

Rebuilding, Restoring, Adding To, or Upgrading Your "Classic"? Here are Six Rules for Success

There isn't a powerboat or sailboat that will meet everybody's definition of perfection. Every boat is a compromise and, over time, just about every owner will contemplate making changes, or adding some gear, or, in the case of the older boat, rebuilding, restoring, or "up-grading". Although boat yards specialize in this type of work, much, if not all, can be done by a knowledgeable owner with some well-developed basic skills. There are, however, some "horror stories" that illustrate what can result when owners lack the knowledge and skills necessary to do the job well. Fortunately nothing is a total loss and from these stories come six basic rules that may be of some value to someone contemplating activities that will make their boat more to their liking.

Rule #1: Don't do anything that limits access to mechanical, electrical, or structural parts of the boat.

- Nothing beats a hot shower for making the cruising skipper into a human being. The heater itself isn't the problem; it's where you find a place to put it. A cruising sloop had her water heater located in a cockpit lazarette that precluded any inspection or maintenance of the fuel tank, seacocks, wheel steering mechanism, and any other gear below the cockpit sole. In order to repair two leaking seacocks and their hoses, the water heater had to be removed.
- We looked at a Pearson Triton that had been totally "teaked" on just about every square inch of interior. It looked beautiful but there was no way to inspect the chain plates, genoa track fasteners, hull to deck join, stanchion base fasteners (which were loose), or wire runs, without destroying the screwed and glued teak work.
- The old Ford Lehman was getting a bit tired and, instead of re-building, the owner opted for a new diesel. The owner wanted more performance and installed a moose of an engine that could have driven the boat into low-earth orbit. The installation was so "tight" that it was impossible to service the reverse gear, or the stuffing box, or even get a hand on the cockpit drain seacocks without going headfirst over the top of the engine.

Being able to easily get at things should be considered a safety issue and not a minor consideration. Sooner or later, everything will fail and your ability to make repairs (often quickly) should not be compromised.

Rule #2: Don't do any structural alterations to any boat without first getting an opinion from a professional naval architect.

- We were invited aboard a '68 Pearson Coaster in Rhode Island several years ago where the prior owner had "opened up" the interior for a less "closed-in" appearance. The main bulkhead and forward bulkhead were cut out and a metal tube compression post added with the belief that it alone would provide the required strength. The vee berths were changed into a large angled double berth that had a hinged panel to gain access to the now non-enclosed head. The companionway bulkhead was also cut away in places to provide additional storage bins accessible from the cabin. The old icebox had been removed and the area now was occupied by an oversized nav station that required the removal of the starboard settee berth. The boat had been extensively sailed for almost ten years in this condition. Unknown to the owner, the hull was longitudinally twisting and inwardly "pumping" at the main bulkhead area. The hull exhibited swirl shaped and longitudinal crazing on the starboard side and the upper shroud chain plate and attachments showed evidence of metal fatigue. The boat was later sold as a "project boat" and the new owner was in the process of returning this classic to her original state. No naval architect in his or her right mind would have supported those "improvements".

- Then there was that classic Alberg designed Bristol 27 that the owner made more "salty" looking with the addition of a varnished bowsprit. Unfortunately (or fortunately), he forgot to add the bobstay. The boat handled poorly with a tremendous lee helm until the mast came down in a blow. It's an ill wind that blows no one some good. Carl Alberg would have been pleased.

Boats are complex integrated structures that depend greatly on their internal stiffening members to maintain hull shape under load. Altering these can often cause more problems than solutions. The sail plan and associated rigging is matched to the hull design. Unless the designer really blew it, any alterations should only be done as a last resort and only with professional advice.

Rule #3: If your boat is a classic or a "one-design", keep it that way. The designer may have known something. Don't diddle with success.

- The Pearson Ensign is a classic Alberg designed racing daysailer. I looked at one a few years ago that had been "restored". The original teak cockpit sole had been replaced with solid fiberglass and, to make matters worse, the flotation was removed from under the cabin berths to make "handy" storage lockers. With the flotation compromised and the added weight of the fiberglass sole, the boat would not meet the "one-design" requirements resulting in a much reduced value. The owner had spent many thousands on the work (including a beautiful Awlgrip job) that will never be even partially recovered.
- The 18' Lyman from the 1950s was clearly a classic. Although the lapstrake hull was in need of restoration, the owner chose to fiberglass the exterior to stop any leaking. The fiberglass didn't adhere to the planking, water leaked in between the 'glass and the wood, and the local microbes made short work of it.

Customizing, rebuilding, or upgrading (whatever you want to call it) of any "classic" should be done carefully and discreetly in order to maintain the boat's appearance, character, and performance. You may regret anything done that detracts from the original.

Rule 4: Don't scrimp on materials.

- We've seen lifeline stanchions, pulpits, and stern rails made from galvanized pipe and mast spreaders made from steel electrical conduit.
- We inspected a boat whose owner had installed brass domestic water valves instead of bronze seacocks to save money. All showed serious corrosion and required replacement before the boat could be insured.
- Using indoor-outdoor carpeting glued to deck non-skid areas has appeared several times and, when wet, assures a quick passage overboard. Remember that that sticky backed plastic teak always looks like sticky backed plastic teak (say that a few times quickly). There's no substitute for the real thing.

Marine grade materials are relatively expensive. Good stuff, manufactured for a low volume and somewhat seasonal market, naturally costs more, but the advantages of not scrimping will be apparent for many years to come. Good stuff lasts.

Rule #5: Become familiar with the ABYC & NFPA safety codes.

These are "safety standards for the design, construction, equipage, maintenance, and repair of small craft" and cover everything from proper wiring, to stove installations, to the placement of fire extinguishers, the securing of battery boxes, etc.

Many boat fires are electrical in origin. We've seen household circuit breaker boxes and solid copper wiring used on many boats with 110VAC duplex receptacles used for both 110 shore power and 12VDC battery power. Lamp cord is good for household lamps but not for boat wiring anywhere. Your batteries can supply hundreds of amps that present a clear fire safety hazard unless properly wired using the correct materials.

A Bristol 30 had a totally new interior. The owner was a master woodworker and had done a beautiful job using mixed hardwoods. I was most impressed with his custom inseting of his Coleman gasoline camp stove. It was beautifully done with cutting board cover and a special compartment to hold a supply of fuel. Unfortunately, he was unaware that, although beautifully done, his installation was not only illegal, but also inherently dangerous.

The lure of that hot shower has prompted too many people to install those propane "instant" water heaters. Regardless of whether vented or not, they have resulted in several deaths and are not approved for marine use by NFPA, ABYC, or by anyone with half a brain. Check labels and if a system is not approved for marine use, leave it in the box.

Boats built just a few years ago do not meet all the current applicable standards, and the older "classics" don't even come close. Making your boat comply with the new codes is a personal safety issue that costs little and saves much.

Rule #6: Get the knowledge and skill before you need it.

- Research the vessel. What was its original purpose, strengths, and weaknesses? Why is it considered a "Classic"? What improvements have others made? What problems did they encounter? What did they choose not to do?
- Learn the things that you'll just have to "accept". That old full keel classic will not keep up with today's racing machines - don't expect it to. No, you can't add a water mattress to the vee berth without affecting sailing performance. Forget about the stove with the oven on your 23 footer and ditto for the chandelier.
- Learn about fiberglass (FRP) construction and repair. There's more to it than buying those cans of goop with the little measuring pumps and a few yards of cloth. There are many techniques and materials for a myriad of situations that have to be handled properly. There are at least three types of resins that you may encounter and all are not perfectly compatible with each other. There are many books that you'll have to read and understand before you tackle the job. The touchy visible stuff may take an artist's eye and skill, but making a strong structural repair is well within the talents of most people.
- Learn and practice good workmanship from mechanics to woodworking to painting and varnishing. If you're not good at something, find somebody who is and give him or her the job. We looked at a Pearson 35 that had been converted from a settee berth layout to a dinette layout. It was pretty well done mechanically but exhibited very poor cosmetic workmanship throughout. In short, it was a mess that detracted from an otherwise elegant old classic.

Knowledge is the primary key to success in all endeavors. If you can't develop the skills needed, the knowledge by itself will keep you "in touch" with the work while someone else's skills are used. This will allow you to better evaluate what is being done, certain problem areas, real costs, and the quality of workmanship. That's got to be worth something.

There are many more rules that can be added to this rather light overview but these are to us the most prominent because they result from our own experience. You may also have already developed some of your own.

It should also be understood that there are many boats where these rules don't apply at all. These were junk when they were new and unfortunately haven't improved with age. It would be foolish to invest your time and money into something that was never any good in the first place. There's more to a classic boat than just her age.

So, off you go to do what you've decided will make your boat closer to your ideal. We wish you well and assure you that you are not alone.

Editor's Note: This is a "commentary" more than a directive and is clearly our own opinion. You may not agree with any or all of it. And then there will be those that will argue that what they do with their boat is their own bloody business. That's fine with us also; certain people are forever happily signing up for grief. We've also had some other opinions that haven't been too popular. One of us advocated using hot air balloons for high volume processing of popcorn and later made a strong case for issuing monogrammed lifetime swizzle sticks to US Naval officers. Neither of these even got a nod. Probably this won't either.

Hathaway Marine Surveyors