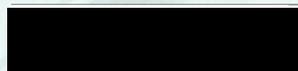


# NAKED AND AFRAID

## BOATING WITHOUT MODERN TECHNOLOGY

By



Illustrations by



**T**he outboard on the back of my 17-foot Boston Whaler started after a few cranks, and I eased away from the dock ready for a day on the water. The fuel gauge read zero, the speedometer was disconnected from the pitot tube, and the chart plotter sat unplugged in its mount. The handheld GPS? Locked safely in the glove compartment of my car in the marina parking lot. All in all, it was shaping up to be a perfect day on the water.

How's that, you say? The idea of boating without 21st-century amenities seems like a daunting concept in the age of NMEA 2000, fully integrated systems and joystick controls. But I wanted to prove that seamanship still counts — big time — in spending a day on the water.



Look for changes in wind speed and direction, temperature drops, rapidly accumulating clouds and even a stronger salty odor to assess the weather conditions.

The idea came to me, of all places, behind the wheel of a car. On a work trip, while driving a rental car down the back roads of South Carolina, I realized I was doing nothing but blindly following the commands of the voice coming from my smartphone via Google Maps. I had no idea what direction I was heading or even the name of the road I was on. "If this phone dies," I thought to myself, "I'm in big trouble."

So I decided to plan a trip aboard a boat stripped of all modern tools, save the outboard, and see if I could get through it using my five senses and the

basic tenets of seamanship honed by boaters over the centuries. Yep, I decided to get naked. Here's how it went.



**LOCATION, LOCATION**

After firing up the engine, I left the safety of the boat basin early that morning and headed into the open expanse of Pine Island Sound. On the west coast of Florida, opening into the Gulf of Mexico, the Sound was the perfect place to conduct this experiment. It's 100 square miles of water protected by the outer barrier islands of

Boca Grande, Cayo Costa, Captiva and Sanibel, with the giant Pine Island stuck in the middle. There are hidden flats, oyster beds and inlets to the Gulf, and, in certain areas, long stretches of water between channel markers.

To start the day, I decided to head south and west to run out of Captiva Pass into the Gulf of Mexico. The first tool I used in my naked adventure — the trusty compass. Many boatbuilders no longer install a fixed-mount compass as standard equipment, and that's a shame. If you're out in the Gulf and out of sight of land, you know

if you point east, you'll eventually find real estate. Ideally, you'd align the compass bearing with a chart to find your way, but I was going naked — not even a paper chart to be found.

A typical fixed-mount marine compass has a set of magnets that cause it to always point to "magnetic north," a location in Canada up near Greenland. (A second set of corrector magnets help protect against deviation.) The dial, or card, inside the housing always rotates to magnetic north, so you can use the degree marks encircling the card to set a bearing. For a southwest



Onshore fixed objects and landmarks, if still visible, can be extremely useful in keeping your bearings and finding your way from point A to point B.

DESIGNED BY FREEPIK (STAR ICON)

course, I tried to keep the dial on 240 degrees. If all I had to do was go straight, perfect. But rarely inshore can you follow a straight line.

While it's fairly easy to get from Placida to the pass if you've done it before, going without charts exposes you to twists and turns and unforeseen shallows. Of course, I followed the channel markers, but from local knowledge I also knew that I wanted to run alongside the island of Boca Grande until I saw the old phosphate docks before making a left and heading south along the backside of Cayo Costa. Landmarks, like those phosphate docks, are vital for determining position on the water relative to land. Ideally, you'd have a pair of binoculars on board to scout out landmarks from far distances, but again, I wanted none of that. Still, on a clear day, keep an eye out for tall buildings, water towers, areas with tall trees, areas with no trees — any point that can serve as a beacon should you get disoriented.

Soon I made it to Captiva Pass, ran the inlet out and headed out into the Gulf, running almost due west (270 degrees on the compass) until I could barely see the coastline on the horizon behind me. Seeing land, I used an old trick to estimate how far I'd run offshore. Standing at the helm of a small boat with an unraised helm typically puts you about 6 feet

above the waterline. On a clear day, the horizon will first appear in your line of sight from about 3.5 miles away. Taller objects, such as lighthouses and other aids to navigation, will appear even farther away. (A 10-story building could be visible from the helm from 14 miles away.)

I had another way to get my bearings. A

sea entering the inlet. While that's a lot more comfortable than a head sea, if I underestimated its size and speed, I could turn a pleasant cruise into a surfing expedition and stuff the bow. How big were these waves? And, more importantly, how close together were they, and how fast were they moving?

about two boat lengths between each wave crest, which is fairly easy to navigate in a 17-foot boat. Knowing that, I hopped on the back of the roller and made my way into the inlet, thinking those conch fritters would go well with a nice grouper sandwich.



**THE WAVES RUNNING INTO THE INLET APPEARED ABOUT 2 FEET TALL WITH ABOUT TWO BOAT LENGTHS BETWEEN EACH WAVE CREST, WHICH IS FAIRLY EASY TO NAVIGATE IN A 17-FOOT BOAT.**

small private airstrip runs east to west on the tip of North Captiva Island, which sits on the southern side of Captiva Pass. I kept an eye out for descending recreational planes and, when I spotted one, set the compass bearing to follow it in. Within a few minutes, I could make out the opening of the pass, and I was good to go, ready to head in for some conch fritters at a dockside restaurant named Barnacle Phil's.



**HOW FAST, HOW HIGH**  
With an incoming tide and a west wind, I experienced a following

From experience, most boaters can run an inlet in by feel, trimming up and riding on the back of a wave to keep from stuffing or wandering. But to get a real sense of the waves, there are tricks to estimate wave height. The best way to measure wave height is when you are in the trough, between two wave crests. Taking a seat at the helm, I was about 4 feet above the waterline. From the low point of a trough, waves cresting parallel to my line of sight, then, would be 3 to 4 feet. Waves slightly overhead would be 5 to 6 feet, and waves parallel to the gunwale would be around 2 feet. The waves running into the inlet appeared about 2 feet tall with

**FEEL THE BURN**

After washing down the last bite of grouper with a tall glass of ice water, I decided I wanted to check out another dockside establishment in a town called Matlacha (MATT-LE-SHEA) that often has live music for entertainment. To get there, I'd have to run north and east again to get around Bokeelia at the northern tip of Pine Island, then run south until I made it to Matlacha, nestled on a little island between Pine Island and the mainland. At this point, the question became: Did I have enough fuel?

The rule of thumb regarding fuel is to use a third of the tank to get where you're going and a third to get home, with a third in reserve for emergencies. But with no fuel gauge, how do you know what's even in the tank? The first order of business is to fill the tank. My boat has a 34-gallon capacity, so I knew I had exactly that much to work with when I left the dock that morning. While my speeds and fuel consumption obviously varied due to stops and starts to get my bearings,

DESIGNED BY FREEPIK (WAVE AND SPEEDOMETER ICONS)



If you pass a ship, tug boat or other commercial vessel with visible smoke pluming from its stack, take note of how the smoke is moving. If it is drooping or curling downward toward the water, this indicates a drop in pressure and could signify that rain, wind or otherwise inclement weather is headed your way.



Figuring out your boat's average gallons-per-hour fuel burn will help you estimate how much total fuel you've used over the course of a trip.

and dealing with no-wake zones and other boat traffic, I tried to keep my cruise somewhere between 3,500 to 4,000 rpm. (No tachometer? Bring the boat onto plane and trim until it settles into a sweet spot. That's usually the point in our tests where we experience the most economical cruise speed.)

There is a formula you can use to estimate a boat's fuel consumption. It goes like this: gallons per hour equals specific fuel consumption multiplied by horsepower then divided by fuel-specific weight. Make sense? To get this to work, you'd

have to know the specific fuel consumption of your engine. What's that? It's an engineering term based on a few complex formulas to understand what an engine burns per unit of thrust. Unless you're a rocket scientist (or outboard designer), don't bother trying to learn it. Instead know that a typical modern four-stroke engine (that includes inboards and outboards) burns about 0.5 pounds of gasoline per hour for each unit of horsepower. (A modern diesel burns about 0.4 pounds of diesel fuel.) Gas weighs 6.1 pounds per gallon; diesel weighs 7.2.

Knowing I had 34 gallons at the start and a 115 hp four-stroke outboard, I could figure out my estimated gallons per hour. Here's how it worked: 115 multiplied by 0.5 then divided by 6.1 equals 9.4.

So, by this formula, I was burning around 9.4 gallons per hour. Probably less since I was running at an efficient cruise speed, and the boat would lose weight with each gallon burned. Still, with no gauge, I had to be safe and estimate that after running for about 2.5 hours I'd burned 23.5 gallons, leaving me 10.5 gallons to make

the run and get home. I decided I'd better find a fuel dock.



### HELLO BIRDS

After refueling, I made plans to head south and access Matlacha around the southern tip of Pine Island. En route, the channel markers guiding the way grew less and less frequent, yet there was no way to determine the water's depth. It all looked like one big bathtub, so I pointed the bow in the right direction and hit the throttles. Big mistake. Within



When assessing weather, remember this old nautical rhyme: "Mackerel scales and mares' tails make tall ships carry low sails." What does it mean? Whispy-looking cirrus clouds or scaly-looking altocumulous clouds appearing on a sunny day indicate that foul weather or a front could be on the way — usually by the next day.

minutes I found the bow safely wedged on top of a sandbar with the tide moving out. Fortunately, I was able to hop out of the boat and rock it free before walking it to deeper water. Otherwise, it could have turned into a very long afternoon.

While it's hard to navigate through skinny water without modern conveniences like a chart plotter and depth sounder, there are ways to watch out for skinny water. The most obvious: Look for standing birds. If you see wading birds in water, that's a healthy sign that the surrounding area is only inches deep. Outside of wildlife tips, look for color changes in the water. Especially on the incoming tide, when clean ocean water's flowing in, the deeper channel will appear lighter or clearer than the surrounding

shallows. Darker water could mean rocks, structure or grass beds. Also look for ripples, rips, breaking waves and current seams that could indicate shallow water. Watch how other boaters' waves act as they spread.

Once I climbed back on board and idled back to the deep channel, I started paying a lot more attention to any subtle changes in the water that could leave me high and dry. With that, I thought I could make it to the bar in time for the band, no problem. As long as I still had good weather.



**GATHERING CLOUDS**

The thing about boating in Florida, especially in the summer, is that you can almost guarantee an afternoon thunderstorm.

I don't know why I expected my trip to be any different. But as dark clouds quickly built over the southern horizon, I knew without listening to the weather broadcast on a VHF radio that I had to reverse course and quickly seek shelter.

Besides watching for black clouds, there are other ways to read the weather on the water. First, how is the wind moving? In the Northern Hemisphere, wind around a high-pressure system — signaling good weather — typically moves clockwise. Wind around a low-pressure system — a front — typically spins counterclockwise. If the wind picks up, figuring out how it's swirling can help predict any weather changes.

Also look at the water. If it starts getting choppy with more confused

patterns, and waves start moving closer together, then that indicates bad weather could be approaching. If clouds start quickly gathering low in the sky, particularly flat and dark clouds, then bad weather's on the way.

While I could see the dark clouds moving toward me, I could also sense a change in barometric pressure; the air just felt different. Strangely, it also smelled different. The salty odor grew more intense, which sometimes happens when pressure drops.

At that point, I turned the boat around and scouted out the water tower indicating the nearest safe harbor. It's one thing to boat naked, but when storms are involved it's time to be afraid. At least I knew I had enough fuel to get home. Ⓣ

Besides standing birds, take a look at current flow to assess depth. Current usually flows fastest in deep water, but a rip could indicate a shallow edge.

