

# Catalina

## TECHNICAL SECTION

# MAINSHEET

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Latitude Adjustment, #13



The following is from Stan Walsh, owner of Makin' Progress.

### ORC Category I Modifications for the C470

I have been asked to mention some of the modifications needed to go offshore racing. Let me make this clear that these suggestions are not paramount to your successful trip. But Preparing for a category I offshore race for me was the perfect way to re-think my boat and be ready now for any opportunity to make a passage. Most of the time when we have guests, all we really explain is the use of the head! Offshore passages (not lengthy coastal

passes) require the "crew" to be ready to take over and become captain. Most races like the Marion/Bermuda or Newport/Bermuda races have some kind of day symposium to assist you and your crew in the preparations. They are now starting to require that a percentage of the crew attend. This was one of the best fifty dollars spent in boating. Attend one if you have the opportunity even if never doing a race. Visit the website, [www.ussailing.org](http://www.ussailing.org) or call (800) US Sail-1 for a copy of their safety recommendations for offshore sailing.

Prior to being allowed into the race, each boat must undergo an onboard inspection from one of the race inspectors. Most of the "suggestions" were already in place from numerous overnight races/sails. I will enclose a copy of the inspection checklist and you can use the item ORC# to check details on each item. Basically, down below, I added teak handrails along the forward head bulkhead, main cabin bulkhead, aft cabin under the bridge step and by

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the mirror. The Nav area I added a vertical grabrail to be able to pull oneself into the chair. A padeye and "seatbelt" were employed to remain seated on starboard tack. I had planned to utilize a line from the stainless steel galley post to the installed rail on the main cabin bulkhead, but it never got that rough. Padeyes and cloths were used to make sea bunks in the aft cabin, forward cabin and table. The aft cabin was a good spot due to least amount of motion. The recliners actually worked very well depending on tack.

Padeyes were used for the galley slave belt. Dowels to keep the lids of the refrigerator and freezer from opening in case of roll were mandated. Our locker latches and door turns were very acceptable. I did have to plan the security of the floor boards. All but the two bilge boards have some kind of overlapping structure so they could not just jump out as I asked the inspector to go ahead and try to remove those other boards! So for the bilge, I made a simple 4"

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piece of teak chock and took out one screw of each table leg to hold it in place. Thus you are able to open those boards quickly in an emergency. Also needed was a cargo netting for the front of the refrigerator to keep items inside if opening the front door. Non-skid mat was placed on all shelves in the galley and heads and the gear in forward shelf lockers was netted. A backup manual bilge pump operated from down below with hatch boards locked in place was required. I mounted a Whale pump onto a piece of wood that would fit into the #2 floor-board width.

If opportunity presents, install a Tricolor masthead light. They actually require a separate battery source for that in case of dead house bank. You could use a genset battery, you just have to have planned the wiring. All seacocks must have soft wooden dowels attached. I used electrical ties, but was informed that a lanyard would be better if you were sinking. The plug would float up to you, which would be better than having to reach down with a knife to cut the tie when sinking! A placard of all seacocks and layout of emergency gear placement, fire extinguishers, etc. was required. This you can find in the C470 manual, photocopy and modify and laminate for the crew. Also laminated procedures for emergency SSB use are required. Our batteries are secured into place properly. You have to demonstrate your emergency tiller and demo your plan to do some sort of emergency "rudder" with a whisker pole.

Safety wise, I think we all use life jackets at night! Type I life jackets must be on board, but we used inflatable vests. Personal strobes, harness, and tethers are needed. They prefer the double type of tethers so that you can always stay attached. We used West Marine type jack lines. Cockpit padeyes on the aft lazarette inboard walls were installed. You can not use the chainplate or turnbuckles as an attachment point because the possibility of a demasting would make such attachments void. Our cockpit table is through bolted and our cabin handrails are drilled and tapped and were acceptable.

A liferaft is obviously a must and I know some people just rent them when required. I have my Switlik hard case over the cabin house. The required abandon ship bag is heavy enough to pick up without trying to grab a 75 lb. Valise from a locker.

Medical issues were thought out. I felt I wanted a medical form for each crew member. If something happened such as an accident or loss of consciousness, I wanted to be aware of any medications and health issues. I had each crew member fill out a comprehensive medical form and seal for privacy in a separate envelope for the duration of the passage. I brought my backup office medical kit along. Anyone on prescription drugs was asked to bring the original bottle only.

I often see questions about the Gail Sail. I chose a conventional storm jib. Not only do you need a storm jib, but also required was a storm trysail with a track on the mast. Each sail had to have a specific sized orange Day-Glo at the head. The sails had to be hoisted and a demo of proper planning in sheet lead and tack height had to be done. For those with Dutchman, you need to lower to get them out of the way. I made my topping lift long enough to be an emergency second halyard. That same Day-Glo orange is required in one square meter size on the cabin top for Search and Rescue. If anyone needs to borrow 22 Solas flares with yellow waterproof canister, I would be happy to lend them! -*Stan Walsh, Making Progress, D470 #32.*

*The C470 list on Sailnet.com has become a very active site for discussion among owners about maintaining and equipping a Catalina 470. I encourage everyone to join the list and take a look. There is no charge for participation. Go to [www.sailnet.com](http://www.sailnet.com), and look at the site index on the left side. Click "Join E-mail List" under the Member's Center section of the index. Then click "Display All Active Lists", then click the "C470 Discussion List" and fill out the brief form to join. You will from then on receive copies of all mail sent to the list by C470 owners and will also be given instructions on how to submit mail to the list. Most of the information in this issue of Tech Notes came from comments or questions by owners participating in the lists. Here are many of the items discussed recently.*

### Dripless Shaft Seal Problems

Early boats received a letter from the factory along with a repair kit for the shaft seal because the stainless steel hub that keeps the spring under tension for the seal had slipped up the shaft causing a vigorous water in-surge at

the shaft. The fix involved tightening the allen key set bolts and installing the second set that goes on top of the set bolts to be sure they don't come loose. I recommend that all owners check the set screws on their hub and be sure that there are indeed two set screws in each of the three set holes. The following reply from Bill Martinelli to one of the Sailnet letters is also a very good solution.-Glen

A very cheap insurance against having your packless shaft gland slide forward is a hose clamp. What you do is place a hose clamp around the shaft in front of the stainless hub and against it. Go big time and make sure you use an all stainless clamp (that includes the screw) as it will from time to time get saltwater on it. When will it get saltwater on it? When you remember to burb the gland after a diver has been under the boat filling up areas with air instead of water. -*Bill Martinelli Voyager #11*

### Mainsail Battcar Systems

At least two owners have replaced the Dutchman sail rollers on the mast track with alternate systems to achieve easier up and down of the mainsail. I went to the Antal system of slides which is quite expensive, about \$3,500.00, but it works wonderfully. Stan Walsh, C470 #32, Makin' Progress, replaced his Dutchman cars with a Shaefer slide system and indicates the hardware cost was about \$300.00-\$400.00 and he indicates also being very satisfied with his. -Glen

### Radar Arches

Two owners that I know of have done very nice radar arches. Stan Walsh has a very nice one that accommodates his radar, wind generator, and his dinghy davits. Seventh Heaven also has a very nice custom one and posted a web address for pictures of his setup. You can see a few pictures of the 7th Heaven's arch, panels and wind generator at:  
<http://mail.the-kgb.com/dante/boat/cat470.html>  
-Glen

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