

We're Sinking!

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Here's a good bar bet: Where is a boat more likely to sink – at the dock or on the open water? Hard to believe, but study after study show that four times as many boats sink at the dock than underway! Why is that???

Well, candidly, Mark Twain had it right: there are lies, damn lies and statistics. If you are underway and you see water coming up from below, you are going to do something about it right away, which we will discuss below. Thus, the underway problems are going to be dealt with in real time and the odds are way in your favor that you can save the vessel, even if you have to drive her on to the beach to do so. But why do so many boats sink at their docks? Why didn't the bilge pump save her, to start with?

Many people believe "big boat, big bilge pump; little boat, little bilge pump." Wrong. Big boat, LOTS of bilge pumps. Little boat, BIG bilge pump. You need to get the water OUT of your 17' Seahunt as fast as possible. Five hundred gallons per minute isn't half as good as 1,000 GPM. It is less than half as good because, once she goes down, no bilge pump can re-float her. And experts estimate that it costs 40% of the **original** value of the boat to re-wire her and restore the engine. Oh, and throw out the radio, GPS and fish finder. So, your \$20,000 17' Seahunt will cost you as much as \$8,000 to repair/restore versus the \$200 1,000 GPM bilge pump. Is she worth that much today..?

And remember, bilge pumps don't save boats. They buy you time. Time from what? Well, again, the statistics say that boats sink at the dock for 2 major reasons. Half the time (50 %!), a thru-hull fitting gives up the ghost and water eventually overwhelms the battery/bilge pump arrangement. So, check the thru-hulls with every lay-up. And check the screws around them. If the screws "rot*" away, it is another source of water to enter that isn't so obvious. But it will add up.

The second most common source of sinking at the dock is snow and rain (30%). Leaves clog the self-bailing scuppers; she fills with water and sinks. Also, many skippers believe that biminis and canvas covers prevent water from entering the boat. Wrong again. They slow it but don't stop it. In the winter, stow them someplace dry and shrink wrap the boat.

So, over 80% of the boats sink for two reasons – all of which adds up to checking the boat from time to time. Or paying the dock hand to... or your teenager who wants some extra spending money to go with his or her new driver's license... but check it. Would you leave a box with \$20,000 unattended on your lawn for months at a time?

Why Do Boats Sink at Sea?

Before we get into the other percentages, why's and wherefore's, the single most reported reason is water coming aboard from the stern through the out-board engine cut-out. While fine for the bays, be extremely cautious about taking a boat so configured onto the high seas. A following sea can easily "poop" you from behind and overwhelm your capacity to off-load the water.

As to the other percentages and categories, roughly 1 in 5 sinkings at sea (18%) are due to direct leaks in the vessel itself, not caused by violent contact with the bottom or the sea itself.

Areas of ingress, in order, are:

- through-hull fittings that give way;
- stuffing box leaks (the spot under the boat where the drive shaft exits the engine space of a cruiser and enters the water),
- knot-meter plugs,
- bait well discharge back-ups

Roughly 1 in 8 sinkings at sea (12%) are caused by raw (sea) water cooling and exhaust systems failures. These parts, subjected to high heat from engine exhaust gases and the corrosive effects of salt water, simply wear out – and you are now pumping water from the sea into the engine spaces. Hitting something, often rocks, accounts for another 10%. This is called "holing the boat"; i.e., you just put a hole in it. Roughly 1 in 20 sinkings at sea (6%) are caused by excess force/excessive speed - and the hull comes apart.

What Do I Do Now??

Put on Your Life Jackets. Right away, direct everyone to don his or her life jacket. On my vessel I have a heavy weather/type-1 life jacket on the back of my helm seat. Across the back, where the crew can read it, it says, "If you see the captain put this on, try to find one for yourself."

Don't Be Bashful. Immediately get on the radio and call the USCG. Tell them where you are, how many people are aboard and where the water is coming from. Why how many people? Because if they get there after the boat goes down, it will make sure they pick up everybody. No one gets left behind.

Stop the leak. If water is coming through a hole in the hull, try to stop it. Jam towels, cushions, extra life-jackets – anything – into the hole. Brace the plug

with a shoulder only if you have to. (You want to avoid having anybody below when the boat sinks.) Use a spar, oar, bimini cover pole, boarding ladder – anything – to jam your plug(s) into that hole. An old sailboater's trick is to jam a sail into the hole from the outside. Let the sea pressure work for you. Not a lot of power boaters carry sails on their Bayliner – but it may give you an idea. You won't stop the water but you will likely slow it. It is going to take time for help to arrive, so you have to start doing things to buy yourself more time. Buy time by slowing the ingress of water. You may have to slow down to contain the water pressure on your plug so you are doing a trade-off here – less water but more time to shore. Start with less water and evaluate who is winning – you or the sea.

Trim the Boat. If you hit something, it is likely that the hole is in the forward part of the boat and possibly near the water line. Trim the boat up and try to get the hole out of the water. If you can, you win and the sea loses.

Any Port in a Storm. If you are losing the battle after doing everything above, beach the boat if you can. Who cares what happens to the boat at this point. We might be talking about living or dying now. Life first, property last.

Create a Ditch Bag. If the situation continues to deteriorate, say your prayers but don't leave the boat until it sinks out from under you. But have a "ditch bag" ready – cell phone, handheld radio, fresh water, dry clothes, medical kit, flash light, flares, etc come immediately to mind. It is always good to have a ditch bag ready whenever you go "outside". Hit a 45' container that fell off an ocean-going cargo ship on its way from Brazil to Maine and you won't have to take your shoes off to count the minutes you have left on your boat.

When you have a leak in your boat, secure the crew, call for help and try to stop the leak. You're the captain.

BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux@aol.com or go direct to the D1SR Human Resources department, who are in charge of new members matters, at [DSO-HR](#) and we will help you "get in this thing..."

* Btw, Marine screws don't rot. They get eaten away by electrical charges in the water. This is due to poor "galvanic isolation". More on that in the months ahead...



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