

## MAINTENANCE NOTES

When fiberglass boats first became available, back in the early sixties, they were advertised as requiring little or no maintenance. This was a real eye-catcher for those sailors who had previously spent each spring scraping, painting, and replacing rotted wood. Of course, they sold like hotcakes with promises of more time at sea and less in the yard. Some people, even today, continue to believe that their boat needs little attention other than a quickie wax job and some bottom paint. We all wish that that were true, but unfortunately, it isn't. Here are some of the things to consider.

**Winter Cover** - If it's winter and the boat is outside uncovered, we're skeptical. We recently inspected a boat that had been left uncovered and hard ice was in the cockpit and the bilge. Not a good sign. Our Maine temperatures shift from above freezing to well below freezing on a regular basis. This alternately freezes and thaws ice masses. As water freezes, the ice formed expands and can damage fiberglass structures. Keeping a boat well covered during the winter is a major item of proper maintenance. The cover should have a high ridgepole to lessen snow loads and provisions must be made for ventilation. Hatches and portlights should be opened slightly to lessen the growth of mildew in the fall and spring. If you have a sailboat, don't forget to cover the mast and rigging. Water can seep into the wire rope fittings and damage can result when the water freezes. It doesn't happen instantly but could take several years to become a problem. Grease the turnbuckle threads to preclude water entrapment. The mast and rigging may all be metal but it isn't indestructible.

**Hardware rebedding** - Freeze/thaw damage can also be the result of trapped moisture in deck cores. Leakage around poorly bedded deck fittings seeps into the plywood, balsa, or foam core. Winter comes along, ice forms and expands in the core, and the fiberglass separates from the core material. This is commonly called delamination. Deck hardware should be periodically rebedded/sealed as part of an ongoing maintenance routine. Failure to do this can seriously impact the value and future sale-ability of the vessel. Although this type of damage is not visual, a good marine surveyor will find it by "sounding" the structure and by using a moisture meter to detect wetness in the core. On the bright side, core wetness can be easily repaired if found early enough.

**Jackstands or Cradle** - The same boat with all the ice in the cockpit was supported by jack stands. The keel blocking had sunk into the mud around the boat and caused the jack stand plates to push into the hull causing several dents. Another boat that we inspected recently was on a cradle that had caused the same problem because the boat did not quite "fit" the cradle. Both situations were very obvious and easily correctable. This denting of the hull generally isn't a major problem if corrected within six months or so, but, if the boat is stored in that condition for several years, it could cause permanent damage. Jack stands are not a set-em and forget-em thing. As the weather changes during the storage season, they should be periodically checked and kept at a point in their adjustment where they prevent the boat from falling over while the load of the boat is totally supported by the keel blocks.

**Wax and Polish** - This apparently cosmetic application can make or break a good gelcoat job. Fiberglass absorbs water to a very slight degree but it still absorbs it. A good wax job not only makes it look good but creates a water barrier that protects the surface from freeze/thaw damage, cover chafing, dock bumps, dinghy collisions, etc. Many boats develop gelcoat "crazing". Often older boats, because of some details of their manufacture, show many of these hair-line cracks. Seasonal use of a good marine wax not only minimizes their appearance but seals them from water absorption and renders them a cosmetic issue only. Gelcoats are also subject to deterioration caused by the sun's ultraviolet radiation. This is most often seen in dark colors that fade and white hulls that get "chalky". Seasonal cleaning and waxing can help minimize this over time.

**Outboard Engines** - We've seen several boats lately that were stored with their outboard engines still attached. One was so corroded to its bracket that it couldn't be removed. It would be safe to assume that in both cases the engines were not winterized or, if they were, the procedure was not done properly. Normally an outboard is run in fresh water for enough time to bring it up to its operating temperature. It is then "fogged" using oil specifically formulated for the purpose. The lower unit is drained of gear oil and refilled, and most good mechanics will lubricate the other moving parts. Fuel tanks are filled and a fuel

stabilizer added. With a small outboard dangling on an outboard bracket, this isn't an easy job. When we see an engine that looks beaten-up, it generally has been. Some people paint the submerged areas of outboards with anti-fouling bottom paint. Most bottom paints are not made for protecting aluminum. The reaction causes deep corrosion in the aluminum that can seriously deteriorate an otherwise good motor. There are special paints formulated for this application. A well-maintained outboard is seldom affected by age. My 1960 3hp Johnson looks great and runs beautifully, although she is getting cranky in her old age.

**Inboard Engines** - The general appearance of the engine room is often a good indication of the engine's condition and level of maintenance. One boat that we saw had its fuel pump hanging from its hoses, unsupported electrical wires here and there, and an unusual amount of oil spattered about. It doesn't take much effort to keep the engine space clean and orderly, but many boat owners feel that the engine is best kept hidden from view. A well-maintained inboard engine generally looks clean and tidy with properly clamped hoses and neatly routed wiring.

**Electrical Systems** - It seems that the smaller the boat, the more mickey-mouse wiring we see. Batteries should be secured in covered battery boxes. The covers protect the terminals from shorting out when you drop something metallic on them. The amperage in a common battery is quite high and poor DC wiring can start fires in boats of any size. Surveyors are forever finding wiring problems. Some may have existed since the boat was built, while others have been added by subsequent owners. If your wiring looks sloppy, it probably is. If you're selling your boat, it would be wise to tidy things up a bit and, while you're at it, check out all systems and lighting. It makes the survey go faster.

**Bottom Paint** - If there were a market for used bottom paint many local boat owners would make a fortune. It seems to be a common practice to keep piling it on every year perhaps with the hope that the more that's there the better it works. We've seen boats lately that have at least ten years of paint build-up that does nothing other than soak up moisture and slow the boat down. A heavy buildup of paint isn't an indication of proper care and maintenance but just the opposite. Fortunately, no permanent harm is done and after a good solid weekend of scraping and sanding (and hollering and screaming) the hull is back to where it was when new. Then every year, you sand off last year's paint and put on the new without all the hollering and screaming.

**Maintenance Log** - Every boat should have one. It should not only include what has been done but what materials were used and how applied. The log becomes a permanent record that can pass from owner to owner. We see few well-maintained boats that don't have a written log.

Whether you're selling your boat or planning to use it forever, maintenance should be a major concern. It can also be an activity that is a fun pastime. Other than an engine overhaul, there isn't much that can't be done effectively and inexpensively by anyone with a good eye, a few books, and a tool bag.

Hathaway Marine Surveyors