



[More gouge on Reef Points](#)

Print Page E-mail Page

Lightning Strikes — Even More Shocking!

By Vincent Pica

A number of years ago, another delivery captain and I were bringing a boat north from Florida with my son, nephew and their friends. As we were putting into Charlestown harbor in South Carolina around 10 pm, we found ourselves in one of those sou'easters that compete with our nor'easters for fury. Wrath of God stuff – Force 8 winds (blew in an "Eisenglass" windshield panel that I had to re-sew underway), driving rain and, above all, lightning strikes all around us. The two grown-ups looked at each other and said, "Hammer down. Lightning is after tall things, not necessarily fast things. Let's get out of here, fastest way." Then I turned to the boys and said, "Don't touch anything metallic."

Facts and Myths About Lightning

The only natural disaster that kills more Americans than lightning is floods. That's right. Hurricanes, mudslides, forest fires and tornadoes all come in behind lightning. And what's amazing to me is that you can go to a NASA [website](#), particularly given the intro above, and find that lightning avoids the ocean. This proves once again that there are lies, damn lies and statistics. Lightning may not hit the ocean often – the vast, almost limitless ocean that covers three-quarters of the surface of the planet – but it sure likes near-coastal environments. That's where we are.

We've all grown up counting to five or six between thunderclaps to determine how far away the storm is and whether it is getting closer or not. Lightning, which can hit as far away as 20 miles from its source-thunder cloud, is so dangerous that it just makes no sense to try to outwit it. "Don't worry, Charlie, the storm is moving away. Pass the bait bucket." Zzziiitttttt!!

All-metal boats are rarely damaged because the ability of the electric charge to quickly run to ground via the preponderance of hull surface in contact with the sea water. Fiberglass or wooden boats are, unfortunately, another story. Those hulls don't conduct electricity well, so "side flash" occurs, which is when the electric charge jumps around looking for good conductors. Take a look in the mirror. We are good conductors.

What to Do

Well, not getting hit in the first place is the best advice. If the weather forecast is bad, forget about trying to get out there to take advantage of the predators starting to "feed up" (they can sense the lowering pressure via their lateral lines) before the storm. It isn't worth it.

But, if you are out there, what do you do when you see a storm approaching? NOAA says:

- Get out of the water if you are swimming off the transom. It's a great conductor of electricity.
- If caught in a boat, crouch down in the center away from metal hardware.
- Don't stand in puddles of water. (Ya' think?)



Let me add a couple of thoughts.







1. Life jackets on everyone.
2. Disconnect all electronics that aren't essential to getting home.
3. If you can see the edges of the storm, and the center of the storm is between you and home, run at speed at a 90-degree angle to the storm and try to go around it. Squalls can be as deadly as a major blow but they are smallish and can be avoided. If the storm covers the sky from horizon to horizon, say a prayer¹ (I carry one on the outside of my sea journal) and head in at speed. (See "[Heavy-Weather Skippering](#)")
4. Get on the radio and let someone know where you are, where you are headed and at what speed you can make. Check in every 15 minutes. After 30 minutes of not checking in, someone needs to start the "rescue starts now" clock.
5. It would be desirable to have individuals aboard who are competent in cardiopulmonary resuscitation (CPR) and first aid. Many individuals struck by lightning or exposed to excessive electrical current can be saved with prompt and proper artificial respiration and/or CPR. There's no danger in touching persons after they have been struck by lightning.
6. If a boat has been, or is suspected of having been, struck by lightning (overnight on a mooring?), check out the electrical system and the compasses to ensure that no damage has occurred.

A number of years ago, I dinghy'd out to my son's 17' Seahunt, sitting on her mooring east of Gunning Point. As I approached, I noticed that the bow-mounted nav lights were broken. "Son of a gun, some yahoo hit the boat last night. Must have been drunk as a skunk!" Then I noticed that some of the other electronics had scorch marks and cracked glass covers. The light went on! I realized that this must be a leftover from a storm that had come through the night before. Scratching my head, I lifted the cover to check the fuel tank. Looking down, I saw that the sender wire that runs from the cockpit gauge back to the fuel tank was completely scorched – to within one inch of the fuel tank itself. We rewired the boat and repeated our prayer.

1 "Dear God, Thy sea is so great and my boat is so small. Protect me..." [back to article](#)

About the Author: *Vincent Pica is a coxswain and the Commander of Flotilla 18-06 East Moriches. He was a navigator in a brown-water and blue-water sailboat racing crew for eight seasons. From the "iron sails" side, he is a licensed US Coast Guard Master of Steam and Diesel Powered Vessels, carries a Radar Observer endorsement, Unlimited, on his license and is certified in Marine Diesel Engine Operation and Maintenance.*

Have something to say? [Sound off](#) on the Squawk Box.

 [Digg](#)  [del.icio.us](#)  [Reddit](#)  [Google](#)  [Yahoo!](#)  [Facebook](#)

Rating: ★★★★★

1 Star 2 Stars 3 Stars 4 Stars 5 Stars

SUBMIT



© 2008 U.S. NAVAL INSTITUTE