

Catalina

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MAINSHEET

C470 Association Technical Editor

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Beckoning, #76

The Quest for Dry Bilges

WHEW! What stinks? That was the reaction of my guest upon sliding open the hatch and descending below. It had been a prolonged absence for me from Beckoning... and an unpleasant welcome aboard from her. So, what was that smell? It wasn't the heads, the reefer, diesel smell or forgotten trash left aboard, it was....the bilges. Odorous, to say the least and a real turnoff for my guest. OK, that is enough of that. Safety always comes first with guest comfort right behind.

That smell was probably not very safe and my guest was not at all comfortable with it. Time for a remedy.

Air conditioners and refrigerators produce two things: cold air and water. The technical term for the water produced is condensate. It is produced when the temperature of the air being cooled is reduced to its dew point; water then condenses out and must be disposed of. Some air conditioning/refrigerator units use a fan to blow the condensate against the condensing coils and evaporate it; most marine units used in C470s just allow it to accumulate in a drip pan and drain away. The standard method on the C470 for condensate drainage is to route the lines into the bilge. When the condensate level rises, the bilge pumps send it overboard. If the water level is not high enough, the condensate remains in the bilge with obvious consequences. The issue then, in the case of

Catalina 470

the C470, is where better to drain it to and how to get it overboard?

Depending on where the air conditioning units are located, there are several options for the condensate drains. Some owners (John Miller, Dulcinea) have installed a Mermaid Condensator (Defender, part # 901354) valve in the overboard air conditioner water discharge line. The Condensator is easy to install, a tad expensive and works without electricity, pumps or owner intervention. It employs the Venturi principle whereby condensate is sucked from the drip pan line into the AC overboard discharge line and routed out of the boat. It is possible that some debris build up can occur in the drip pan then find its way into the valve, thus plugging the line and preventing the valve from doing its job but this has been very infrequently reported.

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Another method used which is equally as simple as the Venturi effect is gravity flow into the gray water box. Some owners have modified the gray water box with a small thru hull mounted on the side, then attached tubing and "T" fittings (suitably hose clamped) from the condensate lines to it. Voila! In that most owners, when aboard, have the gray water main thru hull open and the pump armed, this serves to get rid of the condensate.

Another method, requiring few tools, skills or parts and takes about an hour of time is as follows: If your condensate discharge lines are the standard Valuflex GS 5/8" ID brown hose you can buy stout rubber grommets at most marine stores which exactly fit the outside diameter of this hose. Then, using a hole saw, cut a hole in the top of the gray water box (1/8" smaller than the recommended hole diameter as this makes for a tighter seal between the gray water lid

and the grommet) for each discharge line. Make sure that the holes are cut in the center of the gray water lid. Cut the discharge lines so that no less than 3/4" of line will protrude into the gray water box, spray the line with a just a touch of silicone and insert into the grommet. Tie off the lines for support with plastic wire ties and you are done! Gravity does the work, the gray water box gets flushed out with clean water regularly and you have accomplished your mission....dry bilges!



Destinations...

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—James Holder,
Publisher and Editor

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