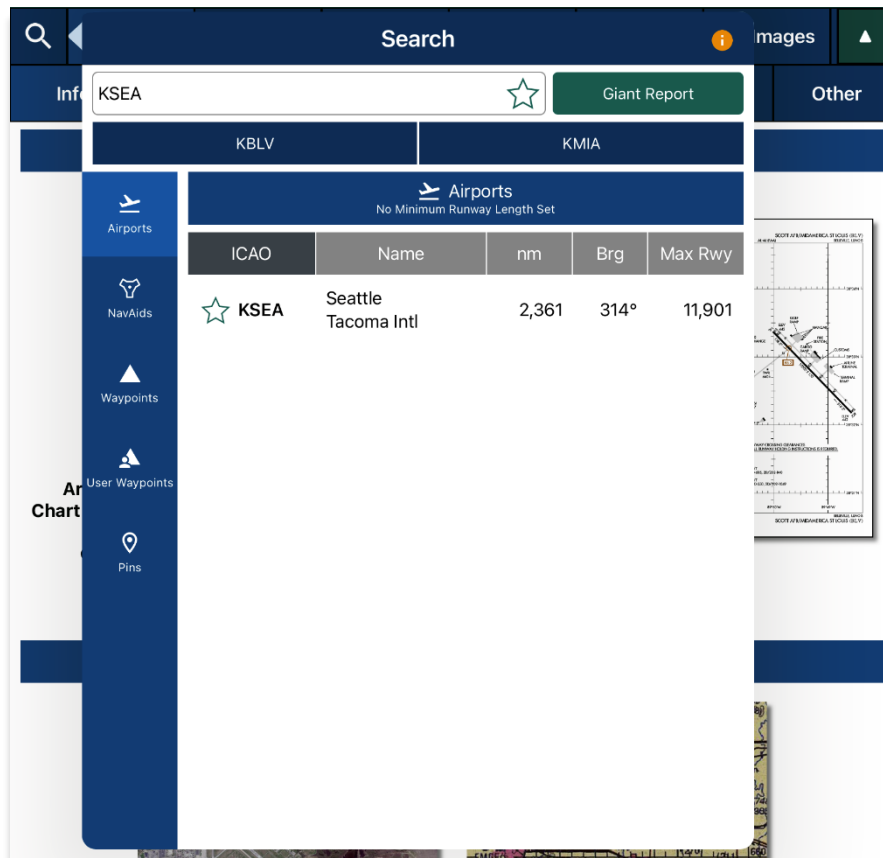


**NOTE:** Users can add an identifier to their *Favorites* list as explained in [Section 15.1.2](#).

### 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 Giant Report for that specific airport will be displayed.

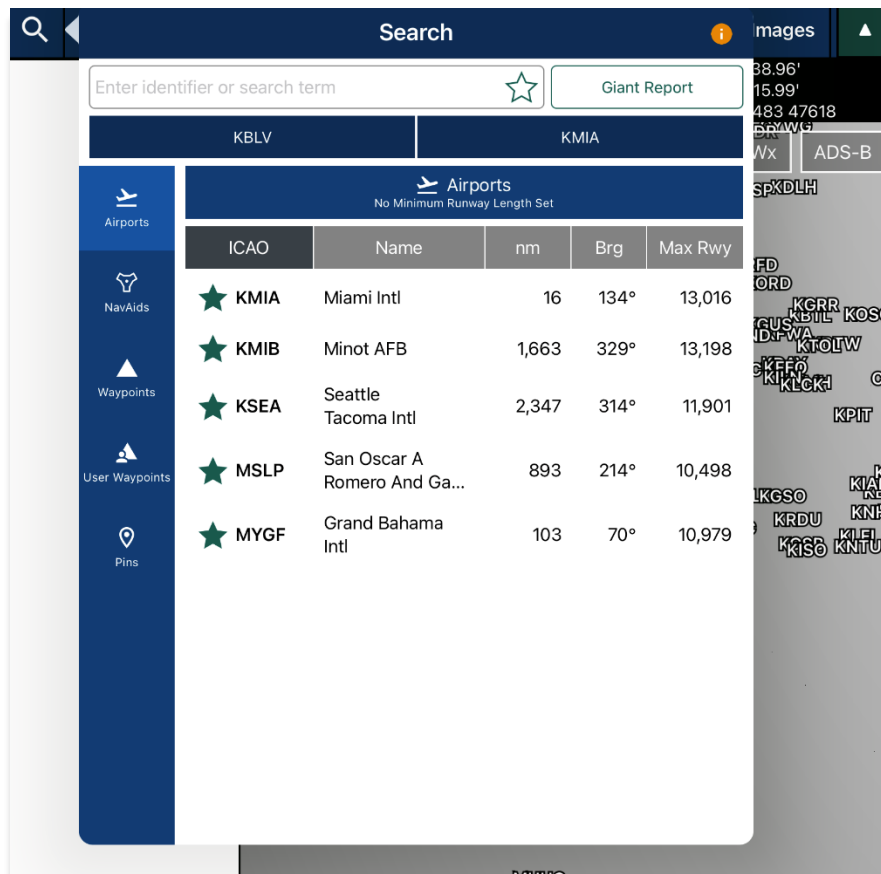


**NOTE:** To view Giant Reports, Giant Reports data must be preloaded onto Active Cycle.

### 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 convert 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.



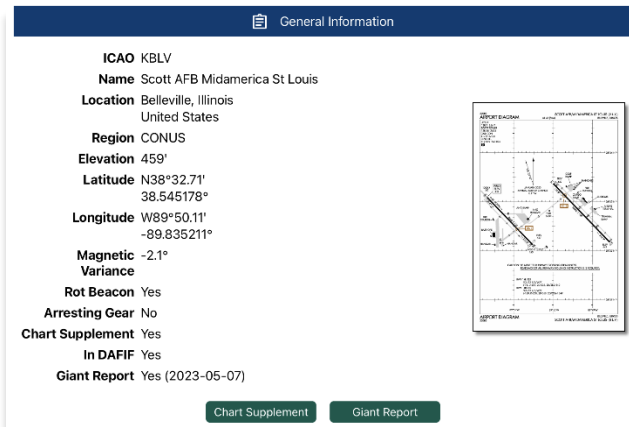
## 15.2 Information

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.

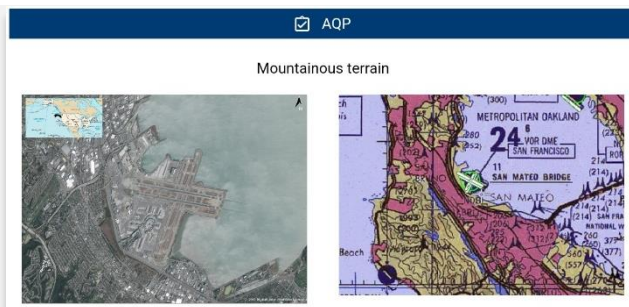
General and other relevant information for identifiers such as NavAids, Waypoints, and User Waypoints are available to users. Global is required to access identifier information.

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.



**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.

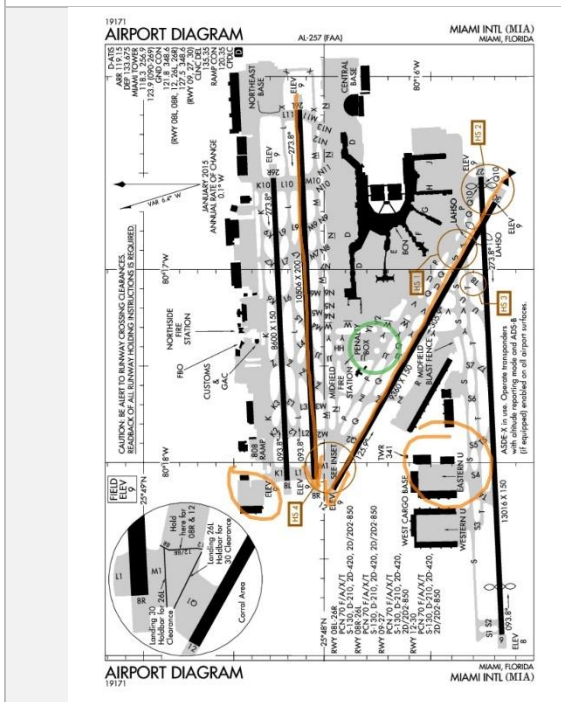


**NOTE:** Drawings on Charts persist across cycles for 6 months.

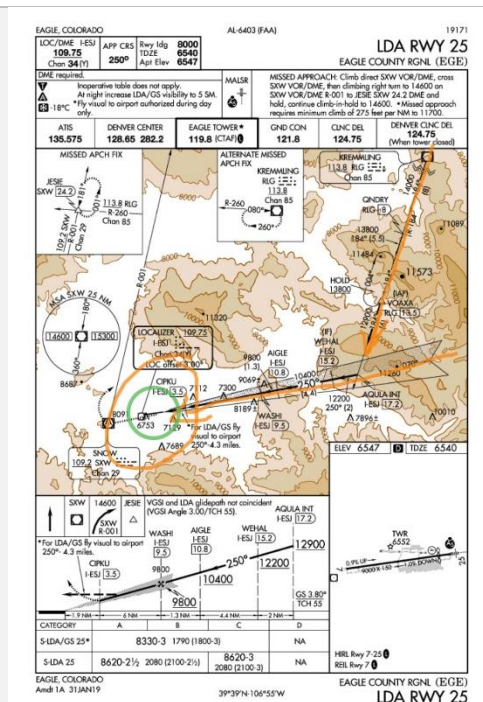


**NOTE:** Draw on Charts is available on Airport Diagrams and Instrument Approach Procedures.

Airport Diagram (APD)



Instrument Approach Procedures (IAPs)

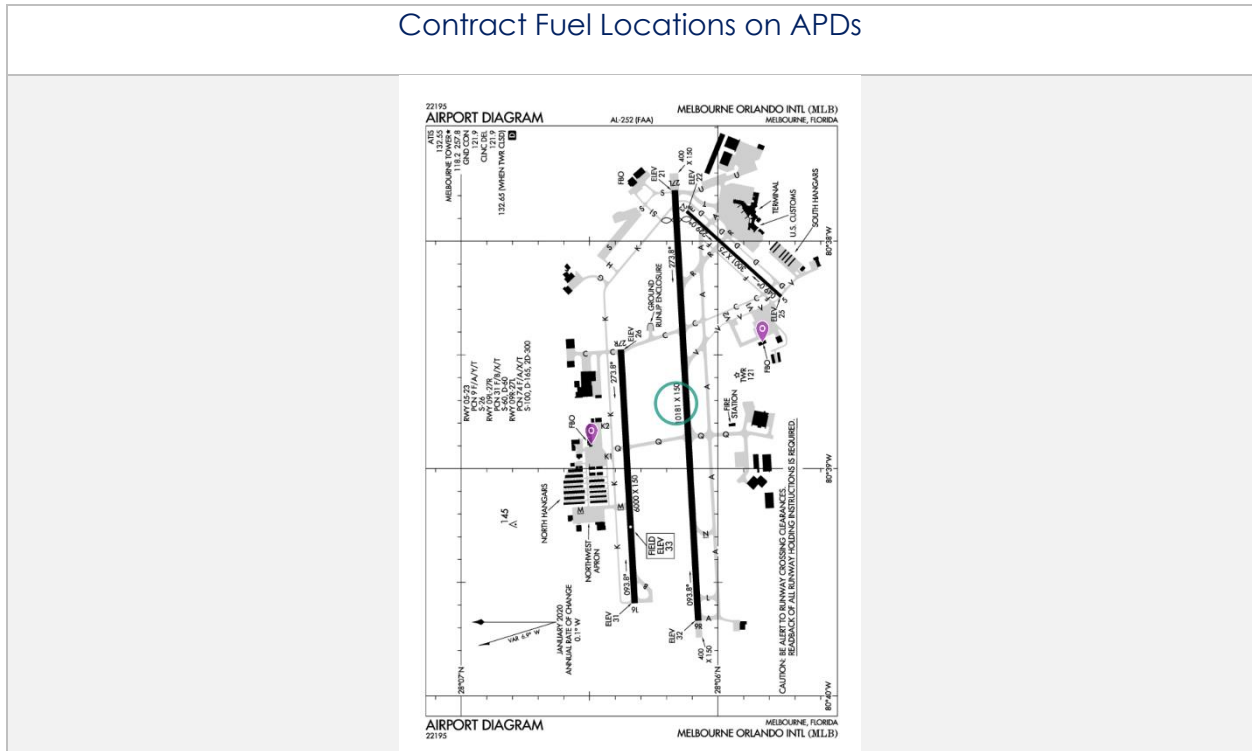


### 15.2.1.2 Contract Fuel Locations on APDs

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.



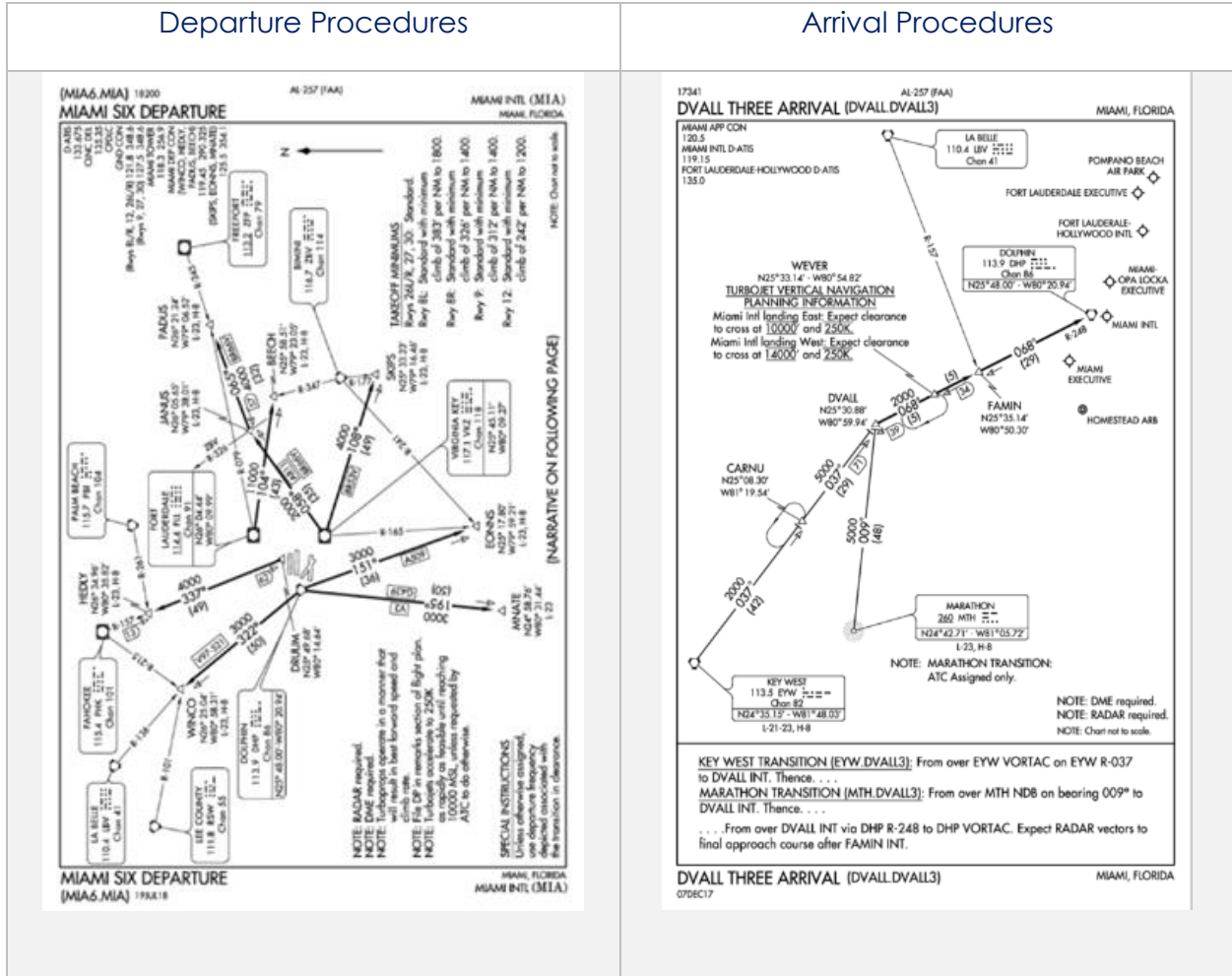
**NOTE:** Georeference is required to view Contract Fuel Locations on APDs.



**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**.
3. Charts will display once selected.
4. Tap on the **action ribbon** to display additional chart selection.



Alternate/ RADAR/Takeoff Minimums

Other

ALTERNATE MINS		ALTERNATE MINIMUMS	
<p><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>                      ND8 Rwy 8<sup>14</sup>                      RNAV (GPS) Rwy 8<sup>8</sup>                      RNAV (GPS) Rwy 10<sup>4</sup>                      RNAV (GPS) Rwy 24<sup>4</sup>                      RNAV (GPS) Rwy 28<sup>4</sup>                      VOR or TACAN Rwy 8<sup>12</sup>                      VOR or TACAN Rwy 10<sup>12</sup>                      VOR or TACAN Rwy 28<sup>12</sup></p> <p><sup>1</sup>LS, LOC, Category D, 1000-3.  <sup>2</sup>NA when local weather not available.  <sup>3</sup>LS, LOC, Category D, E, 1000-3.  <sup>4</sup>Category D, E, 1000-3.</p>	<p><b>TAMPA, FL</b>                      PETER O                      KNIGHT (TPF)..... RNAV (GPS) Rwy 22                      RNAV (GPS) Rwy 36                      NA when local weather not available.</p> <p>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></p> <p>NA when local weather not available.                      LOC, Category C, 800-2¼.  <sup>2</sup>Category C, 800-2¼.</p>	<p><b>SARASOTA/BRADENTON, FL</b>                      SARASOTA/BRADENTON                      INTL (SRQ)..... ILS or LOC Rwy 14                      ILS or LOC Rwy 32                      NA when control tower closed.</p> <p><b>SEBRING, FL</b>                      SEBRING RGNL (SEF)..... RNAV (GPS) Rwy 14<sup>1</sup>                      RNAV (GPS) Rwy 32                      Category D, 800-2¼.                      NA when local weather not available.</p> <p><b>STUART, FL</b>                      WITHAM FLD (SUA)..... RNAV (GPS) Rwy 30                      NA when local weather not available.</p> <p><b>TALLAHASSEE, FL</b>                      INTL (TLH)..... ILS or LOC Rwy 27<sup>12</sup>                      ILS or LOC Rwy 36<sup>12</sup>                      RADAR-1<sup>1</sup>                      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></p> <p><sup>1</sup>NA when control tower closed.  <sup>2</sup>LS, 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>LS, 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.</p>	<p><b>TAMPA INTL (TPA).....</b> ILS or LOC Rwy 1L<sup>1</sup>                      ILS or LOC Rwy 19L<sup>2</sup>                      ILS or LOC Rwy 19R<sup>2</sup>                      LOC Rwy 1R<sup>1</sup>                      RNAV (GPS) Rwy 1L<sup>4</sup>                      RNAV (GPS) Rwy 1R<sup>4</sup>                      RNAV (GPS) Rwy 19L<sup>4</sup>                      RNAV (GPS) Rwy 19R<sup>4</sup>                      RNAV (GPS) Rwy 28<sup>4</sup>                      RNAV (GPS) Z Rwy 19L<sup>4</sup></p> <p><sup>1</sup>LS, Category C, 700-2; Categories D, E, 1000-3; LOC Categories D, E, 1000-3.  <sup>2</sup>LS, 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.  <sup>5</sup>Category D, 1000-3.</p>
<p><b>TITUSVILLE, FL</b>                      SPACE FLORIDA LAUNCH AND LANDING                      FACILITY (TTS)..... RNAV (GPS) Rwy 15<sup>1</sup>                      RNAV (GPS) Rwy 33<sup>1</sup></p> <p>NA when local weather not available.                      Categories D, E, 1000-3.                      Category C, 1000-2¼, Category D, E, 1000-3.</p> <p><b>SPACE COAST</b>                      RGNL (TX)..... ILS or LOC Rwy 36<sup>1</sup>                      RNAV (GPS) Rwy 9<sup>4</sup>                      RNAV (GPS) Y Rwy 18<sup>4</sup>                      RNAV (GPS) Z Rwy 18<sup>4</sup>                      RNAV (GPS) Rwy 36<sup>1</sup></p> <p>NA when local weather not available.                      NA when control tower closed.</p>	<p><b>VENICE, FL</b>                      VENICE MUNI (VNC)..... RNAV (GPS) Rwy 5                      RNAV (GPS) Rwy 13                      RNAV (GPS) Rwy 22                      RNAV (GPS) Rwy 31</p> <p>NA when local weather not available.                      Category D, 1000-3.</p>		

RNNAV DEPARTURE AAUP		MIAMI INTL (MIA)	
<p>21224                      RNNAV DEPARTURE AAUP                      AL 257 (FAA)</p>	<p>MIAMI, FLORIDA                      MIAMI, FLORIDA</p>	<p><b>ATTENTION ALL USERS PAGE (AAUP)</b></p> <p>1. <b>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>2. <b>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>3. <b>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> <p><b>SAMPLE PHRASEOLOGY</b></p> <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> <ul style="list-style-type: none"> <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>4. <b>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>5. <b>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>	<p>RNNAV DEPARTURE AAUP                      25°48'N 80°17'W                      Orig 12AUG21</p> <p>MIAMI, FLORIDA                      MIAMI INTL (MIA)</p>



**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

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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 the 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

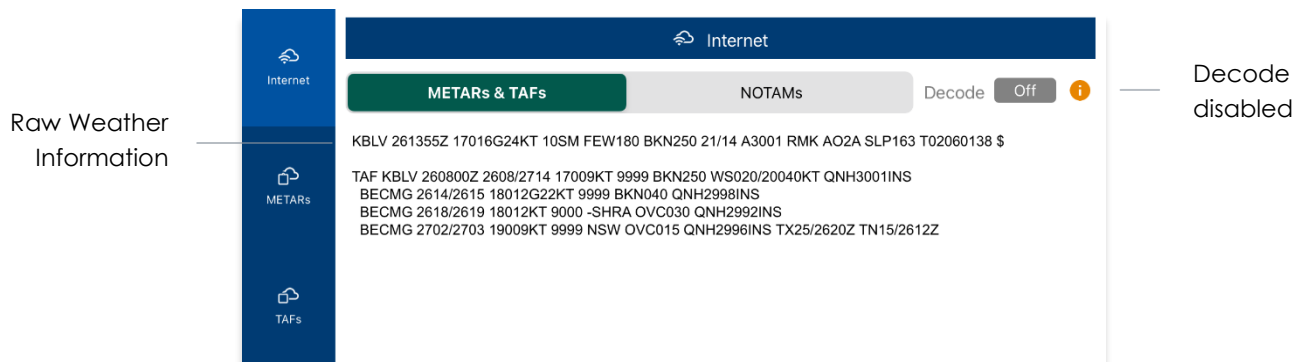
#### 15.2.3.1 Internet

This section describes how to retrieve METARs and 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.

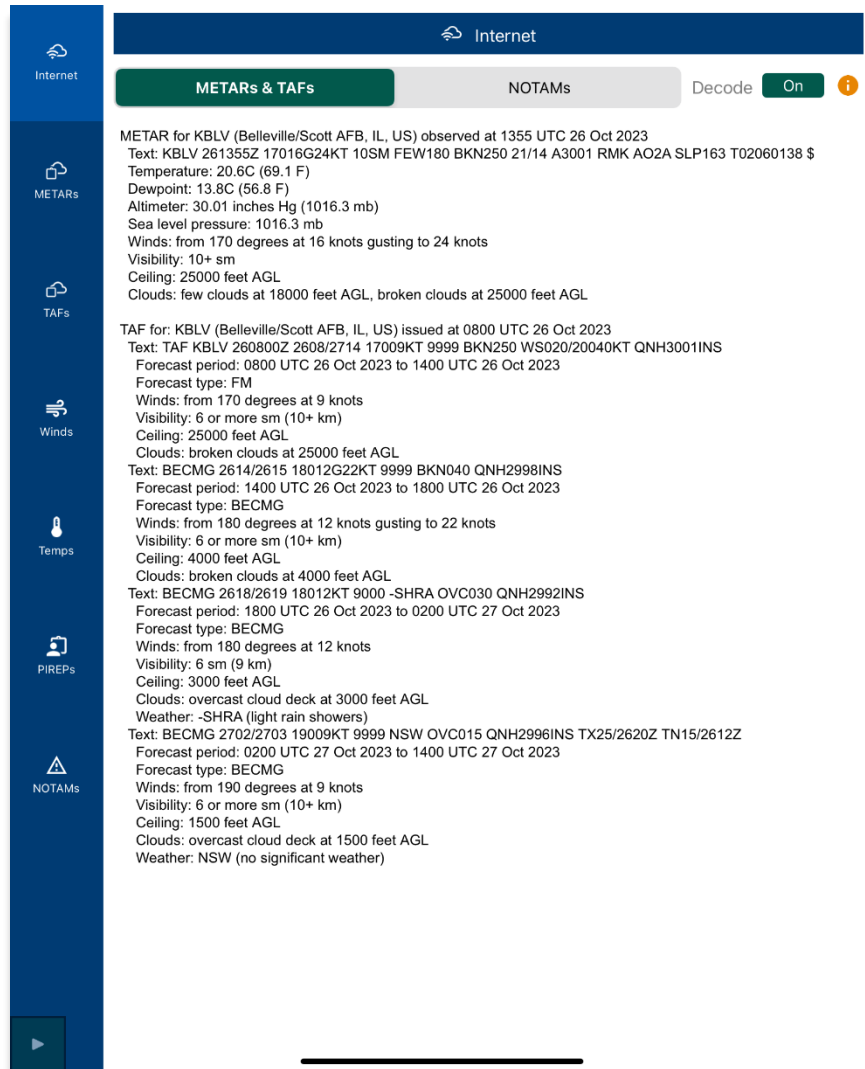
1. Tap the **Active Point** on the **Main Menu**.
2. Tap **Wx** on the **Secondary Menu**.
3. Select **Internet** from the side menu, if necessary.
4. Select **METARs & TAFs** to view information for the selected airport.





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

Decoded Weather Information

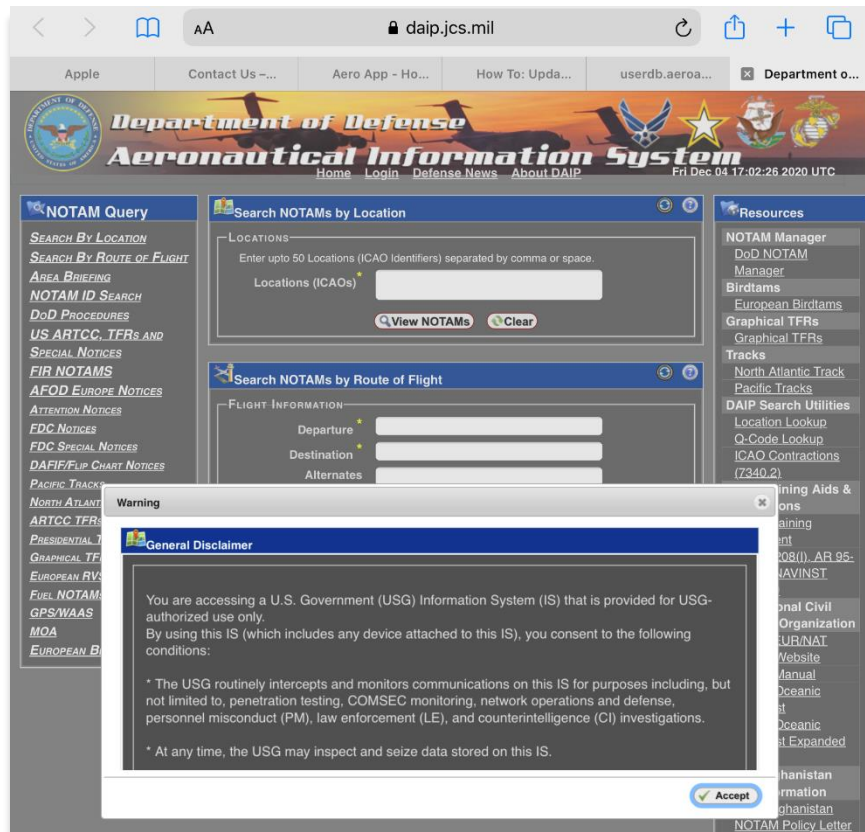


Decode enabled

### 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

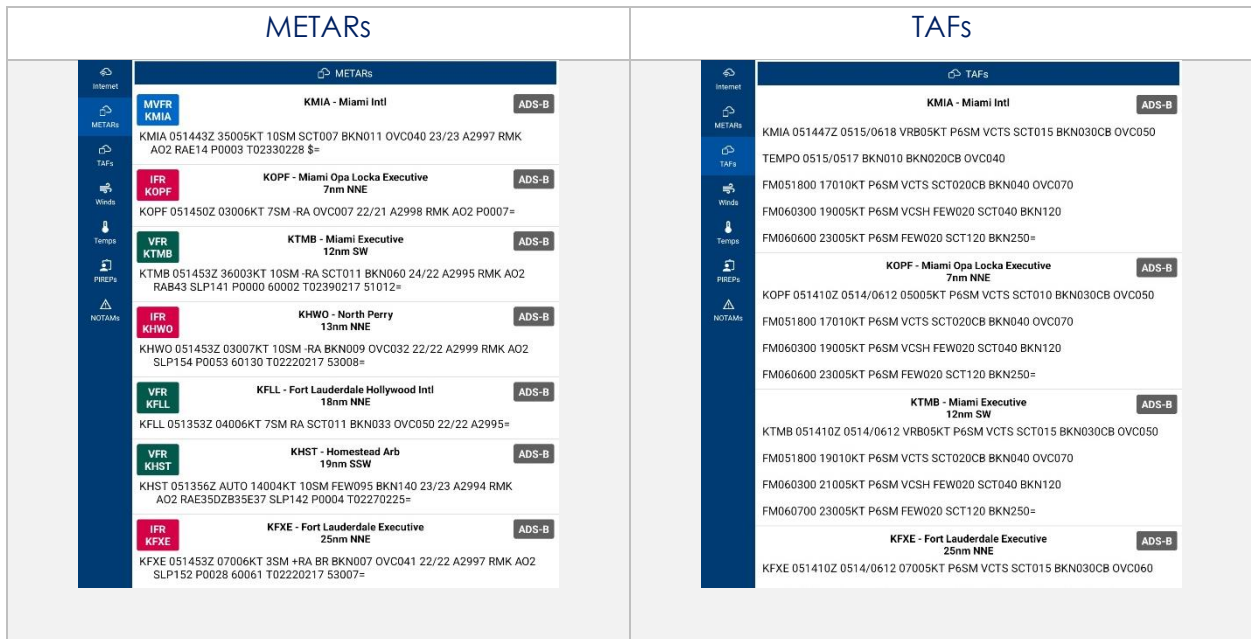
The METARs tab displays raw weather information for ADS-B and Air Force Weather (AF Wx) data that may include temperature, precipitation, visibility, barometric pressure, and other information of interest to pilots.

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.



**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

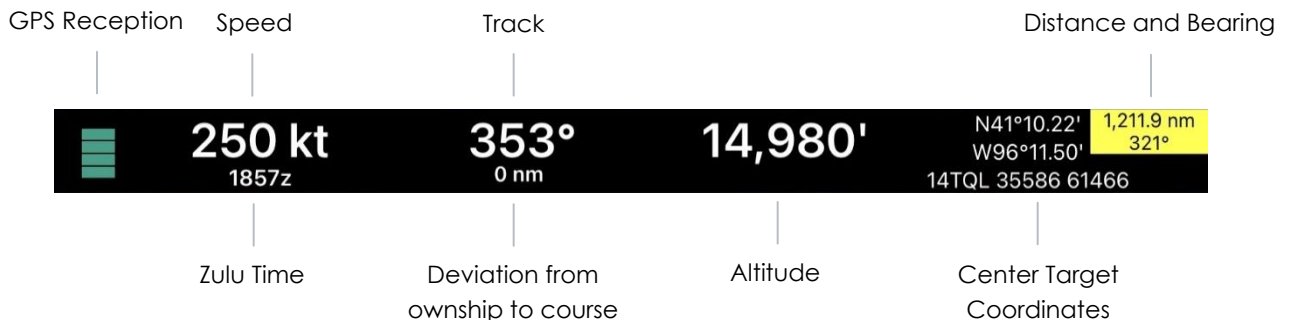
The Moving Map is an essential and powerful tool that provides a highly customizable and comprehensive worldwide map. With a variety of overlays available, it is effortless to navigate and stay informed while in-flight.

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 following ranges are varying from the following:

- **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.

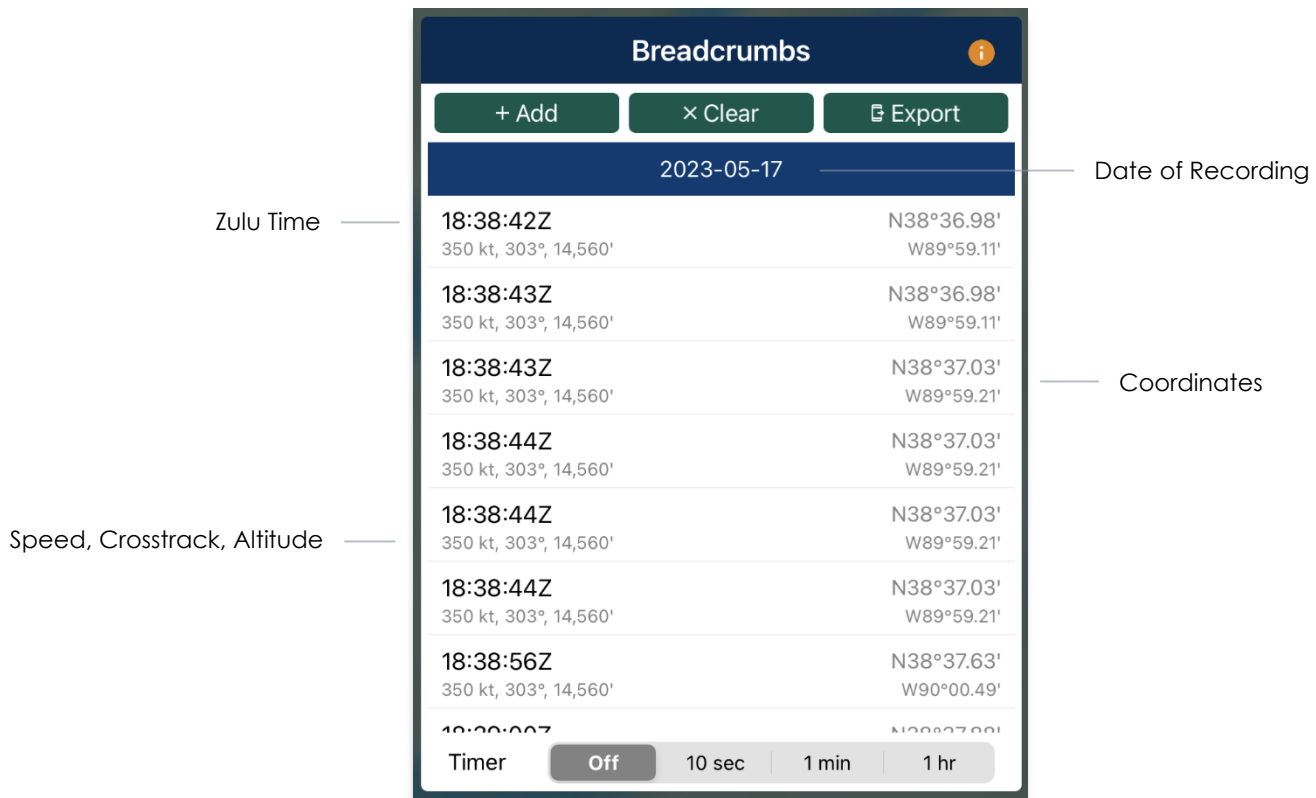
When the center target is activated, a yellow tag is shown on the Information Panel and displays the *distance* in nm or km, respective to which distance unit format users have set in their Preferences and *bearing* (in degrees) relative to current location. Refer to [Section 15.3.1.1.1](#) for additional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



### 15.3.1.8 Breadcrumbs

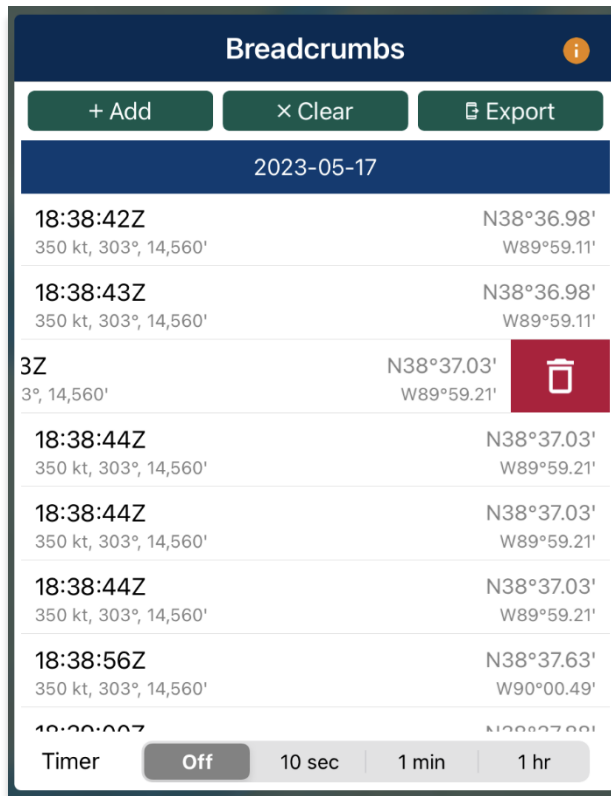
Breadcrumbs enables users to record coordinates throughout their course. A GPS connection is required. To view the recorded Breadcrumbs on the Moving Map, users must enable the option as described in [Section 14.3.7.2.1](#).

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.

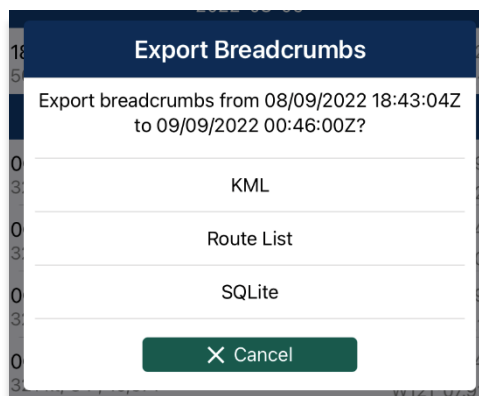


3. Tap **Add** to manually store coordinates. Users have the option to set a timer to automatically add coordinates for every 10 seconds, 1 minute, or every hour.

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



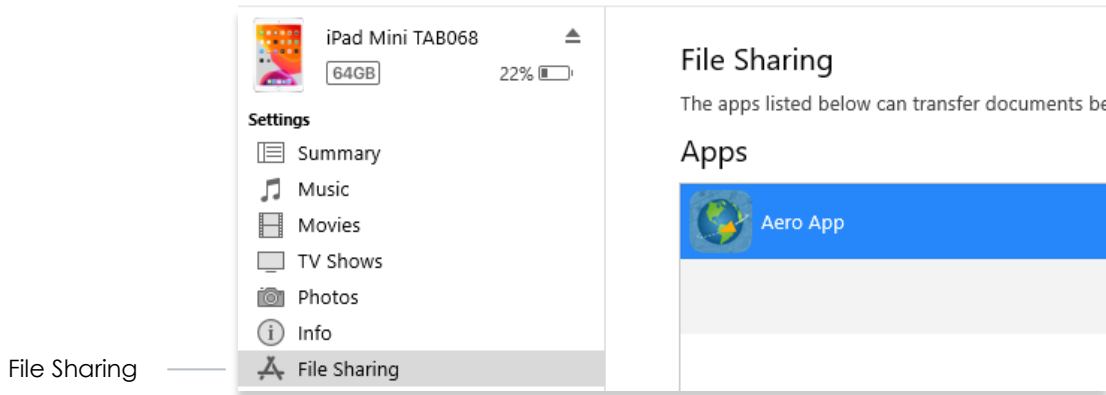
- Tap **Clear** to delete all breadcrumbs.
- To export and save breadcrumbs, tap **Export**. Users can export as a KML file, Route List or to SQLite file.



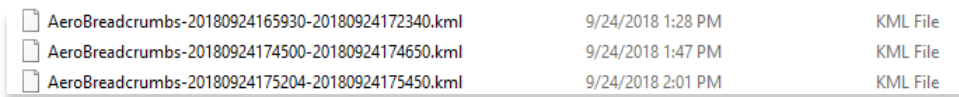
**NOTE:** Breadcrumbs are logged by individual days.

### 15.3.1.8.1 View Breadcrumbs in KML

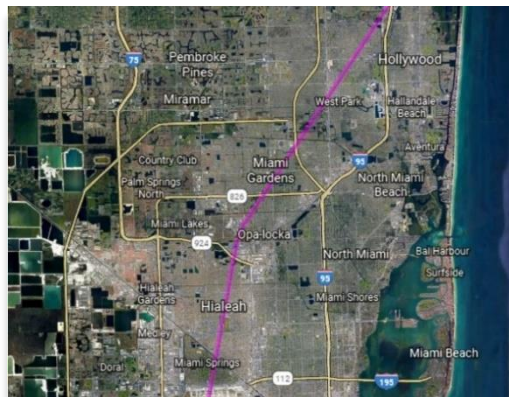
1. Export Breadcrumbs to KML.
2. Connect your iPad to a USB or USB-C port of a Mac or Windows computer.
3. iTunes will display on the screen.
4. Click the **iPad icon** and your device information will display.
5. Locate *Aero App* under File Sharing.



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

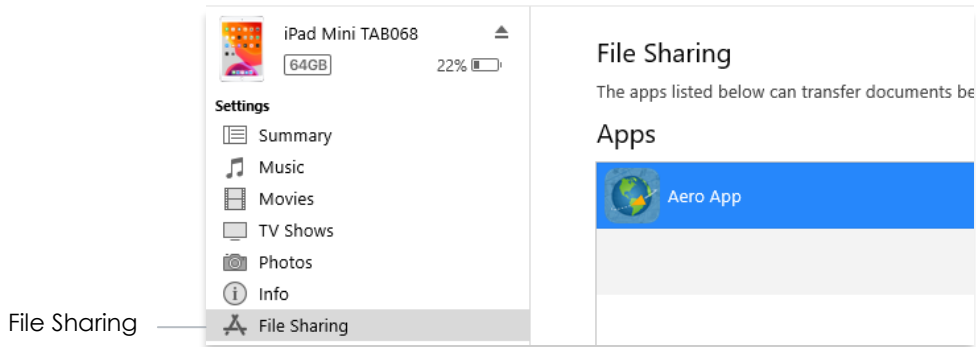
1. Export Breadcrumbs to Route List.
2. The **Export to Route List** popup will display.
3. Users will be prompted to name their route name. Enter the desired name then tap **Save**.
4. To view your saved route, tap the **Route Tab**.
5. Tap **Route**.
6. Tap **Actions** from the side menu.
7. Select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



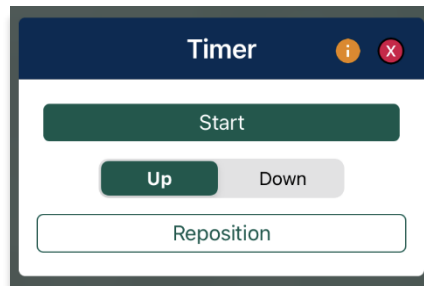
6. Your exported breadcrumbs will be listed.

	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

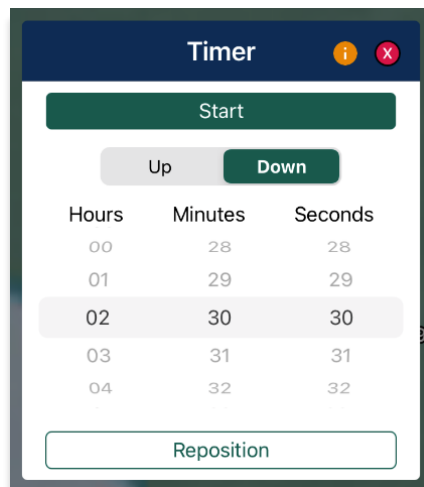
### 15.3.2 Timer

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

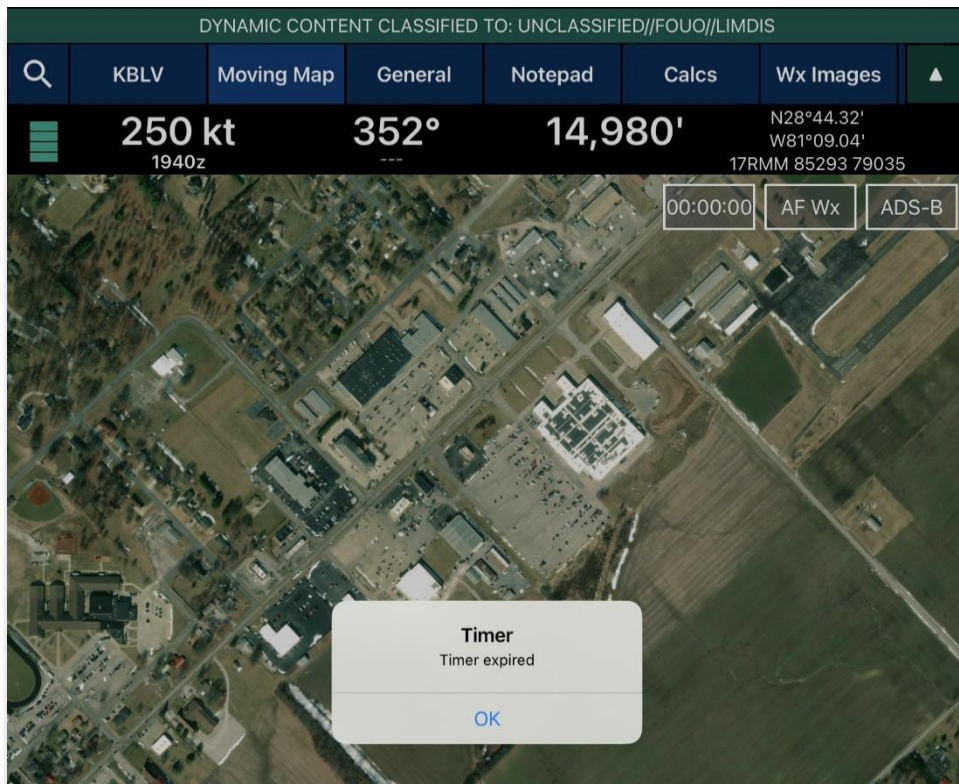
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Timer** located at the upper-right corner of the screen. The timer menu will display.
3. The Timer has two modes:
  - **Count Up** – Starts the timer at zero then begins counting.
  - **Count Down** – Timer counts down based on the selected hours, 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.

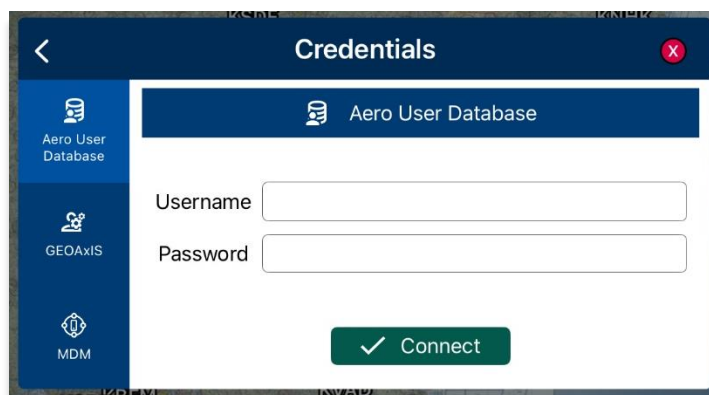


**NOTE:** Tap **Reposition** to move the Timer button from the current position to below the ADS-B button.

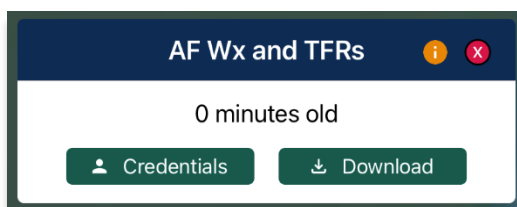
### 15.3.3 Air Force Weather (AF Wx)

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.



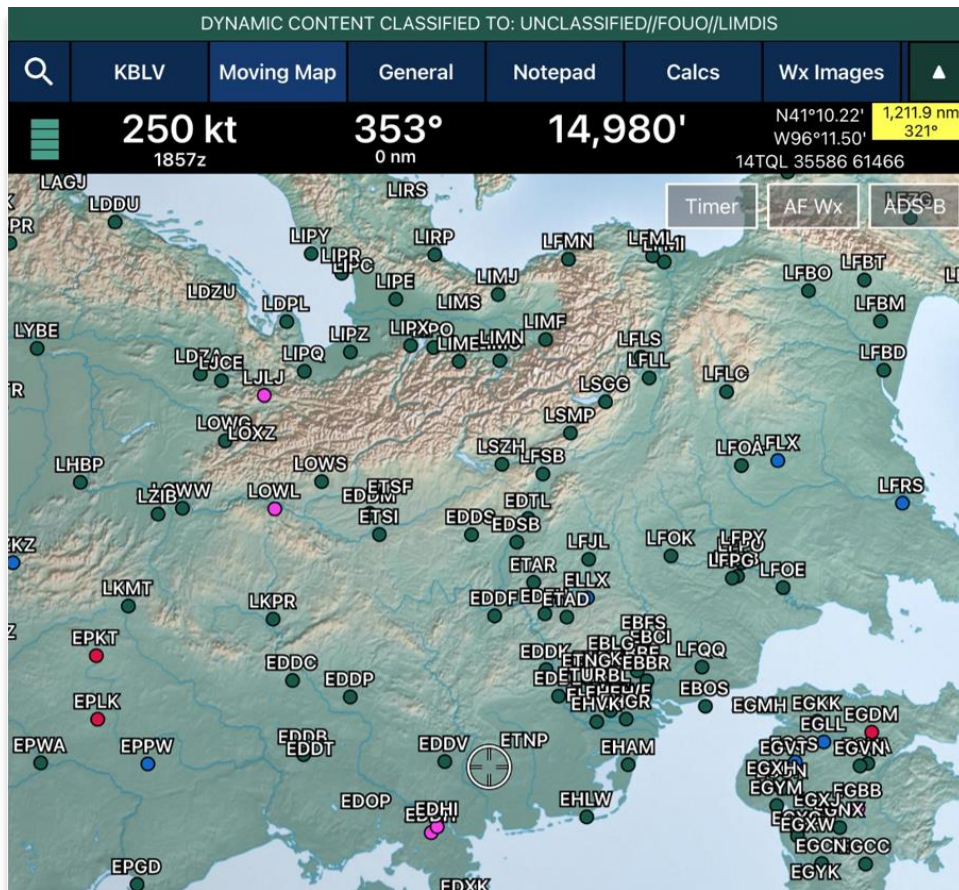
**NOTE:** Air Force Weather (AF Wx) is only available via internet. However, if ADS-B weather information becomes available; whichever source has the latest data will show as the current weather.



### 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 that indicate 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>	TAFs	<b>AF Wx</b>
Winds	EDDN 081620Z AUTO 26011KT CAVOK 21/10 Q1012 BECMG 24005KT=	Winds	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=
Temps	<b>VFR</b> <b>ETEB</b>	Temps	<b>ETEB - Ansbach Ahp</b> <b>21nm SW</b>
PIREPs	<b>AF Wx</b>	PIREPs	<b>AF Wx</b>
NOTAMs	ETEB 081555Z AUTO 28007KT 9999 BKN046 19/12 A2989 RMK AO2 SLP124 T01940122 \$=	NOTAMs	<b>ETEB - Ansbach Ahp</b> <b>21nm SW</b>
	<b>VFR</b> <b>ETIK</b>		<b>ETEB - Ansbach Ahp</b> <b>21nm SW</b>
	<b>AF Wx</b>		<b>AF Wx</b>
	ETIK 081555Z 26011KT 9999 SCT050 21/10 A2988 RMK AO2A SLP110 T02080100 \$=		ETEB 081500Z 0815/0921 25010G15KT 9999 SCT040 BKN050 QNH2989INS BECMG 0818/0819 21009KT 9999 SCT050 QNH2992INS BECMG 0903/0904 21009KT 9999 SCT030 BKN070 QNH2991INS
	<b>VFR</b> <b>ETIH</b>		<b>ETIH - Hohenfels Aaf</b> <b>34nm ESE</b>
	<b>AF Wx</b>		<b>AF Wx</b>
	ETIH 081555Z 26011KT 9999 SCT050 21/10 A2988 RMK AO2A SLP110 T02080100 \$=		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 is populated 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°	
TWR: 119.8, 120.95, 133.9,...	
<b>KJAX</b>	●
Jacksonville Intl 285.1nm, 171°	
TWR: 118.3, 317.7	
<b>KOPF</b>	●
Miami Opa Locka Executive 6.8nm, 192° ETE: 00:02:01, ETA: 17:34:2... TWR: 134.675	
<b>KMIA</b>	●
Miami Intl Destination ETE: 00:03:39, ETA: 17:35:5... 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	
Internet	METARs	Internet	TAFs
METARs	<b>VFR</b> <b>EDDN</b> <b>EDDN - Nuernberg</b> <b>AF Wx</b> EDDN 081620Z AUTO 26011KT CAVOK 21/10 Q1012 BECMG 24005KT=	METARs	<b>EDDN - Nuernberg</b> <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=
TAFs	<b>VFR</b> <b>ETEB</b> <b>ETEB - Ansbach Ahp</b> <b>AF Wx</b> 21nm SW ETEB 081555Z AUTO 28007KT 9999 BKN046 19/12 A2989 RMK AO2 SLP124 T01940122 \$=	TAFs	<b>ETEB - Ansbach Ahp</b> <b>AF Wx</b> 21nm SW 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
Winds	<b>VFR</b> <b>ETIK</b> <b>ETIK - Illesheim Ahp</b> <b>AF Wx</b> 27nm W ETIK 081555Z 26011KT 9999 SCT050 21/10 A2988 RMK AO2A SLP110 T02080100 \$=	Winds	
Temps	<b>VFR</b> <b>ETIH</b> <b>ETIH - Hohenfels Aaf</b> <b>AF Wx</b> 34nm ESE	Temps	
PIREPs		PIREPs	
NOTAMs		NOTAMs	



**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><b>METARs</b></p> <p><b>VFR EDDN</b> <b>EDDN - Nuernberg</b> <b>AF Wx</b></p> <p>EDDN 081620Z AUTO 26011KT CAVOK 21/10 Q1012 BECMG 24005KT=</p>	Internet	<p><b>TAFs</b></p> <p><b>EDDN - Nuernberg</b> <b>AF Wx</b></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>
METARs	<p><b>VFR ETEB</b> <b>ETEB - Ansbach Ahp</b> <b>AF Wx</b></p> <p><b>21nm SW</b></p> <p>ETEB 081555Z AUTO 28007KT 9999 BKN046 19/12 A2989 RMK AO2 SLP124 T01940122 \$=</p>	METARs	<p><b>ETEB - Ansbach Ahp</b> <b>AF Wx</b></p> <p><b>21nm SW</b></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>
TAFs	<p><b>VFR ETIK</b> <b>ETIK - Illesheim Ahp</b> <b>AF Wx</b></p> <p><b>27nm W</b></p> <p>ETIK 081555Z 26011KT 9999 SCT050 21/10 A2988 RMK AO2A SLP110 T02080100 \$=</p>	TAFs	
Winds	<p><b>VFR ETIH</b> <b>ETIH - Hohenfels Aaf</b> <b>AF Wx</b></p> <p><b>34nm ESE</b></p>	Winds	
Temps		Temps	
PIREPs		PIREPs	
NOTAMs		NOTAMs	



**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 as 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.

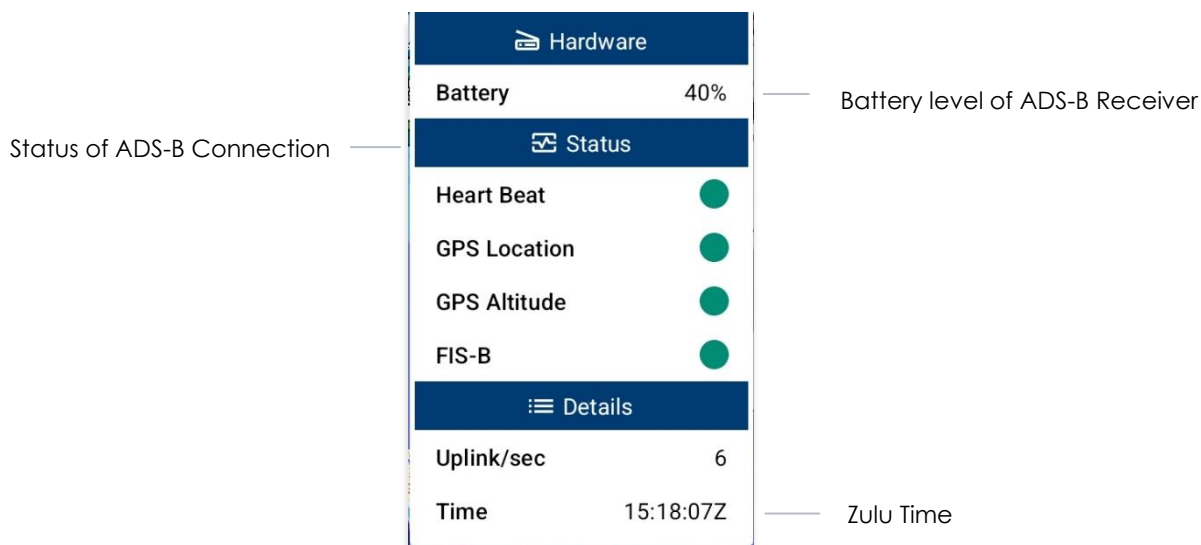
1. Open the iPad's *settings app* and select **Bluetooth**.
2. Enable the **Bluetooth** option to display all available devices.
3. Search and tap the ADS-B receiver in the *OTHER DEVICES* section.
4. Ensure the ADS-B receiver's connection is established. For additional information, refer to [Section 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 Apps, Base Maps, DigitalGlobe (offline), Helicopter and TAC Maps, Map Library, and User Maps menus.

### 15.3.5.1 Aero Maps

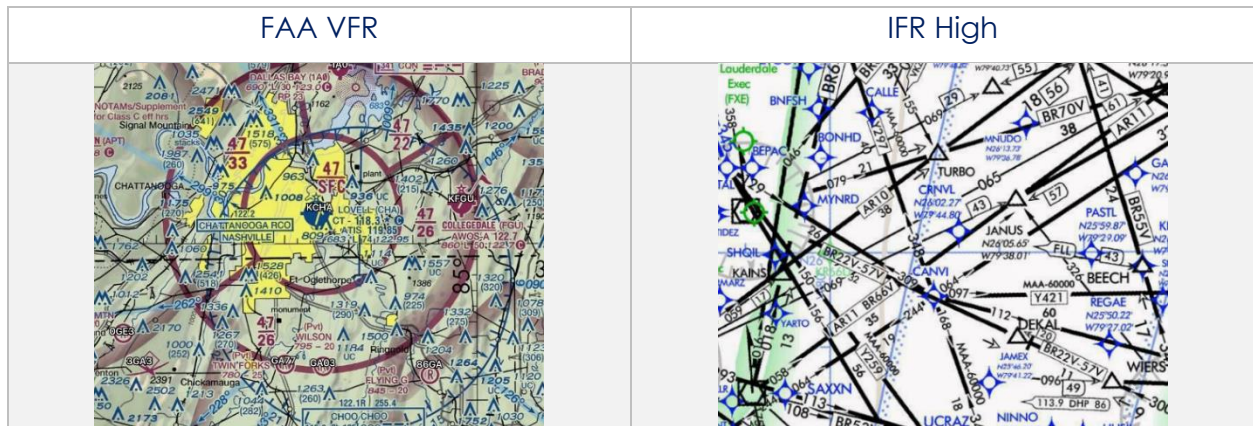
The Aero Maps section provides access to current VFR Sectionals, worldwide IFR High and Low Enroutes, and DigitalGlobe (online).

#### 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.

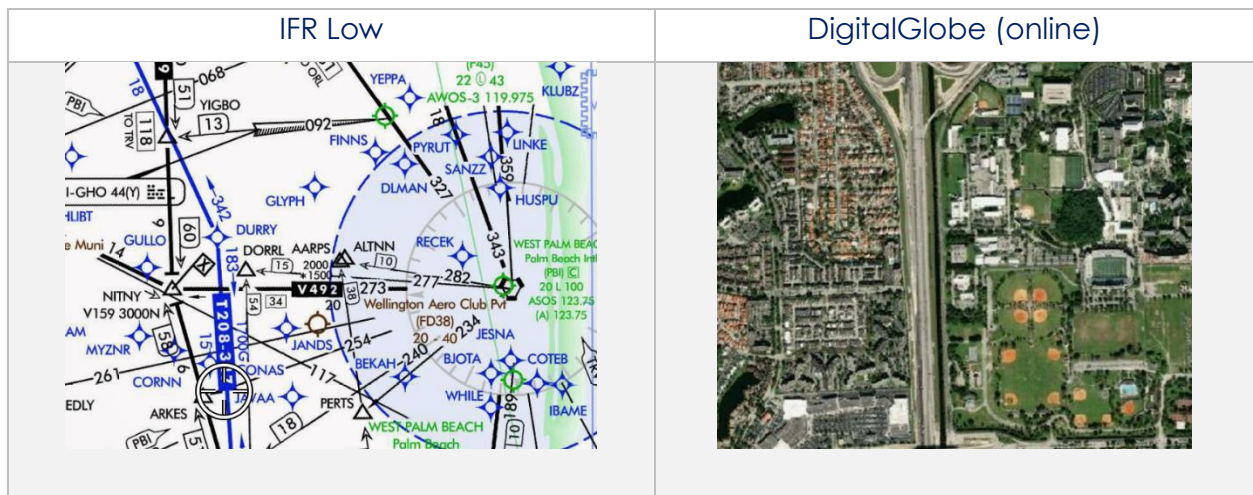
### 15.3.5.1.4 DigitalGlobe (online)

DigitalGlobe (online) requires internet connection.

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 **DigitalGlobe (online)** to enable the option. A satellite imagery will be displayed on the map.



**NOTE:** Users with GEOAxis and specific partners with Aero User Database credentials can access DigitalGlobe (online). Credentials will be cleared when users close Aero App.



### 15.3.5.2 Base Map

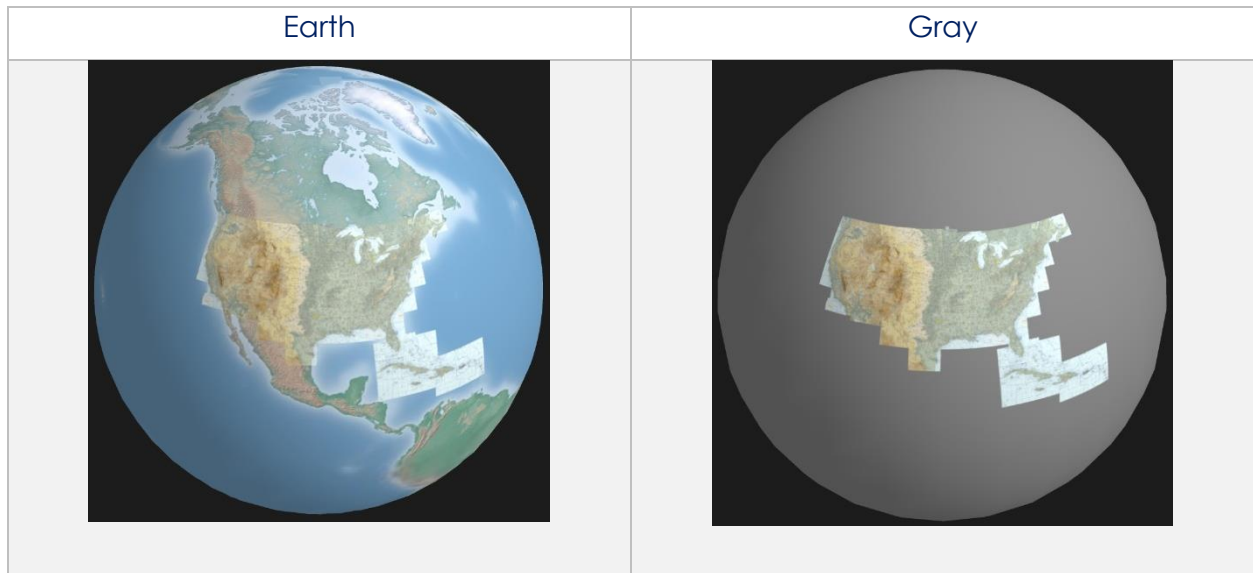
The Base Map provides worldwide Earth and Gray Base maps to choose from.

#### 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.

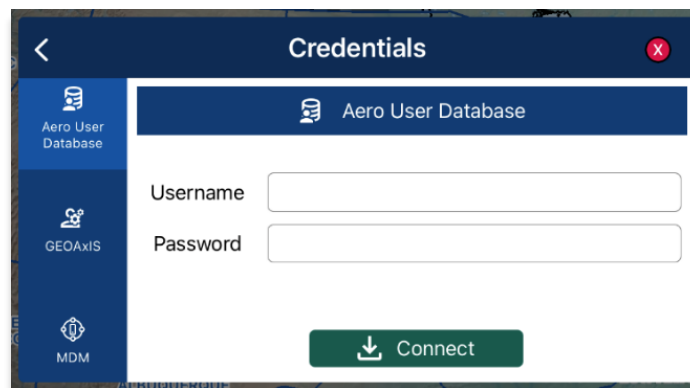


### 15.3.5.3 DigitalGlobe (offline)

Aero App enables users to display cached images on the Moving Map. The DigitalGlobe (offline) option is available to select government foreign partners. DigitalGlobe (offline) requires internet connection when downloading cached images. Internet connection is not required when displaying the downloaded images.

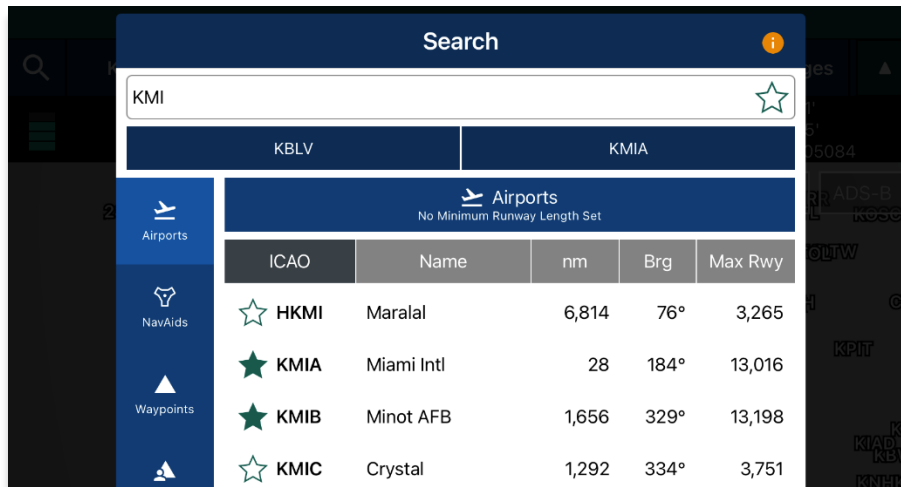
#### 15.3.5.3.1 DigitalGlobe (offline)

1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **DigitalGlobe (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).

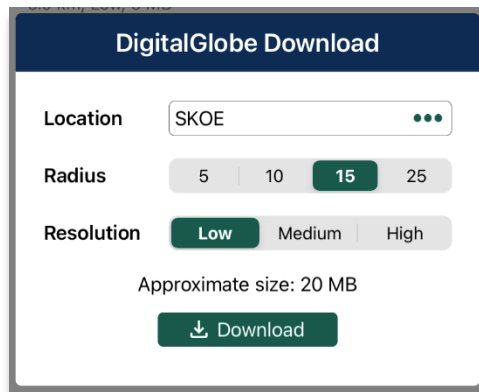


6. The DigitalGlobe Download popup will display the following parameters:

- **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.



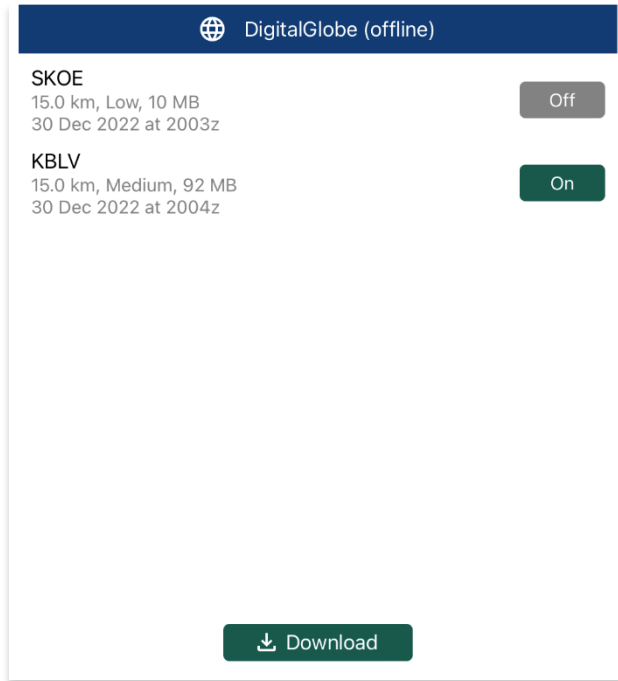
- **Radius** – Select options of 5, 10, 15, 25.
- **Resolution** – Select options of Low, Medium, High.



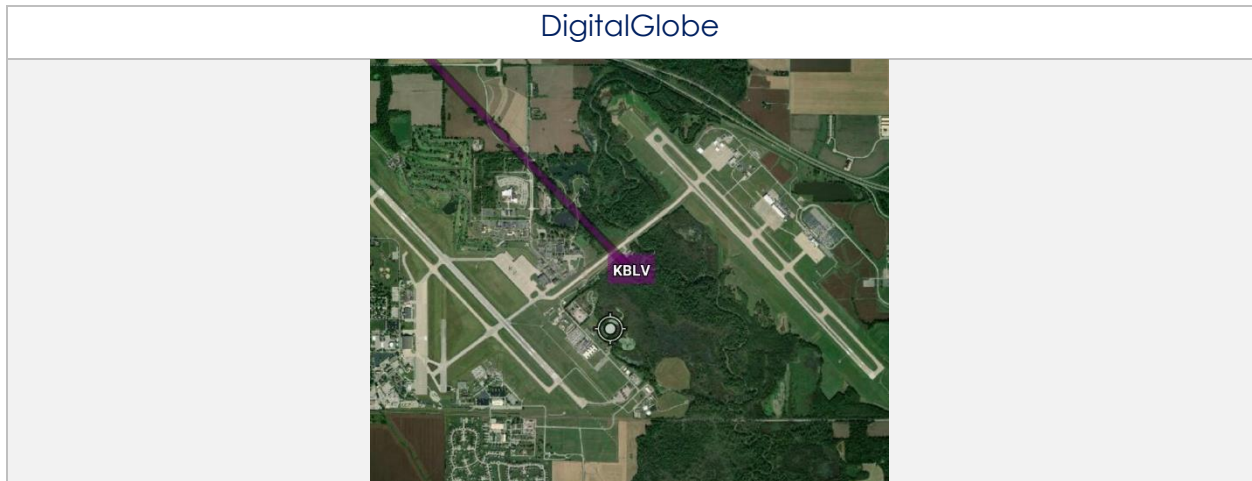
7. Once all fields have been filled, tap **Download** and the cached image will begin to download.



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



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



### 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)

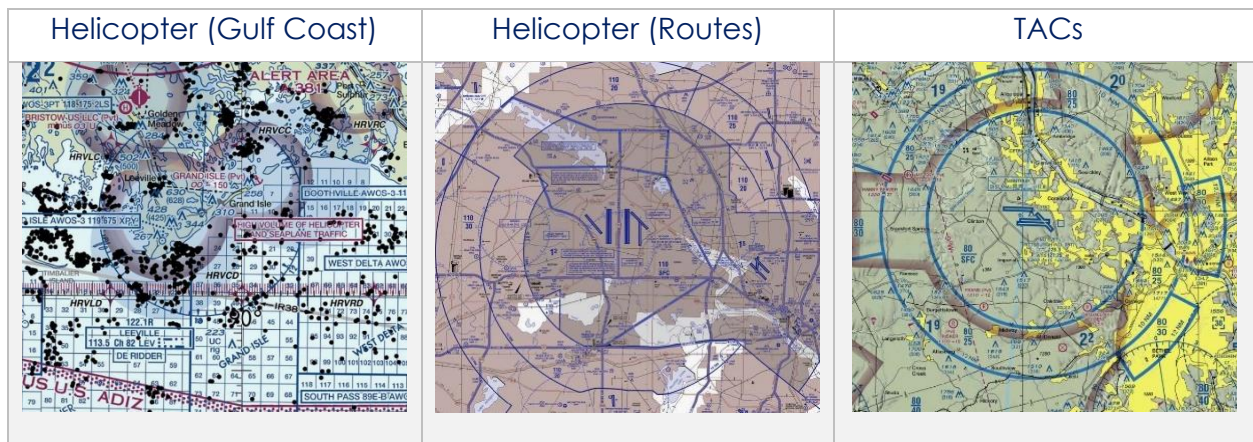
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Helicopter and TAC Maps** from the side menu.
4. Tap **Helicopter (Gulf Coast)** to enable the option. The gulf coast chart will overlay on the map.

#### 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 as well as the ability to overlay charts 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

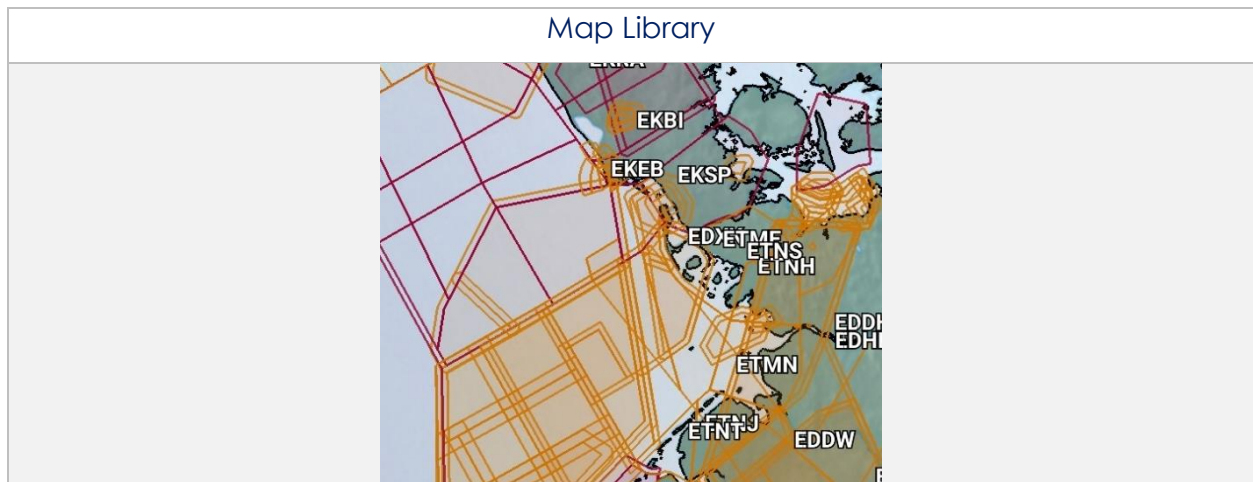
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Maps** located at the bottom of the Moving Map.
3. Select **Map Library** from the side menu.
4. The files are grouped by categories, tap on the desired folders to expand, or collapse to reveal or hide files.
5. Tap desired **Map** and the chart will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



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### 15.3.5.6 User Maps

Aero App enables users to display user maps on the Moving Map.

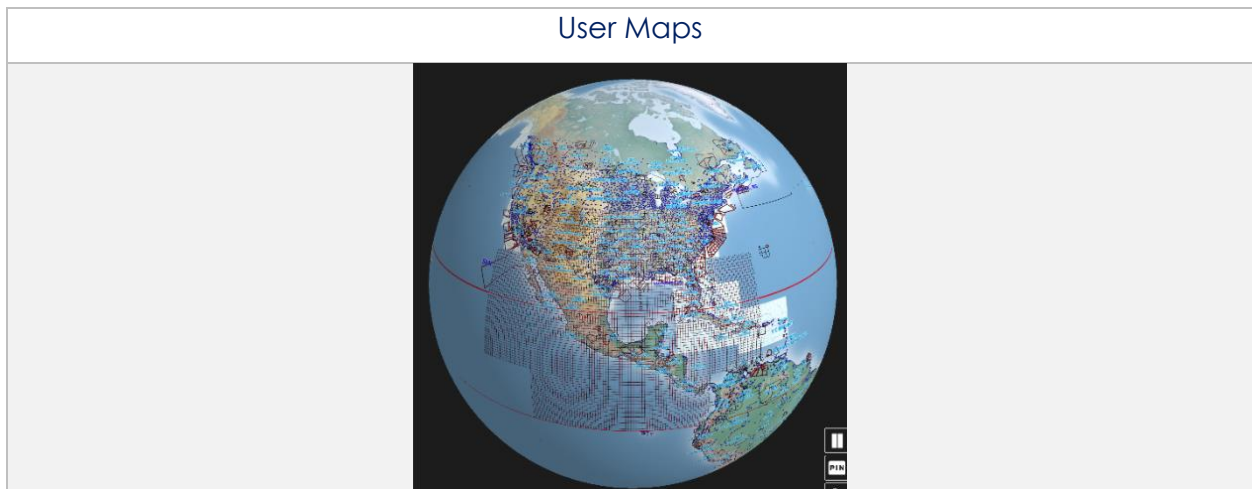
#### 15.3.5.6.1 User Maps

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. Enable desired file(s) and the overlay will display on the Moving Map.



**NOTE:** Refer to [Section 11.2](#) for information on sideloading User Maps

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### 15.3.6 Overlays

Aero App provides users with several overlays to display on the Moving Map. This section will explain how to utilize every overlay on the Moving Map.

#### 15.3.6.1 Aero App Overlays

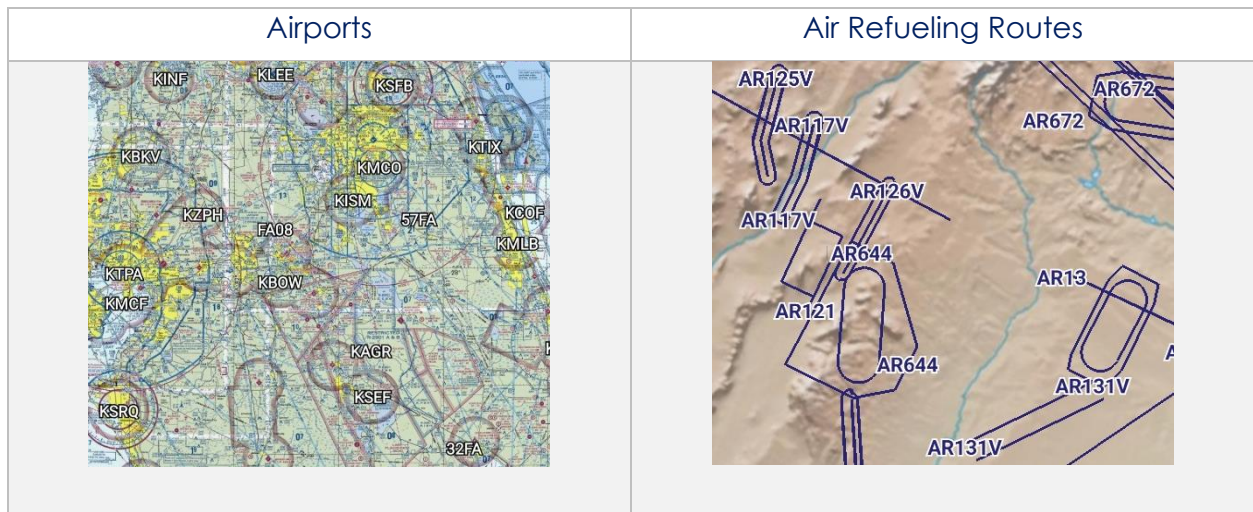
Aero App Overlays include various options that enable pilots to customize map display.

##### 15.3.6.1.1 Airports

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 **Airports** to enable the option. ICAO codes will populate on the map for each respective airport.

##### 15.3.6.1.2 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. By tapping on the AR labels on the map, a popup will appear with additional information.



### 15.3.6.1.3 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. By tapping on the Airspaces (B, C, D), a popup will appear with additional information.

### 15.3.6.1.4 Airways – Low

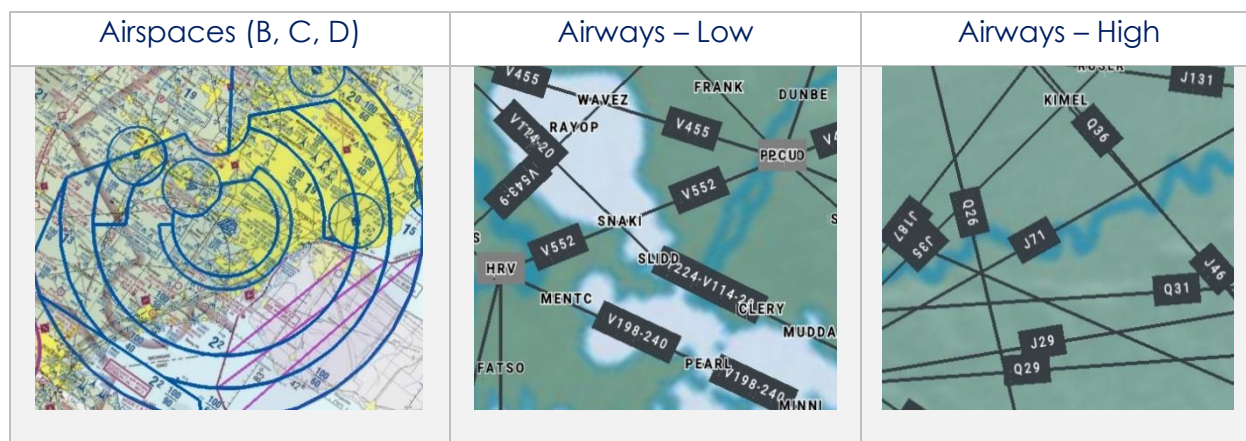
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap to select **Low** from the Airways segmented control. The low-altitude airways that are below 18,000 ft will populate on the map.

### 15.3.6.1.5 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.



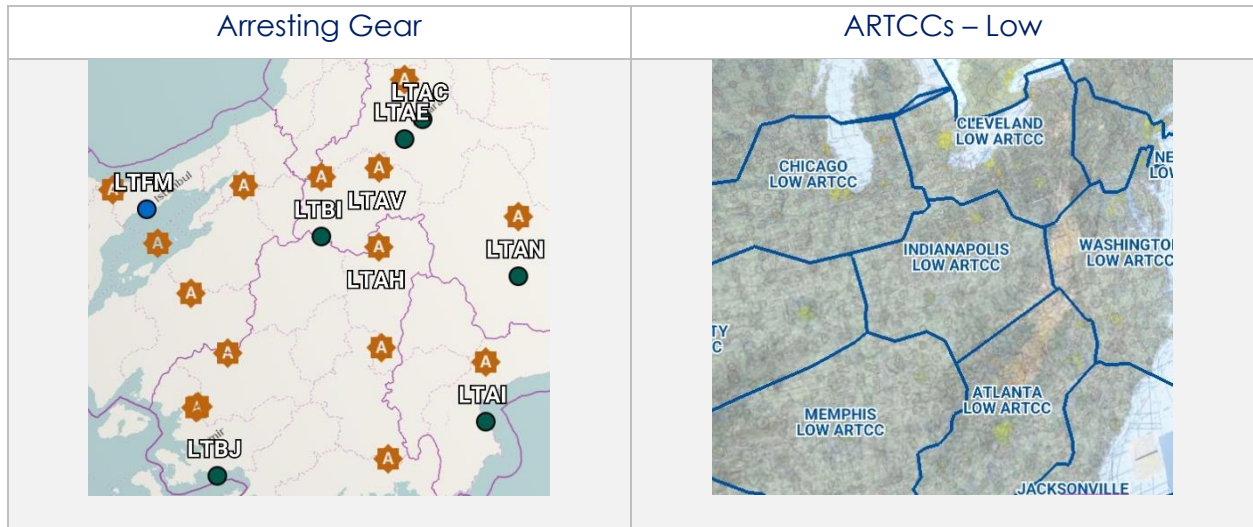
### 15.3.6.1.6 Arresting Gear

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. By tapping the arresting gear icon, a popup will display with the appropriate identifier, arresting gear information such as absorbing system, engagement type, and command.

### 15.3.6.1.7 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.

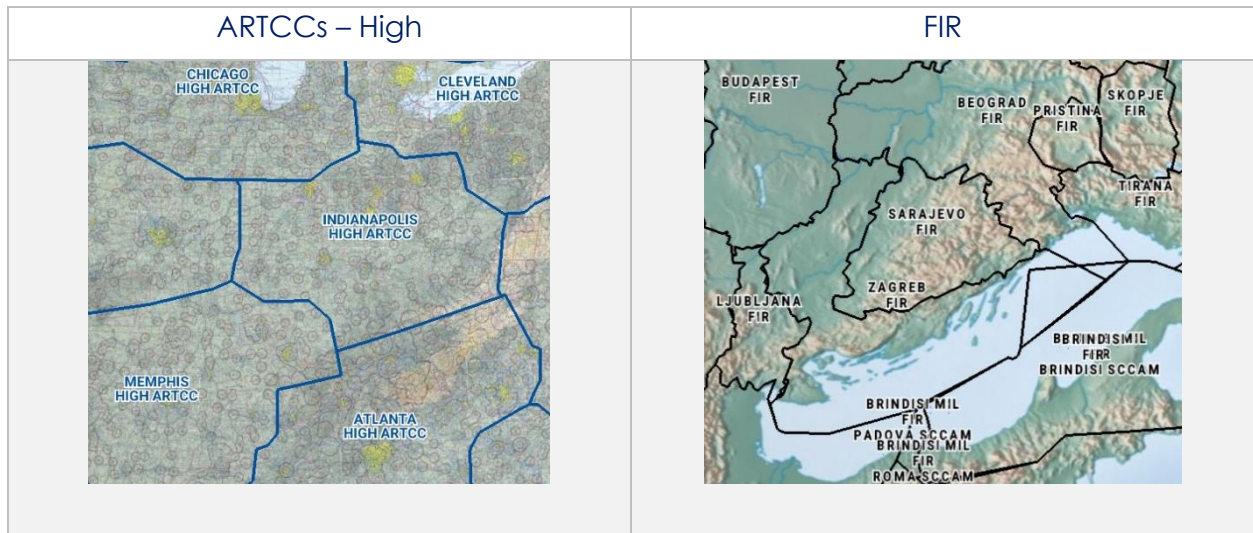


### 15.3.6.1.8 Air Route Traffic Control Centers (ARTCCs) – High

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.

### 15.3.6.1.9 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. By tapping on one of the regions, a popup will appear with flight information services.





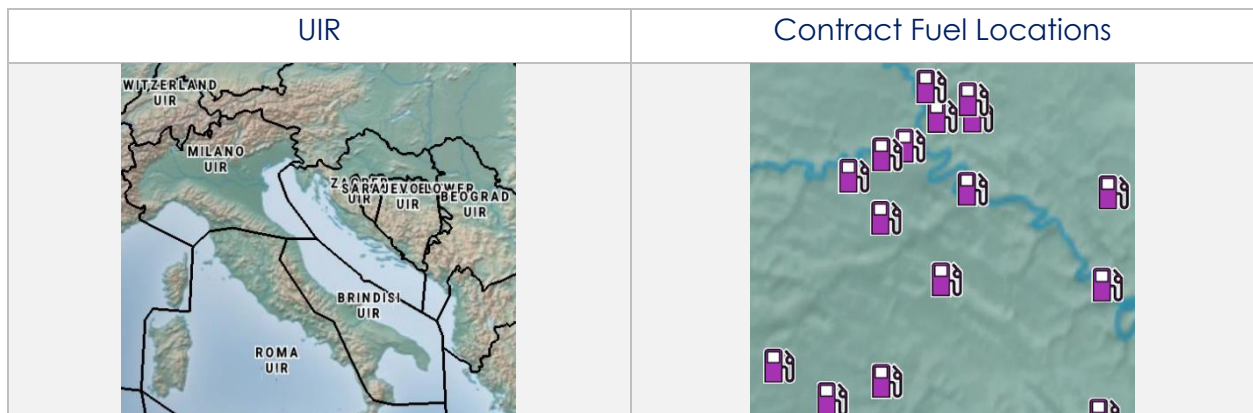
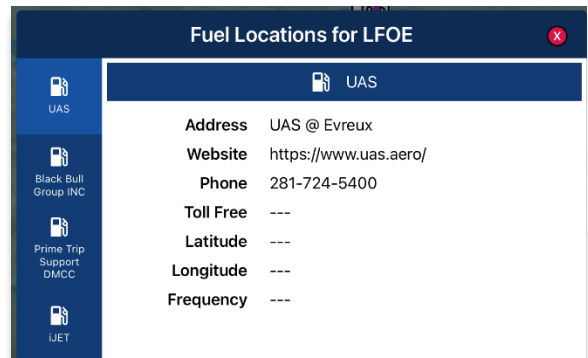
### 15.3.6.1.10 Upper Flight Information Region (UIR)

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. By tapping on one of the *regions*, a popup will appear with upper flight information services.

### 15.3.6.1.11 Contract Fuel Locations

Contract fuel locations are displayed as an overlay on the moving map.

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. Tapping on the fuel pump icons will display a popup window containing FBO information when available, such as:
  - Address
  - Website
  - Phone numbers
  - Coordinates
  - Frequency



### 15.3.6.1.12 Hazards

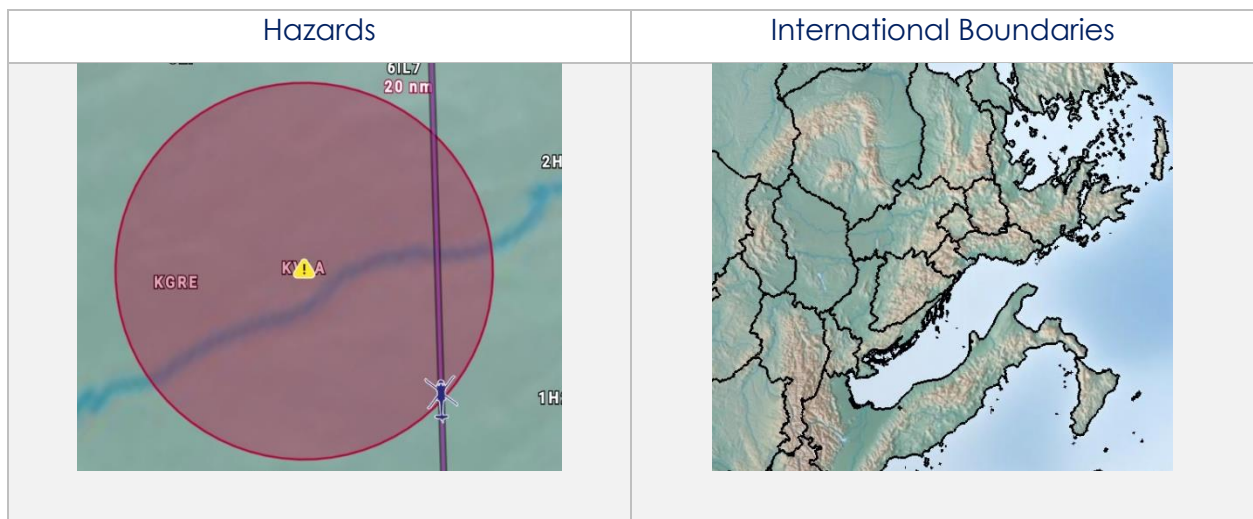
Hazards are marked locations on the Moving Map that were dropped by users. This option must be enabled to view dropped hazards. If no hazards were dropped, refer to [Section 15.3.13.1.4](#) for additional information.

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.

### 15.3.6.1.13 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.



### 15.3.6.1.14 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.

### 15.3.6.1.15 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. By tapping on an identifier, a popup will appear with additional information.



### 15.3.6.1.16 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. By tapping on an identifier, a popup will appear with additional information.

### 15.3.6.1.17 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. By tapping on an identifier, a popup will appear with additional information.



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

MTRs – VR	MTRs – SR



### 15.3.6.1.18 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.

### 15.3.6.1.19 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.



### 15.3.6.1.20 Search and Rescue (SAR) Grids

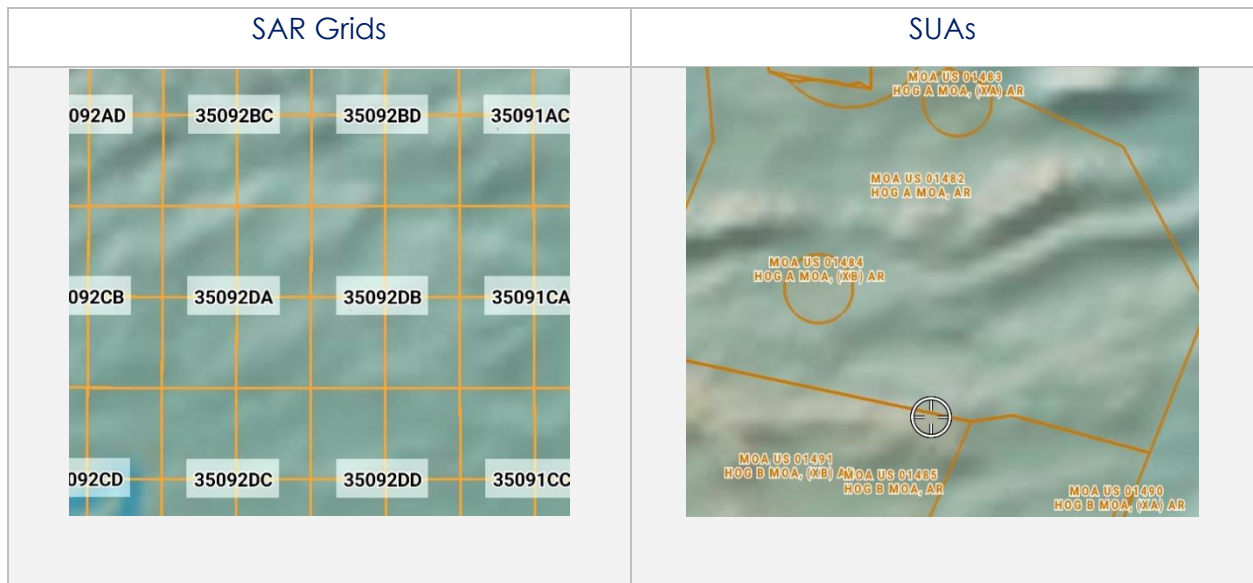
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **SAR Grids** to enable the option. World-wide SAR grids will overlay on the map.



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

### 15.3.6.1.21 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. By tapping the labels on the overlays, a popup will appear with additional information.



### 15.3.6.1.22 Terrain

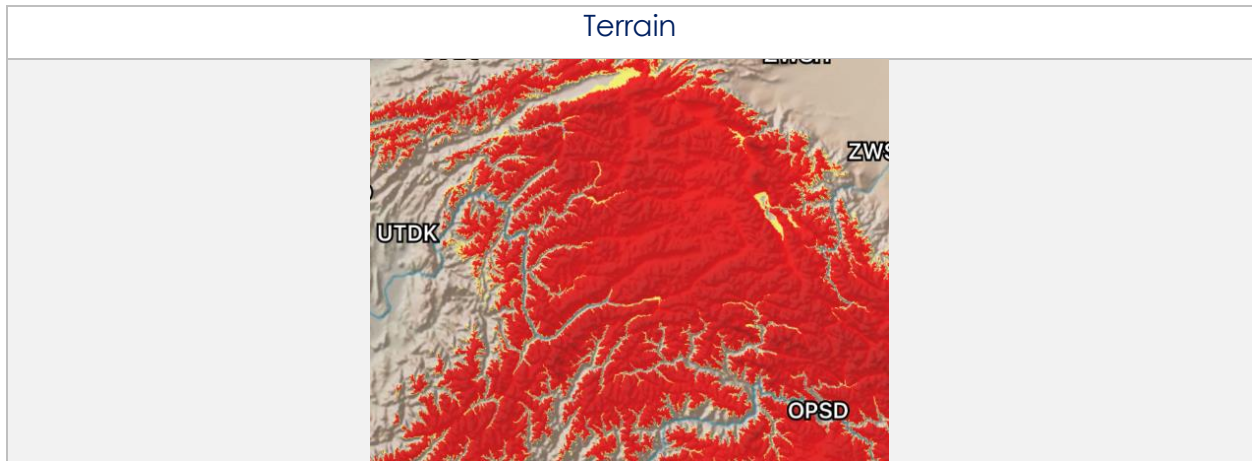
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **Terrain** to enable the option. Terrain coloring will overlay on the map.
5. The overlay will display red and yellow coloring 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 is required to be downloaded prior to use. Refer to [Section 9.1.13](#) for additional information.



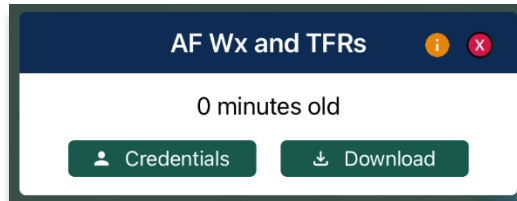
**NOTE:** The elevation of the water is the water's true elevation, therefore, the terrain coloring for water will range from red to yellow depending on the ownship's altitude.



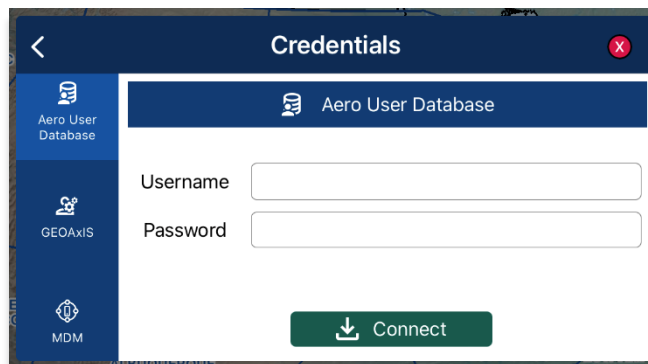
### 15.3.6.1.23 View Temporary Flight Restrictions (TFRs) From the Moving Map

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**.

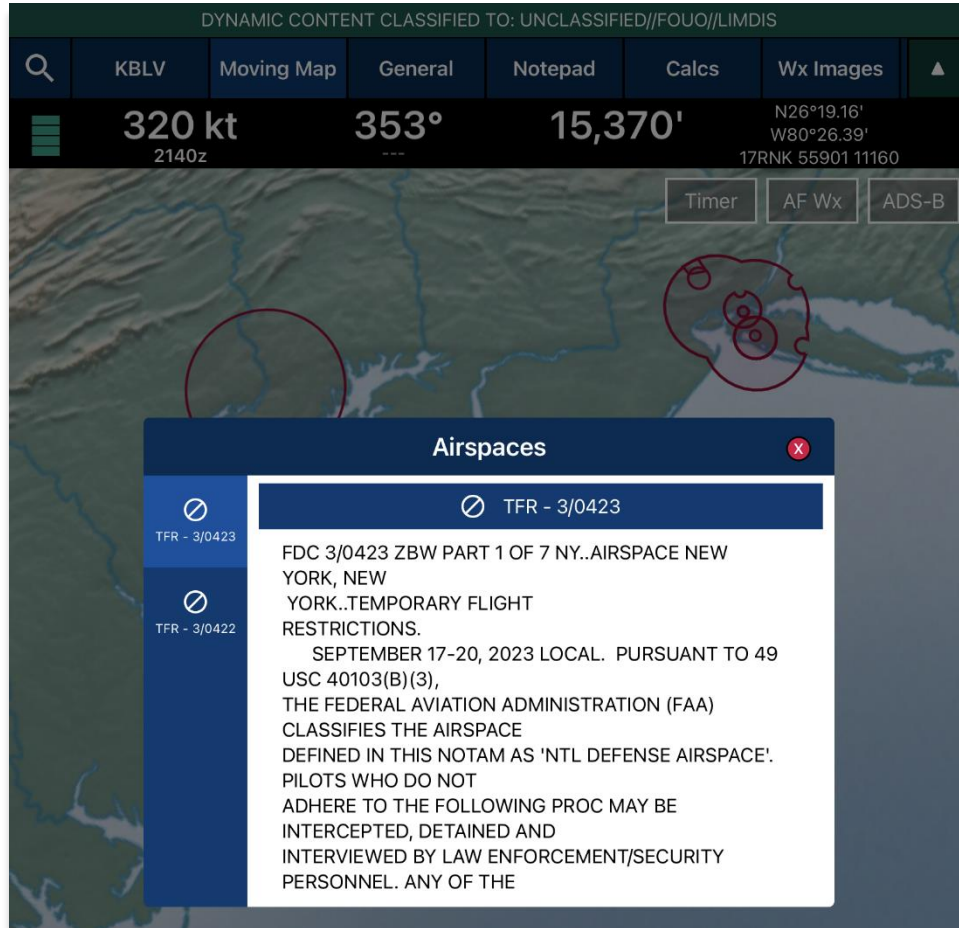


7. Select desired credentials to authenticate using any of the following options:
  - a. Aero User Database
  - b. GEOAxis
  - c. MDM



**NOTE:** Alternatively, users can display textual TFR data by tapping the details button on the Overlays menu.

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

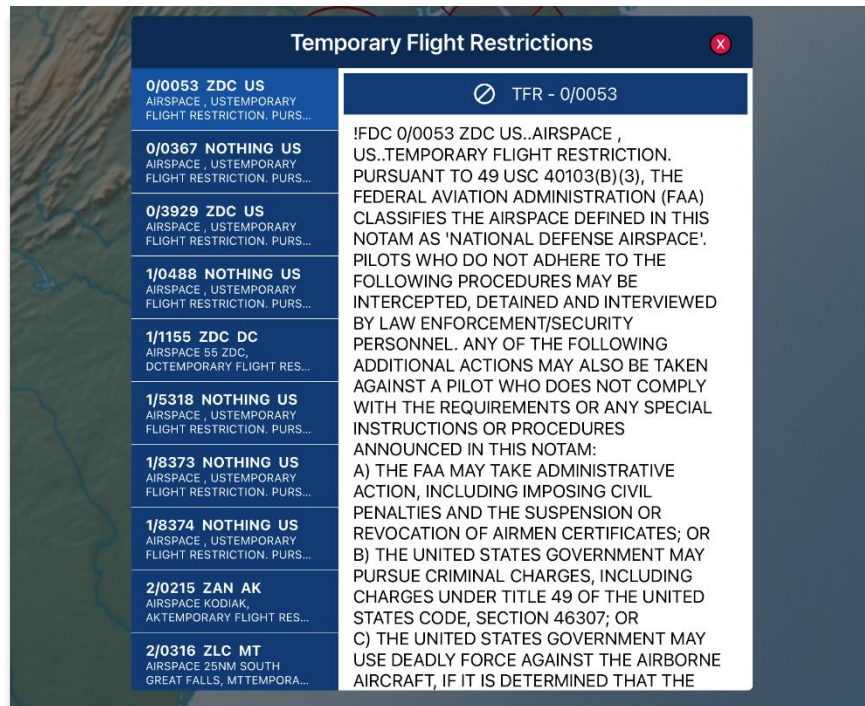


**NOTE:** In the case where a TFR overlaps another TFR, a Which One popup will appear to confirm selection.

### 15.3.6.1.23.1 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 **details** button beside the option.
5. The Temporary Flight Restrictions popup will display with all TFR data including presidential TFRs. Scroll down to view additional TFRs.





### 15.3.6.1.24 Time Zones

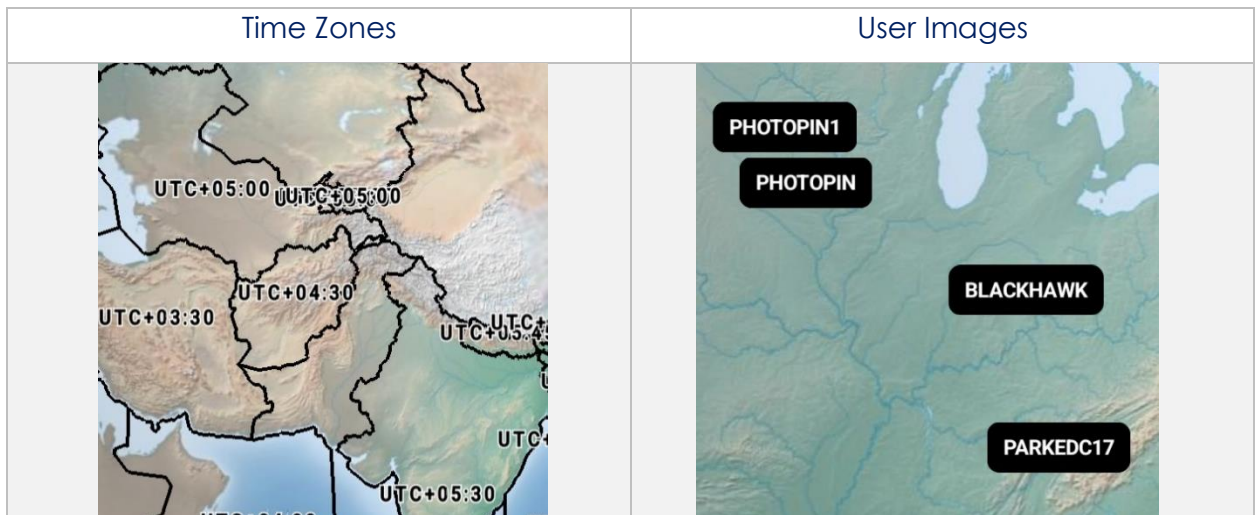
Time Zones are shown on the Moving Map with lines separating the longitudinal divisions. Labels display the time offset for each time zone.

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.

### 15.3.6.1.25 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.

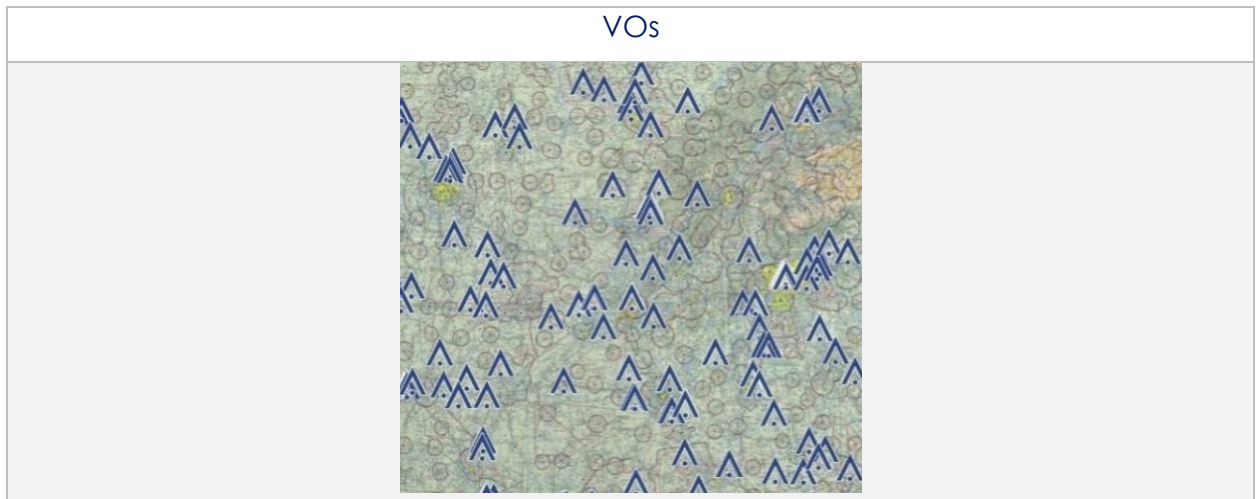
1. Tap **Moving Map** on the **Main Menu**.
2. Tap **Overlays** located at the bottom of the Moving Map.
3. Select **Aero Overlays** from the side menu, if necessary.
4. Tap **User Images** to enable the option. Dropped photo pins will populate on the map.



### 15.3.6.1.26 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. By tapping on an obstruction, a popup will appear with additional information for each VO.



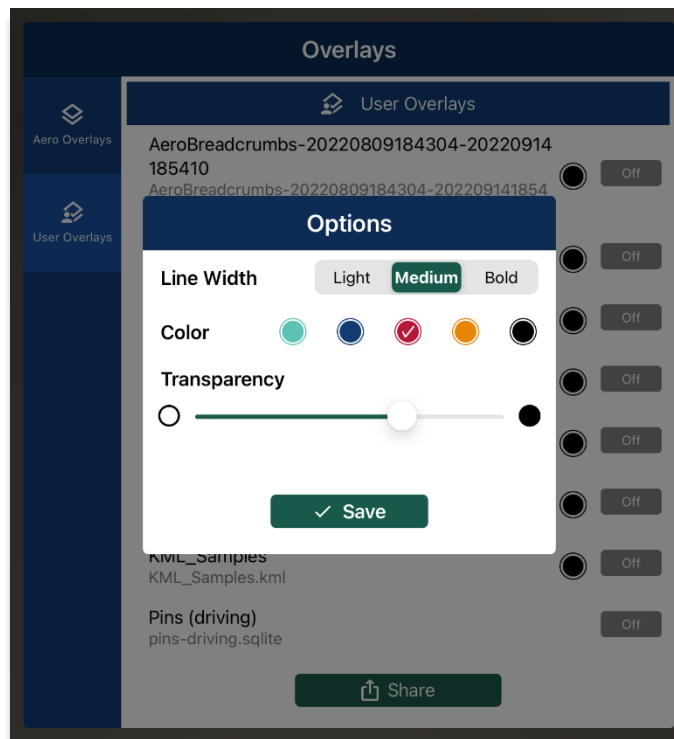


### 15.3.6.2 User Overlays

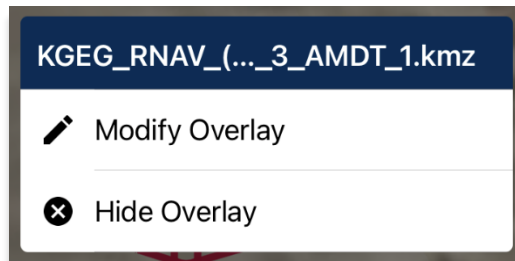
Aero App enables users to sideload User Overlays such as Shapefiles, GeoJSON, and KML/KMZ files to their Aero App directory. Refer to [Section 11](#) for additional information. Aero App provides an additional feature to share KML/KMZ files with other users.

#### 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**.



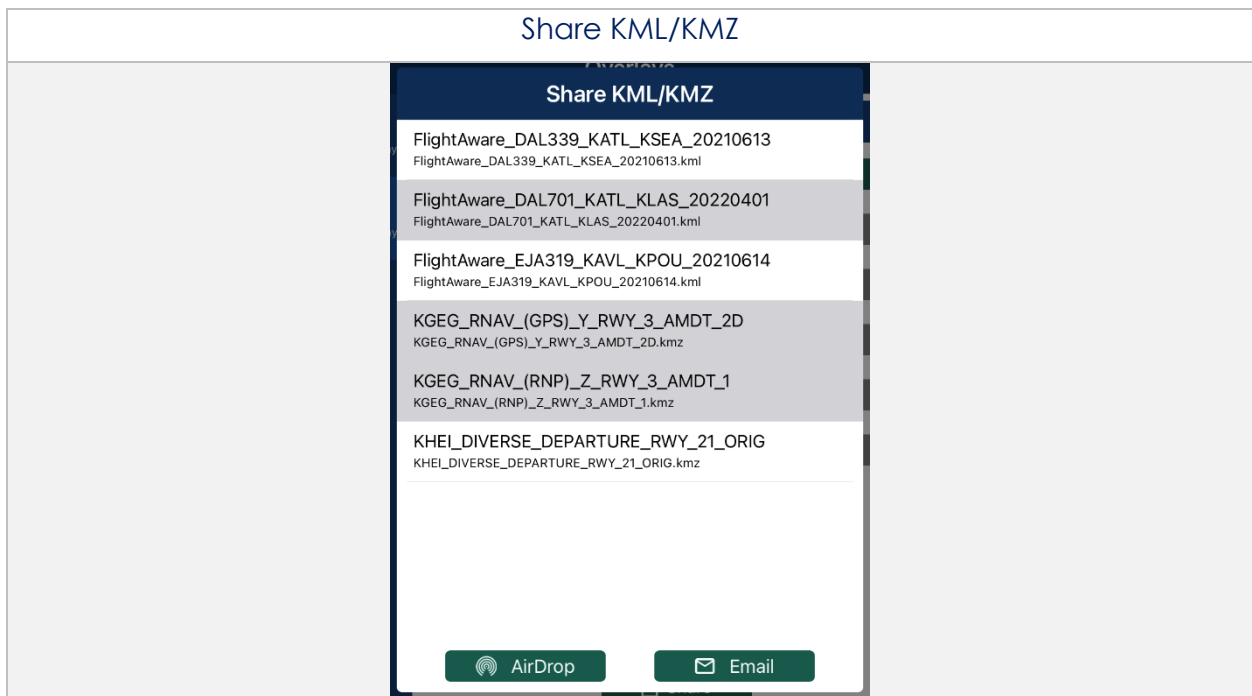
**NOTE:** Users can sideload User Overlays by connecting to a computer via USB and storing Shapefiles, GeoJSON, and/or KML/KMZ files in [mounted root]/AeroApp/MovingMaps directory.



### 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 more information on how to share files.
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 more information on how to share files.



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

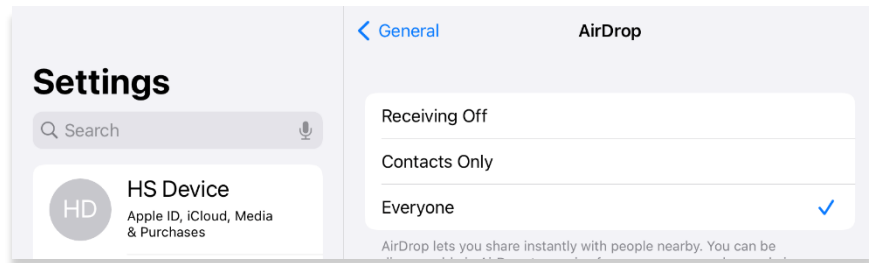


**NOTE:** The share options will be disabled if no files have been selected.

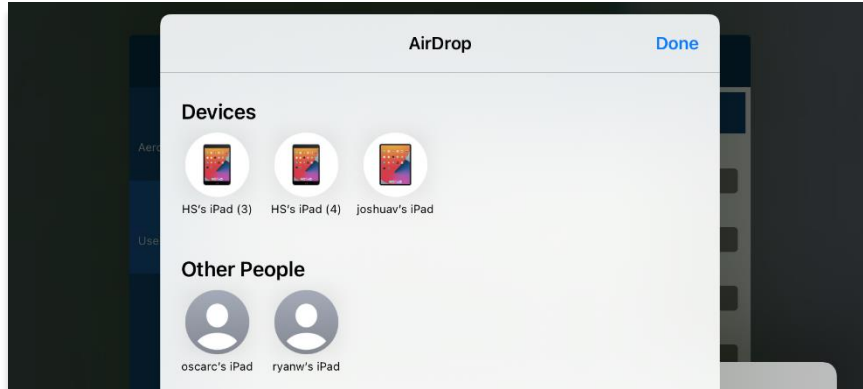
### 15.3.6.2.2.1 Sharing KML/KMZ Files Through AirDrop

KML/KMZ files can be shared with another Apple device through AirDrop. Users must have their device's *AirDrop settings* set to **Everyone** on *both* devices prior to sharing or receiving any files.

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



2. Once the sharing device has located devices to share, select the device to which you would like to share the KML/KMZ files.



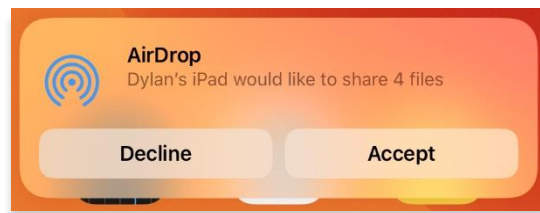
3. The sharing process will begin, and the receiving device will follow prompts to accept the files that are being shared.

### 15.3.6.2.2 Receiving KML/KMZ Files Through AirDrop

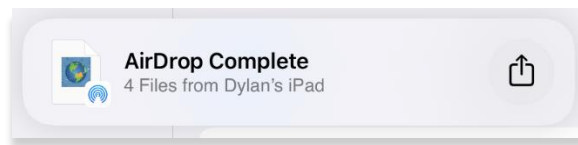
Users can view the Airdropped KML/KMZ files on Aero App. The person receiving the files must have their device's AirDrop settings set to *Everyone for 10 Minutes* (or set to *Everyone* for those running iOS 16.2 or earlier) prior to receiving any files. Different behaviors will occur depending on the device's operating system.

#### 15.3.6.2.2.1 Receiving KML/KMZ Files for Devices With iOS 17 or Later

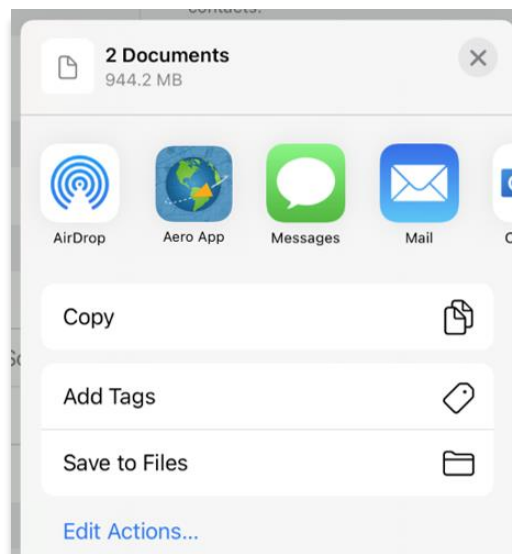
1. An AirDrop notification will appear that prompts users to *Decline* or *Accept*. Tap **Accept**.



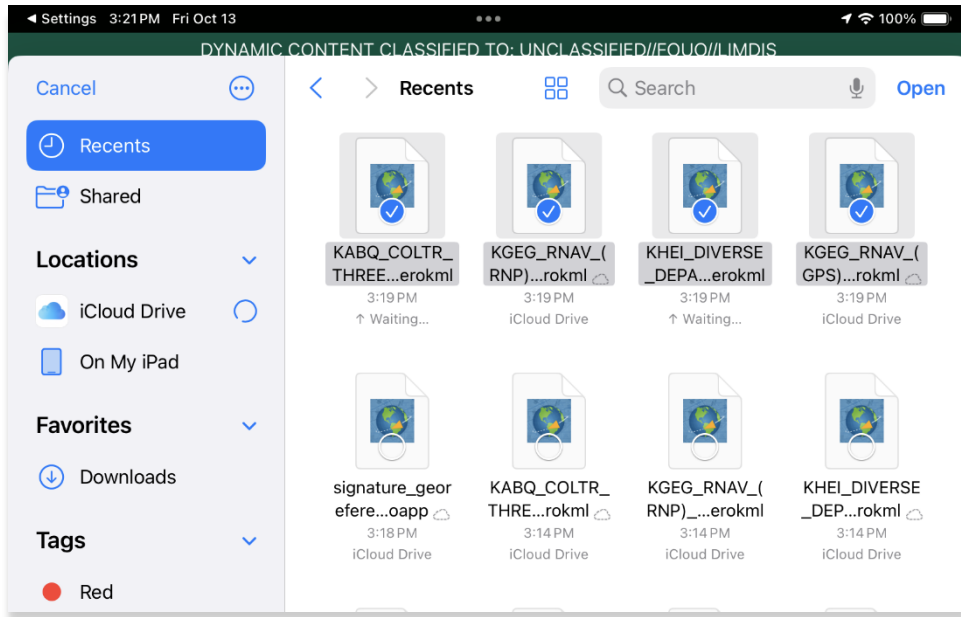
2. Once the AirDrop is complete, a popup will display at the top of the screen. Tap the **Share** button.



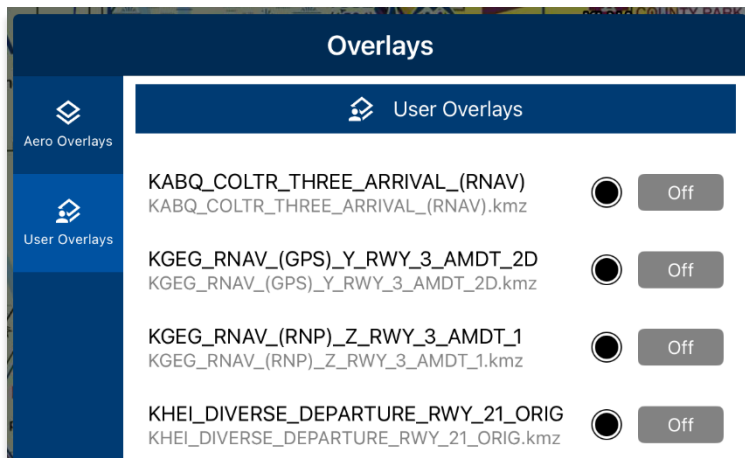
3. A popup to select an application to import the received files will display. Select **Aero App**.



- Aero App will open, and the *document picker* will display. Select desired files to import.
- Tap **Open** once desired files have been selected.



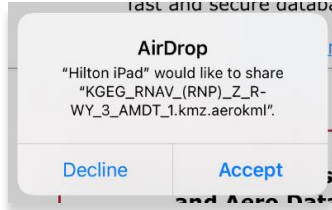
- The Airdropped files will be loaded in the Overlays popup of the Moving Map. Select desired files to overlay on the map view.



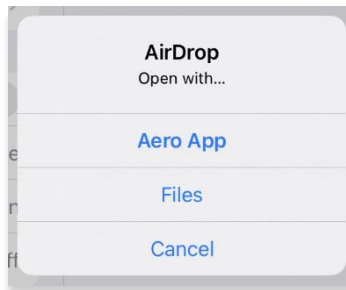
- Aero App provides users the option to import missed files into Aero App. Navigate to the Date Status page and select **Import** to load desired files into Aero App.

### 15.3.6.2.2.2 Receiving KML/KMZ Files for Devices With iOS 17 or Earlier

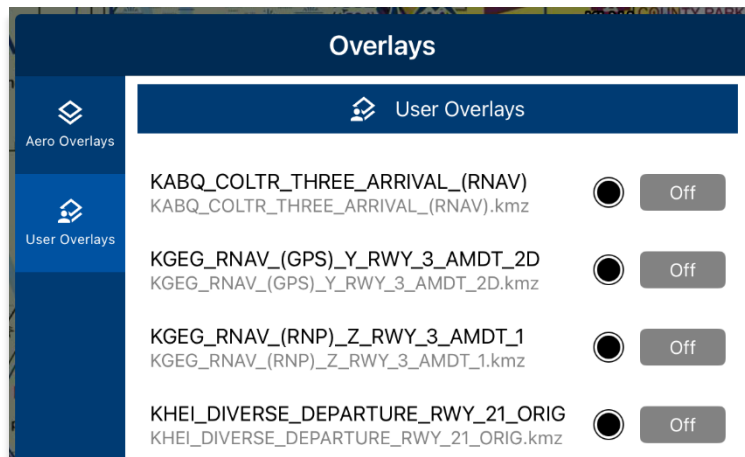
1. An AirDrop notification will appear that prompts users to *Decline* or *Accept*. Tap **Accept**.



2. Once the AirDrop is complete, a popup to open the Airdropped files will display. Select **Aero App**.



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

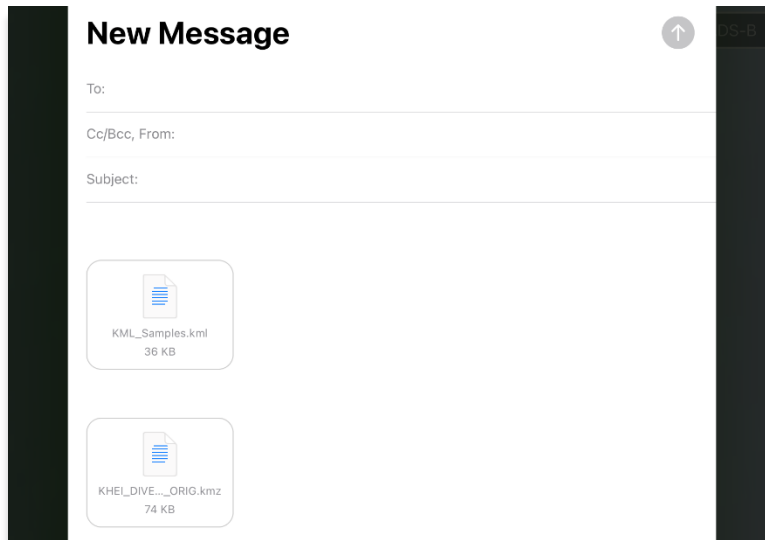


4. Aero App provides users the option to import missed files into Aero App. Navigate to the Date Status page and select **Import** to load desired files into Aero App.

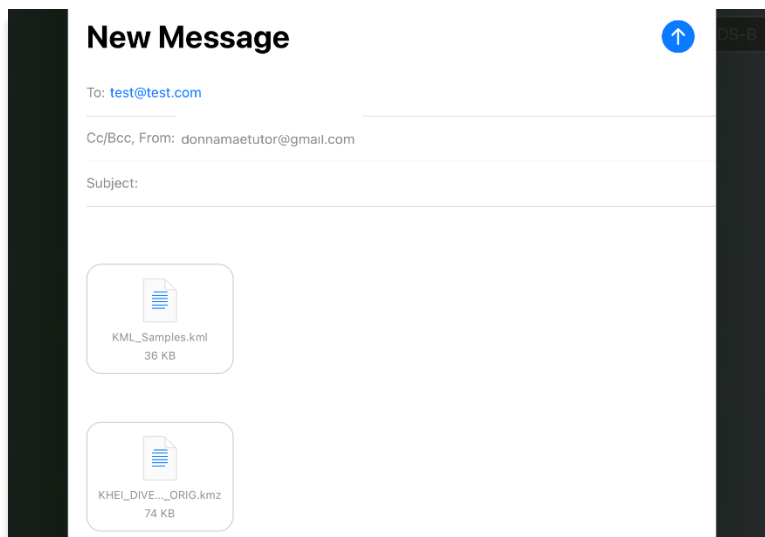
### 15.3.6.2.2.3 Sharing KML/KMZ Files Through Email

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.



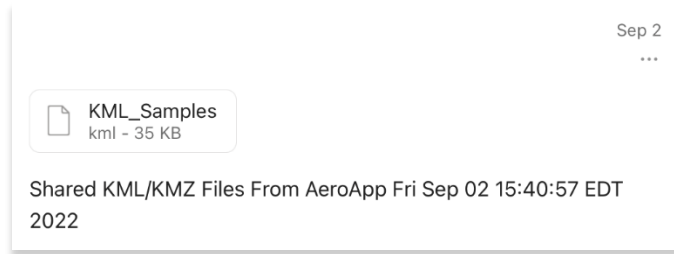
2. Enter the recipient's email address to which you would like to share the KML/KMZ files.
3. Once a valid email address has been entered, the *send button* will become selectable. Tap the **Send** button and the receiving device will follow prompts in downloading the files onto their device.



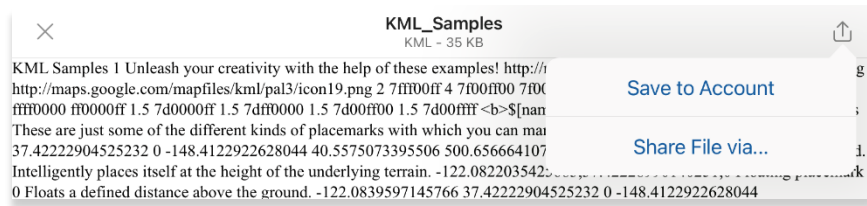


### 15.3.6.2.2.4 Receiving KML/KMZ Files Through Email

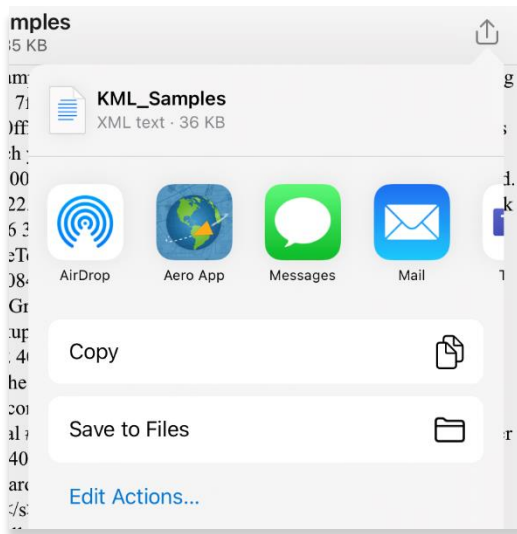
1. On the receiving device, navigate to the email provider in which the KML/KMZ files were sent to.



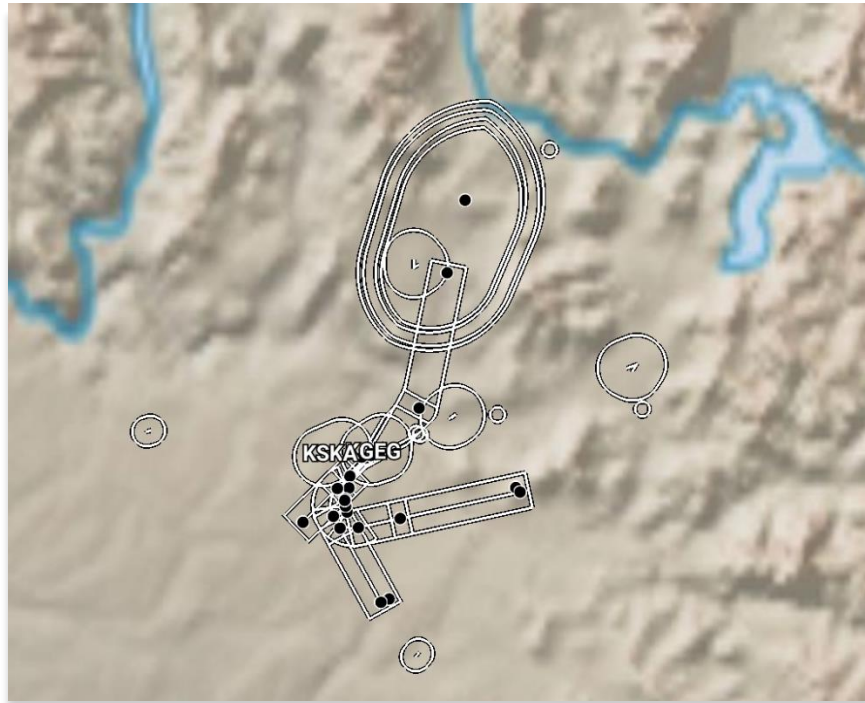
2. From the email provider, tap the **Download** button.
3. Users will be presented with options such as **Save to Account** and **Share File via....** Select **Share File via....**



4. Tap **Aero App**. The file will be stored in Aero App directly under *User Overlays*.



5. Navigate to the **Moving Map** from the **Main Menu**.
6. Tap **Overlays**.
7. Tap **User Overlays** from the side menu.
8. Locate and tap to enable the KML/KMZ file from the *User Overlays* collection.  
The KML/KMZ file will overlay on the Moving Map.



9. 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

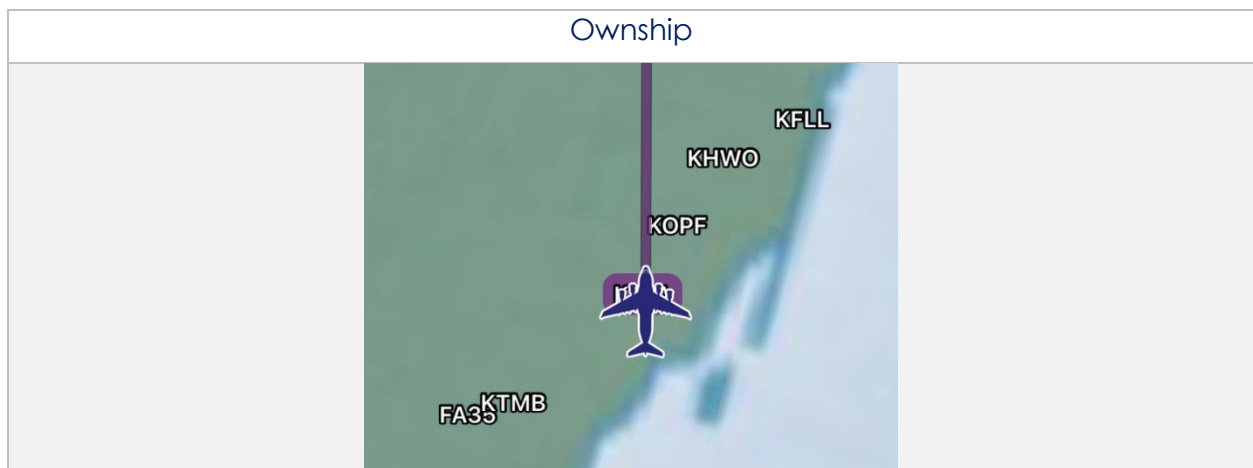
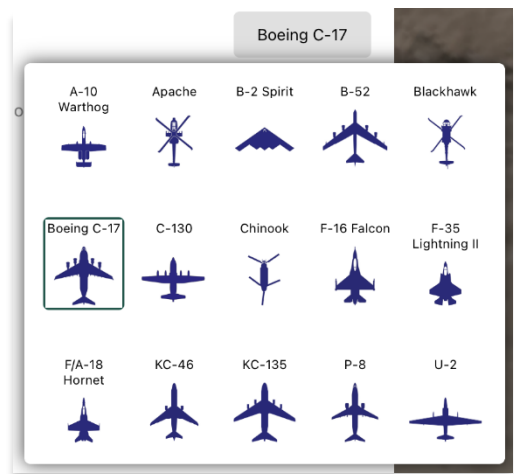
The options menu provides Ownship and Location features to assist users in preflight or inflight operations.

### 15.3.7.1 Ownship

The Ownship menu provides customizable ownship options. 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

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 indicating your current location.
5. Tap the **Ownship Icon** options to display all 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.

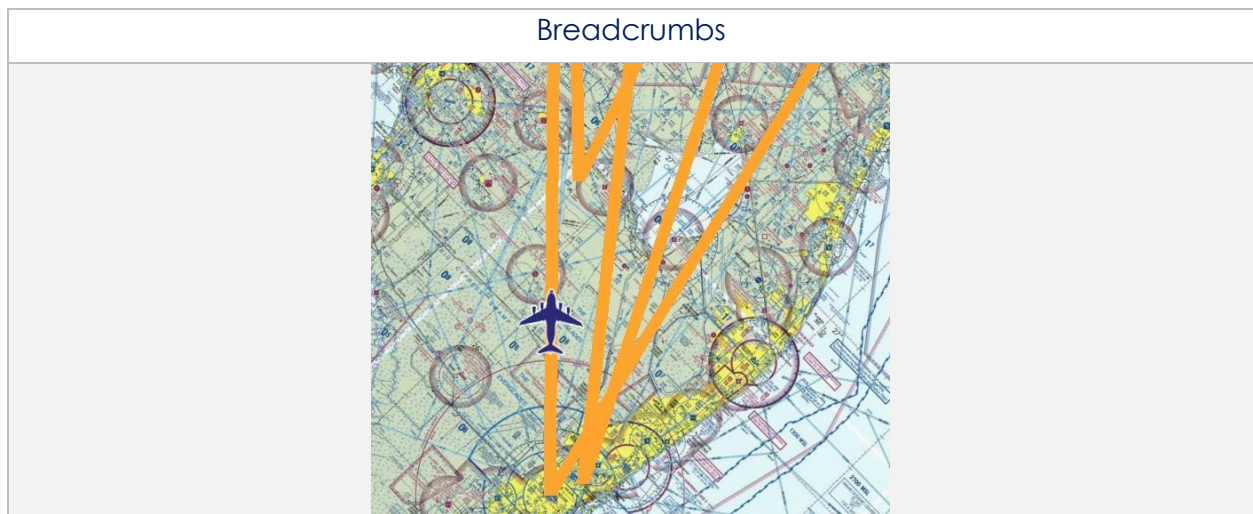
### 15.3.7.2.1 Breadcrumbs

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.

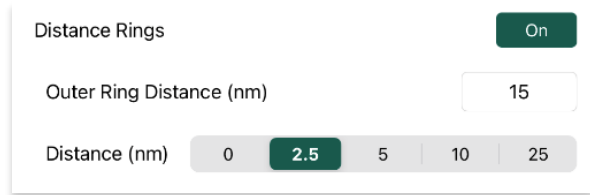
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### 15.3.7.2.2 Distance Rings

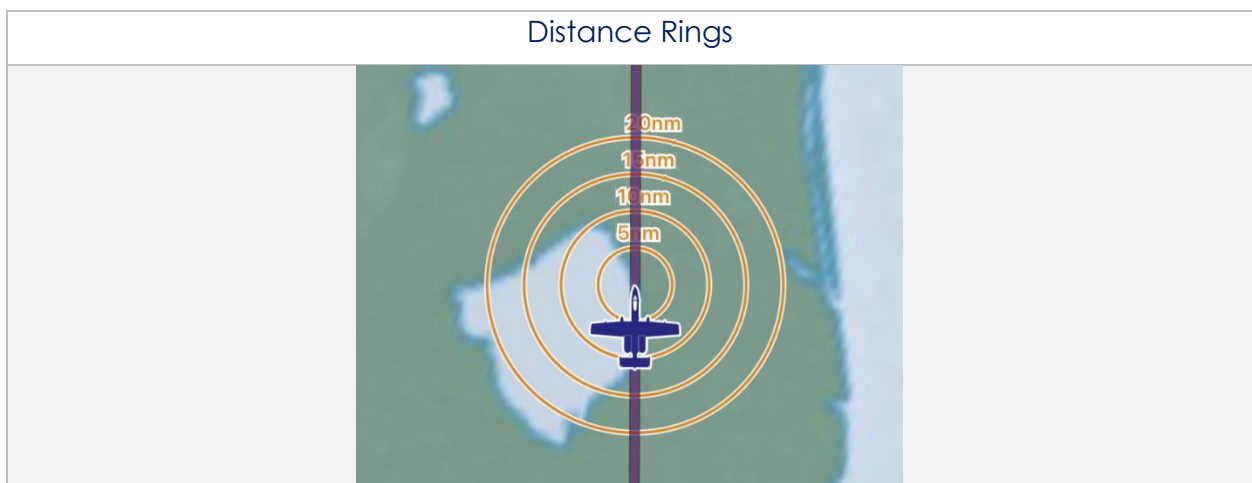
Distance Rings are a series of rings around the pilot's ownship that indicate the distance from the ownship. To set up the rings, users can specify the desired outer ring distance, which represents the farthest distance from the ownship.

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 max 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.

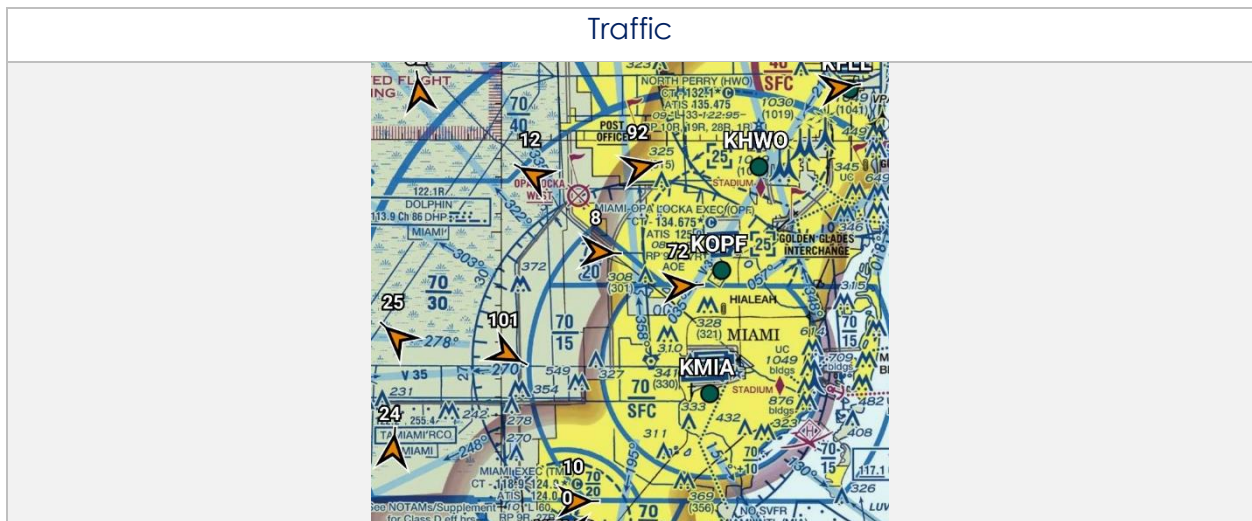


### 15.3.7.3 Traffic

Aero App can display ADS-B traffic. Users must be connected to an ADS-B device to display ADS-B traffic.

#### 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.





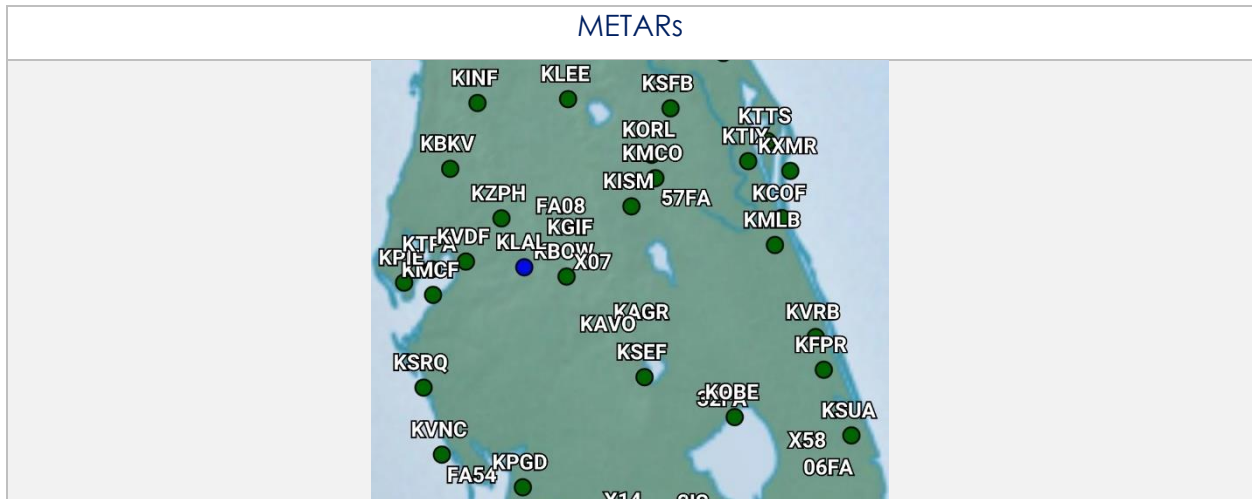
### 15.3.7.4 Weather

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.

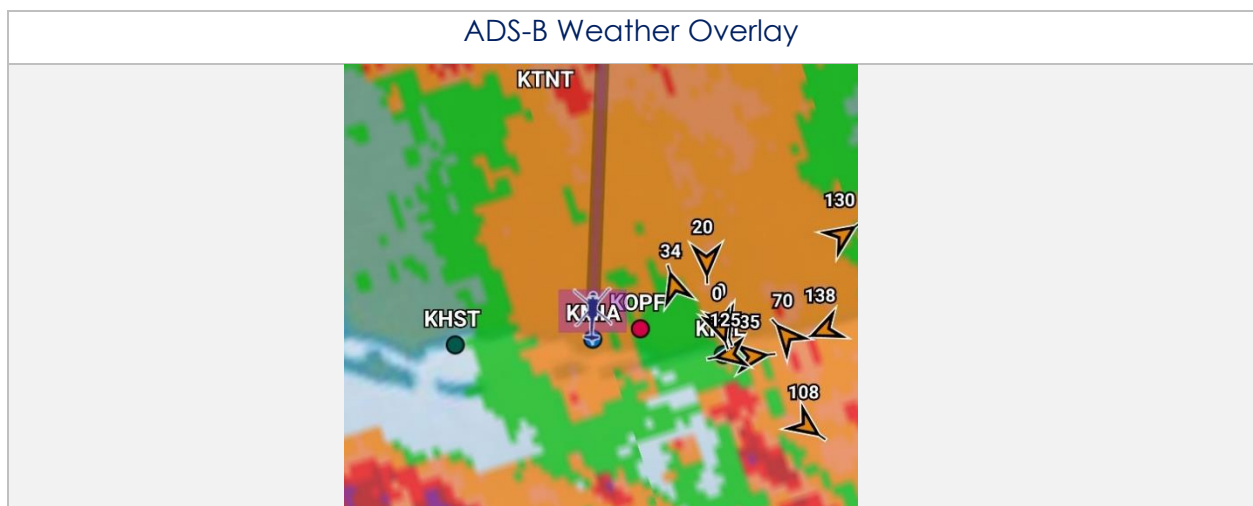
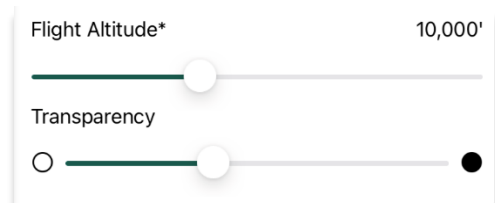




### 15.3.7.4.2 ADS-B Weather

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.

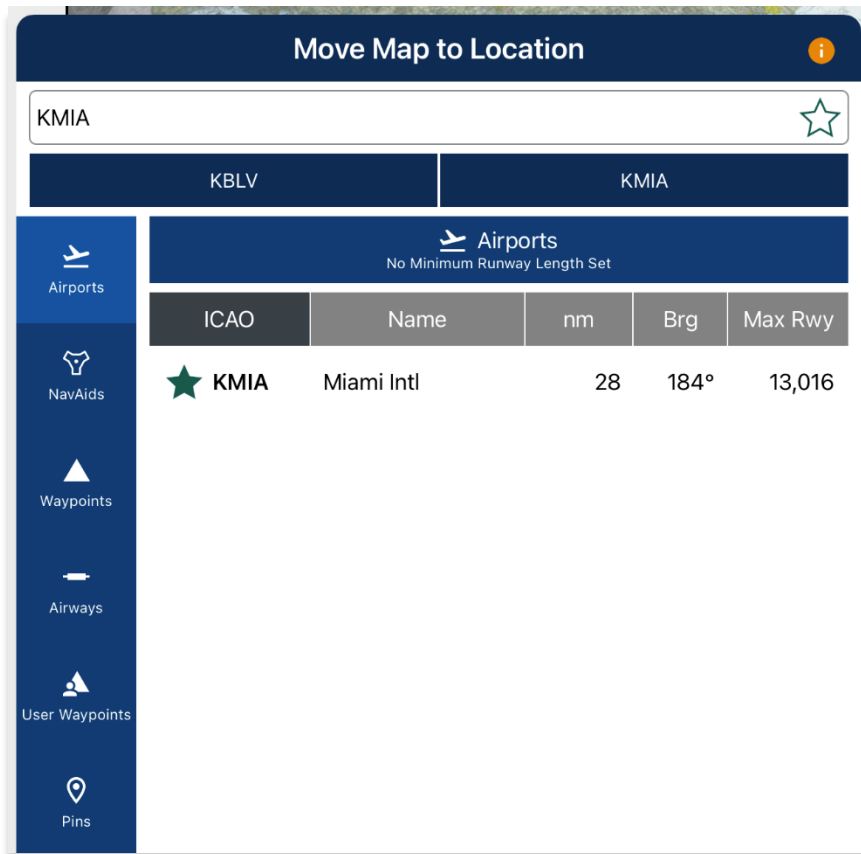


**NOTE:** Users can enable a Snap to Location feature, which returns to the user's current location after 15 seconds as explained in [Section 15.3.7.1.2](#).

### 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, longitude.

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



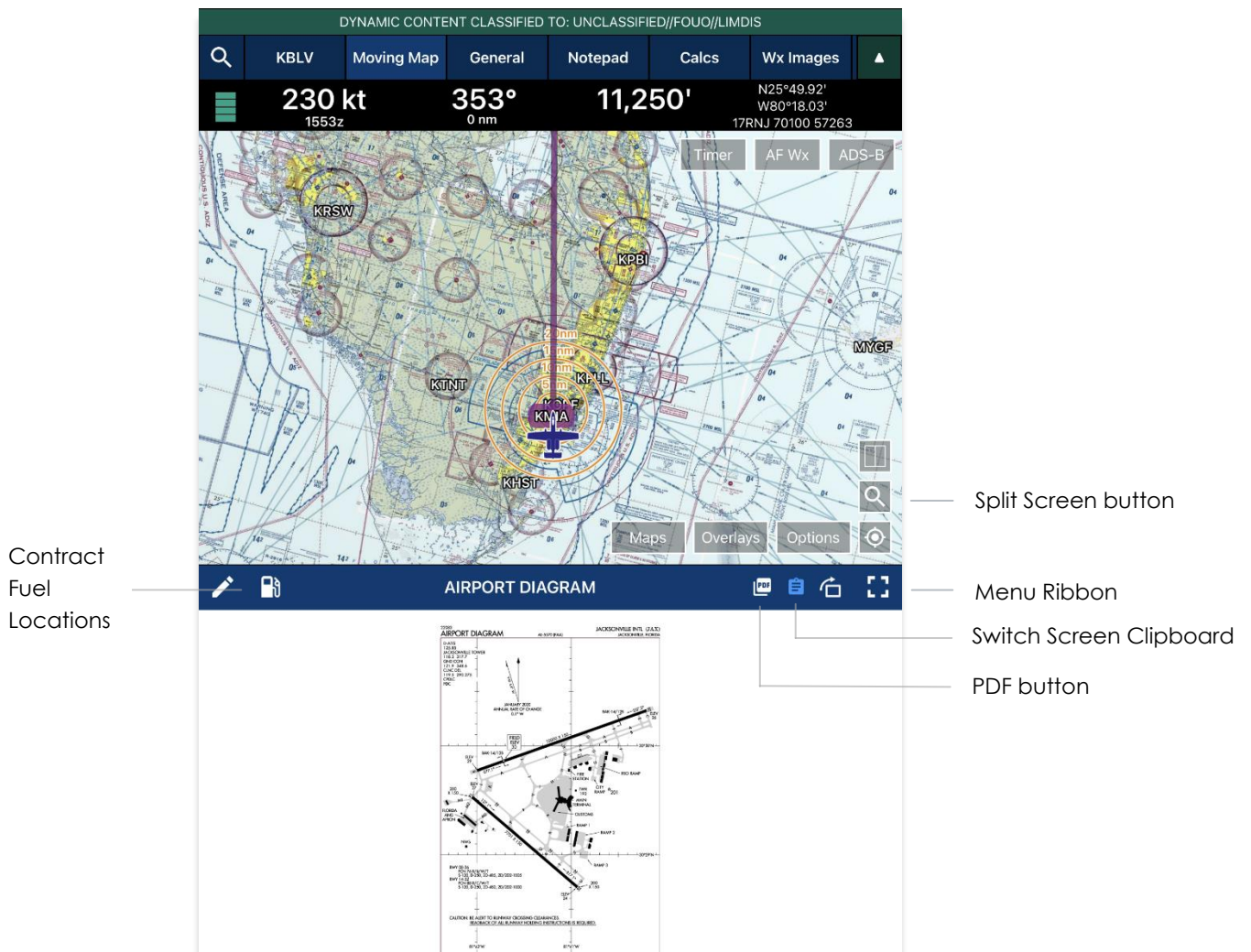
### 15.3.10 Split Screen

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

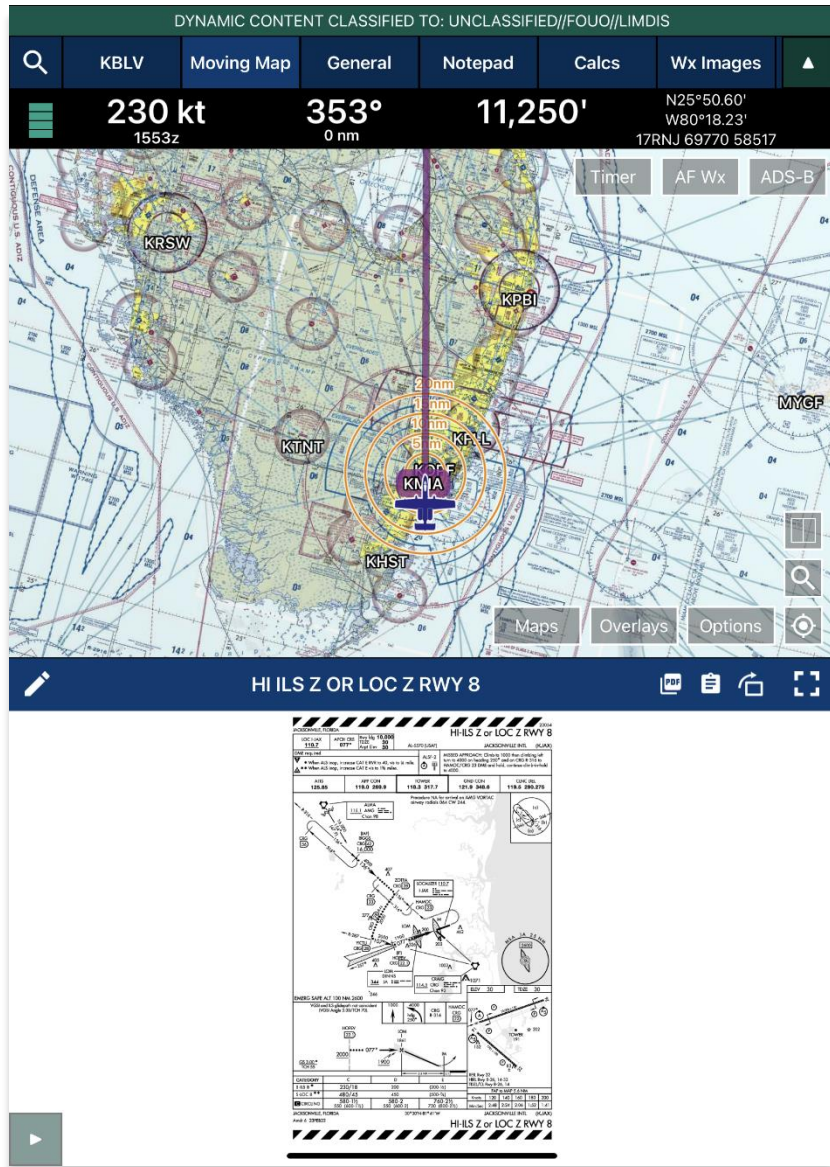
#### 15.3.10.1 APD and IAP for Destination Airport

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.



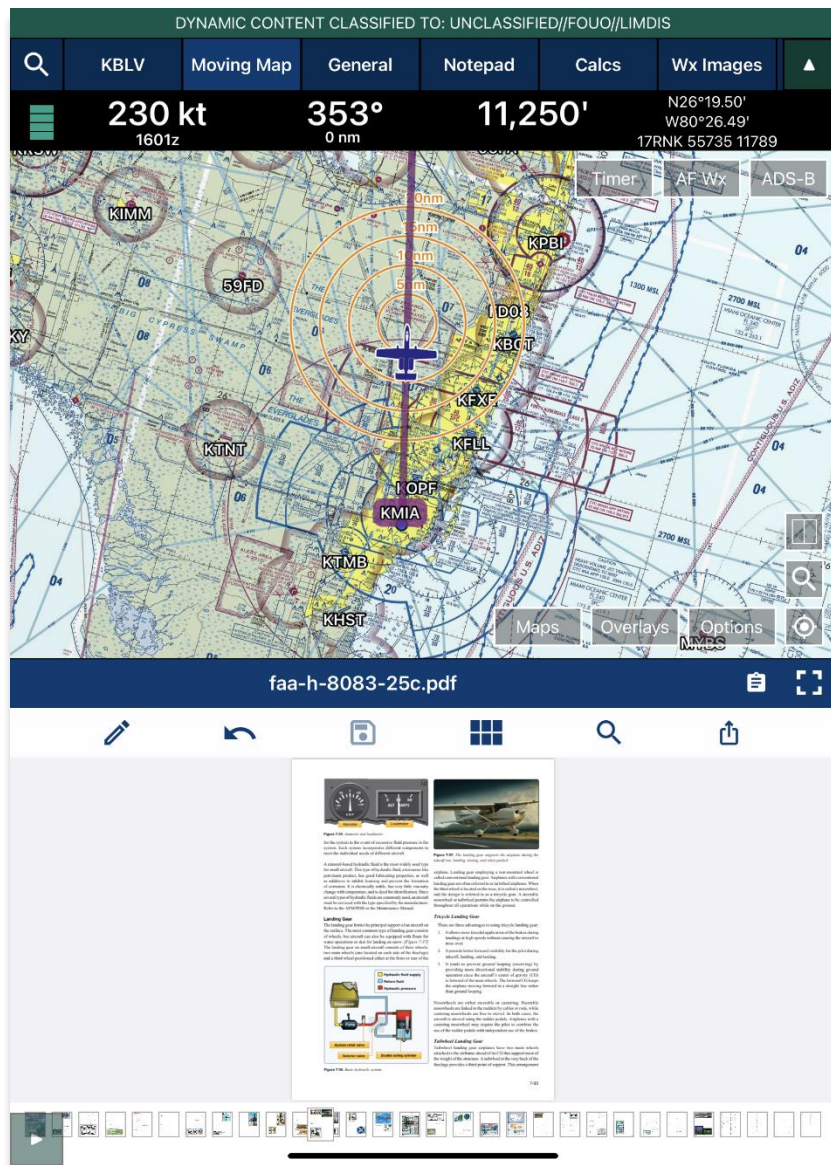
**NOTE:** Refer to [Section 15.2.1.1](#) on how to draw on APD and IAP charts.



### 15.3.10.2 PDF Support

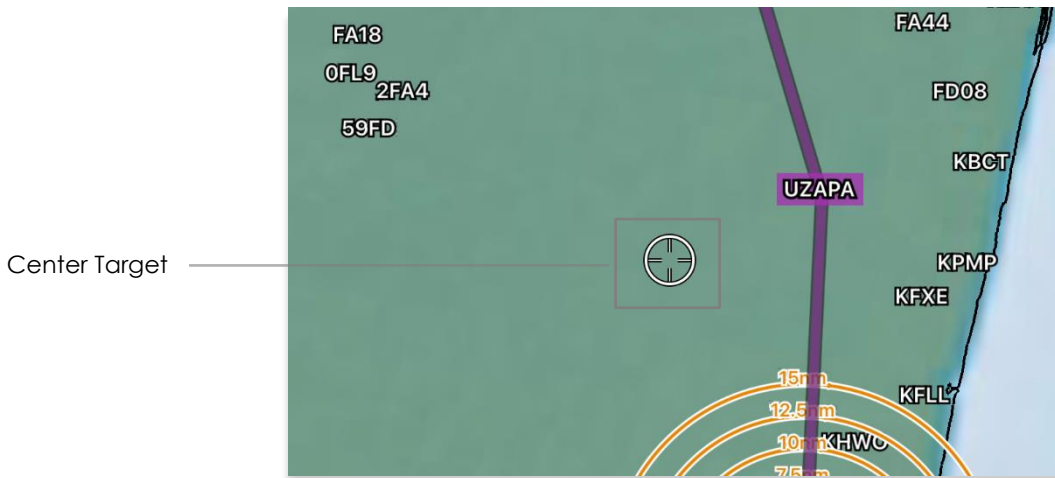
PDF Support enables users to view PDF documents in Aero App. User's documents must be sideloaded prior to viewing the document.

1. Tap the **PDF** button on the split screen.
2. Tap the **actions ribbon** and the *User Documents* popup will appear.
3. Select desired document.
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.

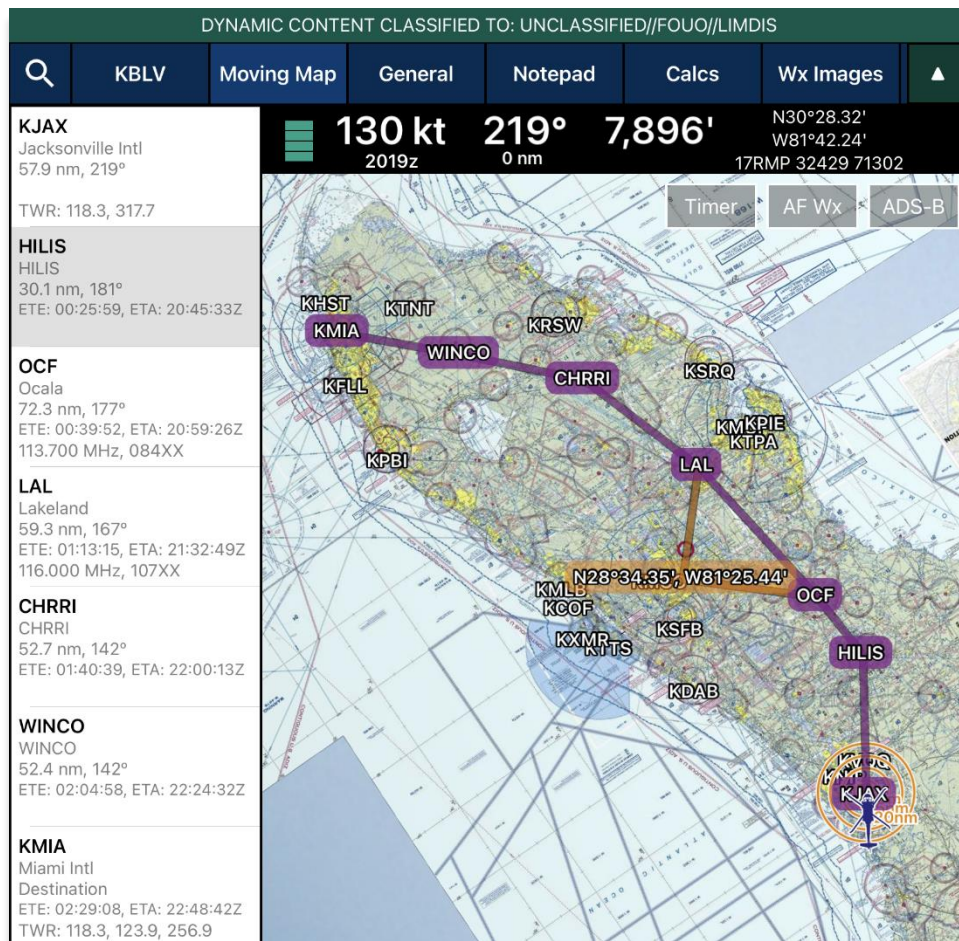
1. Move the *Moving Map* to activate the center target.
2. Choose a *starting point* and tap the **target icon** to set the starting point.
3. Move the *Moving Map* to a desired end point. The measurement is displayed above the end point. The values displayed are the distance and bearing of the starting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



### 15.3.12 Drag and Drop

Aero App enables users to drag any point or segment of the current route and drag it to their desired point.

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
▲

**KJAX**  
Jacksonville Intl  
57.9 nm, 219°

TWR: 118.3, 317.7

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

**OCF**  
Ocala  
60.3 nm, 135°  
ETE: 00:39:37, ETA: 20:59:26Z  
113.700 MHz, 084XX

**KORL**  
Exec  
49.2 nm, 234°  
ETE: 01:07:28, ETA: 21:27:17Z  
TWR: 118.7, 239

**LAL**  
Lakeland  
59.3 nm, 167°  
ETE: 01:30:11, ETA: 21:50:00Z  
116.000 MHz, 107XX

**CHHRI**  
CHHRI  
52.7 nm, 142°  
ETE: 01:57:34, ETA: 22:17:23Z

**WINCO**  
WINCO  
52.4 nm, 142°  
ETE: 02:21:53, ETA: 22:41:42Z

**KMIA**  
Miami Intl  
Destination  
ETE: 02:46:04, ETA: 23:05:53Z  
TWR: 118.3, 123.9, 256.9

130 kt
219°
7,896'

2019z
0 nm
N29°20.79' 114.6 nm  
W79°55.40' 133°  
17RPN 04521 46865

Timer
AF Wx
ADS-B

Maps
Overlays
Options

361.9 nm

+
Edit
Route



**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.



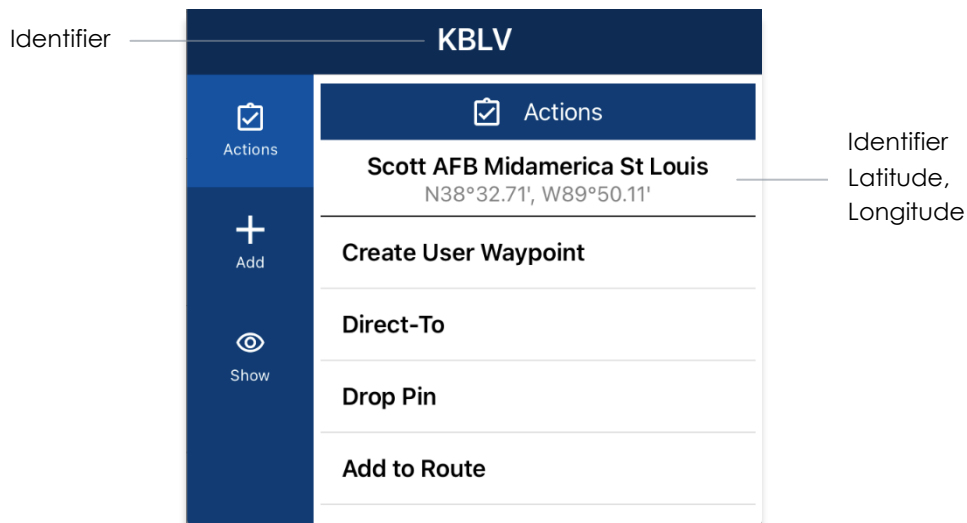
### 15.3.13 Moving Map Popup Menu

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:

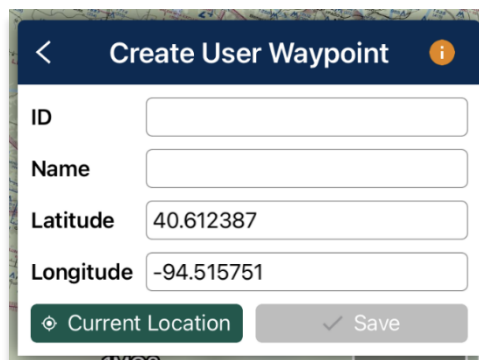
- Create User Waypoint
- Direct-To
- Drop Pin
- Drop Hazard
- Add to Route or Remove from Route

#### 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 11.3](#) for additional information.

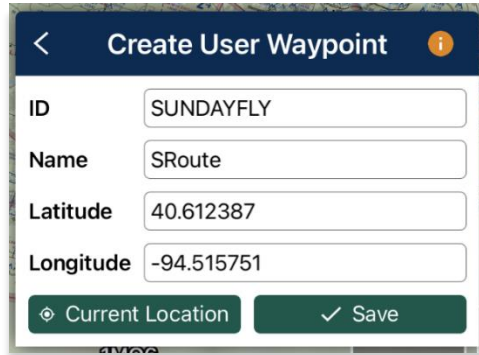
1. Tap **Moving Map** on the **Main Menu**.
2. Long-press a desired point on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear. Select your desired point.
4. The Moving Map popup will appear. Select **Actions** from the side 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 location'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 dialog box is titled "Create User Waypoint" and contains the following fields and buttons:

- ID**: An empty text input field.
- Name**: An empty text input field.
- Latitude**: A text input field containing the value "40.612387".
- Longitude**: A text input field containing the value "-94.515751".
- Current Location**: A green button with a location pin icon, used to populate the latitude and longitude fields with the user's current location.
- Save**: A grey button with a checkmark icon, used to save the waypoint.

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



**NOTE:** User Waypoints can be added as a text file sideloaded into Aero App. Refer to [Section 11.3](#) for information on how to sideload user waypoints.



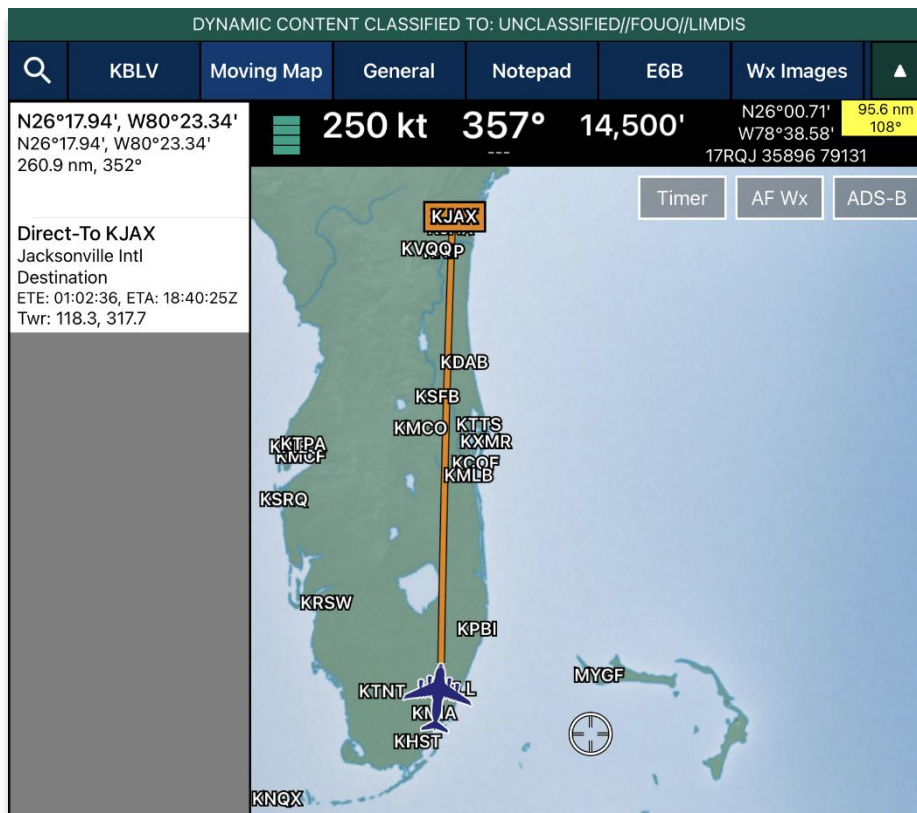
**NOTE:** Refer to [Section 15.3.14.3.4.6](#) to view all saved user waypoints.

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### 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 of 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

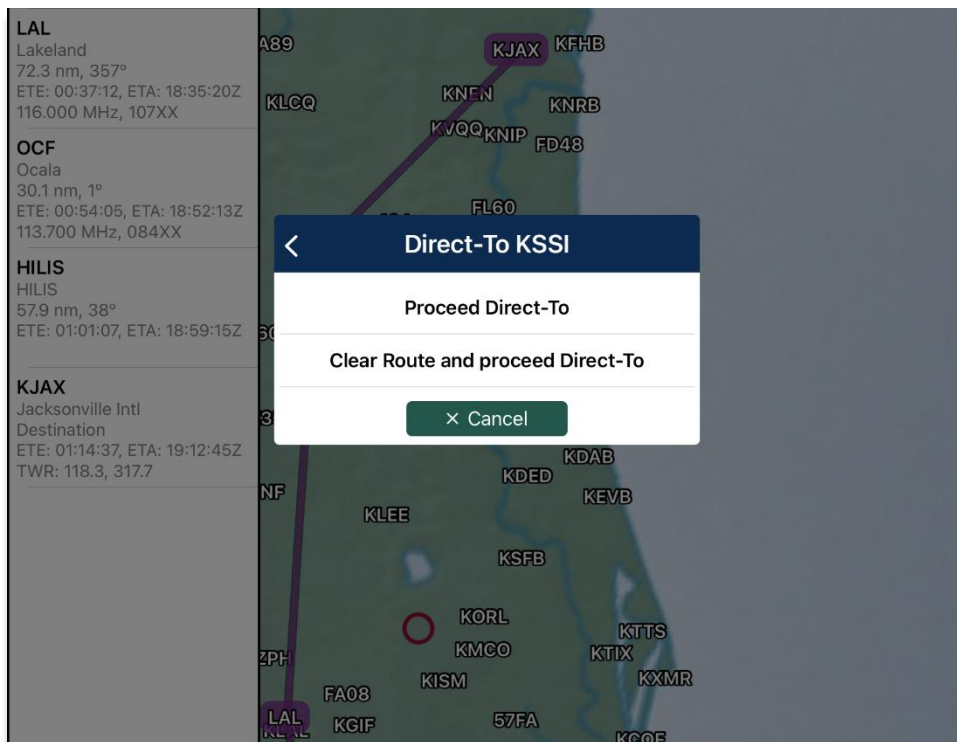
Users can use the Direct-To feature on an existing route.

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

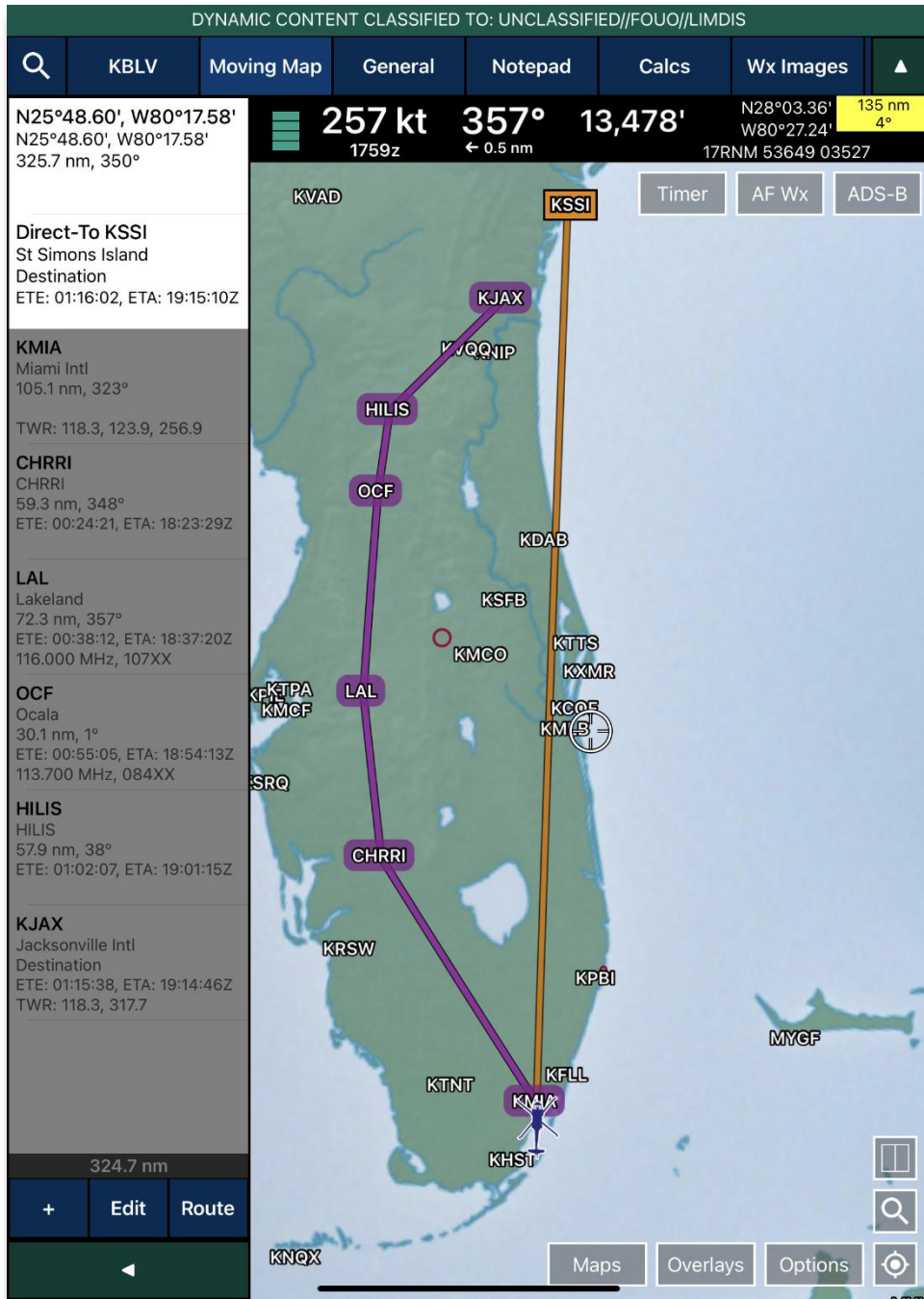


**NOTE:** During the Direct-To course, users will be able to continue adding additional points to the route. The Direct-To enroute will not be interrupted.

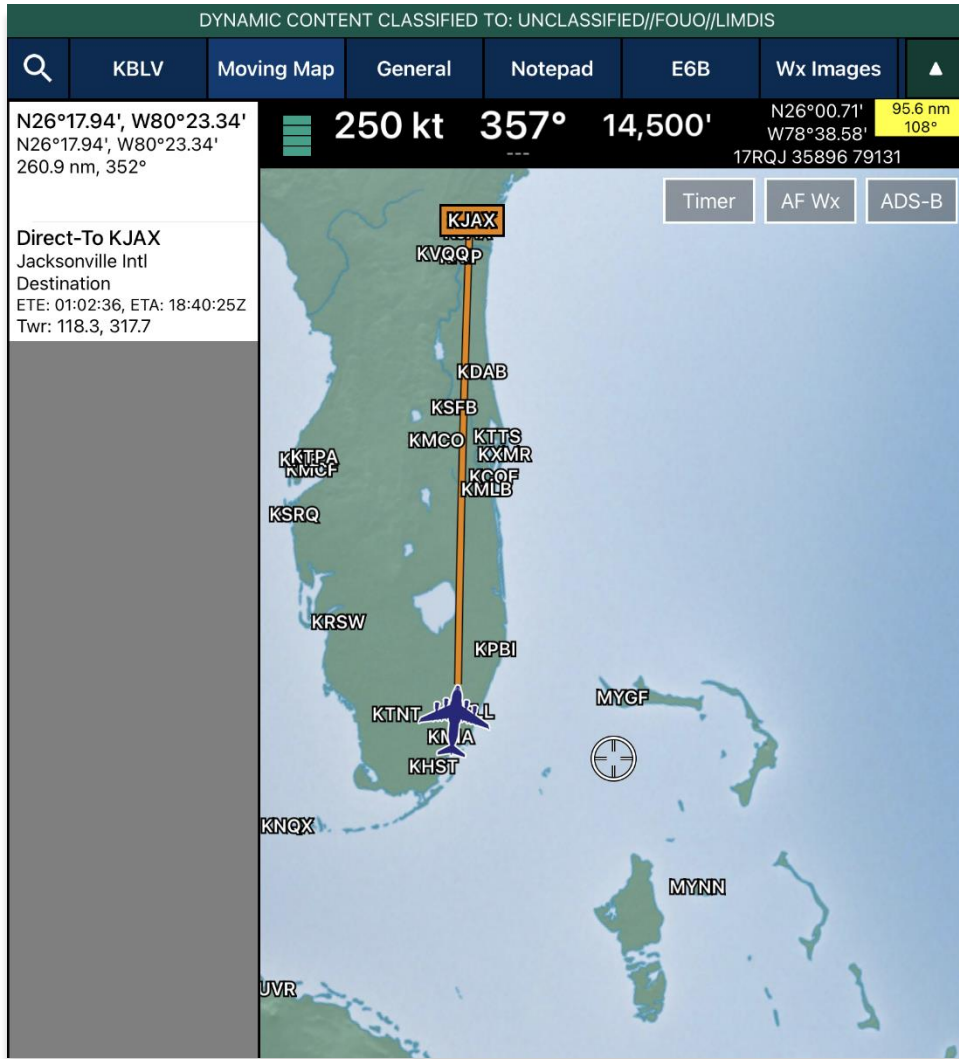
3. Select a point using one of the following methods:
  - Long pressing any point on the Moving Map
  - Tapping an existing point on the Moving Map
  - Tapping any point on the Route Panel
4. Once selected, the Actions popup will display. Select **Direct-To**. The Direct-To options popup will display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

5. 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 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.

The screenshot shows a mobile application interface for creating a 'Drop Pin'. The form is titled 'Drop Pin' and includes the following elements:

- ID\*:** A text input field containing 'F16FALCON'.
- Name:** A text input field containing 'Parked F16 Falcon'.
- Take Photo:** A button with a camera icon.
- Documents:** A button with a document icon.
- Image:** A thumbnail image of a landscape with a sunset or sunrise over a body of water.
- Notes:** A text area with the placeholder text 'Notes (optional)'.
- Buttons:** 'Cancel' (with a close icon) and 'Drop Pin' (with a checkmark icon).



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

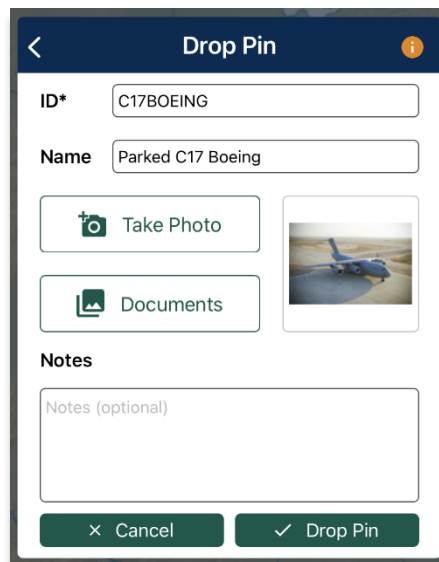


8. Once the required fields have been filled, the Drop Pin button will be selectable. Tap **Drop Pin** and your pin will display on the Moving Map.
9. Tap **Cancel** to dismiss the action.

### 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.
9. Tap **Drop Pin** and your pin will display on the Moving Map.
10. Tap **Cancel** to discard the action.

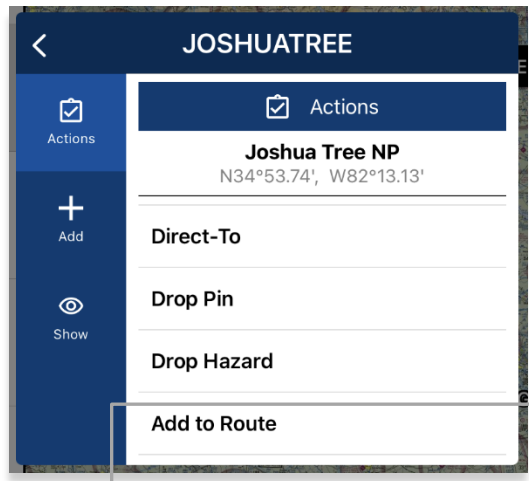


**NOTE:** Creating Pins will require a unique identifier. Existing Pins will be assigned auto-generated identifiers (e.g., PIN1, PIN2, PIN3, etc.).

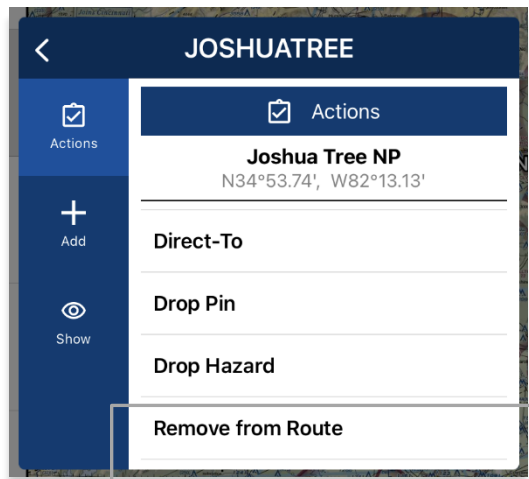
### 15.3.13.1.3.2.1 Add Pin to Route

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

1. Ensure that Pins are 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 onto your current route on the Moving Map and on the Route Panel.
6. To delete from your current route, tap **Edit** then tap the minus symbol or swipe right then tap the delete button.
7. To delete from the Moving Map, tap the dropped pin and select **Remove from Route**.

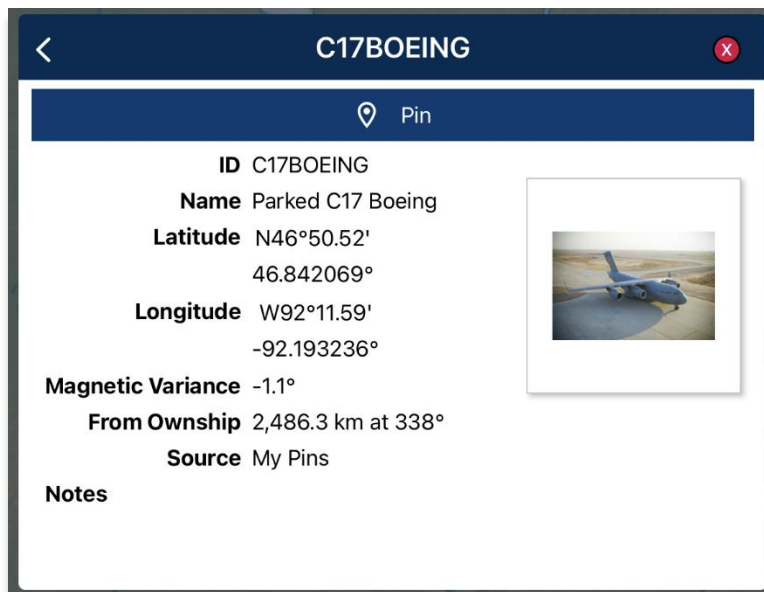


### 15.3.13.1.3.2.2 View Pin Information

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 11.6](#) 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.

**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

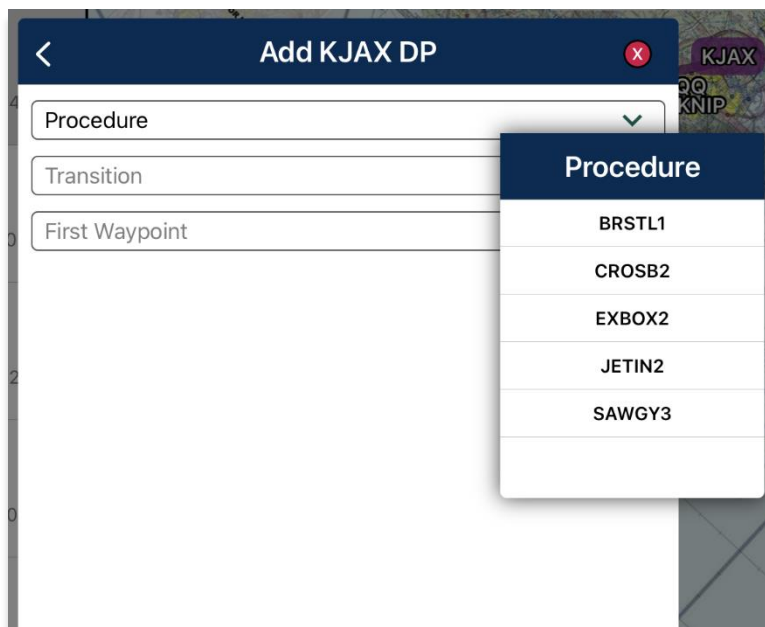
Aero App enables users to add Departure Procedure (DP) and Standard Terminal Arrival Route (STAR) to their current route.

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 126  
119.5 290.375  
CRIC  
GND CON 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.

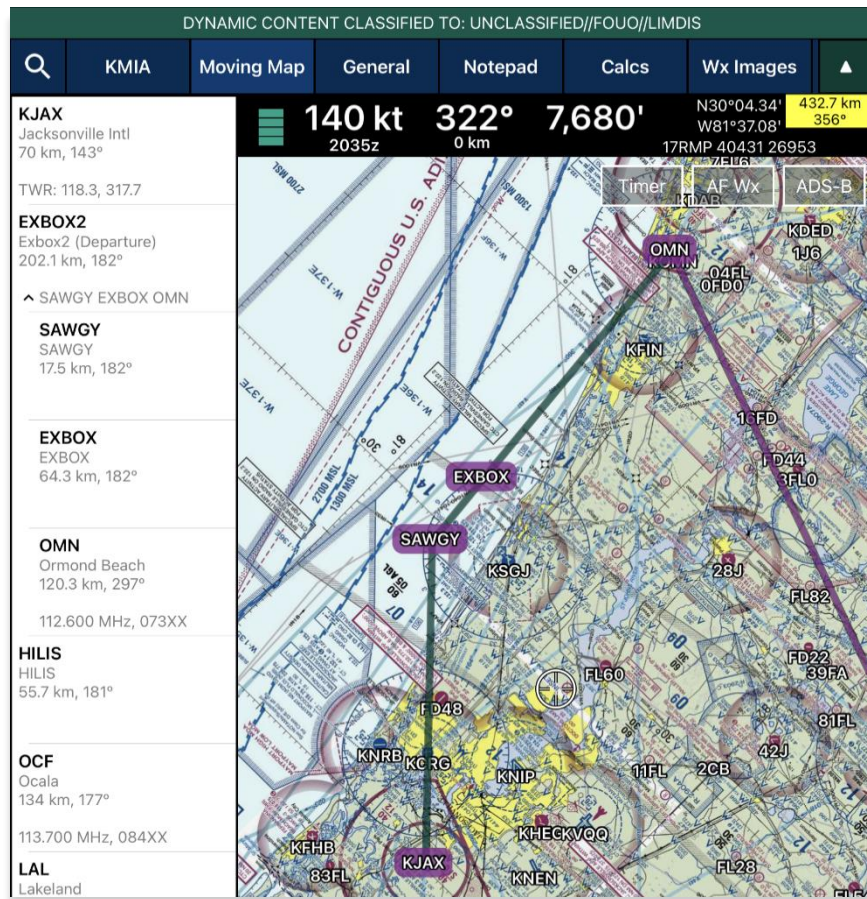
**ORMOND BEACH TRANSITION (EXBOX2.OMN):**

EXBOX TWO DEPARTURE (RNAV)  
(EXBOX2.EXBOX) 08AN15
JACKSONVILLE, FLORIDA  
JACKSONVILLE INTL (JAX)

✓ Add to Route



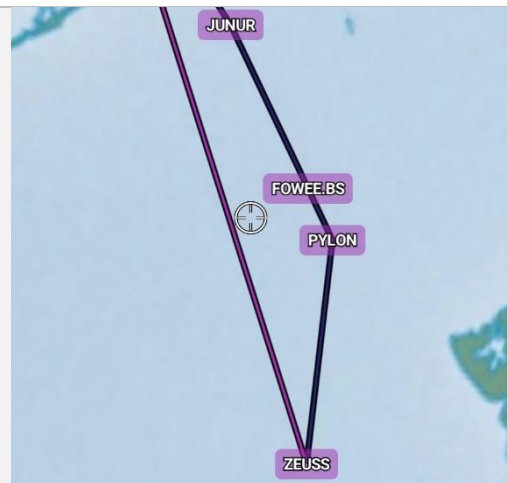
8. The procedure will be added to the current route and on the Moving Map.



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 enables users to be anywhere on the Moving Map and once the option is selected, the screen pans to the exact location of which the point or identifier is placed.

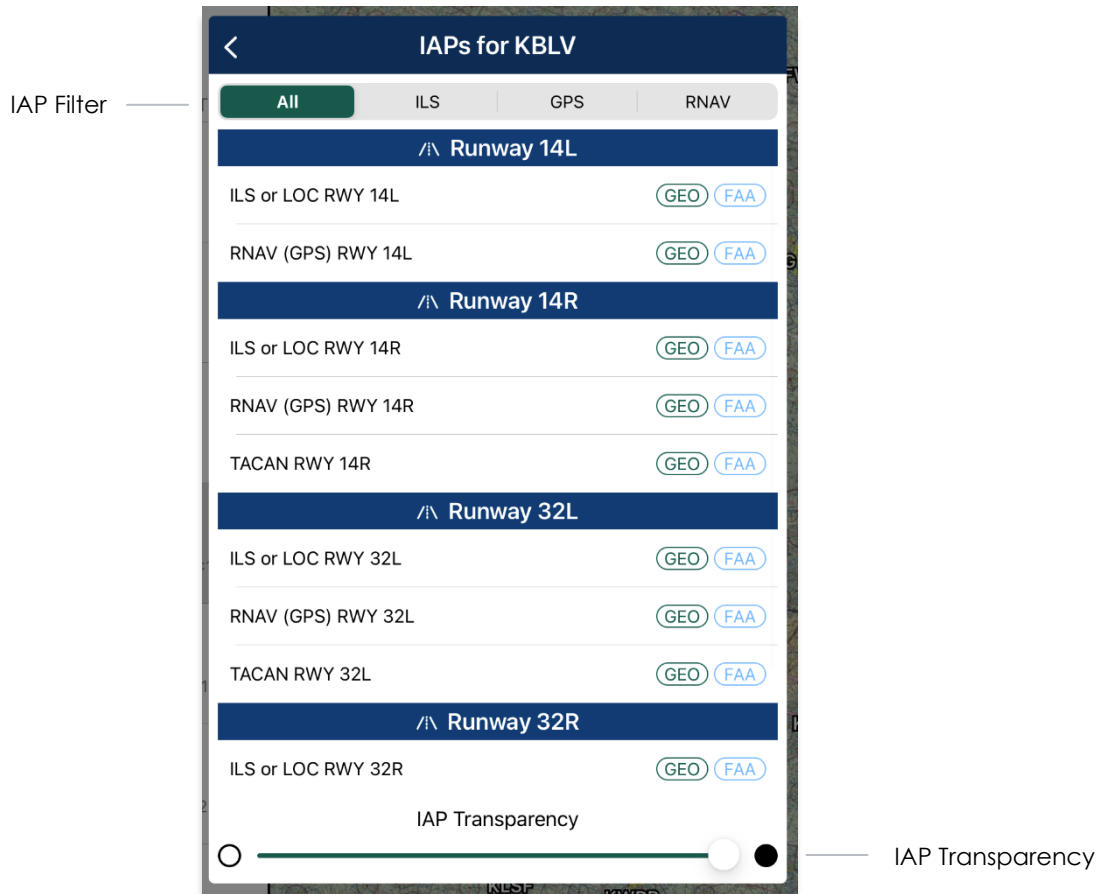
1. Tap **Moving Map** on the **Main Menu**.
2. Long-press on a desired point or identifier on the Moving Map. Alternatively, users can tap on an ICAO from the Moving Map or the Route Panel.
3. The Nearest popup will appear. Select your desired point.
4. The Moving Map popup will appear. Select **Show** from the side menu.
5. Tap **Show on Map**.
6. The screen will pan to the selected location.



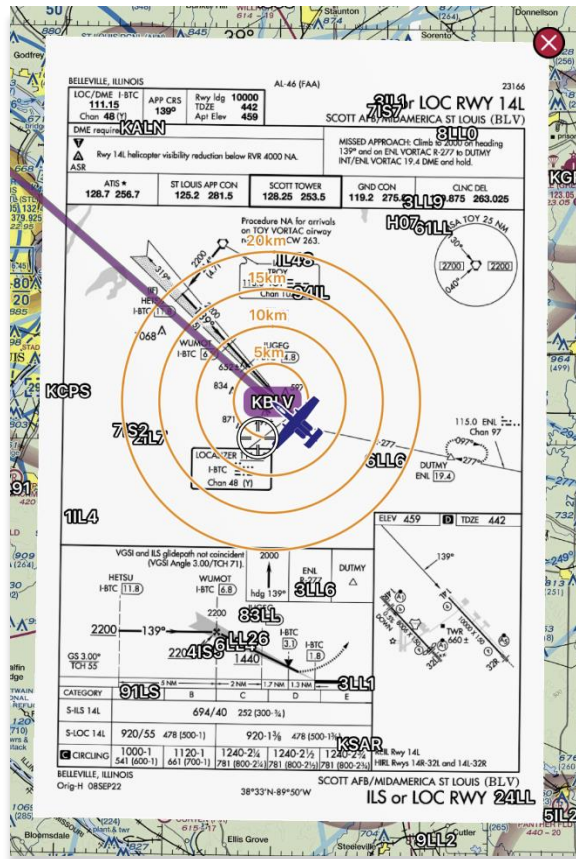
### 15.3.13.3.2 Instrument Approach Procedure (IAP) on Map

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%.



9. To remove the IAP from the Moving Map, tap the red popup X.



**NOTE:** A small number of Instrument Approach Procedures (IAPs) are not georeferenced and therefore cannot be shown on the Moving Map.

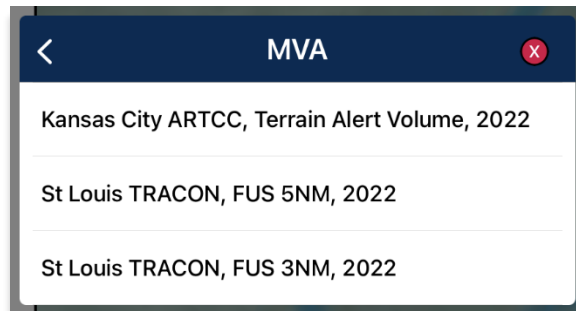
### 15.3.13.3 Info and Wx (Information and Weather)

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.

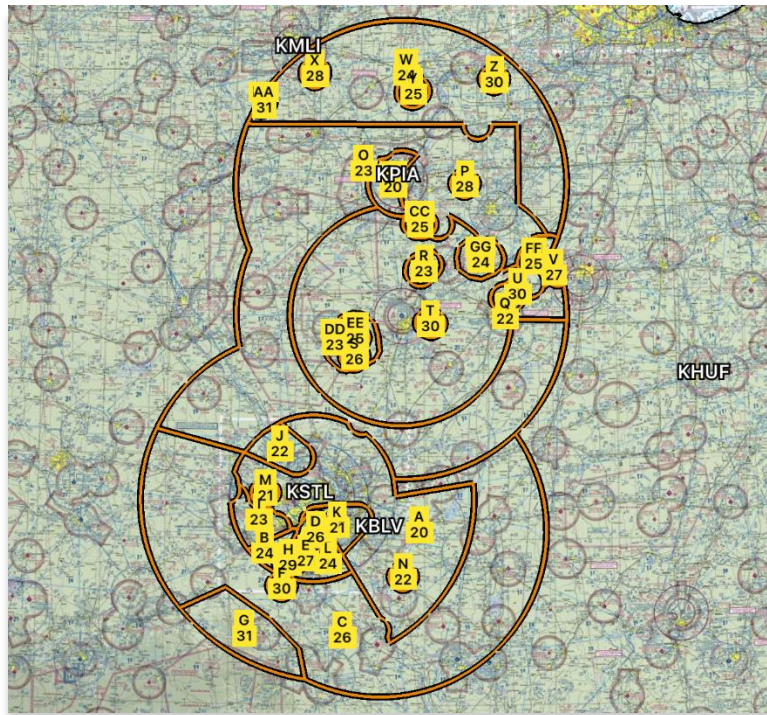
### 15.3.13.3.4 Minimum Vectoring Altitude (MVA)

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.

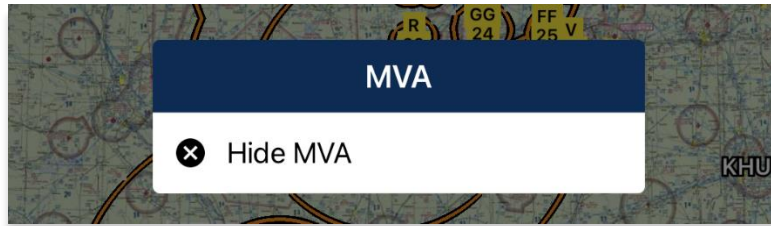


7. The respective **MVA** will overlay on the Moving Map.





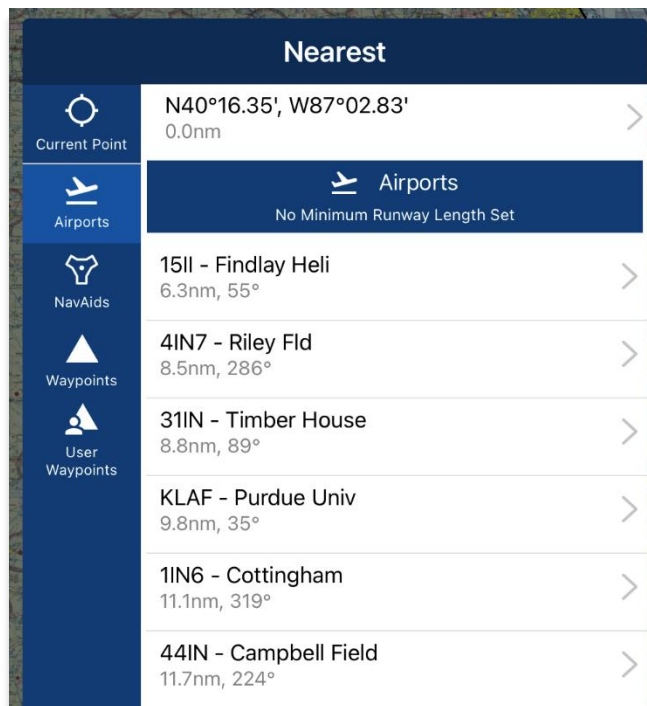
8. Tap inside area to hide MVA.
9. Tap **Hide MVA**.



### 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'; 'Color' with four circular color 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.



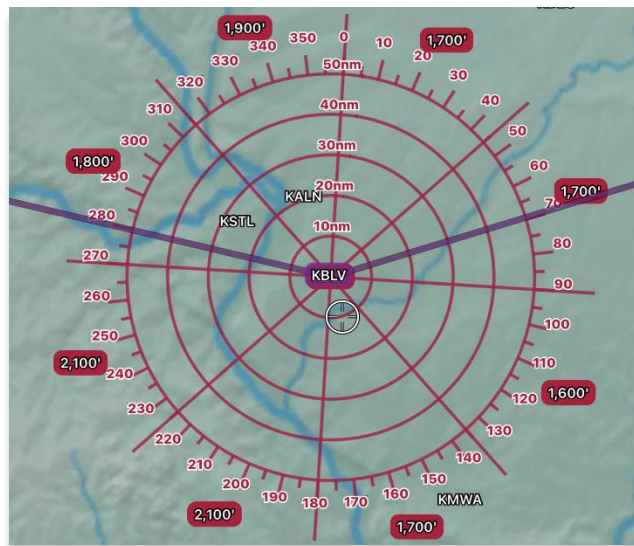
**NOTE:** Azimuth is enabled if the number of rings selected is not set to 0.

The screenshot shows the 'Orbit' configuration screen. At the top, there is a back arrow and the title 'Orbit' with an information icon. Below the title is a section header 'Orbit' with a gear icon. The 'Orbit' section contains two fields: 'Alignment' with a toggle set to 'Magnetic' (True is also visible) and 'Magnetic Variance' with a text input field containing '5W'. The next section is 'Range Rings' with a gear icon. It contains 'Orbit Distance (nm)' with a text input field containing '50' and 'Distance (nm)' with a segmented control showing options 0, 2.5, 5, 10, and 25, with '10' selected. The final section is 'Azimuth' with a gear icon. It contains 'Azimuth' with a toggle set to 'On' and 'Degrees' with a segmented control showing options 10, 30, 45, and 90, with '45' selected.

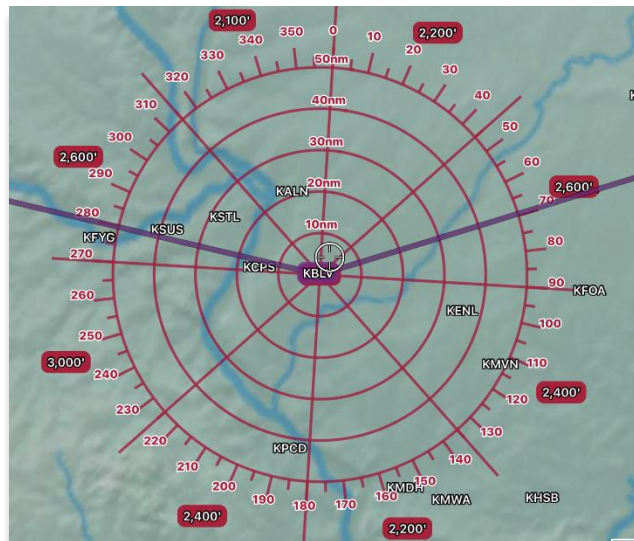
### 15.3.13.3.6.1 Orbit Altitude

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.

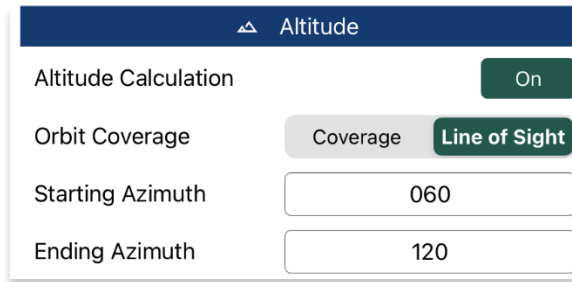


- **Terrain + VOs** – displays the terrain and VOs elevation for each sector.

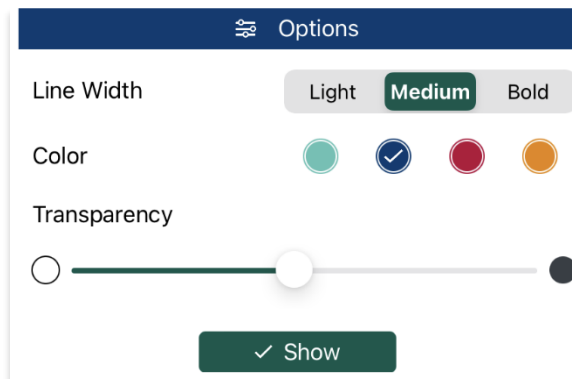




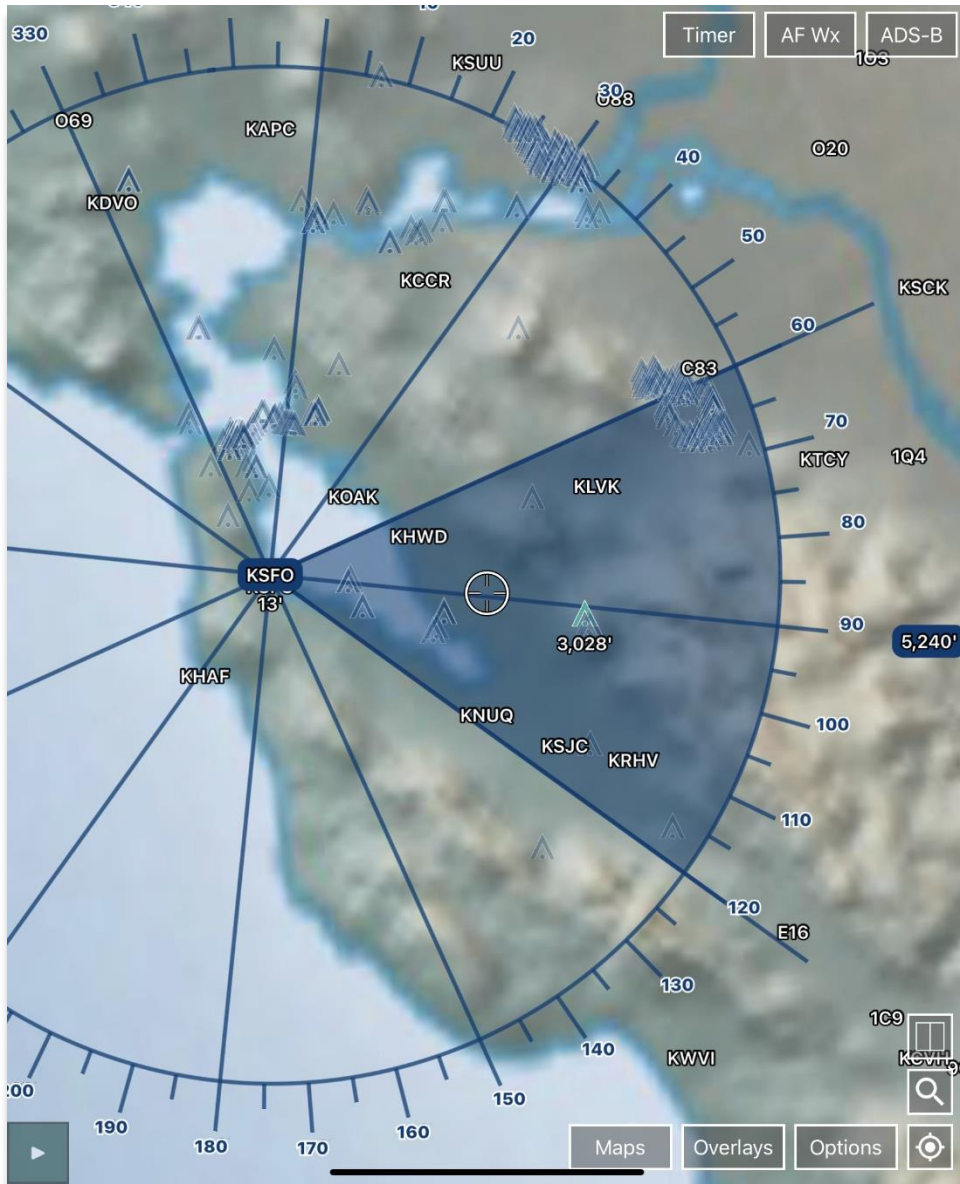
4. Tap to select or toggle the segmented control to **Line of Sight** coverage. Additional fields will be displayed.
5. Fields for Starting Azimuth and Ending Azimuth will display. Values entered will be shaded on the Orbit. Enter the starting and ending azimuth for the line of sight coverage.



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.



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.

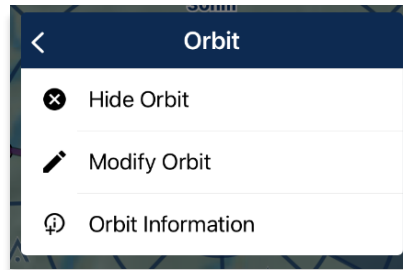


**NOTE:** The value located below the selected point represents the elevation of that identifier.

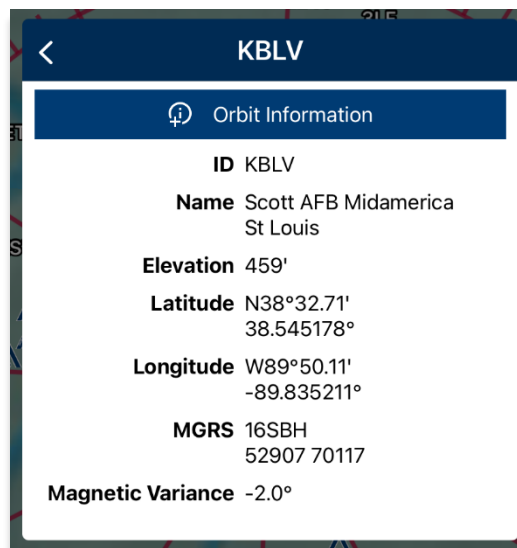


**NOTE:** VOs are visible and will populate within the displayed orbit. The highlighted VOs are the highest elevation VOs.

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.

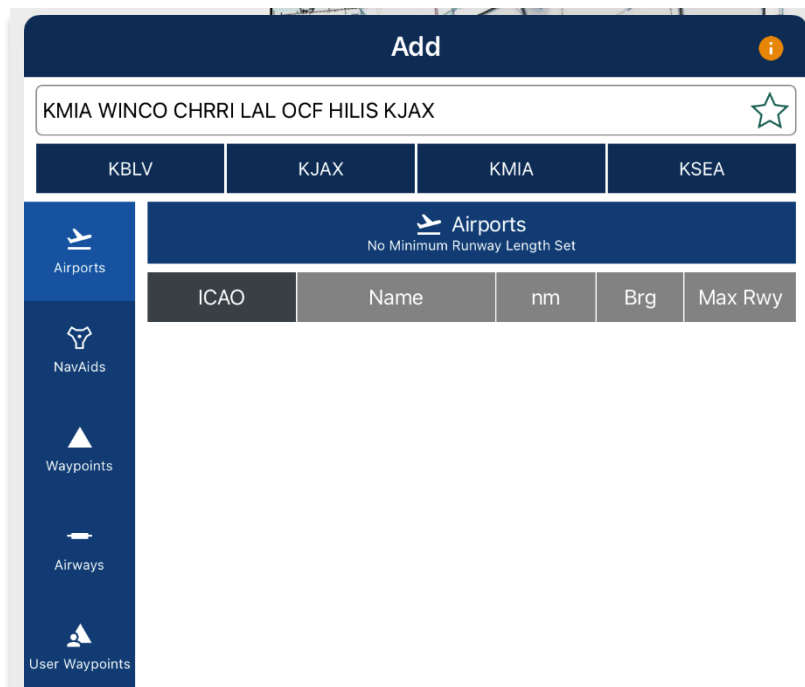
### 15.3.14 Collapsible Route Panel

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.

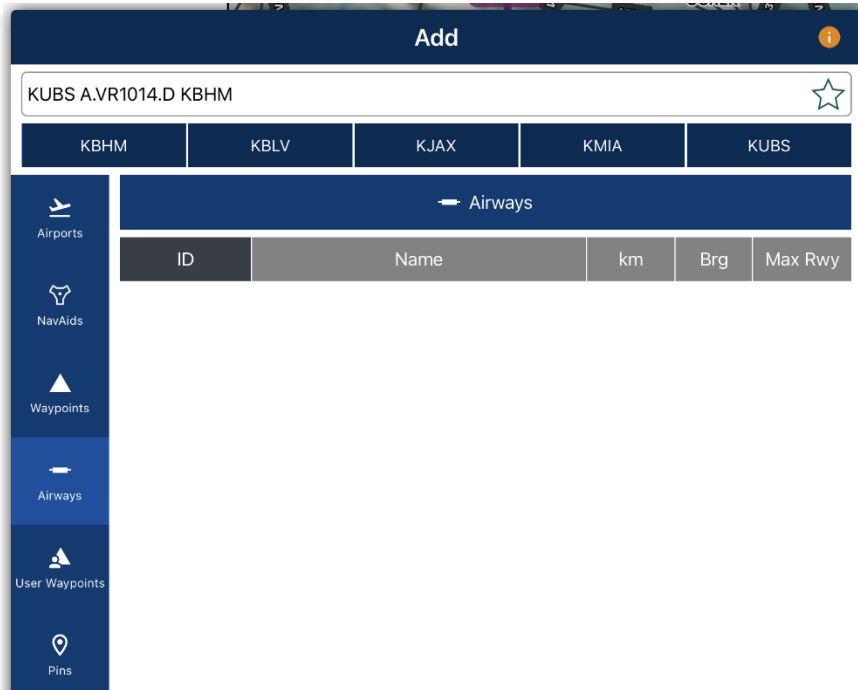


**NOTE:** When adding a new point (e.g., ICAO, Waypoint, etc.) to an existing route, the new point is automatically added to the route in its geographically optimal position and not simply at the end of the route.

#### 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.

The screenshot displays a flight simulator interface with a route from KUBS to KBHM. The route is shown as a purple line with waypoints A, B, C, and D. The left panel shows the route details, including the aircraft type (A.VR1014.D), altitude (150 kt), speed (88°), and distance (10,374'). The right panel shows the map with various airports and waypoints labeled. The bottom panel shows the route panel with buttons for '+', 'Edit', and 'Route'. The top panel shows the dynamic content classification: UNCLASSIFIED//FOUO//LIMDIS.

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

**KUBS**  
Columbus Lowndes Co  
24.5 km, 90°

**A.VR1014.D**  
A.VR1014.D (MTR)  
130.4 km, 107°  
ETE: 00:04:49, ETA: 21:37:25Z  
^ A B C D

**A**  
VR1014.A  
34.3 km, 107°  
ETE: 00:04:49, ETA: 21:37:25Z

**B**  
VR1014.B  
34.1 km, 90°  
ETE: 00:12:13, ETA: 21:44:49Z

**C**  
VR1014.C  
22.5 km, 89°  
ETE: 00:19:34, ETA: 21:52:10Z

**D**  
VR1014.D  
39.6 km, 72°  
ETE: 00:24:26, ETA: 21:57:02Z

**KBHM**  
Birmingham Shuttlesworth Intl  
Destination  
ETE: 00:32:59, ETA: 22:05:35Z  
TWR: 119.9, 118.25, 317.725

154.9 km

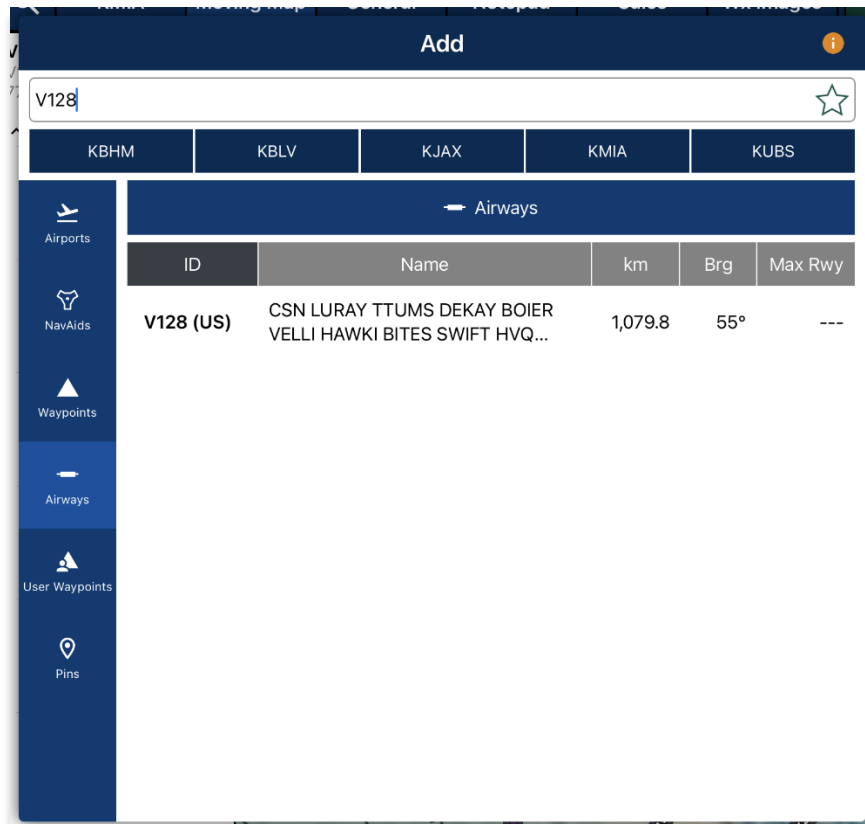
+ Edit Route

Maps Overlays Options

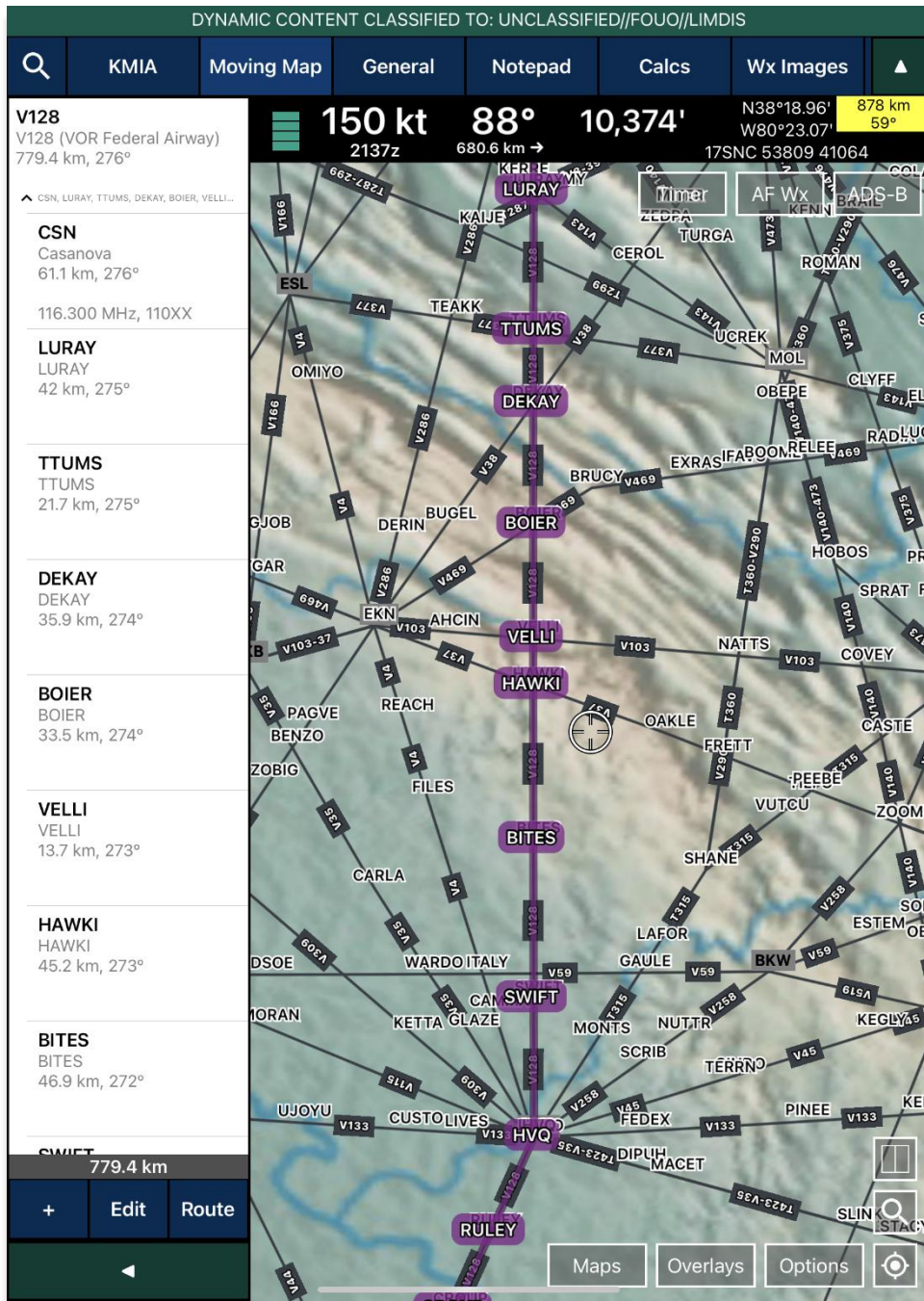
### 15.3.14.1.2 Add Airways to Route

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.



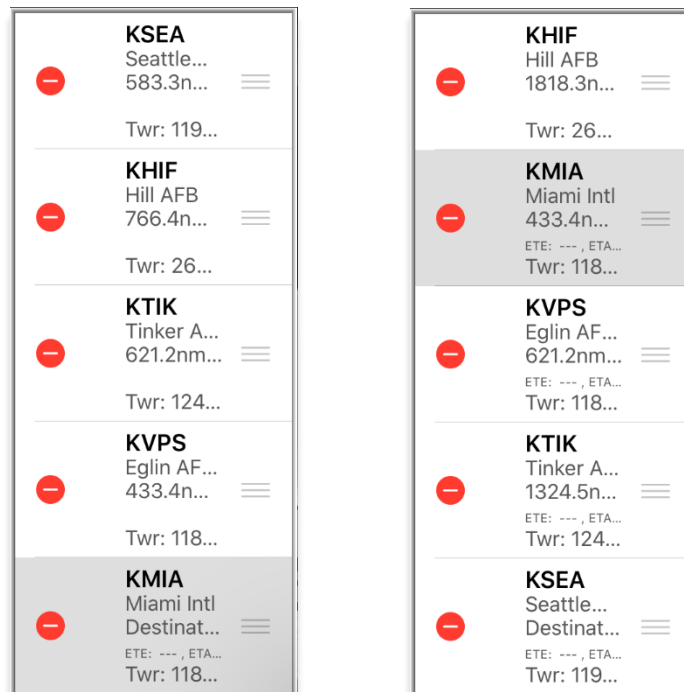
5. Your Airway route will display on the Route Panel.





### 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.



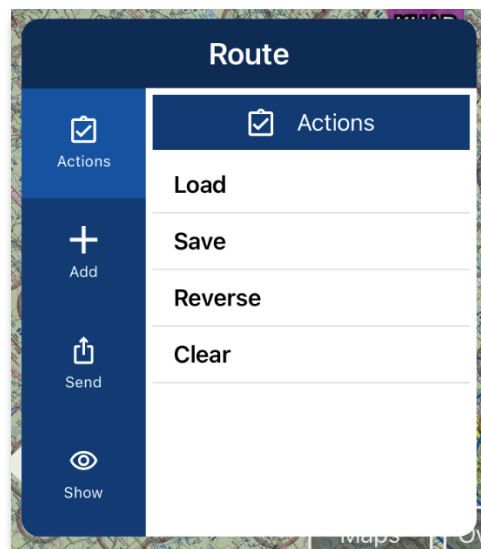
### 15.3.14.3 Route Menu Options

The Route Menu Options are a useful tool for pilots 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:

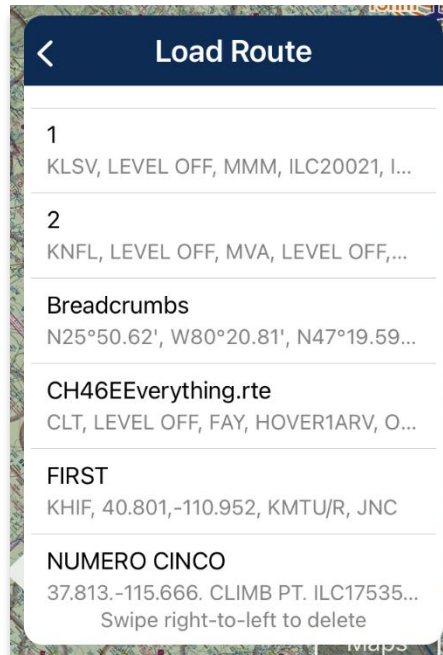
- Load
- Save
- Reverse
- Clear



### 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 route onto their Route Panel. Refer to the sections ahead for reference in loading specific routes onto 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.



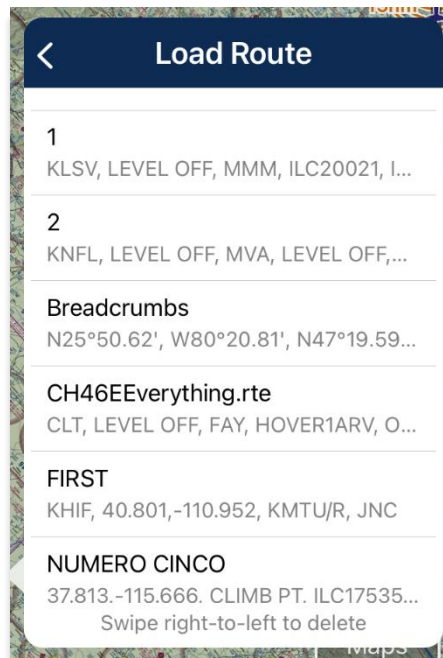
**NOTE:** When loading an invalid route onto Aero App, an error message will appear to inform the users that the points cannot be loaded. Users will be given options to *Save or Remove and Continue*.

---

### 15.3.14.3.1.1.1 Load Common Route Definition (CRD) File

Aero App enables users to load CRD files onto Aero App. Refer to Section 11.4 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 onto Aero App. The CRD files will show on the **Route Panel** as the current route.

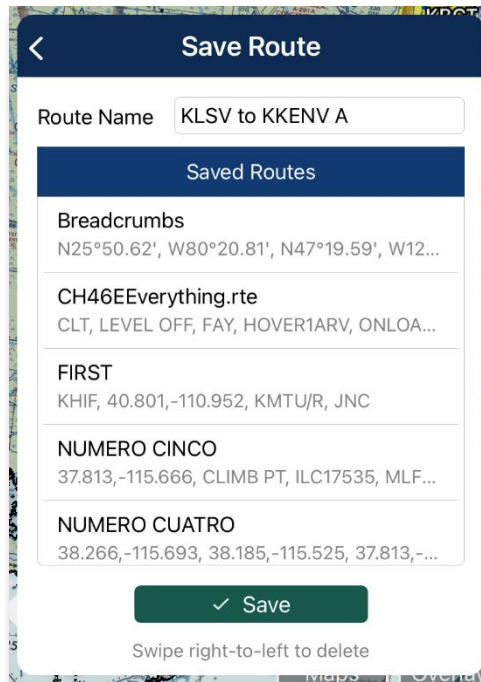


**NOTE:** When loading an invalid CRD file onto Aero App, an error message will appear to inform the users that the points cannot be loaded. Users will be given options to *Save* or *Remove and Continue*.

---

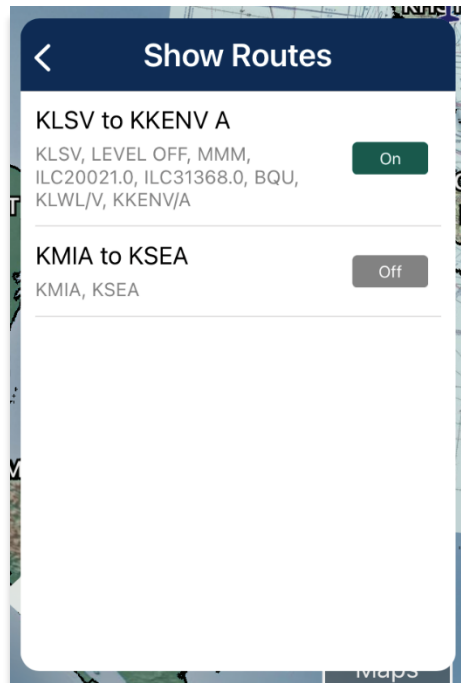
### 15.3.14.3.1.1.2 Save a CRD File

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

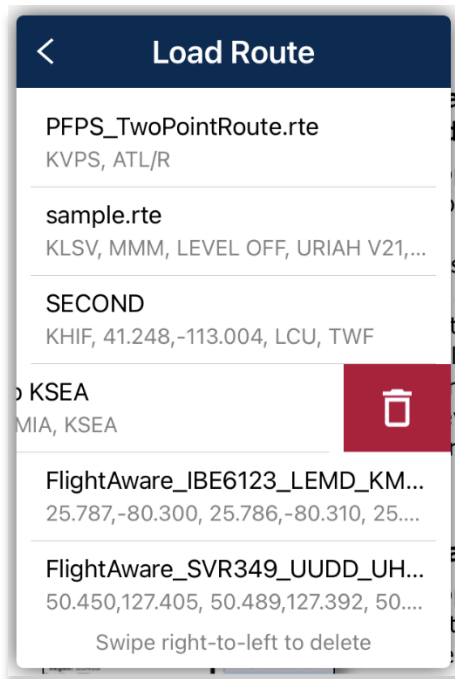
1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Show** from the side menu.
4. Tap **Routes**.
5. A list of saved CRD files will be listed. Tap to select a desired CRD file and the route will display on the map.



---

#### 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.

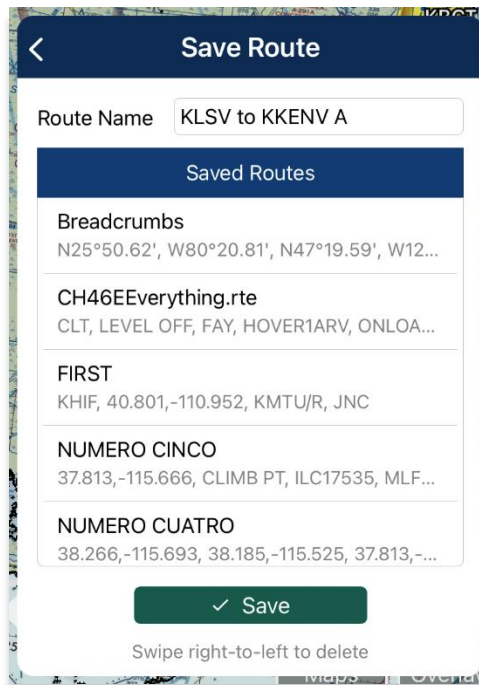


**NOTE:** Users can delete single CRD files when a single CRD route is sideloaded onto Aero App. Multiple routes will be deleted if the CRD route has associated routes.

---

### 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.

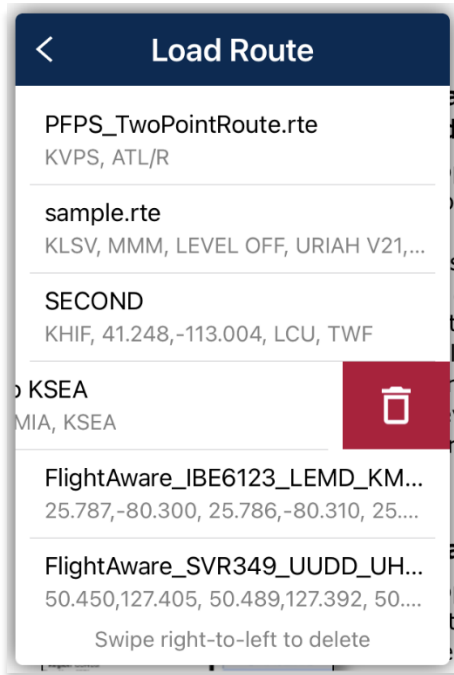


**NOTE:** When entering a new route name, the name can only contain alphanumeric (lower and upper case) characters, spaces, and hyphens.



### 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.

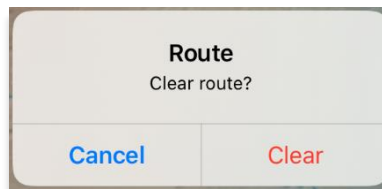
### 15.3.14.3.1.3 Reverse Route

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

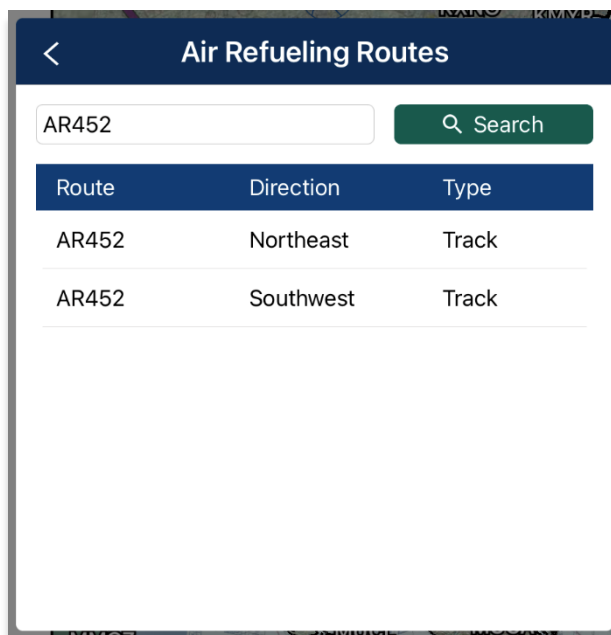
Add allows for users to optimize their planning and provide users the ability to predefine their routes to ensure their mission runs smoothly. The following options are available and will be further elaborated in the sections to follow:

- Air Refueling Route
- Flight Plan
- Preferred Route
- Search and Rescue (SAR)

#### 15.3.14.3.2.1 Add Air Refueling Route

Aero App enables users to add a Refueling Route directly from the Route Panel. The Air Refueling Route will populate on the current route and on the Moving Map.

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.



7. Points list displays the 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'
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.

8. Tap on a row to select *entry point*, and the row will be shaded gray to indicate the point is selected.
9. Tap on a row to select *exit point*, and the points between will be shaded gray to indicate all the points will be added to the current route.
10. 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

🔍 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

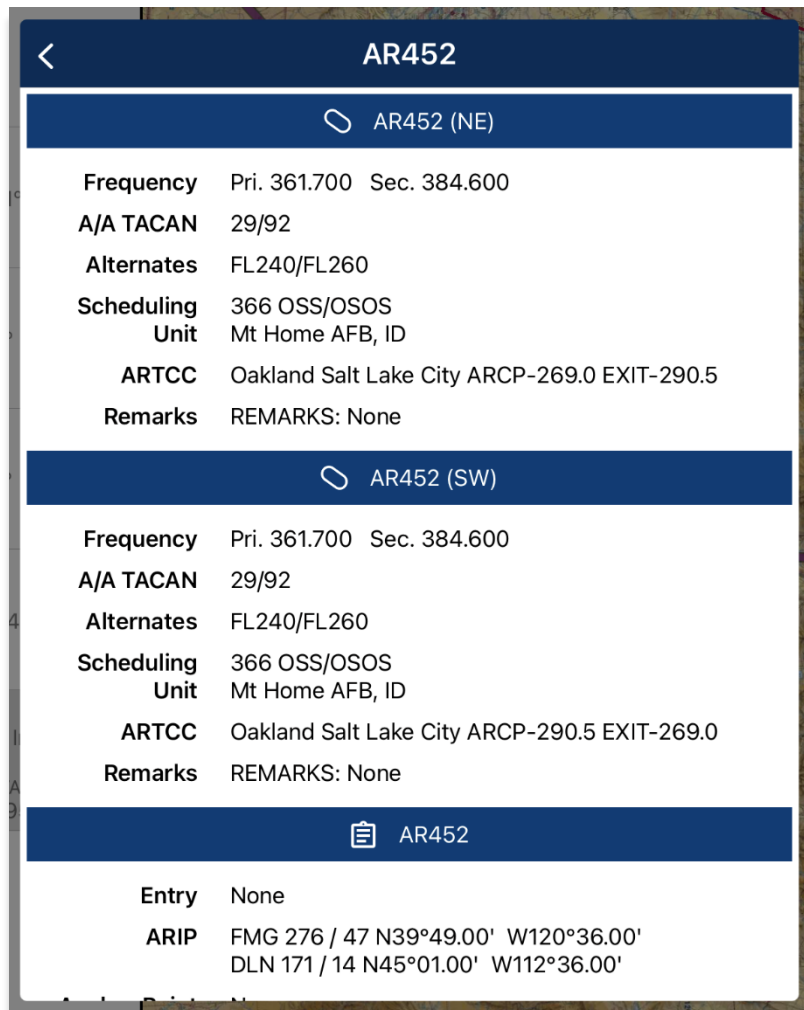
Timer AF Wx ADS-B

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, Alternates, Scheduling Unit, ARTCC, and its Remarks.

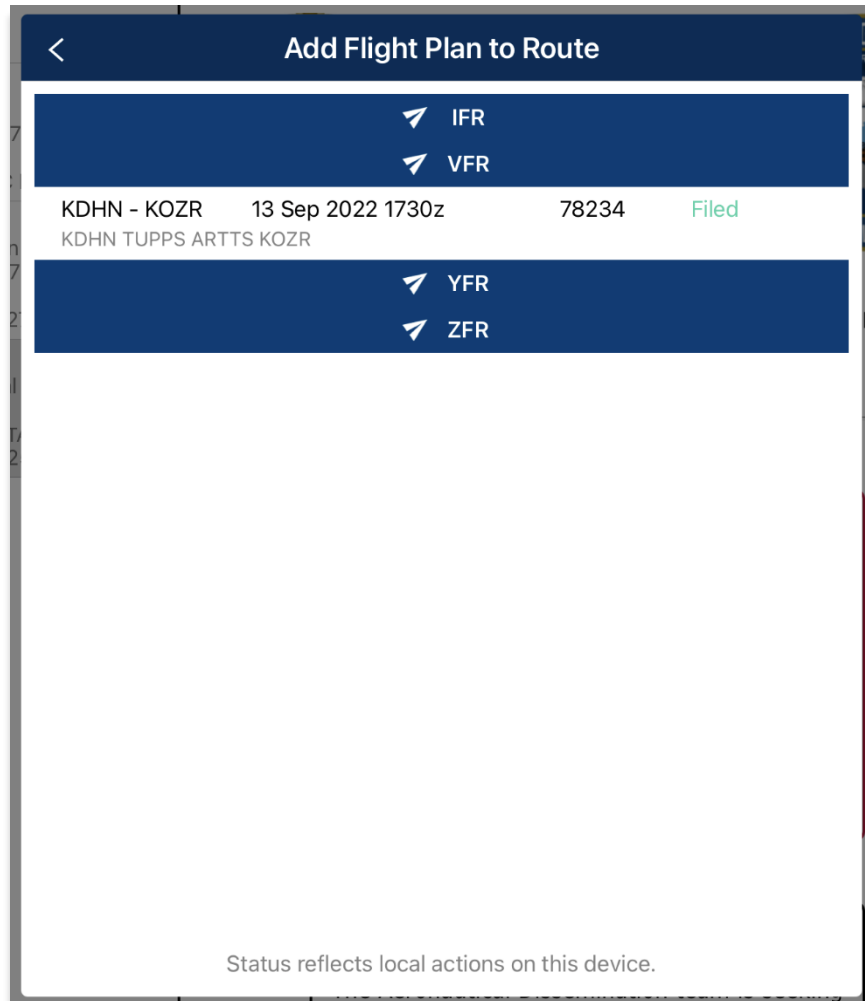
1. Navigate to the **Moving Map** and select a refueling route point.
2. The Moving Map's popup menu will display. Select **Show** from the side menu.
3. Tap **Info and Wx**.
4. The Information view will display additional information such the refueling route's Frequency, A/A Tacan, Alternates, Scheduling 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 into 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.

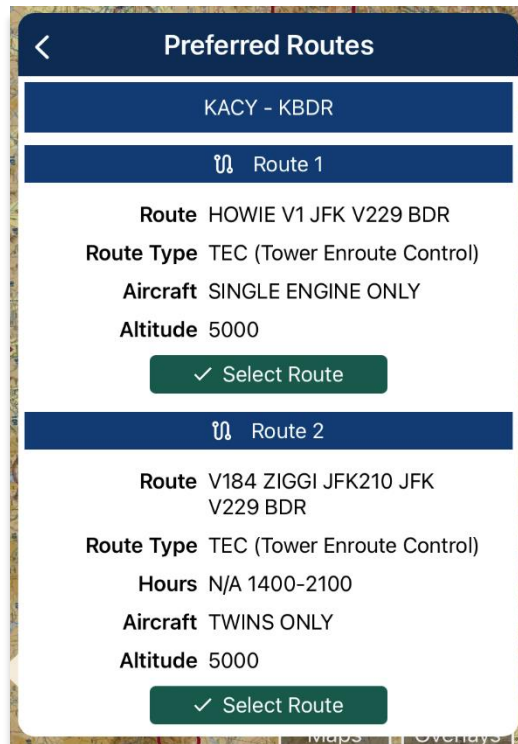




### 15.3.14.3.2.3 Preferred Route

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.



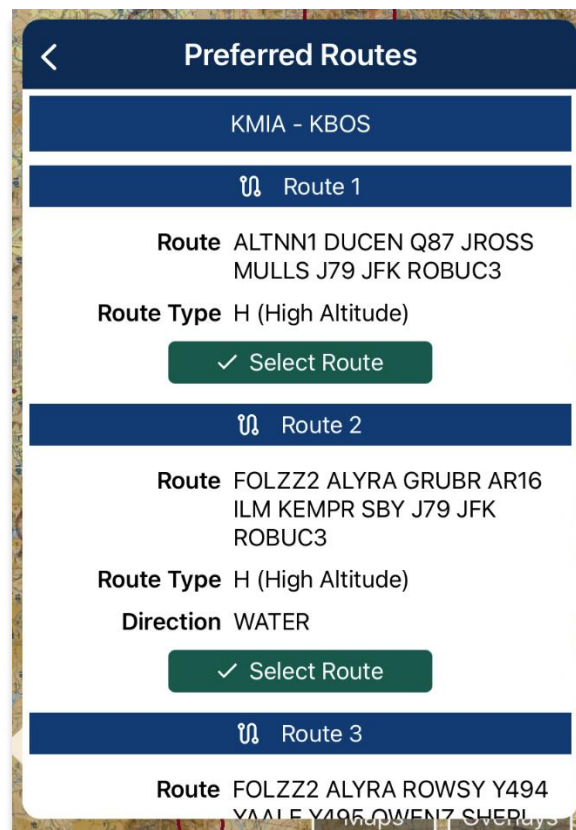
7. When selecting an alternative preferred route, a dialog box will appear, tap **Use Preferred Route** and a new route will apply onto your Route Panel.
8. Tap **Cancel** to discard all changes.



### 15.3.14.3.2.3.1 Preferred Route With DP and STAR

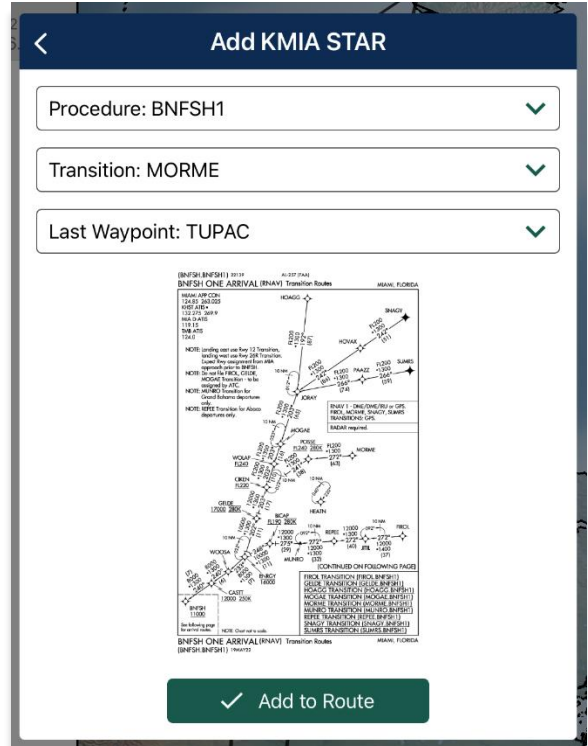
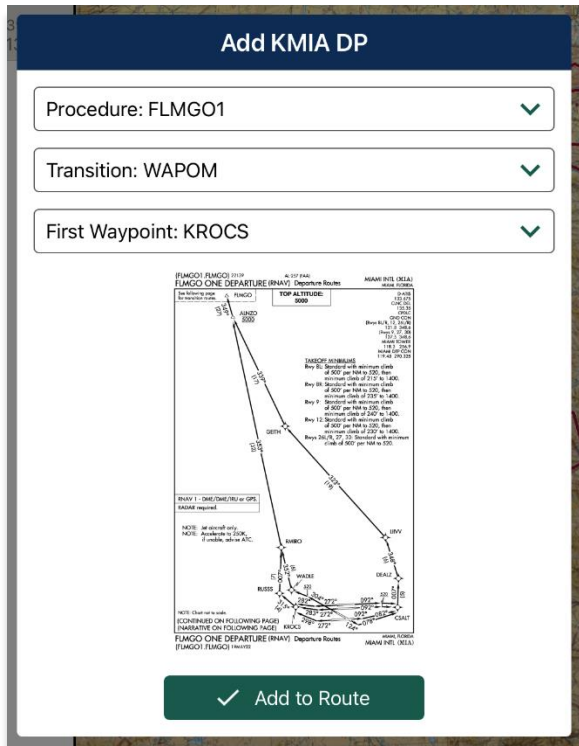
Aero App enables users to select any DPs or STARs, if applicable.

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** and the new route will apply onto your Route Panel.

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

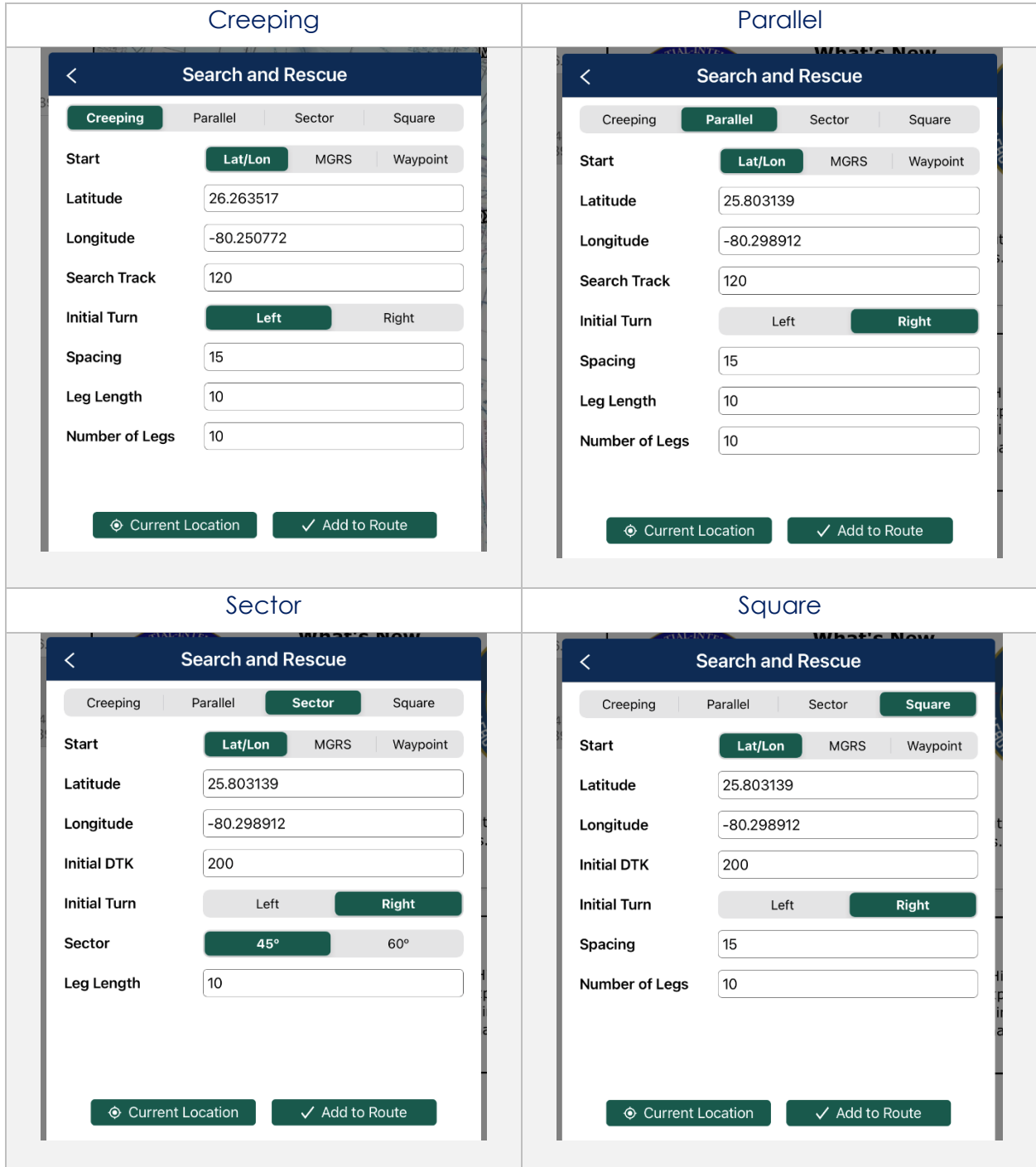
The screenshot shows the 'Search and Rescue' configuration screen. At the top, there is a back arrow and the title 'Search and Rescue'. Below the title is a segmented control with four options: 'Creeping' (selected), 'Parallel', 'Sector', and 'Square'. Underneath is another segmented control for 'Start' with options 'Lat/Lon' (selected), 'MGRS', and 'Waypoint'. The main area contains several input fields: 'Latitude', 'Longitude', 'Search Track', 'Spacing', 'Leg Length', and 'Number of Legs'. There are also two buttons at the bottom: 'Current Location' and 'Add to Route'.

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.

9. 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.

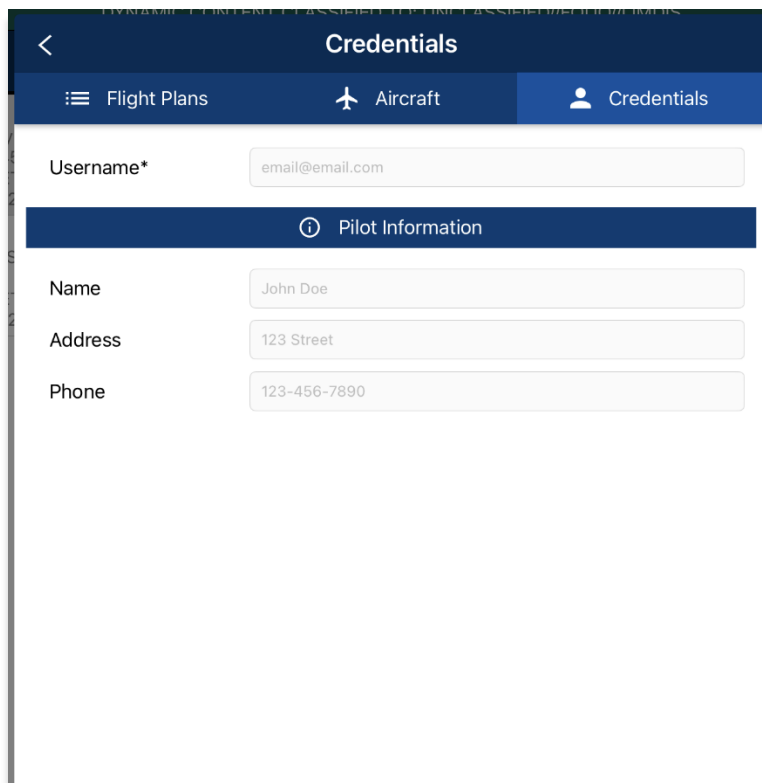
### 15.3.14.3.3.2 Flight Plans

Aero App enables users to conveniently file ICAO flight plans. From the Route Panel, users can access previously filed flight plans, add or edit Aircraft information for ease of access when filing a new flight plan. In addition, users can enter or update Flight Service credentials. This feature is available to FAA and DOD users.

#### 15.3.14.3.3.2.1 Credentials

Users must enter Flight Service credentials prior to filing a Flight Plan. Aero App must be authorized by the user to file flight plans on the user's behalf. To authorize Aero App, refer to your account at: [www.1800wxbrief.com](http://www.1800wxbrief.com).

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 **Credentials** from the navigational bar.
6. From the Credentials screen, 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' (with a hamburger icon), 'Aircraft' (with an airplane icon), and 'Credentials' (with a person icon). Below the navigation bar, the 'Username\*' field is populated with 'email@email.com'. A dark blue section header with a white information icon and the text 'Pilot Information' is present. Underneath, there are three text input fields: 'Name' containing 'John Doe', 'Address' containing '123 Street', and 'Phone' containing '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. The top navigation bar is dark blue with a back arrow on the left, the title 'Credentials' in the center, and three tabs: 'Flight Plans', 'Aircraft', and 'Credentials'. The 'Credentials' tab is selected. Below the navigation bar, there is a 'Username\*' field with the value 'test@test.com'. A dark blue section header 'Pilot Information' with an information icon follows. Below this, there are three fields: 'Name' with 'Joe Johnson', 'Address' with '3456 NW 8th st', and 'Phone' with '222-333-4444'. At the bottom right, there is a green 'Save' button with a checkmark icon.

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 some 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 <span>Knobs</span> <span>Mach</span>
Color	Aircraft Color; e.g. W:B (for White/Blue) <span>○</span> <span>○</span>
Wake Turbulence*	Light <span>Medium</span> <span>Heavy</span> <span>Auto</span>
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/ <span>⋮</span> <input type="text"/> <span>View</span>
Dinghies	
Number	Number of dinghies
Capacity	Capacity of the dinghies



**NOTE:** Asterisks denote required fields.



8. Once the fields are filled, tap **Save**.

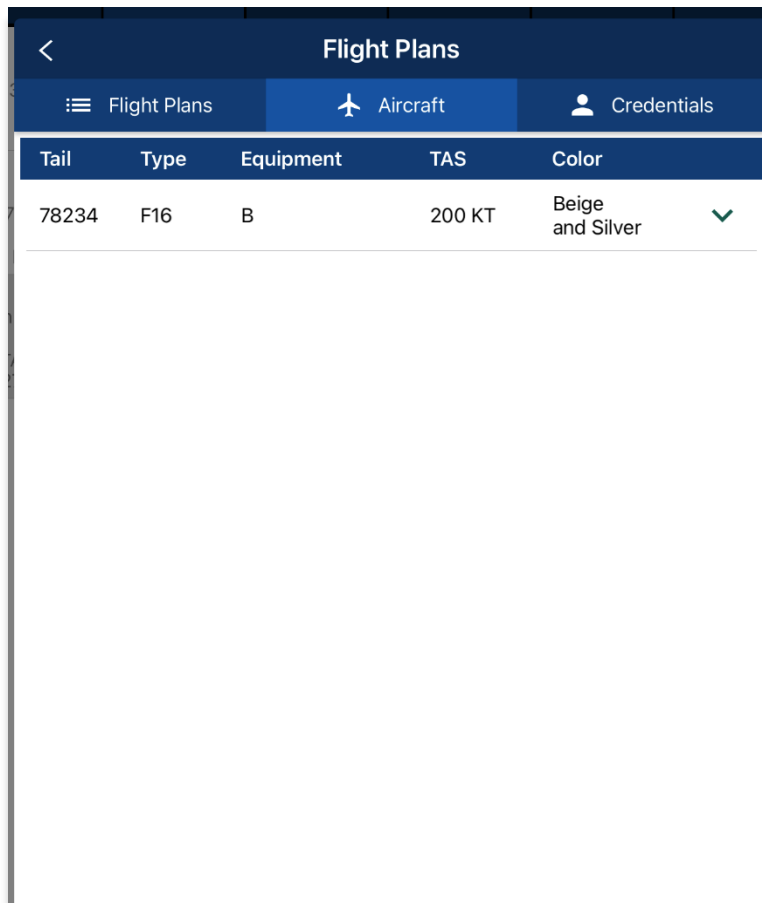
9. Your aircraft will be added to the Aircraft screen.

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, and can be accessed from the Aircraft table.

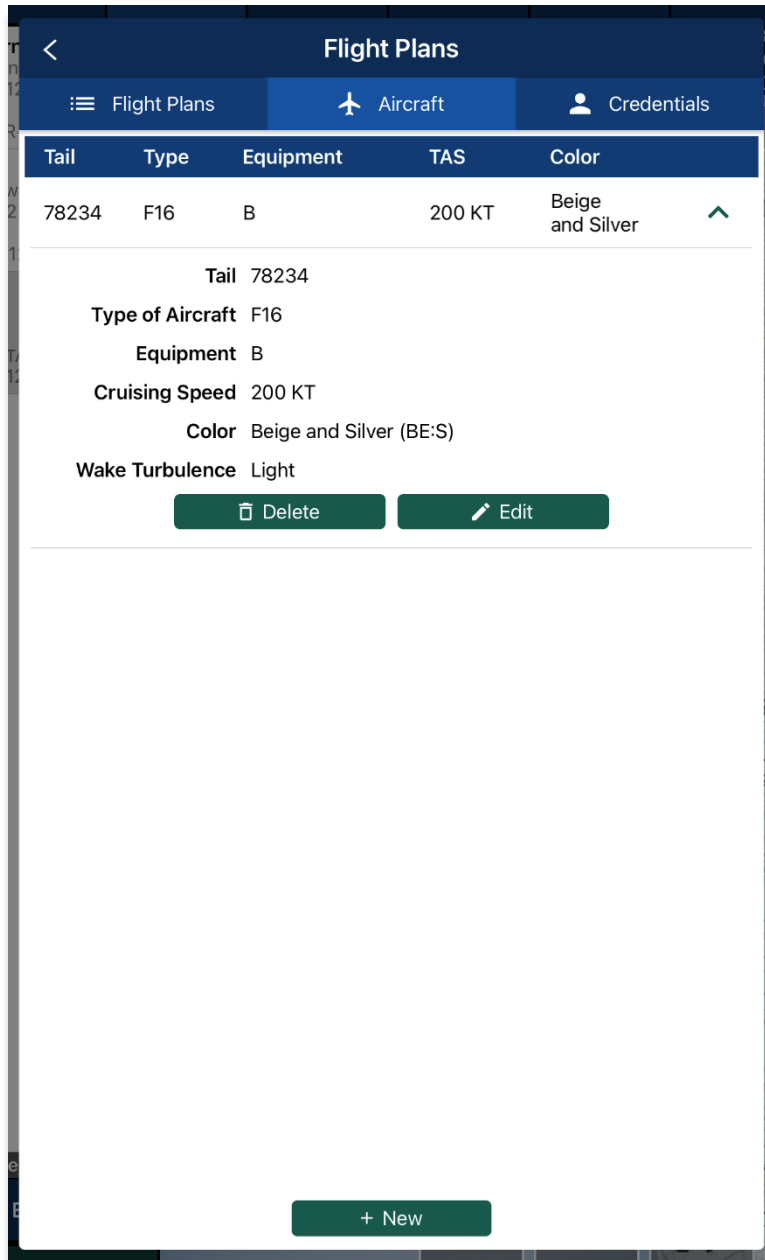
1. Navigate to the **Route Panel**.
2. Tap **Route**.
3. The Route menu will appear. Select **Send** from the side menu.
4. Tap **File Flight Plan**.
5. The Flight Plans popup will appear. Select **Aircraft** from the navigational bar.
6. The Aircraft table will appear listing all the created aircraft.



The screenshot shows a mobile application interface for "Flight Plans". At the top, there is a navigation bar with a back arrow, the title "Flight Plans", and three menu items: "Flight Plans" (with a hamburger icon), "Aircraft" (with an airplane icon), and "Credentials" (with a person icon). Below the navigation bar is a table with the following columns: "Tail", "Type", "Equipment", "TAS", and "Color". The table contains one row of data: Tail: 78234, Type: F16, Equipment: B, TAS: 200 KT, Color: Beige and Silver. A green checkmark is visible to the right of the color text. The table is set against a white background with a dark blue header.

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 your aircraft.
9. Tap **Delete** to remove that specific aircraft.



**NOTE:** Predefined aircraft, such as those obtained directly from the FAA, cannot be modified. The **Delete** and **Edit** buttons will therefore 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 popup will appear. Tap **+New** located at the bottom of the view and the **New Flight Plan** form will appear.
6. The form is broken up into sections such as **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 previously saved aircraft.



**NOTE:** Asterisks denote required field.

- 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

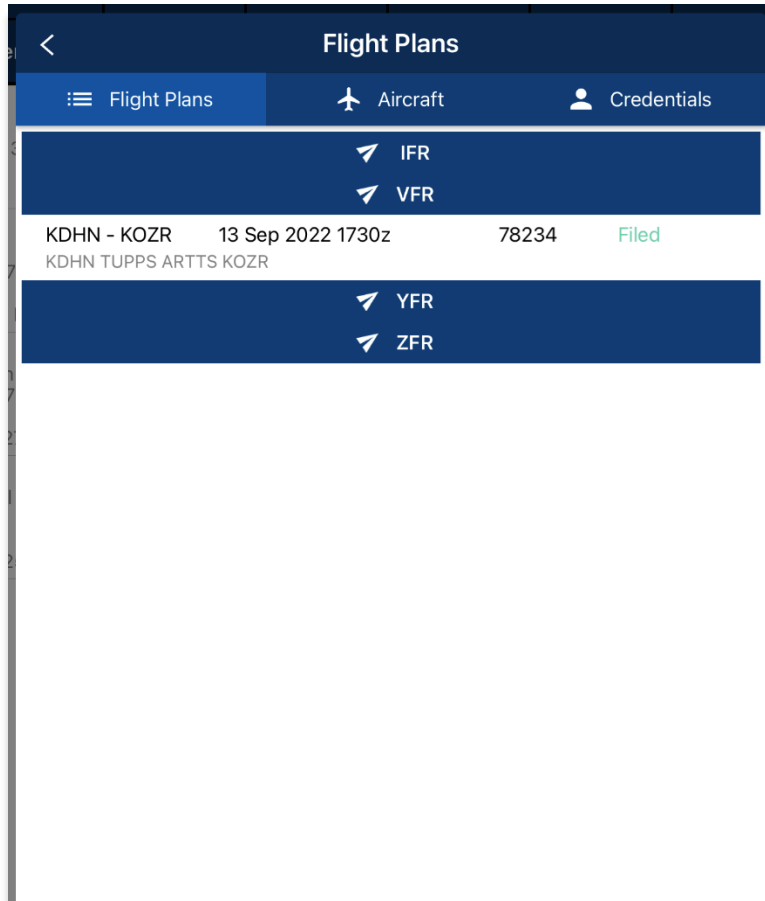
Other Info NAV/ **View**

**Send**



**NOTE:** The Save Form button placed on the header of the Flight Plan form turns blue when data is entered, letting users know any entered data is saved for ease of access upon return to the form.

9. Your filed flight plan will appear on the Flight Plans page 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.

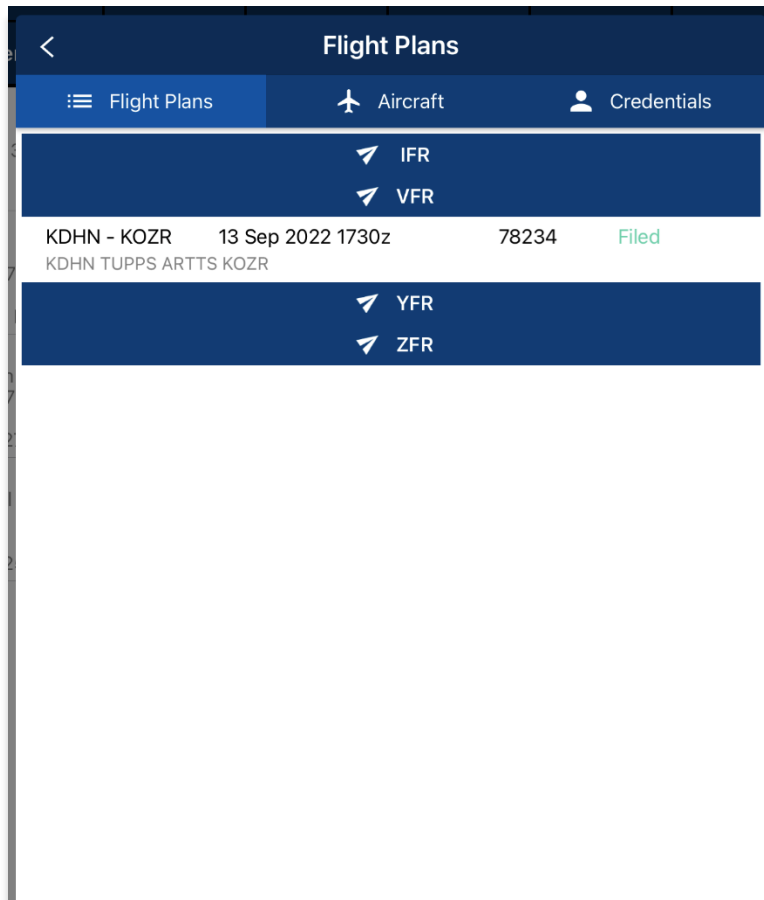


**NOTE:** Users must enter credentials prior to filing a flight plan.

### 15.3.14.3.3.2.5 Flight Plans

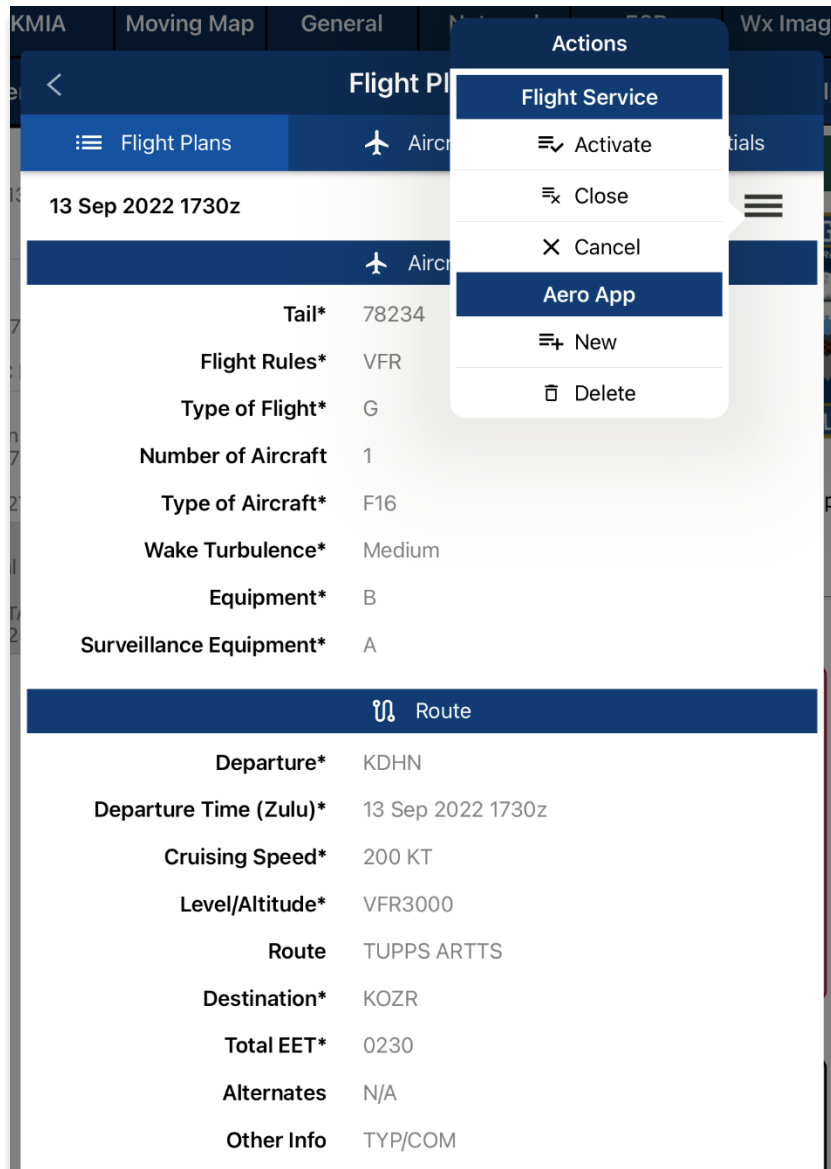
By default, Flight Plans will be the first page that is visible to users. Filed flight plans are listed and sorted by IFR, VFR, YFR, and ZFR. Each filed flight plan previews the route, the entered departure time in which the flight plan was filed, the aircraft's tail number, and the status of the plan.

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 page 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.



#### 15.3.14.3.4 Show

Show provides features to enhance the user's situational awareness when flying any mission. Features are as follows and will be further elaborated in the sections to follow:

- Doghouses
- Dropped Pins
- Point Shapes
- Routes
- User Waypoints
- Route Line Transparency

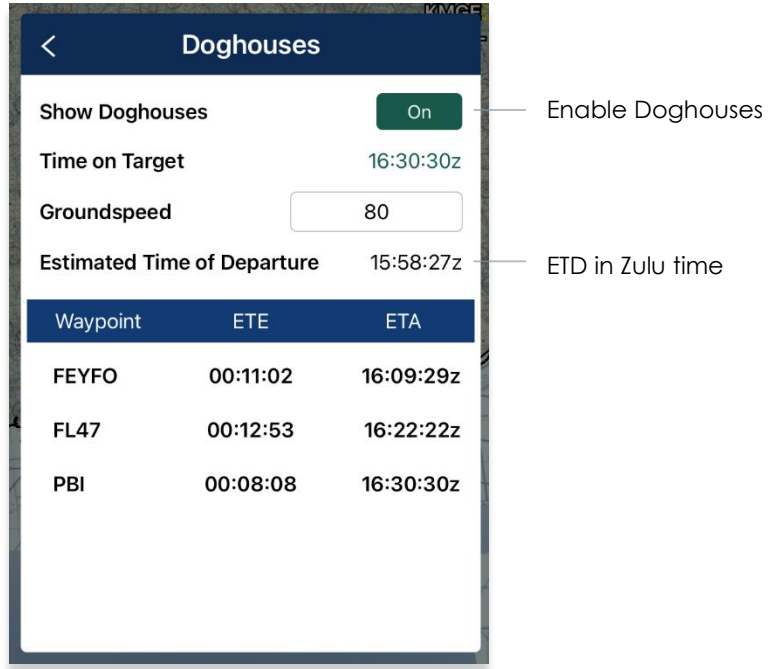
##### 15.3.14.3.4.1 Doghouses

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 the Moving Map. The first doghouse on the current route will be displayed on the right side of the route. Each doghouse will be in the center between the last and next point on the route. Previous Doghouses will disappear as you pass the points on the active route.

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 what is entered in 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.

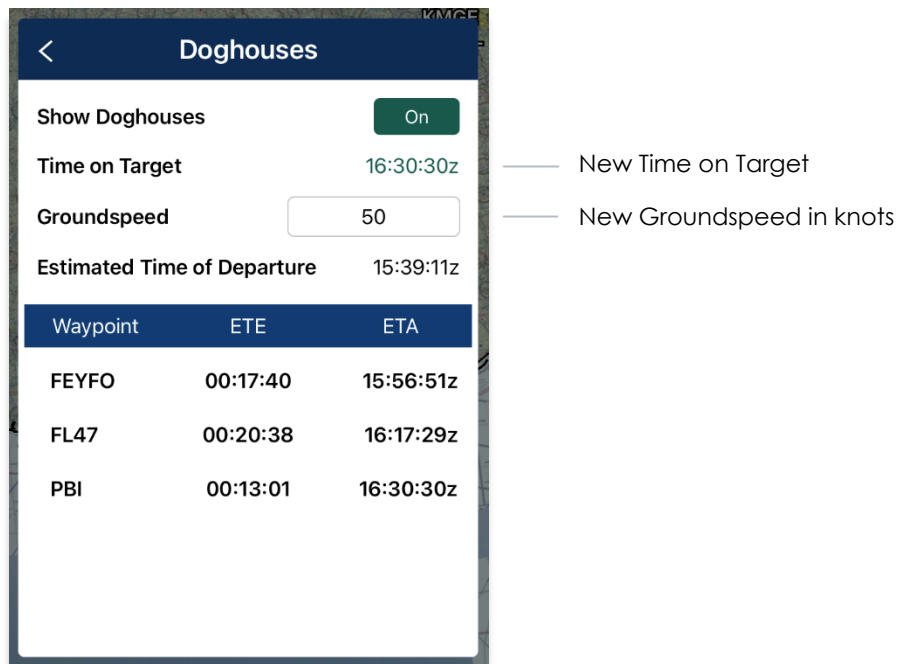


**NOTE:** If users are behind, ahead, or on schedule, the field below your fixed time will display the calculated difference of the time that was entered for your set time following the format **+/- {Minutes}m{Seconds}s**. If the calculated differences are an hour behind or ahead, the format will be **> + {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 what is entered in the 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.

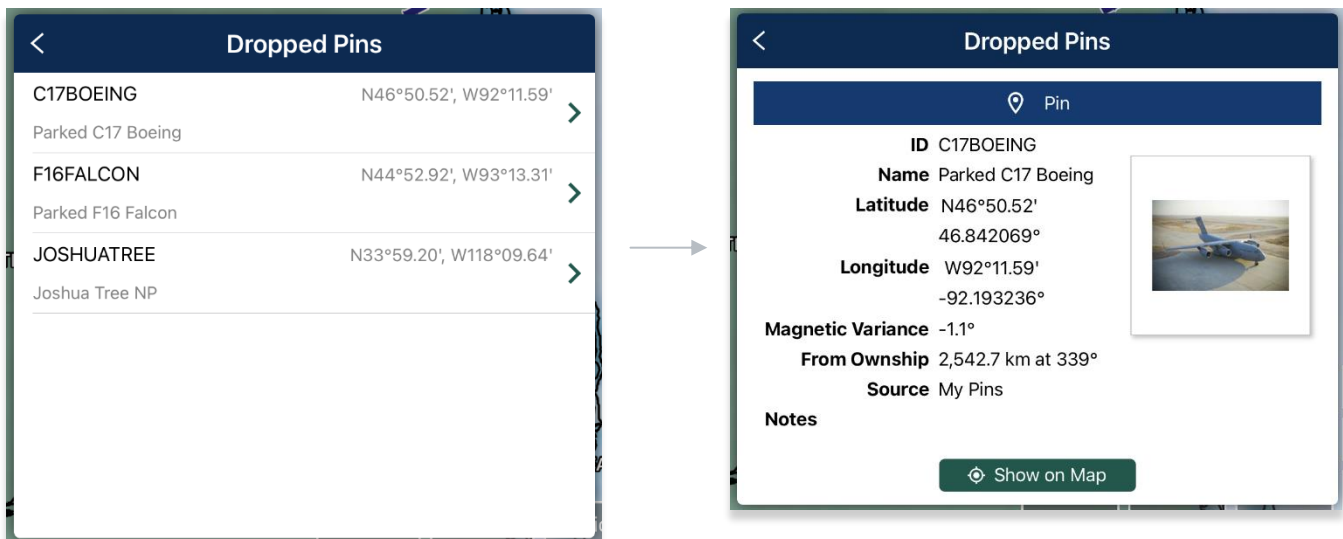


**NOTE:** Alternatively, users can tap on the Doghouses displayed on the Moving Map to view the Doghouses popup.

### 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 15.3.6.1.18](#) for additional information. This is exclusive to Pin. Refer to [Section 15.3.6.1.25](#) for Photo Pins.



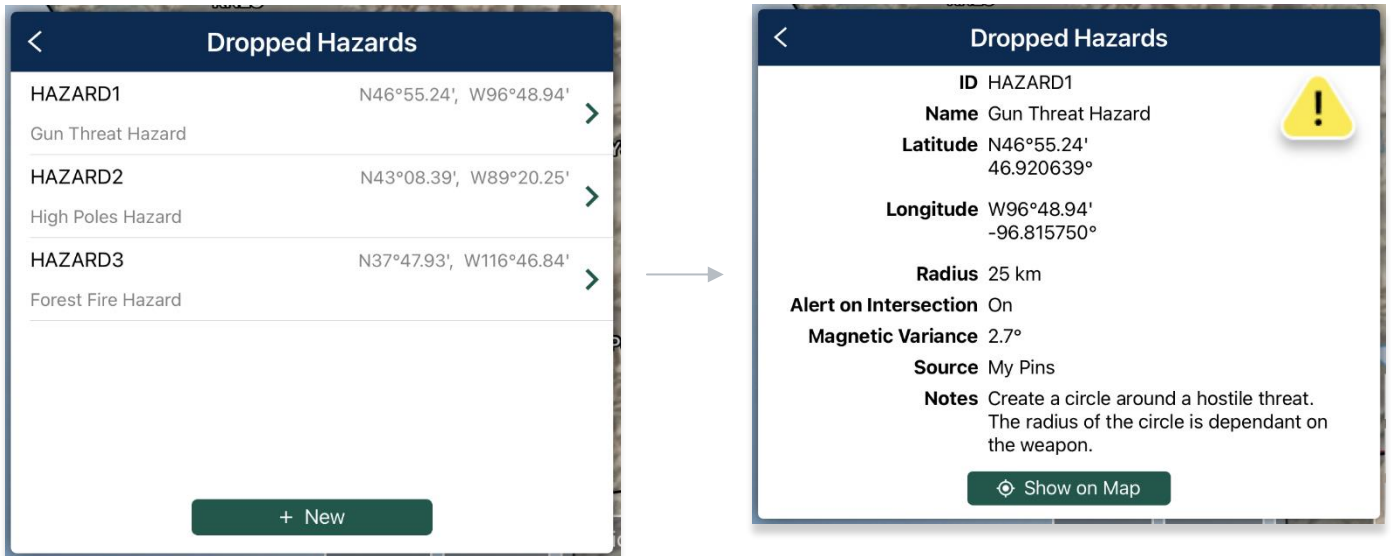
**NOTE:** Users can add pins to their route. Refer to [Section 15.3.13.1.3.2.1](#) for guidance on how to add pins to route.

### 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 15.3.6.1.12](#) for additional information.

#### 15.3.14.3.4.4 Point Shapes

Users can add a particular shape (triangle, square, or circles) to the current points in their route. Once the user has entered a route in the Route Panel, the first and last points will display triangles. The second and second to last points will display squares. If there are any points between the second and second to last points, the points will display circles.

The example below displays a route with 5 points; therefore, all three shapes (triangle, square, or circles) will appear.

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.



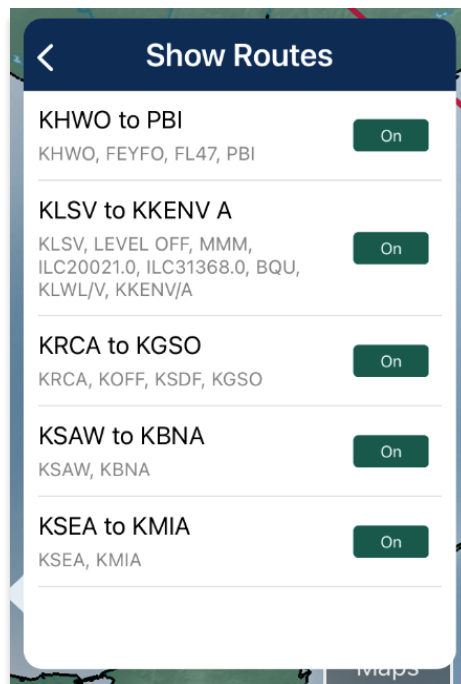
#### Different Points:

- If 6 or more points are added to route:
  - First and last points will display triangles.
  - Second and second to last points will display squares.
  - Points between the second and second to last points will display circles.
- If 3-4 points are added to route:
  - First and last points will display triangles.

- Second and second to last points will display squares.
- There are no circles displayed.
- o If 1-2 points are added to route:
  - First and last points will display triangles.
  - There are no squares displayed.
  - There are no circles displayed.

#### 15.3.14.3.4.5 Routes

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.

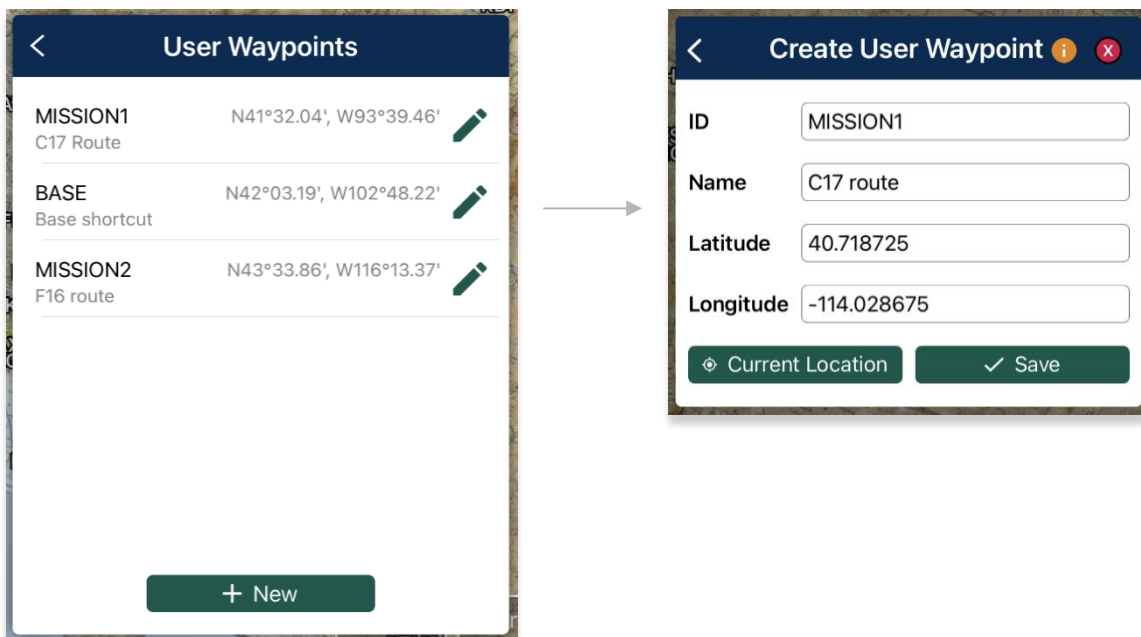


### 15.3.14.3.4.6 User Waypoints

User Waypoints is 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 11.3](#) 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.

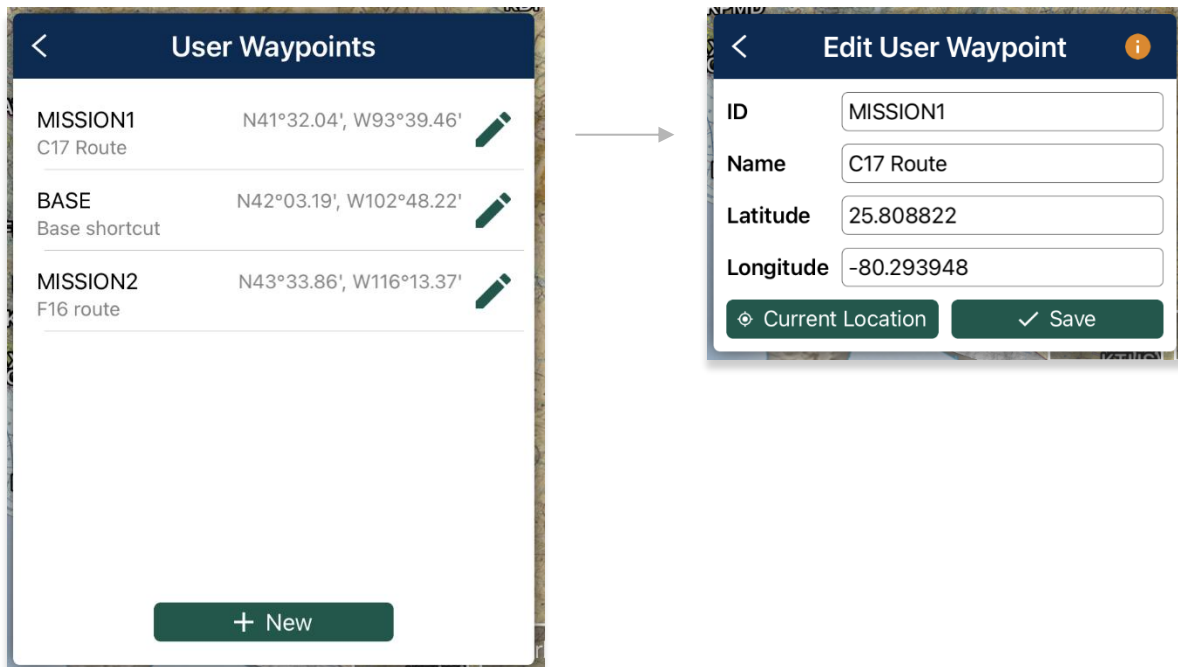


**NOTE:** The Name field is optional. When creating a name for User Waypoints, the name can only contain alphabetical characters (upper and lower cases), space, and hyphens. An error message will display if the name is not valid.

### 15.3.14.3.4.6.1 Edit User Waypoint

Users can modify their created User Waypoints to their desired new Identifier, Name, Latitude, and Longitude 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.

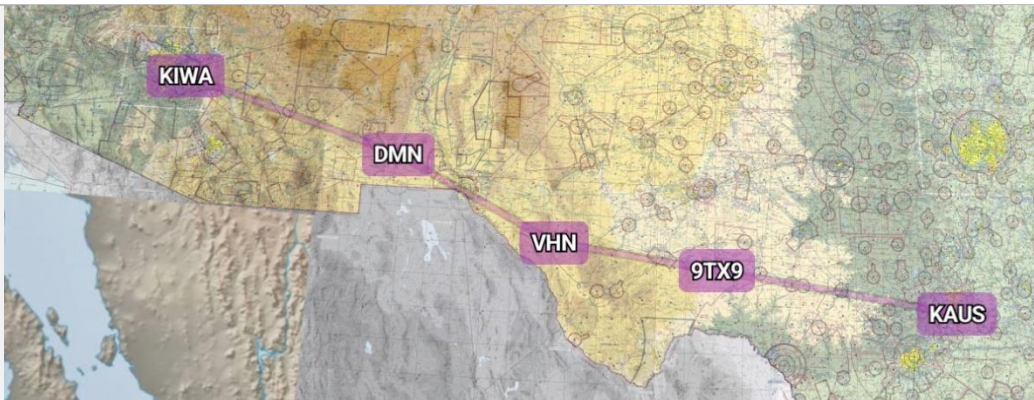


### 15.3.14.3.4.7 Route Line Transparency

Users can adjust the transparency of their current route line.

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%



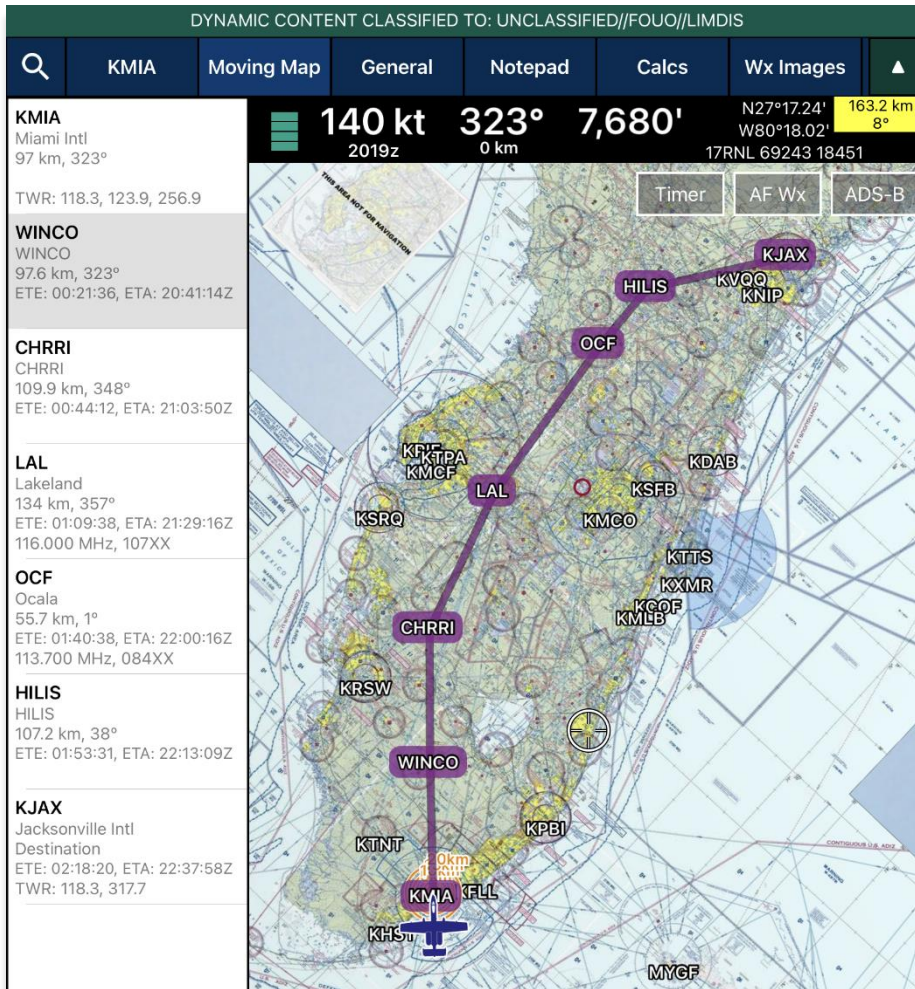


### 15.3.15 Estimated Time Enroute (ETE), Estimated Time of Arrival (ETA)

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

This section will provide information for Charts, Supplements, Planning, Docs, and Legend.

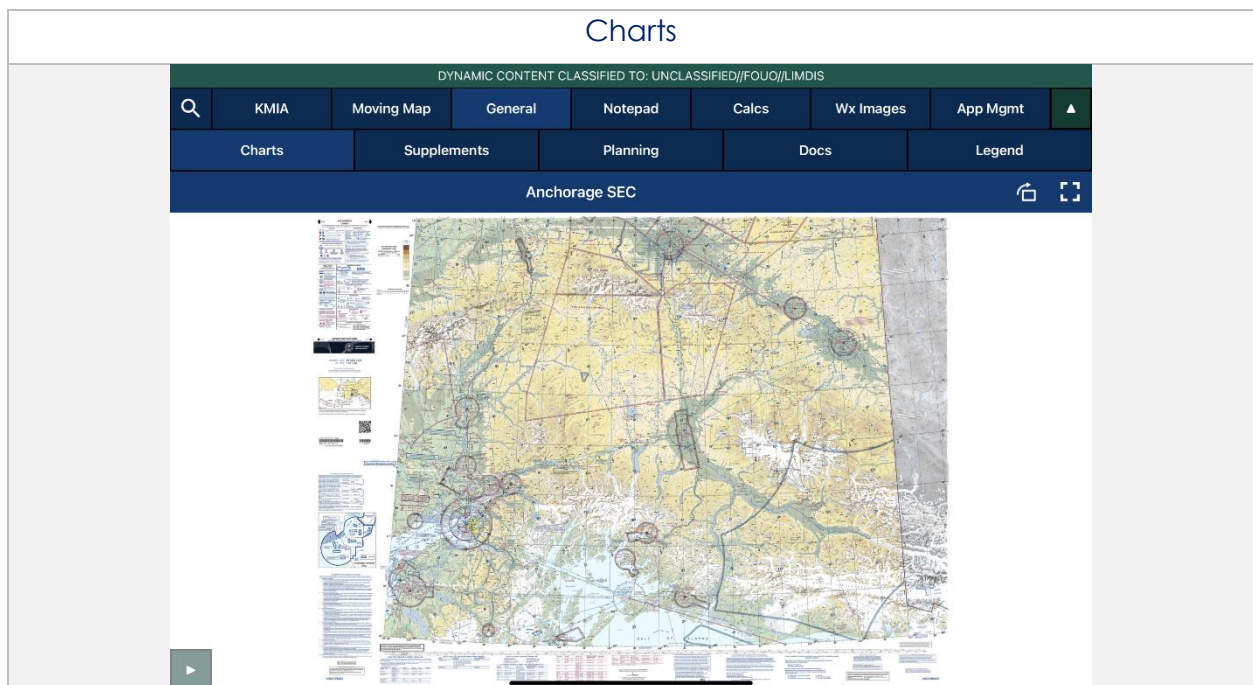
### 15.4.1 Charts

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 specific documents are used to select individual pages for Supplements, Planning, Docs, and Legend charts. Alternatively, users can tap the left or right arrows to turn the page.



### Supplements

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

Charts Supplements Planning Docs Legend

Chart Supplement - East Central US

United States Government Flight Information Publication  
Federal Aviation Administration

CHART SUPPLEMENT  
EAST CENTRAL U.S.  
Effective 0901Z 10 AUG 2023  
to 0901Z 5 OCT 2023

### Area Planning Documents

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

Charts Supplements Planning Docs Legend

AP1

AP/1  
FLIGHT INFORMATION PUBLICATION

AREA PLANNING

NORTH AND SOUTH AMERICA

EFFECTIVE 0001L 20 APR 2023  
TO 0001L 5 OCT 2023

NSC/NM 1 8190176 0001L 10 APR 2023 INCLUDED  
NSC/NM 2 8190176 0001L 10 APR 2023 INCLUDED

Undo Drawing      Grid View      Share

Draw on  
Carts

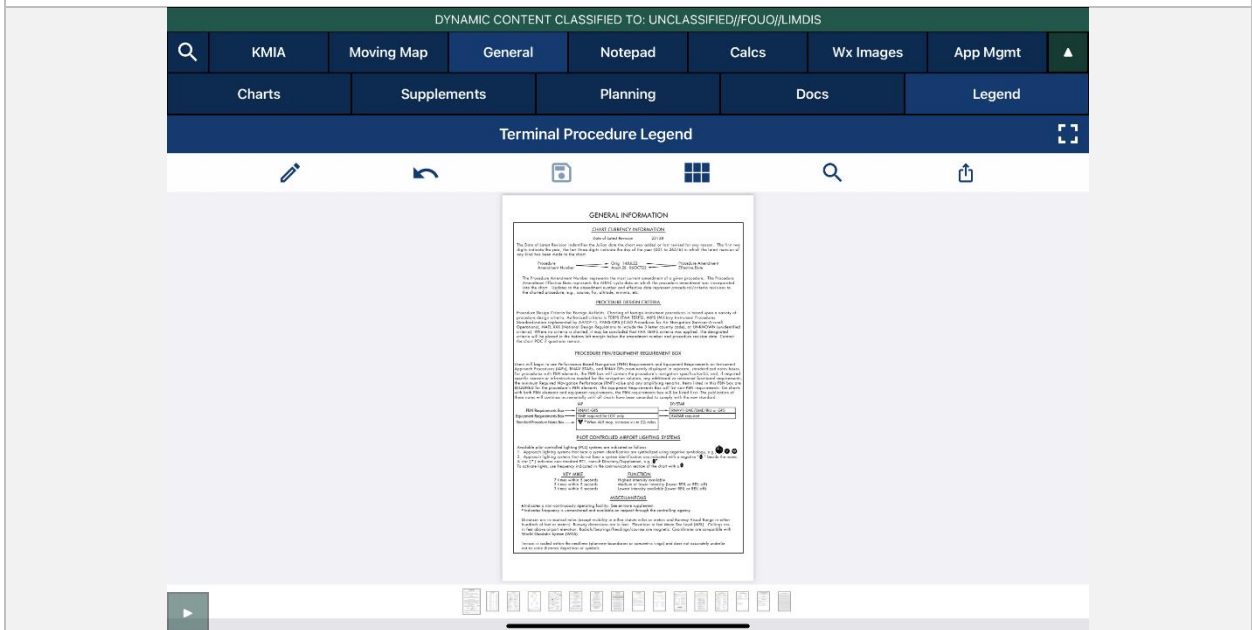
Save

Search

## User Documents



## Terminal Procedure Legend



Undo Drawing

Grid View

Share



Draw on  
Carts

Save

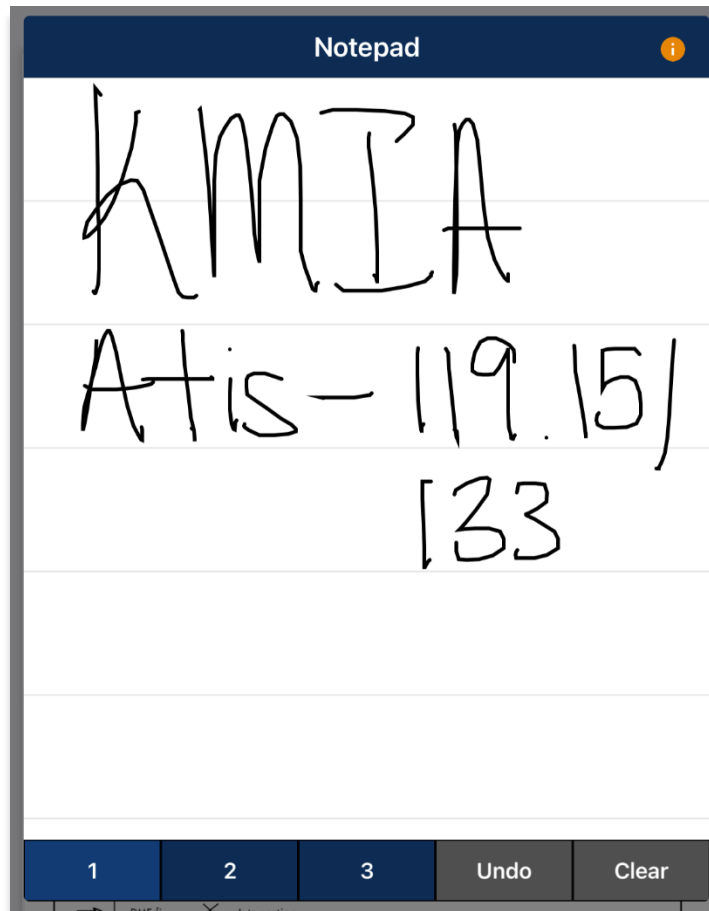
Search



## 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 by using 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)

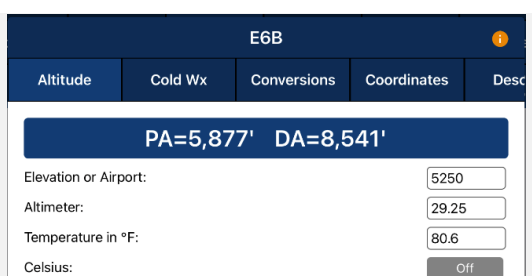
The Calcs menu, also referred to as Calculations, is inclusive of options such as E6B and Fuel Check. To access these features, tap the Calcs button.

### 15.6.1 E6B Calculator

The electronic calculator enables pilots to perform a variety of calculations for preflight or inflight planning.

#### Altitude

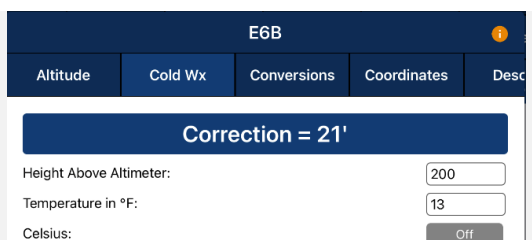
**Altitude** calculates the Pressure Altitude and Density Altitude by entering the Elevation or the Airport ICAO, Altimeter, and Temperature.



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.

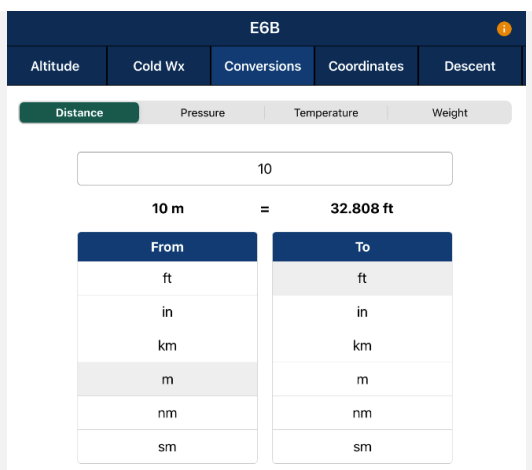


E6B				
Altitude	Cold Wx	Conversions	Coordinates	Desc
Correction = 21'				
Height Above Altimeter:	200			
Temperature in °F:	13			
Celsius:	Off			

#### Conversions

**Conversions** is 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	Descent
Distance				
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.

EGB

Cold Wx | Conversions | Coordinates | Descent | Distance

Lat, Lon | MGRS | GARS | 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°50'06.600\"

MGRS: 16SBH 52911 70116

GARS: 181LT38

Radial Off NavAid: SKE 093 0.77

EGB

Cold Wx | Conversions | Coordinates | Descent | Distance

Lat, Lon | MGRS | GARS | Radial

MGRS

16SBH 52907 70117

+ Insert into Route | + Insert at end of Route

DD.DDD: N38.545171°, W89.835215°

DD MM.MM: N38°32.71', W89°50.11'

DD MM SS.SSS: N38°32'42.616\", W89°50'06.774\"

MGRS: 16SBH 52907 70117

GARS: 181LT38

Radial Off NavAid: SKE 093 0.77

EGB

Cold Wx | Conversions | Coordinates | Descent | Distance

Lat, Lon | MGRS | GARS | 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°19'04.747\", W121°41'49.387\"

MGRS: 10SFG 15449 30944

GARS: 117LQ27

Radial Off NavAid: SJC 090 12.30

## 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 | **Distance** | Descent | 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 | **Speed** | 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 | **Time**

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"/>

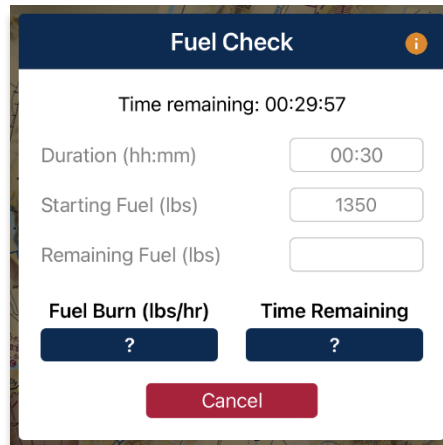


**NOTE:** See reference notes located at the bottom of the E6B popup.

## 15.6.2 Fuel Check

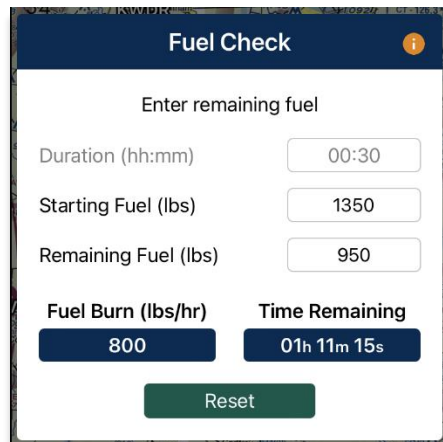
The Fuel Check feature enables users to calculate fuel burn and the time remaining to burn the rest of their fuel. Fuel Check includes fields for Duration (hh:mm), Starting Fuel (lbs), and Remaining Fuel (lbs). The Remaining Fuel field becomes accessible only after the timer is up.

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 '00:30', 'Starting Fuel (lbs)' with '1350', and 'Remaining Fuel (lbs)' which is currently empty. Below these fields are two dark blue buttons labeled 'Fuel Burn (lbs/hr)' and 'Time Remaining', both containing a question mark. At the bottom is a red 'Cancel' button.

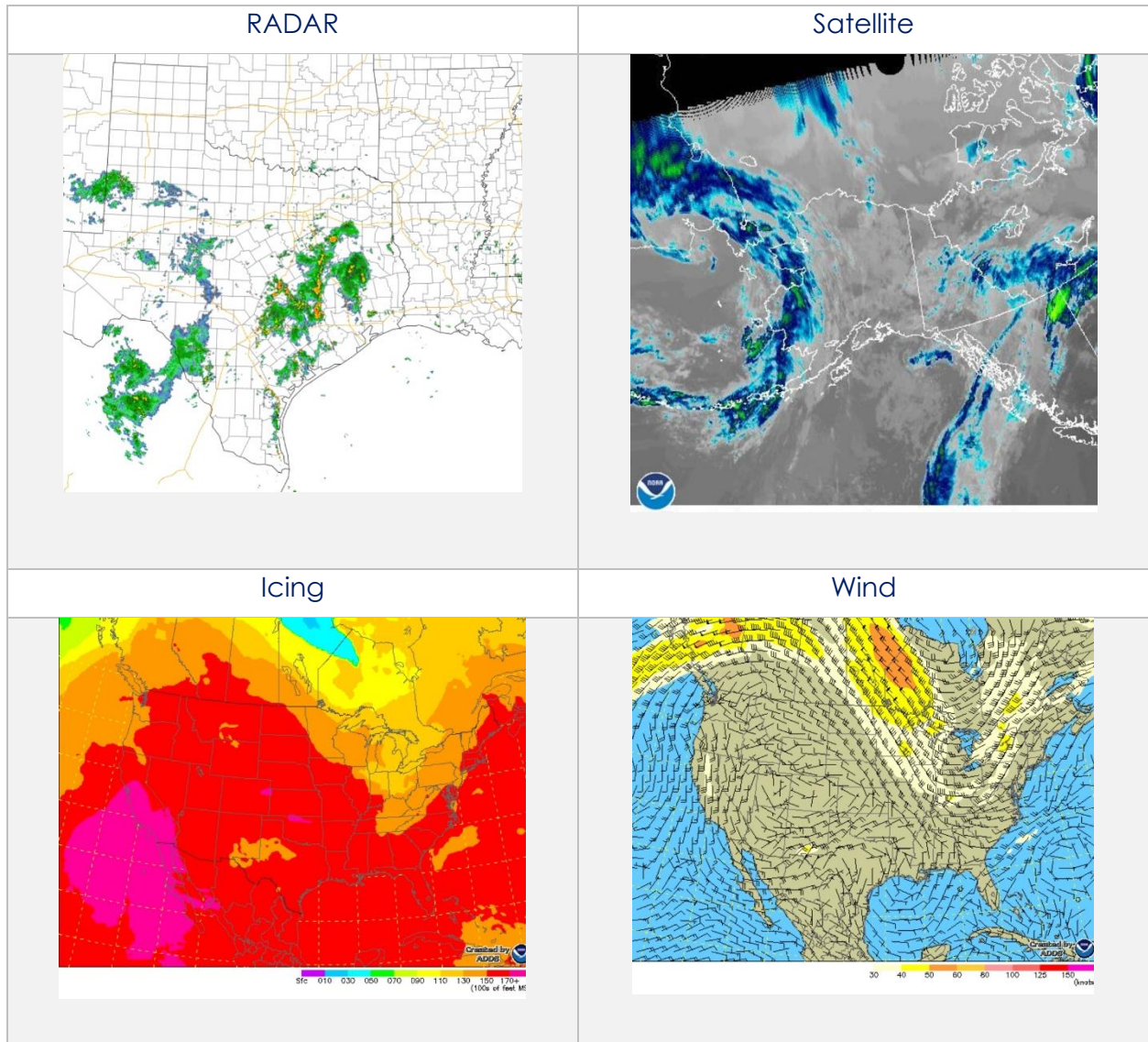
7. Once the timer has ended, the Remaining Fuel (lbs) field will become accessible. Enter the remaining fuel in lbs.
8. The calculations will populate in the Fuel Burn and Time Remaining results field. Tap **Reset** to clear the calculations.



The screenshot shows the 'Fuel Check' popup after calculations. The header is the same. Below the header, it says 'Enter remaining fuel'. The input fields are: 'Duration (hh:mm)' with '00:30', 'Starting Fuel (lbs)' with '1350', and 'Remaining Fuel (lbs)' with '950'. Below these are two dark blue buttons: 'Fuel Burn (lbs/hr)' with '800' and 'Time Remaining' with '01h 11m 15s'. At the bottom is a green 'Reset' button.

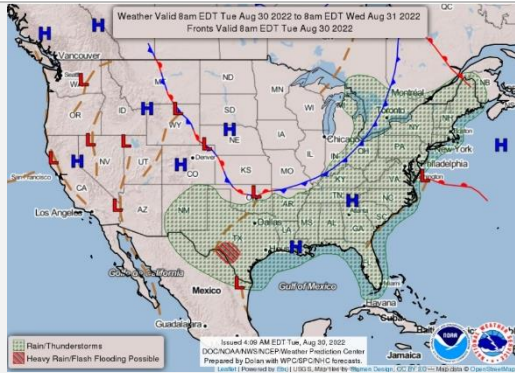
## 15.7 Weather (Wx) Images

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:

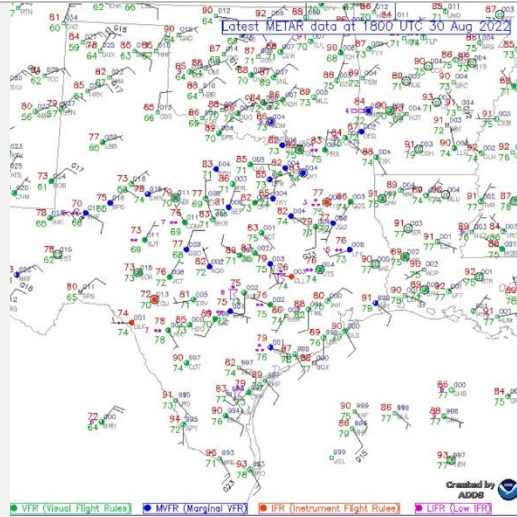




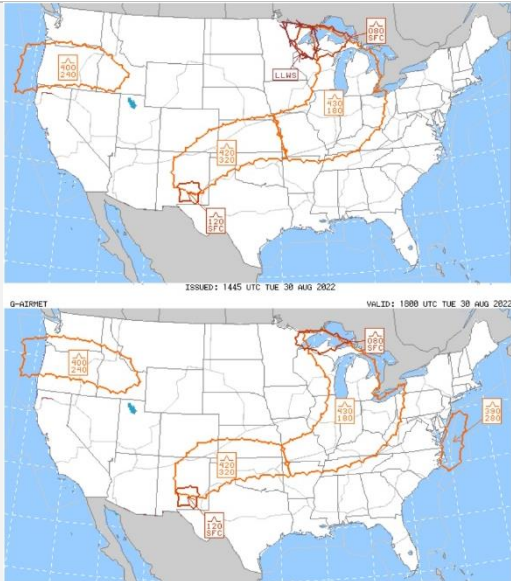
### Weather Forecast



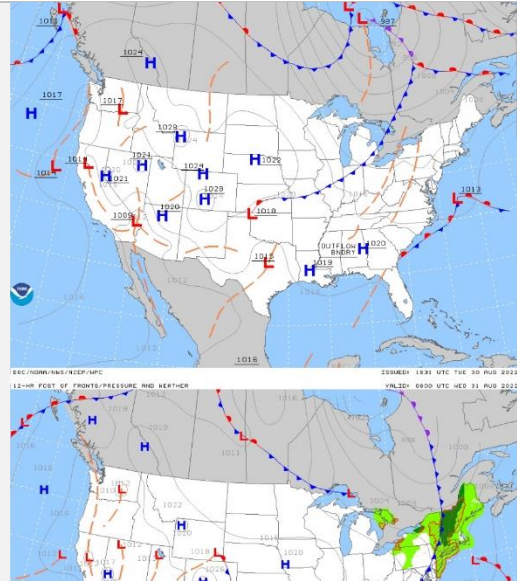
### METARs and PIREPs



### AIRMETS and SIGMETs



### Prog Charts

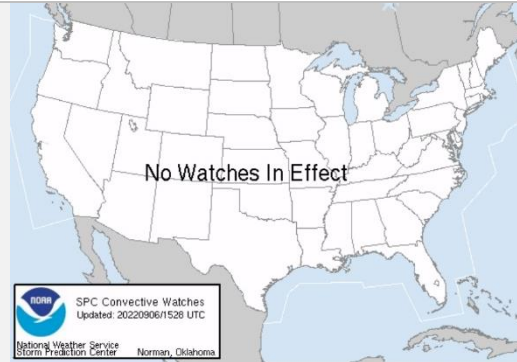




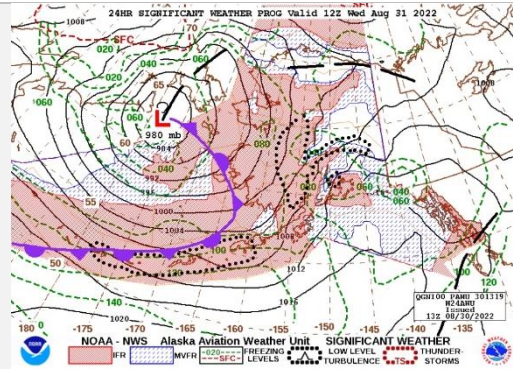
Convective SIGMETs and Outlooks



Current Convective Watches



Alaska



## 15.8 Application Management (App Mgmt)

Aero App's application management is a very 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 rebooted.
  - **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 12](#) for more 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 ASPS Account Registration

Pilots are required to possess an ASPS account to obtain host nation charts.

1. To access Aeronautical Source Packaging Service (ASPS), go to [asps.leidos.com](https://asps.leidos.com).
2. Tap the **Request Account** button.
3. Fill in your information, including Government POC.

#### 15.8.3.2 Download Host Nation Charts

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.

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

🔍	Moving Map	General	Notepad	Calcs	Wx Images	App Mgmt	▲
Preferences		Data		Host Nation		Help	
Download				On Device <span>ⓘ</span>			

**ASPS Account Information**

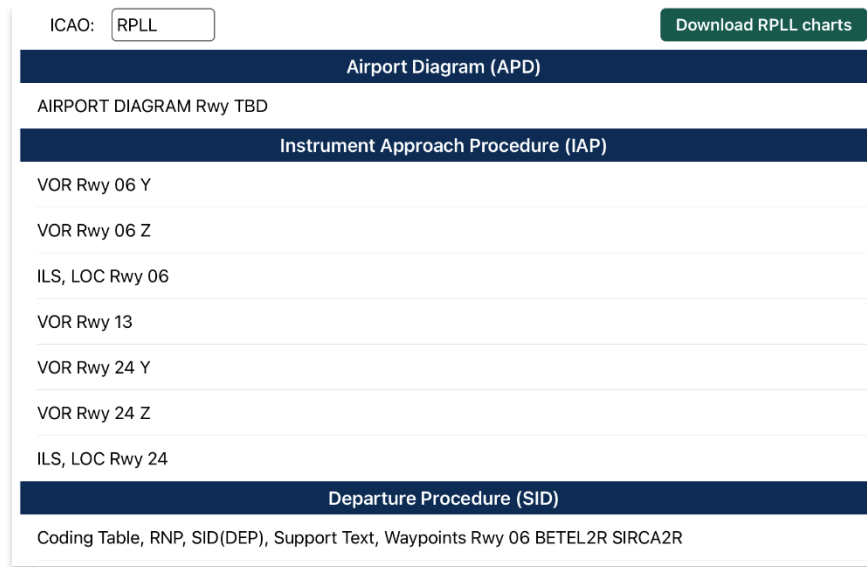
Username:

Password:

ICAO:

[Tap for ASPS Website](#) — ASPS Website Link

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 tab provides users with four 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.

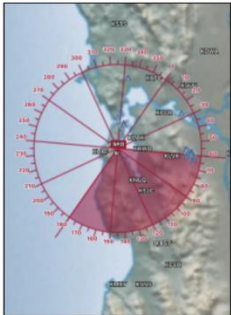
[aeroapp.info](http://aeroapp.info)



---

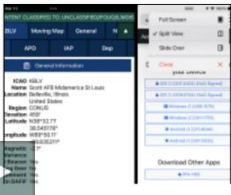
### Currently in Aero App for iOS Version 1.2306

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

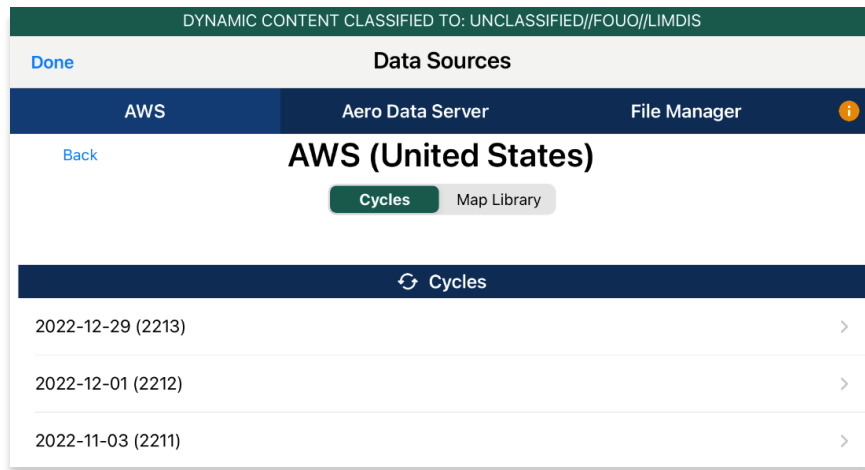
Aero App now supports multitasking capabilities for pilots to interact with multiple apps simultaneously in Split View configuration. Pilots can switch away from their current app to perform other tasks on another app while seamlessly restoring the same view once they switch back. This provides an interruption-free user experience.



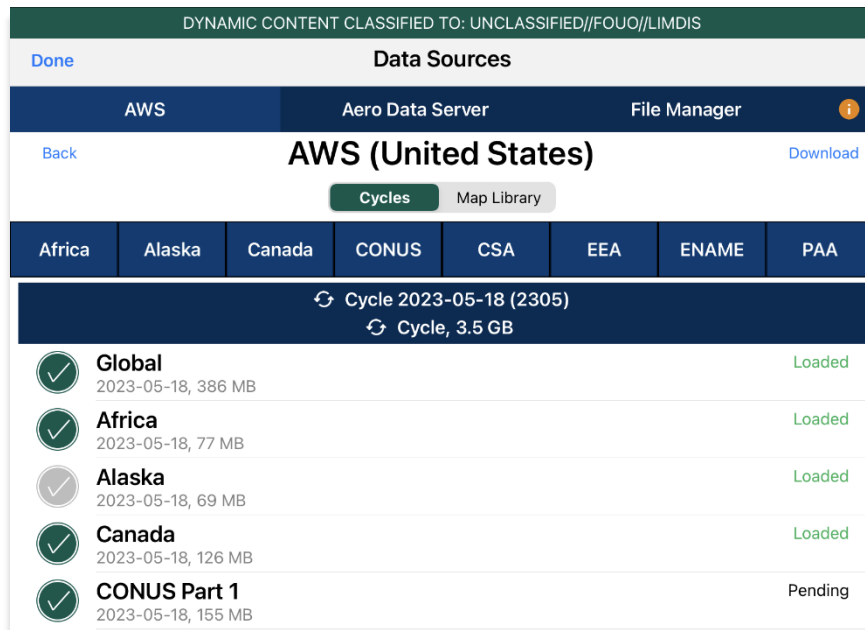
### 15.8.4.1 What's New Popup

The What's New page will pop up when a new cycle has been successfully loaded into Active Cycle.

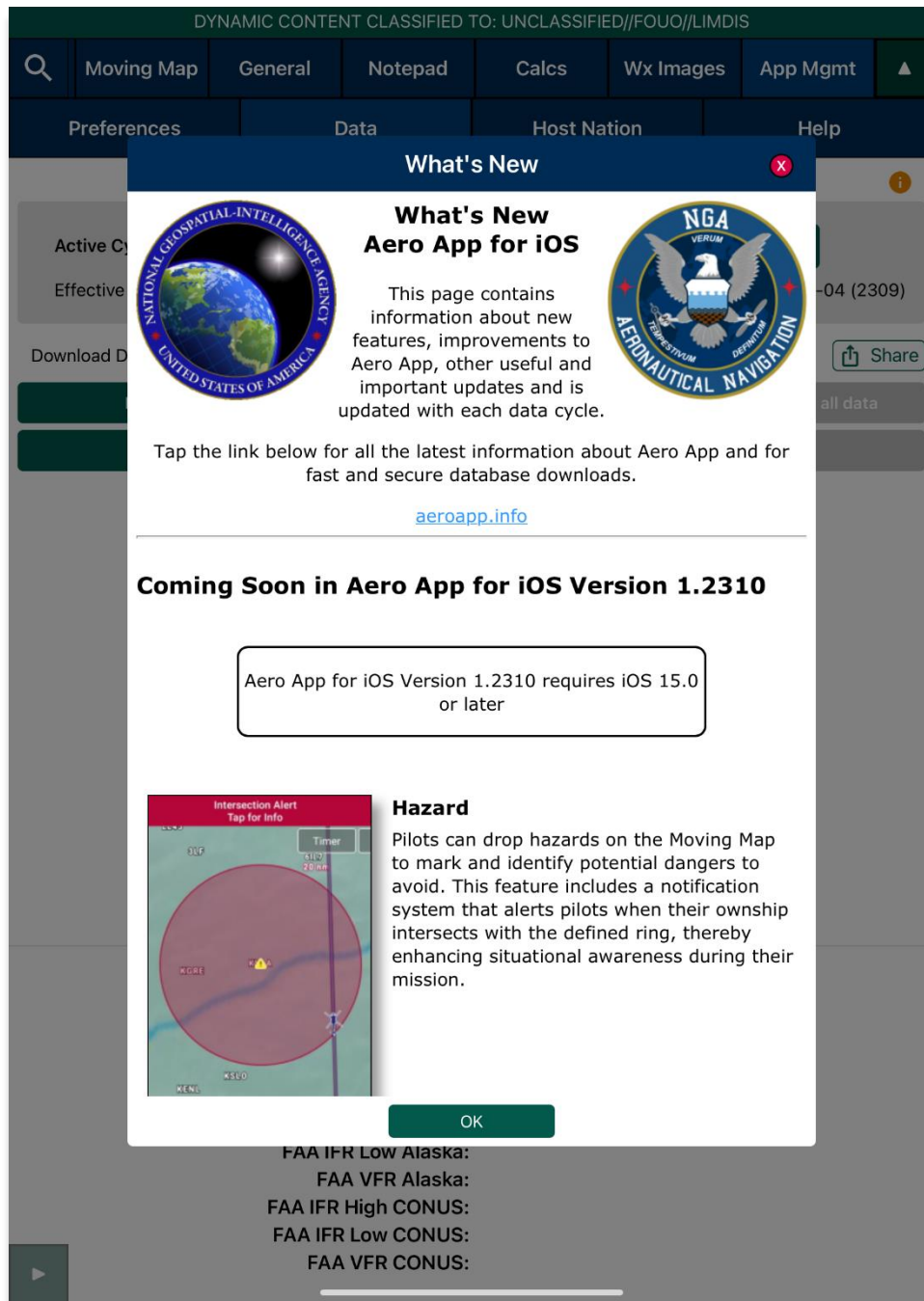
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Data** on the **Secondary Menu**.
3. Tap **Download**.
4. Select preferred authentication from **AWS** and **ADS**.
5. Select desired **data cycle**.



6. Select desired **data** to download.
7. Tap **Download** to begin download.



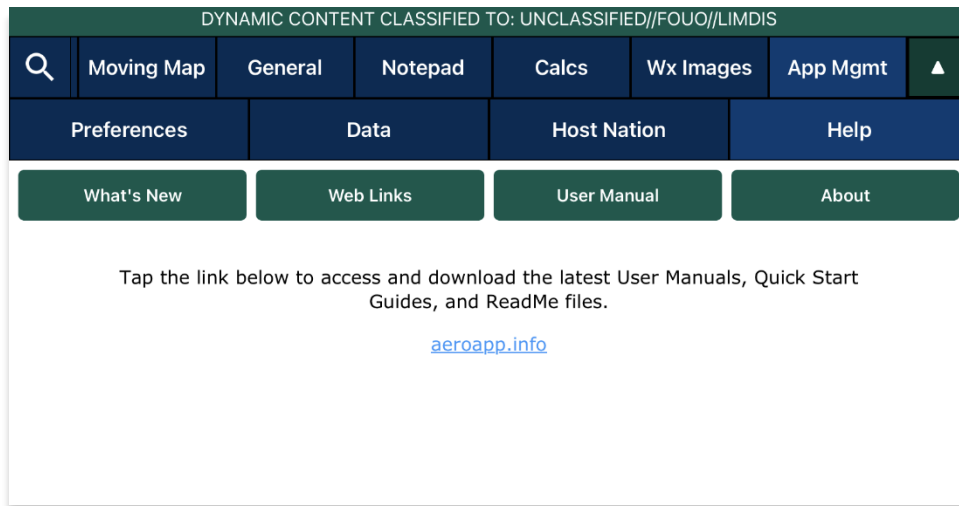
8. Navigate back to the **Data Status** page.
9. Tap **Move to Standby**.
10. Tap **Swap Cycles**.
11. The What's New popup will display.
12. Tap **OK** to dismiss the popup.



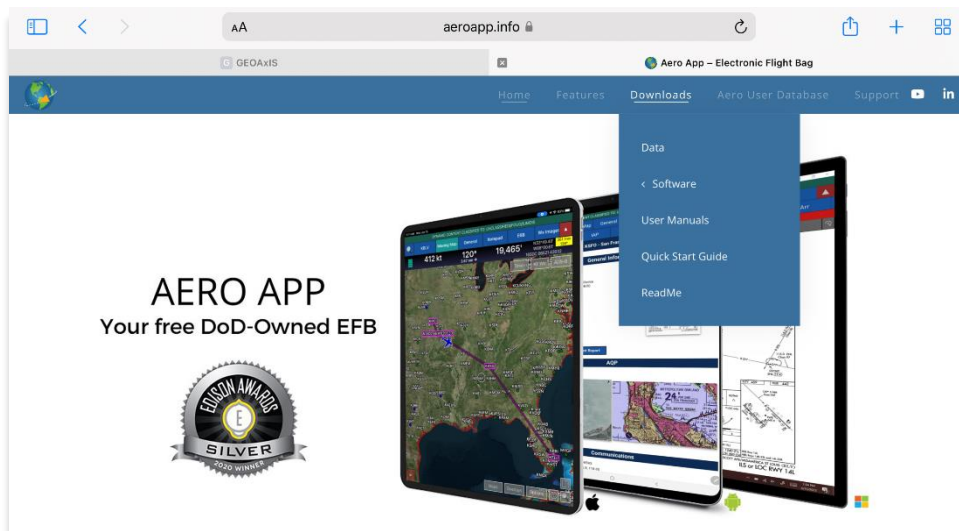
### 15.8.4.2 User Manual Access

The User Manual tab includes a link that redirects users to the [aeroapp.info](http://aeroapp.info) website.

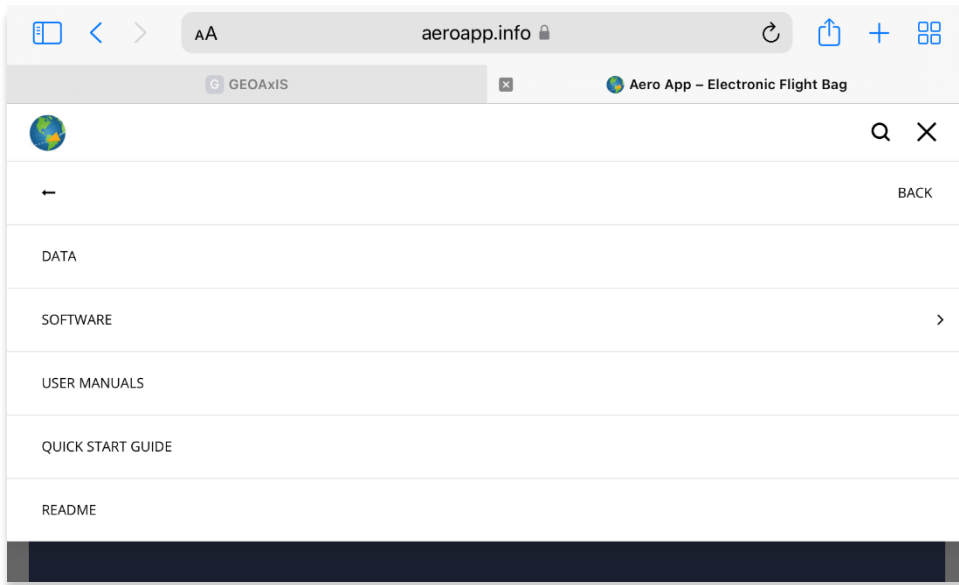
1. Tap **App Mgmt** on the **Main Menu**.
2. Tap **Help** on the **Secondary Menu**.
3. Tap the **User Manual** tab.
4. Tap the **aeroapp.info** link and users will be redirected to the Aero App homepage.



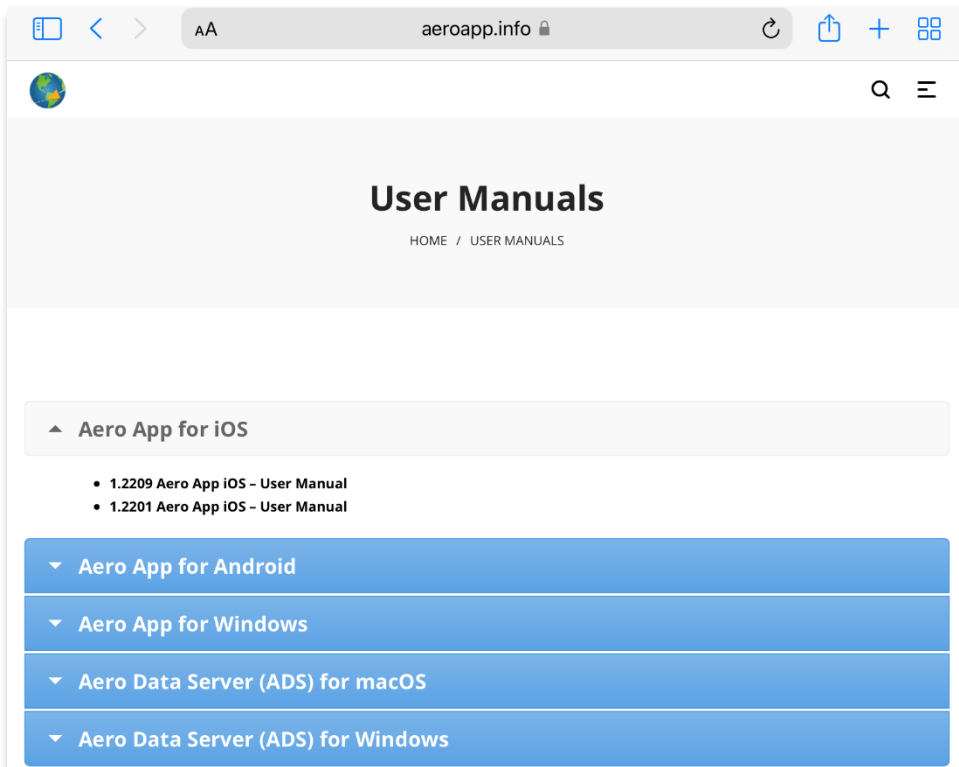
5. Hover over **Downloads**. Option placement will vary depending on display size.
  - On large screens, **the Downloads** option will display the ribbon located at the top of the page.



- On smaller screens, tap the hamburger button and select **Downloads**.



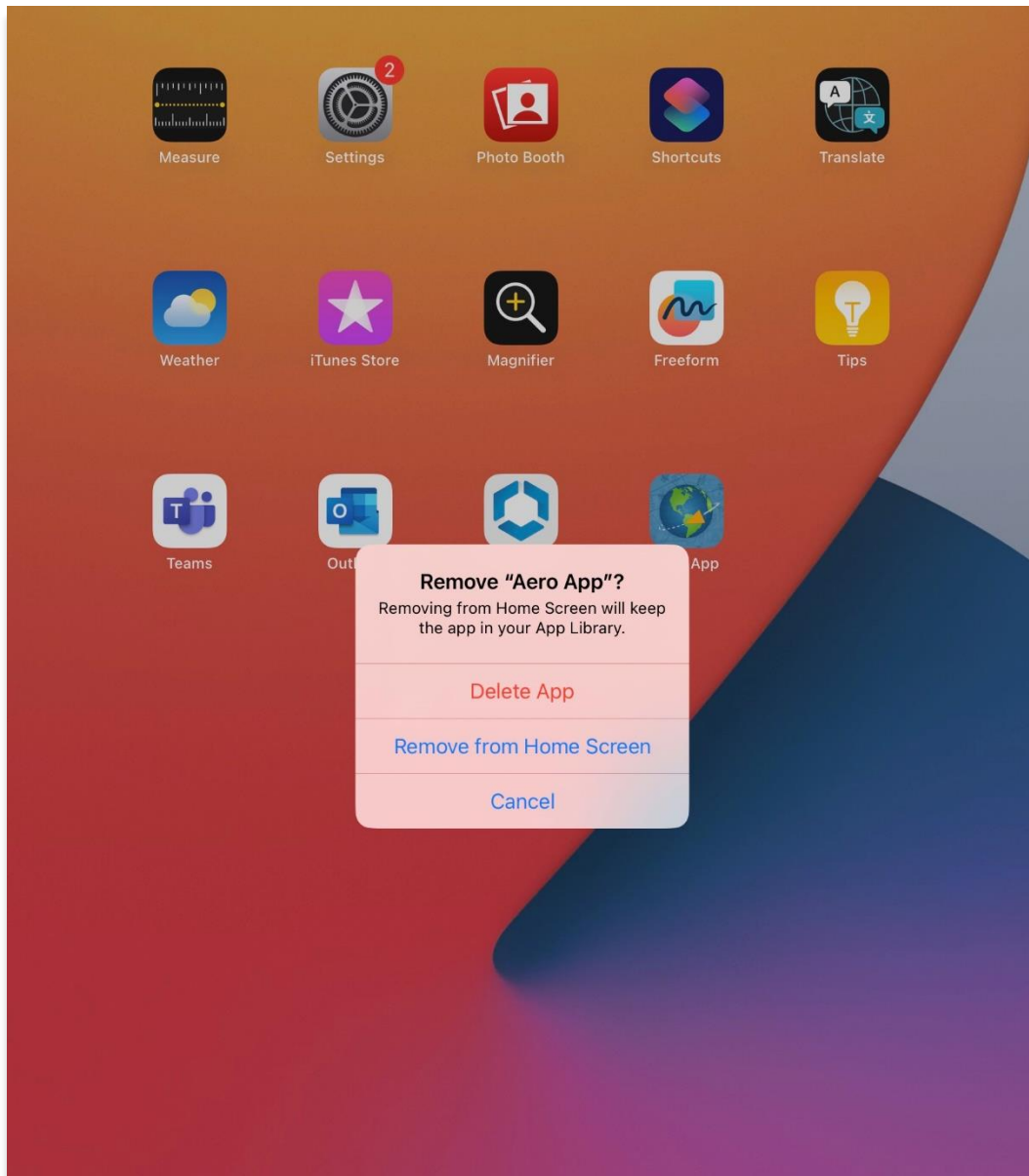
6. Select **User Manuals**.
7. Users are provided with several platforms to choose from. Tap **Aero App for iOS** to reveal all User Manuals available.
8. Select desired user manual version. Users will be redirected to the web PDF.



## 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,WDDMM.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:

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

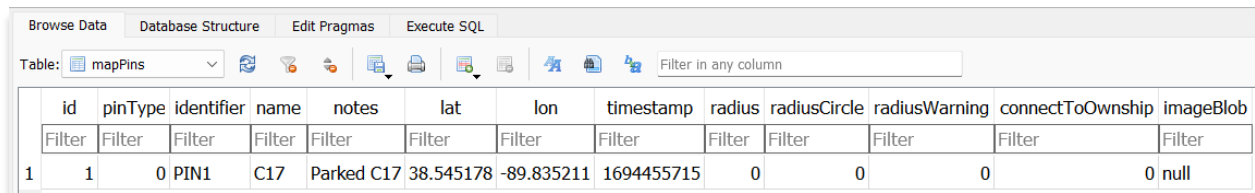
	UNIQUE	convention such as <i>PIN#</i> (starting from 1), where "#" represents a unique number. Users should avoid using white spaces or leaving the field blank.
name	TEXT NOT NULL	The name column can contain any character from the ASCII table. However, it is recommended to limit it to alphanumeric characters 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 below the column headers.

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	null

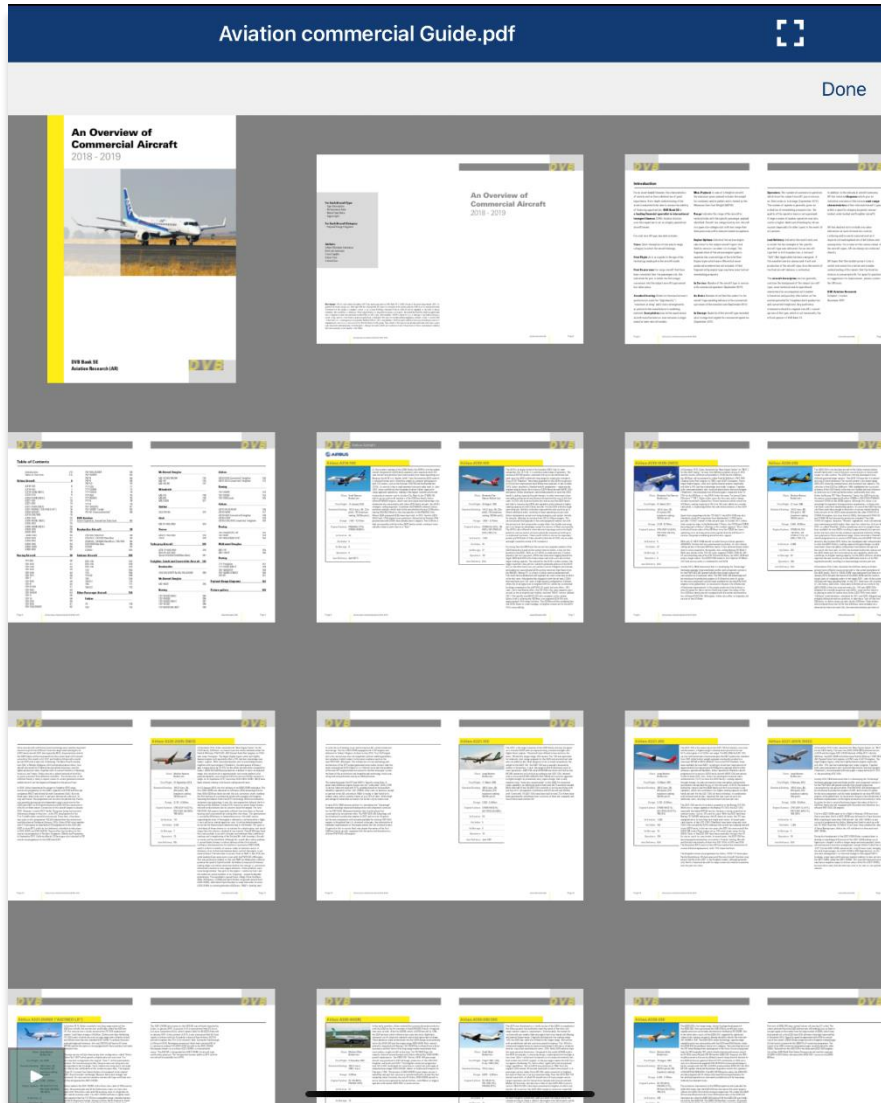
## 19 Appendix D | PDF Viewer

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.



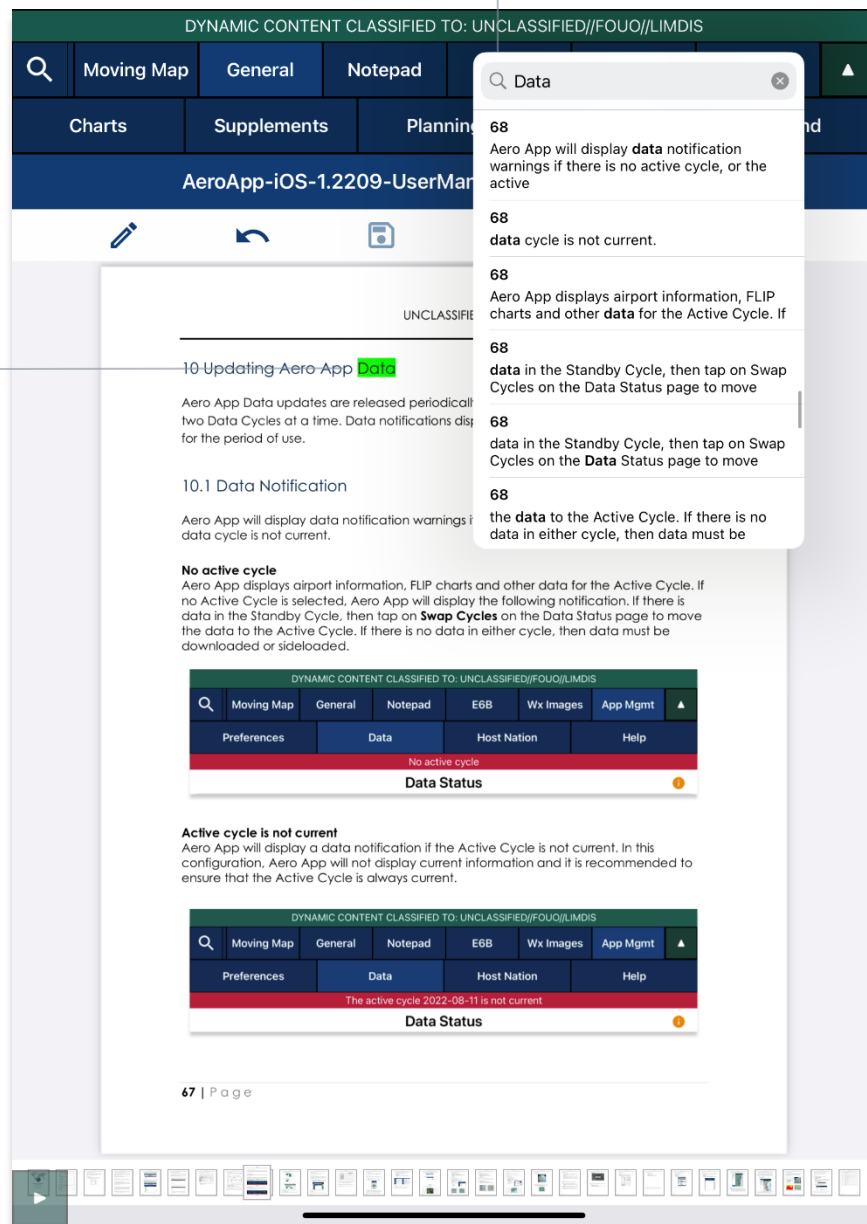
## 19.2 PDF Search

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 Magnifying Glass

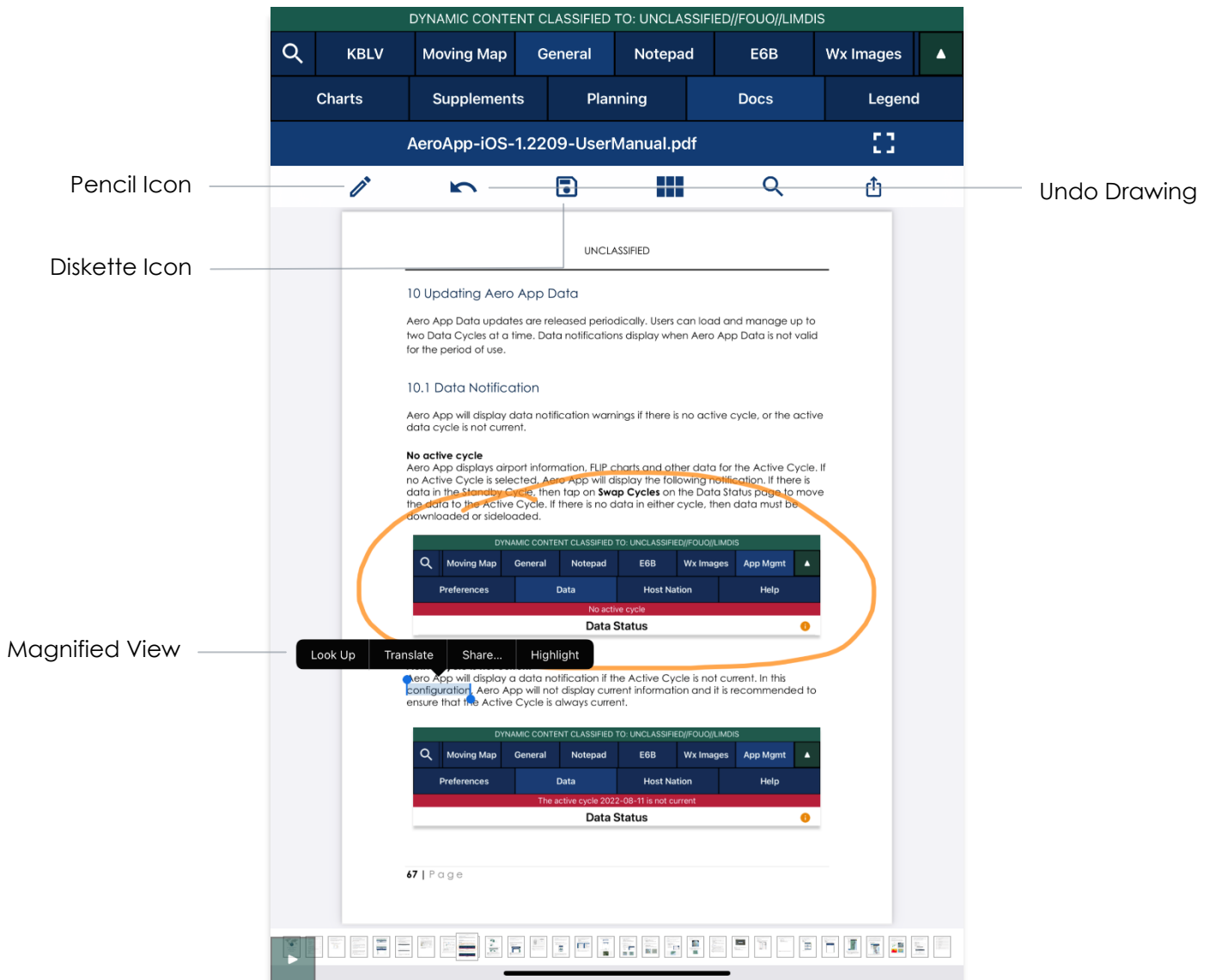
Keyword is Highlighted



## 19.3 PDF Markup

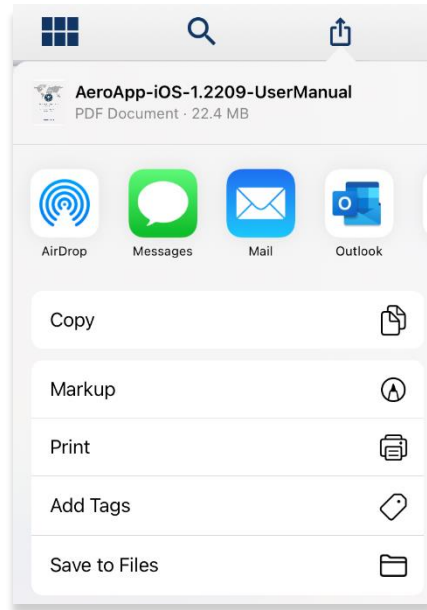
Users can draw and highlight text on a PDF. The markings will be saved on Aero App and can be later accessed.

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.



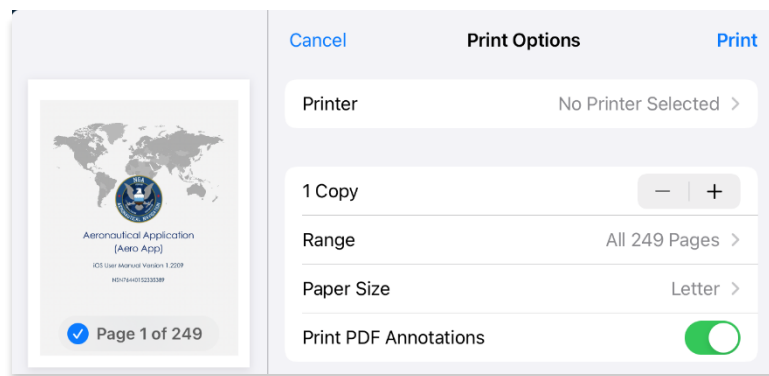
## 19.4 Share or Copy

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**.

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

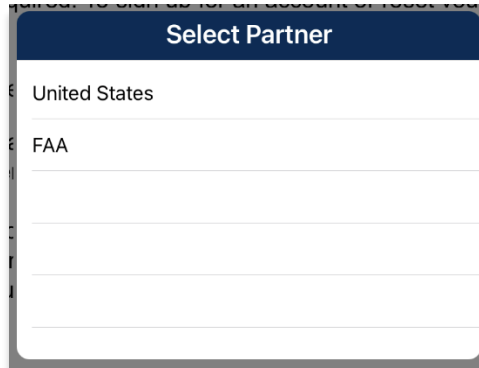
User's Credentials — Username:

Password:

Connect

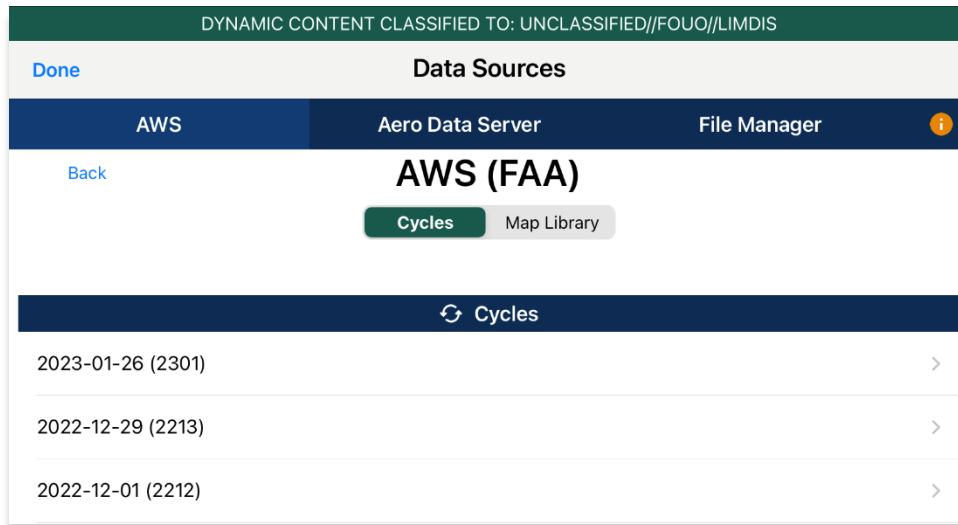


7. The Select Partner popup will display. Select **FAA** from partners list.

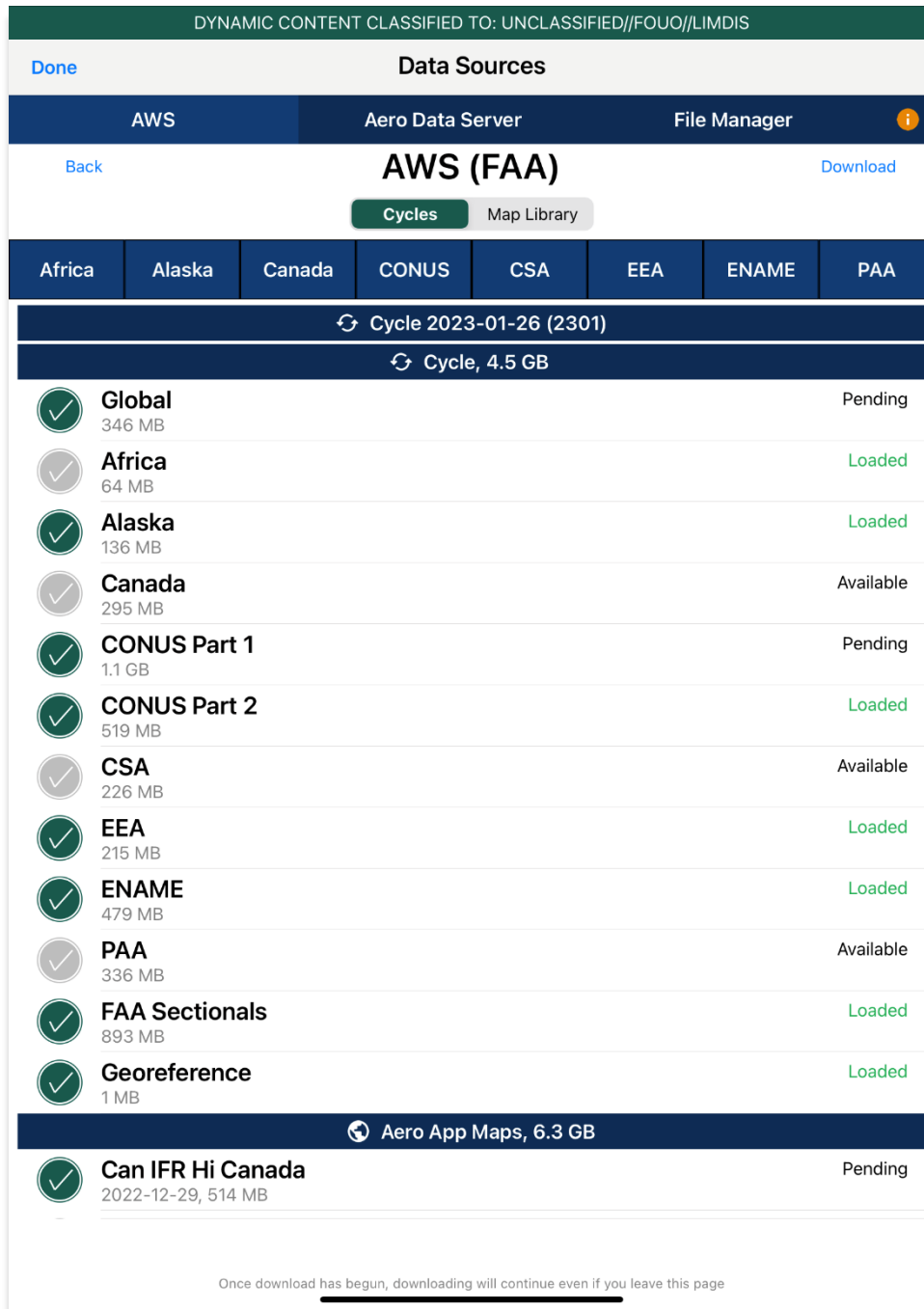


**NOTE:** The Select Partner popup will appear to those who have access to multiple government foreign partners.

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



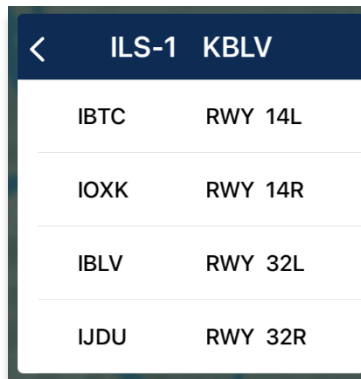
9. Available data pertaining to that cycle will be displayed. Select individual data files or select region Easy Buttons for faster data selection.
10. Tap **Download** once desired data files have been selected.



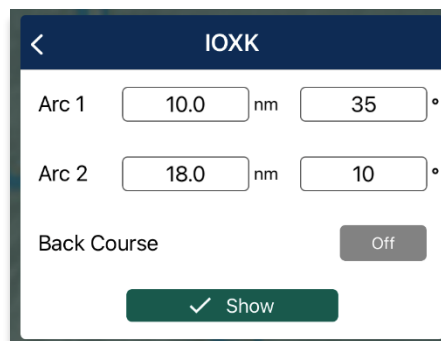
## 20.2 ILS-1 Maneuvers

Aero App supplies an Instrument Landing System (ILS-1) to FAA users which provides short-range assistance when approaching a runway.

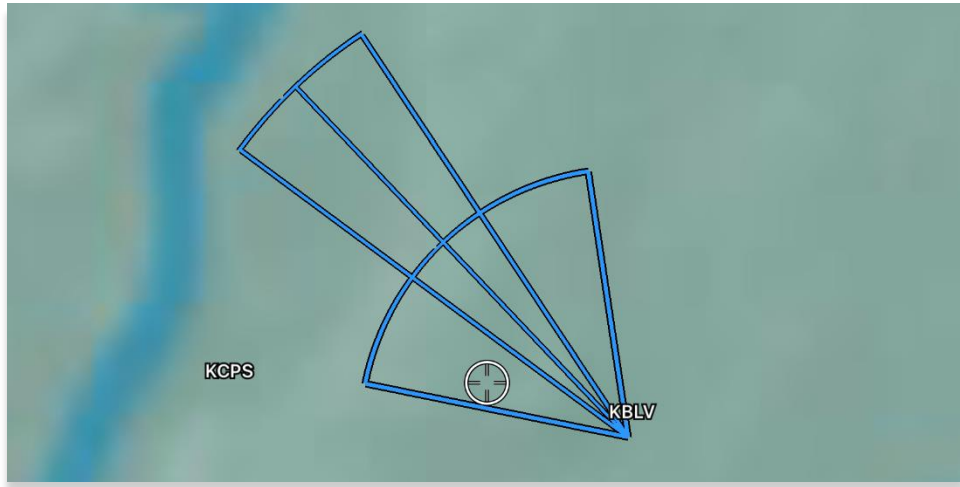
1. Aero App enables users to perform actions to their Moving Map. Users can display the popup in three simple ways:
  - Long pressing a point on the Moving Map
  - Tapping an ICAO on the Moving Map
  - Tapping an ICAO on the Route Panel
2. The Nearest popup will display. Tap an ICAO. The Moving Map's 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

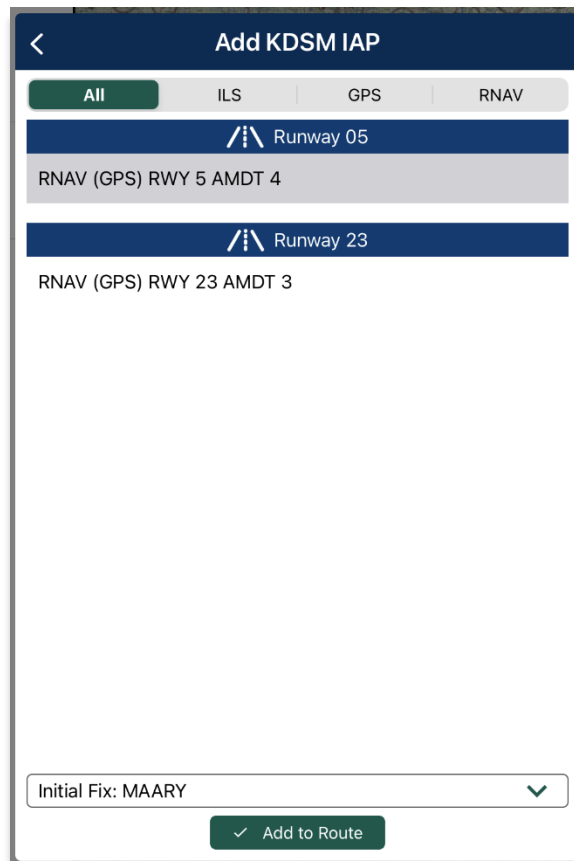
Aero App enables users to add Instrument Approach Procedures (IAP) to their route.

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**.

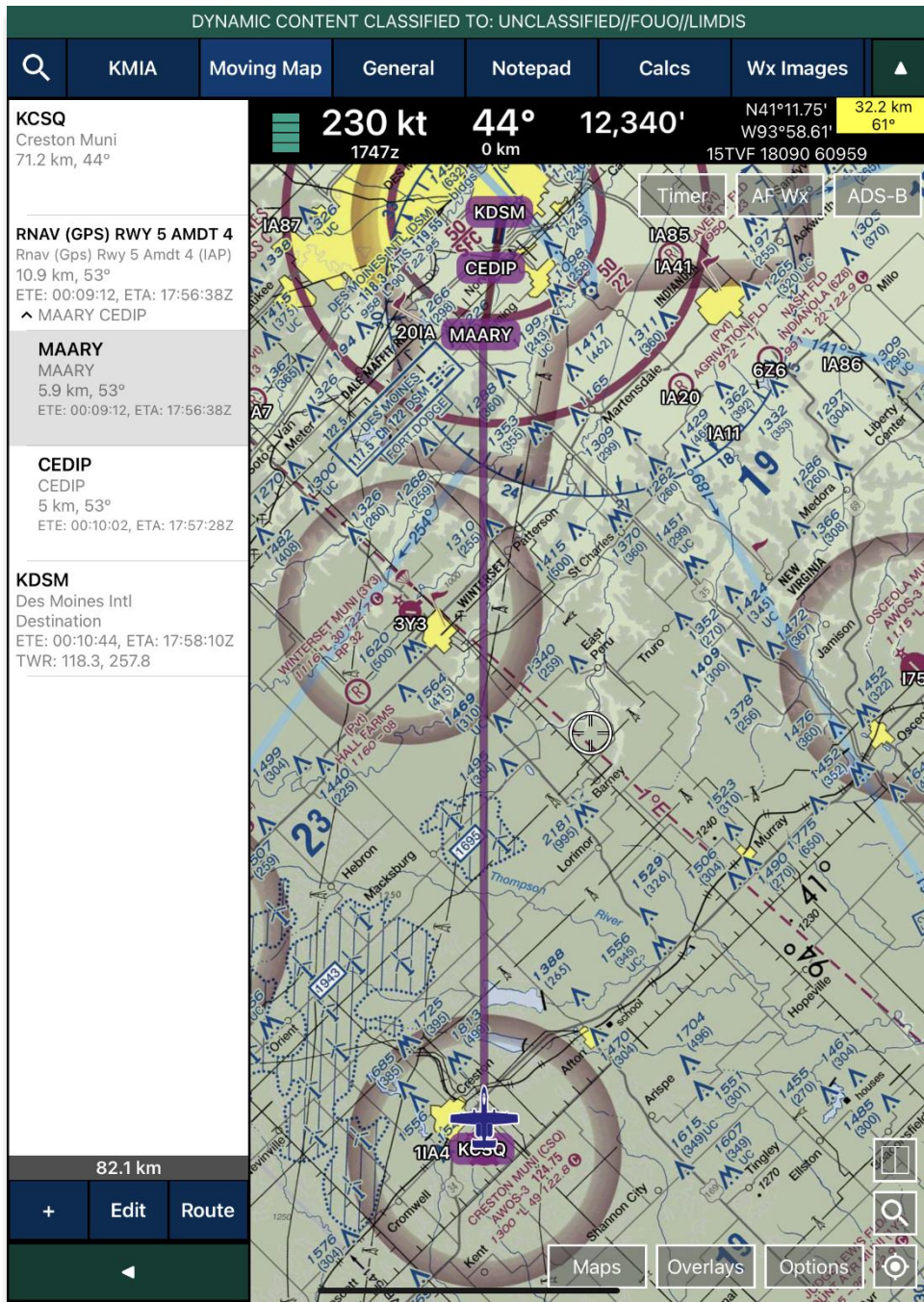


**NOTE:** Select airports will have IAPs available.

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

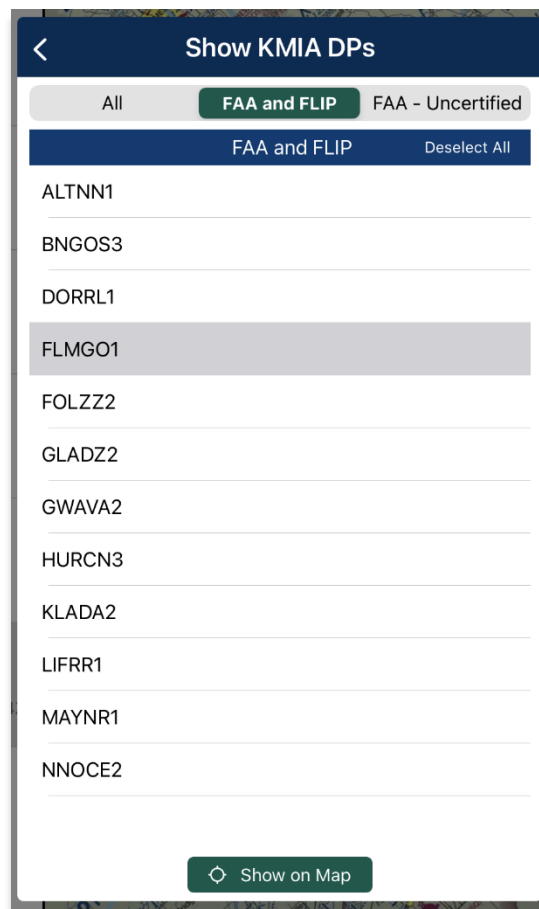
Aero App enables users to display Departure Procedures (DPs) and Standard Terminal Arrival Route (STARs) on the Moving Map.

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.

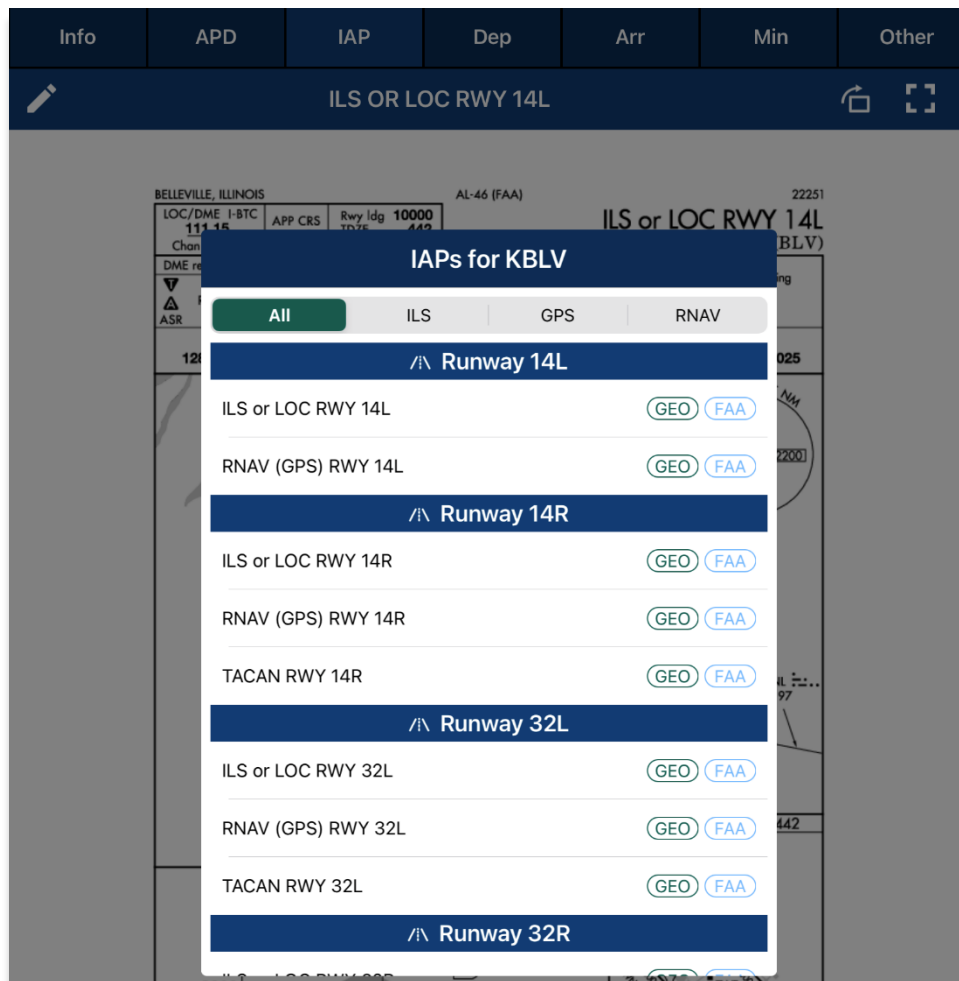




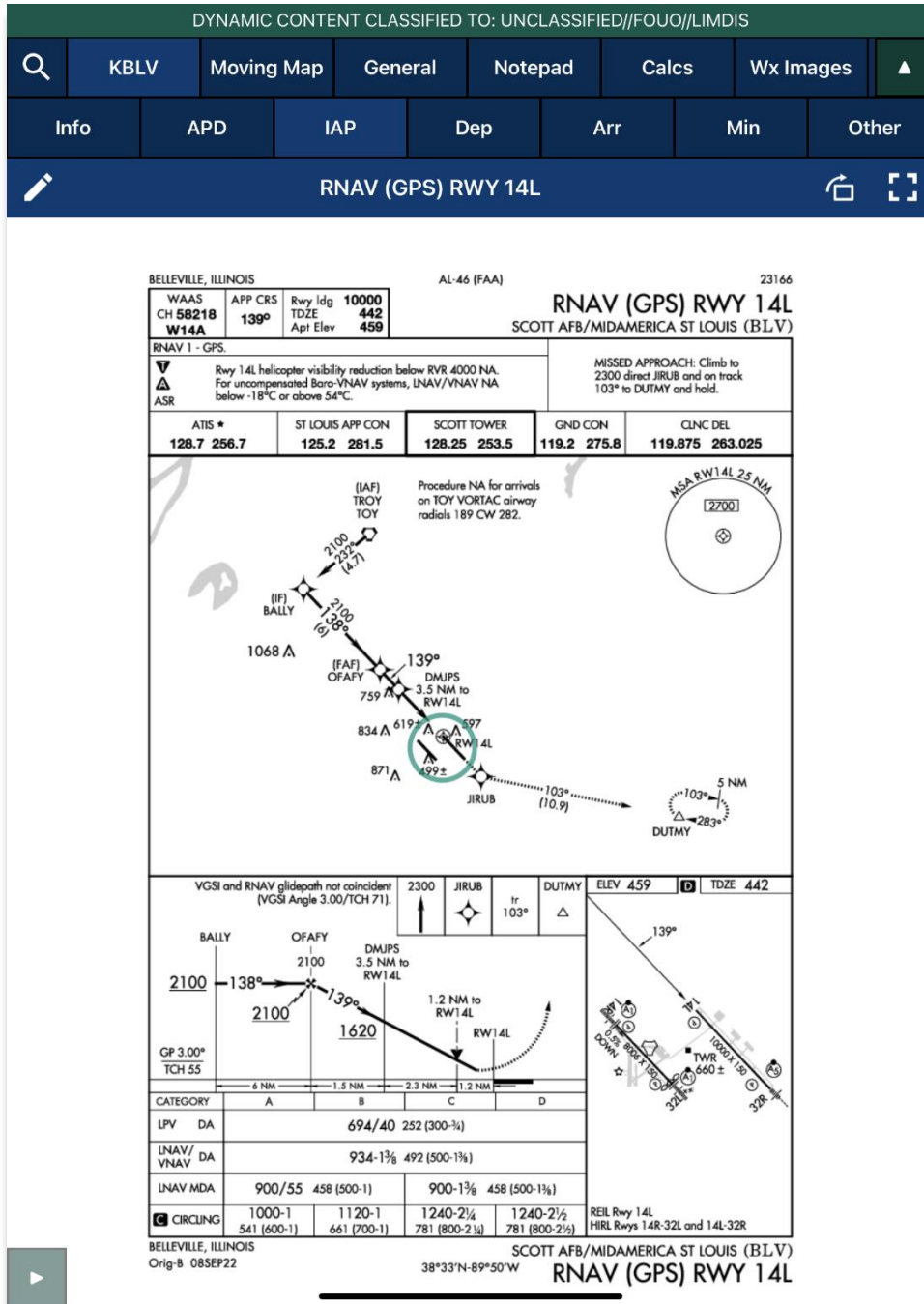
## 20.5 FAA Special Procedure

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.

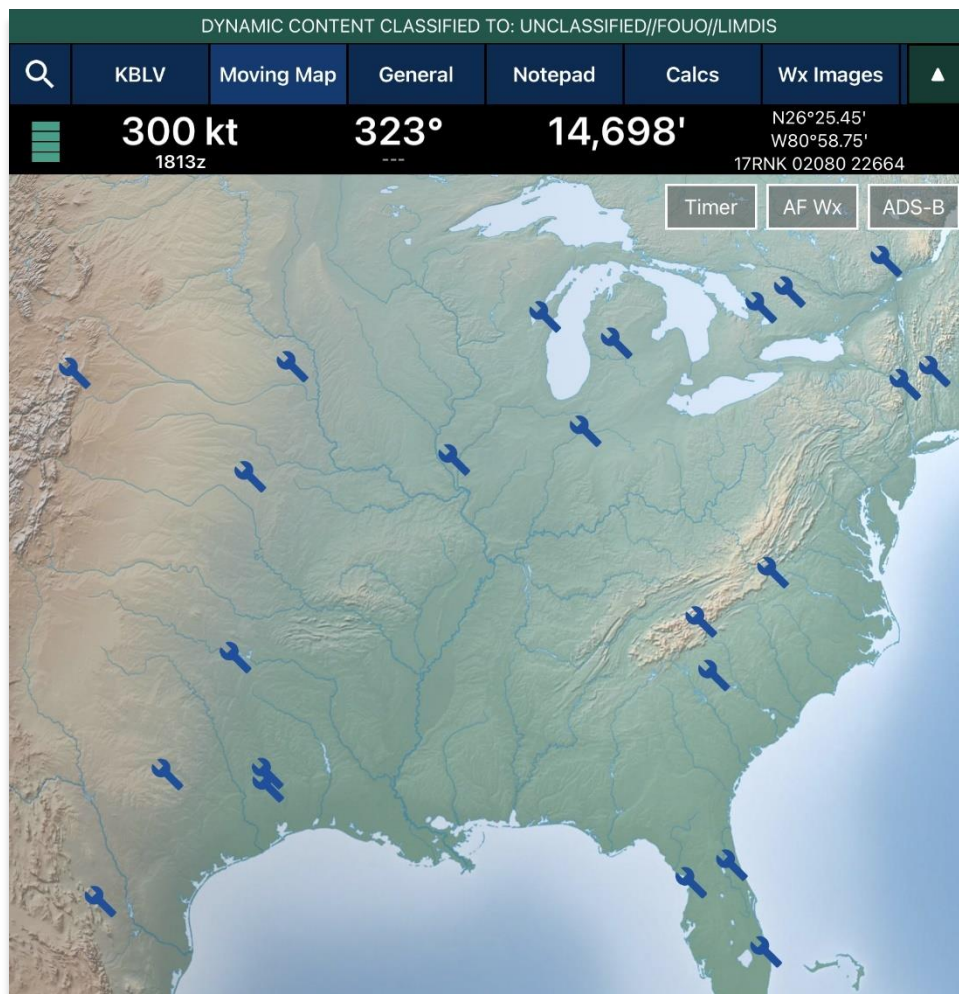


**NOTE:** FAA Special procedures are only available for select airports.

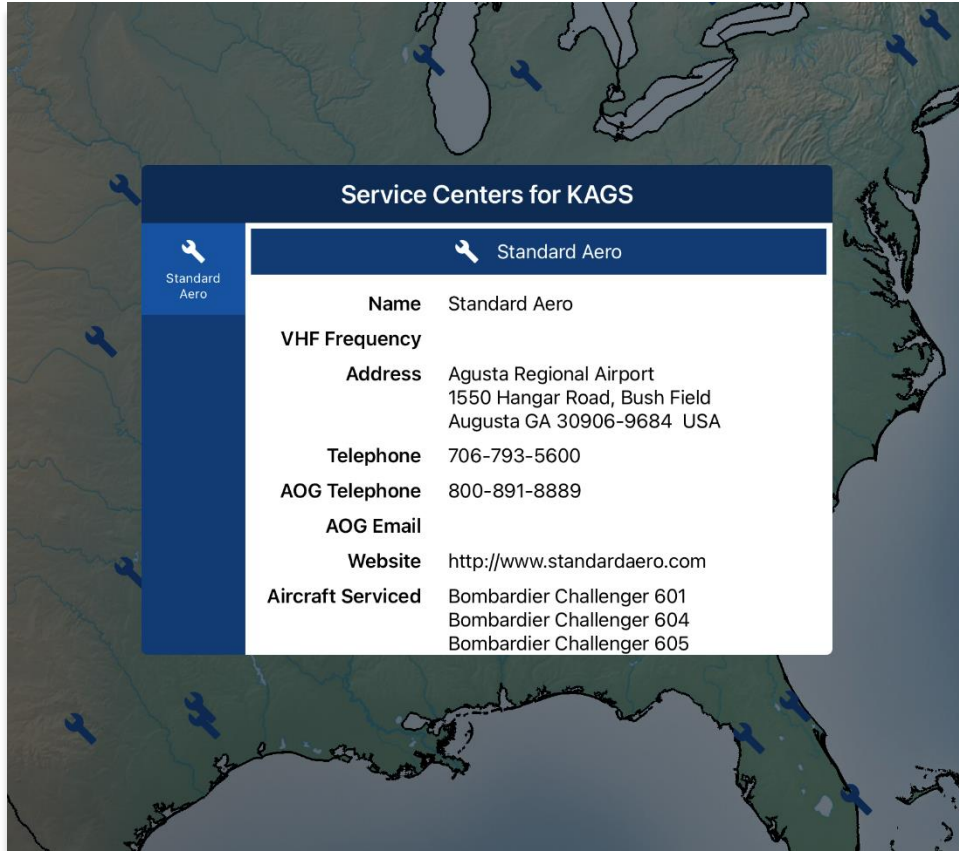
## 20.6 Authorized Aircraft Service Centers

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.



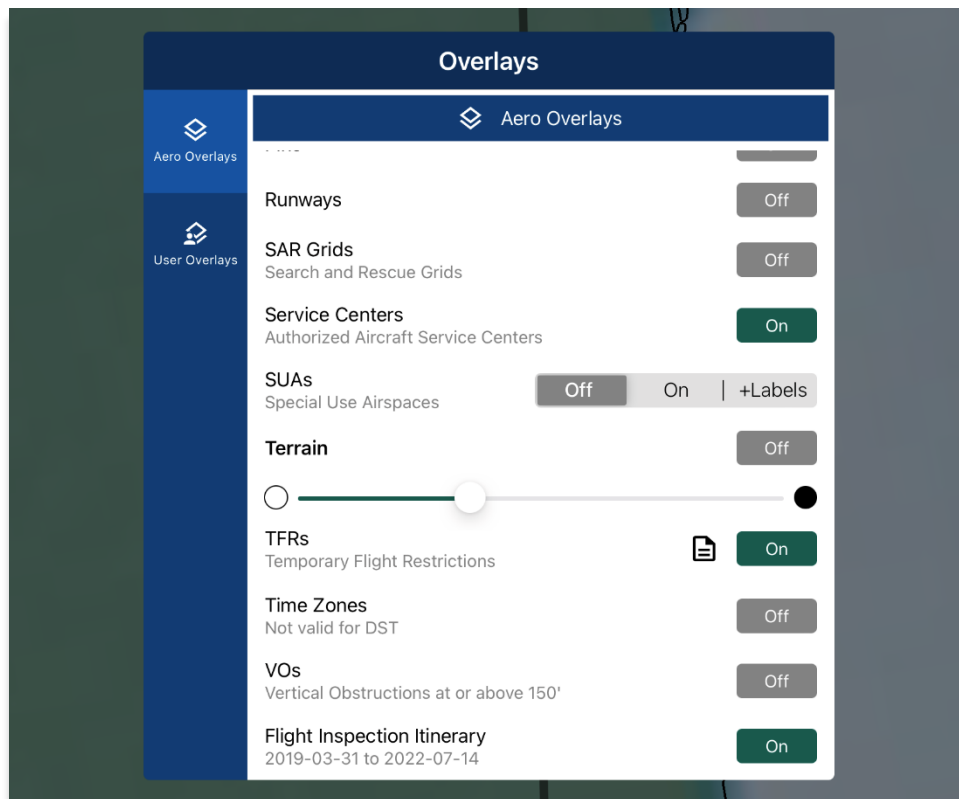
- By tapping the **Service Centers** icon, a popup will display with the respective service center information.



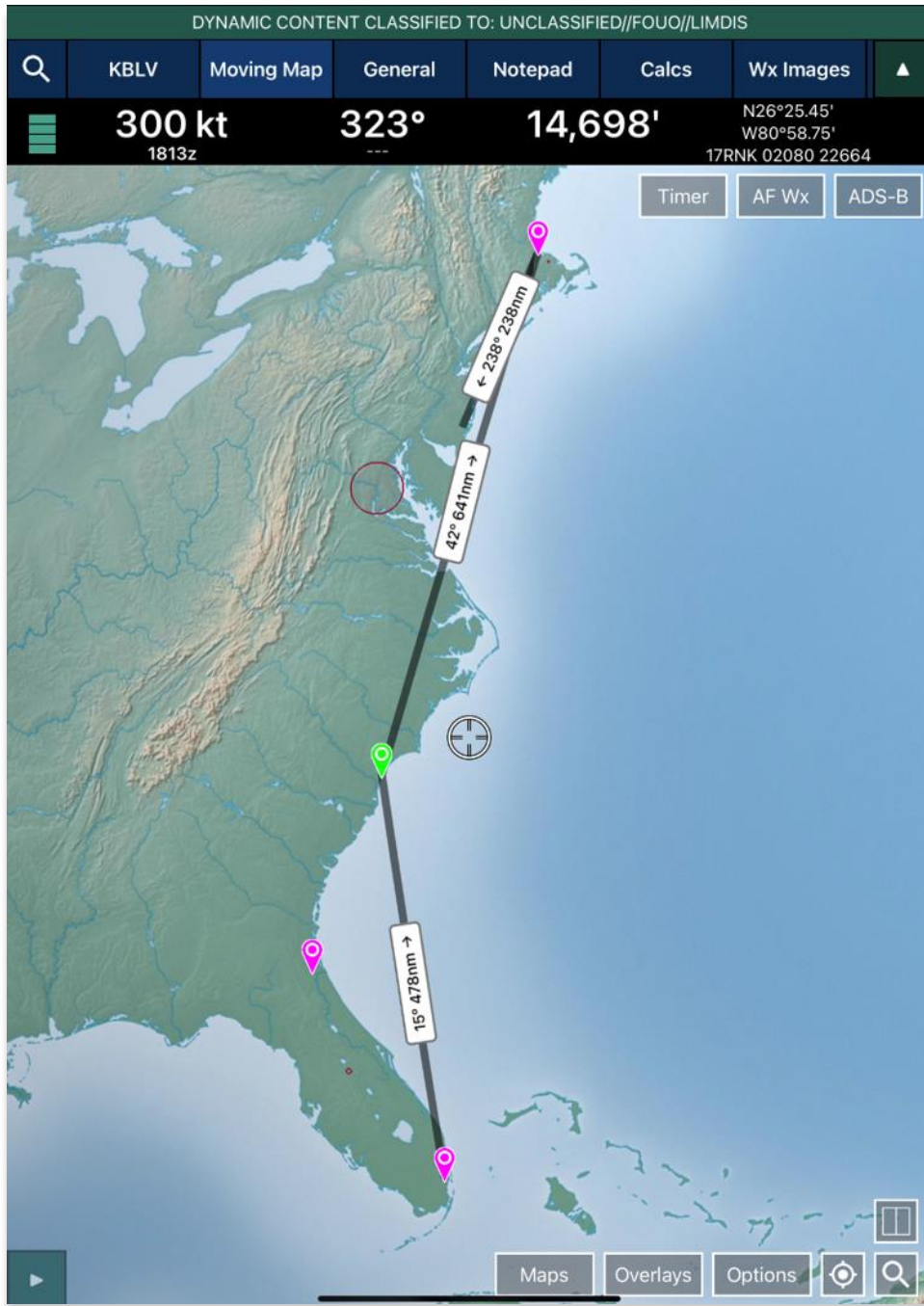
## 20.7 Import and Display Scheduled Flight Inspection Itineraries

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.



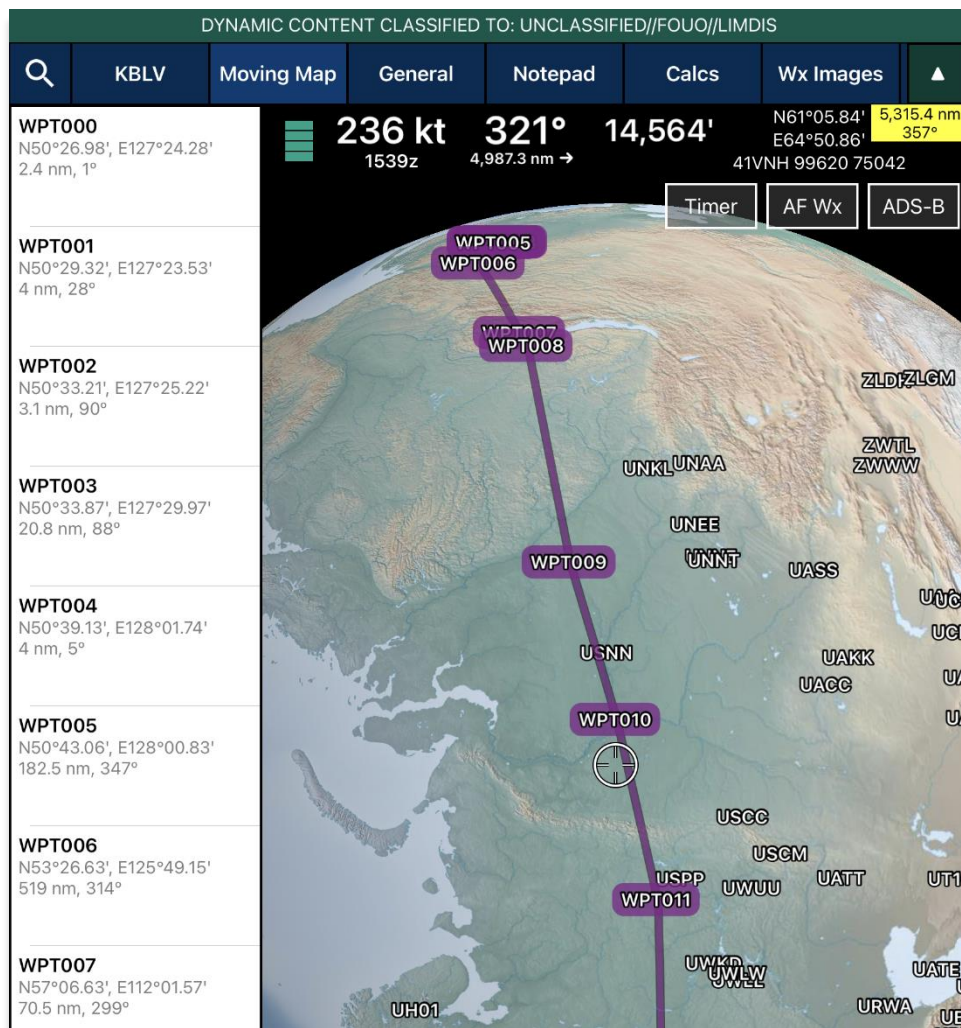
**NOTE:** One Flight Inspection Itinerary can be loaded at a time. Loading a new Flight Inspection Itinerary will result in deleting the previous itinerary.



## 20.8 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**.

## 20.8.1 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

## UNCLASSIFIED

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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