

# Catalina TECHNICAL SECTION MAINSHEET

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Technical information is provided by Technical Editors from each class of Catalina. For Association membership, see the last page of the front section.

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Mail questions and comments to your class technical editor.

*Technical articles are the opinion of the authors and not necessarily the advice of Catalina Yachts, Catalina Mainsheet or the National Associations.*

## TECHNICAL NOTES

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### Refrigeration, Cabinetry, Chain Plate Leaks

Hi everyone. Summer is approaching, refrigerators are being stocked, tanks

are being topped off and all is well with the world. As we prepare to embark on our summer cruises, for a weekend or for a month, it just as exciting. Hopefully, all of the pains of commissioning are healed; leaks are plugged, rigs are tuned, and the stereo is tuned to your favorite music. Cast off!

Speaking about freezers, I have been unhappy with the typical closed cell foam gasket that I originally used. I am now trying a type of gasket used in home refrigerators. If you are interested, I'll give you the specs. I've also plugged a few gaps in the insulation under the counter top that was causing condensation to form on top of the lid. The condensation would then freeze, expand and force the lid open more. It froze the lid shut as well, a difficult situation at best. Where the tube for the freezer unit came through the wall, I found a hole I could almost put my fist through. Obviously this allowed a lot of heat to enter and caused a lot of unnecessary running time. I recommend that you stick your head inside the box and look up. I'm going after the refrigerator next. Insulate, insulate, insulate!

Stephenie and I have had some cabinet work done. We added access doors to the space under the dinette seats, drawers under the settee, and enclosed the tops of the cabinets in the forward and aft cabins. It looks like it came from the factory. The "Yacht Doctor" does very nice work. Next issue, I'll include some pictures.

I've been told that you may now order a settee that is similar to the C-36 side table design. I have also heard that the factory is no longer in the ottoman business. Too bad, they built a really nice ottoman that was convenient for storage as well. We like ours a lot.

If you are still having nagging leaks in the chain plates or from your water tanks, contact Gerry Douglas or me for info. By the time this is published, I hope to be able to tell you which fix works. The water tank leaks are the most difficult. Without permanently sealing the openings, the flexing tanks are tough to keep watertight. As far as the chain plate leaks, Catalina has changed its installation methods and is using a different sealant than they used in the early boats which seems to be successful.

The variations of equipment and outfitting that I have heard about so far have been fascinating. From different sail plans, to tankage and electronics, you are all so creative and inventive, I salute you. Please share your ideas with others. Drop me a line about your boat so that we can publish it. You don't have to have questions, just share your experiences.

Stephenie and I are looking forward to spending August in Catalina and maybe taking a side trip to the Channel Islands. I'm thinking about the Catalina Rendezvous in July as well. We hope your summer cruises have good weather and fair winds. Enjoy! -Tom Garrett, #3, Pajamas

### Refrigeration, Anchor Rollers, Motor Hoist, Davits, Priming Generator

Dear Tom, Here are some more details on what I've found with my boat. **Traveler** - The Garhaur traveler supplied with the C-470 is a mechanical wonder,

works much better than what we had on our C-400. The only thing I've noticed that I like less on it is that the block mechanism and its housing on each end of the traveler are so long that they reduce the outboard travel.

**Refrigerator/Freezer** - I have adjusted the settings on the digital controls of the units to the ones you recommended, and find that the freezer will not cool below 35 degrees in the box, 28 degrees inside the metal unit. I have yet to look at adding insulation as you have recommended or for any of the holes you mentioned in this article- will do that soon, but it is difficult to work on the boat with it in Guatemala now. Some observations I've noticed: if I open the stern lazarette lid in the cockpit, the freezer will cool an extra three to four degrees, presumably from extra air circulation around the compressor. I am thinking of adding a micro solar/D.C. fan to ventilate the lazarette. Also, I discovered to the dismay of my fingers and some gear in the lazarette, that the fan blades of the compressor unit are unprotected. I am going to add a 'star' board cover with many holes in it to keep gear away from the compressors, but still allow air flow. In my boat, the freezer has no drain to remove pooled water, and since it doesn't cool below 35 degrees, the ice slowly melts, leaving water to be sponged out. Is your boat like this, and have you solved it without further cooling loss? I also have the problem of condensation on the counter and lid tops.

**Double ended Mainsheet** - The electric winch has been such a hit on the boat that we never ever use the port side mainsheet control. I am thinking about re-designing the block system for the mainsheet to be single sided to reduce sheet length and friction. Have you seen any single side systems to recommend?

**Garhaur Motor Hoist** - I added one of these, but find two problems. If you mount it on the easiest place, the flat surface adjacent to the port side propane locker lid (it comes up through the port stern perch near the rail), it is barely high enough to lift the motor to the rail. It also does not have a long enough horizontal arm to sufficiently clear the transom. I am considering two solutions and will send pictures when I have solved it. One, I may keep the same location and add a four inch tall glassed wood block under it to increase the height and continue to put up with having to push the motor out to clear the transom. The second possibility is to mount it on the transom surface under

the stern cleat, which would solve the out-reach problem, but would require a specially made pad to handle the angled surface of the transom as well as add height.

**Ocean Marine Davits** - I added these for the dinghy, they fit beautifully, were very easy to mount, and are quite a value for the money.

**Panda Generator** - This has been a wonderful generator, and amazingly, it will run all three air conditioning units, the water heater, and the charger without overloading. The only problem I've had is that if you run out of fuel, it is very difficult to bleed air and re-prime. The Panda manual gives several suggestions which do not sufficiently bleed and prime it. They even suggest that with their suggestions it will self bleed and prime, which is not true. Per their manual, you run the fuel pump continuously by placing a jumper wire or alligator clip on the two terminals under the oil pressure warning switch, with the "on" switch at the Panda panel the on position. Also per their manual, you can open the hex headed bleed screw on top of the engine near the fuel line attachment to the engine. I found that these two steps do not do the trick. In addition to these, with the help of a second person, you need to loosen the actual fuel injector intake lines one at a time, while the second person turns over the engine by pushing the start button. The engine will then start. -*Glen McIntosh, #13, Latitude Adjustment.*

*Thanks for your letter, Glen. You definitely have been the best test bed of any 470. The extensive equipment installations and subsequent long distance cruising has*



*Editor's Note: Be sure to read Glen's story of Latitude Adjustment in Guatemala in the feature/470 section of this issue.*

*provided us all a lot of useful information. Regarding your freezer, it sounds like the whole top of your unit is open. These are the same temperatures I was getting before insulating. Also the gasket is very important. I went to my local appliance supply store and purchased a generic, non magnetic refrigerator door gasket and installed it on the lid. I'm not getting the condensation or frost inside anymore. Of course, San Diego isn't quite as humid as Belize. The drain won't be a problem after the other issues are solved.*

*I would talk to Bill at Garhauer regarding the engine hoist. I know he really backs his equipment. He should be able to build one to fit.*

*Thanks for the info regarding the Panda. I'm going to put a copy of your directions in my manual and recommend everyone else do so. No need to rediscover this procedure. -Tom.*

## Radar Mount, Hailer and VHF Remote, Auto Pilot Remote

Dear Tom,

Attached are photos of three additions to our cockpit on 'Di's Dream'. We mounted the radar on a 360 degree swivel to view from any angle under the



*"Hailer and remote VHF mounted below engine instrument panel at center of cockpit"*

protection of the dodger. We protected it with a grab rail. We added a hailer and a remote for the VHF under the engine instrument panel on the aft end of the cockpit table so that it is in the midline, available to either side. We added a remote for the auto pilot on the forward end of the

cockpit table to use in foul weather under the protection of the dodger. —Roger Frizzelle, #1, *Di's Dream* ♦



Radars on swivel mount and protected by grab rail. It can be rotated for view from any angle.



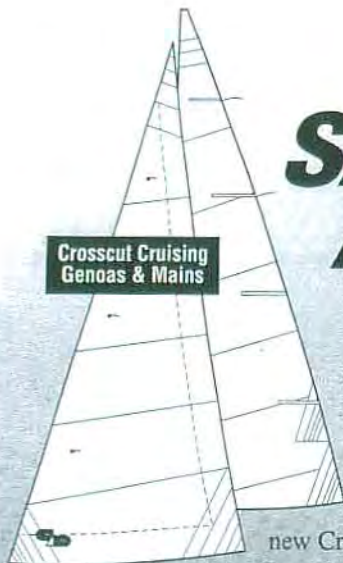
Auto pilot remote for use in foul weather under protection of dodger.

## Catalina MANSHEET

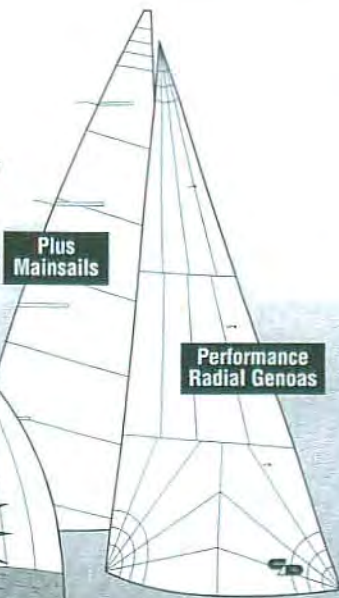
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