

# A Safety List, of Sorts

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Ask anyone who has lived on a boat and put a few miles under the keel a question like, "What sort of safety precautions do you take?" and you will start a long conversation. The problem is that almost everything on the boat, even those things that bring comfort, are contributing to the safety issues.

When we left Portland we knew the boat wasn't really ready. That is, it is a well found boat but there was still a long list of things that needed to be done before we could say that it was ready for all conditions. Keep in mind that we had replaced most of the standing rigging and some of the running rigging. Since that's what holds the mast up (standing rigging) and hoists and controls the sails (running rigging) it seemed a good place to start. We ran out of time before we could complete the standing rigging and had to wait until a thousand miles later in San Diego. We looked for chafed or frayed lines and we considered replacing the life lines and maybe re-bedding the stanchions. That was delayed due to their being in good condition but the idea was that it was important to look at them carefully and make that determination.

We modified the mast and sail systems in the quest for safety as well. We installed a few mast steps to make it easier to get to the mains'l head to work on the shackle on the halyard should there be a problem. We wired the shackle closed after attaching it to the sail so that we would not have one of those middle of the night problems where the shackle comes undone and shoots to the top of the mast with no way to retrieve it. The same procedure was followed in putting up the roller furled 130 genoa. We added lazy jacks so that the mainsail could be doused quickly with a minimum of drama getting it corralled and tied down to the boom. The dodger and windshield had been replaced a couple of years earlier in anticipation of extended cruising. The bimini, I might add here, is a full cover for the cockpit mostly because we were going south. In the north part of the voyage it would have been a "good thing" to have added a

section aft of the steering wheel to protect from the wind from that quarter as well. In the south it is not an issue. We Cetol-ed the topside wood to protect it from the sun. In the process of doing this we noticed that some of the hand hold rails were getting thin (likely due to years of sanding lightly before varnishing) and they were replaced. The anchor was replaced because it was under sized for the job we knew it would have to do in difficult anchorages along the way. The change out for us was to go from a 35 pound CQR to a 44 pound Lewmar spade. The results of that, by the way, have been a lot of peace of mind when the wind is screaming while at anchor. We carry three additional anchors including the old CQR; two danforths.

The aft stainless steel rails did not go far enough forward to handle adding lots of gear to them so we added two seven foot sections to the aft end of the life line stanchions. It was here that we mounted two 135 watt solar panels that could be easily deployed at anchor. We added a motor mount to carry our dinghy motor to the stern and eventually, fifteen hundred miles later, added a crane to lift the dinghy motor which has improve crew health immensely by having fewer strained backs. The dinghy davits were also reinforced to handle more weight from extended angles and through bolted to be sure they were not going to detach themselves somehow. In one of the marinas along the way we added a wooden rail forward to accommodate fuel and water containers to extend our range if needed. Part of the process of failures along the way meant that we also took apart the windlass and noted that we needed extra key stock should the one that was in place fail (which it eventually did). We had hauled out ALL of the anchor chain and noted where it was marked (in fathoms and multiples of fathoms) so that we would know how much we had deployed or how much we had left to go before running out. The roller furler was replaced because the old one was starting to stick and there were signs of breaking ball bearings. That was aided by our replacement of the forestay (standing rigging). We added solar garden lights (that can be removed and stowed when we move to different anchorages) because pangas operators may not see the boat easily in an anchorage and because it makes the boat easier to see if we are returning late at night.

There were already safety items attached to the rails like the Man Overboard throw-able Life Sling and the GPS antenna when we started. The rails were also the place for a larger BBQ and, as was pointed out earlier, the solar panels are attached there as well. We have the two boat hooks in the cockpit and sometimes forward on the deck dependant upon conditions. Jack lines to attach ourselves to when in heavy seas and we need to go forward (in our harnesses and inflatable PFD's, of course) were added from the outset and the rule on the boat is that at night, heavy seas or not, we clip onto the jack lines if we go out of the cockpit. Here along the Gold Coast of Mexico where the weather is warm and the water is near perfect we still follow this rule. I mean, what good is safety equipment if you don't use it?

On our current list for updates is a new radar reflector because the one we have up is getting a bit frayed around the edges. We also have a new solar panel controller on its way to us because the old one seems to have fried at some point south of San Diego!

That covers the deck and upper hardware pretty well although I am sure that there have been small projects that have enhanced livability there too.

This boat, a Morgan 41 Classic, is very comfortable to begin with but there are a lot of safety considerations below decks. There are hand holds in every conceivable place that I can attest to being quite necessary when we have been off shore. We replaced many of the older lights and are still in the process of adding fans everywhere they will fit because they do make a difference when it's warm. The galley is to starboard in the classic "U" shape that helps you stay put when underway. The two heads are small enough to assist in getting in and out without trauma and the berths, with hand holds, are spacious but designed to help you stay put when needed. We added a lee cloth to the port settee/berth and put non-skid mats under the carpet runners to keep your feet from sliding along as well as on the Nav station. We took out the TV and microwave replaced them with a wine rack and cup/dish cabinet. You might not think of this as a safety thing at first but having an old fashioned TV (think, glass) in a vulnerable place is a concern. The micro

wave could not be run at anchor given the size of our inverter anyway so storage was a better idea. We replaced all of the hoses for the heads and in the process added macerators and fresh (double) hose clamps to all hoses and through hulls. All this led to replacing a hose on the engine cooling system because it had developed a kink that got noticed as we were working on other hoses. All this put us in a much better mental place as we now know the state of several systems aboard.

We added a whole new bank of Rolls batteries while still in Portland to boost the house bank up to a much larger capacity. Later we found that other batteries had failed completely but the new Rolls were our main batteries for our work around electrical storage component until we replaced our work around in La Cruz (near Puerto Vallarta). As mentioned already, we are awaiting a visit from a friend who will be bringing down a new controller for the solar system to replace the one that we had added in Portland that failed during our battery episode. These are critical in order to have lights when sailing at night or operating various radios in case of an emergency.

We were given a SPOT tracker at the bon voyage party and having that has meant that family could receive notices that we are doing well even when we are away from other forms of communication that they can receive normally. On board we have a HAM/SSB radio now along with the new VHF radio plus two handhelds. We started with four GPS's but one failed right away so we have three, at the moment, and we tend to use two at any given point. Our older radar is called into service on any night passages and is a Raymarine RL9 unit that works well... even though it didn't when we started. We tend to follow the Keep-It-Simple thought process as much as possible but electrically we are getting more complex all the time without, yet, buying into chart plotters and the like. We like paper charts and cruising guides for lots of reasons. One thing that we added a few months back when I did a boat delivery from La Cruz back to San Diego were a set of amplified USB internet Wi-Fi antennas. This has meant better internet IF it is available. We have on-board but have not yet installed a packet radio modem (TNC) for e-mail via shortwave radio. This will have to be completed before we go seriously off shore somewhere. Below decks we also have red cabin night

lights so we can see where we are stepping at night without ruining our night vision.

There are a few organizational issues that we try to adhere to as well. We have inventoried many of the items that are not used everyday so that we know where they are stored, although at this point it would be a good idea to check that initial list and update it because we have found better ways to do things as we have progressed. Storage in general is an issue because we still have far too many things not secured well enough to do well on a long off shore passage... this is something we are working through currently and hope to master in the next year or so. Too much stuff and not enough room is a common problem to all cruising boats we find when talking to other cruisers.

This is by no means a complete list of things to think about but definitely a place to start. In all likelihood I have forgotten to include things that we have done to make the boat safer and more comfortable. Most things seem to relate to safety, in any event, and along with checking our drive shaft connection regularly, doing oil changes and generally looking carefully at any moving parts from time to time we are a very happy boat.