# Flicka Friends

Building A Flicka

June 2013

Issue 52

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## THE NEXT ISSUE?

The publication schedule is a bit behind the planned date. Still, here is the June 2013 issue of Flicka Friends for your enjoyment.

The July issue of Flicka Friends will be another photo gallery issue. If you have an image from the summer of 2013 and a caption about your Flicka, please consider forwarding it me for publication as soon as you can. If I can get twenty images or so, I'll have another photo gallery issue to publish.

The deadline for the following issue is September first. It will include another installment of Building a Flicka by Bob Collier.

The October issue will be a photo gallery issue and I'd like to have twenty photos from Flicka captains if possible.

Several captains are working on stories relating to longer trips aboard their Flickas. These articles will be great additions to the many Flicka passages that have been in the newsletter over the years.

Thanks to everyone that has helped with photos and/or articles!

## FRONT COVER

This interior of s/y **DULCINEA** in La Paz, Baja California Sur. *Photo: Tom Davison © 2013* 

## BACK COVER

Pacific Seacraft Flicka # 387, s/y **ZANZIBAR** docked in Clinch Park Marina, Traverse City, MI. *Photo: Tom Davison © 2013* 

## **ISSUE 52, VERSION 1.4**



Dave Simeon and Oceancraft Sailboats will be building the Flicka. *Photo: Oceancraft © 2013* 

#### By Tom Davison s/y BLUE SKIES

Just before heading off to work on April 22, They are prov an e-mail was found in my computer in-box. for existing Fli It was from Gus Beare with a forwarded Flicka 20 sailin message from Dave Simeon of Dawson Creek Oceancraft at: Boat Works.

At the 2013 Oriental Boat Show in North Carolina, Dave announced that he would be building the Flicka and the Orion sailboats in Pamlico County. He has purchased the molds from Pacific Seacraft. Dave's new company will operate out of Wayfarer's Cove Marina.

They are providing support and some parts for existing Flickas. This is great news for the Flicka 20 sailing community. You can contact Oceancraft at:

> Oceancraft Yachts Wayfarers Cove Marina 1107 Bennett Road Arapahoe, NC 28510 (252) 617-2763



BLUE SKIES in the early morning in Friday Harbor, San Juan Islands, WA. Photo: Tom Davison © 2013





#### By Tom Davison s/y BLUE SKIES

On the last day of a recent trip, I drove south from the San Juan Islands, down Whidbey Island, crossed to Port Townsend, then across the Hood Canal, and down to Olympia, Washington. The reason for this long side trip was simple. Charlie Dewell's Flicka s/y **KAWABUNGA** was there.

The broker was contacted several weeks ahead of question would be: "Is that Charlie Dewell's time and arrangements were made for access to Flicka s/y **KAWABUNGA?** Answering this the Flicka. John from Capital City Yachts was "extra" question is a small price to pay for owning kind enough to meet me at the marina. A series of a Flicka, especially #171!

images were taken in a short amount of time. After sending some of the images to the broker, I noticed that a sale was pending for this Pacific Seacraft Flicka.

I hope that the new owners will keep us up to date on the location and trips for one of the best known Flickas around. I'm sure that they will enjoy their new sailboat. Like most Flicka owners, they will answer yes to the common question: Is that a Flicka?" For the Flicka informed, the question would be: "Is that Charlie Dewell's Flicka s/y **KAWABUNGA?** Answering this "extra" question is a small price to pay for owning a Flicka, especially #171!

# ABOUT FLICKA FRIENDS

Flicka Friends is a newsletter that is written specifically for the people who own, crew aboard, or are interested in the Flicka, a twenty foot sailing vessel designed by Bruce P. Bingham.

Based on the Newport Boats of Block Island Sound, this fine little yacht has been built from various materials from the 1970's. This includes Flickas constructed from plans obtained directly from Bruce's California office. About 400 sets of plans were sold. According to Bruce Bingham, many Flickas can be found in New Zealand, Australia, and Sweden.

A number of hulls were built by Nor'Star and some were completed by Westerly Marine. The manufacturer of the bulk of the class is Pacific Seacraft who built 434 hulls in California.

Recently, Oceancraft Sailboats purchased the Flicka molds from Pacific Seacraft and they will be building the Flicka in North Carolina.

Flicka Friends is published on a quarterly basis with issues being posted to the internet in March, June, September and December. Articles and photographs are welcome and encouraged.

You can download the current issue as well as the back issues of Flicka Friends from the Flicka Home Page:

#### www.flicka20.com

Flicka Friends is always in need of articles and photographs for publication. Please consider sending something to me for the next issue of the newsletter.

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Layout board for my Flicka: s/y **RED RASCAL**. *Photo: Bob Collier* © 2013

#### By Bob Collier s/y RED RASCAL

**INTRODUCTION** - Several months ago when the editor of "Flicka Friends," asked me to put together several articles on building a Flicka, I immediately agreed. But on further reflection, since most of you are not boat builders, I felt a certain ennui would set in and you'd hit the delete button. Recently, I was convinced otherwise and that a certain enjoyment as armchair builders would prevail. Also, if not builders, we all are restorers and rejuvenators of our boats. So, if you hang in there and follow me through the creation of a Flicka from a set of plans to the launching, you will see several steps that may cause you to say "I can do that" or "I can add that or modify my boat to include that."

**MUSINGS AND RECOLLECTIONS** - Now you may wonder what would cause a supposedly sane man to undertake such a prolonged task, especially for 10 ½ years? My interest in this hobby, and it is a joy such as a hobby brings, originated back in the 70's when my two pre-teen sons asked Dad to enroll them in a sailing course, and wanted Dad to join them. I've been sailing since childhood but never had formal instructions. So off we went on a multi-weekend course sailing everything from a 20' Cal to a 42' Cal (the Jensen Marine company was just around the corner making Cal boats). Besides sailing we were taught the complete care of the boat and sails. At the completion of the course my son's enthusiasm bubbled over to "Dad, let's build our very own sail boat!" Buying into the adage of quality time with your kids, I said "sure!" not realizing what I had bitten off. Talk about "more than one could chew!" I looked everywhere for a boat that came with an

instruction manual on how to build it. Just no success until I discovered the Snipe Class organization. It was before Hobie came along it was the largest one-design class in the world. More importantly, it was before nearly all boats were fiberglass and they published a thick manual of step-by-step photographic instruction. I was hooked, even though my son's enthusiasm flagged and after one week they left dear old Dad for football and basketball practice. I persisted in my spare time and on weekends until after a year we were sailing our plywood-planked wooden Snipe on Mission Bay in San Diego. Since that time I have built two more sailboats, the last one being a Flicka, and accumulated over 50 books on boat building. So, let's get started!

A BACKGROUND ON BOAT BUILDING - Although most of us have purchased a Flicka, which nearly always is a production boat of molded fiberglass, many Flickas were built and designed for materials other than fiberglass. If you wanted to build your own boat the same way as a production boat, you would first have to build a "plug." This is a full-size replica of the boat finished to perfection. This serves as the "male mold" (hull and deck molded separately) from which a female mold is obtained. This "female mold" is then reinforced with iron or steel braces on the outside of the mold to withstand the pressure of several layers of fiberglass either sprayed in, much like the gunite spraying when making a swimming pool, or hand-laid, the latter usually considered the best method today. Then, when the fiberglass cures and is removed from the mold, you have your hull. The deck and trunk house are molded similarly and then attached to the hull. This is accomplished either by "tabbing" in which tabs or extension pieces of the hull are cemented to the deck, or vice versa. Or at times, the deck can be bolted to the hull. This production technique was first introduced in 1956 by the Coleman Boat Works. Some of the older fiberglass boats, including Flickas, were built at a time when knowledge of the strength of the material was not fully known. So, to be sure a boat was strong enough, builders would spray in many more layers than necessary. However, to this day, including the Flicka, these are some of the strongest boats around without any "sandwich" between layers to turn to mush and are generally known as "bulletproof" boats.

Custom-built Flickas have been constructed with everything from concrete (ferro-cement) to a variety of wood methods (laminations, plywood planking, strip-planking, carvel, lap-strake, to name a few) and various fiberglass methods. As one example. I have built a day-sailer by a relatively new fiberglassing method known as "C-Flex" construction. This method is often used for one-off boats, such as America's Cup boats when only one or two boats were built to a particular design and quickly. C-Flex is a fiberglass material that consists of 16 glass rods, 1/4 " thick, which are interwoven with cloth strands. It comes in rolls 100' long and 12" wide (left side of photo with a roll of C-Flex propped against the wall). This technique involves setting up building forms, much like bulkheads, and then stapling the C-Flex to the forms. Because it is flexible one can easily make compound curves with it.

Next, the material is coated with a resin. When this dries you have a very hard and solid boat. The staples are removed and a final coat of fiberglass cloth and resin with glass powder is applied After sanding, this produces a smooth surface ready for painting.

What could take months to years to get to this point would only take a few weeks with C-Flex. This combination of resin and powder is mixed to a plaster consistency and troweled or brushed on. This is an excellent way to repair damages and dings in finished fiberglassed boats. When dry it is easy to sand smooth.

**STRIP-PLANKING** - I searched through all the resources I could find and narrowed the choice of my next sailboat down to two possibilities. I wanted to build a cruising boat and one that I could build in my garage, not an easy find! One of the two was the Flicka. While I was mulling over the plusses and minuses of the two boats, my wife and I took a short vacation to Mission Bay in San Diego (only a few hours' drive from our home). While walking adjacent to the local marina, my wife spotted a boat at a side-tie and said "there's a cute and sort of pugnacious little boat! Why don't you build that one?" That did it! I told her that that was a Flicka and one of two boats I was considering.



An earlier boat building project *Photo: Bob Collier* © 2013



Working with C-Flex to build a small day sailor. *Photo: Bob Collier* © 2013

#### F L I C K A F R I E N D S



Reviewing the plans for my Flicka: s/y **RED RASCAL**. *Photo: Bob Collier* © 2013



Working on the lofting for my Flicka. *Photo: Bob Collier* © 2013

So, on returning home I ordered a set of plans from Bingham who, it turned out, was Fred Bingham, Bruce's father. I had several conversations with this congenial designer (he even sent me his book on boat joinery gratis).

On receiving the plans, which included full-size frame patterns that obviated lofting, and 18 blueprints of the Flicka design by Bruce Bingham, I went over the plans, spot checking measurements to be sure there were no obvious errors on the blueprints to the frame plans to be sure they agreed (one of our cats helped out).

The next step involved connecting the frame patterns to form one large sheet (they were photocopied in 3 parts or sheets). Then I constructed a "lay-out" board. Due to the many times one checks the plans, over the years they slowly wrinkle and become a bit tattered, which would result in distorting the measurements. Boat production companies have large "sail lofts" in which full-size patterns can be transferred to the loft's floor.

For the home or custom builder one builds a "lay-out" board. For the Flicka, I took two 4x8 plywood sheets and connected them with braces to form an 8x8 board. I gave this a coat of white paint and now had a surface I could transfer the full-size frame patterns to this board, thus creating a stable surface for each frame pattern (11 in all)---with each frame a different color to make it easier to check and compare parts of a frame against these line patterns.

This provided a stable surface, I can't overemphasize the importance of the lay-out board. The frame determines the shape of a boat. The frames were made in 3 pieces, placed on the layout board and aligned with its frame pattern. Then they were fastened together with gussets or cleats. This was repeated for the other half of the frame and the two halves fastened together. Without the lay-out board I wouldn't be able to produce the correct curve of the frame and match one side to the other.

We come to a close for now, but I have a puzzle, a conundrum for you to ponder before the next issue: It is a 2 part puzzle (1) traditionally the frame patterns provide the forward half of the frames on the starboard side and the aft half of the frames on the port side, all together only half of the necessary information. How do you obtain all of the frame patterns? and (2) How do you transfer the frame patterns to the layout board without cutting, perforating, or damaging the plans in any way?

So, like the evening radio serials of yore, tune in the next issue for the next exciting solution when the Green Hornet...oops, I mean the s/y **RED RASCAL** solves this dilemma. Look for the new adventures of building a Flicka!!!



A custom compass rose on the galley table and a corian countertop aboard s/y **ELISE**. *Photo: Jerry Ragland* © 2013

#### By Jerry Ragland s/y ELISE

I purchased my Flicka in May of 2007. After several months of sailing, my wife, Beth, and I decided that replacing the entire counter top would enhance the beauty and create a warmer atmosphere in the cabin. We chose Corian for its durability as well as attractiveness.

To save expenses, I checked with several local installers for any scrap or left over Corian that I could purchase at a reasonable price. They usually have various colors and sizes to choose from. I found a great piece. My friend Marvin, a kitchen designer and sailing buddy, used one of his contacts to fabricate the Corian for me. The edges of the holes, for the sink and ice chest, would be rounded, smoothed and polished to prevent any sharp edges as we had decided to under mount the sink.

The first step was to remove the two-burner stove and the sink. I found that a putty knife worked well for breaking the silicone seal around the sink. Pushing an ice pick into the bongs and moving it around until the bongs splintered and popped out. We then unscrewed the rail. Because we wanted more counter space, we decided not to replace the stove. (We now use a one-burner butane stove that can be stowed when not in use.)

With measurements made, a pattern was cut out of masonite. To avoid making angled cuts, Marvin and I decided to leave the backside straight. We knew the Corian needed a tight fit so we undercut a half an inch each of the two vertical trim pieces on the side of the shelves. We did a "dry fit." To avoid using bongs, we under screwed a trim piece to make it more attractive.

With the counter top removed, we noticed there was easy access to the backside of the electrical outlet. Taking advantage of this, we tied in a line and ran it back to the engine compartment. We also mounted another outlet and a battery charger. Another thing we noticed was that by not replacing the stove, there was room to add a small drawer. H & L Marine lists a table drawer that was a perfect fit. We taped off the surface of the fiberglass to prevent it from splitting, marked the lines we needed to cut and rechecked everything. Wearing masks, we drilled a hole and made the cut with a jig saw.

One thing we found helpful was while one person was cutting; the other held a shop-vac hose just behind the saw. By doing this, we were able to keep dust to a minimum and the clean up was much easier.

After making the cut in an effort to make everything uniform, we found we should have moved the opening up 1/2 inch, which would have prevented us from cutting into the backing plywood. This would have made it much easier and would have still looked like it was originally made for the boat.

The drawer has a slot on the bottom so when you close it, it drops down a little to lock it in place and requires a slight lift to open it. The slot had to be cut larger to allow for the trim and the thickness of the fiberglass. We did this



The stove, sink, and facets were removed first. *Photo: Jerry Ragland* © 2013



A template was used to determine the measurements. *Photo: Jerry Ragland* © 2013



Trial fitting the sink, *Photo: Jerry Ragland* © 2013

by setting the table saw blade to the height of the cut to be made. After several passes with the saw we reached the width needed.

The Corian arrived and we the laid it upside down on sawhorses. We placed the sink over the holes and checked underneath to make sure it was centered and even. We applied Marine Goop, rechecked alignment, clamped the sink to the countertop and let it dry overnight. The next day we took it to the boat and placed it for a "dry fit." Very satisfied, we used Marine Adhesive in several areas and secured the countertop.

The weight of the Corian would have probably been enough to set the adhesive but we placed several gallon jugs of water on top just to be sure. We let it dry overnight. Our next step was to place a strip of teak along the backside. A short piece of recessed teak that was part of a shelf to keep items from sliding out was behind that. We took the short piece out and used brass nails to secure a longer piece making it flush with the backside of the Corian all the way across.

We used our left over Corian pieces to fill in the bottom of the shelf which also made it flush with the countertop. This gives the appearance that the bottom of the shelf is one with the countertop. Next, we replaced the front teak rail securing it with brass screws and gluing bongs to fill in the holes.

After this dried, we sanded the teak to prepare it for finishing. We applied three coats of Watco Danish Oil, allowing it to dry in between coats. We installed a new brass faucet and hooked up the connection and drain. We installed the drawer and a brass towel rod next to the drawer.



A new teak drawer for the galley. *Photo: Jerry Ragland* © 2013

After sitting back and admiring the finished job, the plain tabletop was in sharp contrast with the darker countertop. I checked around and found a hardwood medallion of a Compass Rose. This is usually used in flooring. I removed the tabletop and routed out a hole and glued the medallion in place. After letting it dry for 48 hours, I remounted the tabletop.

This entire process took about one month due to various delays. We documented each step with pictures to actually be able to see the process. Beth and I are extremely pleased with our decisions and my hard work that has created a more useful and beautiful area. We look forward to many more years aboard Elise.

But, we do have other projects in mind...



The final result is something of beauty. *Photo: Jerry Ragland* © 2013



A new teak drawer and towel rack for s/y **ELISE**. *Photo: Jerry Ragland* © 2013

F L I C K A F R I E N D S



Two dinghies on the east shore of Power Island on Grand Traverse Bay, Lake Michigan. *Photo: Randy Richardson* © 2013

#### By Randy Richardson s/y ZANZIBAR

North 44° 52.1' West -85° 34.0'

Power Island is a wonderful destination in the west arm of Lake Michigan's Grand Traverse Bay. It is an easy day sail from Traverse City, Elmwood, or Suttons Bay and a nice Kayak trip from Bowers Harbor. There are four camp sites (call (231) 922-4818 to reserve a spot), picnic areas, five miles of nature trails, and a beautiful beach on the east side of the island.

There is anchorage with good holding near the beach but no dockage so you'll need to anchor out and dinghy in.

A Short History - The early pioneers to what is now the Traverse City area called their "Island in the Bay" Eagle Island after the eagles that lived there. In the 1860's the U.S. government designated it Harbor Island, but by then the locals were calling it Hog Island. It seems the locals turned pigs loose on the island to get fattened up on nuts and berries.

In 1872 Fredrick and Ann Hall acquired the island which they gifted to their only child; Marion. Apparently they liked the name Marion better than Hog and the Island was renamed Marion Island.

In 1917 Marion sold the island to Henry Ford. Ford used the island for camping until 1944 when he sold it. The island went through some troubled times but was eventually bought by Rennie Oil in 1959.

Pete Rennie, the president of Rennie Oil, loved the island which he visited often in his 38 ft. trawler named Rennie's Nest. Pete hired a caretaker to create and maintain trails, picnic areas, and a beach which he made available for the public to use and enjoy. In April of 1965 the bay was still frozen. Pete left the island in a snow storm on his airplane engine powered bob sled but never arrived on the mainland. A search turned up Pete's bob sled but Pete was never found.

The island was again up for sale. The Grand Traverse Area Chamber of Commerce (GTACC) wanted to buy the island and keep it as a nature park but could only raise \$250,000 of \$500,000 needed.

However, in 1975 Eugene and Sadye Power (the previous owners of the Park Place Hotel) wanted to give back to the community they loved and provided a \$250,000 grant to GTCC to buy the island with the stipulation that it would always be preserved in it's natural state for people to enjoy as a wilderness destination. It is now a Grand Traverse County Park. Today, thanks to to forward thinking of the GTCC and the generosity of the Powers, Power Island remains a beautiful "Island in the Bay" for all of us to enjoy.

Bibliography: An Island In Grand Traverse Bay by Kathleen Craker Firestone

#### FLICKA FRIENDS



Making ready to leave Elmwood Marina to spend the day at Power Island. *Photo: Tom Davison* © 2013



Motoring s/y **ZANZIBAR** out of Elmwood with "Off To" in tow. Power Island is six miles away. *Photo: Randy Richardson* © 2013



Preparing to go ashore on Power Island from Flicka # 387, s/y ZANZIBAR. *Photo: Tom Davison* © 2012



Power Island is a small county park: donation accepted. *Photo: Randy Richardson* © 2013



Another sailboat anchored near Power Island. Roughly 200 acres, this small island has four campsites and five miles of trails. *Photo: Randy Richardson* © 2013



Memorial for a gift to others in 1987: an island. *Photo: Randy Richardson* © 2013



Tourists enjoying the bay aboard s/y **MANITOU.** *Photo: Tom Davison* © 2013

#### By Tom Davison s/y BLUE SKIES

Running into other Flicka owners is always interesting because they usually have something to share about their particular Flicka. Many have made an improvement that can be put to use by other Flicka captains. During my recent trip to the Pacific Northwest, five different Flickas were found in various ports. They included s/y **KIRI**, s/y **SARNIA**, s/y **PASSAGES**, s/y **LOOKFAR**, and s/y **KAWABUNGA**. Each one of these Flickas had something to consider and possibly add to my Flicka.

While in Anacortes, Washington, I stopped by Cap Sante Marina to see if there were any Flickas in the harbor. The marina employees didn't recall any but directed me toward the north end of the marina. From the north parking lot, the familiar shape of stood out. There was a green hulled Flicka in the second row.

After walking down the dock and over to the boat slip, I knocked on the hull and Karla Marken looked out from the cabin wondering who was there. After introducing myself, we talked about the newsletter and their Flicka. Don was off walking, so we headed for the parking lot to see if we could locate him. The decision was made to place a call to him and see when he might return. While on the phone, we realized that he was less than one hundred feet to the east along the marina.

We met at the gangway and I introduced myself. After walking back to the boat slip, we stepped aboard his Flicka and talked about Flickas like you might expect. Don and Karla Marken had owned their Flicka for over twenty years and had spent their time exploring the San Juan Islands, the Gulf Islands, and into Desolation Sound.

While in the parking lot, I had picked up something for their Flicka. I had a couple of Flicka burgees with me and one was green with gold scrollwork. It would be a great addition to their Flicka. The fact that it was a green burgee was perfect since their hull was green. Once aboard, I gave the burgee to Don and he hoisted it right away.

As the conversation turned toward their Flicka, a number of improvements were obvious and a few were not. One of the first additions I noticed were the fabric storage bags located under the book shelves in the v-berth. They added valuable storage space and provided something to sit against. There were two zippered storage sections in each of the bags.

The next improvement they talked about was the Wallas stove top and cabin heater. It was



Rather than draining into the bilge, a pump is used aboard s/y **KIRI**. *Photo: Tom Davison* © *2013* 

#### FLICKA FRIEND



The hose from the small pump is plumbed to another spigot in the sink. *Photo: Tom Davison* © 2013



KIRI has two zippered storage bags underneath the book shelves. *Photo: Tom Davison* © 2013

kerosene powered and the exhaust was vented through the cabin roof using a mushroom vent and flexible chimney pipe which was run through a wooden tab near the large fixed port next to the galley. The kerosene tank was located under the sink on a teak support with a bungee cord to hold it in place.

S

The sink cabinet also has another upgrade. Rather than draining the cooler into the bilge like most Flickas, the drain has been modified aboard s/y **KIRI** to allow pumping the water into the sink. A small pump, several hoses, and hose clamps were added to make this happen.

The end of the hose was connected to a new spout on the back of the sink. This meant three spigots flowed into the sink: one for freshwater form the tank under the quarterberth, another one for sea water, and the third for the cooler.

The primary parts for the cooler pump system are the Fynspray WS66 Spout in brass which is roughly \$61.00 and the pump is made by Rule Industries, it is a 'Little" Pal' hand pump which costs about \$53.00. A number of hose clamps and hoses are needed to complete the installation. One hole would need to be drilled in the galley top for the spout.

About the only thing that might be considered a drawback would be the need to winterize the hose and drain. It would be a small price to pay for bypassing the bilge.

All three of the upgrades they shared were interesting and each would be considered for my Flicka. There was a growing list of projects to complete on this trip or on future trips.

Don and Karla shared a number of stories about sailing the Pacific Northwest and provided some specific advice about sailing in the San Juan Islands. Both were excited that I'd be learning their cruising ground and would have the chance to visit some of their favorite ports and anchorages.

After talking for an hour, I was off to locate more boat parts for my Flicka and my trip. The list included electrical outlets, new rain gear, engine parts, a life jacket, and a variety of cleaners and polish. There was a lots to do an limited time. I'd be off to Lopez Island in the morning and the rush to get my Flicka into the water would begin.

Hopefully, I'd find Don and Karla in some harbor or anchorage during one of my future trips and enjoy hearing more of the stories from twenty plus years of sailing s/y **KIRI** in the Salish Sea.

#### By Bill Cartwright s/y ENTERPRISE

This is something you really have to think about before you start for sure. It is like a game of chess and you have to think out everything before you start as there will be so many changes that have to take place before you are done.

A 5K unit was found on E-bay and I got it for 500 dollars which is a good deal considering everything. The original plan was to put it under my V- birth. After I started looking I saw that the space was limited. I then looked under the Nav station seat but the Heart interface unit was there. It charges the batteries and makes 120vac and is big and heavy for sure. After looking closely, I decided to sink the Heart unit into the closet and make space for the AC. I want you to know that if you lived in the South and Texas particularly, with 98% humidity and 100 degrees outside, that an air conditioner is not just a nice thing to have but a true necessity.

I installed aluminum air duct from the unit to the V-birth and installed a register at the navigation station and forward bulkhead so air would be in the two main areas of the boat. I have to order the water pump that cools the condenser in the Air Conditioner and a separate inverter for the Air as well.

I can tell you that the standard Flicka should have at minimum should have a 7K or larger unit as my entire boat cabin top and decks have 2 inches of foam insulation so the heat does not get thru the deck. Unfortunately very few boat manufactures insulate so a larger unit would be required for the standard Flicka.

The water pump can be a March or a Cal pump that has at least 300 GPH and must be installed below the waterline. They are waterproof and can operate under water and are USCG approved. When the water pump is running it draws a little under one amp per hour. The AC is 4.3 amps per hour so under 5 <sup>1</sup>/<sub>2</sub> amps of AC power is all it needs to run the system. Good Luck!

The Boat after I raised the waterline about 10 inches at the transom to original boot stripe at midship. Take into consideration this boat was built 40 years ago ad never hit water till last month. Also I compared the waterline to other Flickas and it is close. The keel is 4.5 foot deep so much more than the PSC. It is also stiffer when sailing.



On the hard for more work: adding an air conditioner. This is Texas by the way. *Photo: Bill Cartwright* © 2013



After the maiden voyage, the waterline was adjusted to match the actual balance. *Photo: Bill Cartwright* © 2013



Power supply moved into closet and AC in place. *Photo: Bill Cartwright* © 2013



Power supply moved into closet and AC in place. *Photo: Bill Cartwright* © 2013



Opening up things to install the ducting. *Photo: Bill Cartwright* © 2013



The vent required moving a few things. *Photo: Bill Cartwright* © 2013



A cabin vent was installed as well. *Photo: Bill Cartwright* © 2013



Power supply shown in closet, before woodwork. *Photo: Bill Cartwright* © 2013



VALENTINE during the refit in May 2011. Photo: Dennis Pratt © 2013



"VALENTINE" being sprayed by a friend who is a painter. He did the job for \$100.00 and a case of beer. I later got him another case of beer when she sold. *Photo: Dennis Pratt* © 2013

#### FLICKA FRIENDS



**TESS** was renames s/y **VALENTINE** after the refit. *Photo: Dennis Pratt* © 2013



Launch day for s/y **VALENTINE** on Friday Harbor. *Photo: Dennis Pratt* © 2013

