



THE EMPIRE'S LAUNCH.

The Consuta Trust

The advancement of education in the history of steam launches, by preservation, maintenance and exhibition of the steam launch **Consuta**

News Letter No. 37 — Spring 2009

Dear Supporter,

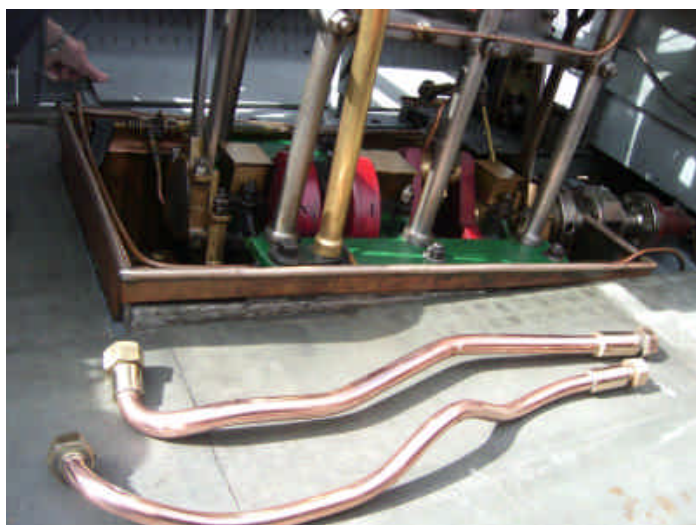
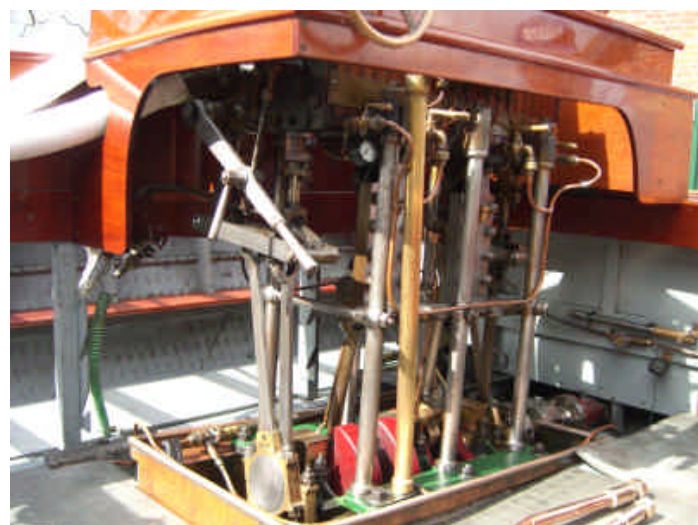
One might think that most surviving historical information about Consuta has already been discovered. However a recent search on the internet turned up a fascinating new piece about S.E. Saunders from a copy of the "Flight" magazine dated February 1919. This article was published because Sam Saunders had just been awarded an O.B.E. for services during the 'great war'. Consuta Plywood it seems was used extensively on various boats and amphibious aircraft during the war. The article states that before 1914 Saunders had been developing consuta plywood at his yard on the Isle of Wight; and that the plywood was used to build amphibious airplanes. The Company in conjunction with Mr Sopwith won the Mortimer-Singer prize in 1913 in a flyingboat using a 100hp 'Green' engine.

During the war it seems that the Admiralty decided it needed to use flying boats to chase enemy submarines and so turned to Saunders because of his experience. The article states that the works at East Cowes were building a score of these submarine chasers per week! using Consuta plywood. Now our steam launch Consuta has four layers of mahogany stitched together with copper wire, so hand stitching was clearly out by 1914. The article reported that the company were using machines based on Singer leather sewing machines only very much larger, and that the stitching was with flax instead of copper wire.

When I first became involved with the task of restoring of Consuta in the 1990's, I presumed that it was just an interesting very fast steam launch using a rather quirky method of construction. Consuta is clearly of historical interest as a steam launch; however probably far more important is that Consuta demonstrated the strength possibilities of using plywood for lightweight monocoque construction. This strong new plywood was ideal for the early 1900's power boat racers in rough sea conditions and also the amphibious aircraft being developed at the start of the new century.

So it seems that Consuta was the very first application of the monocoque construction technique in the world, the technique was then developed into a very successful enterprise by S.E. Saunders on the Isle of Wight. Monocoque is a structure where the skin of the boat, airplane, or whatever, provides the full supporting strength of the object, thus permitting the lightest build method that is possible. The 1919 article suggests that the complete structural weight of the hull of Consuta was about 2lb per square foot of surface area and that this included the weight of all internal structures such as frames keels and longitudinals (as you will probably know these components are all very light in Consuta). Apparently further development using consuta plywood on the monocoque principle achieved weights of less than 1 lb per sqft of surface area. In the article there is even a suggestion that airships could be made from Consuta plywood!

Website: www.consuta.org.uk



Chris cleaning the bilge's in the bow
 Under the stern deck required no treatment, doesn't it look pristine.
 After two or three sessions the engine looks less dirty.
 Look at those shiny pipes. Must remember to ask crew to keep them polished.
 Look at the cleaner bilge's by the engine, they are not meant to be black you know.
 The boiler backhead is **Black** will it stay that way?

Tony Cundick tells me that several years ago Graham Lindsay obtained a piece of the machine stitched plywood, but unfortunately this has been mislaid. We'd love to have a sample for our archive collection.

This Flight article is not large so I've published it complete in the SBA Funnel magazine. If you surf the internet look at:- <http://www.flightglobal.com/pdfarchive/view/1919/1919%20-%200184.html> If you want a printed copy just send me a SAE with your request and I will provide a copy.

Winter work

Consuta has had a major cosmetic work-over this winter. The forward and engine compartment bilge's have been cleaned out. The engine bilge's had suffered from many coal and ash spillage's over time and in some parts this dirt had combined with engine oil into a nasty black putty. Surprisingly the Danboline paintwork underneath came up lovely and clean. The engine had also suffered an accumulation of a resinous deposit from the lub oil. This is a well known problem with some oils, unfortunately this deposit does not respond to normal solvent cleaners and is a devil to remove. Methylated spirits seems to soften it so it can then be rubbed off, but meths has a rather distasteful smell, any alternative suggestions? After some hard work the engine looks much better now.

The backhead of the boiler has suffered with surface rusting over many seasons. We are trying out a new product called "Rust Bullet". This is supposed to work up to 150° C continuously and up to 350° C for temperature spikes. A spike is defined as of up to 24 hours; so good enough for a days steaming, we shall see!

The fore and aft decks and cover boards have been rubbed down, touched up and the second of three coats of varnish has been applied by David.

The funnel has been given a new white paint job by Colin; will it survive the heat, smoke dirt and dirty hand prints of the engineer? time will tell.

Social events in February

This social was well attended and enjoyed by some 60 members and friends. We were very lucky to have such a splendid venue. Our thanks are due to Derek and Sandra Brown for organising this gathering.

The Consuta Trust's work is recognised by the River Thames Society.

Colin Henwood accepted the award on behalf of the Trust and provided the following.

At the River Thames Society AGM, held on 18th April at the River and Rowing Museum, the Society presented their annual RTS Shield awards and The Consuta Trust was given third place for "successfully preserving a unique piece of Thames history". The RTS Shield itself went to Mark Edwards of Richmond Boathouses for his work with traditional Thames boats and maintaining the craftsmanship required to build skiffs, gigs, wherries etc.

The programme for 2009

Our insurance is now provided by Simon Winter Marine who gave us a very competitive quote. John King kindly provided a hull survey and pronounced it to be in excellent condition.

The first event of the year is to be the Beale Park Boat Show. This is a splendid show if you have any interest at all in boating and in such a lovely setting, so why not come along and see for yourself.



Cleaning the mats,
Cleaning the side deck boards,
The working conditions, workshop is in the car boot
The hand cleaning facilities.
Oh dear the whistle has that go faster look, however now
that its been straightened you wouldn't know.
David works on the varnish prep.

Consuta will then be taken down-river to Henley for a special commemorative cruise for members of the Cambridge Rowing club. Soon after Consuta is to be one of the umpire launch's used at the Henley womens regatta.

There is no Consuta activity arranged for Henley Regatta; however with a suitable donation to funds you could take your own party out on one of the regatta days, give us a call.

Consuta usually joins the Steam Boat Association annual Thames Rally. This year their rally is to be based at Twickenham. If Consuta did participate this would be quite a long river trip to get there and back, so if we decided to participate we would want good support from our own group; please let me know if you are interested.

Full details of The Consuta 2009 calendar of events is included with this newsletter, and is also published on our website.

Base for Consuta

Unfortunately this drags on, so very annoying. Everyone says that they love to see Consuta operational but there seem to be so many obstacles put in our way of providing a suitable base to keep the launch in tip top condition. We are continually reminded of the limitations of the present facilities when even the simplest engineering repair job has to be taken away for any work. The Trustees now favour a floating boathouse as Beale Park were rather reluctant to provide long term tenure at the park for a wet dock style boathouse; however we have not totally ruled out a fixed boathouse option yet. The main task now is to raise the funds needed to build a boathouse. So if you are feeling generous please do get in touch, there are tax advantages on donations to charities for both the donor and the charity.

The response to our pre application approach to the HLF for a grant has provided some encouragement, but a lot more work will need to be done to prepare the application. We are also in the process of contacting other third party organisations asking for financial help. The cost of either base option is not particularly high (the floating boathouse would be around £60,000 if we do much of the work ourselves, the wet dock boathouse a bit more). The Trust has a reserve but not enough for this and in any case our reserves are retained for the maintenance and operation of Consuta. If you have any ideas or can help with fund raising for the boathouse please do let us know.

Final thoughts

It was a lovely surprise to learn that the River Thames Society had decided to present the Trust with one of their annual awards. This award was for "successfully preserving a unique piece of the River Thames History". Consuta is displayed in steam carrying out duties she would have performed when built over 100 years ago. This in itself is quite rare as sadly there are very few examples of historic steam launches which are retained as working exhibits, most preserved steam launches are either held in store or displayed as static exhibits. Clearly the Trust need to be making much more of this aspect of our achievements, especially now that we need funding for our boathouse to enable this work to continue.

Many thanks for your continuing support. If you want a bit of hands on work experience please do come along and join in our work parties, they are informal and very sociable, alternatively when Consuta is back in the water just come and help with the crewing, we are always on the lookout for more operational crew.

Brian Smith 8th May 2009

Tel: 01488 658795 or Email:- brian.smith@consuta.org.uk

Consuta's operational calendar for 2009

Date	Event	Participants
May	Re-launch Consuta at Beale Park	Help needed
3rd June	Steam test for boiler inspection	Crew to raise steam
5th-7th June	Beale Park Boat Show	In steam for the public
	Repositional Beale Park to Charvil	Passengers carried
10th June	Cambridge Rowing club visitors	Private
14th June	Private cruise for friends of the Trust	Private
19th-21st June	Henley Women's Regatta	Umpire launch
1st -5th July	Henley Royal Regatta	TBA
8th - 12th July	Henley Festival Potential for an evening cruise	TBA
	Repositional from Charvil to Pangbourne	Supporters linear cruise
18th July	Goring and Streatley Regatta	Public
18th or 19th July	Repositional from Pangbourne to Charvil	Supporters linear cruise
19th July	Thames Traditional Rally at Fawley Meadow	Possible visit on 19th
12th August	Cruising from the River and Rowing Museum	Public event in Henley
20th August	Cruising from the River and Rowing Museum	Public event in Henley
12th -13th Sept	Steam Boat Association Rally at Richmond	

No date set yet

	Berkshire Industrial Archaeology group, date to be confirmed	
October	Trust outing and blow down the boiler	Supporters
October	Crane out for the winter	Volunteers

From the BBC website archive section about S.E. Saunders:-

Aircraft of the Isle of Wight: 1900 - 1919

When the First World War started in 1914, both Saunders Ltd and White's were still primarily boat builders, and continued to build boats for the duration of the war.

Saunders, at this time, was busy building other companies' planes under contract. They built three Curtiss H-4 Small America flying boats, 201 Avro 504 biplanes, and 80 Short 184 seaplanes. Short was, at this time, Britain's leading flying boat manufacturer.

At the same time, Saunders was busy building flying boat hulls. It also built 24 Norman Thompson flying boats. Saunders was also contracted to build 100 Felixstowe F2A flying boat hulls, as well as the engine and crew gondolas for the R31 and R32 airships.

Saunders also started building an aircraft it designed itself. Called the T1, one was built before the creator, HH Thomas, died in the Influenza epidemic of 1918 - 1919. The project was then abandoned.