

## Surveyor's Opinion II

Hurricane preparedness seminar, Storm readiness checklist Bla Bla Bla... I know you've heard a lot about being prepared for a storm from dozens of experts in their particular field. For boaters, I think that my perspective may be of particular interest.

I hit ground zero in Punta Gorda two days after Charlie with my first batch of claims folders. I felt my way around the bombed out city with no street signs, power or cell service (thank you GPS) and visited two small boats on lifts and a handful of docked sailboats. The next day I saw Pine Island, Cape Coral and Bokeelia. This batch of files was all marina kept boats. Some in wet slips and some in rack storage. The third day of straight roadwork I saw Fort Myers Beach and Cape Coral. After the first week of recovery efforts boats were being quickly salvaged and my travels mainly took me to various salvage and storage areas where I handled the final 40 or so claims.

Then came Wilma. I handled 98 damaged boat claims for three insurance companies and covered territory from Marco Island, Alva, across to Lighthouse Point and the collapsed Marina One. I spent the next five weeks working Ft, Lauderdale and getting lost in Miami. I mopped up down in Marathon in January and then slept for a week.

Not much difference in related damage between the two storms except maybe the sheer numbers and the range of the effected areas. The boats were all wrecked for all the same reasons. The information I gathered visiting the post storm sites and speaking with marina personal is what I have used to form my:

### *SURVEYORS OBSERVATIONS ON HOW TO SECURE A BOAT FOR A STORM.*

I guess the best way to assemble the information is a list of survival rates. I don't have percentage numbers, just my opinion based on viewing the nautical carnage of two powerful hurricanes.

1. **Best Overall:** Hauled and blocked is by far the best alternative. Some marinas and dealerships went so far as to tie boats down to the ground by various means. One sport boat dealership on Fort Myers Beach installed small cleats in the concrete pad with concrete anchors. They had not one boat come loose and only a little debris damage from their own awning. Two marinas on the Caloosahatchee tied boats down with steel augers. This is the method I chose for my 32 Luhrs. The only knock downs I saw were at a marina that had a long row of boats very close together and resting on sand with no tie downs. They all suffered the domino effect. By and large the blocked boats over thirty-foot faired very well.
2. **Second Best:** In water private dock. These storms did not produce huge tide surges as expected. Private slips in many cases are broad enough to allow ample scope on your dock lines and still keep the boat off the piles and sea wall. The majority of damage to these boats was by far roofing tiles and fender / dock rash. Sailboats suffered broken masts from pumping in the wind and countless shredded head sails.

3. **Third Best: Trailer kept.** This is the best alternative for the under 30 crowd if available. Please don't park it under a tree. Especially a great big Gumbo Limbo tree. Again the use of a couple concrete anchors or augers can really help keep things in place.
4. **Fourth Best: (second worst) Lift kept.** I saw very few boats secured properly upon their lifts and all were highly subject to flying roof tiles. But the main damage on lift kept boats was from the lifts. Most people had secured the boat to the dock and pilings with the usual macramé of rope and lifted the thing way up in the air. The boats all tried to climb off the lifts and got stuck about half way down where most suffered flooding damage as well. Most of the boats damaged on lifts had been pushed by the wind half way off the bunks. The degree of damage was usually dependent upon whether the boat was shoved forwards or aft. Or even sideways. A boat secured properly upon a lift can actually fair very well. Most boats however are not.

5. **Last or Worst: It's a tie.** Large in the water marina or rack storage. The problem here is that your fate is subject to the numerous risk factors and luck of the storage facility itself. I saw entire docks broken from the pilings with a dozen boats all securely tied blowing around the marina sinking everything in their path, and whole barns of boats racked four and five high that had crashed down in a huge pile of twisted metal and broken fiberglass. I know it's not fair to generalize. Here on Marco we have rebuilt most of our older docks and barns. If you ask their designers they will all tell you that they are rated for X amount of wind and surge and are very secure in a storm. I am just telling you what I saw in a Cat.4. Boats at marina docks fared very poorly. And five barns hit the ground full of boats.

So what do you do? I'll be general and proceed with the understanding that protecting against debris and rain are up to your own common sense and maintenance practices. I shouldn't have to tell you to check your bilge pumps and batteries and clear your scuppers.

Lets cover the suggestions in the same order.

1. **On the hard:** If you are lucky enough to have your yacht hauled for a storm install, or commission the yard to install some anchors. This doesn't need to be fancy or expensive. For concrete pads simple lead anchors and ring bolts work well. An expansion bolt with 3 links of chain works even better. For soft ground use some augers commonly available at home improvement stores. Install one at each corner at a steep angle and tie off using a truckers knot or ratchet straps. Put as many blocks and stands under the boat as you can. And remove the garboard drain plug if equipped.
2. **Private dockage:** Tighten those mooring lines a little. Maybe more than a little. I have seen *zero damage* from insufficient scope on spring lines and plenty from boats bashing against sea walls and pilings. Rope gets wet and stretches, especially nylon. So make sure she is secured off the dock for high tide plus just a little extra (not ten feet extra). Why allow scope for ten feet of surge when that much surge will take out the whole island anyway? Add just a little and keep her off the pilings. Any spare ground tackle you have should be deployed to the

direction of open water and bridled tight upon two cleats. This will act to pull the boat away from structure as the tide rises. For most local docks that would mean setting an anchor abreast and possibly fore or aft. Set them long and deep with a small boat and mark the rode with a buoy or jug. Neighbors helping neighbors makes this task much easier.

3. **Trailer:** If your boat is trailer kept out of doors you can follow the same guidelines as outlined above in #1 but using three anchors, two aft and one forward. The tow vehicle if left hitched counts as one. Tie the boat to the trailer short and tight, and then tie the trailer to the ground. Again tie it steep and tight, remove the bilge plug and turn off the battery switch.
4. **Lift kept:** Tie the boat to the lift tight! Then tie the lift to the dock. Ill say it again. Tie the boat to the lift with short tight lines. Then tie the lift to the dock to limit sway. Surge is the least of your concerns. Don't lift the boat 10' over the dock. Allow for a couple extra feet of surge tide and pull the plug. Try to orient the lift for good drainage and make sure the hatch drains and scuppers are clear.
5. **Barns and marina wet slips:** When faced with leaving the boat in her normal disposition you must first and foremost adhere to the facilities guidelines. Ask the dock master or manager for a copy and ask for his or her input regarding your boats particular situation. But please remove your canvass.
6. **REMOVE YOUR CANVASS.** I know I'm shouting, sorry. No matter where your boat is secured you must remove your canvass. If you can pull all the side panels and window panels do it. Rolling the window panels up doesn't count. BTW It takes less than an hour and less than 20\$ to re-lace an awning. Remove the mooring covers and store all loose gear below or ashore. Drop all sails and store below. I guarantee if you leave your head sail rolled up in a hurricane it will eat itself alive and trash your boat and your neighbors boat in the process. Folks I walked some marina docks the day before Wilma and saw more than one owner actually installing camper canvass and the majority of head sails were still aloft. Your neighbors will thank you for not doing this. Remove everything you can, On my management yachts after pulling all canvass I duct tape a piece of .006" plastic over the dash. It works very well. You may also use painters tape to seal door jams and secure loose hatch covers. Just remember to get that tape off as soon as you can while you still can. Sun and water will make it permanent in less than a week.
7. **Get your insurance policy set early.** No underwriter will write a boat policy when there is a named storm approaching. Can you prove what your boat is worth? Many policies are Actual Cash Value and will only pay what they estimate your was worth before the incident regardless of coverage limits. Appraisals are available and cost less than a full survey.
8. **Get a professional survey at least every two or three years.** A survey on any vessel will help you identify any problems with structure, self bailing or de-watering as well as give you a current document outlining the pre storm condition and value of your boat and its equipment issued by an objective professional.
9. **Secure your boat early, take a few photos, board up the house and get away.** Take your loved ones as far from harms way as possible. I can replace my boats but not my family

**As an accredited marine surveyor, I am associated with the Society of Accredited Marine Surveyors and the American Boat and Yacht Council and the Collier County Marine Trades Association. My normal workload is split between boat and yacht surveys, damage claims work and marine related consultation.**

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