



# NaviTracker

*'As The Crow Flies' navigation and tracking in Airplane Mode.  
Recreational Navigation Tool using GPS, Compass, Waypoints,  
and Alarm Zones.*

## Application Reference



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# **I. Overview**

**‘NaviTracker’** has all the features that any person involved with outdoor recreational or navigational activities would need. The app operates on any iOS device (in background or foreground) that has a built-in or Bluetooth-connected GPS receiver. Navigation is based on GoTo Waypoints "As The Crow Flies". No Internet connection is required (can be used in Airplane Mode). However, when an Internet connection is present, location information is displayed on a map and Waypoints can be selectively interfaced with Apple’s Map app when installed on the same device.

Map displays are available when in off-line mode, provided that map images were downloaded from Open Street Maps (OSM) for each Waypoint prior to navigational use. Off-line maps are stored locally on the device and are managed by the user.

A comprehensive set of Navigation Screens are available to display Compass and typical GPS data. A rich database of Waypoints can be created from different input sources as well as user-supplied informational meta data.

Geofences to alert waypoint arrivals/departures can be configured as either circular or polygon-shaped Alarm Zones.

The user has the option to configure Alarm Notifications for monitoring targeted speed, altitude, and/or distance sentinels.

Alarm notifications can also be in audible voice format (English language) in case the device is being used while driving (when notifications are usually muted by iOS to prevent distraction).

A Tracking Log Manager handles a catalog of user-named track history for future review and analysis. Named tracks can be shared via email in formats ready for import into Google Earth, OSM, or into the ‘**NaviTracker**’ app installed on a different iOS device.

Some of the utility features cover data backup via File Sharing, email attachment, or synchronization with nearby devices running a copy of ‘**NaviTracker**’. Tracking history files can also be imported directly into the app as email attachments received on the device.

Devices with iOS 12 (and later) can configure the app to use Siri for short-cut commands.

The app performs all navigation functions without being connected to the Internet.

**NOTE:** With the exception of Siri Voice Shortcuts and selected downloading of Map images for off-line navigation, the app does not upload or depend on being connected to the Internet in order to perform core navigation functionality. All user-data is securely stored locally on the device and access-protected with owner configured password and/or a biometric type authentication method (e.g. Touch ID, Face ID).

Although primarily targeted for iPhone devices, the app can also be installed on an iPad or iPod touch, running iOS 9.0 (and later) as long as a GPS receiver hardware is accessible for location tracking. The GPS receiver can either be an integral part of the mobile device or a third-party unit connected via Bluetooth.

## II. Privacy and Data Protection

All data collected to meet the functional objectives of this app ('**NaviTracker**') are securely stored internally on your device and **not** uploaded to a remote server, iCloud, or any other Internet-based repository/service.

This app is not designed to share your information with any party or entity for any purpose.

Users can manage their data in confidence being assured that their information is kept private on the device on which the app is installed from the Apple App Store.

The user can control the apps' iOS Privacy settings based on certain functions to be performed.

Typical allowed features include access to:

1. *Location* **Always** for the app to perform navigation functions in either background or foreground
2. *Photos* to use as a location source when defining Waypoints or augment Waypoint meta data
3. *Camera* to augment Waypoint meta data for illustration purposes
4. *Face/Touch ID* to allow quick and secure app authentication
5. *Siri Search* for verbal short cuts to initiate app actions

6. *Notifications* for the app to issue local alerts when arriving/departing at a user-defined geofence
7. *Cellular Data* to access on-line Apple navigation maps and/or download navigation maps from Open Street Maps (OSM) for local storage and use in off-line mode. The preferred method for downloading off-line maps is over the Internet via a Wi-Fi connection.

## III. Navigation

- A. Compass/GPS
- B. Sun/Moon
- C. Waypoints
- D. Data Sync
- E. Settings
- F. Remove Demo Items

### Overview

A. Compass/GPS

B. Sun/Moon

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## **IV. Off-line Maps**

A. Current Location

B. Maps by Zoom Level

### **Overview**

**A. Current Location**

**B. Maps by Zoom Level**

## V. Monitor

- A. Speed
- B. Distance
- C. Altitude
- D. Tracking Log Manager

### Overview

- A. Speed
- B. Distance
- C. Altitude
- D. Tracking Log Manager

# **VI. Preferences**

- A. General Options
- B. Set App Login Credentials
- C. Data Backup/Restore
- D. App Feedback
- E. App Privacy Settings
- F. Siri Shortcuts

## **Overview**

Provides your feedback to our developers via the App Store with the intend of improving functionality in future releases.

Allows for the configuration of several app-wide behaviors.

## **A. General Options**

## **B. Set App Login Credentials**

Configure app-wide preferences, such as restricting app use by requiring either login authentication or having unrestricted access.

Authenticating with Touch/Face ID (if supported by device), or setting inactivity time-outs for automatic logout from the app to protect privacy.

If iOS 10.3 (and later) is installed on the device, then the app icon can be changed to display an alternative one on the Home Screen.

### **C. Data Backup/Restore**

The app will indicate that a device has been locked by monitoring if the device has iOS Password set to ON, and will display the respective status on certain screens, suggesting that iOS Password should be active to prevent unauthorized used.

Monitoring can be enabled/disabled to affect related alerts.

### **D. App Feedback**

Transfer constructive feedback and suggestions to our developers via the [Apple App Store](#).

Your comments will be reviewed by our team to improve the functionality of the app in upcoming releases.

The device has to be connected to the Internet in order to perform this function.

## E. App Privacy Settings

Displays the current iOS privacy settings related to app '**NaviTracker**'.

The user can change the settings based on certain features to be performed by the app.

Typical allowed features include access to:

1. *Location **Always*** for the app to perform navigation functions in either background or foreground
2. *Photos* to use as a location source when defining Waypoints or augment Waypoint meta data
3. *Camera* to augment Waypoint meta data for illustration purposes
4. *Face/Touch ID* to allow quick and secure app authentication
5. *Siri Search* for verbal short cuts to initiate app actions
6. *Notifications* for the app to issue local alerts when arriving/departing at a user-defined geofence
7. *Cellular Data* to access on-line Apple navigation maps and/or download navigation maps from Open Street Maps (OSM) for local storage and use in off-line mode. The preferred method for downloading off-line maps is over the Internet via a Wi-Fi connection.

## F. Siri Shortcuts

iOS 12 (and later) users can configure voice shortcuts to perform certain '**NaviTracker**' app features via Siri. Please note that Siri does require that the device be connected to the Internet.

## VII. How-To Tutorials

### A. Handling File Sharing

#### Overview

The usage descriptions are somewhat generic in nature to cover the general steps in order to accomplish a given task. Because of ongoing iOS feature updates and version releases, some specifics might deviate from the examples shown in the tutorials.

#### A. Handling File Sharing

You can copy files between your computer and app '**NaviTracker**' on your iOS or iPadOS device using File Sharing.

If you're using **macOS Catalina**, use the **Finder** to share files between your computer and your iOS or iPadOS device, or perform alternative Finder actions as described on the Apple Support website.

If you're using **macOS Mojave or earlier** or a **Windows PC**, use **iTunes** to share files between your computer and your iOS or iPadOS device, or perform alternative iTunes actions as described on the Apple Support website.

### ***Finder File Sharing***

(Copy from your Mac to your device)

1. Open a Finder window.
2. Connect your iPhone, iPad, or iPod touch to your computer with a USB cable.
3. Select your device in the Finder.
4. Click the Files tab to see a list of apps that can share files.
5. Click the triangle next to app '**NaviTracker**' to see the files that you can share.
6. Drag the files to the app on your device. The Finder copies the files to your device.

### ***Finder File Sharing***

(Copy from your device to your Mac)

1. Select the files that you want to copy.
2. Drag the files to a folder on your computer. The Finder copies the files to your computer.



## ***iTunes File Sharing***

(Copy files from your computer to an iOS or iPadOS app)

1. Open latest version of iTunes on your computer (Mac or PC).
2. Connect your device to your computer using a USB cable.
3. Select your device in iTunes.
4. On the left sidebar, click File Sharing.
5. Select the '**NaviTracker**' app from the list in the File Sharing section.
6. Drag and drop desired files from a folder or window onto the Documents list to copy it to your device.  
You can also click Add in the Documents list in iTunes, find the appropriate file, and then click 'Add'.  
iTunes copies the file to the app '**NaviTracker**' on your device.

## ***iTunes File Sharing***

(Copy files from an iOS or iPadOS app to your computer)

1. In iTunes, select the '**NaviTracker**' app from the list in the File Sharing section.

2. Drag and drop files from a folder or window onto the Documents list to copy them to your device.

You can also select the file or files you want to copy from the Documents list in iTunes to your computer, and then click 'Save'.

iTunes copies these files from the app '**NaviTracker**' to your computer.

**NOTE:** All imported files are locally stored on the device in compressed format before being automatically deleted from the source location.