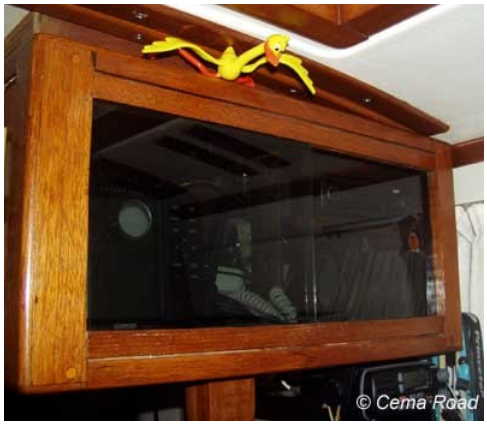
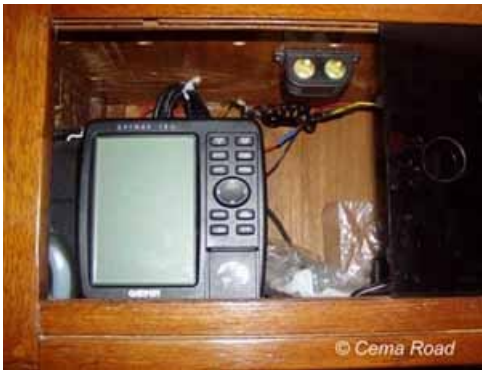
NAVIGATION STATION CABINET ADD-ON

Rick Lucas: *Ping*
(Updated 10th January 2005: new pix and dimensions)

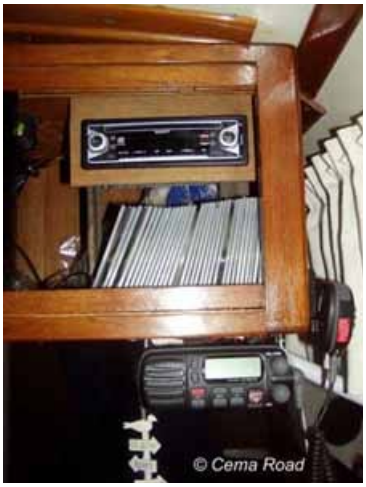


I'm the fourth owner of Pearson 323, hull #142. Legend has it that the original owner bought the boat for coastal cruising from the Chesapeake to the Caribbean. He bought the boat with every available option except a propane stove, but it appears he still wanted more. He had all running rigging routed to the cockpit and added an opening hatch above the head, which was a great idea. The biggest (in size and weight) addition was a large wooden cabinet over the navigation table that housed an old Loran and VHF radio. When I first saw Ping, I didn't like it. But now the usefulness of this addition is beyond question.

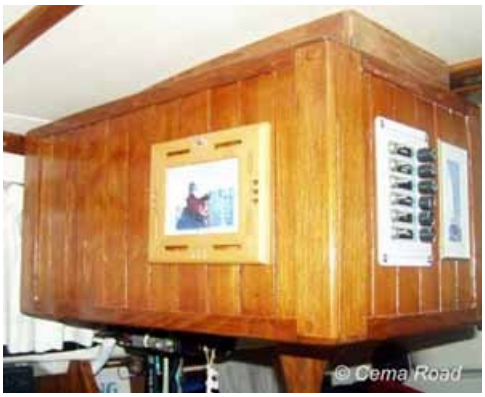
Early on, I knew I wanted to replace the Loran with a small chart plotter and get a new CD/MP3 stereo to replace the tired Radio Shack tape deck mounted in the port side cubby, forward in the saloon. It turns out that the nav cabinet was the perfect place to mount this new gear and some of the other electronics that was strewn about the boat. 12-volt power and antenna connections were already established to the box, running up the support pole from the bulkhead below it. But I found, after removing the Loran, that the wiring was pretty willy-nilly in there. To organize the power I added a panel of fused switches on the port-facing exterior of the cabinet and wired it to a terminal strip inside. To that I connected the new Garmin 180 chart plotter, a new Standard Intrepid VHF radio, and a new Sony CD/MP3 stereo. I also connected the DC power for the television and two cigarette-type power adapters for cell phones and the like. Since all the new gear required a bunch of additional wires running to sensors, antennas, speakers and such that would not fit down the opening in the support post, I had to run it externally across the bottom of the cabinet and down through a hole in the shelf to the right of the nav table. It's not as pretty as I'd like, but it works.



The benefit of having everything located in the cabinet is that it's all within arms reach of the nav station and the instruments can be read from the helm position. This eliminates the need for repeater displays found on many larger boats. The little wireless stereo remote lets me choose my tunes while driving. I'm so spoiled by the cabinet now I wouldn't take it out, even if it makes the boat list a bit to starboard.



Three items of note about the gear I've installed here. I love the Garmin. The display is large enough for these old eyes to see from the helm. It'll even display the DC system voltage, which is helpful if you want to keep the crew from draining the batteries dry while under sail. Trust me, it happens. I also love the CD/MP3 player. Since I'd already ripped most of my CD collection and much of the good old vinyl onto a "music server" computer at home, I could easily copy these MP3s to CD for the boat. You can fit an average of 15 albums on a single CD in that format, so if I want a "blues cruise", I can insert one CD and go from John Mayall to Kenny Wayne Shepherd with a visit to Stevie Ray without ever touching the music box. The wireless remote also lets me turn on the silence from the helm. The last item is kinda cool. Having the 12-volt cigarette outlets let me stow my cell phone safely in the cabinet while underway and charge it at the same time. But what's really cool is that I can charge my electric razor. For some reason my Norelco came with a 12-volt charger. I guess it was for all those high-powered .com executives that shaved in their cars. Although I never did that, it ***is*** nice to have a charger for the razor for those weekends on the boat.



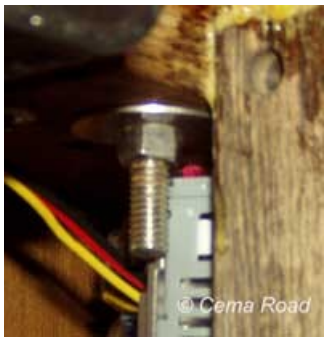
One other thing I did at the nav table was to make a pencil holder from a block of teak and screw it into the bulkhead just above the table. I drilled holes across the top front corner into which I could stick pens, pencils and navigating dividers. I'll admit I stole the idea from a Swan I'd been on, but if you're going to steal boat ideas, a Swan's a good source for plagiarism.

Details and Specifications:

At the request of someone who emailed me, here is more detail on the nav cabinet. Let me first say that I would recommend using 1/4 inch flat teak paneling instead of the grooved panels used by Ping's original owner. That's primarily because it's a pain to get the varnish right and I have found some cracks inside behind the grooves.

The cabinet is made up of three primary pieces; the headliner frame that attaches to the inside of the doghouse roof, the cabinet itself and the support pole that supports it from the bottom.

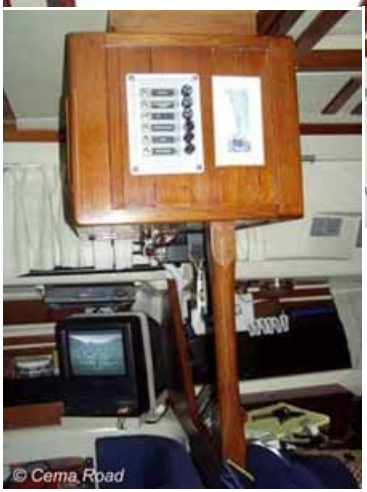
Headliner Frame: I have no idea how the headliner frame is made, but I suspect that it is a cross-braced frame made of plywood covered by cosmetic teak pieces. It is probably designed mostly as a spacer as there is one big bolt that hold the cabinet to the coachroof. I cannot see where the top is exposed as it is covered by the sea hood over the companionway hatch. It appears to be directly in line with the aluminum track on the starboard side of the hatch. If this is the case, the head must be countersunk into the aluminum track to not impede the movement of the hatch. The bolt extends through the spacer, into the cabinet itself.



The cabinet frame is located just forward of the strip that holds the headliner in place. In the picture to the left, it is the strip to the left on the picture that is of a lighter color. Most 323s will only have one strip in this location. Ping has two. The second is to cover holes in the headliner that were made to mount the traveler for the mid-boom sheeting and other hardware that leads lines back to the cockpit.

Cabinet: It has a top and bottom made of plywood with some corner braces to make up the basic structure. The top piece of plywood appears to be screwed or bolted to the headliner frame. This will make the two pieces function as a single unit. I have not taken the cabinet apart, but I suspect that the exterior corner wood and panels were applied later and are not structural. However, the gluing will likely enhance the structural rigidity of the unit.

The bottom of the lower plywood piece is painted white. I have no idea what the top looks like as I cannot see it. I suspect that it is also painted. This isn't a bad idea as the exterior framing that holds the paneling in place creates a raised edge around the top piece of plywood that can be quite a dust collector. Having it painted would make it easier to clean. But that's probably important only to people as anal retentive as I am.



As evidenced by the pictures, the corner pieces are substantial and look to have been added after the exterior panels were affixed. The joint work was very well done as the seams are virtually invisible without close inspection. I suspect that the skipper that did the work bought thick wood and planed or sanded a lot off.

Aside from the cosmetics, the cabinet is a rather simple box that could be easily built. The channels for the Plexiglas doors appear to be cut into solid pieces of wood and installed in the opening at the front of the box. These were probably cut with a table saw, although Norm Abrams in the Old Yankee Workshop could find some very fancy way of getting it done. <grin>

Support Pole: It is both simple and complex. It not only holds up the cabinet, but it is

also the conduit for many of the cables that exit the cabinet. It appears to be a 2" square piece of teak ($!) just shy of 2 feet in length. The center section of the pole was lathed round, which makes a good hand hold when moving around the cabin. There is a channel that is about 1/2" in diameter that runs down the center of the pole that handles some of the cables. The 12v power, ground and VHF antenna cable feed up through this opening.

The bottom of this pole is bolted through this partial bulkhead. The pole is cut to half its width as it extends 7 1/2" below the top of the partial bulkhead aft of the settee. There is a notch in the bulkhead cap rail to accommodate this piece. The wires exit the opening at the bottom of the pole and sneak exposed to a hole cut in the side of the navigation table.

Wiring: The remainder of the wires, which include the stereo speaker wires, GPS antenna wire, VHF RAM mike wire, TV power and antenna wire, exit the cabinet through an exposed flexible conduit that exits the bottom of the nav cabinet and disappears through a hole below the shelf outboard of the navigation table. It might be possible to have the wiring exit the cabinet through the top and traverse through to its destination through the space between the cabin liner and the doghouse exterior but I have not investigated this possibility.

Specifications:

Cabinet:
Height: 12"
Length: 24 3/4"
Depth: 14 3/4"

Headliner Frame
Height: 2 1/4"
Length: 22 1/2" (approx. I can't see or get to the end of it)
Depth: 9 3/4"

Support Pole:
Length: 20 1/8" to top of cap rail; 27 1/8" from top to bottom
Diameter: 2" (actual)

Things I'd do differently: I'd figure out a better way of running all the necessary wires from the boat to the cabinet. Some of them run through the support post that supports the unit from the starboard bulkhead, but there's not enough room for all of them. I'd probably also use flip-up doors instead of the sliding plex covers on the front. Unless blocked somehow, they slide at will to the lee side of the boat when under sail.

UPDATE: I've found that a small binder clip placed in the bottom groove of the door track will keep the doors from moving when underway. I would also get a Blue Sea breaker panel instead of the cobbled together fuse panel that I installed. I have found that Blue Sea gear is of high quality and they offer a panel that will cover the back of the panel, protecting the connections from errant fingers and gear stowed in the cabinet that could move about underway.

Cost: US$35.00 (excluding new gear, e. g., stereo, chart plotter, etc.)
Time: About a day – mostly re-routing wire