Care and Maintenance of a bilge pump

Oh, what a boring subject, right? Yeah, I agree, reading about bilge pumps is not too thrilling. But this is a subject which I've had close to my heart for a long time.

So first and foremost, what is an adequate bilge pump system, unfortunately there are no real rules here but I found a rough guide in my research.

Boat Length	No. Pumps	Total Capacity - GPH
16 - 20	2	2500
21 - 26	2	3000 - 3500
27 - 35	3	3500 - 4500
36 - 42	3	6000
43 - 49	3 - 4	8000
50 - 59	4 - 5	9000 - 10,000
60 - 60	4 - 5	10,000+

The matter you really have to look at is the issue of redundancy, placement is also pretty important, if there is a compartment that does not have free flow out of that compartment, then it needs a bilge pump. Also you have a primary and a secondary bilge pump, the primary is the first responder, the secondary kicks in when the first responder is unable to handle the situation.



Bilge pumps are usually reliable little suckers, it takes a lot to actually kill them, however in many cases it is the electrical system that fail's before the pump. Batteries are not up to powering the pump, the wiring is corroded or submerged, or the pump is trying to push water too far and in most cases uphill. All these factors go towards pump failure.

At least once or twice a year we should venture into that dark recess and ensure the pump is clear of debris, yes even on new boats, they have dust and offcuts, bits of sealant that may have broken loose, fiber glass will easily block pump. Plus of course we should ensure the bilge is clean anyway, free of oil and any solvents, as these will also shorten the life of a bilge pump. While you are down there it would be prudent to check the float

switch as well. It should be free to float and have no obstructions.

Boat builders are contributing to the lack of maintenance for bilge pumps as well, they are not always situated in the best spot to do maintenance or repair, it is my opinion that bilge pumps should be replaced every 10 years and hoses inspected yearly then changed out at the same time as the bilge pump. Float switches checked for operation yearly.

By the way a bilge pump should be the only piece of equipment that operates when your battery switch is off, after all what good is it if the boat fills up but the pump is not on. In fact everyone should check their systems, turn the battery switch to off and ensure nothing is operational then lift the float switch, if it doesn't operate I suggest that you look into making a modification.

So now I challenge you all to go and look see where your pumps are and just see if you have a potential problem, better to find out now rather than when you need the bilge system to save your boat and possibly your life.