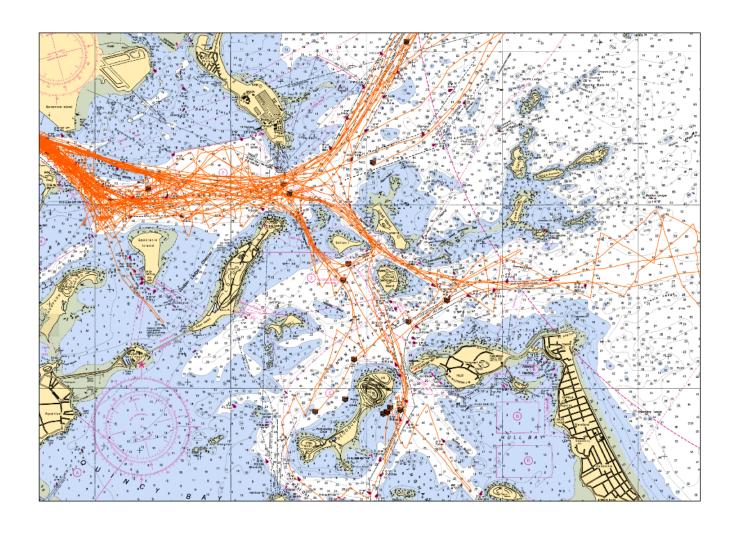
# Your Handheld, Self-Contained Navigation Station

### iOS Edition

TJ - January 12, 2018



## An Ounce of Prevention is Worth a Pound of Cure

Navigation is the art of keeping your vessel clear of trouble while getting where you're going. At sea, navigation is your ounce of prevention.

These days the tools available for navigation are portable, inexpensive and make keeping out of trouble easier than ever - but only if you prepare correctly. With the right inexpensive upgrades your smartphone becomes a handheld navigating dynamo. This guide will get you the tools you'll need whether your a beginner navigator or an expert looking for an edge.

## How to use this guide

This guide is best followed from on the device you intend to use for navigation. All of the app links should take you directly to the App Store so you can simply click install. Where available I have provided the links to the free trial version so that you can try before you buy.

The apps and data that you'll download using this guide could use multiple gigabytes of data. You should connect to Wi-Fi unless you're lucky enough to have an unlimited plan; and even so Wi-Fi will likely be faster. The downloads will still take a while.

If you're in a rush look for the blue links. Clicking the links and downloading the apps will get you most of what you need; in addition to that make sure you download the charts that you need.

In this iOS edition it probably seems like there are spurious paragraph breaks. I've found these necessary because the PDF viewer in iOS gets multiple links in one paragraph confused. Hopefully this makes the guide easier for you to use.

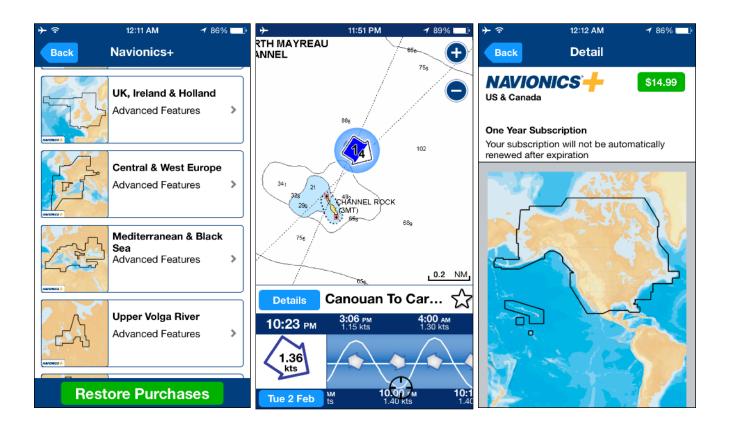
## **Chartplotter App Selection**

The most important navigation app is your chartplotter app.

On iOS my favorite chartplotter app is Navionics; I use this as a chartplotter as well as for tide and current information. For your phone you'll need the standard version of Navionics (*free* - <u>download here</u>).

This three minute video introduction demonstrates the most important features of Navionics.

For a tablet you need the "HD" version of Navionics (*free* - <u>download here</u>). The free Navionics apps have some features and data but they're not usable for navigation unless you subscribe to some of the chart regions. You purchase them in-app:

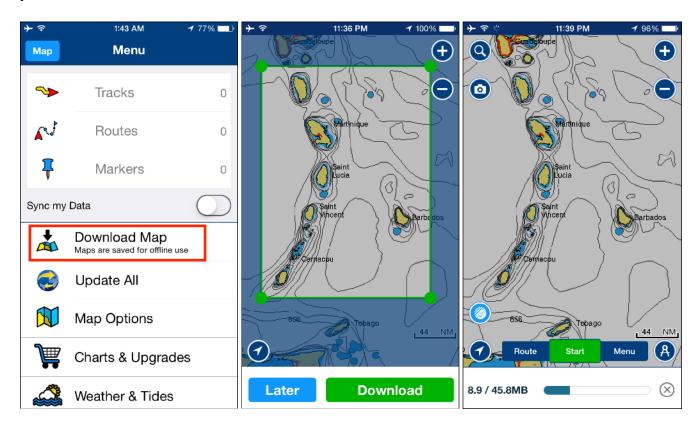


The in-app purchases of the "standard" edition will be cheaper than the "HD" version. The prices change too; the last time I bought the "Caribbean & South America" it cost \$14.99 not \$7.99 so, fortunately, they're not always going up.

#### **Navionics Chart Downloads**

Navionics can't be relied upon for navigation without downloading charts to your device's local storage. Download charts for the areas that you'll be sailing. Download charts for areas that you'll pass by while sailing. Download charts for any areas that you could possibly have to divert to while sailing. MAKE SURE THESE CHARTS ARE DOWNLOADED and not just accessible while your phone is connected to the network. In Navionics I downloaded Bermuda, the Caribbean Islands I've visited, the adjacent Caribbean islands and the entire East Coast of the United States.

Go to "Menu > Download Map" and select the area of the charts you want downloaded. The best way to check if the charts are downloaded is, after you've downloaded, turn your device into airplane mode and review the charts and anchorages within the areas you think you downloaded.



## **Other Apps and Utilities**

<u>Download NOAA Chart One</u> (<u>SavvySalt cached copy</u>) so you'll always have a way to figure out what the squiggles on the charts mean.

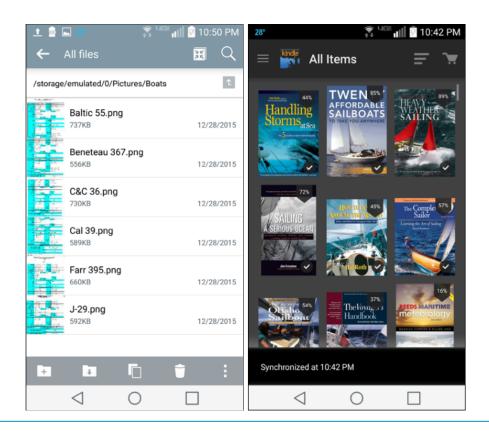
Download this Cheat Sheet of Rules of the Road and Navigation Lights (SavvySalt cached copy). (Lights and Rights.pdf)

<u>Download the Coast Guard App</u>. There's no reason not to have this available.

Learn how to <u>use your device as a flashlight</u>. iOS is great here because you don't even have to unlock your home screen. After my first offshore delivery it was obvious I needed to start using my phone as a flashlight; it's immensely useful to usually have a flashlight in your pocket.

Make sure you know how to <u>use your phone's calculator</u>.

If you have any sailing E-books download them to your phone. Local copies of your sailing books could come in handy out there.



Take a screenshot of your boat's key dimensions from it's <u>sailboatdata.com page</u>. I have screenshots for every boat I sail on regularly in one folder. Take them on your phone so they fit the screen just right when you need them.

If you sail offshore where you don't have access to other weather apps you should download a GRIB app. This season I used PocketGrib (\$5.99 - download here). I recommend PocketGrib on iOS; it's easy to use and reliable.

If you're looking for weather routing the only iOS app that I've heard anything good about is PredictWind Offshore. It takes a while to setup and when you add in the pricing model I gave up pretty quick; I do know at least one offshore racer who swears by it.

At this point you've got a lot of resources that can be used for navigation and more. This is much more than I can remember so I setup a home screen on my phone with everything I just collected so that, someday when I'm in a rough spot, if the solution happens to be on my phone it's right in front of me (from my current Android phone):



## **Preserving your Handheld Chartplotter**

Disadvantages of using your phone as a chartplotter are that you can drop it, lose it overboard, ruin it with saltwater or run out of batteries. Fortunately there are ways to ameliorate these problems:

- Start with a waterproof rugged case. I have this guy which I've taken snorkeling without leaks; the lanyard makes it difficult to drop your phone.
- Get <u>a DC adapter</u> and a cord that will work onboard. If you chose white or black it's really easy for somebody else to accidentally think it's theirs.
- Get a <u>backup charging pack</u> or two.
- If you're paranoid get a <u>portable solar panel</u>. This was immensely useful when I used to adventure on boats without batteries.

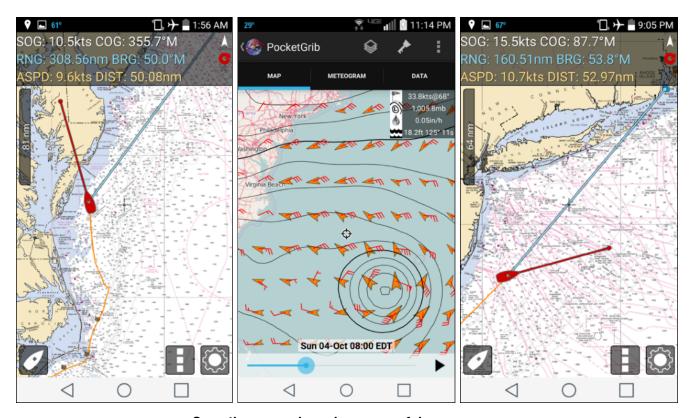
#### Your backup backup handheld, self-powered, waterproof navigation station

Do you have an old smartphone? With a wifi connection and this guide you can turn this old phone into a backup backup chartplotter. Does Mr. Safety bring a backup backup chartplotter? You bet I do!

If you're super paranoid store your backup backup chartplotter in a <u>faraday cage</u>.

## Wrap-up

Your phone now has more navigation capability and data than all but the most well appointed onboard navigation stations. You have the necessary equipment and data to keep your vessel clear of trouble during the trip in the palm of your hand. As you start to become proficient with these tools you're on your way to being a savvy navigator!



Sometimes my phone is even useful as a camera

