

## 2006 AGM Notice

Our 2006 AGM will be held on Saturday October 7th, 2006

The outline programme for the day will be:

- 10:30 DANIEL ADAMSON open for members and their guests inspection.
- 12:00 BBQ to be held at the ship for members and their guests - £5 per head.
- 14:30 Members' AGM at the Bramley Moore Public House (5 minutes walk)

A formal AGM notice and further information regarding the BBQ etc will be sent to members in early September.

## Working Parties

Working parties are now being held on Tuesdays, Thursdays and alternate Saturdays.

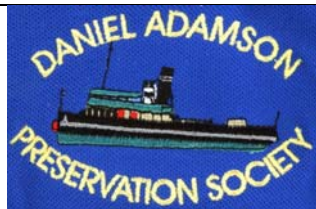
Those wishing to attend working parties should contact::

Neil Marsden - Tel: 01516082868 Email: neil.marsden3@ntlworld.com

John Deakin - Tel: 01928573877.

## The DAPS Shop

Please help support the restoration of the Daniel Adamson by purchasing merchandise from the society shop.



**Polo Shirts £16.50 inc P&P**  
Embroidered Daniel Adamson Logo  
Available in sizes: Small to XXL

**Sweat Shirts £18.25 inc P&P**  
Embroidered Daniel Adamson Logo  
Sizes Medium & Large Only

Limited quantities – please contact Alan Hughes to confirm availability.



**Set of four Daniel Adamson Post Cards - £1.75 including P&P**

Please send orders to:

Alan Hughes

11, Rockwood Drive, Skipton, North Yorks, BD23 1NF

Tel: 01756 701320

Email: [hughes@skipton4.fsnet.co.uk](mailto:hughes@skipton4.fsnet.co.uk)

Cheques should be made payable to The Daniel Adamson Preservation Society.

## The Daniel Adamson Preservation Society



No 9



July 2006



Editor: John H. Luxton

# The Tow Line



Daniel Adamson Lower Passenger Saloon – 1936 Percy Dunbervand Collection

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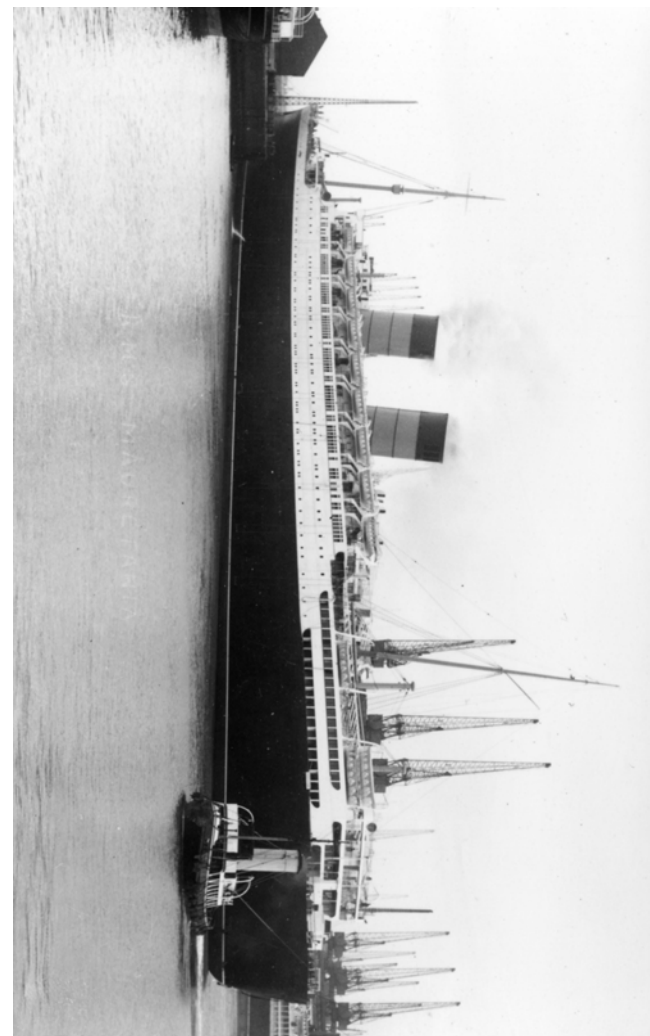
Supported by the  
**Heritage Lottery Fund**

[www.danieladamson.com](http://www.danieladamson.com)

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<b>The Daniel Adamson Preservation Society is supported by The Heritage Lottery Fund and the Fund for the Preservation of Industrial and Scientific Material (PRISM).</b>		

Editor's Notes
<p>Welcome to edition 9 of "The Tow Line", once again running a little late for a variety of reasons. But as they say "Better late than never".</p> <p>However, the slightly later publication means that following a meeting of the trustees we can now notify the date of the AGM – which will be held on Saturday October 07. See back page for more information.</p> <p>Again, this is a 20 page edition of "The Tow Line" with all the latest news, Part 3 of Neil Marsden's "A Remarkable Survivor" is reproduced for the benefit of those without web access. Member Tom Sherriff continues his interesting reminiscences – this time its "Floating Cranes and Heavy Lifts". I hope you enjoy this edition – but can I request that further input – articles or photographs, would be most welcome.</p> <p style="text-align: right;">- John H. Luxton, Editor</p> <p style="text-align: center;"><b>The Tow Line - published end of January, April, July and October. Press date for contributions is the first day of the month of publication.</b></p>



Can you identify this passenger ship and the location? Please send your answer to Alan Hughes - 11, Rockwood Drive, Skipton, N.Yorks, BD23 1NF, by September 30, 2006. – Prize for the first correct answer drawn – Bottle of Whisky.

## Competition - Name The Passenger Ship

## New Zealand Visitors

On Sunday 9th July 'DAPS' played host to a group of visitors from New Zealand. This was an organised visit arranged through Membership Secretary, Pat Crecraft. The group were on a 'Heritage' themed tour of the UK and had expressed an interest in visiting the 'DA' to see what we are about.



Chairman Tony Hirst and one of our New Zealand guests cut the 'welcome cake'

As an organised visit, we were able to make preparations for our guests which included some concerted cleaning and tidying by our volunteers, as well as the provision of refreshments on the day,

again provided by a small group of volunteers, additionally providing guided tours of the vessel.

In total thirty two visitors attended on the day, together with DAPS Chairman, Tony Hirst and his wife who had earlier given the group a tour of the Chester Canal system, along with Pat and Mo Crecraft who were accompanying the tour throughout.

Once on board refreshments were served, whilst Tony Hirst introduced the visitors to a short history of the ship. There followed escorted tours of the saloons, engine and boiler-rooms before the guests returned to the promenade deck where they enjoyed more refreshments and eagerly purchased souvenirs of their visit from the DAPS merchandise available. The sales, combined with a generous donation to the society from the group made a most welcome boost to the DAPS funds. I think it is fair to say that the visit was a great success and that all involved enjoyed the day immensely.

- Neil Marsden

## Historic Tug – Wendy Ann



WENDY ANN at Douglas – May 2006.

Built in 1934 by Alexander Hall of Aberdeen for services on the River Thames.

She now operates for the Laxey Towing Company working at ship handling, towing contractors' barges and also making the occasional TV appearance!

Photo: John H. Luxton

## Chairman's Letter

Others will tell of the activities on the boat much better than I can, but in short even though there have been delays, moving docks, frustrations and some extra work we have achieved what we set out to do. No hidden disasters have been discovered, the main results on the hull and boiler being much in line with previous thoughts. While most of the mechanical surveys have now been completed there is much more to do in the area of the saloons, the crew's quarters and providing the modern equipment needed to operate today.

By the autumn we should have all the survey results, our conservation management plan and be starting to gather costs to undertake the work. It looks like the latter part of the year will be spent at the computer!

Another major piece of good news is that we have raised all the funds needed to undertake the work specified and the extras that always turn up. Thank you to all who contributed directly, and to those who worked hard to persuade outside

organisations and others to contribute generously to the appeal. Any surplus will obviously go to fund further work on the tug.

On a similar theme thank you to all those who sent additional contributions with their subscription renewals, this coupled with careful management of our spending has produced a meaningful improvement to our finances, such that we will have some reserves and we have been able to repay Alan's vital loan (the last and longest of those which enabled us to get established.) Although we are not flush with funds, and all could quickly disappear, we are now getting past the hand to mouth existence.

The AGM date is given elsewhere in this issue. As soon as all the details are finalised we will mail everyone in good time with all the other necessary information. We plan to have the tug open for members in the morning and the meeting, presentations on progress, the future and questions from members in the afternoon. I hope many of you will be able to attend and I look forward to meeting old friends, new members and thank those who have put in so much work in the last year.

- Tony Hirst August, 2006

## Membership Matters

You will read elsewhere of the ongoing efforts and achievements of our priceless volunteers - and the cost of keeping them adequately equipped, as well as finding match funding for the grants obtained (substantially assisted by significant grants from other bodies and generous additional donations from members).

It's worth a reminder that apart from the essential income that your valued memberships bring in, the *number of members* is crucial to obtaining grants (and the current survey work is intended

to lead to larger grant applications) - so we need to demonstrate an increasing membership.

To date (14/08/06), following a steady influx of new members, the highest membership number is 254. However, 28 members did not re-new in year 2005/6, resulting in 225 - providing you all renew this year.

So far, despite early encouraging responses, some 50 members have not yet renewed (though a trickle continues).

It's easy to overlook this (or perhaps you were away)

- so if you haven't renewed: (or I don't think you have) there will be a loose reminder in this Tow Line

- so if you've not done so: please respond as soon as you can.

- returning the completed renewal form and your subscription

- if you've lost the form, include a note stating 'DAPS renewal 2006/7' with a signature (clearly identified to you by membership number or printed name & address)

- cheques payable to D.A.P.S.

- if you have any query (including whether you've paid!) contact me by phone/e-mail/letter (for my contact details see committee list in this issue)

Many thanks to those who have already subscribed - the support of you *all* is vital to getting the Danny in steam again.

## Floating Cranes and Heavy Lifts

During the course of my apprenticeship at the No.2 Ship Repair Yard, Surrey Docks I was able to witness the lifting out of the inner gates of the Greenland Dock entrance lock. This also involved exchanging the gates from middle of the lock to serve as the inner gates.

Careful planning would have been required to minimise the disruption to the shipping using these docks; as during the early 1950s the Greenland Dock was still relatively busy. To lift these gates out and to replace them required the services of the Port of London Authority (PLA) 150 ton floating crane "London Mammoth".

## Welcome!

Once again a warm welcome to new members since Tow Line 8:

245 - Kevin Lytton, Birkenhead  
246 - D. Meers, Liverpool  
247 - James Ellis, Birkenhead  
248 - Kenneth Bromley, Warrington  
249 - Richard Drake, Bebington  
250 - E.M. Haselum, Ipswich  
251 - Ross Munrow, Fareham  
252 - Geoffrey Miller, W. Midlands  
253 - John Gormanly, Northwich  
254 - David Pickup, Neston, Wirral

## Gift-Aid.

As 'old' members will know, we get a substantial return of 28% of the tax you've already paid, if we have your signature to the Grant-Aid statement. Happily only some 20 members have not done so (excluding those who have informed me that they are not eligible for the scheme). If you are not sure if you've signed, wish to inform me or check if you're not eligible, or have any other query, please contact me (by any means - see committee list).

- Pat Crecraft Secretary

As far as I am aware the actual crane was built by Cowans and Sheldon, but I cannot recall who built neither the hull nor the propulsion machinery. The crane had three engine rooms; a propulsion engine room port and starboard and a generating engine room located between the propulsion engine rooms.

The main generator was driven by a totally enclosed compound high speed steam engine, most probably by WH Allen of Bedford. The ship's lighting generator, ballast pumps, main switch board and the condenser associated with this machinery was also located in the generator room.

## Obituary – Michael Edward Warren

DAPS Member Michael Warren passed away recently

Michael Edward Warren was born in Sale on September 01 1926. His family moved to Rock Ferry and they lived on the esplanade during the 1930's.

His father John Warren was a Manchester Ship Canal Pilot and his elder brother Jack Warren also served in the MSC pilotage service.

Michael's two other brothers George and Kenny were Mersey boatmen servicing Tranmere terminals and the Dingle oil buoys

Michael joined the Merchant Navy on August 26, 1943 during WWII and served until finishing on November 19, 1948. He then began working as helmsman on the MSC until achieving first class pilot status.

He served as a pilot until retiring in 1988. He died at home in New Ferry on June 14<sup>th</sup>, 2006 and was cremated at Landican Cemetery.

His ashes are to be scattered on the Mersey from a ferryboat on a date to be arranged.

- Carl Leckey

## Edition 8 Competition Solution

The tug was the MSCCo's "Stanlow" and out of only three correct entries, Percy Dunbervand's name was first out of the hat.

Percy wrote with some very detailed information regarding the vessel: "The tug in question is the Manchester Ship Canal tug "Stanlow" which was a single screw steel steam tug, built and engined at W.J.Yarwoods at Northwich in 1924.

She was registered at Manchester in July 1924 Off No. 147402 Length 80'4"; Beam 19'3" Depth 9'8". She had a steam reciprocating engine, compound vertical, 2 cylinders of 17" & 15" bore and a 24" stroke. 470ihp and a top speed of 10kts." Percy's as ever interesting and detailed notes continue;" She was launched on

the 2nd May 1924 and left Yarwood's on the 11th August to have trials from Eastham to Runcorn, a distance of 13 miles in one hour ten minutes. She carried 24 tons of coal without having any on deck and arrived at Runcorn the same day after her trials.

I believe her cost was a payment on account in December 1924 of £5,404 -3 -4 with the balance of £1,080 -16 -8 paid in June 1925, making a total cost of £6,486. She was built on similar lines as the two 1899 tugs, "Eastham" and "Partington". She was sold to Dutch buyers in 1965 and was pictured on the Wirral while up for sale."

Thanks you very much Percy for the interesting information and enjoy your bottle!

- Dan Cross

Wear down's were taken and the shafts crack-tested. Unfortunately corrosion was noted as being heavy on the shafts especially in the area of the stern tube water lubrication chamber and both shafts were condemned. This is a shame but this highlights the reason for this thorough examination now.

At least we know that as part of the re-build and application for funding, new tail shafts (22 feet long) and their bearings will be required and can be costed and quotes sought. If we had the vessel being re-built and then discovered this, the cost would not be met by any funds made available and the cost would be in excess of any contingency.

The decision to leave the shafts out and have blanks made for the openings was taken as we didn't envisage needing them in the near future! The shafts and props are now in storage at NSL's yard and they will obviously come in very handy when having new ones made as each shaft differed from the other in minor details.

So there we have it, our propeller less tug was towed from dry-dock with the kind assistance of Adsteam Marine again (DAPS member Capt. Alf Turner on the Bramley Moore) and now eventually resides back at our "home" in Salisbury dock, Liverpool.

Boiler surveys have now also been carried out, all boiler tubes have been removed to facilitate this and the smoke box, after being expertly drawn by DAPS member Mike Williams is also gone.

## New Poster

You will find a new poster enclosed with this copy of "The Tow Line". Please could you display it at work places, other

Again a huge vote of thanks to the working party volunteers especially the "black gang" lead by Pete Murray who spent many days inside the boiler once the tubes were out cleaning many years of silt, dirt and burners residue from the tubes out of the boiler cavity.

Wednesday 5<sup>th</sup> July saw Royal & Sun Alliances senior surveyor, Bob Garnett carry out a joint survey with our friend Alan Holmes from the MCA. They came armed with reference books from the 1940's to remind themselves of the construction and foibles of a wet-back "Scotch" boiler as it is no doubt a few years since they saw one let alone crawl around inside one.

As I write this Royal & Sun Alliance have sent their own NDT surveyor, Peter Creamer along to examine some areas of concern, mainly the crowns (top) of each of the three "Morrison" corrugated furnaces which are showing signs of pitting. Again roughly, no more than 25% wastage will be allowed.

I am no engineer and next issue, once all boiler reports and recommendations are with us I will ask one of our "black gang" to report on them. What I can say though is that the shell of the boiler seems fine with the main repairs likely to be around 90 margin/ back stays around the combustion chambers and some sort of repair of at worst, replacement of the one or more of the furnaces. It does look very likely that this boiler will indeed be steamed again one day.

- Dan Cross

preservation ventures or anywhere you think it might attract new members.

Each of the port and starboard engine rooms contained a small inverted compound engine exhausting to its own condenser; the Stephenson link motion being operated manually.

Steam was generated in a single two furnace scotch boiler which was oil fired. (Oil firing was rare on Port of London Authority Vessels in those days.) Forward of the main crane was a bridge running the width of the pontoon, with a small wooden wheelhouse at its centre. The steam steering engine operated the twin rudders by rods, chains and spring buffers to the two tiller quadrants located port and starboard.

As with many floating cranes 'London Mammoth' was broad in the beam, and required about three tugs to manoeuvre her about the docks, or when in passage in the Thames. The two propulsion engines were mainly to assist with her steering rather than propelling her through the water.

The PLA also operated two elderly floating cranes, the 'London Hercules' and the 'London Leviathan' each with a capacity of 50 tons. These vessels were built by Hunter and English of Bow c1890. These cranes had a fixed radius and did not luff, but could slew, the counter balance weight being run in and out by a lead screw operated by a two cylinder Williams and Robinson steam engine; one of these engines has been preserved in the Science Museum, London.

These vessels were propelled by two horizontal compound steam engines, each fitted with Stephenson's Link Motion end exhausting to a vertical surface condenser. Steam was generated in a two furnace coal fired boiler; these cranes could proceed within the docks under their own power. They were not fitted with rudders or any form of steering gear, manoeuvring by means of reversing the main engines independently of each other; a lever

quadrant located in a shelter like a sentry box served as a "wheelhouse".

One of the jobs I saw these cranes employed on was the removal of boilers for Dredger No.5 and replacing the bucket ladder for the dredger 'India'.

Another crane, which I think may have been the 'London Atlas' had a maximum lift of 20 tons, was virtually a square tank with a simple steam crane on it: the usual vertical cross tube boiler (coal fired) generated steam for the twin cylinder simple expansion engine and a couple of pumps.

'London Atlas' was propelled by twin screws through shafting, gearing and dog clutches, as there were no means of steering her, and she was manoeuvred by reversing or stopping the propellers.

After leaving Surrey Docks I did not come in close contact with floating cranes until 1990 when I was employed as resident engineer for Ewbank Preece.

Hong Kong Electric sold the site of App Lie Chau power station to a property developer and work was in progress to clear the site.

This station had six units, each with oil fired water tube boiler and associated MHI Westinghouse steam turbine alternator. The alternators had already been removed for service with gas turbines at a new station being built on Lamma Island. A local company purchased the remaining plant with the intention of building a station in the People's Republic of China. The dismantled machinery was loaded into barges and towed 60 miles up the Pearl River Lin Hua Shan, in Panyu County, Guangdong Province.

A local firm the Charlie and Stanley Engineering Company was given the contract to dismantle the plant and machinery. This company had been established by two brothers in the

Aberdeen District of Hong Kong, and were well equipped to handle such a project.

However! A problem arose when it came to removal of the high pressure steam piping; the surviving brother Charlie was not prepared to spend about £35,000 on a weld cutting and profiling machine.

To prove his point he set his men to work with hacksaws to cut the welds of the chrome molybdenum piping. After almost a week the welds were barely scratched and it was agreed grinding disks should be used.

The main components of machinery were loaded into large square ended barges; these were fitted with a large derrick forward and accommodation aft. The winch for the derrick was very often powered by a Gardiner Diesel and the larger booms could lift up to 50 tons.

The heaviest component was the low pressure bottom half and condenser, which weighed over 230 tons and we therefore, needed the services of a large floating crane together with attendant tugs.

We had several meetings with the Port Authority at Guangzhou, and we were able to charter from them a 500 ton floating crane and four diesel tugs. We also hired a local towage company to tow the large barges the 60 miles up the Pearl River and to organise the off loading of the machinery at Panyu Wharf.

The contractor laid baulks of timber with old rails down the length of the wharf, with a diesel driven winch at the land end. The heavy items of plant were then drawn along the rails until they reached the point where they were to be stored.



The 500 ton floating crane was a square ended vessel, she also had no means of propulsion; the crane jib could luff but not slew so she was dependent on her tugs to manoeuvre her into the required position.



When off loading on to the wharf she was moored hard against the quayside, beam ends on to the flow of the river.



On one occasion the current of the river combined with an ebbing tide was so strong that the combined efforts of four tugs against her port side could keep her in position.

Her main diesel generators were rated at 600kW, there were also several small generator sets supplying electrical power

be asking them to quote for and they were able to discuss with the MCA and our selves an acceptable repair schedule.

Apart from the dozen or so doubling plates we knew would have to be removed and the bad steel cropped and out and replaced, about four other small areas of concern were found in the hull plating which was less than expected.

The main problem however and one we knew existed but were unsure of until the NDT was complete was the wastage of the floor frames or "floors" to use the correct term. Where the frames had been protected by the concrete (now chipped away), they were like new, but where they had been exposed to the sulphurous bilge water mixture they had all been eaten, some only very slightly and well within limits and some were wasted right through under the boiler which obviously we could see.

The results were that basically there were two floors beneath the boiler wasted through; four were wasted in excess of 25% and three were around 20% with not much life in them. It would be fool hardy to leave the marginal ones in as life expectancy was short.

We eventually agreed that the most sensible, and eventually cost effective solution, would be to remove the boiler when the rebuild starts (which will obviously simplify the boiler repairs), and to cut out an 8-10 meter section of the hull where the affected frames are (in the boiler room and one under the saloon), from the keel up to B strake (where the concrete stops and so does the corrosion) and replace this area with a pre-fabricated new section.

This would of course be built to the exact dimensions of the hull and could also be blasted and coated with high quality, heat resistant and corrosion paint beforehand removing the risk of the same thing happening again.

The rest of the hull and tanks were generally found to be in good condition and very small amounts of work will be required elsewhere in the hull, some crop and inserting of new steel in the bunkers etc being about it. Then it was onto the shafts and props....

However.....Engineering of yesteryear was throwing up a few surprises for the shipyard workers who it must be said, appeared to enjoy being taken back in time to their days of serving their time when faced with the "belt and braces" approach to our shafting complete with muff couplings and lignum-vitae bearings.

Peter O'Connor and his team had worked part of the previous week and the weekend to meet the deadline of Monday to have the propellers off and their tail shafts withdrawn but the simple muff couplings proved anything but. They had noted from drawings we have, that these shafts were connected with what seemed to be tapered couplings with simple key ways holding them in place.

Try as they might, using greater amounts of heat and hydraulic jacks they could not split them. Monday morning (15<sup>th</sup>) saw many fitters, burners and riggers assembled in what remains of the aft-accommodation space and a new, larger hydraulic jack was delivered from a hire company. This jack was pumped up to it's maximum capacity of 100 tons (about 250 bar pressure) and a large "pepper pot" burning tool was used (all the wood work was being constantly doused with water as was the bearings to prevent the spread of heat) but still nothing.

To cut a long story short and to save embarrassment and tarnishing of fitters reputations, we shall just say that as a burner was about to cut the shaft as it *had* to come out, the start of a thread was noted on the shaft- yes that's right the couplings were unusually (so I am assured) mounted on a keyway and then threaded onto the shaft!

concrete (up to 5" thick in places) had exposed perfect steelwork much to our relief. I even managed to have a small stint on the hammer and can say that even with all the protection equipment such as overalls, hoods, earmuffs, goggles and the like, the noise was deafening and the dust quite unbelievable.

Meanwhile outside the boat in the dock, the hull was washed off with HP water jets to reveal the excellent condition of the epoxy paint which was provided free of charge last time in dry-dock in 2004 when we had the hull shot blasted. Once washed off and shell (marine growth) removed the anti-fouling was found 100% intact, and just a light top up coat required to maintain its effectiveness.

After this, the hull was then subject to a good few days attention, firstly by Ocean Marine who carried out as required by the MCA, a full Lloyds class type NDT (non-destructive testing) electronic survey of the hull plating and all frames, floors and bulk heads.

The MCA wanted the toughest of Lloyds rules applied and these basically allow for 25% diminution (wastage). Any steel work found to be above this reading would have to be cropped out and replaced at a later stage as part of the rebuild. These strict rules are necessary because the "Danny" will we hope, eventually be classed again as a passenger vessel by the MCA and only vessels maintained and operated to the highest of standards can obtain this classification.

The hull was repaired temporarily as funds allowed back in 2004 when in dry-dock shot blasting showed up some small pin-size holes mainly concentrated around the stokehold (boiler room) area. These areas had doubling plates welded over the top which was fine for maintaining the vessels buoyancy but is a much cheaper option than cropping out

steel work and replacing with new plates as required by the MCA rules.

So with this in mind, the surveyors set about taking readings from the vessels hull about every square foot. This as you can imagine took some time and all readings were noted and presented in report form. Areas in excess on 25% wastage were marked on the hull ready for Alan Holmes, MCA. I am very glad to report that there were very few of these additional areas and again these were all centred around the boiler room.

Why the boiler room I hear you ask? Well there is a good reason why and that basically is coal/ ash. Coal and ash contain high levels of sulphur, the coal dust and especially ash that finds its way into the bilges then mixes with the small amount of water usually to be found there. The water then if left becomes Sulphuric acid which excels at eating its way through steel work.

One of the reasons water was introduced into the bilges, albeit in small quantities was the practice of all coal-fired vessels boiler room crew of wetting the ashes to cool them to allow for onward disposal. Ashes were usually stored in sacks or "ash bags" so naturally they had to be cool before this could happen.

By Monday 15<sup>th</sup> May all NDT surveys were complete and (it was hoped) that the propeller shafts and propellers would have been removed by fitters and riggers from the shipyard so Alan Holmes along with Andy Sheen attended the vessel for a full day of internal and external hull inspections, review of Ocean Marine's report and examination of propellers, shafts, couplings and associated wear down readings.

The survey went well with several DAPS representatives including myself attending along with our own surveyor Geoff Heaps, and Jim Clarke and the steel work manager from the shipyard so they can see at first hand what we would

for the various pumps lighting and on board workshops.

I came across this crane five years later when I was involved with the construction of Shajiou Power Station further down the Pearl River. We had a contract with the Panju Shipyard to refurbish some of their items of plant; this was in actual fact mainly a breakers yard with a large dry dock. They were, at the time I was there, refurbishing two Russian built hydrofoil craft.

I would travel up to Lin Hua Shan on the first ferry out of Hong Kong on Monday morning returning by the last ferry to Hong Kong on a Friday evening. Saturday was spent in reviewing the

items to be transported upstream and assessing the lifts that would be required. The large fleet of high speed catamaran ferries that operated to Kowloon from ports along the Pearl River were owned by a company based in Guangzhou. It could be quite alarming for nervous passengers to watch a large trawling junk bearing down on the ferry only to clear it by a couple of feet.

In passing I believe that the 'London Mammoth' was lost in the Bay of Biscay whilst being towed to Greece in the 1970s. In Volume 10 of a series of books of George Watkins's photographs of steam engines there are a couple of photographs of the engines of the 'London Hercules' and the 'Leviathan'.

- Thomas Sherriff (196)

## A Remarkable Survivor – Part 3

When I embarked on this series of articles I never anticipated that I would find myself turning into an amateur 'industrial archaeologist' into the bargain!

I admit I flatter myself by using the term, however, it seems that without realising it, I have found myself discovering many details of the 'Daniel Adamson' that I for one never knew before.

Since joining 'D.A.P.S.' in May 2004, I have attended nearly every 'working party' from then on, believing that having literally crawled all over the ship, exploring every nook and cranny, I knew the 'old girl' pretty well. I was very much mistaken.

It should be pointed out that the opinions expressed in these articles are entirely my own and based on the best information available at the time of writing.

I am therefore happy to accept any additional assistance or an alternative

opinion from readers and would commend the site 'Guest Book' as the first point of open contact, for this purpose.



Moving on, in Parts 1 & 2, I have made much mention of the 1907 photograph of 'Ralph Brocklebank' and to various reference points on the vessel, to indicate that an apparently major change in appearance took place at some stage, either prior to, or about the time, the vessel passed to the ownership of the MSCCo. Realising this single photograph is key to this point and may not be too clear in its' present format I have 'cropped' the image for greater clarity and reproduce it here.

I would venture that the features I noted previously regarding the extended deck-house/casing are much clearer when the picture is enlarged!

In addition to the fenders, overboard discharge and length of promenade deck aft of the funnel, the photograph reveals even more features absent from later views. Note two ports and what appears to be a doorway, visible below the lifeboat stowed across the aft end of the promenade deck.

Note also what appears to be the passenger boarding position between the second lifebuoy and the ship's boat, in my submission the forward portion of which denotes the line at which the casing was reduced in length.

Clearly the present engine-room casing once formed part of the original extended deck-house, no doubt with a suitable sky-light set into the promenade deck above.

I do know that to this day evidence, in the form of two parallel strips of steel immediately aft of the existing engine casing, denote the location of the original towing gear, but had not quite appreciated how different the ship's appearance would have been.

No doubt it is this appearance that gave rise to more observant commentators' statements to the effect, 'she looked like an American tug' which I now concede is very true and by way of apology produce a photograph (the best I could find) of just such a vessel!

Even I must admit that aside from the enclosed wheelhouse there is a distinct similarity.

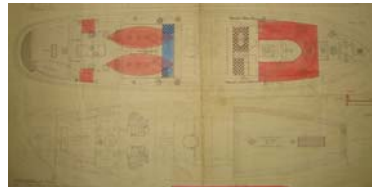
While searching for information on US Tugs of the early 20<sup>th</sup> Century, I chanced

upon the following web-site, which not only provides many good views of such a vessel, but a remarkably coincidental restoration project, involving another 'Remarkable Survivor' I recommend a visit:

<http://scard.buffnet.net/tugbaltimore/index.html>

Visiting the 'Daniel Adamson' today, we notice that the loading hatches for the coal bunkers are incorporated into the top of the engine casing and contoured to match the curve of the stairways to the promenade deck.

This is most certainly a modification dating from the 1936 alterations and conveniently a good point to move on to the plan elevation of the drawing as discussed in Part 2.



As will be seen from the drawing (hopefully) the bunker itself was slightly larger than now, with wings projecting forward into the stokehold itself, whereas today the bunker is confined to the area denoted by the tunnel or passageway between engine and boiler room, rising to the casing hatch level.

The plan shows that two circular shaped coal scuttles were located port and starboard at main deck level, the foremost scuttle allowing the small side or wing bunkers to be 'topped off' when coaling.

worse and the general consensus of professional opinion is that the boiler can be fully restored.

We have replaced the leaking tubes in the condensers and carried out further tests. At the moment all seems well with the starboard condenser, but it seems new joints are required on the port one. Hopefully this can be easily rectified in the near future.

## PPG UPDATE

In The last issue I finished with the "Danny" safely in NSL's #4 Monks Ferry dry-dock (finally).



Working party volunteers (yet again) worked miracles for us and none more so that those attempting to remove some of the concrete in the bilges to allow for inspection.

The entire length of the bilges are lined with concrete, a common practice many years ago and it all appeared to be in tact. However we and moreover our MCA surveyor Alan Holmes needed to be sure that the concrete was indeed in tact and no water had penetrated between the concrete and the steel of the bottom plates.

If this had happened then of course corrosion could be wide spread. We were required to just remove a few small

The TTE trainees were involved in removing the LP piston rings, re-assembling the main engine air-pumps, stripping and overhauling more valves and making numerous new joints, ready for the time when the valves are re-installed. No doubt a job they will take part in when the time comes.

- Neil Marsden

sample pieces around the edge of floor frames to show the condition of the rivet heads and joins. No problem we thought- we hired a large diesel-engined compressor and two small (need to fit under the boiler) pneumatic jack-hammers.



Wrong! The first two jack hammers, after some connection problems proceeded to "bounce" from our pill-box like material and lasted no longer than half an hour. A replacement was found the next day with little or no progress being made but this lasted only around an hour. A fourth hammer was then brought in. It is worth pointing out that these were commercial, heavy grade pieces of kit but 1903 concrete got the better of them!

Eventually after many backbreaking hours and days a few small holes in the

We cannot discount the fact that the vessel's most modern components are over 50 years old, while a great many more date from 1903! Add to that the fact that the vessel was largely 'derelict' for twenty years, so that we must be 100% sure of every detail. The ongoing surveys are designed exactly with this in mind.

By mid June we had completed over 13,000 hours of work aboard, with much still to do; many more hours are spent elsewhere with a thousand and one tasks, the reason? Because we *know* it's worth it. We know how important it is to succeed and to save this unique vessel, not just for our benefit, but for everyone.

Tuesday June 13 was a very busy day with 14 volunteers in attendance plus a visit from our friends at TTE, in Ellesmere Port.



*Trainees assist with the removal of the cylinder covers (Port Main Engine)*

Aside from making good progress on our work schedule, we had great pleasure in welcoming TTE's Boris Baugh and a new intake of trainees to the 'DA' this morning. As readers may already know, we have for some time enjoyed the help and support of the young men and women starting out in their training to become the engineers of the future.

The trainees attend the TTE (Technical Training Group) facility at Ellesmere Port, Cheshire ([www.ttelttd.co.uk](http://www.ttelttd.co.uk)) where they

are taught a wide range of skills to prepare them for careers with various companies located in the region.

Much of the training involves practical engineering skills so that during our association with TTE this has proved of value both to the trainees and 'DAPS' whereby they are able to get some 'hands on experience' while at the same time assisting us with such tasks as overhauling valves and so on.

On this visit the TTE Trainees assisted Member Peter Irlam in removing the main engine cylinder covers in preparation to measure the cylinder bores. Peter a one time apprentice of the Manchester Dry-Docks Co. with fellow 'DAPS' Member John Huxley, actually worked on the installation of the 'DA's' current boiler, back in 1953, so that it was very apparent that Peter was in his element today, passing on some of his skills to today's trainees.

## JULY

On the run up to the important boiler inspection on July 4th, the volunteers had been heavily engaged in scaling the outside of the boiler shell and generally tidying things up, so to allow the inspectors a clear picture of the boiler's condition.

I think it would be fair to describe the boiler inspection procedure as rather thorough which involved four gentlemen clambering all over the boiler, inside, outside, underneath, on top and covering just about every square inch of the thing.

The NDT operator was unfortunately not available, but the survey has indicated specific areas requiring closer examination and detailed measurement in this regard, so that matters can proceed, nevertheless.

We never expected a 50+ year old boiler to be in perfect condition, but it could be



Photo- David Boone Collection, CamdenCountyCollection.com, New Jersey, USA

No doubt the wings were open to the main bunker and must have been angled to allow coal to flow into it. It seems unlikely that the wings extended to the bilge as in the case of the main bunker and most probably formed an angled 'box structure' above the positions occupied by the hot-well and feed pump to port and the general service pump/valve chest to starboard which remain today. This supposition seems to be supported by the fact that 'as built' bunker capacity is quoted as 28 tons, while post 1936; this is reduced to 21 tons.

Why change this arrangement?

As 'Ralph Brocklebank' it would have allowed for the extended deckhouse design. Later when part of the deckhouse was replaced by a more conventional engine casing, the coal capacity would have remained constant having little effect on the frequency of coaling. Only the change to 'Daniel Adamson' brought about the need to modify these arrangements, as it appears boiler replacement had been unimpeded by the side (wing) bunker's location.

The 1936 alterations, involving the widening of the promenade deck to the ship's sides, would have isolated the forward scuttles under the overhang,

rendering them difficult if not impossible to use. Presumably the wing bunkers therefore became unusable and were removed, while the main bunker could now be filled to the level of the new hatch openings, thereby offsetting some of the lost capacity.

From the plan, I hope it is possible to make out the location of the steering engine mentioned in Part 2. It's in the middle, between the crew W.C. and Lamp Room (shown with chequered tile floors) in the narrow block aft of the boiler room entrance doors. With no detail of the actual operating mechanism, it is impossible to know for sure how this functioned, or how the rod/chain gear was routed from here to the steering quadrant aft. I feel reasonably certain that its' position would have remained unaltered until the wheelhouse was raised in the 1936 re-build and the steering mechanism changed to suit.

Still with the plan, note the location of the galley and ladies/gents W.C. originally located in the aft part of the upper saloon, also the appropriately 'horse hair' filled, 'horse-shoe' shaped seat enclosing the stairway to the lower saloon area.

The lower saloon is rather Spartan by comparison with the much-improved facilities installed in 1936, albeit no doubt adequate for the original designed operations.

It is fairly clear that, as built the main casing/deckhouse, extended to the position denoted by the aft end of the (later) engine casing/first tow bow, that the two ports shown on the 1907 photograph probably provided additional light to the upper part of the engine-room but no additional accommodation or stores. The engine-room entrances (port and starboard) would have been via full height doors at the after end of this casing, in exactly the location of their half size replacements today!

Aside from the considerably better access to the engine-room this extended deckhouse provided, it seems its main purpose was to provide a large bridge/promenade deck for passengers, whilst at the same time giving the vessel a more proportional, well balanced

appearance. In Part 4, I hope to cover the changes from which 'Daniel Adamson' emerged.

-Neil Marsden

## Restoration Diary

### May

'Daniel Adamson' left Monk's Ferry No.4 dry-dock on May 15 after two weeks high and dry. sharing the dry-dock with two other tugs, fellow veteran 'Kerne' and Adsteam's 'Gladstone,' so when four more towing vessels appeared outside the dock entrance, with yet more tugs in close proximity it was certainly a big day for any tug enthusiasts present.

Three of Adsteam's Liverpool fleet attended, 'Canada' to handle the dock caisson, 'Trafalgar' to assist 'Gladstone' to NSL's 'wet basin' for engine trials and 'Bramley Moore' to provide our tow to Liverpool.

'Kerne' was in the care of 'Safe Hand' a locally owned edible oils tanker. Waiting to take our place in dry-dock was 'Carmet Towing's' 'MSC Victory' and a dumb tank barge. Carmet's 'Audrey' was also to be seen in the river close by.

All three vessels left the dry-dock and parted to go their separate ways.

Our berth at Liverpool wasn't immediately available, as a film crew were filming a documentary about Jesse Hartley's famous 'Victoria Tower' six faced clock.



*Ian Collard captured the move on a very wet day.*

We were temporarily allocated a berth at the entrance to Clarence Dock, ironically the very dry-dock, the closure of which had necessitated our time in Birkenhead! Almost two years exactly from our first dry-docking. On conclusion of filming we were able to move back to our usual berth.

Tuesday 23rd May 2006 was a special day in our 'run of the mill' working parties. Not only were we back at our regular berth but we also had great pleasure in welcoming aboard His Worship, the Mayor of Halton, Mr. John Swain together with Councillor Steve Nelson, Mrs. Agnes Smith (Funding Development Officer) and Mr. Martyn Platt (Publicity Officer) of Halton Borough Council.



*Mayor John Swain of Halton chats with DAPS Chairman, Tony Hirst*

Some time ago member, Colin Leonard, a Halton resident, approached the council outlining details of 'DAPS' plans to restore 'Daniel Adamson'

As has been recorded in these pages on a number of occasions, the 'DA' has very close links with the Halton area, where she was a familiar sight over many years, indeed a large number of our members hail from the borough, so we were delighted when the Council looked favourably on our approach for financial support to assist in our recent Project Planning stage. The Council very generously donated £5000 towards our costs and today we had great pleasure in being able to show first hand the progress being made toward our goal.

I think it is fair to say that our visitors were 'suitably impressed' both by the extent of work already completed and the commitment of our volunteers of whom a total of nineteen were present on the day. The work continued apace as our guests were given a tour of the vessel by Chairman Tony Hirst and Colin Leonard, taking time to chat with several volunteers and visiting all parts of the vessel without exception.

Not only was this a great opportunity to express our thanks for the Council's support, but I feel sure it served to illustrate our vision of the restoration and

its potential for the region. We hope this will be the first of many such visits and we look forward to maintaining close links with Halton, now and in the future.

### June

Work to remove the remaining boiler fire tubes and smoke box resumed as planned, with NSL's Jim Ash returning to complete the job.

The next phase, after removing all the old tubes and smoke-box parts was to set about 'cleaning up' and to prepare the boiler interior for further close examination by the surveyors.

With all but a few tubes removed (those retained, remain to provide alignment/rigidity between the combustion chambers / tube plate) access is greatly improved allowing a closer view of the furnace's external surfaces, combustion chambers and stays etc.

It has been noted that the furnaces do display some pitting externally, but the extent of this and its implications will depend on further NDT testing and the surveyor's expertise.

Whatever the outcome, we are content that it is essential to ensure the safety and long term life of the boiler above all.

By applying these criteria to the vessel as a whole, we hope to make certain we have covered everything in order to ensure as complete and thorough restoration as is possible.

If an item cannot be economically restored or repaired, then we must budget for a replacement and be in a position to justify our findings. As we propose not only to operate the vessel 'in steam' but to carry passengers too, as one might expect, only the most stringent regulations apply and we fully accept the need for compliance.