## Why Did My Boat Sink?

By Keith Wohltman, U.S. Coast Guard Auxiliary Flotilla 95

MARCO ISLAND, FL – In an all too familiar scene, a boat owner wakes up one morning and looks out at the weather to determine if he will take out his boat, only to find a

surprise at his dock-- his boat is underwater. His first thought is, "why did my boat sink?" We'll take a few minutes to explore the reasons and offer a few suggestions to help you prevent your boat from the same fate.

BoatUS has reported that roughly four times as many boats sink at the dock than when operating on open water. That means 80 percent of the claims for boat sinkings occur with a boat tied up to a dock. How can that be? Most boat owners will tell you the reason the boat sank was



photo courtesy of Cheryl Hehl

that the bilge pumps failed. While that may have been the final failure, it by no means was the real culprit. Remember, a bilge pump removes water from within the boat's hull. The real reason the boat sank was that water was getting into the hull.

There are many reasons a bilge pump can fail. Loss of power, clogged strainer, or broken impellers are the primary ways bilge pumps fail. But in many cases, the bilge pump is working perfectly - but just can't keep up with the amount of water entering the boat. Actually, a bilge pump that's functioning well can hide the fact that there is a problem. So, pay attention to your bilge pump while underway. If it is running often or for extended periods, you have a water entry problem on your boat.

How does water get into your boat at the dock? BoatUS states that in 50 percent of dockside sinkings, water entered through leaks in underwater fittings. All the openings on a boat below the waterline are potential leaks. Stuffing boxes, outdrive bellows, failed hoses or hose clamps, sea strainers, faulty seacocks, transducers, mounting bolts, mufflers and, of course, drain plugs, can provide water an entry point.

I found it interesting that nine percent of the sinkings came from faulty fittings ABOVE the waterline. How does that happen? The simple answer is that those fitting weren't always above the waterline. Perhaps the boat got caught under the dock at low tide and had the through-hull fitting end up below the water when the tide came in. Sunlight can make plastic through-hull fittings brittle and let water seep in. Fuel, water and cargo can also lower a boat in the water just enough to let the leaky fitting be submerged.

Water from the sky accounted for 32 percent of the sinking claims, and while some of this is related to snow and sleet from northern boaters, rain - especially the heavy rain we can get here on Marco -- can fill a boat pretty quickly and over power the bilge pumps, especially if the cockpit is self-bailing - but the scuppers are clogged.

Most boat owners on Marco have their boats on a lift or stored at a marina. However, they are not immune to having their boat sink at the dock. Often, they will leave their boats in the water overnight if the tide will be too low for them to use the lift the next morning. Or, if stored at a marina, they will leave the boat in the water overnight to get an early start on their fishing day. Then they are as susceptible to sinking as an owner who keeps his boat in the water at all time.

The way we prevent our boat from sinking at the dock is preventative maintenance. At least twice a season, inspect all fittings above and below the waterline. Check your boat often while it is in the water. If you can't visit it every few days, ask a friend to check on it. If you boat is at a marina, ask the marina manager to keep an eye on it.

## Here's a list of items to check:

- Check ALL through-hull fittings above and below the waterline for damage.
- Outdrive boots -- look for cracked or dried out rubber.
- Scuppers and drains Keep free of debris and check that they are not leaking into the bilge
- Damaged mufflers Holes in the mufflers can let water in when the engine is not running
- Dockside water hook-ups Leaks in the freshwater system can let fresh water fill your boat -Turn the water off if you will be away for a few days.
- Seacocks and valves These must be made of bronze or Marelon® Check for a pinkish color on the bronze that indicates corrosion.
- Transducers and raw water strainers
- Hoses and clamps Double clamp the hoses with stainless steel clamps. Rusted clamps must be replaced. Use only reinforced hoses at the through hulls usually black in color. Check the entire length of the hose- not just where it is connected.
- Check your dock lines. Properly arranged they should keep your boat away from the dock.
- Check your fenders. Make sure they can keep your boat from hitting into the dock.

For more information, or to register for these and other safe boating courses, contact Joe Riccio, (239)-384-7416 or <a href="mailto:cGAUXCOURSES@GMAIL.COM">CGAUXCOURSES@GMAIL.COM</a>.

To schedule your **FREE** Vessel Safety Check, please call: John Moyer, (239)-248-7078 or Coast Guard Auxiliary Station – Flotilla 95, (239) 394-5911 or email John at <a href="mailto:lmoyer1528@aol.com">lmoyer1528@aol.com</a>.

For those interested in joining Flotilla 95, USCG Auxiliary, please call Bob Shmihluk at (215) – 694-3305