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### Next Issue...

Rik Sandberg

The files are nearly empty!

If you have an article or images, please let me know.

Thanks!

### **Cover Photo**

Tom Grimes's Flicka s/y **BEN MAIN**, **Jr**. **Photo by Tom Davison** 

If you have a high quality photo of your Flicka and would like to see it on the cover, please let me know.

flickafriends@coslink.net

### From the Editor



Tom Grimes and his Flicka BEN MAIN, Jr. aboard his new Triad trailer on the road for the first time. *Photo: Tom Davison* © 2003

### By Tom Davison

This issue of Flicka Friends has been dedicated to trailering. There is an article relating to the purchase of a new trailer and setting the trailer up once it arrived. Another discusses the vehicle used to tow your Flicka. An alternative to a dedicated boat trailer is covered as well.

Owning a trailer for your Flicka offers a number of advantages. The costs of launching and retrieving your sailboat each year drop considerably. Being able to store your Flicka at your home or close to it allows you to do maintenance easily.

Maybe the best thing about owning a trailer is the ability to move your Flicka to various cruising areas. Past issues of Flicka Friends have include many stories where Flicka owners have ventured from home to enjoy distant cruising grounds. Some of this to the southeast coast or to the Sea of Cortez in the win-

ter or to more northern cruising grounds like the Great Lakes in the summer.

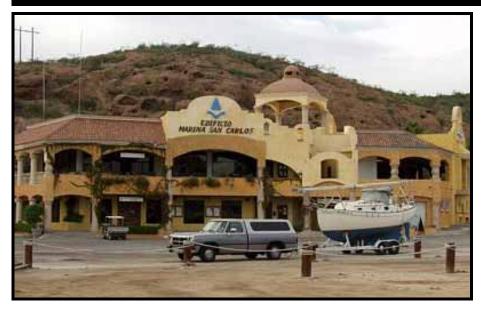
There are a number of trailer manufacturers to consider for the Flicka. Some of the reasons for selecting one manufacturer over another may have to do with where you live. Purchasing a Flicka trailer from the opposite coast increases the shipping costs. Seeking a trailer builder close to home may be the most economical purchase.

There are many fine trailers out there to consider. Possibly the most known to Flicka owners is Trail-Rite. This may be due to the fact they are located near Pacific Seacraft.

The Triad may be the second most popular trailer for the Flicka. Other manufacturers include Manning, E-Z Loader (they no longer build sailboat trailers). The list also includes trailers built from plans or using a cradle on the flat trailer.



## **Trailer Recommendations**



Lee Crockett and his Flicka s/y PUNKER DOODLE in San Carlos, Sonora, Mexico—2,300 miles from home!

### By Lee Crockett

I purchased my trailer last year in basically "junk yard" condition then had it completely rebuilt. I paid \$800 for the trailer and spent around \$1800 in repairs last spring. Last fall I spent an additional \$450 to have the supports repositioned. Last month I spent another \$430 on new tires you haven't lived until you have a blowout at 60 MPH towing 7500 pounds! So for those of you considering a trailer my suggestions are:

Buy a new one if you can afford it. Basically \$6000 for a Trail-Rite or a Triad.

Go for a 10,000 pound gross weight trailer instead of the 7000 pound. My trailer has two 3500 pound axles and I am pushing the limit with the boat and all of the stuff onboard, plus the weight of the trailer. If you find a used trailer, buy new tires anyway.

When I bought my trailer, I had the repair shop put four new trailer (not

automobile) tires on. As it turns out they were an off brand and right at the Illinois/Indiana border, the right rear blew.

In the process, the fender cut a groove in the right front tire. At the Goodyear store the guy pointed out that the left rear was splitting right down the tread line. The point? Buy name brand tires so if you have a problem (in my case 2,500 miles from where I bought the original tires) you can get it fixed/replaced without having to buy new ones. Goodyear, Firestone, whatever. The warranty only works if you can get to a dealer.

Decide if you will ramp launch or use a travel lift. That will make the decision for you to surge versus electric brakes and bunks versus pads.

I tow with a 1/2 ton pickup, 5.9 liter with, I guess what is called a tow package (transmission cooler, hitch, etc.) but it has the standard Dodge one-half ton suspension.

Good luck.

## About Flicka Friends

**Flicka Friends** is a newsletter written for the people who own, crew aboard or are interested in the Flicka, a 20 foot sailing vessel designed by Bruce P. Bingham.

Based on the Newport boats of Block Island Sound, this little ship has been built from various materials from the 1970's until 2003. 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 Corporation who built 434 hulls in California.

**Flicka Friends** is published on a quarterly basis, with issues being mailed in March, June, September and December. Articles, letters, comments and photos relating to the Flicka are welcomed and encouraged.

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# Flicka Towing Advice

### By Mal Misuraca

We tow our Flicka with a 1-ton Chevy, dual back wheel truck, with a huge engine (7.4 liters)---and, needless to say, we feel well-powered and stable.

We used to tow it with a half-ton Chevy pickup, and that was a problem. We have known people to tow Flickas with less power and stability than that, and I guess you can say they muddle through.

In Baja, the grades are in all but a couple of places gentle and therefore not too challenging for a lighter vehicle--in pulling power. Stability is another consideration. The grade just north of Santa Rosalia, and again the grades south of Loreto on the way to La Paz, are much more challenging. The Santa Rosalia grade almost defeated our half-ton, and it did the truck no good, leading eventually to problems with the transmission. (We had problems as well in Southern California, going up the Grapevine grade on I-5 from the San Joaquin Valley into the San Fernando Valley.) With the one-ton, no problem.

Stability is the other factor to consider. Baja main roads, such as Highway 1, contrary to rumor and myth, are not unsafe, but they are two-lane, sometimes with limited shoulders, and by virtue of the terrain can sometimes meander up, then down, then up and down again, and sometimes in fairly sharp turns.

We simply plan for this, and you must plan for it, too, if you would drive safely and comfortably in Baja. This means, first and foremost, taking your time and figuring that with your rig, with stops for gas, and stops to look around you will average maybe 40 miles an hour during a long day.

The way to cope with this substantial reduction in speed on Baja roads is to



Pacific Seacraft Flicka s/y SAIL AWAY ready for another road trip.

prepare for it, expect it and, above all, accept it as part of the charm of the place. Baja is a truly beautiful landscape, stark and much of the time empty. We divide our trips down there into "the truck part" and "the boat part," and we enjoy each for its virtues. We take plenty of "Books on Tape" offerings and have whiled away many an hour going down the road listening to Detective Maigret or some such.

Another rule: when you find gas, fill up. It is getting rarer to find gas stations closed in Baja, but it happens, especially around holidays. The station at Highway 1 at the junction of the side road to Bay of Los Angeles is one that seems to be out of gas, or at least unable to pump it, more than most. Gas stations in Mexico are governmentowned and spaced about 80 miles apart. With a trailer and a big engine, fill up, every time. You never know when a station will be down when you are low on fuel. We carry 10 gallons extra fuel in a couple of jerry cans, and even that is probably not enough.

Likewise, if you take your Flicka to Baja, find a good means to carry extra diesel aboard, at least another 10 gallons. Diesel is not universally available at or near the marinas, launch ramps, or beaches of Baja. Sometimes it's there, sometimes it isn't there, and you need to prepare. The reason? If you launch

in the north, as we usually do---at San Felipe, Bay of LA, or even Muleje--and you plan to bring the boat back to the trailer, as opposed to moving the trailer south, you may have in the wintertime heavy north winds and tough going to make the passage back to the north. We carry a Nauta collapsible tank on deck, with as much as 12 gallons of diesel in it, and have used it every time, it seems. The collapsible tank is preferable to a solid tank in our opinion, and with a fitting and hose to direct the fuel into the Flicka's bow filler point, we simply put pressure on the tank and force fuel into the Flicka's main tank.

One more point about "the truck part." The Mexican mechanics are marvels. They remind me of Steinbeck's description of the mechanic in "Cannery Row"---"the little mechanic of God, the master of all things that turn and twist and explode. . . ." They can make parts when they don't have them, and they never admit defeat, even in the remotest places.

Do yourself a favor. Take plenty of spares, especially for the trailer. Springs, bushings, lights, wiring, take whatever seems to you might break or wear out. We have had to leave our trailer in Baja on one breakdown. That cured me of leaving spares home. Better the spare than the time to get one!



## **HOTSPUR's Trail-Rite Trailer**



By Eric Jungemann

I have a Trail-Rite trailer for my 1989 Flicka "Hotspur." I believe it is original to the boat. It has bunks (instead of pads), keel guides, dual axles, surge brakes and has seen little use. When I purchased Hotspur, I upgraded the trailer adding a load-leveling hitch due to the overall weight of the boat and trailer.

The trailer does not have a tongue extender but it does have an upgraded guide wheel to support the forward area of the trailer when it is eased into the water by chain or tow strap. The picture above, left is a view from the rear of the trailer looking forward showing the bunks, keel guides, forward roller, and spare tire (horizontal) and guide wheel (vertical).

I really like the Fulton Trailer Jack. It easily attaches and detaches to move or store. Because of this, I had the attachment fittings welded to either side of the dual wheels. If you need to change a tire, it takes seconds to jack up the trailer and it is much safer than regular car or trailer jack. The picture below shows the spare tire mounted horizontally, the guide wheel seen from the edge in stored position; it mounts below the trailer when in use, the Fulton Trailer Jack and one of the spare trailer jack fittings.

ABOVE: A trailer jack was added to support the tongue while the caster wheel is lowered.

ABOVE RIGHT: The Trail-Rite Trailer has bunks instead of the pads or rollers.

RIGHT: A retractable caster wheel and shackle

were added to allow using a strap to lower the trailer into the water.

BELOW RIGHT: Another view of the caster wheel. *Photos: Eric Jungemann* 









# Tom's New Triad Trailer

### By Tom Davison

After researching the trailer market, Tom Grimes decided to purchase a new Triad trailer to fit his Pacific Seacraft Flicka **BEN MAIN**, **Jr.** Initially, he contacted Loadmaster Trailer in Ohio since they were much closer to Michigan than Triad. But Loadmaster's price seemed to wander and it appeared that they had never built a Flicka Trailer. He called Triad and learned they had already built fourteen trailers for Flicka owners. Tom placed his order with Triad for a trailer to fit a Pacific Seacraft Flicka. with the following specifications:



- Goodyear Marathon Tires
- Stainless steel fenders
- Seven adjustable swivel pads
- Carpeted keel support
- Trailer tongue extension
- · Retracting dual caster wheels on tongue
- Two speed winch with strap
- Adjustable bow stop
- C-Channel frame construction
- Dual Tor-flex torsion bar axles
- Tongue jack

### **OPTIONS**

- Dico hydraulic surge brake system
- Four wheel stainless steel disc brakes
- Each axle 4,500 lb capacity
- Back-up surge brake release
- Trailer completely hot dip galvanized
- Two 5,000 pound rear stabilizing jacks
- Spare tire and trailer mount

The trailer is obviously of quality construction. Maybe the best thing about this trailer is that everything is welded together. Except for the spare tire support and the keel guides, nothing is bolted to the frame.

Since Tom needed to travel to New York, continuing on to Connecticut would not mean many extra miles. He placed the order and then drove east to pick up the trailer. The trip back was behind his Toyota one-ton. This truck wasn't strong enough for the Flicka and even the trailer's weight was noticeable. This truck has been replaced with the Dodge three-quarter ton truck with a V-10 engine and towing package.



The new Triad Trailer at Sutton's Bay Marina.

All Photos on both pages: © Tom Davison 2003



Carpeted keel support and keel guides.



The tongue extension lies to the side of the keel support.



The adjustable bow stop allows you to balance the load.



The keel guide and base of the keel support.









Standard D.O.T. lighting, keel guide and keel support.







Dual caster wheels.







The trailer extension is secured at the tongue of the trailer.



Secured brake lines & wiring.



The coupler is a 10,000 pound model to fit a 2 5/16 inch ball.



Great fenders—strong and wide!



Leveling stands for stable winter storage.



The extension is held by two pins and three brackets.



Four wheel disk brakes!





# Getting the Mast Down

### By Tom Davison

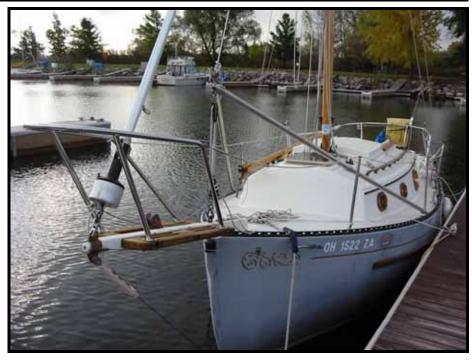
The new Triad trailer was in the parking lot and the only thing remaining was lowering the mast. Dick Shepherd was the second owner of this Flicka and he created a mast lowering system using a couple of aluminum poles.

The poles are set up as an A-Frame. The jib halyard is attached to the center of the A-frame to hold it just above the deck and is secured. The main sheet is rigged between the A-frame and the staysail fitting on the bow. Tension is put on the mainsheet to allow the forestay to be disconnected. Then, as the mainsheet is slowly let out, the mast is lowered to the deck. Since this was Tom's first lowering aboard his new Flicka, we took the precaution of placing foam padding and a boat fender on the cabin top.

Motoring **BEN MAIN**, **Jr**. over to the dock for loading onto the trailer took only a few minutes. The trailer was in the water far enough to load. When the trailer was pulled forward, the Flicka settled to starboard. The center pad was flat and mounted on a swivel. When the bow touched it, the pad would swivel and push the bow to one side. The hull could not be centered on the trailer.

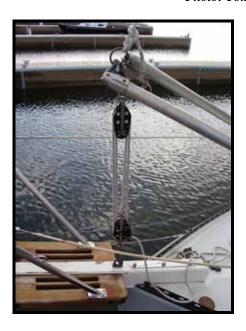
The pads were said to be set to within an half inch of the hull. It was immediately apparent that the pads were much too low—six inches to one foot. Going into the cold water in fly fishing waders to adjust the pads might work. Adjusting the pads on a boat ramp isn't the best way to proceed.

Decision point! Adjust the pads little by little and pull the sailboat repeatedly to get the pads to fit, or....motor fifteen miles up the bay to the next marina and use their lift. Tom called the marina to make sure that the marina would be able to provide the services. They could and asked that the sailboat be there in morning.



Tom Grimes' Flicka BEN MAIN, Jr. uses a couple of aluminum poles and the mainsheet to lower the mast to the deck.

Photo: Tom Davison



The main sheet was used to lower the mast to the deck.
This works perfectly allowing you easily control the weight of the mast and rigging.

Photo: Tom Davison



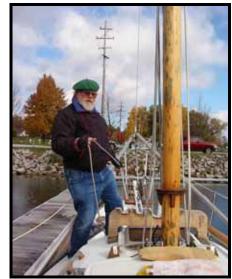
The lower end of the poles are connected to the slotted rail of the Flicka with a couple of small links.

Photo: Tom Davison









**ABOVE & MIDDLE**—Two small wood supports hold the mast, boom, gaff, and stays'l boom.

**ABOVE RIGHT**—Tom Grimes lowering the mast to the deck of **BEN MAIN**, **Jr**.

**RIGHT**—With the mast, boom and gaff on the deck, Tom motors toward the launch ramp.

**BELOW RIGHT**—Approaching the trailer for the first time

**BELOW**—The bottom line was that the pads were a little short of the required height to support the Flicka.











# Delivery of a New Trailer:

By Tom Davison

The plan was to lower the mast of the **BEN MAIN**, **Jr**, load the Flicka on the new trailer, winterize the engine and head off for dinner. We expected this to take an hour or so. What really happened was a bit different. Instead of a couple hours, it took parts of two days.

The bottom line was that the pads were not positioned correctly. Adjusting them in the water was possible, but there was another option. It would also mean moving the Flicka to a boatvard with a travel lift. The downside was that this marina didn't have a travel lift. There were two boatyards in the area with lifts. One was fifteen miles to the north, the other was roughly the same distance to the south. Since the mast, gaff, and boom were already down on the deck, we would need to motor. The decision was made to motor BEN MAIN Jr. from Suttons Bay, Michigan to Northport, Michigan, the closest marina with a boat lift. The wind was out of the southwest; traveling north would make the trip faster. It was also going to be warmer traveling with the wind rather than against it.

Before leaving, owner Tom Grimes worked on getting all of the standing and running rigging secured. I drove over to the local deli to pick up a late lunch of chili and crackers. This, along with coffee would warm us for the trip to Northport Bay Boatyard. It was October in Michigan and most boats were already out of the water.

It was about 2:30 when we cleared the breakwall. The course steered was to clear Omena Point and then turn toward Northport, Michigan. Other than the cold weather, the trip wasn't difficult. Darker clouds passed to the north, but a few rays of sunlight appeared between the bow and our destination. The entire trip took about three hours and we motored into the small harbor as the light was failing.



The marina crew was ready with properly adjusted slings to catch the Flicka, almost eliminating the need for dock lines.

\*Photo: Tom Davison\*\*



BEN MAIN, Jr. required several attempts to get on the trailer. In the end, we discovered that the support pads were not close to the placement required to properly support the Flicka.

Photo: Tom Davison ©



# **Tuning the Setup**



After cleaning the hull, BEN MAIN, Jr. is ready for the trailer.

Photo: © Tom Davison 2003



A California built Flicka meets a Connecticut built trailer for the first time. Note the height of the support pads on the trailer.

Photo: © Tom Davison 2003

They asked that we use the third slip from the ramp. The harbor was shallow due to the low water level of Lake Michigan. After stopping on the sand bottom twice, we opted for another slip that would accommodate our draft. The dock level was nearly four feet higher than the lake surface. After securing the Flicka for the night, we made plans to be back at 9:00 am.

We all returned to the boatyard the following morning and BEN MAIN, Jr. was motored around to their lifting basin. The lake was a bit rough, but the crew was ready for us and the slings were in the water. The crew was skilled and efficient. As we approached the dock, they already had the slings positioned to catch the hull. They positioned them to catch the hull and prevent damage due to the following choppy waves. Only two of the four requested docklines were used and then only for a minute. After a little adjusting, they began raising the Flicka from the water.

Within ten minutes of arrival in the lifting basin **BEN MAIN**, **Jr.** was raised from the choppy waters of Lake Michigan. Once high enough, the Flicka was moved over to allow placement of the trailer. Before we the trailer was brought over, they pressure washed the hull and began to lower the hull.

As soon as **BEN MAIN**, **Jr.** approached the trailer, it was obvious that the forward-center pad was much too high. One of the crew immediately stated that the flat pad wouldn't work and that a v-shaped pad would work much better. The boatyard had a v-shaped pad that, after being cut to length and their very casual morning coffee break, fit perfectly.

One thing that the boatyard crew complained about was not having sling points indicated on the hull. It was ob(Continued on page 12)



# **Delivery of a New Trailer:**

(Continued from page 11)

vious that they would need to move the slings. This appeared to be a common step due to the number and proximity of numerous large blocks of wood. **BEN MAIN, Jr.** was lowered onto a stack of blocks to allow moving the aft strap into the slot.

They continued lowering **BEN MAIN**, **Jr.** onto the trailer. As they did, it was apparent that the pads were one foot from they should have been.

As the weight settled onto the trailer, they decided to move the Flicka forward on the trailer to get the weight in the correct location. This was based on years (actually decades) of loading boats and looking at how the tires appear under load. The bow stop was moved six inches forward to balance the Flicka on the trailer.

Next, the crew centered the Flicka vertically with the slings. They have two lifts, one is a motorized travel-lift that allows them to place a boat on the trailer anywhere in their yard. Instead of using that one, a stationary lift was employed. This appeared to offer a number of advantages. They could move the hull in all planes and put the hull on the trailer carefully and in exactly the desired location

They went to work adjusting each pad to the hull, measuring both sides and then balancing the hull from side to side. After double checking each adjustment, the set bolts on each of the hull support pads were tensioned.

### **CAUTION**

The following settings are based on Flicka # 315—**BEN MAIN, Jr.** While they should be close to other Flickas, the fore and aft placement of the trailer was based on this particular Flicka. It has an inboard diesel engine, an enclosed head, a nearly all rope single anchor rode.



The boatyard crew quickly went to work adjusting the trailer to fit the Flicka. Their pace was slow enough to eliminate any mistakes.

Photo: Tom Davison © 2003



After lowering BEN MAIN, Jr. onto the trailer, each of the pads were adjusted.

Photo: Tom Davison © 2003



The pad height was measured and adjusted as required to center the hull on the trailer.

Photo: Tom Davison © 2003



# **Tuning the Setup**



The forward-center flat pad was replaced with a v--shaped pad. This should help loading the Flicka next summer.

Photo: Tom Davison © 2003



The center pad is probably the most important one in terms of placement of the Flicka on the trailer.

Photo: Tom Davison © 2003



This is the port-forward pad, referred to as pad # 1 on the Triad trailer.

Photo: Tom Davison © 2003



The aft-port flat pad was extended to meet the hull. Also, note the gap in the guides that allows placement of the lift strap.

Photo: Tom Davison © 2003

Your Flicka's balance could be difference based on the equipment aboard and where it is placed. These numbers should be used only as a guideline. You should seek a marina with a skilled crew to "tune" the trailer to your Flicka immediately after delivery.

#### WINCH PAD SETTINGS

After the boatyard crew completed tuning the trailer, it was immediately obvious that the initial pads settings were far from correct. While I would have expected the manufacturer to get them closer to the hull, it is actually very difficult to do. The main reason is the balance of the hull.

#### TRAILER BOW STOP

When the trailer arrived, the arm was set to the maximum aft position. That put **BEN MAIN**, **Jr.** too far aft on the trailer to weight the hitch properly. The bow support was moved forward to the point the boatyard crew felt the Flicka's weight was correctly balanced over the trailer tires. This adjustment left the bow stop two inches short of fully forward.

#### FORWARD KEEL SUPPORT

The original pad provided was flat. When we attempted to load the Flicka the first time, the bow slid to the side one way or the other. When the boatyard viewed this flat pad, they immediately replaced it with a v-shaped pad. The lower portion of the pad screw was too long for the support and they removed the extra length before installation. This will be watched next time the Flicka is loaded. This pad was adjusted fourteen inches from the trailer frame. Note that this measurement along with those to follow are from the trailer frame to the center of the ball pivot of the pad.

#### FORWARD SUPPORT PADS

Both of these pads were flat and worked well. The only thing required was adjusting them out to meet the



hull. Their adjustment was measured at twenty-six inches from the trailer frame to the center of pad pivot.

### **CENTER HULL PAD**

My guess is that the two center pads do the most in terms of centering the Flicka on the trailer. The adjustment is twenty-five inches from the trailer frame to the center of the pivot ball.

### **AFT HULL PAD**

These two pads required the most change. From the trailer frame to the center of .pad pivot, the measurement is thirty-six and one-half inches.

After the lift slings were removed, the rest of the hull was cleaned, followed by winterization of the Yanmar inboard engine and the head. Two large straps were employed to secure **BEN MAIN**, **Jr.** to the trailer. After a quick check of the truck, trailer and hitch, **BEN MAIN**, **Jr.** was ready for the road.

Moving the Flicka down the road to the storage barn didn't take very long, but the driver took his time and kept the speed to around 45 MPH. Since these were secondary roads, they were less than perfect. The paved road from the boatyard was particularly bumpy, but everything went very well.

The barn was perfect for boat storage. After a little jockeying in the barn with the truck, we lowered the caster wheels and pushed the tongue of the trailer toward the wall. After **BEN MAIN**, **Jr**. was in the storage barn, there were several other tasks to complete.

Triad Trailers recommends the you use the tongue jack and the two jack stands at the aft end of the trailer to take some of the weight of the Flicka from the axles. You should lift the trailer until there is some movement in the axles. This reduces the tension in the torsion bars slightly. The straps securing the Flicka to the trailer were loosened. No reason to leave this tension on the hull.





Two straps were used to secure the Flicka to the trailer. *Photo: Tom Davison* © 2003



After the trailer was ready to go, the boat yard crew finished pressure washing the full, winterized the engine and the head. All of the other water tanks were empty.

Photo: Tom Davison © 2003



# **Tuning the Setup**



With all of the adjustments complete, BEN MAIN, Jr. was ready for the road. The Northport Bay Boatyard crew did an excellent job of "tuning" the trailer to the hull of the Flicka.

Photo: Tom Davison © 2003



The final destination was a storage barn for the winter.

\*Photo: Tom Davison © 2003

Don't get me wrong. The Triad is a very nice trailer. Quality construction is apparent throughout. If you are planning to lift-off and lift-on, the trailer is perfect and nothing needs to be changed. Floating off and on is a different matter. After loading a Flicka on the trailer, there are some improvements that should be considered.

The front center keel pad works against loading the Flicka. Changing from a flat pad to a v-shaped pad made a big difference. Instead of helping center the load, the single forward pad allowed the bow to slip to one side or the other.

Replacing the single center pad with two lateral pads located in nearly the same location would help the bow find the centerline of the trailer.

Rather than the single fixed winch stop, a dual pivoting poly roller stop arrangement would act as a hinge and help the Flicka settle onto the trailer. While there is a small keel guide, it is well below the keel when loading. Something higher and longer would help the keel find the way to the keel pad. The first attempt to load the Flicka resulted in the hull damaging the right board. The repair was easy.

Getting the trailer setup for the Flicka should be done with a travel-lift. While it would be possible without one, getting the placement exact is much more difficult. Triad recommends lifting on the first time. I'd have to agree.

With **BEN MAIN**, **Jr.** in storage, Tom will need to wait until next spring to see how well his Flicka launches. Everything appears to be ready and launching should take a few minutes. The real test will be reloading the Flicka for a trip to the North Channel of Lake Huron next summer.

What was the last detail with trailering **BEN MAIN, Jr.**? It will be months until the 2004 boating season.



## **Building a Cradle**

### By Rik Sandberg s/y HAPPY LITTLE GIRLS 2

When we were looking for a trailer to carry s/y **Happy Little Girls 2**, I'm sure like most, we first started looking at normal boat trailers. We found these priced anywhere from \$4,200 on up to \$6,900. I didn't care for the way the less expensive trailers were built and didn't really want to have \$6,500 dollars tied up in a trailer that was probably going to just sit for 90% of every year.

Several of my businesses have equipment or materials that occasionally need to moved. So, I thought that a flatbed trailer would to be more efficient. Adding a cradle to the flatbed trailer would allow one more use for the trailer. When I need to move our Flicka, the cradle is loaded onto the trailer and chained down. The cradle also serves two purposes. It works just as well when storing the boat on the hard as it does to transport s/y **Happy Little Girls 2** on the trailer.

The 24 foot flatbed trailer cost \$3,600, which was less expensive than any of the boat trailers I looked at. There is another \$300 or so tied up in the cradle. The cradle's measurements are 110 inches long (108 in 2 inch x 2 inch side pieces + 2 inch x 6 inch front cross piece) and 70 inch wide at the bottom (66 in 2 x 2 cross pieces + the 2 2 inch x 2 inch side pieces).

The upright support legs slant inwards from the sides of the base, 5 inches per side, measured at 30 inches above floor, giving approximately 60 inches between the center of the pads when measured side to side. I ripped a 2 foot long, 2 inch x 6 inch board at an angle, 4 inches narrower at one end (top), to use as a template for this angle.

The uprights are spaced out equally from front to back with the front upright sitting atop the 2 inch x 6 inch



The custom cradle built for s/y HAPPY LITTLE GIRLS 2. Photo: Rik Sandberg © 2003



Another support will be added to the cradle at the forward crossbeam to support s/y HAPPY LITTLE GIRLS 2.

Photo: Rik Sandberg © 2003



## For Your Flicka



The trailer pads allow the plywood to flex and adapt to the shape of the Flicka's hull. *Photo:* © *Rik Sandberg 2003* 



Chains are used to secure the cradle in place, ropes and straps secure the Flicka to the cradle and trailer.

Photo: Erick Sandberg

front crosspiece and the rear upright sitting atop and flush with, the back end of the 2 inch x 2 inch side pieces. The center upright lines up with the center cross piece in the base.

The keel rest is 5 inches higher in the front than the back to allow the boat to sit level when in the cradle. The keel rest (6 inch channel) is welded atop the 2 inch x 2 inch rear cross piece and the 2 inch x 6 inch front cross piece with a 1 inch square tube spacer to make the difference between the front and rear heights five inches (More about this below).

The metal pad frames are made with a ½ inch space between the plywood and the 6 inch center piece to allow the plywood to shape itself somewhat to the curve of the hull. The plywood is only attached to the metal frames on one side, to allow this flexing.

I will be building an extra, adjustable, front keel rest, as the keel does not sit on the keel rest all the way to the front. In the interim, a 10,000 lb. nylon ratchet strap is used between the two front uprights and under the front of the keel to support it better while trailering. I don't believe this would be necessary while just sitting on the hard. The ratchet strap front keel support has worked well enough that I have not felt the need to rush into building the adjustable metal front keel support, although I will eventually.

Since the original construction, I have re-thought the keel rest. When I first built the cradle, without the benefit of the boat being where I could put a tape measure to it, (she was in Seattle, I was in Minnesota) I used a six inch channel for the keel rest. I thought that the keel could sit down between the sides of the channel iron to keep it securely centered, side to side, in the cradle while trailering.

(Continued on page 18)





## **Building a Cradle for Your Flicka**

(Continued from page 17)

I found, upon loading the Flicka the first time, that the keel was just a bit too wide to fit between the sides of a 6 inch channel. At this time I had to put a 2 inch x 6 inch board (these don't quite fit and must be ripped down a ½ inch or so) in the channel, so the keel could sit above the channel sides.

My thinking then was that I would simply remove the 6 inch channel and add an 8 inch channel instead. After further investigation, I decided that it would be better to leave the 6 inch channel in place, continue to use the ripped down 2 inch x 6 inch inside of it and add 2 inch "wings" of 1 ½ inch x 1 ½ x 3/16 inch angle to the top of the sides of the channel for the keel to sit between.

After seeing everything loaded and in place, I found that lowering the boat the extra two inches would put the rudder too close to the bed of the trailer. This probably wouldn't have made much difference on the trailer, which is perfectly flat, but may have been a problem when using the cradle on the ground, which may be more irregular. This does not change the need for the front keel rest I referred to above.

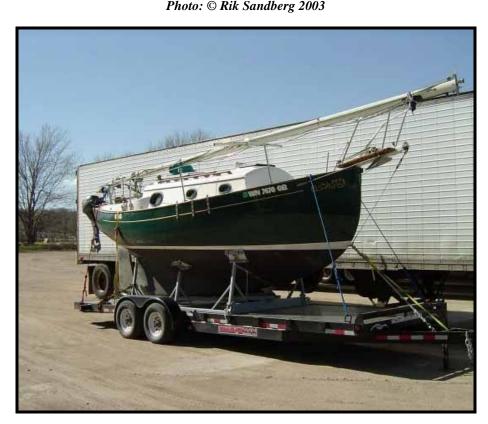
If one wanted to use an 8 inch channel instead of the 6 inch, this could be done and still maintain enough ground clearance by using a 2 inch x 8 inch rectangle for the front cross piece and 2 inch x 4 inch rectangle tubing for the rest of the pieces of the base of the cradle. This would add a substantial amount of weight to the unit though, making loading and unloading of the cradle to or from your trailer by hand more challenging.

So, you can see that I have not only killed two birds with one stone, but also saved some money in the process. For more information, my email address is:

rik@rjsgraphics.net



Sailing s/y TWO HAPPY GIRLS II on Kentucky Lake on the Tennessee River in western Kentucky.



The trailer, cradle and Flicka are ready for a trip to the lake.

Photo: Rik Sandberg





## Materials list for a Flicka Cradle

Individual Parts		
1	2 x 6 x ½ rectangle tube	70 inches – front cross piece
2	2 x 2 x 3/16 square tube	108 inches – sides of base
2	2 x 2 x 3/16 square tube	66 inches – middle and rear cross piece, base
2	2 x 2 x 3/16 square tube	24 inches – Front uprights
2	2 x 2 x 3/16 square tube	22 inches – middle uprights
2	2 x 2 x 3/16 square tube	28 inches – rear uprights
10	1 x 1 x 1/8 square tube	18 inches — angle bracing
2	1 x 1 x 1/8 square tube	23 inches – angle bracing, front/side
1	1 x 1 x 1/8 square tube	12 inches — spacer under keel rest, between 2 x 6 rectangle and 6 inch channel
12	1 ½ x 1 ½ x 1/8 square tube	12 inches - pads
6	1 ½ x 1 ½ x 1/8 square tube	6 inches - pads
1	6 in channel	120 inches – keel rest
2	1 ½ x 1 ½ x 3/16 angle	72 inches – wings to widen keel rest
Hardware/ Auto Parts Store Stuff		
6	1" x 36"	threaded rod
12	1"	nuts
6	1"	washers
6	9" x 12" ½ inch	plywood
12	2 ½ x ¼ in	bolts
12	<sup>1</sup> ∕ <sub>4</sub> in	nuts
12	<sup>1</sup> / <sub>4</sub> in lock	washers
1	6 ft x 10 in	carpet for keel rest –
6	9" x 12"	carpet for top of pads –
12	nylon tie-wraps	nylon
1	2 x 6 treated board	ripped down to 5 ½ inches to fit in 6 inch channel
6	4 inch 1 ½ inch PVC	pipe (inside 2 x 2 uprights to protect threads)



