In a disaster area, the small things you normally never think about can be the most challenging. Superstorm Sandy made landfall on the New Jersey coast at 8:00 p.m. on Monday, October 29, with tropical storm-force winds extending from North Carolina to Maine. New Jersey, New York, and Connecticut bore the brunt of the destruction, but the mammoth storm took out power and destroyed boats in more than 15 states. Before the wind and rain had stopped, BoatU.S. was deploying its Catastrophe team (CAT team) into the hardest-hit areas, where small things were causing big problems.

Early Wednesday morning, less than 36 hours after Sandy made landfall, Jim Schofield, a retired BoatU.S. employee, was hard at work trying to find rooms for the CAT teams heading out into the field. “The phones are still out in many areas, the coastal hotels are shut down, the inland hotels are full of people who evacuated,” he said. “I finally manage to book something, and then FEMA or the Army Corps of Engineers comes in and commandeers a block of rooms, leaving my guys out in the cold.”

Hotels were only one piece of the logistical puzzle. Dave Wiggin, who has worked on BoatU.S. CAT teams for more than two decades, arrived on Staten Island two days after Superstorm Sandy to find the marina owners in Great Kills Harbor grappling with a host of problems: “There is no electricity. Every piece of equipment — from the Travelift to forklifts to generators to tools — has been submerged in eight feet of saltwater.” Gasoline was already becoming scarce and soon it would be rationed. Restaurants were closed, supermarkets shuttered, roads were blocked by trees, power lines were down, emergency vehicles were everywhere. Finding a clear way through the last four blocks to the waterfront took Dave a dozen tries and more than half an hour.

Ten days after Sandy, when the Seaworthy editors paid a visit to...
More Left Coast Musings

After seeing all those interesting letters in the October Seaworthy, I decided to relate one of my unique experiences during 30 years of boating in Southern California.

The incident happened while fishing alone about a mile offshore in the vicinity of Port Hueneme. The day was clear and the sea was about as calm as could be. I was kneeling in the cockpit of my 22-foot Sea Ray rigging my lines when I happened to look over the starboard beam and saw this huge breaking wave coming at me. I literally leaped to the helm. Luckily the engine was idling. In an instant, I hit the throttle and turned hard right to meet the wave head-on. Unfortunately the wide-open throttle on the big V8 sent the boat over the crest, and with nothing under me but salty air, the boat landed pretty hard. Anything anywhere ended up somewhere else. Fortunately, I was quick to shut the engine down before it blew. I then checked everything I could — bilge, engine mounts, gas tank. Amazingly, there was no damage and none emerged after another five years with the boat.

I’m guessing that wave was nine or 10 feet over my head, which means that the wave was about four feet higher than that due to my position kneeling.

Frank Miller
Bellingham, Washington

Frank did exactly the right thing by putting the bow into the wave, even if he caught some air on the backside. His quick reactions almost certainly kept the boat from being swamped or worse. His story is a good reminder that wave heights fall along a normal distribution, which means that in six-foot waves (or swell), 1 in 100 waves will be larger than nine feet, and 1 in 1,000 will be larger than 11 feet. And then there’s that one wave you just hope doesn’t have your name on it …

*******

I was surprised to learn from your introduction that “West Coast weather is consistent.” Generally true in Southern California and the San Francisco Bay where we used to live — but not here in the Puget Sound (more generally the Salish Sea). We have windstorms each winter into the 60-plus-knot range and occasional events over 100.

Even during the summer, the weather, at least the winds, can go from days of calm that frustrate sailors to 15 to 40 knots that combine with currents to set up wave trains that make powerboating uncomfortable or worse. All divided up into microclimates which can surprise folks. And the old standbys of classic weather books like counterclockwise-winds-around-the-low don’t work here because of the complex terrain.

Turns out there are reliable forecasts for this area but most boaters do not know about them. I’m trying to address that, a long story, however. I love Seaworthy and highly recommend it to all my Power Squadron students!

Bill Ray
Edmonds, Washington

Swells and Safety

Like the author, I wouldn’t have expected northerly swells (even large ones) to wrap around the point to that extent. Interesting that anchoring in 60 feet of water just a mile away worked so well — a point worth remembering in light airs. I’m in the process of upgrading my anchoring system, and based on this article, I’ll make sure I have enough rode for 6:1 in 60 feet. Here is a photo of my boat in Stillwater Cove, albeit in different conditions. The other photo looks out into Carmel Bay past Pescadero Rocks (shown on the chart in the article) — you exit to the left. I imagine waves were breaking there.

John Connally
Los Gatos, California

Yes, it’s good to be reminded that Stillwater Cove is calm most of the time, and quite an idyllic anchorage. But on the flip side, when we talked to Bob Pankonin, the harbormaster at Stillwater Cove Yacht Club, he pointed out that one of the California “monster wave” surfing sites, Ghost Tree, lies just north of Pescadero Point. If you want to scare yourself silly, Google it. It just goes to show that the
safety of almost any anchorage depends upon conditions at the time.

************

George Philips closes his article by saying “how very lucky” he was. He was not lucky at all. He was saved by his exceptional skill and preparation. He carried extra anchors; flaked the rode “just in case;” he had put some rope on the bitter end so it could be cut in a hurry; he had sufficient line to anchor in deep water; and he even managed to tie a fender to the abandoned anchor so it could be recovered. That is most definitely skill and not luck.

Leonard Koenick
Ft. Washington, Maryland

Electric Shock Drowning

I would think someone would have constructed a device that would quickly tell the user if there was electricity in the water rather than reading the current from the shore power cord. Ground one lead and put the other lead in the water and get a reading back on the meter.

C. Henry Depew
Tallahassee, Florida

************

A very good article, except the last paragraph leaves one hanging. The last paragraph states that you can test to see if a boat is leaking electrical current using an AC clamp meter. Exactly how do you hook up the clamp meter onto the shore power cord to measure the electricity going into the boat's electrical system and returning from the system?

Dave Skuse
Rochester, New York

Alas, there is no easy-to-use device that can be dipped into the water to detect stray current. Clamp meters, mentioned in the October Seaworthy article, are probably the easiest to use, most readily available device that can be used by non-electricians. They work by clamping over the shore power cable while all of the circuits on the boat are under load using all of the onboard appliances (heater, battery charger, toaster…). A reading of 0 indicates a healthy system: all of the electricity going onto the boat is also returning to the power pedestal. Anything other than a reading of 0, however, indicates a fault — or “leak” — somewhere in your boat’s system or, possibly, a nearby boat. To rule out a nearby boat as the source of the problem, turn off power at your boat’s power pedestal. If the non-zero reading persists, the problem is coming from a nearby boat. If, however, you get a reading of 0, the fault is coming from your boat, and you can isolate the problem by testing the various circuits and appliances under load. The testing takes time and some skill; it’s not as easy as it sounds.

The American Boat and Yacht Council (ABYC) is working with marine electrical companies to develop an even more user-friendly device — a marine shore power pigtail with a meter that would indicate any potential faults. It’s relatively easy to use but will be expensive — around $300. ABYC hopes that freshwater marinas will use the pigtail routinely to check boats.

************

Great story on our Lake of the Ozarks electric shock drownings and what’s being done to correct that around the lake. And thanks to Bob Adriance for all your years of service to the recreational boating community. I’ve been reading your materials for 25-plus years and have quoted you as well in my radio shows along the way. Enjoy your extended time on the water now!

Bob May
Bob’s No Wake Zone Radio
Clinton, Missouri

************

This happened to a young boy at the Detroit Yacht Club around 1963. He went into the water to pick up a coffee maker strainer. I have been warning people ever since, always unplugging the boats that were near a swimmer. Does this happen in saltwater?

Bob Deresz
Miami, Florida

No, saltwater is more conductive than the human body, which means that electricity will follow saltwater to ground and bypass a swimmer. However, no one is sure about brackish water — at what point does the lack of salt mean that the water is less conductive than a swimmer? We recommend not swimming in fresh or brackish water near an energized dock.

Bye-Bye Bob

Oh. Did not see that coming.

About five years ago, my club decided to host a Hurricane Preparedness Seminar. I was tasked with preparing it. Because of the work Bob had done on the Houston Yacht Club, I knew I had to reach out to him for advice.

Bob shared his ideas as well as materials for our seminar. In addition, he put me in touch with the local TowBoatU.S. operator, who volunteered to leave his business (one of the largest operators in the country) and speak to us.

The quality of the materials we shared and the overwhelming amount of good information we provided blew the club away. Then the real life stories from BoatU.S. put the cherry on top.

What an asset we are losing. I am happy to see Bob heading off to enjoy himself, and know that we’ll be in good hands. But, sir, you will be sorely missed.

Bill Prater
Lake Harris, Florida

************

BoatU.S. made the right decision in hiring Bob Adriance 35 years ago. He has been a shining beacon for all of us who love boating and want to stay safe on the water. Here’s hoping he logs many more nautical miles in the next episode of his interesting life, and that he writes about his adventures for Seaworthy. My husband, Kiko, and I join his thousands of other fans in wishing him fair winds, and many thanks.

Gordie Villalon
Pine Island, Florida
Making Sure Batteries Don’t Go Boom

When the owner of this battery turned the key on his 27-foot Wellcraft after a pleasant couple of hours ashore, he thought someone had sabotaged his boat (Claim #1214339). “I heard the starter click and then, ‘Kaboom!’” he told Seaworthy. The sulfuric acid that spewed out was largely contained within the engine compartment, but the owner destroyed his clothes cleaning it up. The deep-cycle battery was only a few months old, and it had been installed and topped up by the boatyard. BoatU.S. referred the owner to the manufacturer, who refunded the purchase price. The owner wanted to make sure others were aware of what can happen if a battery explodes.

Battery explosions like this involve two things: hydrogen gas and a spark. Hydrogen is the lightest of the elements, so it will disperse quickly if it is released into a ventilated space. In this case, the battery had been installed with plenty of ventilation as the American Boat and Yacht Council (ABYC) recommends. It was located in a spacious engine compartment with two air vents right above it. The couple of hours between turning off the engine and starting it again should have dissipated any hydrogen gas. The alternative is that hydrogen gas built up inside the battery case and an internal spark caused the explosion. This could happen if the electrolyte levels got so low that the plates were no longer covered, or if the vent was clogged, allowing hydrogen to build up.

The battery had been kept on a shore charger when the boat was in the slip, and the owner had not thought it necessary to check the electrolyte because the battery was almost new. According to marine author Nigel Calder, “If the battery has not been topped up since the first installation, and if it had been overcharged repeatedly since then (maybe plugged into shore power with a charger that was malfunctioning or had too high a float setting), it may have been substantially boiled dry.” Trojan, a manufacturer of deep-cycle batteries for golf carts, recommends topping up a new battery monthly until you get a good idea of how “thirsty” it is.

So make sure your deep-cycle batteries are in a well-ventilated space, check the electrolyte levels regularly, charge it using a marine charger with a regulator, keep grease and other contaminants away from the vents, and watch out for bulges in the battery case, which indicate a buildup of hydrogen gas. If you prefer a lower-maintenance solution, the next time you need to replace your batteries, you might want to switch to AGM or gel technology, as this owner did. But don’t assume you don’t have to do anything — even those batteries are not maintenance free.

Wet Sand And Aluminum Don’t Mix

The owner of this 2002 23-foot Pacific Boat, an aluminum center-console skiff, couldn’t figure out why holes kept developing along the keelson on the bottom of the boat. After fixing several with epoxy, he put in a claim with BoatU.S. (#1213765). He was the third owner of the vessel, and he told the surveyor he towed it to Baja, Mexico, and launched it from the beach.

The surveyor found a large amount of wet, sulfurous-smelling sand in the after reaches of the bilge that led to poultrie corrosion. This relatively common type of corrosion occurs when wood, dirt, or fluff (any material that can hold and wick moisture) comes in contact with the aluminum surface. If this detritus stays dry, the situation is relatively benign. However, when the material becomes wet, the aluminum surface beneath the material is starved of oxygen and it cannot build up the layer of oxidation necessary to protect the aluminum from corroding.

Sand accumulated in the hollow keelson along with any water that came into the boat, and the water/sand mixture sat there because there was no way to access the area to clean it and no bilge pump to remove the water. Since BoatU.S. policies do not cover wear, tear, and corrosion, his claim was denied. If you have an aluminum boat, make sure to keep the bilge clean and dry in order to avoid this problem. If access is difficult, figure out a way to improve it.
Alcohol And Boating, Take 1: Drunk Skippers

Seaworthy has discussed the issue of alcohol and boats many times, but an incident in New York and a conviction in California highlight the increasingly serious view law enforcement and the courts are taking of boating under the influence (BUI).

In September 2012, a driver in a deadly boat crash in New York state was indicted for vehicular homicide — a charge usually reserved for the worst cases of intoxication and recklessness on highways. Prosecutors say 27-year-old Brian Andreski was under the influence of alcohol and cocaine on June 23 when his 25-foot speed boat slammed into a fishing vessel in Long Island’s Great South Bay, killing a fisherman heading for a shark-catching tournament. A grand jury indicted Andreski on the charge of aggravated vehicular homicide, a felony previously used only in motor vehicle crashes on land. If Andreski is convicted, he could face up to 25 years in prison. The tragedy spurred legislators to call for tougher laws for BUI in New York and resulted in BUI crackdowns by Long Island police last summer which are likely to continue next summer.

In October 2012, a judge handed down the first murder conviction in a BUI case in California and, as far as we are aware, in the nation. The defendant, 25-year-old Justin Ennis, cried openly in the courtroom as a judge sentenced him. In August of 2010, Sal Rodriguez and an adult friend were out in Rodriguez’s boat celebrating a child’s birthday. Rodriguez, a soon-to-be father, had stopped to pick up one of the children and an inner tube when he saw Ennis racing toward him in a powerboat. Rodriguez tried to start his boat and move out of the way, but he was too late. “Mr. Ennis spent the day drinking, and one hour after the collision, he was [at] a 0.12 blood alcohol,” Deputy District Attorney David Wolf said. “In addition, he had marijuana in his system.” Ennis was sentenced to 15 years to life in prison for second-degree murder.

Alcohol And Boating, Take 2: Drunk Passengers

To reduce BUI accidents, some well-meaning organizations and individuals have called for a “designated skipper” similar to the “designated driver” that has worked to reduce DUI accidents. Seaworthy has argued against the proposal if it gives others on the boat license to drink too much. Unlike in a car, passengers are not safely strapped in while the vehicle is underway, and the marine environment can be hazardous to anyone who is impaired. Another court decision handed down this fall by the Charleston Division of the United States District Admiralty Court in a civil suit (not involving a BoatU.S. insured) demonstrates the shortcomings of the designated skipper approach (Pressly v. Kaberna).

On July 21, 2010, Kevin Kaberna invited some friends to join him on his 28-foot Sea Ray. His friends brought some other friends, and by the time they left the dock at 12:30 p.m., there were 15 people aboard along with a great deal of alcohol. One of the passengers was Anna Truitt Pressly, a 34-year-old personal trainer and marathon runner who had never met Kaberna. The group spent the afternoon traveling to different spots drinking, swimming, playing music, and partying. By 5:00, Kaberna realized some of his passengers were drunk. He was sober — as confirmed by a Breathalyzer an hour or so later. He decided it would be a good idea to get some food into his guests.

While motoring slowly through a narrow channel on the way to a restaurant, one of the drunken passengers jumped overboard. As soon as Kaberna stopped the boat to retrieve him, several other people jumped into the water. He ordered everybody back aboard, but some of the passengers did not hear him over the loud music. Pressly was behind the boat, near the swim platform, talking to another passenger when Kaberna backed up. The propeller sliced into her left leg. Over the next two weeks, Pressly would undergo seven surgeries.

The court awarded Pressly $1.9 million. Kaberna was found to be at fault for not operating the vessel in a safe and prudent manner and not exercising reasonable care for his passengers. It was no excuse that many of them were drunk and some were acting irresponsibly. As captain, he had a legal obligation to know where all 14 of his passengers were and to keep them safe.

Beware Bad Fuel

Many serious offshore boats are equipped with two Racors just to be sure. Thal adds, “Stock up before you go offshore with no less than three complete sets of primary and secondary fuel filters for the engine, and don’t forget three sets for the generator.” Another suggestion: Have your fuel polished before heading offshore if your boat has been sitting for a season or more. Many companies have mobile polishing units they can bring to your marina. That could save you a lot of unnecessary frustration at the worst possible time.

To avoid fuel problems, install a centrifugal filter, such as those manufactured by Racor, between the diesel tank and the engine in an easily accessible place. These are considered primary fuel filters while the small filter on the fuel pump is a secondary filter.
the CAT teams in the field, some of the most vexing challenges had started to be addressed. In Great Kills Harbor, generators were humming all along the waterfront, pumps were siphoning water out of basements into storm sewers, and forklifts were bustling around with boats cradled in their upraised arms. The Great Kills Yacht Club had hired a crane, and all of its boats were back on jackstands, upright though thoroughly battered. But gasoline was being rationed, boats were scattered willy-nilly around residential neighborhoods, twisted and broken jackstands lay in piles like kindling, condemned houses extended for four blocks and more from the water’s edge, and the power was still out on large parts of the island. To add insult to injury, everything was covered with a couple of inches of snow from the nor’easter that had come through the night before.

Dave Wiggin was staying in an apartment more than an hour from Staten Island, so he was spending 14 to 16 hours a day in the field, working out of his car, subsisting on power bars. The small things most of us take for granted were still tremendously difficult, and life was a long way from normal.

Despite all that, the first checks for BoatU.S. insureds had been processed and mailed, and were being received by grateful owners. To make that happen, BoatU.S. fielded over 40 CAT team specialists across more than 400 miles of coastline, all working as hard and as long as Dave Wiggin. Many of them were managing multiple salvors at a half-dozen marinas. At BoatU.S. headquarters in Alexandria, Virginia, the entire claims department had been mobilized and personnel had been

Friday after Thanksgiving, BoatU.S. had geared right back up and our employees were once again processing claims as quickly and efficiently as possible.

“Never Seen Anything Like This”

In Great Kills Harbor, Staten Island, on November 8, 10 days after Superstorm Sandy made landfall, Dave Wiggin stood in the middle of Mansion Avenue talking to Ed Corbo, the owner of Mansion Marina. On one side of them, boats from the marina’s hardstand area straddled the crumpled chain-link fence running along the road. Some were tilted at odd angles, their bows or sterns sticking straight up into the air, as if they had made a desperate attempt to leap the fence and been brought down mid-flight. On the other side, a tangle of a dozen sail and powerboats ranging from 20 to 40 feet in length leaned precariously against one another where they had fetched up against one of the elegant houses fronting the street. Farther down Mansion Avenue, a row of sailboats lay on their sides in front of the row of houses, their masts tangled in the electrical wires overhead. Right behind Dave, a 25-foot Chris-Craft sat on the edge of the road in front of a house as if it had been parallel-parked. A note on the side said, “Do not move … Boat is fine, not junk,” with a phone number.

Dave, who had been told that morning he looked like Richard Gere with a beard and was making sure everyone knew it, introduced us to Ed. We offered our condolences and asked if he minded if we wandered around his marina. “What’s left of it,” he said grimly.

Corbo and his marina crew had made a Herculean effort to get as many boats as possible out of the water and on the hardstand before Sandy hit. The storm surge had not only lifted almost all of the boats off their jackstands and carried them across the hardstand area, but it had also floated the docks off their pilings and left them in twisted heaps along the bulkhead. In the Travelift slip, a 25-foot center console sat atop a jumble of floating docks. Shallow puddles of gasoline and diesel shimmered in rainbow colors over the muddy ground, gathering in the low-lying hardstand area from the damaged boats in this marina and the marinas on either side. The Coast Guard had been by that morning asking when the fuel would be cleaned up. But there was no electricity, no working pumps, and no way to stop the continuous trickle of fuel coming from dozens of different places.

The marina employees were tackling a pile of powerboats on the bulkhead with a forklift, picking out one at a time and trundling them over to a cleared space where several dozen boats had been re-blocked in neat rows. Everyone looked shell-shocked. They’d been working nonstop for nearly two weeks, starting three days before Sandy struck. The nor’easter the day before had stopped the work for half a day, but at dawn that morning they had been back at it again, despite the freezing temperatures and snow.

When our CAT team specialists in the field started reporting in within 48 hours of Sandy’s landfall, they all said the same thing: “I’ve never seen anything like this.” Even those with more than two decades of experience working disaster sites in the wake of hurricanes could hardly believe how widespread and complete the devastation was. Their reaction should have prepared us, but we were still shocked. We spent the first hour or so saying, “This is unbelievable.” “I’ve never seen anything like it.” “This is absolutely awful.” After that, we stopped saying anything at all.

A Day In the Life Of A CAT Team Member

Dave Wiggin pasted a BoatU.S. sticker with a claim number and the BoatU.S. phone number to the bow of a blue, 30-foot C&C that lay nose down halfway over the crushed chain-link fence that had marked the boundary of the Mansion Marina hardstand area. He returned to his car, pulled out a sheaf of claim files in manila folders, and riffled through them until he found the right one. He made some notes, and then said, “A guy’s bringing a crane in where one of our boats is. I need to go over and negotiate a salvage contract with him.”

We climbed into his car after shifting boxes of claim files, foul weather gear, bags of power bars, and a huge plastic jug of dog treats shaped like pigs-in-a-blanket. The first three tries to reach the waterfront in the right area ended in streets blocked by trees, repair vehicles, and boats. A police car with flashing lights guarded the entrance to the fourth street we tried. Dave slowed and rolled down his window, but the police waved him through when they saw the BoatU.S. Catastrophe Team sticker on the side of his car.
Dave turned onto Tennyson Drive, separated from the water by a wide marsh filled with cattails. At least a dozen boats lay scattered among the yellowed stalks, and three or four had come to rest against the guardrail running alongside the road. Most of the boats came in pairs, one tied to either side of a pontoon with doubled lines and chafe gear still in place. Dave slowed, reading the names on some of the sterns of the boats alongside the road. “The hardest thing right now is finding our boats. I think all of these came from Nichols Marina on the eastern side of Great Kills Harbor,” he said. “Those pontoons floated off their pilings and the boats were driven right across the harbor and almost out the mouth to fetch up here, half a mile away.”

Dave pulled over behind a utility vehicle with a workman in the cherry picker fixing a power line. Just beyond, two 35-foot powerboats on either side of their pontoon sat in the middle of an intersection. The tower on one was within a few feet of the power lines. “Going to have to take off that tower,” Dave said.

It took a couple of phone calls back and forth, but eventually Captain Frank Nicolais a local salvor, found us. In the meantime, Dave fielded a half-dozen calls about other boats from members, salvors, and BoatU.S. headquarters. Captain Frank and Dave engaged in a spirited negotiation before they signed a salvage contract on the trunk of Dave’s car. One of the biggest advantages of our CAT team personnel is their long experience with salvage. They know not only how much they should pay, but also how to judge whether a salvor is up to the task or a fly-by-night operator with no knowledge of boats stepping in to make money off of a disaster.

As we climbed back into the car, Dave said, “Multiply by 300.”

“Multiply by 300”

Multiply by 300. Not just 300 claims. Multiply by 300 marinas ... at least.

When we arrived at Nelson Marine Basin in Island Heights, New Jersey, the next morning, 11 days after Sandy struck, work was already well underway. It had taken us more than three hours to drive the 50 miles from Monmouth Junction, the only place we’d been able to find a hotel, out to the seaside resort area. The roads were jammed with cars as people flooded in to check on houses on the mainland and the Barrier Islands, and with semis bringing food and supplies to the stores whose shelves were all but bare. Power had been off again overnight in several of the towns we passed through, and emergency workers were clearing more than one intersection of traffic accidents.

At Nelson’s, we found CAT team surveyor Jack Hornor with marina owner Gordon Nelson observing the slow work of untangling a massive pile of boats. Gordon had hired a crane, and it was painstakingly lifting each boat out of the pileup and swinging it into the waiting Travelift. The Travelift then lumbered off to set its load down alongside one of the neat rows of re-blocked boats while Gordon’s crew scrambled to set up jackstands.

Multiply by 100-and-something ...

As the crane lifted a 40-foot Beneteau sloop, Jack said, “That’s one of ours, and the big Silverton under it.” The Beneteau had been lying on its side and came up listing drunkenly to starboard. The crane operator carefully adjusted the straps to rotate the boat just enough so the mast cleared the Travelift arms. As it settled into the Travelift slings, Jack said, “The owner just got her back after major repairs to the keel and hull from a bad grounding.”

Gordon was still in a state of shock. The marina had been a family-owned business since 1965, and he was the third generation to manage it. He had spent the storm in his apartment on the second floor of his new sailing center, a beautiful, gray wooden building perched on the bulkhead overlooking the sailboat rental docks. The sailing center had been Gordon’s passion, and under his management it had grown to seven instructors and dozens of boats including 30 Ensigns, a 25-foot O’Day, and a 30-foot Gemini catamaran. Gordon was committed to getting adults out on the water, not just kids, and some of those he had turned on to sailing now had boats lying in the pile at the crane’s feet. The sailing center had been self insured, and Gordon couldn’t see how he’d be able to get it up and running again.

Near Crescent Beach, Staten Island, NY

It had taken more than an hour-and-a-half to reach the boat and finish our business with Captain Frank, the third step in Dave’s handling of this member’s claim — he had already spent time contacting the member and locating the boat. Once Captain Frank got the boat back to where it had come from, the fourth step — the damage appraisal — could begin.

Seaworthy January 2013 7
But he was already doing it. The crane was hard at work, and all of the boats would soon be re-blocked so that the damage assessments could begin. Like so many other marina owners, Gordon was taking it one step at a time, doing what had to be done, and not waiting for anyone else to step in.

“‘This is where BoatU.S. can make a difference,’ Jack told us. ‘What the marina owners need right now more than anything else is cash. We’re in the field, so we know when the work has been done.’ As the crane picked up the Silverton we had insured, he continued. ‘As soon as we can, we start the money flowing for the salvage of our boats. For some of these marinas, that money will fund the work that has to be done until they start receiving payments from owners or other insurance companies.’

Stories like this were unfolding from the eastern end of Long Island as far south as Cape May. Forty BoatU.S. CAT team specialists were doing whatever they could to help, from offering advice and authorizing checks to taking the lead in complex salvage operations.

On Friday, November 9, Mike Ruah, writing to the rest of the boat owners at the Stuyvesant Yacht Club on City Island in New York City, said, “Today, a barge-mounted crane arrived at the club seawall to begin lifting some of the boats that are in the twisted pile … of … roughly 29 boats …. The BoatU.S. Catastrophe Team was the first insurance group to arrive onsite. They immediately assessed the situation and joined our Board of Directors at a meeting on Monday evening, November 5 [one week after Sandy made landfall]. The BoatU.S. team members Fred Wright, Ted Lemmond, and Tom Benton have shown a genuine concern for all boat owners. Tom will be onsite during the recovery operations and will assess damages once the boats are safely on jackstands.”

Mike McCook, the salvage coordinator for the BoatU.S. Catastrophe Team and storm veteran with over 30 years of hurricane recovery experience, was on the debris-laden and boat-strewn waterfront at Atlantic Highlands Marina the day after the storm. Every single one of the municipal facility’s 425-plus boats had to be salvaged or recovered. Many were owned by BoatU.S. members. Mike teamed up with Captain Harold Smith of TowBoatU.S. Sandy Hook, and the BoatU.S. team worked with marina personnel to develop a salvage master plan to recover all of the marina’s boats. The City Council ratified the plan just three days after Mike arrived onsite. Three weeks after the storm, every boat had been recovered and safely blocked ashore, and the damage appraisal process had begun.

Which brings us back to logistics. To cover the waterfront, so to speak, BoatU.S. has had to use all of the resources and experience we have built over 30 years of CAT team responses. We have brought people out of retirement, and mobilized new CAT team personnel we had been grooming. At headquarters in Alexandria, Virginia, BoatU.S. employees have been working just as hard as the CAT team members in the field.

Rick Wilson, CAT team director, cut his teeth on Hurricane Bob in 1991. Three weeks after Superstorm Sandy steamrolled the Northeast, his normally smooth baby face was covered with a thick growth of black whiskers, and his eyes were red-rimmed. “The only storm that even comes close to this one for us was Isabel,” he said. “And Sandy makes Isabel pale in comparison.”

Superstorm Sandy has stretched all BoatU.S. employees as far as we have ever been stretched and will continue to do so well into the spring. In most other CAT events, we would have wrapped up and paid out the last claims after three weeks. Despite the hurdles, with many times the claims we’ve had in most CAT events, and every one of our resources already committed, by the time you read this, the majority of damage assessments should have been completed. However, the repairs on many boats will have to wait until the weather breaks in the spring. Carroll Robertson, head of claims for BoatU.S., summed it up: “This is a marathon, not a sprint.”
Early Lessons Learned: Floating Docks With Tall Pilings

Sandy was a “hybrid storm” that combined the punch of a hurricane with the reach and longevity of a nor’easter. Sandy’s arrival also coincided with an unusually high lunar tide, which resulted in a massive — and destructive — eight- to 12-foot surge.

As with every other major storm, BoatU.S. Technical Services has been meeting with claims personnel and CAT team staff and surveyors to learn what could have been done to protect boats. In past storms, boats on shore were less likely to be seriously damaged, since boats don’t sink on land. But Sandy’s unusually high surge picked up boats — thousands of boats — that were being stored ashore for the winter and then bounced them against each other as well as buildings, telephone poles, electric wires, and automobiles.

It’s difficult to see how this sort of damage could have been reduced. Storage on high ground typically wasn’t an option and there wasn’t enough time or resources available to haul boats inland. Boats left in the water at marinas, as in past storms, proved to be equally as vulnerable to damage as boats on shore and many were bashed against pilings or sank. The one exception that we saw — the only place that boats consistently resisted damage — was at floating docks with pilings that were taller than the surge. The boats shown above, at a heavily battered area on Staten Island, simply floated up and down with the surge. Boats at floating docks with shorter pilings, however, were among the most damaged boats — the surge lifted the docks off the piling and carried them ashore. The key was the height of the pilings.

In the coming months, we will be debriefing our CAT team personnel and talking to marina owners in an effort to learn more. And we will share what we learn in the pages of Seaworthy and in webinars for the industry and for owners in hopes of reducing the damage should another hybrid storm like Sandy come calling.

The Making Of A Superstorm

Let’s be clear — when Sandy came ashore on October 29, it was not a hurricane. Technically, it was an extratropical cyclone. Factually, it was all but unique in the annals of weather history in this country. The meteorological ingredients that created Superstorm Sandy may never have come together in just this way before. So what went into making Hurricane Sandy into a “superstorm”?

To answer that, we need to start with some meteorological basics. Tropical cyclones, which include hurricanes, develop around a core of warm air and are not associated with frontal systems. They are fueled by oceanic heat and moisture and grow strongest when the surrounding air is uniformly warm and humid and upper-level winds are relatively weak. In these conditions, sustained wind speeds can reach 120 to 150 knots, but the storm center is usually very compact, often less than 100 miles in diameter. When separated from their warm-water energy source, whether by moving over land or over colder water, tropical cyclones quickly become disorganized and wind speeds drop to gale force. Damage at landfall is usually limited to the tight band around the storm center where the strongest winds and largest surges occur; once inland, most damage results from flooding as the tropical air cools and loses its moisture in the form of heavy rainfall.

In contrast, extratropical cyclones, known as lows or nor’easters in the United States, develop around a core of cold air and are typically positioned at or near the intersection of a cold front and a warm front. They draw their energy from the temperature and pressure differentials across these front lines and can be strengthened by the strong winds of the polar jet stream. They average three to four times larger than tropical cyclones, but their wind speeds rarely reach half of the highest wind speeds of a fully developed hurricane. They can last for days and cover thousands of miles before the front lines dissipate and the low center “fills.”

For Hurricane Sandy to become Superstorm Sandy, it had to undergo a process called extratropical transition — to switch from a warm-core, tropical cyclone fueled by the Gulf Stream to a cold-core, extratropical cyclone fueled by a complex frontal system and the jet stream. Meteorologists are aware of three ways this can occur, as described by Bob Henson in a blog post on the website for the National Center for Astomspheric Research:
As colder, drier air from the jet stream intrudes into the warm core, the storm typically loses symmetry and begins tilting toward the coldest upper-level air. In an average year, one or more hurricanes will evolve into extratropical storms this way as they move into the North Atlantic.

Once in a while, an extratropical cyclone will get a boost of energy by absorbing the remnants of a hurricane. In October 1991, well east of New England, the iconic “perfect storm,” made famous by the Sebastian Junger book of the same name, was fueled by heat and moisture from the late Hurricane Grace. While it never came ashore, this powerful storm still pushed destructive surf into much of the U.S. East Coast, killed 13 people, and caused $200 million in property damage.

In the least understood case, a pocket of warm, moist air is drawn into the cold-core circulation, then pinched off through a complicated set of dynamics involving air pulled down from the stratosphere. The extratropical cyclone is said to have developed a “warm seclusion,” and though not well understood, it is known that some of the Atlantic’s most intense storms have emerged from this process.

Sandy’s evolution appears to have involved elements of all three, meaning that meteorologists are still parsing the maps, trying to understand all of the dynamics at play. But to simplify it as much as possible, when Hurricane Sandy headed north after battering the Caribbean, a deep trough was moving across the northern United States, and the jet stream had dipped well south of its normal track. The cold air in the trough meshed with Sandy’s circulation and pinwheeled around it, creating a nor’easter of unprecedented size and rarely seen power. The energy from the joining of the two systems fueled the hurricane at its heart: Even as the outer part of the storm increasingly resembled an extratropical cyclone, a thin eye-wall appeared at Sandy’s center, a sign of hurricane intensification. In terms of its total energy, Superstorm Sandy was the second most powerful storm in history (see chart above).

None of this would have been of more than academic interest if Sandy had simply headed off into the Atlantic the way most hurricanes do. Instead of taking a right, though, the storm took a 90-degree turn to the left and made a beeline for the Jersey shore. That turn resulted from an additional meteorological twist — a strong high-pressure system blocking Sandy’s path to the east. The rest of the story has been hashed over often enough: By the time the storm made landfall, it was more than 900 miles wide, and its coming coincided with a high lunar tide. The result was unprecedented storm surges and devastation along the coast from Cape May to the eastern end of Long Island and in parts of Connecticut.

Only one other storm in recorded history may have had a similar morphology — the Long Island Express hurricane of 1938. Incomplete weather records make it impossible to know for certain, but meteorologists have pointed out many similarities. Though forecasters were well aware of the storm’s existence days before it made landfall, everyone expected it to curve off into the Atlantic. No one predicted it would cross Long Island to come ashore in Connecticut and Rhode Island as it did. Storm surges of 14 feet and more struck from Connecticut to Massachusetts. Estimates of total deaths range from 682 to 800.

Given all of this complexity, the accuracy of the forecasts for Sandy’s track and potential impacts is astonishing. The European model was the first to predict this outcome, one week before the storm made landfall. The NOAA models took a few more days to come to the same conclusion, but did so in time to warn people along the coasts to evacuate. One cannot help but wonder what the death toll would have been if the forecasts had been less accurate. Superstorm Sandy was a meteorological anomaly. We can only hope we don’t see its like again in our lifetimes.

DAMAGE ESTIMATES

Number of deaths: 106
Total economic losses: $60 billion plus
Total recreational boats damage or destroyed: 65,000
Value of recreational boats damage or destroyed: $675 million
Number of marinas seriously damaged or destroyed: 500 plus
Capacity, Stability, And Safety: How Many Is Too Many?

The capsize of a 34-foot cabin cruiser in Long Island Sound raises questions about boat carrying capacities.

Boaters gather every year in Long Island Sound for the dozens of private and municipal Fourth of July fireworks displays visible from the water. Among the hundreds of boats on the Sound last year was a 34-foot Silverton cabin cruiser, called Kandi Won, loaded down with 26 friends and family members of the owner. When the fireworks ended, the Silverton joined the crush of boats heading home. At about 10 p.m., according to news reports, the boat rolled, spilling passengers into the water.

“It was very fast,” passenger Lisa Gaines later told the Today Show. “The boat started to lean, and it just didn’t recover.” Three children, including Gaines’ 8-year-old daughter Victoria, were trapped in the cabin when the boat went down, and died in the accident.

An investigation of the capsizing by Nassau County, New York police is still underway, but response in the boating community and in legislative chambers was swift. In New York, spurred on by Lisa Gaines and her husband Paul, state legislators introduced a bill calling for more boater training. Most of the response, though, has centered on the number of people aboard — by seemingly any measure, the boat was overloaded. But the older boat had recently been purchased by an inexperienced skipper, who may not have understood the capacity numbers, and see if the numbers prove conclusively.

The numbers, it turned out, were the easy part. The hard part, Gerr says, was reconstructing the boat. Silverton is in bankruptcy, and plans for the older boat were difficult to come by. He had to start from scratch, developing a mathematical model as well as a computer drafting simulation to analyze the boat. Once he had those models, he was able to determine the stability of the vessel when it was loaded with people.

“Most of the response, though, has centered on the number of people aboard — by seemingly any measure, the boat was overloaded. But the older boat had recently been purchased by an inexperienced skipper, who may not have understood the danger. Boats under 20 feet and powered by an engine are required to have capacity plates indicating the number of people a boat can safely carry. These remove any doubt about when a boat is overloaded. But boats 20 feet and over, like Kandi Won, have no such labeling. In the wake of the July accident, some experts are asking whether the capacity plate requirement should be extended to cover all boats.

Dave Gerr, nautical architect and author of (among other books) The Elements of Boat Strength for Builders, Designers and Owners, believes that all powerboats should carry capacity plates, and he has recommended that the American Boat and Yacht Council (ABYC) adopt the requirement as a standard. Gerr, with a group of other naval architects, investigated the sinking of Kandi Won.

“It was immediately apparent to all of us that this was crazy,” he says. “You don’t put 27 people on this boat.” So a bunch of us said, “OK, that’s our intuition, it seems like we all agree. Let’s take a look at the stability numbers, and see if the numbers prove that conclusively.”

The numbers, it turned out, were the easy part. The hard part, Gerr says, was reconstructing the boat. Silverton is in bankruptcy, and plans for the older boat were difficult to come by. He had to start from scratch, developing a mathematical model as well as a computer drafting simulation to analyze the boat. Once he had those models, he was able to determine the stability of the vessel when it was loaded with people.

“My original results were surprising,” Gerr says, “so I had a couple of people look at it. Basically, it was quite a nice boat. Quite safe and stable. But with 27 people onboard, including eight on the flybridge, the stability was very questionable. It had almost no reserve stability at all.”

His conclusion: “A boat that size was probably safe with 15 or 16 people onboard. Maybe even a few more.”

A real-world test of his finding was fairly simple. Marine consultant Eric Sorenson piled weight on the rail of a similar Silverton 34 and measured the angle of heel. In a detailed article in Soundings last year, Sorenson was more conservative in his preliminary findings. “Some feel that 15 [passengers] would be permissible in calm waters in daylight if half of them are kids,” he writes, “but I think this is excessive because of the complications so many people create in the event of an emergency.”

Gerr thinks Sorenson’s estimate is too conservative. “I can see no reason that boat wouldn’t be safe with 15 or 16 people aboard for ordinary coastwise junkets,” he says, “but with no more than two or three on the flybridge.”

Sorenson’s Soundings article is an excellent and in-depth investigation. It is also physics-heavy and, one suspects, a bit dense for casual boaters like the skipper of Kandi Won. He concludes that experience is the best guide, or barring that, education of the sort offered by the Coast Guard and Power Squadron.

Gerr agrees that experience (and common sense) should serve as a guide. “Anyone who’s spent any time on the water sort of understands” when a boat is overloaded, he says. “If you’ve been in a canoe, you understand. If you’ve been in a rowboat, you understand.”
James Mercante, a lawyer hired by the insurance company of the Kandi Won owner, does not agree. “They were out there for hours before, during, and after the fireworks and there was no incident, no problem; the vessel handled fine,” Mercante told The New York Times. “You get two or three big boats when they’re together, you get a wake becoming six to eight feet. Any boat could get rolled over with a trough like that.” Mercante’s remarks have been disputed by Sorenson and others.

In the absence of capacity plates for recreational boats 20 feet and over, safe operating capacity is left to the captain’s experience, judgment, and common sense. Charles Schumer, New York senator, would like to change that. Shortly after the July 4 accident, he wrote a letter to the Coast Guard, asking them to “require all recreational boats to post capacity information in a highly visible location for all to see. This will provide passengers, who are not familiar with boating capacity and safety measures, the option to choose whether or not they feel safe boarding the boat.”

In September, Schumer introduced the “Boating Capacity Standards Act of 2012” in the Senate. It would require all new boats to prominently display their carrying capacity, in people and in pounds. The bill has gone to the Senate Committee on Commerce, Science, and Transportation. If the bill passes, capacity plates for larger boats would become the law of the land, but in the meantime, the Coast Guard is unable to make a rule on its own because larger boats just don’t capsize that often.

Phil Cappel is the chief of the Coast Guard’s Recreational Boating Product Assurance Branch, which keeps the numbers on the trouble that recreational boats get into every year. His team looked at their data after the Kandi Won accident and found that in 2010 and 2011, there were 26 capsizals, resulting in two deaths and six injuries on boats in the 26- to 40-foot range. Over the past five years, an average of 60 boats greater than 20 feet capsized each year. For smaller boats, the yearly average was 255. In an email, Cappel wrote that “we don’t have the justification from our boating accident database that we feel is needed to attempt to publish a regulation requiring capacity plates on all recreational boats 20 feet in length and over.”

“Operator have to be more aware of the placement of persons and gear aboard the boat rather than just the total weight allowed,” he says. “Many boats less than 20 feet in length, that are required to have capacity plates, capsized each year even though they may be carrying the proper number of occupants. The simple fact of the matter is that smaller, lighter boats have much less stability than larger, heavier boats.”

Gerr has recommended that the ABYC adopt a standard formula for capacity. The ABYC is undertaking a study to see if there’s a statistically significant number of larger boats that capsize due to overloading. Like Cappel, Gerr says it is more about stability than capacity — where the weight is placed is an important factor. Unlike Schumer’s bill, he would make an exception for sailboats, because they heel by nature, and he would like to see a separate capacity plate for flybridges. Still, he says, the draft standard he envisions would not be overly burdensome.

“What I have in mind is not going to require a vast amount of calculation,” he says. “The idea is to make it easy.”

While the National Marine Manufacturers Association (NMMA) hasn’t taken a position on the issue, some manufacturers already label their larger boats. Beneteau, based in France, labels their powerboats according to a European Community (CE) standard, with passenger capacities based on where they will be used, from Class A (“Ocean: Designed for extended voyages where conditions may exceed wind force 8 [Beaufort scale] and significant wave heights of 4 meters and above, and vessels largely self-sufficient”) through Class D (“Sheltered waters: Designed for voyages on small lakes, rivers and canals where conditions up to, and including wind force 4 [Beaufort scale] and significant wave heights up to, and including 0.5 meters may be experienced”). Beneteau’s new 30-foot Barracuda 9, for example, is CE-certified to carry four people offshore, and 10 people inshore.

What Gerr is proposing is less complicated. While he would like to see a separate rating for boats with a flybridge, testing stability would be fairly easy. “It’s a little more complicated than this,” he says, “but if you have a boat that you want to carry 12 people, you get 12 people and you stand them on the rail. If the boat doesn’t heel more than 14 degrees, you pass.”

Gerr proposes providing a simple set of calculations for voluntary use in the design phase and developing a simple stability test. “These calculations would be in the standard for those who want to use them,” he says. “So if you’re a designer, whether you’re working for a manufacturer like Silvertor, or whether you’re building a boat on your own, you could optimize your design based on those calculations. But if you wanted to test them, it would be something relatively simple. And that’s important, that it be relatively simple.”

Since neither the Coast Guard nor Congress is likely to enact a new standard in the foreseeable future, any immediate action on capacity plates would have to come from the ABYC’s technical committee. In the absence of capacity ratings for larger boats, is there a method for calculating capacity that doesn’t require a degree in naval architecture? Not really. Anything I can think of that’s simple might possibly lead to assuming a boat was safe that
Owners of larger boats may find assistance in their owner’s manual (the manual for a later model of the Silverton 34 lists a 10-person capacity) or by contacting the manufacturers directly. But as the Coast Guard’s Cappel pointed out and the European Community standard for capacity labeling indicates, conditions outside the boat can have a dramatic effect on stability. There is still no substitute for training and experience.

For smaller boats, there is a formula that gives a rough approximation of the number of passengers a boat can carry. The New York Times cited it in an article about Kandi Won, but later corrected the article. Widely referenced online, the formula is length times beam, divided by 15. Asked about that formula, Gerr wondered aloud what answer it would give for the 34-foot Silverton. There was a brief silence over the phone while he calculated.

“That gives 27 people,” he announced. “So yeah, it breaks down on bigger boats.”

Drawings prepared by Dave Gerr, Director of the Westlawn Institute of Marine Technology (www.westlawn.edu), and first appeared in Soundings Trade Only.

Severe-Weather Fallout: Rates Set To Rise

In the wake of an unprecedented number of weather-related claims in the past two years, CNA Insurance Group, the underwriter of the BoatU.S. insurance program, has been forced to reassess its pricing in all aspects of its business. The result will be rate increases for BoatU.S. policyholders over the coming year. CNA and BoatU.S. remain committed to the boating market, and more importantly, to boaters. We will continue to bring you peace of mind and partner with you to protect your boat.

With the focus on Superstorm Sandy, it can be easy to forget the other weather events that made big headlines over the past couple of years. Taken together, these extreme-weather events affect every state in the country and every boating area from inland lakes to coastal waters. All of the following have contributed to the decision to increase rates:

• **Snowstorms.** Many areas experienced record snowfall amounts over the winters of 2009-2010 and 2010-2011. In February of 2010, an unprecedented 49 out of 50 states had snow on the ground (all except Hawaii). Between February 6 and February 12, 2010, 1,180 snowfall records were set all across the country. In 2010, BoatU.S. had to deploy CAT teams to deal with marina disasters due to sheds collapsing under the snow load.

• **Windstorms.** Unlike hurricanes, tornadoes and derechos come with almost no warning, so there is very little people can do to protect their boats. In 2011 there were 1,692 tornadoes, the second highest total since the start of record-keeping in 1950. This extraordinary activity extended into 2012. On March 23, 319 tornadoes struck across the Midwest in a single day, a new record. The BoatU.S. CAT teams have worked at marinas in Louisiana and Tennessee to deal with tornado damage. The unusual tornado activity only ended when a ridge of warm air set up over the Midwest, but that did not prevent a string of violent thunderstorms, termed a “super derecho” by meteorologists, from leaving a 700-mile trail of destruction across the Midwest and mid-Atlantic in late June, cutting power to millions and killing 13 people.

• **Drought.** The warm air that ended the tornado activity brought drought to dozens of states, dropping water levels on inland lakes to unprecedented lows. Claims for groundings and striking submerged objects skyrocketed, increasing by more than 50 percent in the Great Lakes alone. The drought is forecast to continue in the Southern and Midwestern states for the foreseeable future and to affect water levels next summer on many inland lakes.

Superstorm Sandy comes a bit more than a year after Hurricane Irene lashed the Northeast. This latest extreme event resulted in an estimated $650 million in recreational boat losses, making it the most destructive storm ever for boats.

After similar high-loss periods in the past — in the wake of Hurricane Andrew and after the rash of hurricanes in the mid-2000s, for example — the boat insurance market changed dramatically. Some companies stopped insuring boats all together. Others canceled policies mid-period for entire categories of boat owners and large geographical areas.

You can be sure that BoatU.S. won’t stop insuring boats. Our members are boat owners, our business is boats, and we are boaters, too. Not only will we remain committed to providing the best boat insurance in the market, but when disaster strikes, our CAT teams will be on the ground, using their years of experience to do what can be done for your boat so you can focus on your family and your home.

We regret the necessity for rate increases, especially in these hard economic times. If, when you receive your renewal, you find the rate increase an unbearable burden, please contact one of our underwriters. They may be able to lower the premium by adjusting your coverage to better match your risks. Those with older boats that are not financed may want to consider a “liability only” policy, which does not cover the boat and engine but would provide full liability coverage, including salvage and wreck removal.

We appreciate your confidence in us and hope we can continue to serve your boat insurance needs.
If you haven't been following the America’s Cup, you've missed out on some spectacular sailing. But you've also missed out on a furious debate over the difference between tow and salvage. Seaworthy has covered this issue in the past, most recently in January 2010. Salvage is defined as the rescue of a boat from *imminent peril*, and as that article discussed in some detail, the salvor and the boat owner don’t always agree on either the existence of peril or its imminence. That's exactly the debate going on over the rescue of the French Energy Team’s America’s Cup 45 (AC45) catamaran.

On Sunday, September 30, the French catamaran snapped its mooring line and drifted off into the night. It fetched up a mile later on Treasure Island in the middle of San Francisco Bay, where it was spotted by Todd Tholke (he claims he is the night watchman at Treasure Island Marina, which explains what he was doing up at 3:30 a.m.). Tholke used his Boston Whaler to pull the catamaran off the shore and take it back around to the Treasure Island Marina, where he handed it over to the French team. The French were so grateful they offered Tholke a ride on the Bay. End of story?

Uh, no. The following Friday, as the French team prepared for a regatta, they were presented with a warrant from U.S. District Court to “arrest” the boat and take it into custody as soon as Sunday’s races were over. Tholke’s lawyer, John Edgcomb, is well versed in maritime law, and he was seeking a maritime salvage award which he estimated could be over $200,000, or 20 percent of the value of the boat. The account of the rescue from the court filing contends that the catamaran was about to be damaged on the rocks, and that Tholke’s Boston Whaler “took on water, its motor cut out intermittently and smoked from overheating, and was nearly capsized on repeated occasions” during the recovery. In other words, Team Energy’s AC45 was in “imminent peril” and Tholke incurred grave risks in rescuing it.

Of course, the French disagree. They say it was a perfectly calm night, and they would have been more than happy to retrieve their own boat with no help from Tholke. They also disagree on the $1 million value for the boat implied by Edgcomb’s award estimate. The boat is 5 years old, outdated, and about to be replaced by the team’s America’s Cup 72 catamaran, which they will race in the America’s Cup next year.

All of this will have to be untangled by the courts. Until then, you can be sure that a lot of people who didn’t realize there was a difference between salvage and tow before this incident will be arguing one side or the other on the Internet.

If you haven't been following the America’s Cup, you've also missed out on some spectacular crashes. On October 16, the America’s Cup 72, *Oracle*, pitchpoled when the team tried to bear off and the catamaran buried a bow. If you want to see a video of a 72-foot catamaran with a 46-foot beam and a 130-foot-high mast flip end over end in slow motion, Google “*Oracle AC72 capsizes*.” There was no question of tow versus salvage this time — Team Oracle would deal with this problem themselves. They quickly got lines on the boat from several large RIBs and the towing ensued. Only the Team Oracle boats weren’t doing the towing ... the capsized catamaran was.

The five-knot springs ebb tide had the huge catamaran in its grip, and over the next several hours the AC72 proceeded to drag the Team Oracle RIBs out under the Golden Gate Bridge and two miles into the ocean. Team Oracle made no headway until the tide turned and carried *Oracle* back into the Bay. By that time, the wing mast had collapsed, one hull was submerged, and the other was half full of water. The $8 million catamaran looks to be a total loss. Team Oracle must now rush their second boat into the water and hope they have time to master it before the races begin next fall.

One last towing (and America’s Cup) note. In 2010, a 60-foot catamaran sailed across the Pacific from San Francisco to Sydney, Australia. But this was no ordinary catamaran. *Plastiki* had been built from 12,500 plastic, two-liter bottles in an effort to raise awareness of the dangers of plastic waste in the ocean and the potential for recycling. The catamaran arrived in Sydney, Australia, in July 2010. Due to damages caused by rough weather on the voyage, *Plastiki* was set to be shipped back to Oakland, California, but somehow it ended up in Long Beach. It still needed to get back to its home port in San Francisco so it could be put on display for the America’s Cup this fall.

How to get the boat 420 miles up the coast without a mast? How about a tow?

Chase Henderson and his team from Southwest Marine Resources, Vessel Assist San Pedro and Marina del Rey, undertook the project. But first, they wanted to make sure nothing would go wrong. They waited until the summer in hopes of getting the best weather possible. In April, they had a brand new diesel engine installed in their preferred towboat for longer jobs, *San Pedro*. When they set off, they carried everything they could possibly need,
including, “gasoline and electric-powered
dewatering pumps, 720 gallons of diesel,
an extra 1,500 feet of tow line, spare parts
for our engine and equipment, enough
tools to nearly rebuild an engine, and a lot
of food,” according to Henderson.

The captain for the San Pedro area,
Captain Shawn Slusser, accompanied
Henderson on San Pedro. One of the
Vessel Assist deckhands, Clint Perdue,
and the Plastiki expedition coordinator
rode on Plastiki. The two crewmembers
on each boat alternated shifts on the two
boats every four hours for the four-day tow.
The run back took only 24 hours.

Would Henderson do it again? “Absolutely,”
he said.

In July, Seaworthy reported that the
Supreme Court had agreed to hear Lozman
v. the City of Riviera Beach, Florida (No. 11-626), which will attempt to draw a clear
distinction between a house and a boat. If
the court finds that the structure in
question is a boat that will vindicate the
town’s actions in sizing and destroying it
under maritime law. The decision in the
case will affect more than 5,000 Americans
who own floating homes as well as 60
floating casinos in the United States, and
numerous floating hotels and restaurants.

Oral arguments were conducted in
October with some interesting exchanges
between the justices and counsel. David
C. Frederick’s argument for the city that
a vessel is something that “floats, moves,
and carries people or things on water”
didn’t seem to convince the justices.
Chief Justice Roberts pointed out that an
inner tube or inflatable raft would fit that
description. Justice Stephen Breyer held
up his coffee mug. “A cup doesn’t float,”
Frederick said.

“Oh, well, this is lighter than you think,”
Breyer retorted.

We couldn’t help wondering what the
justices would make of the Hot Tug, a
new offering out of the Netherlands The
Hot Tug lets you take your hot-tubbing
on the road … er … water. The deluxe
version is equipped with a stainless steel
wood-burning heater, an electric motor,
400 AH of batteries, and a battery charger,
all for something over $20,000 at current
exchange rates. We can be pretty sure
the justices wouldn’t consider the Hot Tug
a house. But is it a boat? The Supreme
Court is unlikely to weigh in on that one,
but the house versus boat decision will be
rendered in January.

Our West Coast article in the October
issue brought back fond memories for
Louise Merrick: “I am originally from close
to Cape Cod but moved to Bradenton,
Florida, and then the San Francisco Bay
Area. (There was a common theme about
bridges falling down, but that’s another
story for another time.) Once while living
in the Delta on Bethel Island, California, I
was fortunate enough to be the ‘admiral’
of a small fleet. I had a dated houseboat at
my dock behind my house that I used for
my office. I had a sailboat that I was
learning to sail. I had a little skiff, Aqua
Kisses, a ’70s Crestliner that was my
favorite and the one I would hop in and
take to the Rusty Porthole for brunch or
dinner. And lastly I had a 1978 wood
Trojan that I managed to sink twice (I
thought that boat issue WAS resolved!).
These were some of the most wonderful
days of my life — discovering the hidden
tributaries in the 1,500 miles of the Delta.
Now, I am back on an island off Cape Cod
and docks are not allowed on this island,
but moorings bring their own set of special
challenges.”

And, no, we couldn’t let that comment
about bridges go by. Louise responded
to our query with this story: “When I was
commuting over the old Sunshine Skyway
Bridge, a ship hit it and it came down. Then
I relocated to the San Francisco Bay Area
and Loma Prieta hit and
down came the Bay Bridge
while I was commuting
from San Fran to San Mateo.
Then I relocated to Cape
Cod and I keep looking over
my shoulder as I commute
across the Bourne Bridge!”
So if you live in that area,
you may want to avoid the
Bourne Bridge when Louise
is around.

She ended her note with a
theme that resonated with
the Seaworthy editors. “My life
would have never been the same
without the oceans, lakes, rivers, and
marinas I have encountered! I owe it all
to my Dad who propped me up behind
the helm of his little Whaler when I was 4
years old and nudged me to steer toward
the Vineyard!”

We also owe our watery lives to our Dads, so
here’s to all Dads (and Moms) everywhere
who take their kids out on boats.

Keeping your boat safe means keeping
the water out. Seaworthy has often
discussed how quickly a boat can be
overwhelmed — a 2-inch hole in your boat
one foot below the waterline would jet in
enough water to fill a 55-gallon drum in 40
seconds, exceeding the capacity of most
dilge pumps. The holes in the boat below
the waterline are protected by seacocks,
which can mean a very bad day if one fails.
That’s why most experts recommend
keeping a tapered, wooden plug near each
thru-hull. But wooden plugs have a lot of
disadvantages. They are difficult to see in
the bowels of the bilge. They rot. They
cannot be used for irregular openings.
Forespar’s TruPlug overcomes these
problems. A temporary emergency plug
made from a proprietary foam, coated
with a flexible, international orange sealer,
TruPlug can stop flooding from circular,
oval, or irregular holes up to four inches in
diameter.

When it comes time to renew your
insurance, if you need to submit forms or
provide photos, that process just got a lot
easier. You can now do so online at
BoatUS.com/insurance. Click “upload
photos and docs” in the lower left-hand
corner. Put your policy number in the first
box on the next page and follow the
directions from there. This will save you
from having to mail anything in, and it will
speed up the renewal process.
Let’s start with the conclusion: Beth Leonard, the new editor of Seaworthy is qualified for the job. As you’re about to learn, that’s an understatement.

While most people lead lives of quiet desperation (Thoreau), Beth and her husband, Evans Starzinger, quit the corporate world and went sailing around the world, twice. The first time was in a nearly new 37-foot Shannon ketch and the second time in a 47-foot aluminum Van De Stadt sloop, Hawk, which they took delivery of as a bare hull and finished themselves. By the time Hawk was completed, she was capable of taking them anywhere on the planet. Among other things, the boat safely carried Beth and Evans above the Arctic Circle, and on a 60-day, nonstop passage through the dreaded Southern Ocean.

The obvious question is, what does dodging icebergs and waves that tower over the mast have to do with things like a bent prop, a leaky fuel pump, or a split bilge pump hose — the kind of mishaps the average Seaworthy reader is liable to encounter? Wouldn’t Beth be better suited to edit Ocean Navigator? Well, the answer to that is simple: In their 110,000 miles of cruising, they encountered many of the same problems that weekend boaters deal with, only in the Arctic or Southern Ocean you can’t drop the anchor and call TowBoatU.S. Instead, they carried spares and made repairs themselves. They also spent days, even weeks, checking and rechecking systems on Hawk before they began a long passage.

More to the point, though, Beth grew up waterskiing and fishing in a boating family in upstate New York. She understands the joys and frustrations of everyday boating, and she truly enjoys talking to boaters about their boats.

Now, the final question: Can she put words together to make a coherent sentence? The answer to that is yes; when she wasn’t standing watch, Beth found time to write three books: The Voyager’s Handbook, Following Seas, and Blue Horizons. The Voyager’s Handbook is widely regarded as the definitive book on bluewater cruising, and Blue Horizons won a 2007 National Outdoor Book Award.

Other changes are afoot here at BoatU.S. After 25 years resolving member problems with builders and boatyards as director of the BoatU.S. Consumer Protection Bureau, Caroline Ajootian is retiring to live a quiet life with her husband in Oregon. Charles Fort, the associate editor of Seaworthy, will be taking over from Caroline. But Charles, who also spent much of his youth bouncing around the world’s oceans on a Van De Stadt, will remain on the Seaworthy staff along with Chris Landers, who cut his boating teeth working on tall ships in the Chesapeake. So you can count on Seaworthy to continue delivering timely, insightful information that will help keep you, your family, and your boat safe on the water — just as it has for 30 years.

— Bob Adriance