

Navigation In Your Pocket!

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I've been struck this summer by how much we've used iPhone applications on Snap Dragon to augment the normal complement of paper charts, compass, chart plotter, VHS, radar, and barometer we use to safely get where we want to go. We've used our iPhones for navigation and piloting, sight reductions (for practice), seamanship information, and weather. That's in addition to the things you think about as normal smartphone functions - communication, news, entertainment.

So I thought I'd give you a rundown on how iPhones have been useful to us on the boat. This is not intended to be an exhaustive list or a full-scale review of iPhone apps for boaters. Think of it as more of a case study of some useful tools. If you're thinking about a new phone, check out the new smartphones. There are smartphones available from all the wireless carriers at this point, but be sure to check out the applications available before you buy. At this point, the iPhone is leading the pack on variety and scope of applications software. You can get one for as little as \$100, but a two-year voice and data service contract is required.

Why is an iPhone useful?

An iPhone is a handheld computer integrated with a cellular phone. It works well as a regular voice phone using the AT&T cellular network. It also connects to AT&T's cellular data network, and to any wifi network you have available. The front side of the phone is a large touch screen, which is used for most input. All iPhones have an internal GPS chip, and the current models have an electronic compass. Apple delivers iPhone applications through its iTunes App Store (currently 250,000+ apps available). You can purchase and download applications over the AT&T network, over a wifi connection, or download them to your PC and then install them on your phone. Many apps are free; more specialized, higher-powered apps are priced from \$1 to \$50, sometimes more. There are lots of developers putting out apps for boaters; competition is driving app prices down.

One consideration for using an iPhone on a boat is whether the app you're using requires a cell signal to pull down data, and whether you have a cell signal at your current location. Most, but not all, navigation apps pre-store charts on your phone, so you don't need network connectivity to use them. Weather and news apps tend to need to be connected. Depending where you cruise, you may find AT&T's network coverage spotty. In our area, the ICW in upper Adams Creek and from the Bay River to the Alligator River has lots of dead spots, as does Okracoke and most of Pamlico Sound. The rest of the east coast from Maine to Florida is well covered, including the ICW and up to 15-20 miles offshore.

iPhone Boating Apps

- **Navionics Marine:** US East (\$9.99, no connectivity required). This chart plotter app has the same East Coast charts used on RayMarine chart plotters. You can overlay satellite photos on the charts; set waypoints and routes; check tides, currents, sunrise, sunset, moonrise and moonset;

record your track and view it on Google Earth or Facebook. Marina, fuel, and point-of-interest information is included. This app makes a good backup chartplotter. There is lots of development going on in this area, and new competitors are coming out all the time.

- ***AyeTides*** (\$9.99, no connectivity required). Does only tides and currents, but does it quickly and easily. Information for any date, time, tide or current station available in text or graphics.
- ***StarPilot*** (\$79.99, no connectivity required). A full-functioned celestial navigation calculator. Sight planning, sight reductions, fixes, LOP plots, solutions for all common nav and piloting problems. Especially useful if you, like me, haven't finished your sight folder for the Navigation course.
- ***Knot Guide*** (\$1.99, no connectivity required). Ninety-one knots with step-by-step color photo instructions. Useful for learning, refreshing.
- ***Imray Marine Rules & Signals*** (\$6.99, no connectivity required). Rules of the road, full Colregs text, lights and shapes for boats and marks, radio use, flags, distress signals, etc. Flash card system for learning and review. Coastal, inland, and international buoyage systems. This is everything you need to know.
- ***The Weather Channel*** (free with ads, \$3.99 with no ads, connectivity required). This is the full Weather Channel internet application. Daily, hourly, weekly weather forecasts by zip code. Severe weather alerts. In-motion weather activity maps.
- ***RadarScope*** (\$9.99, connectivity required). Originally developed for storm chasers on the great plains, this app provides NEXRAD radar data feeds from each of the 140 NEXRAD sites around the country. Pick the site closest to you, and you'll be able to see what's going on around you or over the horizon. Your location shown on the map along with static or animated radar data. Extremely useful.
- ***Boating Weather*** (\$2.99, connectivity required). Get the National Weather Service marine forecast you want without having to wait for it on your VHF. All forecasts immediately available in text format.
- ***Hurricane*** (\$3.99, connectivity required). Complete information on all Atlantic and Pacific tropical depressions, tropical storms, and hurricanes. Pulls data together from a variety of sources and makes it instantly available. Full information on location, intensity, speed and direction. Track forecasts from 10 tracking models, consensus track forecast, satellite photos, radar feeds. Data on historical hurricanes back to 1851. This time of year, this is a great app to have in NC!
- ***Wind Alert*** (free, connectivity required). Gives detailed hourly wind forecasts and actuals for 40,000 locations. (There are nine between New Bern and Okracoke.) You can set alarms for too much/too little wind.

- **Wind Meter** (\$0.99, no connectivity required). What's the apparent wind over your deck? Just turn your iPhone upside down and hold it up to the wind. The app listens to the wind noise from the microphone and gives you a wind reading. And it's accurate! Nice little app.
- **New York Times** (free, connectivity required). The New York Times is just an example. Pick your favorite news source - newspaper, TV channel, website - and it's probably got a free iPhone app. If you have a network connection, you have access to as much information as you want. Or were you trying to get away from all that on your cruise?
- **iPod** (free with iPhone, no connectivity required). Download your music and videos from iTunes on your PC to your iPhone, and listen/watch on the boat. Use headphones or plug into your on-board speakers or stereo. No more messing around with CDs!

Summary

Those are the apps we used this summer on the boat. Not every day, but when they were needed they were very useful. And all available at relatively low cost in a package that easily fits in your pocket! One note on that, however. iPhones aren't waterproof, so if you want to use one under way in the cockpit, or take one ashore in your dinghy, a waterproof bag or case is essential.

You can get more information on these apps, or what else is available for boating from the iTunes store. You don't need to have an iPhone, but you do need to download the free iTunes PC or Mac application and set up an account. It doesn't cost anything unless you make a purchase.

One last thought. The iPhone has a 3.5-inch (diagonal) screen that is useable but pretty small for charting, although it's fine for everything else. This past spring, Apple released the iPad, which runs the same apps and has a 9.7-inch screen. Although it's much more expensive than an iPhone (\$630 and up with GPS), it costs much less than a similarly sized chart plotter and has much greater functionality. Many people are exploring using iPads as a chart plotter replacement, although waterproofing is still an issue.