Summer is here and that means hurricane season. This summer is already very warm. Hot even. Maybe it's just me getting older but I don't remember a summer quite this hot this early in many years. Its mid June and the surface water temperatures are climbing past eighty-five degrees. Eighty degrees is the magic number for hurricane development. Last season was, thankfully uneventful for Florida. We all know how much so many communities needed the respite. I used the time to work, build a new office and think.

It's been two years since I last worked a named storm and not much has changed. The two seasons off from storms has allowed me time to contemplate my stance on certain aspects of safety and security. As I boat around the local communities I am disheartened at the percentage of lift kept boats secured for the summer in less than an ideal manner. The sad fact is that the way many of these boats are secured will likely compound damage and frustrate salvage efforts were they (the boat) to in the direct path of a strong storm. As the majority of local boats are lift kept; this article will focus upon the dos and don'ts of securing a boat upon a lift for hurricane season.

The intent of this article is to benefit the reader of my experience for the purpose of securing a vessel against imminent storm damage. I have handled hundreds of claims of every kind regarding storm damage to boats from sinking and flying debris to total barn collapse and marina devastation. I have seen first hand what works, what doesn't and what makes things worse.

Glossary of Terms:

Storm: Any named or predicted tropical depression or windstorm.

Trailer kept: A vessel stored ashore upon a trailer.

Lift Kept: Any vessel stored on a cradle type hoist. Excluding water or buoyancy lifts and davits.

Jet Dock: Not something you want your boat on during a hurricane.

Marina stored: A vessel secured to a fixed or floating dock system comprised of many such docks in a line or branch.

Hauled: A vessel that is removed from the water and stored ashore on stands or blocks. Barn Stored. Any vessel stored ashore in a dry-stack facility.

Wet Slipped: Any vessel tied to the dock and afloat at a singular dock commonly adjoining the owner's residence.

Wet Slipped: Lets start here. The most common issue I see here is too much scope. By far the overwhelming class of damage seen post-storm to wet slipped boats is dock rash and chaffing from pilings, docks and sea walls. This is followed by wind driven debris damage. (Roof tiles) In all the claims and all the boats in all the storms I have never even one time seen a boat severely damaged from too little scope of the mooring lines. Think about it; if we get 10' of surge the house dock, lot and neighborhood will be gone. Think you boat will still be there because you left the lines slack?

**Recommend:** Tighten those mooring lines a little. Maybe more that 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.

**Marina Stored and Barn Kept:** 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 of the facility protocol and ask for his or her input regarding your boats particular situation. But please remove your canvass.

**Hauled:** 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 find and remove the garboard drain plug if equipped. Please do not tie off to neighboring boats. That actually happened to me a few years ago. My own 32' boat was on the hard and I had spent a long hot day setting augers, lines and blocks only to come by the next day to find the two neighboring boat owners sole means of preparation was to tie their boats to mine. A sharp pocketknife made short work of their efforts.

**Trailer Kept:** 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.

**Recommend:** Here is how I secure the Baitkiller; I first put Mommas car in the garage, close the door and ease her bumper right up against the closed door. I then pull my truck with the boat behind it up to the garage door effectively pinning the garage door firmly between two vehicles. I then set two Red Head 5/8" expansion bolts in the driveway with three links of chain on each. The chain simply gives me something to tie off on. These are positioned at a steep angle under the stern eyes of the boat. About 45 degrees. Two ratchet straps from boat to bolt and the old girl is snug as can be and I have wind proofed that weak aluminum garage door at the same time.

**Lift Kept:** Take a ride down a canal and see how many boats are tied off wrong. Most of them unfortunately are. A common practice is lift the boat way up in the air and string lines all over the dock to every cleat and piling available. Guess what happens to that boat in a category IV hurricane? The boat will come about half way off the lift, fill with water, break the lift and partially sink in a tangled mess.

Recommend: Tie the boat to the lift with short straight lines and 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.

## IN CLOSING, A FEW NOTES:

- 1. 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 headsails 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.
- 2. 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.
- 3. 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 dewatering 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.
- 4. 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.