



Anybody Been Noticing the Weather Lately?? And Lightning Strikes Twice!

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With the fantastic storms we've been having lately, I thought it useful that we update the column on lightning and boating. Clearly, it is quite possible and has been quite likely that you can leave the dock under fair skies and come back being chased by the Wrath of God... And I did just have a "lightning strikes twice event" this past week... see below.

Fast or High?

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 10pm, 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 "Eisen-glass" windshield panel that I had to re-sew under-way), 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..." Lightning isn't attracted like our eyes to fast moving objects. It is attracted to the fastest way it can reach "ground" - and that starts with tall objects.

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 is amazing to me is that you can go to a NASA website, particularly given the intro above, (http://science.nasa.gov/headlines/y2001/ast05dec_1.htm), 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 5 or 6 between thunder claps 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." Zzziii-itTTTTT!!

All-metal boats are rarely damaged because of 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 wood boats are, unfortunately, another story. Those hulls don't conduct electricity well so "side flash" occurs, which makes the electric charge jump 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 ad-

vice. 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. Electrical tape over the exposed leads so nothing climbs up the wire to the gear...
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 small-ish and can be avoided. If the storm cov-

ers the sky from horizon to horizon, say a prayer* (I carry one on the outside of my sea journal) and head in at speed. (See SSP article, "Skippering in Heavy Seas," Oct 11, 2006)

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 great 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 is no danger in touching persons after they have been struck by lightning. No joke. Some people fear that. No one has CPR training. Call the American Red Cross and get a course under your keel.

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 some of the other electronics had scorch marks and cracked glass covers. The light went on! I realized that this must be a left-over 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 1" of the fuel tank itself... We re-wired the boat and repeated our prayer...

This year was different. The lightning missed my boat. Hit the house... Luckily, just some chipped paint but I'm starting to wonder about Gunning Point...! What's under there - Atlantis?

BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux2008@aol.com or go direct to MaryJo Cruickshank, who is in charge of new members' matters, at FSO-PS@emcg.us and we will help you "get in this thing..."

"Dear God,
Thy sea is so
great and my
boat is so small.
Protect me..."