

# Tech Notes

Q&A for Your Catalina That's Been Factory-Approved for Accuracy

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## CATALINA 470 NATIONAL ASSOCIATION

### The Best Seat in the House

A number of issues ago, I wrote a *Main-sheet* article that cataloged a good number of the adaptations, equipment modifications, and procedures that I developed to help me sail *Onward* singlehanded more than 40,000 nm. One of these, *Onward's* navseat, was described in general terms. It has proven to



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be so useful, I thought it worth providing more details to make it easier for others to implement.

*Onward's* navseat is a removable and very comfortable armchair that occupies the walk-through between the stern helm seats whenever underway. I came upon the need for the navseat in the first season of my full-time cruising sojourn when I ventured out of the muddy, benign environment of the Chesapeake Bay to explore the rocky shores of New England. A navigation faux pas while tacking across the northern tip of Jamestown Island in Narragansett Bay resulted in *Onward* very narrowly missing the infamous Halfway Rock S of Prudence Island. As a result, I realized I needed a comfortable central seat that provided excellent visual situational awareness and close proximity for operation of the chart plotter and autopilot. In the ensuing years,

I developed several implementations of the navseat and now, some 7 years later, I think the current design is a real keeper.

The navseat essentially consists of a light-weight but strong and rigid stainless steel (SS) framework that can be installed or removed in about 50 seconds. The framework consists of a horizontal base with a forward leg that can be separated for stowing. The seat itself is a standard folding cockpit/deck seat that sits on the framework.

A 58" length of 1" OD SS tubing was used to fabricate the framework. After placing a 1" SS Tee fitting at about its midpoint, I took it to a canvas shop where they bent it into a symmetric bow with the Tee at the mid-point/apex. I then had 1" OD SS crosspieces welded across the bow. They, together with the bow itself, form the platform for the removable seat. The dimensions of the bow are shown in the drawing.

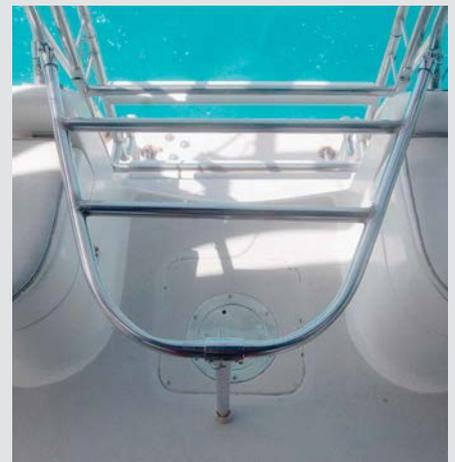
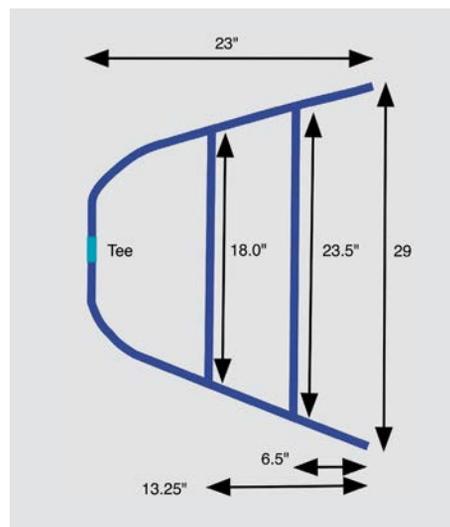
On the base of vertical risers for the stern rails on both sides of the walk-through, I installed SS rail clamp fittings with 1" SS tubing end caps attached via the tangs. These were installed first to enable exact measurements so the bow and crosspieces could be correctly sized to fit the opening well enough to enable rapid installation and removal. When in use, the ends of the bows are held firmly inside the SS end caps using 6-mm x 2 cm SS knurled hex cap screws that



fit the standard set screw threaded hole in the end cap and go through a larger diameter hole in the end of the bow. This provides rigid mounting and enables the rapid installation and removal without need of tools.

An 18" length of 1" SS tubing fits into the Tee fitting to form the forward leg of the framework. The end of the leg is through-drilled to enable a SS snap pin to hold it into the Tee and enable rapid installation and removal. A 1" ID rubber crutch tip keeps the leg from slipping on or marking the deck; a 1" dia. stainless fender washer inside the rubber tip prevents the tubing from cutting through the tip.

*Onward's* navseat is a removable and very comfortable armchair. I have made many hundreds of miles of offshore passages and Gulf Stream crossings sitting in the navseat and it is remarkably stable.





I initially used a standard padded canvas folding cockpit seat with adjustable back-angle. Then, Don Andrew on C470-76 *Beckoning* convinced me to go to a slightly larger, better-padded version with arm supports. This was a great improvement. Recently, I replaced the foam in the seat bottom with higher density closed-cell foam and inserted a 3/16" thick sheet of aluminum plate between the stainless steel tubing frame of the seat base and the foam. This makes for a much more comfortable seat for long hours of ICW navigation.

I have made many hundreds of miles of offshore passages and Gulf Stream crossings sitting in the navseat and it is remarkably stable. Since my philosophy is not to be out to "enjoy" really bad sea conditions, I haven't found it necessary to fasten the folding seat to the framework when in use - gravity alone does the job. But if I were to make longer passages in more strenuous conditions, I would devise a tie-down system to hold seat onto the framework.

With the padded seat removed (I normally stow it on one of the two stern rail seats), it is possible to use the stern walk-through by stepping over the framework.

When at anchor or in a berth, the framework is removed and stowed by sliding it vertically between the forward outside rim of the port helm and the fiberglass bulkhead.

It is possible to manually steer using either helm while sitting in the navseat, however, I primarily use it when the autopilot has control. There is better all-around situational awareness than sitting at either helm as one sits higher and thus can better see over the console, companionway deck, traveler, etc. It is also easier to see and control the chart plotter and autopilot on the center console while looking forward. This has proven invaluable on the ICW.

The navseat is much sought after by guests during cockpit parties! Many fellow sailors have been aboard and seen the navseat and some aren't convinced it's for them. However, these same folks, when aboard while sailing or motoring, always prefer sitting in *Onward's* navseat.

—**Joe Rocco**, [jjr@onward.ws](mailto:jjr@onward.ws)

## CATALINA MORGAN 440 NATIONAL ASSOCIATION

### Port Visors: What Would we do Without Them?

When we arrived in the tropics, we were always glad to have a nice, cooling breeze flowing through the cabin. We'd open up all of the hatches and ports, enjoying the free air conditioning and



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then, wait a minute, it's raining! Again. This realization was followed by a mad dash around the boat to close everything before we had to clean up a watery mess. With the boat closed up to keep the rain out, we lost that great breeze and

things would get hot and muggy quickly. We had to find a solution.

The biggest problem we found were the oval shaped ports around our coachtop. Those ports let in a lot of air, but they also allow rainwater to pour in. They can also be tough to close in a hurry, so when you're racing around the boat trying to close any that are open, it can add a sense of panic in a real downpour. And when we had guests aboard, they would sometimes forget to close them in their berth.

A sister ship showed us the solution. They are called PortVisors made by Seaworthygoods.com They are simple, look good on the boat, are easy to install



and clean, and most importantly, keep the rain out while allowing you to keep the port open. Ventilation, as we all know, is key inside the boat, and these assist in that. They come with 3M VHB double sided tape on them, so all you do is clean the fiberglass with the enclosed alcohol wipe, align the visor, and press it into place. Done! I included a couple of pics of them installed on our boat. You'll have to wonder how you ever lived without them.

—**Mike Simpson**, [mike@threesheetssailing.com](mailto:mike@threesheetssailing.com)



### Swim Ladder Repair



You may have already experienced this, but recently one of the steps on our swim ladder fell off. Fortunately, we were in the yard getting a new bottom job, so the step was not lost to the abyss of the ocean. I tried 5200 but it would not hold - believe it or not. I also thought about drilling a couple of screws into the step, but was concerned that water might make its way inside the ladder and rust out the inside of it.

I asked Warren what is used and he replied that it is a marine adhesive called Plexus. I quickly found it online at this location <http://www.usplastic.com/catalog/item.aspx?sku=38217>

The applicator is easy to use and the adhesive sets quickly. An easy repair!

—**Mike Simpson**, [mike@threesheetssailing.com](mailto:mike@threesheetssailing.com)