

## Catalina 470

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Beckoning #76



### The Carriage of Dinghies

The availability of a dinghy enhances the utilization of our C470s. Taking the dog ashore, visiting other boats, cargo and resupply runs plus general poking about into secluded areas are routine operations. The

underway stowage and securing of a dinghy is not difficult due to the excellent products available for such use. The two primary stowage methods are the standard davits and the arch. The selection of either is a major decision for the owner; the selection of the mounting system for this equipment is equally as critical.

Both equipment types have pluses and minuses. The standard davit (KATO davits shown on Cygnus, Hull #54) is very light, very strong and offers the advantage of the arms being easily moved inward or outward for other uses or storage. This configuration also allows good visibility over the stern when underway. The disadvantage of this equipment is that the stern is not available for use during a MOB situation without dropping the dinghy.

Another option is the arch (Wells Radar Arch shown on Dulcinea, Hull



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#110). The arch "answers many questions" (Terrie Olver of KATO) regarding placement of radar/radio/GPS antennae, solar panels, wind generators, etc. It is also very strong and has the advantage of allowing the use of the stern and stern ladder during a MOB event. The dinghy, carried high enough to allow the use of the stern, obscures visibility aft but can be carried lower if required then raised if a MOB situation is encountered.

Both these types of equipment are excellent solutions to dinghy carriage and are in wide and successful use in our fleet. As stated above, the mounting systems used are critical and warrant our serious attention.

A dinghy hanging off a boat from an overhead structure generates leverage in much the same manner as a child does on a teeter-totter. Hopefully, the dinghy will not move when stowed nor will the davits! Davit mounting and support is the single most critical issue (other than not overloading the davits) of the entire system. Previously, marine plywood was used to make "backing plates" whenever additional strength behind fiberglass was required and is still available.

A product called NIDA-CORE is also available to the boat owner for such purposes. It is a honey-combed material of extreme strength and is impervious to the elements. Glued/glassed in place, it provides lightweight, non-compressible buttressing where the davit installation penetrates the transom or coaming. The use of aluminum backing plates for further load distribution (shown on BECKONING... hull #76) provides a mounting system of extreme strength usable for all types of davit and cleat mounts. The use of stern rail supports, for the standard davit installation, transfers lateral (fore and aft) pressure to the vertical plane and onto the sugar-scoop itself for additional stabilization and strength. These supports can take the shape of vertical stainless steel posts (shown) or rails extending from the

stern rail to the boarding ladder area and can be used as a grab-rail when boarding or leaving the dinghy. The arch installation does not utilize these supports due to the geometry of the mounting posts. The arch has exceptional strength due to the size of the tubing used and the design.

Mounting the dinghy to the davits is most important. It is critical that the dinghy not be allowed to move when carried in the davits. This is accomplished by the use of heavy buckled straps run diagonally from the bow and stern of the dinghy to the C470 and tightly snugged down. Frequent inspection when underway is necessary to maintain the security of the dinghy.

Lastly, please don't forget to take out the dinghy drain plug! The #1 cause of failures is a dinghy on the davits filling with water from rain or seas.

### Water into Wine

No it's not a miracle but it is what I consider a better use of space. Our 470s come with 5 water tanks. Number five only holds 15 gallons of water this means it always runs dry when parts of you are covered in soap. Removal of this tank gives you additional storage space and in my case this means a wine cellar. At the moment I have two bus trays (from local restaurant supply) filled with wine bottles that works out to about 24 bottles. If you really want to you can fit about another dozen bottles by wrapping them and placing them in the bilge before you put the trays in. We pack the bottles in old socks to protect them.

Making a hatch in the deck is fairly simple, it just takes a bit of conviction to walk over to your table saw and cut into the holly/teak panel. If you look at how the rest of your hatches are made you will realize you have a pattern to follow. The hatches are made up of two pieces, the holly/teak sole and a piece of 3/4" plywood. The holly/teak rests on the fiberglass structural grid and the plywood rests in a recess in the grid. You need to design your new hatch dimensions by leaving at least 1" for the holly/teak to rest on. I could do this on three sides but not the fourth, the side adjoining the head, more on this later. Once you figure out the outer dimensions measure the width of the trim around the hatches and figure that into your cutting plan. NOTHING IS SQUARE in a boat so when you go to cut the panel make sure you are cutting parallel to and at 90 degrees to the holly inserts. After you get the panel cut and trimmed you need to attach the 3/4" plywood piece to the bottom of the panel. Glue and screws will accomplish this, be sure the screws are not too long. On the fourth side that I could not have

a 1" border I needed to space up the plywood so it would hold the finished hatch level. I did this by placing a number of flat head screws into the deck plywood and adjusting them till the deck was level and supported by the heads of these screws on that fourth side. Also on the fourth side I took the teak molding piece and cut its length to match the new hatch and fastened it to the hatch. Doing this allows the hatch to lift up like any other. If you try and leave the trim attached to the bulkhead you will have to pull the hatch out from under and slip it under this molding every time you access the storage area. The latch is a Perko number 1221DPOCHR available from your local chandlery or West Marine's number is 255729.

After removal of the tank I also took care of one of my many pet peeves. This was the inability of the aft shower draining on a port tack. I added an additional drain in the shower floor right in front of the seat. Now this still isn't going to drain because the water from the shower has to drain by gravity all the way to the grey water sump in the center of the boat. The solution to this is to add an additional grey water sump in the space where tank number five used to be. Pretty simple installation. All I needed to do was make a small plywood platform, coat it with fiberglass resin and adhere in place with copious amounts of 3M's 5200. I then led a hose from the new drain to the input of the sump and took the existing drain and did the same. Take the old drain hose and connect it to the outlet of the new sump, wire it into the same circuit as the original sump and you are done. The shower drain water now goes from the shower to the new sump from there to the old sump and overboard. The pump is a Rule number 98-4 or West Marine's number is 1245984. —Bill Martinelli

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