

# Consuta Trust Newsletter - Winter 2021

Merry Christmas to all and wishing all the best for the new year.

While the covid threat still continues there have been some interesting developments during the year. We are planning to re-launch Consuta in Spring following a satisfactory steam test earlier this autumn.

Many of you will already know about Adam Toops/ Penny Rose plans for the Rose Toop collection of classic Thames pleasure boats and memorabilia, which at time of writing, is currently waiting for a planning application decision to be based at the refurbished Hobbs yard in Henley – on the Wargrave Road side. If you want to look up the details please visit website:- <u>https://www.rosetoopcollection.com/</u>

Now about those minor issues which were revealed at our autumn steam test. The skin fitted gate valve used for the boiler blowdown was found to have a long crack down the body of the valve. It's likely that this was caused by frost damage probably some time while Consuta was out of the water when the valve remained shut so trapping a small amount of water in the valve slide channel. You might be wondering why hasn't this happened before; not really sure, probably because the valve had been left open in the past but this time had been closed since its last use?



The other issue was why did the safety valve start to open at 160 psi not the intended 180 psi. The pressure gauge had been serviced and calibrated with a red mark at 180 psi.



Using our deadweight pressure gauge tester, the gauge accuracy was found to be good. This choice of the new safety valve and its setting might be my fault, I chose a proportional lift valve and not a high lift valve commonly called pop safety valves. I had reasoned that pop valves can be a bit frightening on a boat especially if they suddenly blow off in a lock so chose a proportional lift valve type, like the type previously fitted to Consuta.

I've checked the SBA boiler inspection guidance notes on safety valve use and requirements, however these are not precise regarding a max acceptable reading under full firing conditions. The SBA Inspection Services state:-

"Within an acceptable margin of the specified maximum permissible working pressure"

I've noticed that our inspector is usually satisfied with safety valve performance provided the valve starts to open around 175 psi and the gauge pointer doesn't rise above 190 psi at full release. I've seen another

boiler inspection code which suggests no more than 10% above the red line. I suppose an extreme view might be that it should never go above the red line. I'm presently thinking our gauge was set for full release at 180 psi, so more investigation is probably required.

By the way if anyone is interested we could bring the gauge tester along to some of our early next year worker sessions at Beale Park – for a "Check you Safety Valve" - its quite an interesting procedure and is very useful.

Other work over the last few months has been to see about building the main engine steam line in copper

tube. The present one fitted is screwed steel pipe with screwed fittings – a bit commercial style and not traditional. The Trust now have a brazing hearth for this large copper size bending work, the pipe curves are quite complicated so will have to see how it goes. Paul was concerned some of the pipe seal we have currently used might be better if replaced by one of the more traditional screwed pipe seal compounds, so have been making some tests between various screwed pipe joint sealants. The current one in use remains flexible, but probably should have one that seals tight which is not flexible. Test results given in next newsletter.

I'm sorry to report that we currently don't have a down river base for Consuta's use next year, so any thoughts, offers of help or suggestions about this would be most welcome. I suppose it might be possible to



1.5" parallel pipe fittings. The blue tape is used to ensure equal depth screwed thread section. Black and red colours are the two thread compounds under test

see if Consuta could have a temporary mooring at the Rose/Toop Hobbs site when it is completed, this could potentially only be needed during the summer weeks, we'll just have to wait and see.

### Future of using Coal for heritage steam.

UK steam coal supplies may be in jeopardy for the future. I understand that the Ffos-y-Fran Welsh coal mine is due to close next year. This mine was only permitted because it provided coal for the nearby Aberthaw power station which closed in 2019; we have found this coal to be excellent, and currently have 2 tons in stock. Some heritage rail groups are already looking towards importing Russian coal.

There is so much hypocrisy within the decarbonising movements, even the bio fuels currently being used at the UK Drax power station are promoted as renewable, however this fuel produces significantly more CO2 per kilowatt of electrical output than when coal was previously used. In case you are wondering, Consuta would definitely have serious problems if we tried burning wood fuel. In any case I don't even accept that wood fuel is carbon neutral especially on the present scale of UK usage. I think all fuels which lead to the production of atmospheric CO2 should be appropriately taxed in order to fund the development of alternative clean power sources, sadly society is unlikely to accept this.

### Future Trust support needed

Next year the trust will require plenty of fit supporters to help get Consuta ready for steaming, and also provide operational crewing. I would also ask you to consider who might be considered as a new trustee for The Consuta Trust, this position would need someone who is prepared to be actively involved at all stages of our trust work, and also help with the steaming of Consuta.

I don't know whether you've noticed, but our Christmas Card is from an earlier year. We had a lot left over and it seemed a shame to just dump them, so in the spirit of being as economical as possible we're skipping a new print this year. Another question is should we arrange a social meal; well yes of course but at this time of the pandemic, perhaps still not a good idea.

Many thanks for your continuing support.

Brian Smith on behalf of the Trustees.

## Looking back in Time through the trust archives



Consuta in the 1910's when owned by Arthur Howett



Consuta at the 1912 boat race, the Thames was a bit rough and both boats were swamped. The two umpire launches used were Consuta and Maritana, can you identify which is Consuta?

Consuta was built by S.E. Saunders of Goring in 1898 for H.S. Clutton as an experimental umpire launch fitted with a DesVignes steam engine. There was a need to reduce the wash created by earlier umpire boats, and Consuta was very successful so the hull style has been used for all Henley Royal Regatta launches ever since.

The reduction in wash was credited by many to the tunnel stern, but in reality the reduced wash is probably more to do with the hull lightness using "Consuta Plywood" and also the slightly longer hull compared with earlier umpire launches.

The photo on the right shows a Saunders hull (is it Consuta?) fitted with a two bladed propeller. So the unresolved issue is was Consuta originally fitted with a two bladed prop?

Consuta's steam plant was removed in 1923 and replaced by the first of several different petrol engines.







Outside the Leander Club on Tuesday week, when the river was rapidly subsiding to its usual level.— The Consuta's steam is up and the crew just off for the morning's work.

The photo of the engine on the left at Tom Taylor's yard, Chertsey was probably taken shortly after removal from Consuta in 1923. Graham Lindsay purchased the engine in the 1970's it had been used to drive steel plate bending rolls at the boatyard.

### THE MOTOR BOAT.

2ND MARCH, 1911.

### PROMINENT PERSONALITIES OF MARINE MOTORING. II.-Mr. S. E. Saunders.

Although one sees the ancient art of boatbuilding carried to its very latest developments in the Columbine Yard, at the mouth of the Medina river, a something-ofthe-stmosphere-of-the-past seems to pervade the place. The perfectly-arranged modern shops, installed with the latest machinery, electrically driven, are not sufficient to dispel this. Perhaps the impression may be due to the immediate proximity of the oldest house in East Coweswith its ghost story-where Mr. S. E. Saunders, Member of the Institute of Naval Architects, and Chevalier of the Order of St. Charles, lives in the heart of the industry he personally supervises, and takes such pride in. More than this, he himself personifies that spirit of thoroughness, which he inherits from the craftsmen of a bygone age.

One can find an index of the owner's character in the consistent manner in which the fine old panelled house has been restored and adapted to modern requirements, with no sign of decoration. The windows look

out across the sparkling water, where a flotilla of small craft, chiefly motor boats, lie moored.

With the advent of steam craft, Mr. Saunders still kept in view the importance of combining lightness, strength, and elasticity. In a moment of inspiration the earliest traditions of his art came to his aid, with the idea of stitching on the planking instead of nailing it. And thus it is that the strange-shaped hull of the latest hydroplane is but a development of the birchhark canoe of Hiawatha, the legendary hero of the North American Indians.

In reviving, modernizing, and perfecting the ancient system, Mr. Saunders has arrived at an admirable form of structure capable of carrying the highest-powered engines with safety. And it is in connection that this system his name is best known. He has, on various occasions, built boats abroad so as to permit of them racing in their respective countries, having taken his own staff of workmen to Germany, to France, and to Italy for this purpose.

When he laid his system before the committee of the Leander Club, opinions were somewhat contradictory as to its practicability. One of the members, however, Mr. Clutton, offered to build an experimental boat, and the well-known "Consuta" was the result, a boat used for umpires during the Thames boat races.

Though the company had built sea-going craft on the Thames for a good many years, yet they were always hampered by the difficulty of getting them down the river. Moreover, the era of self-propulsion had produced fast craft, for which the Thames offered insufficient scope. This decided Mr. Saunders upon installing the present works at Cowes, of which the ones at Goring still remain a branch.

He set up on the Solent with the ambition of building the fastest craft afloat, an ambition that was realized in "Ursula," and later in the "Pioneer," the hydroplane. Having found an pportunity of personally witnessing the performnce of one of the first French hydroplanes, Mr. saunders was convinced that in this form lay the

highest possibilities for speed. "Ursula's " speed was 35 knots. A single one of the twin engines drove the hydroplane " Pioneer " at over 40 knots. At what speed will two of them drive "Brunhilde "? -

Having turned his first attention to this type of craft, the first result was the well-known "Columbine." in which, with 65 h.p., a speed of 32 knots has been obtained.

It is seldom that the head of the yard is not to be found personally at the works. If he is away he has probably gone to pick out the best of a cargo of timber, making careful selection of the cedar and mahogany which go to form the skin planking, and the Canadian rock elm, destined for the frames.

A glance at the shops reveals a wide variety of craft in all stages of construction, varying from ships' boats, for the Royal Navy, to motor launches for millionaires yachts, and other things, about which an air of mystery attaches, which are not to be spoken about till their success is assured.



145

## Consuta used for the first live TV coverage of the Boat Race

**BBC Television Service** - Equipment used for televising Oxford and Cambridge Boat Race 1950. Twelve shore based camera and one on the launch Consuta were used to televise the race from start to finish. The 'Consuta' with the Marconi camera in her bows. The aerials, from left to right, are for sound commentary, vision transmission, reception of picture as transmitted from Alexandra Palace, and reception of cues and instructions from the control centre at Riverside Telephone Exchange. Immediately behind the cameraman are the commentators. In the stern is the petrol- electric generator set for supplying the equipment.



The petrol engine in use was a six cylinder Gray marine side valve engine, of about 4.5 litres and had a max revs of 1800 rpm; we still have this engine, plus its fine casing and the steering wheel.

These photos indicate just how far video technology has advance since the 1950's, the TV cameras then were only monochrome. No mobile phones fitted with video cameras in the 1950's.

Consuta was owned by F & B Boats (Balchin) based at Surbiton at the time and was being used as a tripping launch. Note in the photos below that Consuta, when lifted out, was fitted with an all round hand deck rail.

## Consuta's commercial service seems to have ended by 1968





Consuta was finally sold to Graham Lindsay in the early 1970's then lifted out of the water at Nick Knight's yard on the Medway, note the use of two cranes needed to spread the load during the lift.

On the right, now out of the water.

Photo above shows the last Thames Conservancy licence dated 1967



## The first restoration of Consuta begins

After Consuta was rescued by Graham Lindsay in the early 1970's the restoration progress was very slow with several false starts. The main issue was just how would it be possible to restore the original four ply hull where the cross ply's were stitched with copper wire?

Tony Cundick at Kew Steam Museum first started this task, but Graham wasn't convinced so after some initial work the hull was moved to Michael Dennetts, however here the costs had became excessive, also it was obvious the hull had lost its shape.

The Consuta Trust was formed in early 1999, and with help from Colin Henwood and Tony Cundick a restoration plan was agreed. Henwood and Dean would carry out the hull refurbishment and Kew Steam Museum would install the steam machinery.

Colin Henwood kindly allowed the trust's new volunteer group to help with most of the non specialist restoration work at the Henwood & Dean workshops.

Please look at the trust website where all our newsletter since 1999 are available, just click on the "**Past News**" main menu option.



Tony Cundick at The Kew Museum starts the restoration work during the early 1980's



Above right: First steaming of Consuta's engine during 1999 for early supporters using a Merryweather boiler to provide the steam



Tony Cundick, Brian Smith Derek Brown, and Graham Lindsay discussing the work progress with Colin Henwood



Trust supporters at one of the many early work parties at Henwood and Dean workshops during 1999.