

Computers Aboard

Electronics: Four cruisers discuss the systems that keep them connected, entertained and on course. *by Jen Brett*

FROM A POCKET-SIZE smartphone to a full-blown desktop PC with monitor, keyboard and printer, you'll face a lot of choices when it comes to selecting a computer for your sailboat. What you choose will likely be determined by how you plan to use it. If you'll be keeping up a website, working remotely or editing a lot of video, your requirements will be

different than if you just need something to send and receive emails and weather and to surf the Web from time to time.

Below, several veteran offshore sailors discuss their computer solutions and recommend gear for those fitting out their sailboats.

Michael and Windy Robertson and their two daughters have been cruising

the waters off the U.S. West Coast and Mexico aboard their Fuji 40, *Del Viento*, since the middle of 2011.

"Aboard *Del Viento*, we have a 17-inch Dell laptop, a 14-inch HP laptop, and an iPad 2 with 3G," Michael reports. "We bought the 17-inch laptop thinking that it'd be powerful enough for Windy to do freelance cartography work on, and we figured the large screen

1. **MacBook Pro** laptops are housed in an aluminum case, and several sailors have reported that the computer holds up well aboard.
2. **iPads** have become a favorite gadget among sailors. This one is protected with an Otterbox case.
3. **Panasonic Toughbooks** are rugged laptops that can withstand abuse.

would be nice for watching DVDs. We bought the 14-inch HP thinking it would be good to have two computers aboard, because there are four of us, and I figured this would be the computer I'd use personally.

"In reality, the 17-inch Dell is hardly ever used. The DVD drive broke at some point after we started cruising, and it's a big, heavy beast. When it dies, we'll replace it with a

cheap, smaller PC laptop like the 14-inch HP. The 14-inch HP laptop is the workhorse. I use it for all of my writing and for family movie night. It's also light and easy to carry.

"Before cruising, we bought the iPad because we'd read about other cruisers who use them for navigation. We're so glad we did. Though we have paper charts aboard, a fixed-mount GPS down below with a tiny chart-plotter screen, and a couple of handheld GPS units, we've never used anything to navigate other than the iPad and cruising guides. We love the iPad. We use the Navionics app, and it's worked great for us. We love the ability to move and pinch the chart with our fingers — it's super intuitive and easy. We're considering buying another iPad as our backup. I never use it for writing or updating the blog because it doesn't get along with Blogger, but Windy and the girls use it all the time for checking email, keeping the family calendar, and calling family by using Skype and FaceTime.

"Contrary to what we imagined before heading out, we rarely take either of the PC laptops off the boat. There's just no need. We usually can access the Internet on the boat, either through a marina connection, 3G Internet we buy, or free Wi-Fi accessed via our Wirie booster antenna, so there's no need to schlep a computer to an Internet café or something. If we started over, we'd have two cheap PC laptops and at least one iPad, and two if we could swing it."

John and Wendy Clarke and their two children spent four years cruising along the Eastern Seaboard of the

U.S. and Canada and in the western Caribbean aboard *Osprey*, their Adams 45 steel cutter.

"*Osprey* carries four computers on board. We have two Toshiba Satellite Pro laptops that run on Windows XP and two Apple MacBook Pro laptops. Each of these computers has a primary function and an important secondary function," says John.

"Our primary Toshiba serves as our main computer navigation source. We have four different stand-alone nav programs and one that interfaces with the Raymarine chart plotter. This computer serves as our high-seas communications link through SailMail and our SSB. We also use this computer to gain Wi-Fi Internet access using the Ubiquiti Bullet receiver. The second Toshiba is a complete backup to the first, and I use it for travel when I'm delivering boats. It's also used to play DVDs and to access external hard drives.

"The primary Apple is Wendy's. She uses this computer to keep track of all of our financial matters. She sends email when we have Internet access, and it's her primary writing platform. We also store all of our photos and journals on this computer. The most recent Apple belongs to the kids. They use it for school, research and entertainment. The primary computers are backed up to an external hard drive regularly.

"As an additional navigation backup, we've just purchased a new iPad, and I absolutely love it. I run the iNavX, Garmin BlueChart and the Navionics programs at the same time.

"The oldest computer is our primary Toshiba. It's

5 years old and sits on the nav-station table without any special protection. I have some trouble with corrosion on USB cables, but it's minor. The next oldest is the second Toshiba, at 4 years old. It doesn't enjoy any special protection, and it travels the most of all the computers. Over time, it's developed some idiosyncrasies, but

we still use it a lot. Wendy's Mac is next at 3. It's used all of the time and is still going strong with, again, no special consideration.

"My best advice to cruisers looking for an onboard computer is for them to get a proven operating system with quality hardware. Once you find what you like, get another one and duplicate the



Five Cases to Protect Your Investment

The moist, salty environment aboard a typical sailboat can wreak havoc on expensive electronics, so you need to protect your devices. Fortunately, waterproof and drop-proof cases are easy to find.

- 1. Lifeproof (www.lifeproof.com) makes a range of low-profile waterproof cases for iPhones and iPads.**
- 2. For impact resistance, check out Otterbox cases (www.otterbox.com) for smartphones and tablets.**
- 3. Pelican cases (www.pelican.com), like the one above, provide the ultimate protection for all of your electronics, including laptops, hard drives, tablets and cameras.**
- 4. With multilayer construction, Ballistic phone and tablet cases (www.goballisticcase.com) offer strong impact resistance and screen protection.**
- 5. OverBoard cases (www.overboardusa.com) look similar to dry bags, but you can still use your electronics while they're safely protected inside. The company makes bags for just about any handheld electronics (cameras, VHF radios, phones, tablets) and even a line of waterproof backpacks that can easily fit a laptop. It also sells desiccant sachets to keep moisture out when storing electronics.**

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essential programs that you use all of the time.”

Bill and Lara Calfee and their daughter, Isobel, left Lake Champlain, Vermont, in

laptops on board. We don't need two, so we've talked about mothballing one for when the salt air gets to the one in use. So far, they've held up well,” says Bill. “Lara's is

have electronic charts and guides for the world. I also have a program called Parallels on this machine, which lets me run Windows at the same time that I'm

tropical summers. It's worked every day for 23,000 miles in 17 countries. It's posted over five years of blogs in every hemisphere, delivered thousands of weather GRIBs, and has kept us connected with business, friends, and family when it matters.

“We selected this Toughbook because its titanium case, shock-mounted hard drive, waterproof keyboard and gasket-sealed ports make it ideal for the harsh environments on board. I

IN ADDITION TO THE TOUGHBOOK, WE HAVE AN IPAD ON BOARD, WHICH HAS REVOLUTIONIZED THE WAY WE PLAN TRIPS AND NAVIGATE.

2009 aboard their Hallberg-Rassy 38. Since that time, they've cruised along the Intracoastal Waterway and throughout the eastern Caribbean.

“We have two MacBook Pro

3 years old. She uses hers for photos mostly, with a little email also. I have a hard drive that has the archived photos on it.

“My MacBook Pro is used for emails and trip planning. I

running the Mac OS, so I can use Windows-based programs such as SailMail and MaxSea. I also blog from this one and can post them using SSB through SailMail.

“We have a Canon i100 printer that we use if we need to print something, which is rare. We also have a little Neat scanner, which we've found to be useful.

“We have an iPad, which I resisted forever, and I love it. We use the Navionics app, which is \$49 and has very good charts. If things are sketchy, we use it to back up the chart plotter, and often, when we're on passage, we'll use it to check out where we are.

“We should store the laptops and iPad in a Pelican case, but it's just too cumbersome. Instead, we do backups and store our hard drives in a Pelican case.”

Neville and Catherine Hockley are nearly six years into their circumnavigation aboard *Dream Time*, their 38-foot Cabo Rico. They are currently cruising in French Polynesia.

“Our primary system on the boat is a Toughbook 30, which is Panasonic's most durable laptop,” says Neville. “We've had the system on the boat for almost six years, and it's worked without any issues. It's been dropped, banged and splashed. It's endured hurricanes, gales, rain squalls and long, humid

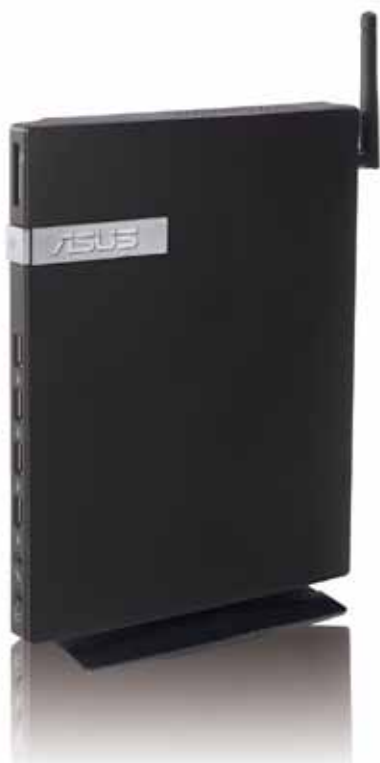
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use the system primarily for my work in graphic design, maintaining our cruising website, downloading weather GRIBs, and for emails.

“In addition to the Toughbook, we have an iPad on board, which has revolutionized the way we plan trips and navigate. We use it for all the obvious features like email, Web and entertainment, but the iPad has also become our remote nav table, or rather nav tablet. iNavx is an app installed on the iPad which, in addition to displaying charts, is capable of receiving and displaying all the boat's information, such as boat speed, wind speed and direction, water depth and temperature, and lat/long. The iPad is housed in an Otterbox. The Toughbook doesn't need one.”

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Jen Brett is a Cruising World associate editor.



Another Option

While not typically thought of for use on board, a permanently mounted desktop-computer system may work for you. The Asus EeeBox PC (www.asus.com) is tiny at just 8.5 by 1 by 7 inches and can be mounted nearly anywhere. It also sips power, requiring only 40 watts (about 3.3 amps). An Apple option is the Mac mini (www.apple.com), which comes in at 7.7 by 1.4 by 7.7 inches. Add a display and keyboard, and you're good to go.

J.B.