

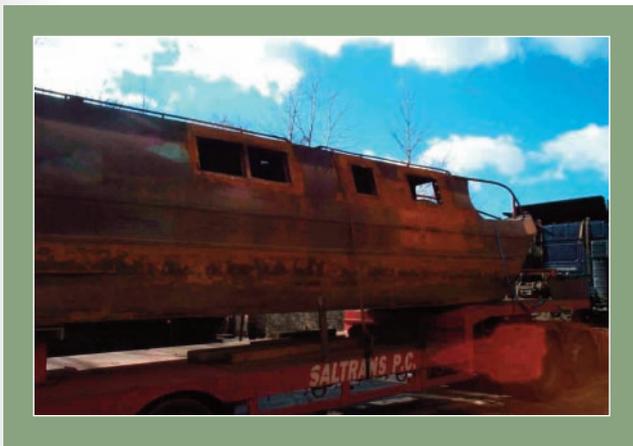
THE PHOENIX PROJECT

Many ancient legends (Greek, Egyptian, Arabian, Chinese and Japanese) tell of a bird not unlike an Eagle or Heron that is reborn through fire. Only one Phoenix could exist at any time and when it reached the end of its life it would construct a pyre out of aromatic branches and spices, then set it alight. The bird would then be reborn and rise up from the flames.

The Trafalgar Marine Phoenix project was launched on Friday 24/02/2006 when Paul and myself viewed a burnt out canal boat at Marple BWB yard.

The 42ft boat was in quite a state after teenage vandals had set it (and another two boats) alight early one winter morning (sods).

After mulling it over Paul decided it would make a great asset for the company if we could restore it and by that evening we had agreed to purchase the boat from Harral brokerage.



The main problem with the boat was the front section of roof which had been badly rippled during the fire.

No problem Paul said "We'll make a day boat".

The boat had been built at Market Harborough and had once been part of the Anglo Welsh hire fleet.

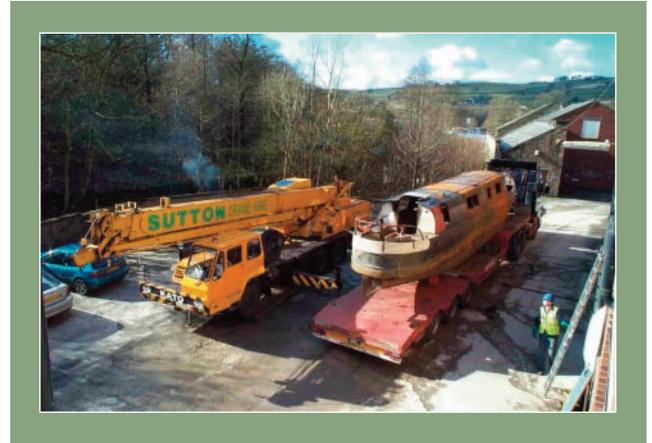
Originally named North Star we thought, after its encounter with the fire and its reincarnation as a day boat, Phoenix would be an excellent name for the vessel.

THE PHOENIX PROJECT

The first thing was to move the boat to a place where we could work on it. BWB wouldn't let Paul touch it at their yard because of health & safety and all that jazz.

For a while we were planning to take the boat to Whaley Bridge basin for the refit but there was a lack of amenities there i.e. power supply. Added to that was the cost of dry docking which would have been necessary to finish off the steel work.

So we decided to get it craned out of the canal and have it delivered to our industrial unit (near New Mills).



One problem; Marple doesn't have a suitable place to crane boats out. After a few calls and cups of tea we found another boat was due to be craned out at Macclesfield.

So the next day, Monday 27th, Paul got a tow up to Macclesfield Marina with George Boyle and his historic narrowboat Alton.

The next morning she was craned out at Macclesfield and transported to our industrial unit.

She arrived in the afternoon and was craned into position with no problems.

It was a tight fit lifting the boat into the car park but the skilled crane operator did a fine job.



THE PHOENIX PROJECT

After an initial check of the hull Paul and myself got straight to work with me taking as many photographs as possible and Paul grinding off the roof (good deal if you ask me).

A list of necessary equipment had already been drawn up on the Friday to get a picture of the costs involved in transforming the boat.

I set about ordering the necessary equipment from our suppliers while Paul finished off the roof.



After the first day only one section of cabin was left, the rear eight foot. Eventually a kitchen and toilet will be fitted into this area.

Paul and myself were very happy with the first day's labour and retired to contemplate the next step.

March 1st, and a cold wind blows through the High Peak. It has been a full 18 hours since narrowboat Phoenix arrived. The front of the roof has been removed and vital equipment is hopefully en route.

As usual Paul is overly keen to get on with things. By the time I'm awake he has constructed an engine mount and managed to lift the Lister SR2 engine out, aided by our 1970's Lancing stacker truck.



Now the engine had not been touched by the fire but it had been underwater after she sank. The reason behind the sinking is currently unknown, but one assumes the fire crew flooded her bilge. Would the engine run after being underwater?

Lister fans amongst you will probably be screaming yes at their computer screens right about now.

THE PHOENIX PROJECT

We could have serviced the engine ourselves but this would have taken a few days so instead we chose to farm the work out to a friend of ours, Neil Milton.

Neil runs his own business repairing/hiring a variety of plant hire. Expert in hydraulics and diesel engines he's available on 01663 744285 or 07974 439608.

By the afternoon we had heard back from Neil, the engine was indeed a runner.

It should be steam cleaned and serviced in good time.



Not so much is known about the engine, a 1970's Lister SR2 diesel.

It was serviced in the 1980's by a tractor company - was this when it became a marine engine?

If you can shed any light on the history of the boat (North Star we think) or engine please email us.

Fate smiled on us later when a passing scrap man saw the roof piled up by the side of the boat.

He managed to get the oven, fridge, sides of the boat and the roof into his transit.

About this time I start worrying about how well things are going. A nice cup of tea calms my nerves.

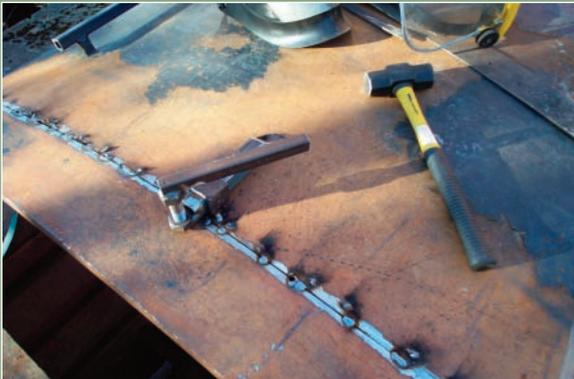


THE PHOENIX PROJECT

After the engine had been removed to Neil's unit and the scrap man had plundered the roof, frantic work resumed on the hull. The front bulkhead was cut in half, and the top half was removed intact (seen on left hand side of this picture).

The idea is to weld the top of the bulkhead to the eight foot back cabin. This will help to shape the front of the roof, and it will also be more aesthetically pleasing.

The front bulkhead was slid up to meet the eight foot rear cabin.



The two steel plates are pulled together and tack welded across roof and sides.

A contraption is then made to pull the buckled rear roof into the correct profile for the front of the cabin.

As the handle (in the picture) is turned the two different sections are pulled into line with each other.

When the sections are in the correct position a continuous weld is added.

End of the second day and the front bulk head has been welded onto the rear cabin. The weld is ground off to produce a smooth continuous surface.

The windows have been ordered from channel glaze and tomorrow's plan of attack has been formulated.



THE PHOENIX PROJECT

It has been two days since the arrival of NB Phoenix and work continues despite infrequent snow showers.

The first job of the day is cutting off any old bolts, screws, hinges etc. Not such an important job but it saves ripping the shirt from your back.

Paul also plans out where the new roof pillars will be situated. The two pillars will be welded onto the horizontal reinforcing bars that line the bottom of the hull.



With a chisel, hammer and extra elbow grease the D-bar (rubbing strake) is painstakingly removed from the side of the boat.

Doing this exposes the section of hull that has been warped by the heat of the fire.

The plan is to totally remove the old D-bar, bend the steel plates straight and then replace the D-bar with a brand new section.

The new steel arrives after lunch but the order is not quite right. The correct treader plate which we need for the front steps has not been supplied.

This is no big deal as the decking plate is not needed today. Paul also decides to exchange the 40mm D-Bar we ordered for some 50mm flat edge.

This flat edge bar should be easier to attach and will be stronger.



THE PHOENIX PROJECT

Paul removes one or two of the bent strengthening bars (stringers) from the inside of the boat. It's strange how some of the bars have been badly affected while other sections nearby are perfectly straight.

One assumes that the bars under the water line were less likely to bend as the water controlled the temperature somewhat.

The side plates are to be straightened before new stringers are attached.



The diesel tank is drained off into five gallon containers. The diesel has a lot of water in it but this separates to the bottom of the container meaning you can filter the "good" stuff from the top.

Neil says he can use the diesel for his steam cleaner even if it does smoke slightly.

Paul then removes the throttle assembly complete with throttle cable. He's planning to clean up the assembly and fit a new cable. It's not worth risking it with the old cable as even one break down would be irritating.

The bilge pump is removed from the boat and thoroughly cleaned. Surprisingly it's working like new.

The oil filter is also taken out and cleaned in motorbike man's parts washer.

The replaceable body of the filter is thrown out, only the top of the filter is cleaned out.

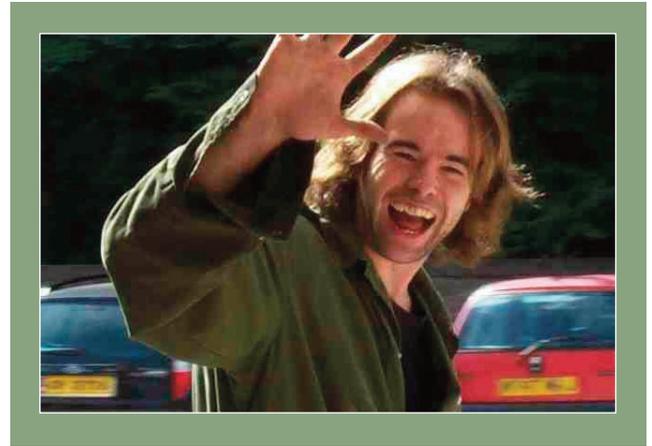


THE PHOENIX PROJECT

Motorbike man (another Paul) has been fixing bikes for many years now, he sublets some space from us and lends out his tools/skills on a regular basis. Get in touch with us if you have any work for him.

With the weekend nearly upon us most of the new steel is in the unit and all the bent stringers have been removed or straightened.

The next big jobs are getting the hull straight and fitting the new roof.



Friday, March 3rd. Warmer than the last few days but snow (from yesterday) still remains on the ground.

Early morning and I ask Paul for a status report. He says we are doing well and that all the steel work jobs should be finished by early next week.

End of the morning and Tatham steel deliver the correct treader plate and new D-bar.

All the steel is now at the unit ready for fitting.

Neil and his trusty dog, Tico, drop by to see how work is going; he also picks up the first batch of water logged diesel.

He hasn't had much of a chance to look over the Lister but replacing the engine is at the end of a long list of jobs.



THE PHOENIX PROJECT

One of the first steel type jobs is straightening out the hull. As mentioned before the roof was badly damaged by the fire but the sides have also been affected to a lesser degree.

Steel strengthening bars (angle iron) are tac welded onto the inside of the hull in place of the original stringers that were removed yesterday.

These bars are perfectly straight and will help reshape the buckled side plate.



A moveable steel framework is then constructed. The framework holds a one and a half tonne winch or pulling block.

The frame can be moved to any point on the angle iron sections but is never actually in contact with the side of the boat.



When the framework is in the right place a steel eye is welded onto the inside of the hull (just above the frame). The winch is then attached to the eye at one side and to the framework at the other.

Now when the winch is operated the side plate will be pulled back into line with the straight angle iron.

The process is repeated until all of the plate has been straightened. The angle iron bars are then welded to the hull side to keep the whole lot in place.



THE PHOENIX PROJECT

Paul attaches the new D-bar (or rubbing strake) to the side of the boat that has been straightened.

As you can see it matches up really well with the original section at the rear.

Eventually the bar will be seam welded all the way along the boat to prevent corrosion between D-bar and hull.



Saturday morning and as ever Paul's up first thing. By the end of the morning he has welded the roof supports in place. He then makes a box section frame to hold the roof. The frame is attached to the supports and then the roof is welded onto the frame. The roof is bent to the same profile as the back cabin with G clamps. Finally the sides are welded onto the finished structure.

After a hard day's work Paul decides to take the Sunday off (part timer!).

Monday morning rolls around with a certain inevitability. It has almost been a full week now since NB Phoenix was delivered.

Paul starts the week by cutting a groove in the front of the boat just above the forewell.

This is where the front steps will be located.

It's an easier job than it looks because the plate is actually one section that has been folded round to create the boat gunnels.



THE PHOENIX PROJECT

Sides for the front steps are constructed from sheet metal and welded to the sides and bottom of the boat.

When the sides are in place Paul cuts the treader plate from Tatham steel into equal sections.

These sections are then used to form the actual steps themselves.



Once in place vertical uprights are welded to the sides of the steps.

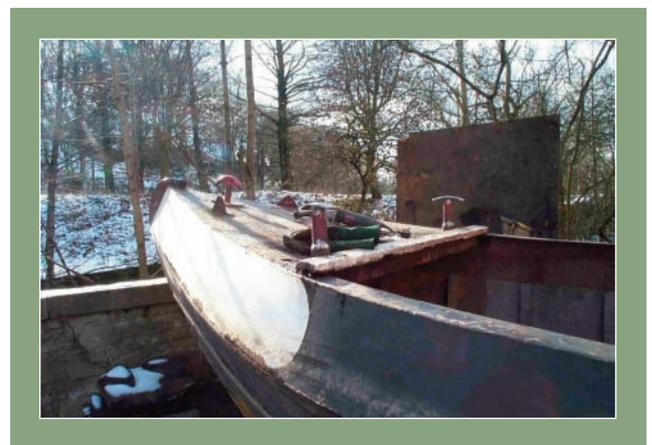
A strip of metal is then placed between the uprights to provide a handrail for customers.

Finally any loose or sharp edges are ground off to provide a smooth finish.



Two sturdy new T studs are welded onto the front of the boat. This is necessary as we don't want passengers clambering all over the front of the boat to get to the original T stud.

The new studs have been fabricated from the old idiot bars that were on the front of the boat, I believe they're actually known as tunnel guards.



THE PHOENIX PROJECT

The steel work jobs have been going well with the new front steps and T studs in place.

The only other steel jobs left are constructing the back steps and welding in angles for the bench seating.

The bench seating will line the front twenty foot of boat on both sides.

Waterproof decking for the floor and benches is ordered from Drinkwaters of Whaley Bridge.



Four brand new anodes are attached below where the water line will be. A grinder is used to remove the paint, dirt etc. from the steel before the anodes are attached (providing a better contact).

These freshwater anodes are made from magnesium and are meant to be a sacrificial device. Electrolysis in the water would normally corrode the steel but the anodes stop this happening by reacting first.

Anodes for salt water vessels are made from zinc because magnesium reacts too violently in salt water.

It rains most of Tuesday, this prevents any further welding.

Since Paul is already wet he decides to pressure wash the bottom of the hull on both sides.

It is advisable to pressure wash your boat before painting to remove any rust, barnacles etc., as this gives a better surface for the paint.



THE PHOENIX PROJECT

Over the next few days work progresses well and by March 10th all the steel jobs are complete.

Frequent rain showers stop a lot of the outside work giving us chance to finish some of the little jobs.

A new set of back steps is fabricated from the left over treader plate and some normal flat section.

Paul paints the steps with grey oxide; this paint will stop the steps from rusting.



The old water tank is removed so we can clear the mud, water and scale from the bottom of the bilge.

The scale is layers of steel that have slowly rusted away over the years. The good news for us is that the boat had a new bottom a few years ago.

When the tank has been lifted out it is opened up, and luckily it's in good condition meaning we don't have to get a new one.

The rain returns so we go back inside. Paul takes this time to construct a new control box. The old control stick was made from wood and was badly charred in the fire.

The new box is made from sheet metal and again is painted with the grey oxide.



THE PHOENIX PROJECT

A new weed hatch is also constructed from the left over treader plate.

The weed hatch can be removed to gain access to the propeller when it is fouled.

The old weed hatch was slightly bent causing us a certain degree of concern. The worst case scenario for us would be if water started coming in through the hatch. I would say that weed hatch failure is one of the main reasons narrowboats sink.



The weather clears up for a time on Thursday, and during this time Paul welds up some box section.

The decking for the front seats will be attached to this box section framework.

There are a few discussions regarding the height of the seating and if any tables should be added.

I think that there should be two Desmo style tables that can be configured to suite the particular party.

Paul is eventually persuaded.

The slide hatch is extended. This has to be done because the new steps have a shallower angle than the old ones.

A new hatch is made up complete with hasp. We can now padlock the back doors. This is not really necessary at the moment since there is no bulkhead at the other side of the cabin.



THE PHOENIX PROJECT

The side window where the kitchen will be is cut out to fit the new Channel Glaze window.

As you can see I'm still working on the bilge clean up - dirty work but someone has to do it.



At the weekend I escape back to Sheffield and I return Monday evening and am a little surprised at how much has been accomplished in my absence.

A weld has been placed between the front and back bilges. Paul wants to keep the two bilges separate so that oil and water from around the engine bay will be kept separate at the back of the boat.

The bilge is then subjected to a good pressure washing; this removes most of the gunk not picked up by myself.

Any water is pumped out of the bilge which is then left to dry out. When it is dry Paul hoovers out any left over rust and dirt.

The outside of the hull is blacked with "coal tar bitumastic" - this will stop the bottom rusting. The bitumastic is much thicker than normal paint and is a by product of the oil industry. The bitumastic is only applied up to the boat's gunnels.

The outside of the back cabin is then spray painted with grey oxide primer and left to dry.

Another coat is applied when the first has hardend.



THE PHOENIX PROJECT

The roof and back doors/hatch then get a cream undercoat. Paul wants to get as much paint on as he can whilst the weather is good.

As soon as the first few coats are on Paul can install the windows. He wants there to be paint between the window and steel work as this will discourage rust from forming between the two.



As you see the front has been covered by a makeshift sheet, fashioned from pallet wrap - this will hopefully keep the inside fairly dry.

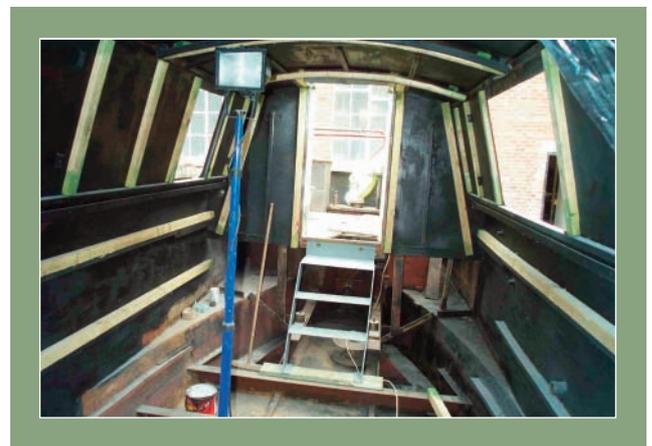
The inside gets spray painted with the good old grey oxide.

The bilge is then wax oiled. Wax oil is an under body sealant that is supposed to penetrate the metal's surface protecting it from water and air.

The wax oil is diluted with white spirit so that it can get into all the various nooks and crannies.

Wooden battens are put up inside the cabin. The plywood sides along with kitchen units etc. will be screwed onto these battens.

The battens are screwed through the steel work with the screws being ground off on the outside.



THE PHOENIX PROJECT

The back cabin is then "masked up" ready for the first Mercedes red undercoat.

Try to use a low tac tape when painting metal surfaces as normal tape tends to pull off a lot of the new paint when removed.

The paint scheme will be the same as the Judith Mary II.



The new control box is fitted to the back deck. The old single lever control stick has been cleaned up and will be used but we have bought new cables. There is no point having to attend a breakdown call for the price of a couple of cables.

Paul notices that one of the new cables is broken. A replacement is ordered.

Over the next few days work continues at the usual break neck speed.

The plywood lining is temporarily screwed onto the inside battens. Paul then traces where the window will be on the wood from the outside of the boat.

After the lining has been marked it is taken out. Window holes are then cut out in the correct positions.

This has to be done on both sides as the two windows are different sizes.



THE PHOENIX PROJECT

The back deck arrives from Drinkwaters of Whaley Bridge. It's a thick wooden sheet with a non slip surface laminated on.

The deck will also be used for the locker lids.



A water filler cap is installed by the front steps. It is not yet linked up though as we haven't put the water tank back in.

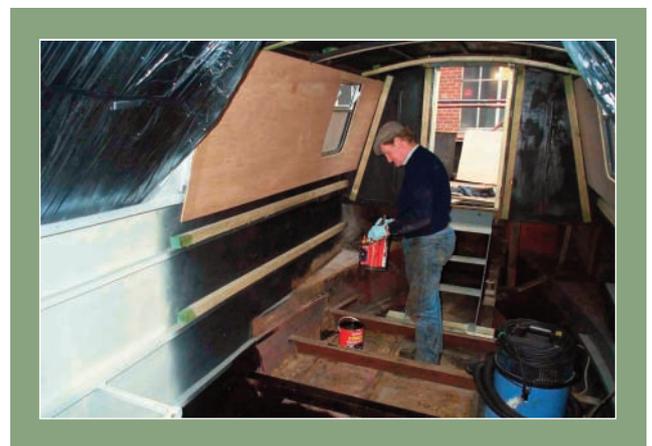
As you can see there is a small patch at the front of the boat that has not been painted. This is just about the only bit of boat not covered by some kind of paint.

Except the bilge!

We manage to get dad (David) involved as repayment for works done on the family home.

He's as happy as a sand boy with a paint brush in his hands. So we put him back to work for the second day of painting the bilge.

Later we have a family shindig in honour of my upcoming 25th birthday. It's St Patricks day since you asked.



THE PHOENIX PROJECT

Paul cuts the floor battens using our Dewalt angle saw. He then dips the ends in wood preserver. He also applies an extra coat of preserver to the length of each beam. Hopefully these measures will help the wood last as long as the steel work.

The wooden battens are then attached to the horizontal steel beams that line the bottom of the boat.

The floor of the boat is going to be made out of standard garden decking. The decking will be screwed onto the wooden battens so that they can be removed easily.



The plywood lining sheets are permanently screwed into place. The sheets have been attached to the vertical wall battens.

Once the plywood sheets are in position the windows can be riveted in.

A special tool is used to install the windows. It holds a small rivet. The rivet is then inserted through a pre made hole. When the handle is squeezed the rivet pulls back out on itself. It's like when you put your head through railings and then can't get out.

We borrow a diesel stacker truck from a local firm to lift in the ballast. Our Lancing has been taking a hammering lately and has had to be put on charge.

We put in around half a tonne of the old ballast that has been jet washed. The ballast helps stability and stops cavitation where air is pulled into the propeller.



THE PHOENIX PROJECT

More bad weather closes in as the weekend approaches.

Now that the bilge has been protected with wax oil and the floor battens are in place we can add the garden decking.

The decking will be fitted throughout the bottom of the hull. We were originally thinking of putting lino down on top of plywood in the kitchen area but decided against it.



Paul attaches the decking to the floor battens with screws so that more ballast can be added as needed.

Most of the job is simple as the planks are all the same length and width. The only awkward sections are at the back where the swim comes in.

The swim is under the water line of the boat at the stern. It is designed to help the flow of water going to the propeller.



As soon as the decking is in place Paul starts work in the back cabin.

He wants to get the back bulkhead in place so that we can get other people in to help if he gets busy with orders.

I give Paul a hand cutting up the wood for the back cabin. I also check on a few orders that have not arrived.



THE PHOENIX PROJECT

The rear bulkhead is attached. We haven't welded in a steel bulkhead so the wood will need a couple of coats of a good preserver.

We make sure that the measurements taken are correct by putting the toilet into position.

There will be a hatch in the bathroom wall for emptying the toilet cassette.



Work continues on the back cabin. The wire hanging from the ceiling is the power cable for the light in the toilet.

It is obviously easier to add any wiring and plumbing before attaching the plywood lining.

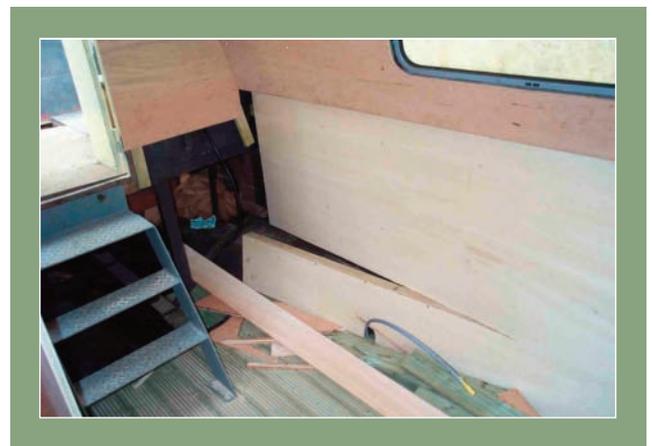
An extra piece of wood between the roof and lining will be added once the other woodwork jobs have been completed.



The grey pipe in this picture is the water pipe from the front tank (which has not yet been replaced).

The water pump will be located at the back of the boat for various reasons. It will provide a better flow rate at the back because there won't be any drop off in electrical current.

We receive a large order on March 20th so Paul has to return to fender making.



THE PHOENIX PROJECT

We draft in a friend of ours, Huw, to finish off some of the smaller jobs. The plan is for Huw to work with us once the boat is launched.

He will meet with customers in the morning, give them some steering lessons and make sure the boat is full of water etc..

Huw runs AMS a commercial, domestic and marine painting business. He is available on 07793 458470.



More fender orders come in so we have to work on those until early April.

Once the water tank has been thoroughly cleaned it is returned to its original home under the front deck. It's a really tight fit but we manage to lever it into position.

Once the tank has been replaced Paul welds the front two strengthening bars back in place.

With any luck it'll be down there for some time.

Inside the back cabin work is going well, both bulkheads are in and the wooden lining has been installed.

We still have to fabricate the doors and fit the bathroom and kitchen out.



THE PHOENIX PROJECT

Paul reattaches the throttle with its new cables.

He also cuts out the laminated plywood for the back deck, first cutting out the main piece from one corner and then the smaller locker lids from the other side.

The three batteries (1 engine start, 2 domestic) are in the right hand locker.

Should look good once it's all been cleaned up.



The bench seating is attached to the metal framework constructed in the front of the boat.

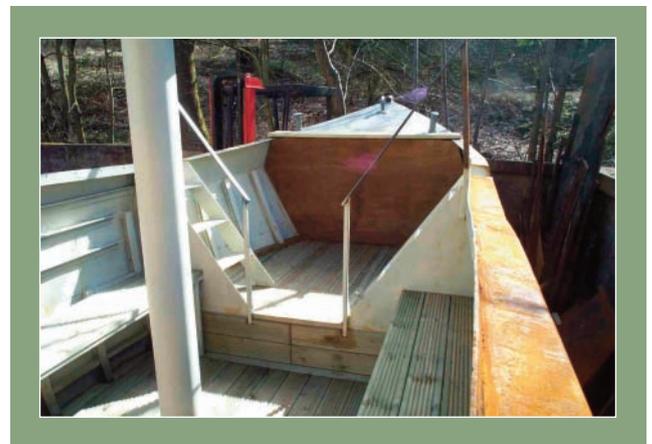
There is 14ft of seating on both sides - this should be more than enough room for twelve people. Desmo style removable tables will be situated between the two roof poles.



The front deck is covered with garden decking and a plywood sheet is fitted to the back of the forewell.

Some strips of decking are also attached behind the water tank.

We thought about adding another step but it's not really feasible or necessary.



THE PHOENIX PROJECT

Paul gets the kitchen top from Fountain Bathrooms. They have a unit next to ours and have supplied us with a few bits in the past.

He cuts out holes for the sink and hob top. The work surface is then installed.

The area below the sink will have shelves instead of cupboards. We don't want any customers leaving personal effects behind - hopefully having shelving will stop them forgetting.



Paul goes out to deliver some fenders. Neil turns up with the freshly restored engine. He has stripped the engine, cleaned it and changed the oil a few times.

The engine has been painted green - although not the original Lister green it's good enough for us.

On Paul's return we get straight back to work refitting the engine. Since time is getting on we just drop it in and bolt it to its mountings.

It's now April 26th.

Paul goes on holiday for a couple of weeks leaving me to fend for myself.

In his absence I manage to get some friends working on the Kitchen and bathroom.

We need to get some of the basic jobs out of the way so Paul can concentrate on finishing the project (if he ever comes back).



THE PHOENIX PROJECT

The front doors are attached. We've used two thin doors so that they can fold back against the front bulkhead. The doors are then varnished on the outside and painted on the inside.

The doors are secured on the inside by three bolts.

The doors will be taken off to install some brass air vents. These vents are required by law. It will be easier to install the vents inside the unit.



Here's the hatch that will be used for emptying the chemical toilet.

As you can see all this area has been painted. First with undercoat then with matt white.

The final coat will be a yellow gloss, which should look better and be easier to clean.



We start to board off the engine compartment. The stairs have been designed so that they can be removed if we need to get at the engine.

The woodwork can also be removed with ease (and a screwdriver).

We may need to insulate the engine at some point in the future depending on how loud we think the engine is.



THE PHOENIX PROJECT

Hopefully the boat will be finished soon, especially as the weather is getting better all the time.

There is still a lot of work to do before the boat can be launched. The boat will also need to be surveyed before we can get insurance. We need to get insurance so that we can apply for a BWB licence.

As the boat is over thirty years old we will need a hull survey as well as the obligatory boat safety scheme certificate.



The sink is fixed into place against the back bulkhead. We realise later that the drain hole will be too low compared with the water line.

The sink gets raised up and plumbed in along with the kitchen sink.

As you can see the woodwork in the bathroom has been filled but not painted.

Huw and his mate Simon are due to come down after Easter to finish off painting the inside.

I manage to do some actual work myself, applying another coat of coal tar bitumastic to the outside of the hull.



THE PHOENIX PROJECT

All the inside jobs, painting etc. are finished off. We then hear that a crane is arriving early next week to lift one of Alken's boats.

Before the boat is launched we have to arrange a boat safety certificate and hull survey. The hull survey is necessary because the boat is over thirty years old.

The boat safety certificate is now a mandatory BWB requirement.

It comprises a check list of points that a vessel has to comply with.

You can find more about the boat safety scheme at www.boatsafetyscheme.com/



The crane driver is unhappy and reluctant to lift the boat. He first "picks it" which basically means weighing the situation up by lifting the boat a few feet to test how heavy it is.

Once he is happy with the weight the truck is manoeuvred into position. We have hired the truck from Moss & Levit a local company.

The boat is lowered onto the flatbed trailer and then secured for its short journey.

After our boat has been loaded the crane goes next door to Alken Engineering. Their boat is a brand new 45ft narrowboat shell complete with lining.

Again the crane driver "picks" the boat, but unfortunately this time he is unable to complete the lift as the boat is too heavy for the crane.



THE PHOENIX PROJECT

We arrive at our destination around an hour after the crane first arrived at our unit.

A boat has to be moved as we make room for the lift. I'm just hoping that nothing goes wrong and that she doesn't sink.



Paul and our mate Simon get to work attaching the crane straps.

The crane is positioned between the truck and the wharf side. This means that the crane does not have to over stretch.

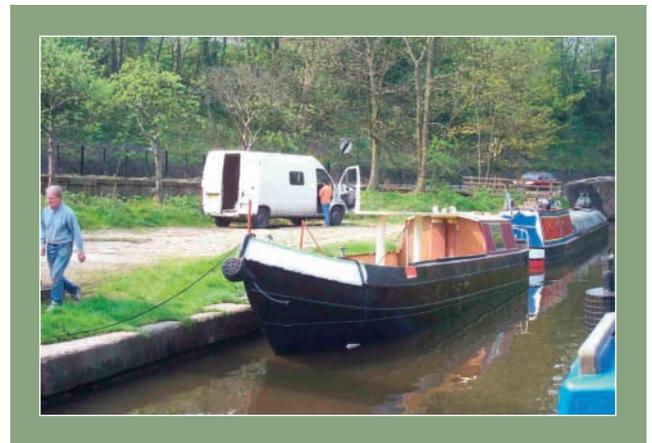
I watch from a safe distance; finally the moment of truth is here.



After so much hard work the boat is in the water, and more importantly, floating.

It still needs to be ballasted. The ballast is placed in the bilge of the boat and helps keep the boat low in the water. The lower in the water the boat is the less top heavy it becomes (therefore it is more stable).

We are using concrete slabs for our ballast. Some are already in place but you never know how much weight you'll require before the boat is in the water.



THE PHOENIX PROJECT

The boat has only been in the water a matter of minutes before the maiden voyage. We moor up under a nearby bridge to finish off the paint work.

Andy Russel, renowned sign writer and good friend will be coming to signwrite the name and web address at the end of the week. Andy's web site is Andy Russell - <http://www.theboatpainter.com/>

The finished article!



(Friday 24/02/2006 - Friday 14/07/2006)

The Finished Article



Over the next few weeks we ballast the boat and add any finishing touches deemed necessary. Getting the BWB license takes longer than expected though. This means we can't hire the boat out for the first few weeks she's in the water.

We then find out there is water in the bottom of the fuel tank, which leads to the engine periodically cutting out. The diesel has to be drained out of the tank and the fuel filters replaced.

Whilst we are waiting for the license a friend Stuart designs and prints out brochures for the Phoenix and Judith Mary II combined (email your home/company address if you would like one).

THE PHOENIX PROJECT

It is October before the advertising is ready and the boat can start operating successfully. We get some great feedback off the first few hirers which is most reassuring. We also get an article written about the boats restoration which appears in two local papers.

Paul and myself would like to thank all those involved in this project. "Truly the Phoenix has risen from the ashes".

I hope that you have enjoyed reading this article, Michael WH Dawson (BSc)

