<u>ASEAWORTHY</u>

The BoatU.S. Marine Insurance and Damage Avoidance Report*

Avoiding Collisions With Big Ships



Photo: John Whitman

In This Issue...

MEET MIKE McCOOK	6
PROP GUARDS	9
SEAWORTHINESS VS. STYLE	.10
IS THE WEST COAST BEST?	.16

*The BoatU.S. Damage Avoidance Program is dedicated to helping you enjoy accident-free boating. Seaworthy looks at real claims and how they might have been avoided. Material in Seaworthy may be reprinted with credit to "Seaworthy, the BoatU.S. Marine Insurance and Damage Avoidance Report."

t seems straightforward. The best way not to get run over by a merchant ship is to get out of the way. Quickly. On a working waterfront, it's called the law of gross tonnage, and the bigger ship always wins. To an observer,

this might seem simple. Seen from the deck of a smaller boat, larger ships lumber along at a glacial pace. Plenty of time to zip out of the way, or dart past. It's like driving a school bus through a flock of sparrows—the birds will get out of the way, right?

Talk to someone who has to pilot a big ship into a crowded harbor, though, and it doesn't seem that easy. "It's getting worse," says Bill McGovern. "It's just been getting so bad that the Coast Guard and others

Continued on page 12

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Seaworthy Kudos

A few years ago, my insurance carrier (autos, home, and umbrella policy) notified me that because my boat was insured through BoatU.S., they were no longer going to cover that policy with the umbrella. I contacted the underwriter and he said that they had boat policies and that if I wanted to have the umbrella cover the cruiser, I'd have to insure it with them.

I told him that if he could show me that his boat policy was at least as good as the policy through BoatU.S. and was competitively priced, I'd switch. I subsequently sent him the Declarations page for my BoatU.S. policy together with a copy of Seaworthy. A few days later, he called me and said he had reviewed the materials. He asked if Seaworthy was part of my policy. I said, absolutely. He then said the BoatU.S. policy would continue to be covered by the umbrella policy. I asked him what changed his mind. He said two things: 1) His company does not include pollution coverage in its boat policies, unlike BoatU.S. and 2) His company has nothing like Seaworthy for its policyholders. He said he was a boater and he learned a great deal from just that one issue. He also said, as an underwriter, he wished his company had something like Seaworthy to educate policyholders.

I'm still with that same company for the autos, home, and the umbrella policies and with BoatU.S. for the cruiser. There have been no further issues about the umbrella and the BoatU.S. policy.

Frank Kapsch Minneapolis, Minnesota

Thank you for returning to the paper format for *Seaworthy*! Thank you for returning to the paper format for *Seaworthy*! Thank you for returning to the paper format for *Seaworthy*! Thank you for returning to the paper format for *Seaworthy*! Thank you for returning to the paper format for *Seaworthy*! Thank you for returning to the paper format for *Seaworthy*!

Steve Hawkins Nashville, Tennessee

Ethanol And Older Engines

Your article discusses older engines and

ethanol. Is there a problem with the much older 1970s motors that were intended to use leaded gas? Seems to me that there is an additive out there to compensate for the unleaded gas, which is about the only thing available.

Ron Kornicke Westfield, New Jersey

Typically, older engines need a lead substitute additive only when they are run hard for long periods. If you're concerned, using an additive like ValvTect Lead Substitute is inexpensive insurance.

Hello, I hope you can answer my question regarding the back-and-forth use of E10 and E0. Fortunately, we have a fuel station nearby home that has 91-octane E0 fuel, but what about times when I have to use E10? It has been rumored that going back and forth between E10 and E0 can also cause harm. I regularly use a fuel stabilizer and plan on using E0 every time I can, but what if I have to resort to fueling with E10?

Edward McCabe Buffalo. New York

You're lucky to have a fuel station nearby that sells E0. But you don't need to worry about going from E0 to E10. The base gasoline is nearly identical and ethanol is simply added in the transport truck. You will end up getting some lower ethanol blends, any of which are better than E10 for your boat. Keep using a stabilizer and don't worry about occasional use of E10. That said, if you have never run any ethanol blend, be prepared for more frequent fuel filter changes, especially if you use mostly E10 because it tends to dissolve the old gunk lining the tank walls.

Inspecting Middle-Aged Boats

I have a 20-year-old Cape Dory and found the article to be superb—a true mandate of what to check and replace.

> Dr. Edward O'Brien Clearwater, Florida

Cleaning Up After Mechanics

We had a near-sinking episode with our

23-foot Caravelle Walkaround I/O that others should keep in mind. We had our 100-hour service done on our 350 Mercruiser last November. We felt that everything had to be in great shape, and launched the boat. After about 20 minutes of running, I noticed that the bilge pump indicator light came on. We were in deep water so I started heading for shallower water. The pumps were not keeping up with the leak, so we radioed for help, and put on our life vests. The engine slowed on its own and finally quit (overheated). At that time, I thought I knew what happened. They must have left the hose from the water pump off. With the engine shut off, the pumps drained the bilge. What was found was a massive failure of the hose downstream of the water pump, which is under the motor and not visible.

I am convinced that the failure occurred (at least started) due to the pulling by the mechanic to remove the hose and replace it.

> Bryan Gorman Panama City, Florida



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MOB App

I am a UK reader of Seaworthy and am struck by the number of sailing accidents there seem to be. We all think that it will never happen on our boats but the stories in Seaworthy suggest otherwise. One thing I now take with me is my iPhone. I have an App on it called Man Overboard, which I found under Navigation in the App Store. I think it's simple and brilliant. If someone goes over the side, you just hit the MOB button and just follow the big arrow back to where they went in. It also gives the lat & long to call in to the emergency services and the bearing to the MOB. It doesn't adjust for wind and current, of course, but the Coast Guard can work that out much better than I can.

> Neil Cossar Derbyshire, United Kingdom

Mysterious Leak

I experienced a problem similar to the one described by Bill Ludlom in his letter appearing in the April issue of *Seaworthy*. Our 1976 Cal 34 started taking on water, but only while underway at fast speeds. One fine sailing day, when we were sailing down the Chesapeake at over 6 knots, my wife noticed water over the floorboards. We slowed down and the water stopped coming in.

It turned out that the source of the leak were the plastic thru-hulls for the bilge pumps. The through-hulls are located on the counter, which is the part of the hull under the transom. They face downward, and the reflected UV rays over the years broke down the plastic and led to tiny cracks. The fittings are normally above the waterline, but the stern squats down on a sailboat when it nears its hull speed, submerging the fittings and forcing water through the cracks.

Wayne Winokur Columbia, Maryland

I had exactly the same problem on my M-34, for years! I just couldn't find it. The bilge was dry, but if I sailed, saltwater always seemed to find its way in. It turned out that there was a leak in the hose that connects the cockpit drain to the through-

hull under the stern. This through-hull is well above the waterline, and there is no seacock on it.

When I sail, the through-hull is immersed. The bilge pump output hose is "teed" into the much-larger-diameter cockpit drain hose, and it was poorly done, I suspect, by Morgan.

With the through-hull immersed, the teed connection would be below the waterline, and water seeped through the cracks into the bilge.

I'll bet a dime to a dollar that he has a similar situation.

John Stoffel Mamaroneck, New York

Bill Ludlom should check the packing at the rudderpost. Typically, the rudderpost is housed in a molded fiberglass tube, the top of which has a circular bronze fitting that holds packing.

When the boat is at the dock or on mooring, it is likely riding with this packing above the waterline. However, when she is underway, she has additional weight in the cockpit that, added to the normal pitching, can result in the packing spending time below the water. Hydraulic pressure then forces water through the packing, into the bilge.

Geoff Lerner Yorba Linda, California

SAE Stands For...

How funny that I would come home from presenting at the SAE World Congress in Detroit to see that SAE stands for the Society of American Engineers (*Seaworthy*, Vol. 30, No. 2, "Ethanol and Older Engines). SAE actually stands for the Society of *Automotive* Engineers and the proper name at present is SAE International. The name was changed a few years back to reflect SAEI's global presence fostering mobility engineering (land, sea, and air). I have been a member for 24 years and presently serve on several committees writing standards and supporting educational initiatives.

Thanks so much for bringing back the paper version of *Seaworthy*!

Andy Perakes Canton, Michigan **Are SmartPlugs Smart?**



Could you please comment on Smart-Plugs in a future issue? There is mixed information regarding these new safety gadgets and in fact, I have heard that some insurers will not insure a boat if it has one attached as it may cause a fire. Please dispel this rumor if it is untrue. I exam many boats for the USCG Auxiliary each year and this question is now coming up frequently in my area due to recent boat fires at various marinas. Thank you.

Peter Border Bellingham, Washington

SmartPlugs are designed to be a safer alternative to traditional shore power plugs, incorporating a sensor to shut off power if the temperature of the connector rises above 200 degrees F. And instead of the typical nickel-plated brass blades, a spokesman for the company says SmartPlugs blades are made with 316 stainless steel, which offers 20 times the contact area of the old-style plug with no potential for corrosion. One model cord has a SmartPlug on the boat as well as at the shore power connection on the dock, which means that you'll have to work something out with your marina. For cruising, SmartPlug offers a cord with a SmartPlug on the boat and a conventional plug that is connected to the dock.

BoatU.S. underwriters don't have a problem insuring boats that use them, and marine surveyors who have seen them in use are impressed.



Autopilots And Collisions

Every year there is at least one spectacular collision in the BoatU.S. claim files involving an autopilot and a crew that was either down below, asleep at the helm, or too busy having a good time to notice an approaching boat, marker, beach or, in one head-scratching claim, a towering cliff. Most years, there are several autopilot claims.

The bow of the sailboat shown here being repaired (or, more accurately, being replaced) was smashed after the crew turned on the autopilot and went below to have dinner. The boat was under power a few miles offshore and, to be safe, the crew looked around to make sure they were alone. The boat they were destined to collide with, a trawler, was probably just below the horizon and moving quickly on a reciprocal course.

Ordinarily, when there is a head-on collision, the fault is apportioned 50/50, because the skipper of either boat could have prevented the collision. In this case, the trawler's skipper claimed that he tried to avoid the collision but the sailboat swung into his boat at the last minute. Whether that was



true or not is a moot point. With no one on lookout, the sailboat's skipper had to take responsibility for repairs to both boats. Luckily, no one was injured.

Avoiding Collisions With Very Small Boats—Kayaks

A group of prominent engineers recently presented a paper "Visibility Factors in Small Boat Collisions" at the 2012 International Marine Forensics Symposium sponsored by the Society of Naval Architects and Marine Engineers that offers some good suggestions on how to avoid being run over in smaller boats—kayaks—and, conversely, how to avoid running over small boats. In the past few years, there have been several tragic examples of small boats, notably kayaks, which were run down by larger, fast-moving boats.

The suggestions on how to avoid being run over were based on a series of tests on the water using volunteers in kayaks and powerboats. Researchers found that kayaks aren't likely to be spotted by a powerboat until they're a quarter mile-away, which can quickly lead to an "extremis condition." The sooner a small boat is spotted, the better. Seventy-five percent of the powerboat operators first reported seeing "paddle flash" when they saw the boat. A white or lightly colored paddle blade was much easier to see than a dark blade. The remaining 25 percent saw the luminous jersey that was being worn by the volunteers.

Among the recommendations to kayakers: Carry an audible signaling device; wear fluorescent life vests or shirts; use paddles with white or lightly colored blades; and avoid kayaking in areas with high boat traffic. There are also flags available that can be mounted on kayaks Conversely, for owners of larger boats: Wear sunglasses; keep a proper lookout; and be especially alert in areas where you are likely to encounter smaller craft.

Reducing Inflatable RIB Accidents



Because they're far less tippy, RIB (rigid inflatable) dinghies are generally safer than their traditional fiberglass counterparts. In the October 2008 issue of *Seaworthy*, there was an account of a man in Maine who drowned after his nine-foot fiberglass dinghy flipped over as he was preparing to step aboard his moored boat.

Anyone who owns a RIB, however, should be aware that over-inflating the tubes makes their dinghies less stable. Jo Mogle, the vice chair of the Training Committee at US SAILING, wrote *Seaworthy* a while ago noting that over-inflation makes an inflatable more skittish. He cited *Fast Powerboat Seamanship*, by Dag Pike, which says the seaworthiness of a RIB is due to its ability to flex in response to the waves. When a RIB is overinflated, it tends to bounce off waves rather than absorb the impact.

To test for overinflation, hit your tube with a clenched fist; if it bounces back, you'll need to let some air out.

Launching A Boat? Look Up!

A member in Las Vegas was launching this 26-foot trailerable sailboat at a public boat ramp last summer when the mast caught on a light post, bringing the whole rig down. Apparently, the operators of the boat ramp don't expect a lot of sailboats because there are signs directing traffic to pass directly under the post (Claim # 1105243). Another member in Washington state told Seaworthy about a close call while retrieving his 22foot sailboat at an inland lake. As he was trailering the boat out of the ramp, the mast passed within inches of a highvoltage power line and a spark jumped to the VHF antenna, destroying the antenna as well as the cable. If the mast had been any higher, the outcome could have been much worse, especially if anyone had been on the boat. The member noted that there were no signs warning of the power line. If you sail your trailerable sailboat in places not frequented by boats with masts, it's good practice to raise the mast as close to the launch ramp as possible. Be extra cautious and walk the portion of the route you'll be driving with the mast up, checking for obstructions.

It's not just sailboat owners who need to look up. While towing his 33-foot powerboat down a residential street, another member's radar got caught on a low-hanging cable TV wire. The wire ripped off the radar, and damaged the boat's upper helm (Claim #11103045). Wires in most jurisdictions are required to be 14 feet above the roadway, though wires can sag in hot weather; this one was less than 13 feet over the road. The company that owned the line was apparently having financial problems and had not been monitoring for low wires. In



another powerboat claim (#1111894), a member was hauling out his 24-foot bowrider last year in Maryland in anticipation of Hurricane Irene, when he ran into a low tree branch damaging the boat's bimini and windshield. Powerboaters, especially those with arches, radars and antennas, need to be aware of the height of the boat, particularly when maneuvering around residential areas, gas stations, and tree-lined drives.

Electrical Faults Ashore

How safe are you in a boatyard when your boat is plugged into shorepower? Not as safe as you may think. In the water, if there is an electrical fault in the boat's AC system, current usually leaks into the water and dissipates (which, while dangerous for swimmers, usually isn't for you if you're in the boat). But ashore, if there is an AC fault and a poor ground, which is often the case at boatyards, any fault current may leak to the boat's underwater metals, which are now overhead. Touch an energized fitting (a prop for example) and you could be seriously injured. Dave Rifkin, a marine surveyor who specializes in electrical safety, says that the best solution is to verify there is a good ground on the yard's shorepower system before powering up a boat on the hard; a simple circuit checker can be bought at home improvement centers. Better yet is to run a ground cable from one of the boat's underwater fittings to a grounded outlet (a ground pigtail can be bought for this purpose). A stake driven into the ground is usually not effective because of resistance in the soil.



Meet The BoatUS CAT Team— Mike McCook, Salvage Coordinator



McCook at the BoatUS Hurricane Ike CAT Headquarters

Mike McCook said they had only been airborne for maybe a half-hour when the worst—the absolute worst—thing that can go wrong in a small airplane went wrong: Smoke started pouring out of the plane's only engine. The pilot calmly said "Uh-oh" and started looking for a place to land. They were over the jungle in Honduras and

McCook, an independent marine surveyor from Maryland, had been on the way to an island to salvage a stranded sailboat. A self-described "non-jungle person," McCook could only see thick, green forest for hundreds of miles in every direction. After a few anxious minutes, the pilot banked the plane sharply and headed down. McCook

said it wasn't until they were just above the treetops that he finally spotted what the pilot had seen—a narrow logging road.

There is a lot more to McCook's jungle saga stories seldom end quickly—but he eventually reached the stranded sailboat and worked successfully with local fishermen to get it refloated. Carroll Robertson, the senior vice president of Claims at BoatUS, says that's typical of McCook. "He always-alwaysgets the boat, which is why after 30 years of working with salvors to recover thousands of boats, he is the obvious choice to be the salvage coordinator

for the BoatUS CAT [Catastrophe] team." After a hurricane, tornado, flood, marina fire, or blizzard, his job is to coordinate the daunting job of salvaging boats. She calls him a wizard.

Whatever ryou call him, McCook has an impressive bag of tricks. When Hurricane lke's 12-foot surge left the 58-foot Narcosis wedged high-



and-dry between two homes, it fell on McCook and fellow BoatUS CAT team member Dave Wiggin, a marine surveyor from Massachusetts, to find a way to get the 58,000-pound boat back to open water (Seaworthy, July 2009). As with many post-hurricane salvage jobs, the recovery effort was even more complicated than it originally appeared. For one thing, the size of the equipment that would be needed meant obtaining permits from federal, state and local governments. And because the homeowners were already antsy about the massive gatecrasher on their lawn, the permits would have to be obtained quickly, a word not often associated with the permitting process. The size of the crane and other equipment that would be needed to salvage a yacht that size presented a second problem-how to transport them



Cranes as well as crane operators must be certified (many aren't) before they will be considered for a salvage job. McCook also says a crane operator must also have the right types of straps and spreader bars to lift a boat without causing further damage. The boat shown here was salvaged after Hurricane Isabel.

over roads and bridges. The solution was to load them onto a barge. And finally, since barges ferrying giant cranes tend to draw a lot of water, they'd have to find a way to get the barge close to shore.

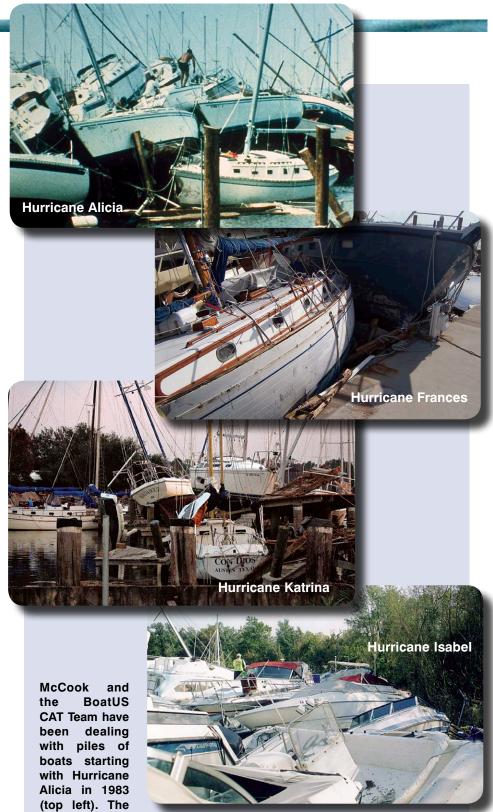
Like McCook's jungle story, this one also has a happy ending. McCook and Wiggin got the permits and moved the equipment into place. Narcosis was gradually positioned closer to the water's edge and was lifted by the crane onto the barge. After many, many days of planning, the massive job was over; start-to-finish, the hands-on work was completed in a day.

The biggest challenge for McCook in these situations is determining which salvor is best suited for the job. Every salvor he interviews promises to get the job done quickly, at a reasonable price and without doing further damage to the boat. Some salvors do have the knowledge and equipment to get the job done, but with others, mistakes are more liable to be made—boats that are sunk are destroyed in the process of getting them to the surface; boats get dropped by cranes; or after days or even weeks of effort, boats remain unsalvaged.

Another longtime CAT surveyor, Jonathan Klopman, a marine surveyor from Massachusetts, says McCook has an "uncanny ability" to sense which salvors can deliver and which can't. Klopman speculates that the reason is because McCook has been salvaging boats since Hurricane Alicia back in 1983, which is before many of the salvors he deals with were born. "There is something to be said for experience," Klopman says.

McCook is quick to point out that he no longer salvages boats himself, "I'm not up to swimming under the boat with cables and airbags these days, but I've done it often enough that I know what works, or what is liable to work, or what definitely won't work." He recalls a 60-foot powerboat that was sunk in 85 feet of water in Green Bay, Wisconsin. McCook got out the yellow pages and contacted the only marine salvor. who proceeded to explain what he would do to get the boat back to the surface. After listening politely, McCook decided that the approach wasn't likely to get the boat back to the surface, at least not in one piece. He got the phone book out again and found an "ice recovery salvage expert." Intrigued, McCook called him and learned that he specializes in salvaging fishermen's trucks that fell through the ice. The more

Continued on page 8



job of remov-

ing so many boats from a pile used to be "mind boggling," but McCook said after dealing with the aftermath of countless hurricanes, tornados and snowstorms, the CAT Team now approaches these types of jobs methodically. The key, he says, is finding the right salvor with the right equipment. TowBoatU.S. towers are a

good resource.

Once the salvor is hired, the CAT Team then works with him to discuss strategy and technique. The job are often complicated and McCook says everyone involved knows that patience is the key to a success. Being in a hurry, he says, leads to careless mistakes.

CAT TEAM, from page 7

the guy talked, the more McCook became convinced that he could get the job done, even though he'd never salvaged a boat. McCook took a chance and in a few days the boat was floating back at the dock.

In his almost 30 years of working with the BoatUS CAT Team, no one has ever accused Mike McCook of being a worrier. After all, worry never fixed anything. When asked who on the BoatUS CAT team might someday succeed him, McCook said it's not going to be a problem. David Wiggin, Jonathan Klopman and several others on the BoatUS CAT teams have more than 20 years of salvage experience. And there are more than 10 others who have been working with salvors for at least a dozen years.

accused Mike McCook of being a worrier. years.

Tornados often occur in parts of the country where marine salvors, if any, are lacking in experience and are not up to complex jobs. In this case—a houseboat in Alabama—McCook had to bring in a more experienced salvor from another state.



Major damage from snowstorms, like this one on the Bohemia River in Maryland, typically involve covered sheds that collapse. Salvage operations may be complicated by weather and ice, which make it difficult to position a crane.

All of this experience came in handy after Hurricane Irene swept up the East Coast last year, damaging thousands of boats from North Carolina to Maine. Instead of the CAT team working out of a single office, they were scattered among 23 locations up and down the East Coast. Unlike previous operations, there weren't meetings every night or long discussions about how to get the various boats salvaged; each CAT team member worked independently with local salvors. After only three weeks, 80 percent of the boats were recovered. It seems that there really is something to be said for experience.



Helicopters are expensive and are only used when all else fails. A boat that is going to be lifted by a helicopter must first be readied by salvors so that it can be raised quickly and easily. If a boat can't be lifted on the first attempt, the pilot will simply let go of the cable and leave. The boat shown here was lifted out of an environmentally sensitive area in Massachusetts after Hurricane Bob.

Are You Ready For Hurricane Season?

It's hurricane season! For proven ideas on how to prepare your boat for a storm, go to http://www.BoatUS.com/hurricanes>

Note to BoatU.S. policyholders: Your BoatU.S. Marine Insurance Policy pays half the cost, up to \$1,000, to have your boat hauled out ashore or moved out of harm's way by a professional captain when a hurricane warning has been posted for your area.

The Coast Guard's Search For A Protocol To Test Prop Guards

Is the "cure" riskier than the disease?

Several years ago, Bob MacNeill and his wife Sandy were idling along in their inflatable dinghy in the canal behind his home in Florida when a series of freak events sent the normally cautious boat owner overboard. He had just finished casually unclipping the engine's kill switch (a mistake) in preparation for landing at the dock and was talking to friends in another boat when an unseen wake bounced him across his dinghy and into his wife Sandy. In the awkward split second that he struggled to regain his composure, he inadvertently spun the outboard's tiller and throttle, causing the boat to accelerate and turn sharply to port. MacNeill was thrown into the water and almost immediately struck the boat's propeller. He says he was "lucky" if you can call someone who was run over by a boat propeller lucky; although he was badly cut, MacNeill wasn't killed and he didn't lose a limb.

Not surprisingly, when the Coast Guard announced it was planning to develop a protocol for testing prop guards, MacNeill quickly volunteered. Not only does he have the perspective of someone who was cut up by a propeller, MacNeill is also a yacht designer and the retired president of Chris-Craft and Carver Yachts.

While the idea of reducing propeller accidents is certainly appealing, none of the boat manufacturers, including Chris-Craft and Carver, has ever offered the devices. Nor has West Marine. MacNeill said that when he was at Chris-Craft and Carver, not much was known about prop guards—what was available or how well they worked. Even today, tests tend to be contradictory and there is a wide disparity of opinion on how well prop guards work or even if they work at all.

Richard Blackman, who recently retired after eight years as an engineer at the Coast Guard's Boating Safety Division, says that the Coast Guard's prop guard testing protocol is in the final stages of development and anyone—engine manufacturer or prop

guard manufacturer-will be able to follow it so that any future tests and test results will be comparable. In the past, test results have varied, not surprisingly, depending on who was doing the testing. Prop guard manufacturers claim that in addition to reducing the chances of a propeller accident, their tests prove that their devices have the added benefit of improving a boat's speed and performance. Tests by engine manufacturers, however, have indicated the opposite. Both Mercury and OMC have found the devices are liable to work only on boats moving slowly, at about 10 knots or less. The faster a boat is moving, the more likely that a guard will reduce speed and increase fuel consumption. An even larger concern for engine manufacturers has been a prop guard's potential impact on maneuverability. As one engineer said, anything underwater with a horizontal surface will act as a planing surface and anything with a vertical surface will act as a rudder. Depending on the shape of the device, it can introduce hydrodynamic forces that will have an effect on how a boat handles.

The most significant difference, however, involves the degree of protection provided by the various devices. One of the prop guard manufacturers has a dramatic video demonstration of watermelon being hacked to pieces after it is tossed from the stern of a boat into an unguarded propeller. A guard is then affixed to the lower unit and a second watermelon is repeatedly tossed at the propeller without being affected.

Some baseline testing sponsored by the American Boat & Yacht Council (ABYC), however, found that some of the guards failed to prevent injuries at slow speeds. And at high speeds, all of the guards tested were capable of inflicting significant "blunt force" injuries that were at least as significant as injuries from the prop itself. Note that the injuries were to a specially developed gel "leg" that was designed to approximate the characteristics of a human leg.

How well the prop guards work to protect a person in the water and how much they will affect a boat's performance and fuel consumption are still open questions. Dave Gerr, the highly regarded naval architect and author of The Propeller Handbook (McGraw-Hill/International Maine), believes that any device near the propeller will interrupt water flow and affect acceleration, fuel consumption, speed and maneuverability. Other people who have studied the guards believe it is likely that some of the guards work in some situations and with some engines and boats. Several people have mentioned that the "cage" type guards seem to do a good job of protecting people in the water when a boat is moving slowly and have minimal effect on fuel consumption and maneuverability. At higher speeds however, the cage guards consistently caused significant boathandling problems and were more likely to inflict potentially fatal blunt trauma injuries. Other guards appear to cause fewer boathandling problems at higher speeds but offer far less protection to anyone in the water, even at slower speeds.

If the Coast Guard protocol is ever used to thoroughly tests prop guards with different boats and engines, we may have a better idea of what, if any, protection they provide. In the meantime, everyone who was interviewed for this article said that the best way to prevent propeller accidents is to follow a few basic safety rules: •Make sure everyone is seated safely inside the boat. • Never allow passengers to ride on the bow, gunwales, or transom. • Slow down in heavy seas or when you encounter a large wake. • Avoid letting people aboard drink heavily. • Wear your engine cutoff switch lanyard when the boat is underway. •When launching or ungrounding a boat, keep people in the water away from the stern and prop. •Never put the engine in reverse and back toward a skier (or anyone else) in the water. •Don't use an outboard or I/O's lower unit for boarding, even when the engine is off. • Shut the engine off when you're near anyone in the water. A

From the BoatUS Consumer Protection Bureau

Seaworthiness Vs. Style

Boat manufacturers have improved the overall safety of their products enormously, but there is still the tendency with some to be swayed by the marketing department rather than the engineers.

As the French say, *plus ça change*, *plus la meme chose*. In other words, the more things change—in this case boats—the more they stay the same, especially when it comes to the design flubs and flops about which some boat owners perennially complain.

Owners flummoxed by the logic of how their boats are put together almost invariably focus on five areas that cause them the most consternation: leaks and drainage problems, limited access to engines and other mechanical systems, poor quality or inadequate fittings and finish, non-ergonomic designs and the conflict between seaworthiness and style.

Following are just a sample of the discussions generated by the many comments and questions fielded by the BoatU.S. Consumer Protection Bureau.

Seaworthy vs. Stylish

- Are boat engineers/designers really boaters? Do they ever use the boats they design?
- Minor feature overload is my pet peeve. Do they really believe that 28 cup holders will sell a boat?
- Who comes up with the backward "standard" features? For example, the VHF, engine sync and trim tabs are optional but the blender, cooler and 6-disc changer are standard!

Most of this kind of design excess (sacrificing good design input) is market driven, often by what's popular on cars. Does it make sense? No, particularly when a sunny summer afternoon turns into a squall, the seas turn rough and suddenly, the ability to make a pitcherful of margaritas doesn't seem so important.

Leaks

· Why is it almost every boat I have

ever seen has leaky windows?

• Does it cost that much more to bond the rubrail joint more frequently, or at least use a couple more tubes of caulk?

The short answer: Leaks

like these are usually quality-control issues rather than the result of manufacturers skimping on caulk for economy's sake.

Windows, for example, usually don't leak when they are new (if they do, it's a quality-control issue) but they can't be expected to be leak-free forever. Every five to 10 years it should be normal maintenance to recaulk fittings, windows and hardware.

The rub rail is a different story. Covering the hull-to-deck joint on most boats, the rub rail is a component of structural integrity and should not leak. Period. In reality, however, the screw holes for the rub rail may be drilled in the wrong place and don't get filled. And, the gunwale guard needs to be sealed at the top, bottom and at the screw line. Often one or more of these steps is left out.

While even entry-level boats are generally built with a watertight hull-to-deck joint, the integrity can be disturbed by repeated impact with docks, pilings, and other boats as well as the normal dynamics of sea action. Once again, the solution is follow-up maintenance after three or four years or whenever leaks show up.

Leaky windows and a rubrail that weeps underway are a drop in the bucket compared to problems related to leaks that saturate the hull's core. Damage can go undetected for years, creating conditions that render a boat unsafe structurally and cost thousands to repair, if a repair is even possible.



Safety is sometimes left at the dock when boat design focuses on the "patio."

How does water leak into the core? Again, it can start with poor quality control at the factory in terms of adequate bedding around through-hull fittings. Through-hulls and other fittings that are bolted to the hull should be inspected yearly, with bedding compound renewed on a regular basis. Better yet, epoxy and fiberglass can be used to isolate the core from the fitting (this may have been done by the builder).

Drainage

• Why doesn't my boat have an automatic bilge switch and why does it have just one wimpy little pump?

Bilge pumps in recreational boats are only intended to remove normal accumulations of bilge water, sea spray and rain. Even high-capacity systems are almost never designed to maintain a vessel afloat in the event the hull is severely damaged.

In an emergency, the go-to device is either a portable pump or one driven by an engine or generator.

Limited Access

- Why is it that boats are constructed in a way that won't allow you to fix or replace anything without having to cut a hole in the fiberglass to access it?
- I want to get to my water pumps, belts, spark plugs and batteries without having to crawl on exhausts. Do I have to hire a "vertically challenged person?"

Production boat builders build what the public is buying. If buyers demand a 28-foot express cruiser with galley, microwave oven, air conditioning, auxiliary generator and overnight accommodation for six, access to something has to go.

What get eliminated are the things that don't have immediate visible impact—sex appeal. Unfortunately, these types of design decisions by the manufacturers can mean that changing the oil on two inboard engines and a generator requires a human being with the arms of an orangutan.

And when nuts-and-bolts stuff has to make way for creature comforts, it can create some tense moments during emergencies. Just imagine groping in a far corner of the bilge for the battery switch if there's a fire in the engine compartment. Or trying to determine if the fuel tank is leaking when the tank itself is fiberglassed into a compartment that doesn't allow access to anything except the top of the tank.

Poor-Quality Fittings & Finish

- Why do some builders use foam-backed cabin headliners when they disintegrate and come unglued in hot weather?
- Why put carpeting in storage lockers where wet gear will be stored or that will be soaked if it rains?

Poor quality control is again a factor, but so are environmental factors. Slapdash application of the adhesive that binds the liner to the cabin is a bad start which, when combined with the extreme heat that builds up in closed cabins, can cause the glue to lose its grip. There are lots of options for cabin liners and it's all about dollars. Poor-quality foam disintegrates due to temperature extremes. Droopy liners aren't found in top-end boats.

Put two boats side by side that are otherwise identical except one has carpeted lockers, and it's almost a sure bet that the one with the carpeted lockers sells first. Another example of looks trumping common sense.

From a technical standpoint, carpet and padded liners make it very difficult to properly survey a vessel or to make technical decisions when repairs are made. While carpeting and vinyl covers may give the boat the "wow" factor, it's impossible to access core-connecting reinforcement like bulkhead tabbing, cabin sole-to-hull

tabbing or locker tabbing.

The boat owner has to rely on blind faith in the manufacturer and, short of removing carpeting and liners—clearly, a difficult job—there aren't many options short of avoiding this kind of boat to begin with.

Poor Quality, Cutting Corners—or Sensible Choice?

• Why are plastic through-hulls used on boats that cost more than \$150,000?

Actually, there is nothing wrong with plastic through-hull fittings if they are good quality and designed for their intended use. For example, Marelon is a reinforced polymer composite material that is approved by the American Boat & Yacht Council (ABYC) and Underwriter Laboratories (UL) for use in fittings above and below the waterline. It could be argued that Marelon fittings are better below the waterline because they are not subject to galvanic or stray current corrosion. Still, UV deterioration is a major concern for inexpensive plastic fittings above the waterline.

UL evaluates marine fittings for UV resistance in its tests. Boat owners buying plastic fittings should look for fittings that pass the UV test.

• Why is it that fittings that are below or at the waterline do not have two hose clamps?

Another myth to be busted! It's an old wives' tale that there is any standard or practice that requires two hose clamps on all fittings below the waterline. It may be good practice for hoses that are fit onto smooth pipe but it is not required by the ABYC. There are only two places where double clamps are required on boats: the fill pipe on a gasoline fuel tank and the hose connections for a marine wet exhaust system. It's also a good idea to double-clamp the shaft log.

In the early days, most hose clamps were steel and corroded readily. Having two made more sense. Today, with the goodquality stainless-steel clamps, the second clamp is not as critical as in days of old.

Still, good-quality hose clamps are relatively inexpensive so double-clamping is a good precaution with no downside.

Ergonomics

• Why is it that consoles are made to be

comfortable ONLY when you're standing up? When you sit on the helm seat your back is bent over at a 45-degree angle, which is not comfortable.

• The forward stateroom in my boat is so small that you cannot get to the sides of the berth. Did the designer really intend for me to jump up on the foot of the berth and crawl forward?

Once again, the answer to the questions about furniture is that manufacturers build what attracts buyers and what seems to attract buyers is eye candy that sometimes has lots of calories but not much nutritional value.

Some modern boats appear to be designed and built by committee—salesmen, accountants and other people with no practical experience. The fix? Do the equivalent of reading nutritional labels when buying a boat: Sit, lie down, climb and put all systems through real-life tests both at the dock and underway.

• Who decided to locate the battery on/off switch underneath the rear cockpit seat so you have to get down on your knees to turn the switch on or off?

When it comes to mechanical systems, manufacturers often make a choice between cost of materials and practicality. And don't forget the premium placed on creature comforts versus nuts-and-bolts. There is a tendency to put things like battery switches as close to the batteries as possible because long runs of heavy battery cables are expensive and dangerous unless provided with the appropriate overcurrent protection. Switches shouldn't be in the engine space where they might be difficult to reach in the event of a fire.

• Why is it that some boats have flimsy or undersized bow railings or railings that don't leave you with enough support to actually hold onto them, or offer little protection from going over the side of the boat?

The ABYC establishes some good standards for deck rail height and a minimum of 400-pound static load test, at any point and in any direction. Any boat touted as National Marine Manufacturing Association (NMMA) certified should have railings that comply with ABYC.

Continued on page 13

COLLISIONS, from page 1

are starting to take notice." McGovern is a pilot. He works for the Sandy Hook Pilots, based in Staten Island, New York. McGovern started in 1982, and he guides about 170 ships a year to one of the busiest harbors in the country. "Sometimes it's so crowded with fishing boats," he says, "you can't even see the buoys."

It is safe to say that McGovern has seen more than his share of head-slapping stupidity, but despite that, he remains optimistic. In his spare time, he visits local yacht clubs and marinas to educate boaters on how to stay safely out of his way. The stakes are high for everyone involved. Last year in Philadelphia, a tugboat mate was sentenced to prison after the barge he was towing ran over a tourist duck boat, killing two people. In 2009, a pilot on a tanker went to prison after his ship hit a bridge in San Francisco Bay, spilling 58,000 gallons of oil. In those cases, the courts determined that the big ships were at fault, but McGovern says close calls happen with alarming frequency, and in the crowded inland waterways where he works, a misstep on a tanker or containership can be disastrous.

"It takes a beautiful sunny day—should be a relaxing day for a pilot—and I can feel my heart beating out the side of my head," McGovern says. "I feel like I can take my pulse on the side of my temple because I don't want to kill anyone."

An expansion of the Panama Canal means ships are getting bigger, and it also leaves pilots like McGovern with less room for error. Even a tall bridge, like the Verrazano-Narrows, which is over 200 feet, requires a big merchant ship to pass through the center span. Ships often come in with the high water, which means the current is running behind them, propelling them forward, and speed is of the essence to maintain steerage, but also to stay on schedule. "Time is money in this industry," he says, "huge money. We're going as fast as we can."

Meeting a small boat in a narrow channel, he says, the pilot's choices are limited. Draft constraints make going outside the buoys an untenable option, unless he wants to end up like the San Francisco pilot. Backing down on the engines means a loss of steerage; cutting the engines mean the ship's momentum will take over, and a loaded tanker can go for miles. Even with the ship's engines running right, it can "take a shear," he says, and slide sideways

in the current. "It happens all the time; you really have no control, and that ship could kill you."

Last year, he recalls, another pilot had a close encounter near the Verrazano-Narrows Bridge with a boat towing a child in an inner tube. The smaller boat approached from behind, went close up the side of the ship, then crossed in front and sped back down the other side. "I didn't know whether to call the Coast Guard or [family services]," McGovern says.

"Two miles is a good distance, he says. It gives the ship time to react, and it gives the boater time to get out of the way. "Two miles gives us about 10 minutes. If anything goes wrong, two miles will seem like nothing." In that 10 minutes, a lot can go wrong"

The problem is visibility. Once you're closer than 500 meters (1,640 feet), he can't see you anymore. "To you in a small boat it looks like 'Oh, I've got time, that ship isn't really moving too fast'" he says. "If we're doing 15 knots, we can be on you in minutes. Once I lose sight of you, there's nothing I can do. I can't go to the left or the right, and if your engine doesn't start, I can't do anything, because I can't see you. If you go left and I go to my right, and we're facing each other, I've just contributed to the collision."

Two miles is a good distance, he says. It gives the ship time to react, and it gives the boater time to get out of the way. "Two miles gives us about 10 minutes. If anything goes wrong, two miles will seem like nothing." In that 10 minutes, a lot can go wrong.

Anchoring in a channel is illegal, McGovern says, but more importantly, it can endanger your life. Even dead in the water, he says, a boat stands a better chance just bobbing around than it does anchored. The current may push it out of the channel, and if it doesn't, the ship might. To hear the pilot tell it, this is a rule that gets broken fairly often. Sometimes the small boat operators

don't even seem to notice. A few years ago, a ship he was piloting met another ship in a turn. It was crowded with small boats, and most of them got out of the way, except for a small wooden boat.

"I'm blowing the whistle," he recalls. "I'm

going hard left, then hard right. It was an older couple, and the man was up walking around. The woman was wearing a large hat—I never even noticed the woman in the boat. She never even looked up! She sat in a chair the whole time! I could've spit on her head, and I don't spit well. I'm up 110 feet, looking down and she

I'm up 110 feet, looking down and she never even looked up. And it wasn't like afterward they pulled up their anchor and moved. They just sat there.

"The big thing is, when you're in a boat and you're not moving, I don't know what's going through your mind," he says. "I don't know if you're suicidal, you're a terrorist, or you're a freaking moron; I don't know what's going on." The best way to communicate with an oncoming ship is the VHF radio. On inland waterways, merchant ships monitor Channel 13, but often when McGovern tries to call a small boat, he doesn't get an answer. If you don't have a radio, get on deck and start waving something bright. The odds are good that the pilot is already watching you through binoculars, trying to figure

out if your anchor is down, or if you even notice them. If they think you're in trouble, no one can tell the Coast Guard where you are better than a trained pilot. If they can't tell what you're doing, the next thing you hear may be five short blasts of the horn. That's bad.

"Five whistles do not mean hello," McGovern deadpans. "If a ship is blowing its whistle at you, it means you're in danger." If there's a ship between you and the other side of the channel, it's best to wait it out, crossing after the larger vessel has passed. Tugboats and barges present a particular danger to recreational boaters. The lights can be hard to recognize at night, and McGovern says people have been killed trying to cross between a tug and its tow. Boaters should watch not only for the masthead towing lights on the tug, but the navigation lights on the barge itself, which may be some distance behind.

Becoming a pilot takes years. Sandy Hook pilots, like McGovern, serve as apprentices for seven-and-a-half years, then work as deputy pilots for seven more. A mistake can mean the loss of their livelihood or even prison time. "This is all I know," he says. "This is my one expertise."

McGovern says he's tried to get local boating safety courses to include a section on avoiding merchant ships, but so far he's been unsuccessful. For now, the best he can do is talk to boaters at yacht clubs and fishing groups, or yell at them individually as he passes, to convince them it's in everyone's best interest to avoid a collision. Sometimes they don't get the message. There was the kid fishing with a bunch of teenagers, who didn't look up, exactly, but slowly extended his free arm in a familiar, one-fingered hand gesture ("I

was going out there to yell at him, but after that..."), or the sailors he speaks to who believe they have the right of way over powerboats, regardless of size (not over a vessel constrained by its draft). More often, he says, people just don't understand the stakes, like the guy at a recent presentation who asked him "Do I have to move?" It's the law, McGovern told him, but ultimately, no.

"This is America," he said. "You can sit right there and stare at my bow the whole time."

Take-Home Message

SEAWORTHINESS, from page 11

Even though everyone knows the value of having used boats inspected by a marine surveyor prior to purchase, new boats—particularly ones that represent a major investment or have many complicated structures—are also good candidates for evaluation.

Boat manufacturers have improved the overall safety of their products enormously over the past three decades, but there is still the tendency with some to be swayed by the marketing department rather than the engineers.

It's up to the consumer to ask tough questions and investigate when buying a "toy" as complicated as a recreational vessel that will be operated in an unforgiving environment. Resisting the surface glitz is step one. Sure, you want your family and friends to be comfortable and have fun, but you also want them to be safe.

Doyour homework. To research complaints from other consumers about boats and marine engines, BoatU.S. members can access the BoatU.S. Consumer Protection Bureau's online database at <my.BoatUS. com/consumer/database.aspx>.

For a list of BoatU.S.-approved surveyors, visit < www.boatus.com/insurance/

How To Avoid Huge Ships, The Short Version

- Stay out of the channel. Unless you need to be there, leave the deeper water for those who need it. Never anchor in the channel.
- Get out of the ship's way. If an approaching ship is within two miles, make a move for the side of the channel—the outside, if circumstances permit, otherwise as close to the edge as possible.
- 3. Don't cut off a ship. If you're crossing the channel, wait for the ship to pass, and if it's a tugboat, watch for a tow behind it.

- 4. Let the ship know what you're doing. If there's shipping traffic, monitor and use Channel 13 on your VHF to communicate.
- 5. Let the ship know if you're having trouble. If the engine won't start, or you can't move for any reason, call them on the radio or get on deck and start waving. Odds are, they're already watching you.
- Radar reflectors are great. An Automatic Identification System (AIS) is great, too. Even if you have them, though, you'll still need to keep a lookout.



SMALL Stuff

Seaworthy has good news for anyone worried by E15, which has been receiving a lot of attention since it was approved by the EPA for use in automobiles built after 2001. E15 is still not approved for use in boats and many boat owners, especially trailer boat owners, are concerned that E15 could find its way into boat tanks. The good news is that isn't likely to happen, at least not anytime soon.

Seaworthy talked to representatives of Chevron and British Petroleum, both of whom said that, aside from maybe a couple of independent distributors in the Midwest, none of the major oil companies have plans to offer E15. For one thing, gas stations will still be offering E10 for use in older cars and they would need to install additional tanks in order to also offer E15. And even among new car carmakers, at least one, Toyota, has begun putting labels on new car gas caps that warn owners to use, "Up to E10 Gasoline Only." Using E15 would void a new car's warranty.

So, since gas stations will only be offering one or the other, and since all cars are permitted to use E10 while maybe half can use E15, it is likely to be many years before E15 finds its way into the mainstream marketplace, if ever.

In the meantime, a lot of people in the marine industry are hoping that ethanol will be replaced by a more user-friendly biofuel like isobutanol, which is made from cellulosic biomass (similar to ethanol) but does not have ethanol's potential side effects. Gasoline containing 16-percent isobutanol (B16) has the same oxygen content as E10; but with higher energy content (better mileage); doesn't absorb water like ethanol; and doesn't pollute more than E10 or regular gasoline (E0).

This past May, representatives from Volvo-Penta, Indmar, Bombardier, the American Boat & Yacht Council (ABYC), the National Marine Manufacturers Association (NMMA), and the U. S. Coast Guard, along with staff from BoatUS Technical Services, spent a week in Annapolis, Maryland testing isobutanol in a Malibu ski-boat. Using sophisticated instruments to measure the exhaust, the tests confirmed that B16 emissions are very similar to E10 and E0.

The Coast Guard, which is interested in using B16 in its outboards, is involved in a separate study with Honda and Mercury. ABYC has also been using B16 in its outboard engine for over a year and reports there have been no problems with the fuel.



Dave's Plug

Seaworthy gets a lot of letters that typically include photos and helpful advice from members who, for whatever reason, don't want their name published. We're never sure why, although one member volunteered "I don't want people coming to my house." So, in the case of the photo above, all we can tell you is that it came from Dave who lives somewhere in the Mid-Atlantic.

Here's what else we can tell you about Dave. While he was launching his boat late last summer, he put in the drain plug and noticed it didn't lock securely. Fortunately, he carried a spare so he inserted the second plug and then sped off for a day on the water. Most people would have bought a replacement and chucked the old plug. Not Dave. He took the plug home and soldered a nut to the washer, so that he could use it for at least another year.

Dave asked that we remind you that plugs can fail and you should check periodically to make sure the bolt and nut are fitting securely. He also recommends that you carry a spare. Finally, *Seaworthy* would add that you should remember to insert the drain plug whenever you put the boat in the water. While that seems obvious, on a hot summer day when people are rushing to launch their boats at a crowded ramp, inserting the drain plug is sometimes overlooked. One proven technique for

jogging your memory is to keep the plug with your boat's ignition keys.

Note to Dave: Thanks for sharing. Note to everyone else: If you know a helpful guy named Dave who owns a boat and is good at getting one more season out of everything he owns, this may or may not be a photo of his drain plug.

And now for a couple of stories from members who don't mind seeing their names in print. The first is from Robbie Elves, a member in Florida, who sent along a story of a drowning that didn't happen. Robbie had just purchased a new Zodiac RIB and was heading out a narrow channel on the Banana River. He was wearing a self-inflating life vest and had snapped on to the engine's kill switch.

After bringing the boat onto plane for the first time, Robbie slipped and knocked the tiller hard over. The boat ran headlong into a marker, sending him flying over the bow and into the piling. He broke his clavicle as well as several ribs and was unconscious in the water for 10 to 15 minutes-long enough to have drowned several times. But instead of drowning, Robbie quietly bobbed up and down in his life jacket until he finally woke up. He didn't have a clue how he got there, but his boat was a few vards away, so using his feet and one good arm he managed to climb aboard and get back to shore and some badly needed medical attention.

In the last issue (Alert, "Wearing Your PFD") *Seaworthy* noted that at night, in rough weather, in tippy boats, in cold weather or if you can't swim, a life jacket makes a heck of a lot of sense. To that we would add, "when boating alone." As Robbie said, "Accidents tend to happen suddenly and when you least expect them."

One more, this time from Michael Ostrander a member in Washington state. It's a photo of what can happen when a bottle rocket lands in a boat. In this case, the boat was anchored in the Hood Canal near Seattle. Michael pointed out the sawhorses in the background are piled high with various pyrotechnics, which he says "tells all." So, here's something to



Boats are flammable.

think about when you're celebrating on the Fourth: Boats are flammable.

There's good news for anyone who spends a lot of time, maybe too much time, on the water: According to Genetic Determination Today, researchers at Mystic University in Connecticut have identified a gene that is associated with "seafaringness." It's a form of the MAOA-L gene, which is associated with "high risk" behavior. (It's also closely related to something called "the warrior gene," which might explain a few of the more bizarre BoatUS Marine Insurance claims.)

The researchers studied residents of traditional whaling villages-Mystic, Connecticut; New Bedford, Massachusetts; and Cold Spring Harbor, New York-and found that they were 20 times more likely to have the seafaringness gene than residents of land-locked villages.

Why is this good news? Let's say you've always had a tendency to spend far too much money on your boat at the expense of things like your kids' college fund, contributing to your IRA, or fixing the roof on your house. Well now you have an excuse-spending money on your boat is genetic! Sort of like going bald; it's not your fault.

Some seafaringness gene types aren't faced with the dilemma of whether to spend money on the house or boat. That's because at many marinas—more and more these days—there is often a "boat" or two that look conspicuously like a house. These houses float on barges but are otherwise no different than houses on land-pitched roofs, porches, siding, windows and doors. They lack engines, navigation electronics and nav lights, and can only be moved if they're towed.

You may or may not care to have something in the slip next to your boat that looks like Anne of Green Gables' cottage, but the distinction is more than aesthetic. The laws that apply to houses are not the same as the laws that apply to boats. People who own houses pay property taxes while people who own boats do not; Coast Guard regulations apply only to boats and not to houses; houses don't need state registration numbers; and if someone were to be injured, the damages awarded would be significantly different if the accident were to occur in a house rather than a boat.

According to an article in *The New York* Times, resolving the house vs. boat question has made it all the way to the Supreme Court. The Times article cited a case that began in Florida involving a twostory "boat" that a local jurisdiction had removed from its marina slip and destroyed because it was a house. Or so they claimed.

Was the action legally justified? In other filings, two federal courts have ruled that



Boat or house?

the owner's intent is key to determining whether a structure is a boat or a house, but according to the Times article, the 11th Circuit Court of Appeals held that what matters most is if a structure is "'practically capable of transportation over water,' which closely tracks the language in federal law that dates to the 1870s." The boat or house question will likely be settled in October, when the Supreme Court is scheduled to hear the case.



Boat or truck bed?

Whatever else you call it, just about anything that floats can become a boat. Here's a photo of a "boat" made from a truckbed liner that was taken by the BoatU.S. Claims training supervisor, Andrea Toske, this past spring at Doctor's Lake in Orange Park, Florida. The boat was equipped with running lights, fenders, fishing gear and a cooler. Power was provided by a trolling motor. After a day of fishing, Andrea said the man casually loaded his boat onto a trailer and headed home.



In the last issue of Seaworthy, there was a series of photos of a sailboat in Falmouth, Massachusetts that broke loose from its mooring during Hurricane Irene and smashed into another sailboat on its way to the beach. A member in Chicago sent along this photo of a boat that came to grief during a fall storm on Lake Michigan. It is one of seven boats that were completely destroyed. Another 20 broke loose and were badly damaged. As with most mooring mishaps, some of the boats chafed through their pendants and some dragged their mooring anchors-in this case, cement blocks—ashore.

The likelihood of this type of damage occurring could be greatly reduced if "traditional" mooring anchor and pendants are upgraded to take advantage of more recent technologies. For more on storm prep, including moorings, go to <www. BoatUS.com/Hurricanes>. 🛔



Finally, from our archives: The original "Picnic Boat."

Need help on the water?
Download our smart phone app and connect with BoatU.S.
Towing dispatch with the push of a button:
www.BoatUS.com/App

BOAT OWNERS ASSOCIATION of THE UNITED STATES Washington National Headquarters SEA 880 South Pickett St., Alexandria, Va. 22304

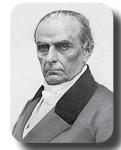


Is The West Coast The Best Coast?

Or is it "cheerless and uninviting?" We're hoping Seaworthy readers will let us know.

If you do your boating on the West Coast, *Seaworthy* would like to hear from you. Back here in the East, there have always been a lot of misconceptions about boating on the West Coast that are begging to be corrected. For example, Daniel Webster, the orator and statesman from Massachusetts, famously said, "What can we do with the western coast, a coast of 3,000 miles, rockbound, cheerless, uninviting, and not a harbor on

Lighten up Daniel. Of course the West Coast has harbors. As for being "cheerless and uninviting," have you ever seen a photo of Daniel Webster?



Big Dan

Seaworthy is hoping that readers on the West Coast will help to set the record straight. Is it true that boats in some harbors are covered with sea lions? If so, how do you keep them off your boat—rubber orcas? And what about sea otters? Several members on the West Coast have complained that sea otters (which can consume 25 percent of their body weight each day in fish) like to relax on swim platforms. Boaters in other parts of the country only have to worry

about cleaning up after ducks. Finally, what about the famous photo of a megayacht crashin g through waves in Oregon? Is that sort of thing typical?



Big waves

Over the years, *Seaworthy* has included stories—tantalizing hints—about boating on the West Coast. For example, who can forget David Close, "the Cookie Man" (*Seaworthy* July, 2009) who routinely takes Girl Scout cookies and beer out to boaters who run aground in front of his home on Puget Sound? Are people on the West Coast always that thoughtful? And at the other end of the warm-and-fuzzy spectrum, what about the guy in Los Angeles who fired a blank pistol to start a sailboat race and was promptly arrested by a SWAT team (*Seaworthy*, October, 2010)?

Several years ago, *Seaworthy* heard from members on the Great Lakes—America's Heartland—who said that the weather on the Great Lakes is fluky, often violent and hard to predict. In storms, the waves can be steep, close together and scary. But it's also beautiful; dozens of readers wrote to say they are head over heels in love with the place.

Now it's your turn, West Coast readers. Send your stories, long or short, good or bad, to Seaworthy@boatus.com. You can also send stories via the post office to Seaworthy, C/O BoatUS, 880 South Pickett St. Alexandria, VA 22304. Photos are always appreciated! We'll compile them into an account in the next issue. We may also print longer stories separately in future issues. If nobody writes, maybe we'll do a story about Daniel Webster.



Big trouble

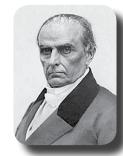


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Seaworthy is hoping that readers on the West Coast will help to set the record straight. Is it true that boats in some harbors are covered with sea lions? If so, how do you keep them off your boat—rubber orcas? And what about sea otters? Several members on the West Coast have complained that sea otters (which can consume 25 percent of their body weight each day in fish) like to relax on swim platforms. Boaters in other parts of the country only have to worry

about cleaning up after ducks. Finally, what about the famous photo of a megayacht crashin g through waves in Oregon? Is that sort of thing typical?



Big waves

Over the years, *Seaworthy* has included stories—tantalizing hints—about boating on the West Coast. For example, who can forget David Close, "the Cookie Man" (*Seaworthy* July, 2009) who routinely takes Girl Scout cookies and beer out to boaters who run aground in front of his home on Puget Sound? Are people on the West Coast always that thoughtful? And at the other end of the warm-and-fuzzy spectrum, what about the guy in Los Angeles who fired a blank pistol to start a sailboat race and was promptly arrested by a SWAT team (*Seaworthy*, October, 2010)?

Several years ago, *Seaworthy* heard from members on the Great Lakes—America's Heartland—who said that the weather on the Great Lakes is fluky, often violent and hard to predict. In storms, the waves can be steep, close together and scary. But it's also beautiful; dozens of readers wrote to say they are head over heels in love with the place.

Now it's your turn, West Coast readers. Send your stories, long or short, good or bad, to Seaworthy@boatus.com. You can also send stories via the post office to Seaworthy, C/O BoatUS, 880 South Pickett St. Alexandria, VA 22304. Photos are always appreciated! We'll compile them into an account in the next issue. We may also print longer stories separately in future issues. If nobody writes, maybe we'll do a story about Daniel Webster.



Big trouble