It’s been a great summer of boating and now it is time to begin preparing your boat for winter. If your boat is hauled out for winter storage, here are some suggestions that will help you ensure that your vessel will be ready for safe and reliable cruising next year.

**Before Haulout**

**Anchors and Canvas** - Remove canvas covers, deck and cockpit cushions, extra mooring lines, fenders and anything else on deck that should go ashore for winter storage. Rinse your anchor rode with fresh water.

**Sails and Rigging** - Give the sails a careful inspection to identify any repairs or cleaning that may need to be done by your sailmaker during the winter. Take all your running rigging off the boat (don’t forget to reeve messenger lines) so you can clean it by soaking in a mild detergent solution, then rinsing and drying. Inspect it all for frayed ends, chafing, or other damage. Unstep the mast, at least every few years, so you or your rigger can inspect all the rigging and fittings, especially the ones at the masthead.

**Check Your Shore Power** - If your boat is equipped with AC shore power, inspect the boat’s shore power receptacles and cables. If you see any sign of darkening of the plastic around one of the prongs, parts are in need of replacement.

**Check the LPG/CNG Gas System** - If your boat is equipped with a propane (LPG) or compressed natural gas (CNG) system, be sure the valves are turned off at the tanks. Take a close look at everything in the tank locker (tanks, regulator, pressure gauge, solenoid valve, wiring, etc.) to be sure all is properly secured and in good repair.

**Fuel Tanks** - Simple Rule: Try to run your gas tanks close to empty for winter storage, and your diesel tanks should be nearly full.

**Winterizing Systems** - If you have harsh winter climates where you store your boat, her systems will need to be winterized. Air conditioning and engine cooling systems, as well as sanitation and domestic water systems should be drained. In some cases it’s not possible to drain all the water out of hoses in hidden spaces, so it may be necessary to add some non-toxic anti-freeze.
Protect the Batteries – Storing the batteries at home will extend their life, since cold weather will cause them to self-discharge more rapidly, and once they've spent more than a few weeks in a discharged state, they can't be trusted. So take them home for winter storage, if possible.

Clean Out, Clean Up – Remove as much gear from the boat as you can, including electronics, lifejackets, binoculars, clothing, cushions, fishing gear, and anything else that could be damaged by moisture and cold weather, or that may be attractive to thieves.

Haul Her Properly – If the yard isn’t familiar with your boat, be sure to let the foreman or the lift operator know where it’s safe to set the straps so nothing on the bottom will be damaged. Also, it’s very important that your boat is blocked properly. You should know ahead of time how the yard will block your boat, and you should insist that they use proper methods and equipment.

After Haulout

Inspect the Bottom – Check all through-hull fittings and scrape inside their openings. Be sure all seawater intakes are clear of obstructions.

Fall is an Ideal Time for a Marine Survey

As you prepare for winter storage, now is also a great time to consider a marine survey. A periodic inspection by a qualified, independent marine surveyor is a critical part of all boat ownership, and is particularly important for aging, gasoline-powered boats.

As time goes on, boat ownership changes, parts and components wear out, and there is a significant risk that some parts may have been replaced with ones not designed specifically for marine use. This seems to be especially true with older vessels. For example, a starter purchased in an auto parts store may save $100 when compared to a marine specialty item, though it will not be ignition-protected and when installed on a boat, a serious explosion hazard has been created. In addition, as mechanical systems age, electrical insulation can deteriorate, connections become loose and other wear and tear issues develop that can result in hazardous conditions, potentially leading to a major accident.

Identifying these issues through a marine survey may be a life-saving exercise. If you haven’t had a mechanical inspection or marine survey performed in the last several seasons, now is the time.

To locate a professional marine surveyor in your area, please visit: www.marinesurvey.org or www.namsglobal.org.

Through-Hulls and Zincs – Check all the through-hulls above the waterline. If there are any plastic ones, shine a flashlight into them and look closely for cracks.

Transducers and Running Gear – Underwater transducers for depth sounders, fish finders, and knot meters should be inspected. Check propellers for damage and straightness. Check shaft bearings for wear. Inspect swim step supports, trim tabs, thruster grates and boarding ladders.

Outdrive Hints – Those flexible rubber bellows between the drive and the transom don’t last forever. Inspect them carefully! Changing the oil in the drive would also be a good idea.

Don’t forget the plug! – If it’s an open boat and the hull has a drain plug, remember to remove it so rain and melting ice and snow will drain out. In the spring, be sure that plug is in place and tightened securely!

Inside the Boat

Inspect All Seacocks – Make a note of any that felt stiff or rough. It may be time to service or replace them.

Change Engine Oil – It’s a good idea to change the oil just before winter storage, regardless of how recently it was changed the last time. The oil filter should be changed too. Remember, all the things you need to do to the drive engines, you also need to do to the genset as well.

Cooling Systems – Pull the impeller out and inspect it. If the impeller shows signs of wear, make a note to replace it. Even if it’s in good shape, you might want to leave it out of the pump for the winter so the blades won’t take a set. If your engine is due for a coolant change, now is the time to do it.

Don’t Forget Her! – Now that all the chores are done and the boat is snug in the yard for her winter nap, don’t forget her! Plan to drop by the yard every month or so to check on her.
Common Recommendations

One of the best ways to help ensure the safety of your family and friends while aboard your boat is to identify common maintenance items before they become a problem. What follows is a list of recommendations that surveyors most commonly identify:

- Incorrect battery installations;
- Lack of smoke detectors on boats over 26’ in length with accommodation spaces for sleeping;
- Lack of carbon monoxide detectors on gasoline powered boats with berths;
- Incorrect portable fire extinguisher location, improper number of fire extinguishers, improperly maintained;
- Lack of vapor detectors on gasoline powered boats;
- Engine, generator and exhaust system problems; connections not double-clamped;
- Unsatisfactory condition of life jackets/PFDs and improper storage;
- Improper use of portable electric heaters;
- Lack of throwable device (ring, horseshoe, MOB, etc.) with proper line;
- Poor installations of bilge blower, or none installed on gasoline powered boats;
- Loose or unsupported electrical wires throughout the boat;
- Automatic bilge pump problems;
- No Ground Fault Circuit Interrupters for 110-volt AC outlets in galleys, heads, machinery spaces and weather decks;
- Federally required “Discharge of trash/oil” placards not posted.