

## THE REFIT OF ASTRAEA

# The Refit of a Classic Cheoy Lee 41

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## Refit Phase II

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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](#)

## Restoration Phase II: \$17,780

Svendsen's Boat Works

November 2007 - February 2008

New Electrical Distribution System

Portlight and Porthole repairs.

A new Force 10 stove! A thing of beauty!

Kewl new ICOM VHF and Remote

Redo of bottom paint

Well, it was November 2007 and time to get some more work done. So off we went back to Svendsen's Boatworks in Alameda with a list of things to do.

One job was the installation off my new Force 10 stove. YEAH! Man, is it beautiful. It is so shiney and new it will be a shame to use it and get it dirty! The carpenter at Svendsen's boatyard yard did a masterful job of installing it, which is a rather complex task due to the gimbles. I could have probably done it, but I have no woodworking shop tools to manufacture the blocks. Anyway, I am sure that I could never have done as neat and proper a job as the pros at Svendsen's. Anyway, here is what she looks like all installed. Awesome!

[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 is the new whisker pole! KEWL! I like the way the riggers put it on the stanchions. I did not want it to be stored on the mast. We paid a fortune to have those masts rebuilt and Awlgripped. I don't need an ugly pole on the fore of the mast! This is a classic cruiser here, not a J boat racer.



Another rigging job was the repair of the main sheet track and installation of a new main sheet traveler. When I was visiting the Cheoy Lee offices in Hong Kong recently and taking a tour of the old sailboat parts warehouse I found a brand new traveler to fit our boat. Ours had been broken during a most unfortunately accidental jibe back when we were first learning how to sail her. However, one of the hold down bolts to the track had also broken and the track was deforming. This meant removing the MANY hold down bolts and repairing and reinstalling the main sheet traveler track. While we were at it we went ahead and had a new main sheet (line) made and replaced the three blocks on the boom. The new installation is SWEET! Now we just have to make sure and use a preventer and not do any more hard accidental

jibes! The boat does NOT like those!

Looks great, huh? You know, this is a CRUISING boat, not a racer. This works just fine.



Another major project is electrical. Just as we were bringing Astraea to the boatyard the Heart Inverter/Charger died. It had done 14 years of service, so no big surprise. I decided against putting in another inverter, as we have not used the inverter in the three years we have owned the boat. Our flat screen LCD TV and the computers easily run off of pocket inverters which plug into the many 12V outlets in the boat. Much less "overhead". It seems dumb to run a 1500W inverter for an LCD TV and a



computer. We do not have nor want a microwave or other 110V appliances (this is a SAILBOAT, not a floating condo). Therefore we are going with a state-of-the-art battery charger, new electrical simple monitoring system, a new voltage regulator, and a new high capacity alternator. She also has six beautiful new gel cells. Plenty of power if we are careful.

The wiring behind the electrical distribution panel was a total mess! Too many things had been added. The ABYC certified electrician cleaned it all out, corrected the wiring, removed old dead wires, put in a new main power switch, and a new shore power circuit breaker. The new circuit breaker is up near where the shore power enters the boat. He also installed a galvanic isolator for defense against stray voltages from boats whose electrical systems are not correctly installed.

Here is the before of the electrical panel.



In progress. Excuse the mess. She is in the yards!



New and improved electrical panel! Totally rewired and rebuilt.

[http://refit.cheoylee41.com/phase\\_ii.html](http://refit.cheoylee41.com/phase_ii.html)



The new battery charger safely stowed on the interior bulkhead of a hanging locker in the stateroom. Safely shielded from water and damage.



New voltage regulator.





Originally the inverter and all the controls were on the bulkhead behind the ladder from the cockpit to the interior of the boat. Not really a good idea were a wave of water to crashing in.

Before:





After. Simplified, new, and moved to the Nav desk.



The new battery charger is safely inside a hanging locker, protected from the elements. All these instruments were removed. The yard covered the old holes with a piece of bakelite type material. I will have it properly patched and repaired later when we are in Mexico.

After:

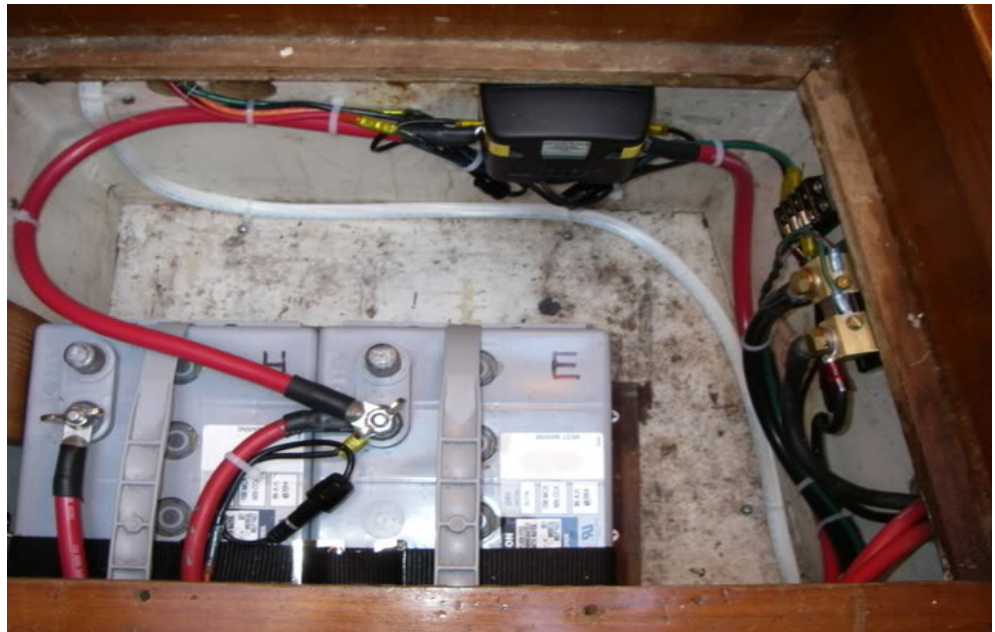


Under the accomodation ladder are the five gel cells (4 house and 1 starting). This space was a rats nest of wires and old electrical components. There are now five new gels, the gels are properly secured from moving, and every component, fuze, and wire was replaced. Sweet! Really, really nice work.

Before. Old cracking wires, old fusing, lots of dead wires:



After: All new components and an automatic cross-over switch for charging, new fuses, new wires, even the batteries are new. And all simple and properly installed. Sweet Sweet Sweet!







Sitting at the dock for so long at the boatyard Astraea's bottom was looking a little fouled. It had been 18 months since her bottom was totally redone, and I had hoped it would last longer, however apparently the Interlux VIVID does not work that well with soft slime growth in San Francisco.

Here she is going into the travel-lift at Svendsens. Again.



After a power washing the slime came off and the bottom looked perfect. However I decided that I needed to try a new paint, Interlux Micron66, which is not supposed to slime. So had the yards send off the "old" new paint, the VIVID, and repaint the bottom in Micron 66.



This time went with a dark blue instead of the light Pacific Blue. Also had just had the coving stripe painted by George Kelley in the dark blue. Unfortunately they splashed her before I could get a picture of her out of the water with her new dark blue bottom. However here she is with her new color scheme. Awesome!!!!



Also had the riggers redo the track for the car for the new whisker pole. Kept the original Cheoy Lee track, but they rebuilt the car to handle the new whisker pole and rigged it for up and down movement. Can't wait to try it all out!





Preparing to get underway from Svendsen's Boatyard March 7, 2008





The trip home! At Last!!!



[Click here to go to Phase III: June 2008 Until ??????](#)

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

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All Content provided by Robert Moon