

THE REFIT OF ASTRAEA

The Refit of a Classic Cheoy Lee 41

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Re-Fit of Astraea

Here is a documentation of the work done by Svendsen's Boat Works in Alameda from November 2005 to the present. Click on each phase to see details of the work.

[Phase I: November 2005 through March 2006. Mast rebuild, new rigging, recoring the foredeck, new lifelines and lifeline stanchion bases.](#)

[Phase IB: The work of Phase I continues. From April 2006 through June 2006. New bottom, new shaft, new prop, new cutlass bearing, and a new transom paint job.](#)

[Phase IB Cont. July 2006. The work continues. New B&G instruments, new bilge](#)

Refit Phase IB Continues

Restoration and Re-Fit Phase IB Continues

Svendsen's Boat Works, Alameda CA

Work continues into July 06

The Gold Plated Holding Tank From Hell

Now if you are bored enough to have read all of the first part of this story you will recall that we originally came into the yards this time to get a leak in the holding tank repaired. We are now entering month three. This job has GROWN! This is a classic example of "SCOPE CREEP!!!!" Now I know how the President must feel about Iraq. My original intention was to get in and get out fast. It just sort of keeps going on and on and on..... will it ever end? Will we ever sail her again? I am forgetting all that I learned in my sailing lessons!

However other things are happening! The old B&G depth and speed instruments are being installed to replace the old Datamarine instruments that had been installed in 1987.

[pump system, huge new holding tank system, and repair of previous grounding damage from the Caribbean.](#)

[Phase II: Electrical System Update, New Force 10 Stove, Bottom Rework Part Deux](#)

[Phase III: Repowering with a new Westerbeke 44; Cleaning and repainting of bilge; Installation of new Furuno NavNet2 radar, GPS, and other electronics; refinishing of cabin sole; installation of a new Monitor windvane.](#)

[Click here to see the extensive refurbishment of her brightwork.](#)



Here the old gauges have been removed. Watch this space for the fabulous new installation of B&G we are doing! (I say "we", it is really "they"). The old Datamarine were original to 1983 fitting out. Time to replace them.



Here is what she looks like after the new B&G instruments were installed this past week! Looking good!!!!

Also, the new bilge pump is in. Along with the new pump is a new pump holder, new wiring, new control switch, new piping, and a new bronze thru hull. The yards determined that we should go with a 3700 GPH (gallons per hour) pump to replace the old 2400 GPH one. Also, of course, the new pumps have a 1 1/8" discharge now. The boat was built for 3/4" pump discharge. That meant all new hoses. Of course that also meant a new larger thru hull. And of course the old switch did not work. So, a new switch. Sigh..... another "scope creep" example. Also, they replaced the hand bilge pump that is in the cockpit. If we ever use that one it means we are in serious trouble! 😊

Very nice installation of the new pump and wiring and piping. Very professional! (Hummm.... I need to paint the bilges. If my friend Scott in Rhode Island sees this ugly old bilge paint and green verdigris on the copper piping, please don't roll your eyes! I will get to it!!!)

This pump is awesome. After they installed it I did a test by putting a water hose into the bilge and turning on the water from the dock at full force. Despite the HUGE inflow of water from the hose this big pump kept up with it without a problem! I feel very comfortable knowing that I have this new oversized pump and new oversized overboard thru-hull bronze discharge valve in case something happens and we get a leak.

Everything looking good, except the inside of the boat looks like she has just been through a hurricane. My beautiful Astraea! What a mess!!!!



The Gold Plated Holding Tank From Hell

OK, this next part is scary. 🙄 The main problem we had come into the yards for was a new holding tank for the head. Our old metal one had rusted through after 20 years of salt water and "waste". I did ask them to put in a larger tank if one would fit, as the old 20 gallon tank was sort of small if there are several people on board for any period of time. You see, unlike some boat owners, I refuse to ask guests to use a paper bag for depositing their used toilet tissue. YUCK! 🤢 I hate those little signs that some people have in their heads that say, "Don't put anything in here you did not eat first". HA HA. Very cute. 😏 Man, I hate that. Therefore I like a system that can accept toilet tissue. So, gimme 'da BIGGEST tank that will fit in the space.

So, I was expecting a nice new 30 gallon plastic tank like they are putting on all the new boats. NOT! One day during my daily visit to the yard Adam (my trusty yard foreman) leads me over to this shiny MONSTER polished aluminum metal tank that looks like something built for the Space Shuttle. This thing is HUGE! It is as big as a fuel tank! In fact, it is BIGGER than most fuel tanks! It has to be 40 - 50 gallons. It is big, heavy, shiny, aluminum in the most incredible shape imagineable. Adam said that he decided that since I was so "particular" about my boat (*now*

where did he get that?) that I would not be happy with plastic as they tend to leak a bit and smell. 🤢 No, it is not really gold plated, it was just priced like it was. 😬

OK, I can buy the argument of metal over plastic. However, staring at this MONSTER all I can think of is 1) how much labor went into this and 2) how much this thing is going to cost me! 🌐 When I saw it today on the floor of the shop, sitting on a WOODEN PALLET so it could be moved with a FORK LIFT, I was stunned. It is HUGE! My first thought was, appropriately, "Holy Shit"!



Here are pictures of this new "work of art" known as the holding tank. It is a shame it will be hidden under a bunk.

It is so big they will probably have to lower it onto the boat with a crane. I also wondered, and I asked Adam, did they measure the companionway entrance size before they built this thing? What if it won't fit through the companionway hatch? He said, "Of course we measured it!!! It will fit!".

Adam: "Of course we measured it! It will fit!"

July 25, 2006: Remember that fancy new holding tank that I had some doubts would fit through the companionway access? Of course Adam had said, "Of course it will fit! We measured!". Yeah, sure. Turns out that I WAS RIGHT! It will NOT fit through the companionway hatch! So the tank is now back in the metal shop being cut back to a size that they can get into the boat. Gheeze! 🤢

Well, today is Thursday, August 27. I am supposed to get her Saturday

morning. Last step, they got the holding tank in! As you can see it is MUCH bigger than the old one.



Here is the old holding tank, small 20 gallons.



Here is the fancy new one! Not sure how large it is, but it is certainly MUCH larger than the old one!

July 24, 2006. *Astraea* SPLASHES. Back in the water.

I was out of state for a few days and when I got back on July 24th she was back in the water! 😊😊





Astraea sits at Svendsen's dock waiting for the final touches so she can go sailing once again!



[Click here to go to Phase II of the Re-Fit of s/v Astraea](#)

[Click here to see the extensive refurbishment of her brightwork:](#)

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All Content provided by Robert Moon