

## Preparing your Boat for High Winds and Waves

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The fall boating season is always a great time for racing and cruising, but it can also bring bad storms and even hurricanes. Anticipating bad weather and preparing your boat accordingly can make a big difference for the safety of your boat and others around you – remember, you are ultimately responsible for your vessel and the damage it may cause.

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|----------|-------------|---------------|--|
| Force 8  | 34-40 knots | Gale          | Moderately high waves of increasing length and edges of crests breaking into spindrift (heavy spray). Foam is blown downwind in well-marked streaks. |
| Force 9  | 41-47 knots | Strong Gale   | High waves with dense foam streaks and some crests rolling over. Spray reduces visibility.   |
| Force 10 | 48-55 knots | Storm         | Very high waves with long, overhanging crests.   |
| Force 11 | 56-63 knots | Violent Storm | Exceptionally high waves that may obscure medium size ones.  |
| Force 12 | 64-71 knots | Hurricane     | The air is filled with foam and spray, and the sea (45 ft. or more) is completely white  |

Here are some observations, considerations and precautions that you can take when leaving your boat at a swing mooring or dock:

### **People & Equipment:**

- First and foremost, safeguard human life - do not choose to stay aboard during a bad storm and do not try to do any of this work once the storm has started – above 60-70 knots you will be virtually blind and unable to function.
- Make arrangements with a reliable and knowledgeable person to carry out your hurricane/storm plans if you are going to be away.
- Remove valuable equipment and items from the boat and ensure any remaining items are properly stowed as for heavy weather sailing.
- Batteries should be secured, fully charged and able to run automatic bilge pumps for the duration of the storm. Turn off all other devices consuming electricity.
- Disconnect and stow shore power cords, hoses and dock equipment.
- Lash down tiller/wheel, boom, and anything that moves.
- Ensure propane tanks are removed or secured, and shut off.
- Remove tender, outboard and portable gas tank, and store properly ashore.
- Close fuel valves and all seacocks - ensure cockpit scuppers and deck drains are clear.
- Batten down all hatches and secure all portholes.

### **Anchors, Lines, Cleats & Fenders:**

- Utilize 3-strand nylon line as first choice because of stretch (15-20%) and shock-absorbing qualities – other lines of other materials (e.g. halyards, sheets, Dacron, Kevlar, etc.) may snap or pull-out cleats.
- If possible, set additional anchors (7:1 scope or greater) to increase holding power and/or control the position of the boat (e.g. off the dock).
- Chain rode should be attached to the boat with snubbers and/or nylon rode for shock absorbency
- Add extra lines, as large as practical, to mooring ball or dock. Distribute each load to multiple cleats or around the base of the mast. Utilize double crossing spring lines and don't forget to allow for the normal tidal range and expected storm surge (the Hurricane Juan surge was almost 6 feet!)
- Add chafe protection and snubbers to all lines running to mooring ball, anchors and docks. Several layers of duct tape will work temporarily.
- Put on extra fenders and fender-boards, if available. Since fenders (and fender-boards) can fly-up in high winds, consider securing with a line on the bottom of the fender running under the boat to the opposite side.
- Avoid raft-ups at swing moorings and re-position boats at docks to minimize the possibility of masts and rigging colliding.

### **Sails & Canvas:**

- Remove all sail covers and sails including roller furling sails – in high winds, they will unfurl, shred, take your mast down or worse. Most boats have enough windage to start sailing in high winds, even with 'bare poles'.
- Remove any other canvas such as a Bimini or dodger.

Obviously, you would not take all these precautions unless a bad storm is coming but it is prudent to have more preparedness this time of the year.