

## *Spring Re-Commissioning for Your Boat*

*\*or\**

### *I didn't know I actually de-commissioned it...*

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Did you feel the slight bump in the air Monday afternoon last week around 5:24? Me too! The phenomena, of course, was the moment when our friend *El Sol* crossed the equator on its path to warm and lengthen our days. Naturally, the event inclined our hearts towards our boats, complete with all the joy and angst that accompanies our wonderful waterborne hobby.

Even if you did not “winterize” your vessel (*I'm shocked*), it is always a good idea to spend a few hours to find, look at, touch, and deal with a number of items which may have changed over the course of your winter lay-up (or your winter ignore-and-neglect) process. You may have even felt a little pang of anxiety during the annual USCG inspections on the 18<sup>th</sup>, and that's a good thing. I'll step through a few items to help stimulate your thinking about getting back out on the water in the next few weeks. Let's start at the top, and work our way down...

#### Mast, Boom, and Standing Rigging

- General condition:
  - o Spars: aluminum corrosion under painted areas looks like cauliflower; on bare surfaces it looks like white dust piling up. Solution is the same- wire brush the area down to clean metal out past its edges, clean with solvent, prime with zinc chromate paint, then re-paint with a quality topcoat. NOTE: all of those stainless fittings and stainless fasteners attached to your mast and boom create galvanic action where they touch aluminum. Solution is a good anti-seize lubricant on the screw threads and mating surfaces. There are a number of good ones on the market.
  - o Rig: corrosion looks like brownish-orange streaks- yes, stainless steel can and does rust. Key items to look for are breaks or loose strands in the cables, especially in the vicinity of the swedge fittings, where water can seep into the fittings and either accelerate corrosion or -worse- freeze and actually cause the fitting to crack open. To find broken strands without splitting open your fingers, wrap a paper towel around the shroud and rub it, feeling for any excessive drag and watching for little clumps of paper snagged by a broken or distorted strand.
  - o Rod rigging focus points are at any connectors, especially the pin or bolt attaching the bottom of the rod to the top of the chainplates. John Bouma has some hair-raising stories how just a little looseness at the rod attachment nearly dis-masted him. Don't let it be you.
- Rig tension can be checked with a wire tension meter. I believe Ravi has one back in his shop. Tension needs to be symmetrical, side to side. You can also check the straightness

of your mast by taking one of the halyards and stretching the shackle out to the deck edge and cleating it off. Then take the halyard across the boat to the opposite deck edge and make sure the length matches. If it does, you're golden. If it doesn't, you'll need to start making adjustment to the shrouds, both at the masthead and on intermediates at the spreaders. They should not be guitar-string tight; just firm. If this makes you nervous, check with a professional rigger.

### Sails & Running Rigging

- Un-furl the jib. The drum furler action should be smooth, including the rollers, blocks, and fairleads that tend the furling line back to the cockpit.
- Hoist the main, or for you real uptown types, un-furl the main from inside the mast. Smoothness of the furling line or the halyard counts here, too.
- Things to look for on the sails:
  - o Frayed areas, i.e., patches of high wear- indicates either normal aging or potentially a new section that's being abraded.
  - o Integrity of all stitching.
  - o Integrity of the slides on the tack, particularly the ones near the head-board, where there is the most tension and wear from repeated hoisting.
  - o Batten pockets secure.
  - o Leech line settings & security.
  - o Tell-tails still intact and free-flying.
  - o No bird nests or mud-dauber nests- a particular problem for in-mast mains or open-bottom sail covers.
- Things to look for on the running rigging:
  - o Secure connections between the halyard and the shackle.
  - o Sheets and halyards both ductile and flexible, with good "hand" qualities.
  - o Jiffy reef correctly rigged without impinging on sail shape.
  - o Lazy jack lines intact, with all fittings secure.
  - o Smooth operation of vang and topping lift control lines.

### Topsides

- Lifelines:
  - o Make sure they are tight enough that they're not flopping around.
  - o Look for the same corrosion that you looked for in the shrouds.
  - o Check that all stanchion, pulpit, and taffrail mounts are secure (and not leaking).
- Wrap *rigging tape* around all your turnbuckles and pinned shackle connection to cover the cotter pins. This will not only protect your sails, but will also give you a better chance to walk off the boat without punctured and bleeding forearms. Ask me how I know.
- Deck drains need to be clear- you'll be checking hoses and clamps down below later.
- Lights: they all work, right? Right?
- Spinnaker and/or whisker poles- properly stowed in a dedicated rack.
- Dorade vents- clean and clear. No bird nests.
- Non-skid: how's it holding up?

- Varnish: how beautiful is it, really?
- Deck gear: still secure? Covers where needed and secure. Wheels on all blocks intact and rolling freely.
- Winches: take apart, clean and lubricate

### Below Decks

- *STOWED FOR SEA*... don't get too comfortable. If you hear a lot of crashing and banging down below when you harden up to close hauled, you're not stowed for sea. *This is a sailboat, not an apartment.* There: I said it...
- LIFE JACKETS: Where are they stowed? When was the last time you tried one on? Better yet, when was the last time you opened up your inflatable version and checked the integrity of the bladders and removed the CO2 cartridges, putting a little daub of grease on the threads when you put it back into the fitting? If you have self-inflating types, what's the condition of the "pill" in the inflator?
- Dittos for the first aid kit and the fire extinguishers and that expensive strobe that takes the place of all those over-aged flares.
- How are the gaskets on your openable port lights? How about the gaskets on the forward and salon hatches?

### Instrumentation

- Does everything still work? If not, why not? Is it the gear or is it the power supply to the gear? Always start with the assumption that there is a bad ground in the power supply.
- Is your map current? [*Mine is not...*] How do you do updates? Do you have to open up and change the chip or can you get it via WiFi? [*This is my current anxiety*]
- Handheld VHF fully charged?
- Can you sail your boat without all the instruments? Which one(s) is (are) the *must-haves*?

### Engine & Transmission

- Fluids and filters:
  - o **Oil**→your #1 engine priority. Pump out or drain as much as you can and re-fill your diesel with Rotella-T (or equivalent), or your Atomic-4 with a high grade synthetic. Always change the filter with the oil. Always. Especially on a boat.
  - o **Coolant**→ your #1A engine priority. For freshwater systems, this generally only means checking the level and topping off the tank with a 50/50 solution of distilled water and ethylene glycol (i.e., Prestone). NOTE: on *Courageous* just last month I was a little rattled when I opened the pressure cap and found the coolant tank dry. Turns out I had a leak in one of the hoses going out of the block to the hot water tank. It explained why the bilge was wet with green water.
  - o **Transmission Oil.** Don't forget there's another little dipstick back there. What kind of oil does it use? You have three choices: 1) 90w gear oil; 2) 30w motor oil; 3) Automatic transmission fluid (a.k.a. hydraulic fluid). Once you figure that out, make sure there's enough inside the case. [I'd guess that of all our NNSA boats,

the vast majority use #2, but make sure you are certain. They all have different properties, smells, and look]

- Electrical connections (make sure your BATT switch is off for these checks):
  - o Remove the ground cable, sand both sides of the end, sand the part of the block that it's bolted to, buy a new fastener & lock nut, and put it back on.
  - o While the ground is off, remove the wires from the back of the alternator and do the same thing, re: cleanup. Pay close attention to where each of them came off, and put them back where they belong.
- Control cables- I bet they are rusted down at the engine and tranny. Clean as much of it off as you can, then lubricate the exposed sections with WD-40 or equivalent.
- Belt(s)- Put on a new one, just because. If you have a bunch of black fuzz on the face of the engine, look closely at the alignment of the alternator and adjust to get it back in plane.
- Water pump- you're supposed to change the saltwater impellor every year, but... um...that may be overkill. Do pay attention to the amount of water belching out the exhaust port. If there's plenty, you're OK. If not, you're not OK.
- Hose clamps- Change any of them that are showing any hint of rust. Don't be a cheapskate about this; they're not *that* expensive.
- Dripless Bearing Seal-
  - o Ditto on the clamps. And since these are clamping a critical, single-point-of-failure item, change all four of them, just because.
  - o Clean up the salt encrustation at the seam of the stainless steel and carbon blocks.
  - o Push the bellows back toward the shaft opening to "burp" it and to make sure there's adequate spring pressure on the SS block.
  - o Note the material condition of the bellows. [*I'll be replacing mine soon*]

## Bilge

- Find every thru-hull fitting and cycle the valve closure lever multiple times. If there's a grease nipple, give it a squirt of waterproof lithium grease. If there's no grease nipple installed, there's probably a set screw or small bolt plugging the hole. Take it out, put in a nipple, and give it a squirt.
- Check steering system cables & pulley pins for integrity. And if your rudder post is low enough to have a packing gland to keep the water out, check that too.
- Per the engine notes, every hose should be double-clamped at the thru-hull fitting, with the little worm gear tighteners positioned on opposite sides of the hose.
- While the engine raw water valve is closed, open the strainer and clean out any gunk that has accumulated. While the strainer is open, briefly re-open the thru-hull valve to give yourself some motivation about keeping the water out.
- Bilge pump and float valve
  - o If there isn't some water already there (ha!), put some fresh water in the bilge (might as well wash it) and test the pump's capacity to pump it out.

- If there's a lot of discharge hose backwash at the end of the pump cycle (like there is in *Courageous*) consider installing a check valve just downstream of the pump. This will become another regular maintenance item.
- Pull out those old nasty oil-absorbing rags under the engine and re-install new ones, maybe even the big oil-absorbing footballs. I learned this year that they even absorb ethylene glycol, to say nothing of whatever diesel fuel drools out of all those lines and hoses during operations. Note, too, that these rags will eventually deteriorate and create debris that can clog your bilge pump. Don't let that happen, please.

## Hull

- I was amazed how much fouling grew on my formerly clean hull over the winter. Yours too. Don't let it stay there, as it will eventually attract barnacles and other hard fouling. To solve this problem, you can brush it from the dock or better yet, hire a diver to brush it, or even better, scoot over to a local boatyard for a short-haul and a pressure wash. Any of these will help. Do one of them.
- Check your zincs. All of them; eggs on the shaft, tail zinc on the prop, pencil zincs in the engine block. Again: cheap insurance. If you're burning through them in less than a year, consider getting and installing a galvanic isolator, a piece of gear which is now performing zinc-ish miracles on *Courageous*.
- If you have a feathering prop, make sure to re-grease the hub during the dive or that short-haul in the yard.

Other Than That... Get out there and get sailing. You will be amazed what a joy it is when you realize your gear is working correctly because you checked and/or fixed it yourself. Give yourself a little pat on the back!