

TURN YOUR BOAT INTO A FLOATING OFFICE

Marlin®

THE INTERNATIONAL SPORTFISHING MAGAZINE

Do Fish Like Your Boat?

What Sounds Raise
and Repel Big Game

Top-Secret Tricks
to Target Daytime
Swordfish

Hawaiian Lure Tips
Passed Down
From the Greats

Stanley Meltzoff
The First True Painter

MARCH 2010
www.MarlinMag.com



\$4.99

A man with short blonde hair, wearing a grey polo shirt and blue sunglasses, is sitting on a boat. He is holding a black mobile phone to his ear with his right hand and a black laptop on his lap with his left hand. The background shows other boats and palm trees under a clear blue sky. The word "OFFSH" is written in large white letters across the top right of the image.

OFFSH

How to Open
a Floating
Branch so
You're Never
Out of Reach

BY LENNY RUDOW



BOAT OFFICE

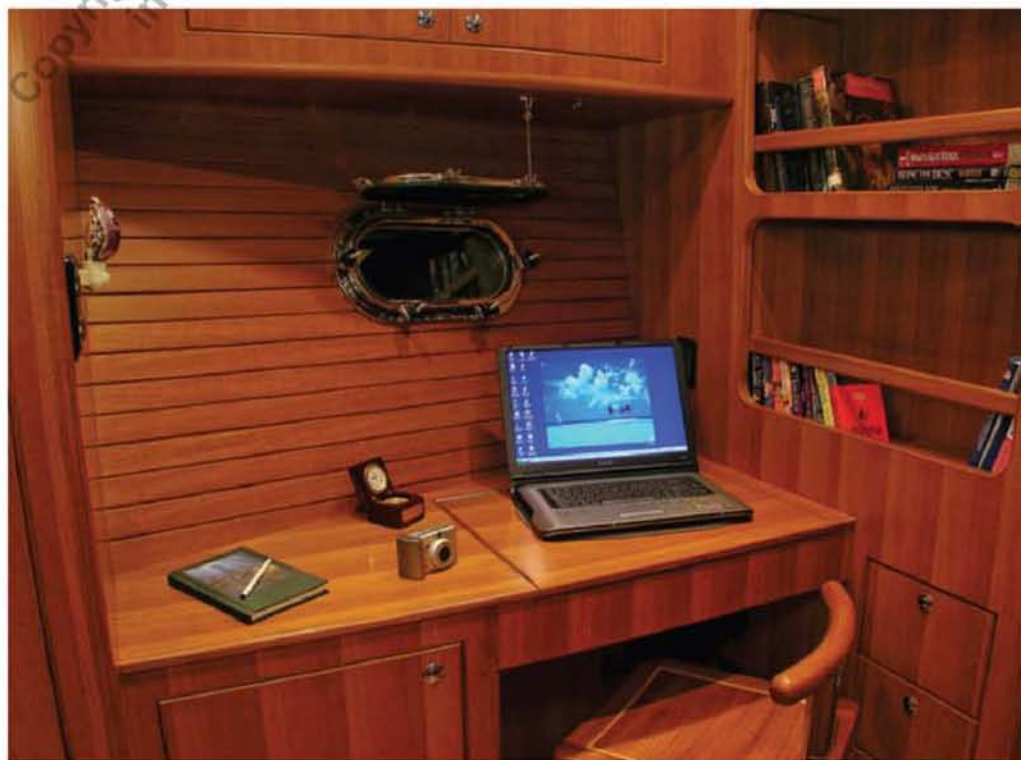
The marlin bite is wide open, but the same thing could be said about your accounts-receivable department — the manager quit yesterday, and if you're not around to ride the bean counters, you know the numbers are going to suffer. So what's it going to be? A blue-water billfish hunt or heading to the office to collect bills of a different sort? Why can't it be both?

In this day and age, you can telecommute from just about anywhere, and that includes a sport-fishing boat. With a little advanced planning, some design tweaks and a few high-tech gadgets, there's no reason you can't create a fully functional workspace aboard your boat. So get away from that fax machine and reach for a flying gaff — it's time to open up a branch office on the cockpit mezzanine seat.

The New HQ

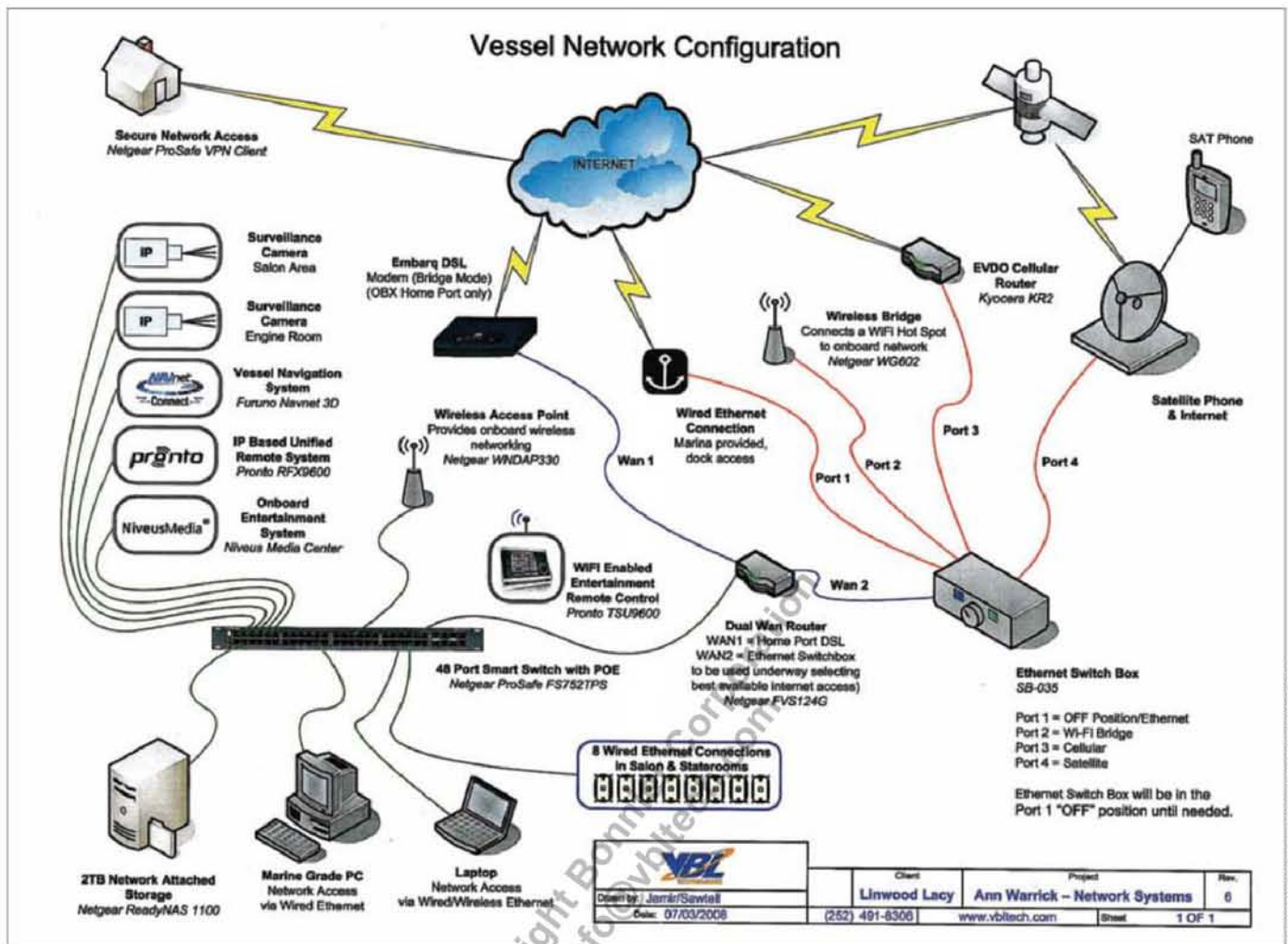
There are two levels of dedication when it comes to creating an office on your boat. You can either establish a simple work area where you'll plop down your laptop and plug in, or you can set aside a real working space with all the accouterments of a land-based office. If you want to go with a full-blown office space, it commonly means dedicating a stateroom-size area to the purpose.

"Offices on boats are really created on an as-needed basis," says Peter Fredriksen of Viking Yachts. "You can make the room a real media center, or you may only need a tabletop with an outlet. It changes from boat to boat and owner to owner. It also depends on the captain's input because he may use the work space even more than the owner."



DAVID SHULER / WWW.YACHTPHOTOGRAPHY.COM (2)

Most owners opt to rig their boats with Wi-Fi or cellular connectivity so they can carry a small laptop on board rather than use a bulky desktop system.



COURTESY PAUL MANN CUSTOM BOATS

When an owner decides to complete an office aboard, he often opts for more versatility in the use of space on the boat. "Pullman berths are an example," Frederiksen says, "because you don't have to sacrifice the number of berths in the stateroom, but you get a lot more working space when they're folded away."

Since each owner has different needs, boatbuilders must do what they can to accommodate. "We had to integrate office equipment, including fax machines, into the 76-foot *Anne Warrick*," says Robin Mann, of Paul Mann Custom Boats. "Ventilation, wire runs and accessibility were all important. We installed Cat-5 wiring, network equipment and printers as well. Also included was pre-wiring for future upgrades, spaces for future components, and a temperature-controlled cabinet for computer, satellite and TV equipment. Plus, the owner has a Wi-Fi hot-spot antenna, a hardwired Ethernet connection for when he's in port and a cellular router for 3G Internet connections."

Because of space constraints, you rarely find desktop computers in a boat-

based office. Another problem with full-size computers is the heat buildup they produce. Squirrel away a PC in a cabinet or under a berth, and ventilation can become a serious issue. Meanwhile, laptops take up far less room and can be packed up, stored safely and taken back to the "real" office at any time.

Printers, although also rare on a boat, may be a necessity for some onboard offices. If you've absolutely got to have one, be ready to sacrifice print speed and quality for size. Small ink jets are about the best you can realistically hope for. Same goes for scanners, giant hard drives and any other bulky hardware. Do without it if you can. If a scanner is an absolute necessity for you to do business, forget about those bulky flatbeds and look for a mini scanner (some products on the market are no larger than a pen). And if you don't run the climate control or air-conditioning on a 24/7 basis, be sure to seal your paper in a large Ziploc bag so it doesn't grow mildew. What about fax machines? They're more or less irrelevant these days. "If you have an Internet connection and a computer,

you can do everything you need without a fax," Frederiksen says. "They really aren't necessary in most boat offices."

Connecting the Dots

No matter how you arrange your space, the real key to establishing a functioning office in today's environment is connectivity — if you can't check the Dow Jones, e-mail your lawyer and talk to your associates all at the same time, then it's not officially a workday.

Todd Tally of Atlantic Marine Electronics (www.atlantic-me.com) stressed the fact that needs vary greatly from boat to boat. "A good example is one 74-footer we rigged," Tally says. "We had to mount flat-screen TVs all over the boat because the owner was a trader. He needed to be able to watch the stock-market numbers at all times. Other owners have completely different needs."

But no matter what your profession, staying linked to the Internet is a huge part of being able to stay connected to your work. "Just about everyone needs connectivity these days," Tally continues,

“and there are three basic ways to stay in touch. The first is catching available Wi-Fi. This can be as simple as plugging in your laptop and maybe paying \$10 or \$15 to access someone’s hot spot. But it only works at the dock, and not every marina offers Wi-Fi. The second method is cellular. It only costs a little more, the hardware is pretty inexpensive and it works wherever cell coverage is available. The third is satellite communications. With the right antenna, coverage extends just about worldwide except at the poles. But it’s expensive. If we put on all the bells and whistles, it might cost as much as \$50,000 to fully outfit a boat with top-of-the-line gear.”

The charges also differ significantly when using satellite services. While Wi-Fi and cellular charges generally accrue by time in the form of a daily, weekly or monthly bill, satellite-usage charges often accrue by the amount of data sent and received through the system.

If limited access at the dock is good enough for your office needs, all you’ll need is your laptop and a Wi-Fi card, if one isn’t already built into the computer. What about availability? WifiMarine, an organization set up to assist boaters with understanding their Wi-Fi options, lists U.S. marinas with hot spots at www.wifimarine.org and internationally at www.wifimarine.org/world.

You can also arm yourself with a directional Wi-Fi antenna, which in some cases will allow you to grab signals from a coffee shop or bookstore that sends out a free signal up to a mile away. But much of the technology is unproven in a marine environment, especially over the long term. “We’ve been experimenting with many new products,” says Ken Englert of Maritime Communications (www.maritimecomm.com) in Marina del Rey, California. “The technology is innovative, and there are a lot of garage operations out there. Stay tuned; things are constantly changing.”

Those who need more substantial coverage and opt for the cellular method can use an air card on their laptop or have a cell system hardwired into the boat. However, extending service with a booster or repeater, like those offered by Digital Antenna and Shakespeare, represents a more popular option. Boosters connect directly to the cell phone (or air card) and can extend service by up to 50 miles. That means people in most areas will be able to stay connected except when they’re actually fishing far offshore



DAVID SHULER / WWW.YACHTPHOTOGRAPHY.COM



COURTESY PAUL MANN CUSTOM BOATS

The 76-foot Anne Warrick features a temperature-controlled cabinet to house all of its high-tech office and communication equipment.

— but in many fisheries, such as the sailfish bite in south Florida, getting a good signal should not pose a problem. Repeaters offer slightly less range and generally extend scope to 20 or 30 miles. But they do have an advantage in that they don’t need to be physically tethered to the phone or computer.

“With some of these systems, we can take a feeble signal and boost it 20 times,”

As more boat owners telecommute from the water, hardtops must house a bevy of antennas and sat domes to stay connected.

Englert says. “For the bulk of the people out there, the extended cellular connection allows them to stay in touch when they need to. In fact, I know of a few boaters who maintain their full workload from the boat using these systems.”

Complete Connectivity

If you absolutely must stay in touch at all times, no matter what, no matter where you go short of the North Pole, then a satellite service is your only option. Inmarsat’s Fleet service, supported by its constellation of 11 satellites, is what boaters seeking the ultimate Internet service connect to. JRC, KVH and Thrane & Thrane all make antennas that utilize the Fleet system, but the newest entry to the field is Intellian’s FleetBroadband series, announced this past September. (See Office Equipment on page 62 for more information on these products.) And in this case, size matters. Generally speaking, the larger (and more expensive) an antenna you purchase, the faster a data stream it will support. Of course, you’ll pay more for a faster stream.

Figuring out exactly what this kind of access will cost can be difficult. Monthly fees can range from \$100 to \$1,000, and data fees can run anywhere from \$6 to \$14 per megabyte. Fail to pay attention,

OFFICE EQUIPMENT

DIGITAL ANTENNA

Cellular Amplifiers — The DA4000 is a 3-watt direct-connection cellular amplifier. It will work with most cell phones or air cards and can extend range for up to 50 miles, though exact range will depend on antenna height, cabling and other factors. Price is \$300.

Cellular Repeaters — Digital Antenna offers two repeaters, the 4KMR-30M (\$600) and the 4KSBR-50M (\$800). The 4KMR-30M is a 50 dB gain, 3-watt wireless system that doesn't require a direct connection to the phone or air card. Range boost is about 20 miles. A 12-foot separation is needed between the inside and outside antennas, and the systems won't work with Nextel.

The 4KSBR-50M has 3 watts with a 70 dB gain and can feed up to 20 separate cellular lines within its wireless range at the same time. Expected range boost is 30 miles, a 25-foot separation is necessary between interior and exterior antennas, and like the 4KMR-30M, it won't work with the Nextel system. (Digital Antenna's 9 dB cellular antennas are also available without boosters or repeaters, but due to numerous factors, range extension is not predicible. **For more info, visit www.digitalantenna.com.**

SHAKESPEARE

CruiseNet — Shakespeare's high-speed wireless Internet data systems for multiple cellular networks work like Broadband and have Wi-Fi wireless options. Systems vary in price from \$1,100



to \$1,500 and must be matched to your cellular carrier. Monthly access fees will also apply, with most major cellular companies charging about \$60 per month for unlimited access. The CruiseNet system can interface with onboard monitor systems and send a text to your cell phone when abnormalities arise. **For more info, visit www.shakespeare-marine.com.**

INTELLIAN TECHNOLOGIES

FleetBroadband FB 150, 250 and 500 — These satellite antennas provide global coverage with the Inmarsat Fleet system. Simultaneous voice and data services, LAN interface and router features, and IP connections are included, with 150 Kbps to 432 Kbps data rates. Base hardware prices range from \$7,495 (for the FB 150) to \$18,995 (for the FB 500.) **For more info, visit www.intelliantech.com.**



JRC

FleetBroadband Fleet F33, F77, FB250, FB500 and Inmarsat C — JRC's line of satellite communications starts with the Ethernet-connected "mini" 13.7-inch F33, with 9.6 Kb of voice and data service, which goes for \$7,500.



At the other end of the spectrum, the 26.9-inch FB500 provides voice and data connectivity up to 432 Kbps and costs about \$15,000. **For more info, visit www.jrc.co.jp/eng.**

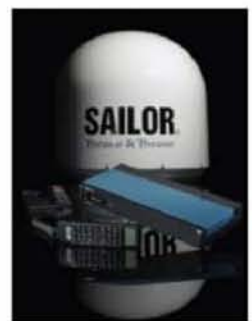
KVH

TracPhone FleetBroadband KVH ETRAC, 252, F33, F55, F77, FB150, FB250 and FB500 — These antennas run the gamut, ranging from 600 bps to 432 Kbps with both voice and data service, with the exception of the KVH ETRAC. The KVH ETRAC features a 12-channel GPS and supports e-mail and position reporting/polling on the mini-C system. E-mail pricing runs one cent per character, and the extremely compact antenna (2.4 pounds, 6 inches) makes this an interesting option for relatively small boats. Base hardware prices range from \$3,250 to \$19,999. **For more info, visit www.kvh.com.**



THRANE & THRANE

SAILOR Inmarsat mini-M, mini-C, Inmarsat-C, FleetBroadband 150, 250 and 500 — Thrane & Thrane builds much of the hardware used in the antennas from the above companies, so it's no surprise that they offer an extensive lineup, ranging from mini-C systems that are designed for position reporting/polling to e-mail services and Inmarsat-C maritime distress (\$2,500) to the \$23,000 FleetBroadband 500, with 432 Kbps voice and data systems. **For more info, visit www.thrane.com.**



and it's possible to rack up tens of thousands of dollars in fees per month. On top of these costs, the communications dealers I spoke with also stressed that basic hardware costs (as listed above) are only one part of the equation. To make it all work properly, boaters need additional parts and cabling, and you must also take labor expenses into consideration. When all is said and done, an average system cost in the mid-\$30,000 range is about right.

Whatever type of gear you opt for, both Englert and Tally agree on one thing: Rigging your boat for connectivity is not exactly a do-it-yourself job.

"You should use an NMEA-certified marine electronics dealer because it will affect your warranty," Tally says. "By buying the gear off the shelf, you might get a one-year parts-only warranty, but when a certified dealer does the work, it may be extended to cover two years, for both parts and labor."

Englert agrees on the importance of using a qualified installer. "If you have a professional do the installation, it usually prevents a lot of the finger-pointing that can happen if there's a problem with the gear," he says.

More importantly, why should you spend your time mounting, wiring and connecting all that gear? You have too much work to do — and that hot bite won't last forever, so you'd better get to the office ASAP.