MOBILE DEVICES ON BOARD

Club member, Owen Mace, gives an insight into using mobile devices on boats

Smart mobile phones and tablets have been around for some years now and many of us use them daily. What sets this newer generation of smart mobile devices apart from their older counterparts are the huge numbers of applications available for them.

Quite apart from games and social networking applications ("apps", as the *cognoscenti* call them), there are literally hundreds of thousands of other apps available. In fact, I wrote the first draft of this article on an Apple iPad.

Oh, it's worth saying that smart phones do actually work as telephones and texting (SMS messaging) devices. They also connect to the internet and the web so that you can also send and receive emails and browse the web.

Let's look at how smart phones and tablets might be useful for boaties.

Communication at Sea

Of course, communication is an obvious example and more than one hapless boatie has made contact with authorities using their mobile in order to summon help. I think they are a useful backup to our marine VHF radios - they use a different set of batteries, so if you lose your ship's batteries, you may still be able to make contact with your mobile.

I say "may be able" because, of course, you need to be in range of a mobile tower to use your mobile or tablet to communicate. I find that on a voyage from North Haven to Port Vincent I can communicate for much of the voyage provided I am on deck. If I am below more than a few miles out, I lose the signal and can no longer communicate. Some people have external aerials and mobile phones for regional areas and they undoubtedly do better.

As a caution here, Telstra's NextG service is said to be the best coverage along our coasts and it claims coverage up to 70 km out to sea (ref 1). Telstra gives advice on improving coverage on the same web page (ref 2). Other carriers utilise the Telstra network for coverage outside their own network but sometimes it is with reduced performance. Check with your carrier for coverage at sea, including data coverage.

If you have coverage and a 3G-enabled tablet or mobile then emails are another means of communication. Most tablets have WiFi but that's no use at all if you are at sea.

The World Wide Web

If you have a NextG or 3G, enabled device, then the web is available to you while you are in a coverage area. You have access to the web with its plethora of weather forecasting services, both free and by subscription, see "Web Weather Services".

It goes without saying that if you have a satellite phone with a web connection then these services are available to you outside the mobile coverage area, that is, almost anywhere on earth.

Apps

This is where things get interesting. Boaties need apps that don't need communication with the web to operate - games are an obvious example. But what about apps that are useful for us boaties?

Tides

First, and I'm leaving the most interesting ones to the end, are tide predictions. The one I use for tide predictions is called AyeTides for which I paid a small sum but today is advertised for about $10.50. There are dozens of tide applications that are available for Apple mobile devices and costing from nothing to around $10. Most do not need to be connected to the web to operate.

Web Weather Services

There are heaps of weather apps but, of course, they need to be connected to the web to be able to provide you with the most recent forecasts. There are so many that I am not even going to list them. Trouble is, not all agree, especially for forecasts some distance into the future because different services use different computer models to forecast future weather and, like climate change models, they do not all agree one hundred percent.

Knots

The next category of apps that do not need the web is knot tying. The one I have is called "WhatKnot" and there are over a hundred other knot apps. I suggest you look at knot tying apps you want to download to ensure they meet your needs. An app on fly fishing knots may not be what you want on board. Costs range upwards from zero.

Compass

The next app category, and we have nearly reached the biggie, is positioning. Most of the devices I am talking about have built in GPS receivers and so they are aware of where you are. There are apps that display position (latitude and longitude), speed over the ground (SOG) and course over the ground (COG), height (handy at sea), etc. Not hugely useful in view of the biggie which is ....

Charting

Yes, there are heaps of charting apps and the surprise is that they are so darned cheap. You know what paper charts or a chip for your chart plotter costs - heaps - and yet charting apps cost roughly the same as a single paper chart, more or less, but cover all or a fair slab of the coast of Australia! Wow!

I have three such chart plotters on this iPad. They are Navionics Marine Australia (ref 3), iNavX (ref 4) and iSailor (ref 5). All three give me the charts that I want, that is, the Gulfs, and I have looked at areas around Sydney, Melbourne, Tasmania and Darwin. They appear to be complete as far as I can tell from a quick look. All three apps pan and zoom using gestures as you would expect. They display position, SOG, COG, etc, measure distances and have those handy tools; waypoints, journeys, tracks also. Brilliant.
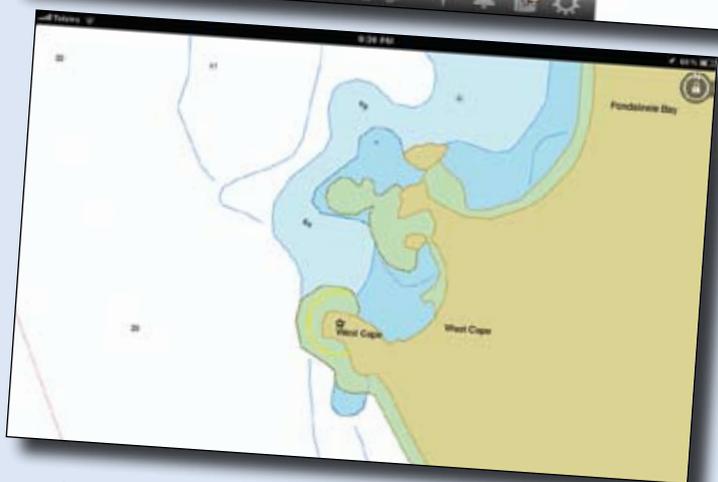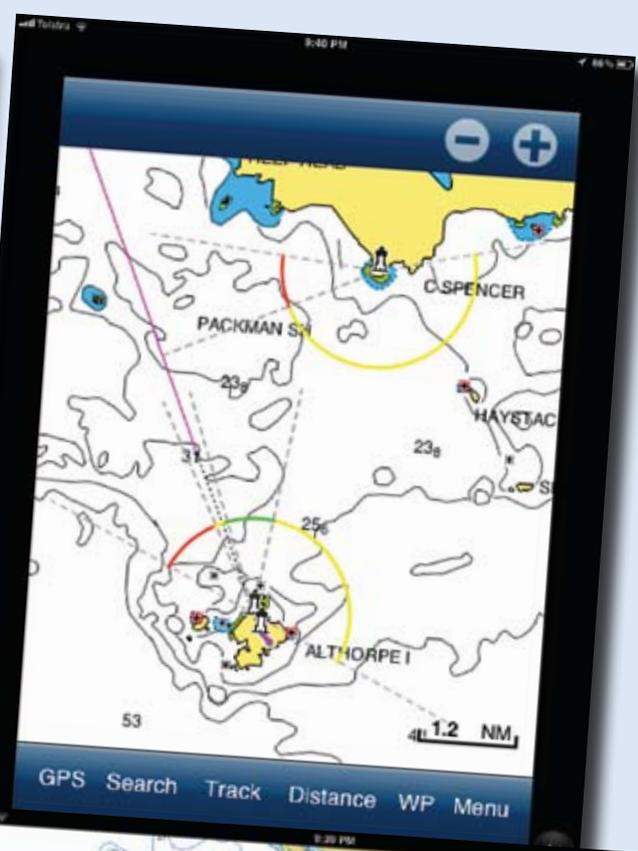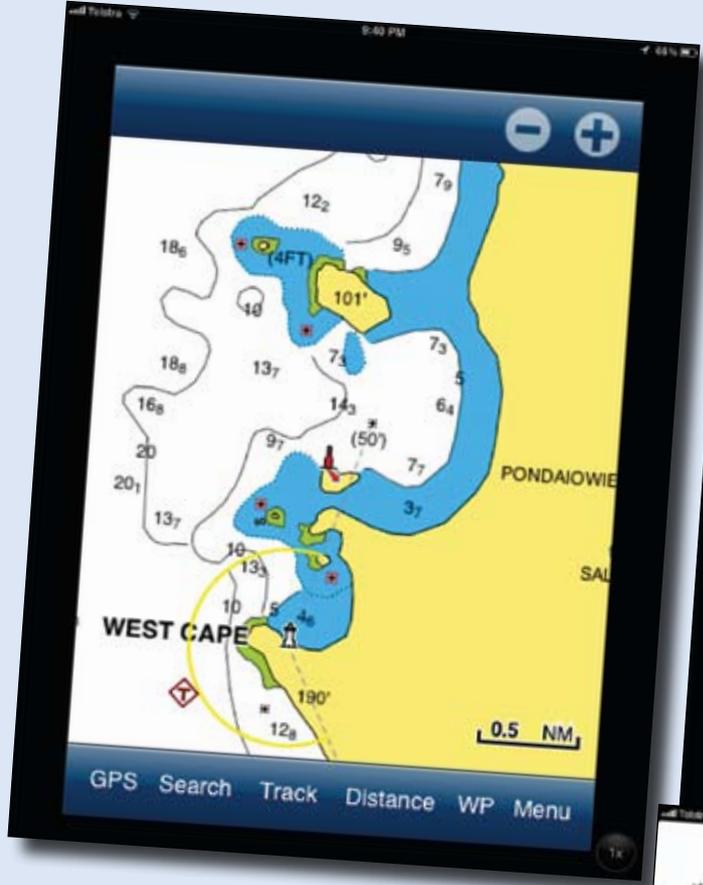
Opposite are some screen shots from my iPad – they may not be the latest version of the apps or the chart data so don't compare the two apps. The images are taken from two of my chart apps and show Cape Spencer and Pondalowie.

Here's an idea – set one of these apps as an additional anchor alarm and keep it right by your ear as you sleep.

There appear to be around a dozen chart plotters for tablets with costs up to around $50. If you want charts for another region, such as the USA and Canada, you pay the same amount. If you are considering buying a chart plotter app, be sure you look at all the offerings and their features. Most importantly, make sure they have charts for the area you want to sail. Remember that the US charts are provided free to download by the US government but, sadly, not so in this country. Since some chart plotting software assumes that you will download chart data, it can be expensive to download chart by chart from the Australian Hydrographic Office.

You can even buy a waterproof housing for your iPad.

What's the catch? I really don't know, other than that mine are not connected to my on-board instruments, radar or autopilot. However, Brookhouse and Digitalyacht make WiFi devices that

connect instruments to your iPad app (references 6 and 7). Some non-Apple tablets have USB inputs and so perhaps on-board instruments could be connected to them via an adapter.

If you own an Apple Mac you can set up to use an iPad as your autopilot, thruster control and instrument display. This means you can manage your boat, navigate and steer from anywhere on board or even nearby. I haven't seen this done but I have seen YouTube videos.

Do remember however that electronic navigation aids should be treated with caution and you should have paper charts in case the electronics fail.

Laptops

There are quite a number of chart plotter software applications for laptop computers. Again, make sure you understand the cost of chart data as there is no free chart data for Australian waters, unlike the US.

The advantage of some of these devices is that they have USB ports and so there is the potential for direct connection to your ship's instruments, radar and autopilot.

Android Apps

I have concentrated on apps for Apple mobile devices, iPhones and iPads, because that is what I have. Nevertheless, there are competing mobile phone and tablets using Google's Android operating system. Again, there are hundreds of thousands of apps for Android devices. My impression is that there are more iPhone/iPad apps for boaties than Android.

There is at least one Windows tablet so presumably laptop chart plotting software can be used on such a tablet. For us computer nerds there are open source operating systems and software suitable for tablets and mobile phones.

Summary

So portable devices (smart phones, tablets and laptops) have come of age and there are useful apps for us boaties. If you know of any others let us all know about them.

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