DC Upgrade

Rick Lucas: *Ping*

The designers of a boat built in 1978 could never have anticipated the expansion in the power consuming devices modern skippers require of their craft these days. The number of breakers originally installed is simply not enough. Somewhere in the boat's history, a PO installed a macerator and decided to hook it to the same breaker that managed both the pressure water and sump pump. Not good. An upgrade was in order, along with some maintenance. There are two parts to this. First was the addition of a supplementary DC breaker panel. Second was the simple replacement of the original A/B battery switch.

In a perfect world, I would have loved to replace the original DC panel with a new one with the needed capacity. However, two things conspired against me: cost and space. SailNet had a beautiful Blue Sea 13 breaker panel for under $250. More than I wanted to spend, but I'd be willing to spend a quarter of a "boat unit" for the new high quality unit. But there was that second problem. Space. If only Bill Shaw had designed a booze locker that was a little bit narrower.

The 13 breaker unit contained two rows of breakers that made it too wide to fit into the available space between the nav station seat and the engine cover. The largest single-row unit contained ten breakers, which is what the boat came with, so there's no net gain in installing that. The only logical option was to find an add-on panel that would give me the three needed additional breakers while fitting into the space available. The solution came from Blue Sea in a simple, three-breaker unit that could fit easily next to the existing panel. The price was right. Just under $70 from SailNet which is a little more than half of what it would cost from my local big box chandlery.

As I'd learned when I installed their AC panel, Blue Sea does a great job with their products. Installation instructions are complete and come with a template for use when cutting the mounting hole. I squared that template to the existing breaker panel and taped it to the bulkhead. Using a roto-zip, I cut the hole guided by the template and slid in the new unit... it fit. The wiring was simple, albeit time consuming. I tapped into the master power from the original panel and everything came to life.

If you look at the picture at left, you might wonder why there's no label next to the bottom breaker on the new panel. I'm saving that one for the autopilot.

The second item, replacing the battery switch, was pretty simply. In theory, you simply unbolt the connections from the old unit and remove it. Install the new one and reconnect the wires. Close, but not quite. The original Perko switch was surface mounted over a hole for the wires. The new Blue Sea switch can be surface mounted, but does not sit flush to the mounting bulkhead, thus leaving a gap above the bulkhead. Not only would the new switch stick too far out from the bulkhead, it would also allow free flow of air from the bilge area into the cabin. Not critical, but annoying when it's cold out.

The nice thing about the Blue Sea unit is that it can be mounted from behind, as they do with their integrated switch/DC panel products. Luckily for me, the hole cut for the Perko unit was a nearly perfect fit for that mounting method. I slid it in from the back, bolted it into place and connected the wires. The slight gap between the perimeter of the switch housing and the plywood was easily filled with exterior latex caulking. This leaves a clean installation that doesn't protrude from the bulkhead as the original switch does, and should last another 25 years.

Things I'd do differently: Nothing.

Cost: US$90.00 (Panel and switch)
Time: About 2 hours