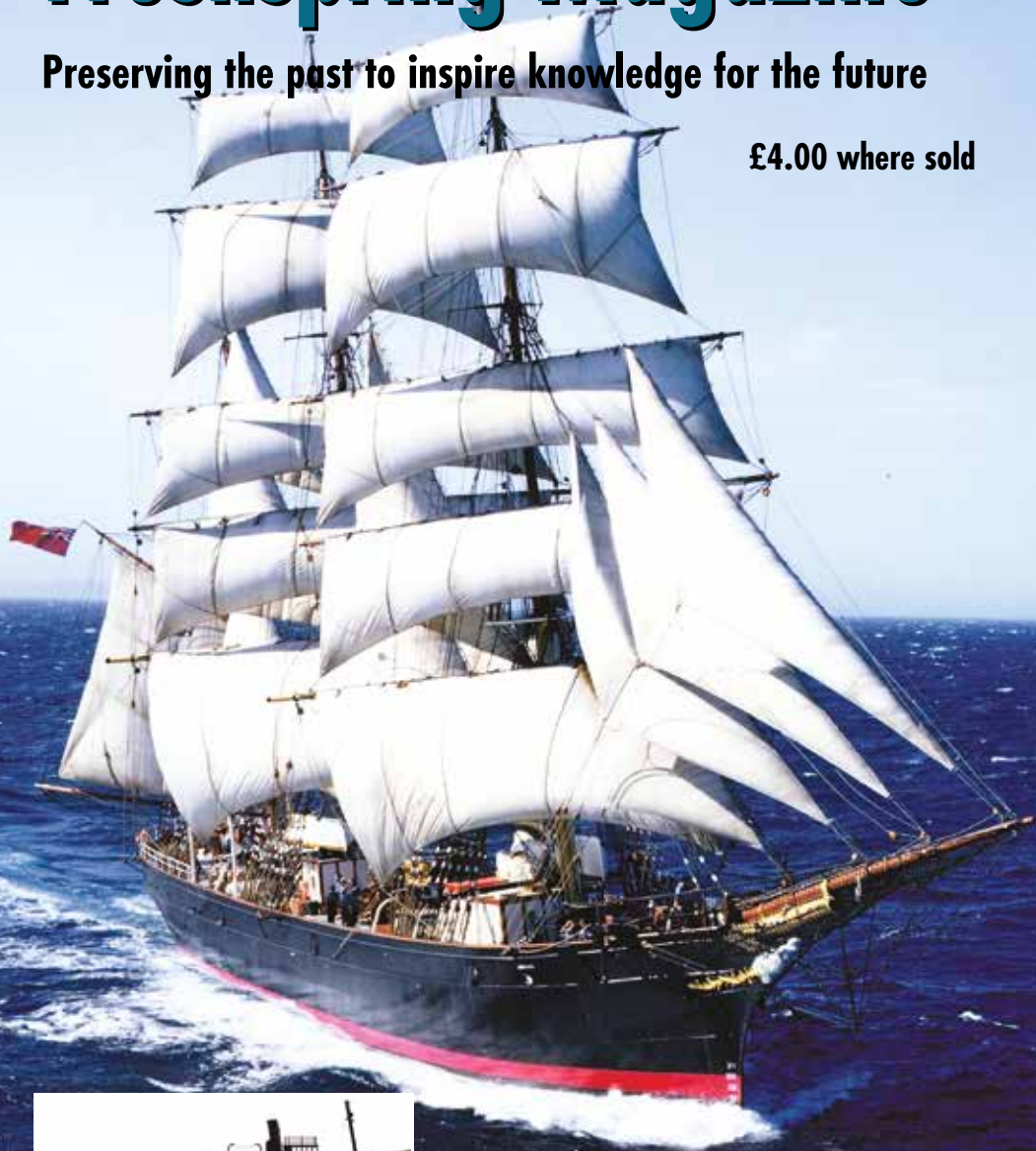


# Freshspring Magazine

Preserving the past to inspire knowledge for the future

£4.00 where sold



No.35 Summer 2023

The **Steamship Freshspring Trust** is a registered charity, No.1151907.

**Objects of the Charity:**

To advance the education of the public through the preservation and operation of a historic steamship, and the promotion of maritime studies particularly amongst young people for the public benefit.

**Registered Office:** Little Cleave, Lower Cleave, Northam, Devon, EX39 2RH

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**Ship Visits & Volunteering on the ship:** The ship is open for public visits on Sundays from 9th April. For members' visits outside this time, or if you are interested in volunteering, please call Peter Gillett, our Local Ship Manager, on 01237 237 183 (email: peter.gillett@ssfreshspring.co.uk).

*Freshspring Magazine* is edited by Brian Gooding, and published by the Steamship Freshspring Trust, a registered charity.

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**FRONT COVER:** 1874 restored barque James Craig, is seen sailing at 10 knots in a 25 knot NE breeze off Sydney, Australia.

## From the Chair

**Summer is** here and we started our seasonal programme of events by opening the ship on 26th March as a Lottery Ticket holder day. Our first regular ship opening was at Easter and we attended the Tarka Valley Railway event the same weekend by providing steam engine rides.

On 1st April, we held an event on board. We had a local shanty group, the Pluckateers, along and we even arranged a drinks licence so we could sell our Freshspring beer. Pasties were included in the price, and we sold out in a matter of days. It was a great evening and those who came along very much enjoyed the occasion. The Pluckateers kindly donated their time and so it was financially very successful for the Trust. The ship is a great venue and we plan to hold more events on board during the season. The Pluckateers return on 8th July for another fun packed evening so why not come along.

I recently attended a party where our own group were playing; actually, for the first time professionally. The Bar Bouys, as they are known, have come a long way since their early practice days and are now very worthy of a shanty evening of their own. Some of their songs are about the team and our ship, which considerably adds to the fun. We will let you know when we have a date.

Our next occasion was a student achievement event at the University of the West of England, where our three students were displaying their work and we were able to share the 360 degree experience, which we now use extensively locally. We have been very lucky to have the support of UWE for many years now as it has meant that we have been able to achieve amazing things with learning and virtual reality. BMT Global have also played a major part in the liaison, as has Martin Kemp, who is a Documentary Maker and overall coordinator of the project.

The weekend of 29th April was extremely busy with three events in three days. First was Northam May Fair where we provided steam engine rides, plus delivering our VR presentation; then Merton Vintage Show where we again provided steam engine rides. On the Monday we were at Kingsley School Fete, where again we provided rides and VR. All in all, I carried some 600 people on the steam rides and was totally worn out by Monday evening. We do need more people to man events as our stands are always busy and popular. It is a very good way to gain members and supporters.

To add to this, we have just returned from Rock Park, Barnstaple, where we attended a Coronation picnic. Here we carried over 200 people and our stand was extremely busy. People seem to be really interested in *Freshspring* and what we do. Over the recent period the engine performed well with only one incident, the gib key fell out of the flywheel, which sent the engine into a spasm of vibration before I managed to stop. Remarkably, I did see something fly past at the time and only had to retrace my steps to see the key lying in the grass. A lucky escape indeed. After knocking the key back in, we continued our run. All of this activity shows that a third scale Clayton & Shuttleworth engine is capable of very hard work and is as reliable as big brother. Incidentally, the engine was built when road engines were lying in scrapyards and the builder simply visited a local yard and was able to measure up an engine prior to its disposal. How times have changed!

I am working with Mike Teare, Way of the Wharves, to support Bideford in becoming a Heritage Harbour. Heritage Harbours are a joint initiative by the Maritime Heritage Trust (MHT), National Historic Ships (NHS) Shipshape Network and Historic England (HE).

Historic ports and harbours in England, Scotland, Wales and Northern Ireland can become





Two pictures of John and his Clayton miniature engine busy on trailer rides at the Coronation picnic in Barnstaple on Sunday 7th May and had a very successful time when the ride carried 200 people!

officially recognised as 'Heritage Harbours'. This emphasises the great value in sensitively developing their historic buildings, waste land, mooring and maintenance facilities for both local and visiting historic vessels.

As a result of our recent National Lottery Heritage Fund success, I am pleased to say that we have commissioned BMT Global to carry out the feasibility study of the ship for passenger operations. This is an extensive piece of work and includes liaison with The Maritime & Coastguard Agency, who ultimately license passenger ships.

The study is critical to the future of the ship and, to an extent, the future of the Trust. There are two possible outcomes, one, that with some modifications, the ship can operate with passengers, and two, that the ship can never comply with passenger ship regulations. The second option would pose some challenges for the Trust as an operational ship would just not be viable. We could still aim for operation but would be limited to 12 passengers. It is most likely though that the ship would remain static for the foreseeable future.

If it is determined that the ship can carry passengers, the Trust is in a position to move forward to seek funding for the conversions required. Clearly, the implications are considerable. The cost budget would be in excess of £3 million and Trustees will need to gear up for a major project along with successful operations.

The Feasibility project is led by Trust Technical Director, Ken Thompson, who is very experienced in ship conversions and operations. The National Lottery Heritage Fund grant is also supporting two part time members of staff, A Trust Administrator and an Audience Development Manager.

You will have seen on the cover of the magazine a great picture of *James Craig* under full sail. It is almost impossible to believe that this ship was once a part submerged wreck. We also have an article provided by Alan Edenborough a Trustee of The Sydney Heritage Fleet. I visited them in January and was warmly received. The achievements of the team are remarkable, with support from the government and many other sources. I hope we can keep in touch and encourage visitors to the UK to come and see us. If you go to Sydney, a visit is a must.

My son Tom went to sea when he was 16 as a Cadet. He joined along with Alex O'Connell, and they continued to remain friends throughout their careers, often working on the same ship. Now they are both Chiefs on the same ship, Tom as ETO and Alex as Engineer. Alex has kindly written an account of his career, which is included in this copy. Recently they set up a company (OP-CO) providing marine services, which I hope will be a great success. A major aim of this Trust is to encourage careers in the maritime sector and accounts such as the one from Alex, confirms we are on the right track.

We aim to review books from time to time, which we think will interest our Members and I am pleased to report that sales of 'The Fabulous Flotilla' are going well. I'm afraid I am a little slow in reviewing the next book, 'The Magnetism of Antarctica', but we will certainly feature it in the next issue.

We have been debating the AGM this year and, ideally, we would like to have it in person here in Bideford. This gives members an opportunity to spend time at the ship and for us all to have time to chat. We will provide a Zoom link for those who just cannot make it.

### John

*When away from his busy life steering the Freshspring Trust, John manages to get out on the river in his steam boat but still Freshspring looms large in his journey...*





# Sydney Heritage Fleet – The Museum that goes to Sea

**Alan Edenborough**

**Sydney Harbour's** role as a major commercial port has sadly ended and with it has gone 220 years of maritime trade and shipping.

From the earliest days of colonisation, through the eras of sail and steamships to the modern cargo ships of recent decades, Sydney has been a city which grew from ships and the sea.

With Sydney Harbour increasingly gentrified all that remains is memories... And a remarkable organisation which over five decades has worked to preserve and present examples of the ships, artefacts, literature and art which tell the story of Sydney's maritime history: The Sydney Heritage Fleet (SHF).

Working with, essentially, a volunteer workforce and financed by operating its vessels and by donations and sponsorships, SHF has, nonetheless, managed within its own resources to restore and maintain one of the world's largest, and oldest, fleets of operational heritage vessels. This has involved the solving of complex engineering problems and the development of techniques which are now recognised internationally. It also means the retention of traditional maritime skills, ensuring that they will be passed on to future generations through 'hands-on' training.

Five of SHF's operational vessels are more than 100 years old: tall ship *James Craig* (1874), steam yacht *Lady Hopetoun* (1902), steam tug *Waratah* (1902), gentleman's



*The operational fleet together on Sydney Harbour.*

schooner *Boomerang* (1903), and harbour launch *Protex* (1908). Despite the curious fact that after 50 years of existence SHF still has no permanent shipyard home in Sydney Harbour, it is regarded internationally as a leading maritime heritage organisation.

## Expertise and experience

The Sydney Heritage Fleet, by its very nature, exists in the world of heritage objects, sites and sensitive and challenging environments.

SHF has learnt to blend the operation of heritage vessels and a heritage shipyard with the need to earn money through involving visitors in the process. More than 30,000 visitors a year are guided over the Fleet's restored barque *James Craig* and thousands more go to sea aboard the Fleet's vessels – offshore under sail aboard *James Craig*, or enjoying the varied sites of Sydney Harbour aboard the Fleet's steamships and launches. Guided tours of



*Steam Tug Waratah, built in Sydney in 1902. For many years she towed barges filled with spoil dredged from coastal river-mouth bars to enable shipping access.*



*Edwardian schooner Boomerang, built in Sydney in 1903, a classic of her era.*



The Fleet's shipyard and two current restoration projects; Pilot Vessel John Oxley (1927) and Sydney Harbour ferry Kanangra (1912).

the Rozelle Bay Heritage Shipyard introduce yet others to the wonder of traditional maritime skills practised in a modern world.

So blending tourism with a working environment is something the SHF does well.

Another aspect of SHF's expertise and experience is its ability to generate and implement partnerships and co-operative programmes. Restoration, on-going maintenance and operation of heritage vessels requires resources which stretch a not-for-profit organisation to the limit; without partnership there is no future. The Fleet has used this approach in all its major successful restoration projects to date.



Launch Protex, built in 1908 and with a varied subsequent career including as a ferry and Sydney Harbour workboat.

The SHF's flagship, VIP Steamer Lady Hopetoun, built in 1902 in Sydney by the Government as the VIP vessel from which to show visiting dignitaries the beauty of Sydney Harbour.



A measure of its success is that in 2003 The World Ship Trust presented the Fleet and James Craig with its prestigious Maritime Heritage Award 'for outstanding restoration and preservation of this historic ship'.

- The organisation was founded in 1965, to save the VIP Vice-Regal Steam Yacht Lady Hopetoun, built in 1902 and still steaming; the Fleet's flagship.
- The original company name was the Lady Hopetoun & Port Jackson Marine Steam Museum Limited. The name has changed over the years, but it is still the same company as first founded.
- The current company name is Sydney Maritime Museum Ltd – trading as Sydney Heritage Fleet. It is a charity and not-for-profit company limited by guarantee.
- Sydney Maritime Museum Ltd is classified as a 'public museum' and has 'deductible gift recipient' (DGR) status; donations of \$2 or more are tax deductible.
- The Fleet has some 1,200 members, and around 450 of them are active volunteers. The volunteers regularly clock up annually 100,000 hours of volunteer work.

The SHF welcomes visitors from around the world and the overwhelming response to an experience with Sydney Heritage Fleet is enthusiastic support. Long may it continue!



Launch Berrima, dating from the 1950s, was a pilot launch for a time, then a general workboat on Sydney Harbour.



Although not among the Fleet's centenarians, launch Harman was built in Sydney for the Royal Australian Navy in 1943 and was a well known vessel on Sydney Harbour.



## 'King' attends Freshspring Event!

### Annemarie Shillito

**OK, so,** it was a very happy Luke Burton, Northam May Fair King, but he was our king for the day! He joined us with his mum, dad and sister along with around 300 other children and adults who came along to have a steam engine ride and see the ship via our nine minute VR experience.

It's been an incredibly busy start to the 2023 season for *Freshspring*. We opened the ship early, with a National Lottery free open day on 26th March and have been regularly open on Sundays since then, welcoming visitors to see new developments including the restored galley. Everyone, from age 4 to 90 are fascinated with the ship and now the VR experience.

Alongside opening the ship, we're attracting big numbers by staging and attending events. Between April and mid-May, we attended Bideford's food festival, Northam May Fayre, Merton Vintage Fair, Kingsley School's May Fair and Barnstaple's Rock Park Coronation party. We averaged over 200 people a day attending our stand, attracted by John's steam engine rides and the VR. Taking the oculus headsets to events means we can show people the ship and raise their awareness of our cause from anywhere in the country and this is helping more people experience the heritage than ever before. One youngster was so enthralled that she attended two events in a row and tried the VR three times!



Luke Burton, Northam May Fair King, enjoying a seat at the steering wheel of the steam engine.



Matt, Luke's dad, commented "Awesome, really educational, loved it and thanks for letting us have a go".

We're also staging our own events with one successful 'Sea Shanties and Pasties' evening under our belt. We had around 40 people on board on a balmy April Saturday evening to listen to the talented 'Pluckateers', a four-piece ukulele band. Based in Parkham, the band has quite a following so tickets sold out fast, so much so that we're staging a second event in July and have already have a queue of people interested. Huge thanks to the Pluckateers for helping us raise much needed funding with this event.

Overall, events seem to be the way to engage more people but we're looking into how we can increase the numbers of people also coming to the ship. Our volunteer stewards are the people who make all these events and open days happen so hats (and crowns!) off to them for all their dedication.

*Merrity Hedderly interacts with the VR experience at the Kingsley school event – her third go that weekend!*



The model of ss Freshspring underway, giving an idea of things to come one day.

## Time Travellers

### Martin Kemp

For the last year or so visitors to the ss *Freshspring* have been travelling back in time, finding themselves in 1947, as the crew readies the ship to depart on her maiden voyage to Malta.

### Wheelhouse & camera

The time machine that transports them back to an age when *Freshspring* was young and still powered by coal-fired steam is a VR or Virtual Reality headset. Strictly speaking though, this is not VR. The

action plays out, not in a computer-generated artificial world, but on board the *Freshspring* itself. Once comfortably fitted with their headsets, what our visitors experience is a totally immersive 360° drama performed by actors playing various members of the crew. The story takes them around the ship from the captain's cabin to the boiler room to the engine room, from the galley to the deck, from the wheelhouse to the crew's mess.



### Crew's Mess & camera

The drama was shot on a professional 360° camera – the Insta360 Pro 2. The size of a small bowling ball, the camera has six lenses and is capable of recording in 8K stereoscopic. It sees everything around it in all directions. What the viewer sees in the headset is what the camera sees and that's what makes this experience so much more immersive than plain boring old 2D cinema or TV. The action is not just in front of you it's all around you. Turn in your chair and you'll see what's behind you as though you were in the room.

Recently, there's been some very interesting research into memorability which appears to



show that viewers of 360° content are more likely to retain details of what they have seen than if they had watched a traditional drama or documentary. Anecdotally, that seems to be the experience that many of our visitors' report, especially given that most will have previously toured the ship prior to donning their headsets. The 360° experience will hopefully help cement some memories of their visit on board long after they have ascended back up the gangplank to 21st century Bideford.

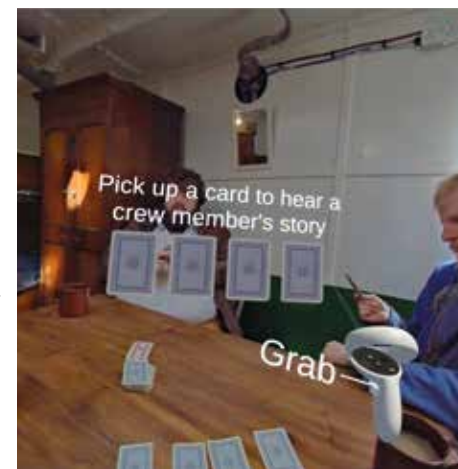
So, the 360° experience seems to be working well for us but we're not finished yet. Over the last two years we've been working with Games Technology students from the University of the West of England (UWE) in Bristol to turn the existing film into an interactive game. Also supporting this new initiative are our partners at BMT's Visualisation Lab who have offered their technical expertise. Soon, we should have a version of the experience which will allow the viewer, let's call them gamers now, to manipulate objects in the film that will reveal more storylines and content.

So, for instance, down in the engine room, the Chief Engineer explains how different coloured valve wheels control the flow of air, steam, fresh water, and sea water through the ship. She then asks the gamer to let some steam into the engine for her. Can you remember which colour wheel to turn? You'll be presented with four choices. Get it wrong and you'll receive a stern rebuke.

### Freshspring interactive still

Meanwhile, in the crew's mess they are playing cards. You are invited to join in. Pick a card and, depending on which one you choose, you'll launch further content about life on board for the Stoker, the Ship's Boy, an Able Seaman, or the Cook.

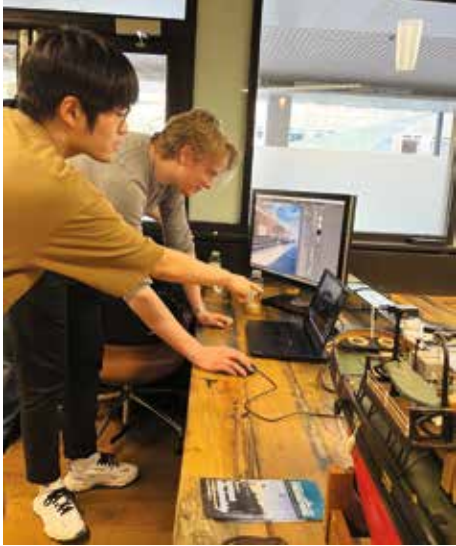
The beauty of this gaming approach is that once the experience is truly interactive, we will be able to create different versions of the game. Clicking an interactive element can launch further content tuned to target audiences. So, in theory, we could have a version for steam enthusiasts, another for schoolchildren, another for history buffs, this list is endless.



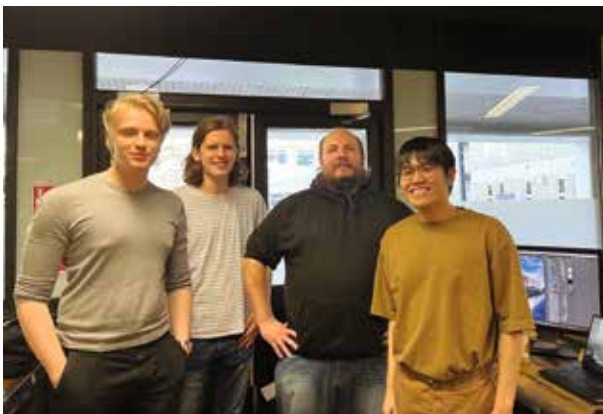


## Foundry UWE

In April, John Puddy and Annemarie Shillito from *Freshspring* and Jason Hodges from BMT, attended UWE's Foundry event in Bristol, a showcase for students to show off projects they have been working on with local companies and organisations. John and Annemarie took along our VR headsets and showed off the existing film to event



Wei & Edvinas at their Foundry Event.



Edvinas, Oli, Norbert and Wei.



visitors. Meanwhile, four of our UWE students, Wei, Oli, Norbert and Edvinas, were there to present the work they have been doing on the *Freshspring* interactive project. By all accounts, it was a highly successful event and one that showed how our little Bideford-based charity can forge and maintain mutually beneficial links with leading universities and businesses.

*Freshspring's* existing 360° immersive film and the soon to be launched interactive version are exciting new developments for the visitor experience on board and something that I think we can truly say we are leading the way within North Devon. Next time you are on board be sure to give it a try.

## Our new team members – Welcome!

### Ros White (left in picture)

I am very excited to join the *ss Freshspring* team.

From my initial visit on board, I could feel the passion and dedication the Trustees, volunteers and members have for the ship and I can see the evidence of this from the restoration achieved to date, which is truly impressive. To have such a unique ship berthed in Bideford providing a resource to engage with young people and now with the opportunity to plan the next important steps with the ship's development, must be significant for the Bideford area and North Devon maritime communities.

I moved to Fremington last year and having spent 25 years working with community-based charities, it was important that my next role was community focussed, so I was delighted to be offered the Trust Administrator role. As the Trust embarks on this next important stage of *Freshspring's* development, I shall be providing the additional support this will require, including a range of administrative duties, documenting progress, finances, compliance and more as the planning and decision making progresses.



### Anne Garside

I am Anne and am taking on the role of Audience Development Manager at *ss Freshspring*. I recently attended an event on the ship and was overwhelmed by the commitment of the team to restore this amazing vessel and bring her back to her former glory, not only restoring her but sharing her history with the community.

The Trust's Chairman spoke so passionately about their work and aims, I was inspired to follow their journey and as a result applied to work with the team. I am very much looking forward to meeting and recruiting volunteers to join us and engaging new audiences to share the amazing experiences that *ss Freshspring* and the team have to offer.

### New members

We welcome the following new members of the Trust:

Mr Peter Green	Horsham, West Sussex
Mr Andrew Morgan	Bideford, Devon
Mr William Blythe	Frithelstockstone, Devon
Mr Chris Heaton	Bristol



## A Surprise visit to the Old Station

**Brian Gooding**

I was surprised to have been invited to 'afternoon tea' at midday by Peter Mellersh, the owner of a lovely 100-year-old Burrell traction engine named *Surprise*. What was more interesting was the venue was the old railway station a mile or so south of the West Sussex town of Petworth. With Petworth House (now National Trust) being in the middle of the town, the station, on the Pulborough to Midhurst line, was a lavish affair and luckily it has been saved from dereliction and turned into both a home and a B&B. Outside, in the platforms are no less than four former Pullman carriages, each used for accommodation. I believe that some of them used to be based at Marazion in Cornwall.

The access road to the station crosses the River Rother, itself once navigable from Pulborough to Midhurst, though the arm that passes the station was not part of the navigation. Of course, the railway followed a similar route and, like so many other similar situations such as the Rolle Canal in the Torridge valley, lead to the navigation being abandoned. The railway itself closed in 1966, passenger services having been withdrawn eleven years earlier.



*Burrell Surprise is joined by a Model T Ford and an Austin Seven, making a lovely period scene outside Petworth Station.*



*The lavish interior of the former waiting room is now a venue for afternoon tea.*



*The foredeck of the Heina in 1965.*



*A loop of the River Rother, runs close by the station and under the adjacent main road.*

Apart from partaking of an excellent tea, though a bit strange at lunchtime, it was good to be able to have a look around the old station and the platforms, and to see the carriages on the old running line and in the bay platform. It is good to see this relic of a former railway age looking superb and being put to good use.

It was good to have a bit of steam too, albeit road, not rail or marine. It's all great!



*Burrell Surprise heads for home from Petworth Station, making a lovely sight in the late April sunshine.*



*Bideford from Upcott Hill May 2023.*  
Photographer Graham Hobbs. © Way of the Wharves



## Bideford and East-the-Water – historic harbour on the Torridge

**Bideford** is an active medium-sized port. The competent harbour authority is Bideford Harbour Board, authorised by Torridge District Council under the Pilotage Act (1987).

In addition to heritage vessels moored (some being restored or used as houseboats or cafes), there are several vessels that operate commercially from the port. Some of these are themselves heritage vessels.

This article looks at some of the components of this historic harbour and how both the past and future of the towns and communities along the Torridge are tied together by the maritime environment and economy.

### All Bideford's history is maritime

Bideford was granted a Market Charter in 1272, but real prosperity developed when it became a thriving port trading with the Americas under the patronage of the Grenville family.

With boat building documented back to Elizabethan times, Bideford and the Torridge Estuary have a long and fascinating maritime history. The story of this town on the south west coast of England is dominated by its maritime links.

Although shipbuilding was important on the Torridge, it wasn't the only economic activity along the estuary. The history of the riverside communities also involves timber, emigration, pottery, coal mining, gravel extraction, fisheries, agriculture, energy and enterprise.

Bideford ships and families were active along the Bristol Channel, to Wales and Ireland and in the exploration and development of North America, establishing the earliest colonies at Roanoke (in current day North Carolina, USA). It was the import of tobacco, followed later by the Newfoundland cod fishery and trade with southern Europe that brought in significant wealth.

During the Napoleonic war, timber started to be imported from Prince Edward Island and many North Devon families emigrated there.

During the 18th and 19th centuries, there were ship building yards all along the estuary, including at Appledore, Cleave, Bideford and East-the-Water. There were even vessels built upstream of Bideford Long Bridge, by the entrance to the Rolle Canal. They had to be launched and 'shot' through the arches of Bideford Bridge at high tide before any masts or superstructure had been completed.

### Historic Vessels operating in Bideford

As well as *Freshspring*, there are a number of other historic vessels moored or operating from Bideford.



*Barquentine Winifred moored at Restarick's shipyard, shortly after launch, about 1879. The Winifred made voyages to Australia.* Courtesy North Devon Maritime Museum, Appledore.



Next to *Freshspring* is *Hindustan*. Built in 1958, she was one of five Royal Navy Aircraft Lighters. Withdrawn from service in the late 1970s, she was used for a while as a dock barrier. In January 1990, while under tow from the Devonport tug *Robust*, the tow parted in a storm and she beached on Southsea Castle promenade, in the process losing her front ramp. When she eventually arrived in Devonport, she was converted into a Seamanship Training vessel and renamed *Hindustan*. Extra rooms were added, props and shafts removed and blanking plates welded in before in 1991 she was towed to Dartmouth for nearly two decades at Britannia Royal Naval College. She is now in private ownership and operating as a café.

A little further along Landvisiau Walk is *Endeavour*, a ship with a very different history and use. This former Customs & Excise cutter, built in 1966, was operated out of Portsmouth by the Royal Maritime Auxiliary Service as a Torpedo Recovery Vessel. Most often working for the Admiralty Underwater Weapons Establishment, she used to run between Bincleaves, Weymouth and the distant ranges, ferrying technical experts, boffins and trial gear back and forth. She was sold out of service in 2000 and is now privately owned.

A historic vessel still very much operational is Bideford registered MS *Oldenburg*, built in 1958 by the Rolandwerft GmbH, Bremen. After being purchased by The Landmark Trust, she underwent extensive refurbishment at Appledore before starting regular services as the ferry to Lundy in 1986. She can carry 267 passengers and below decks retains her original panelling and brass fittings, but has been modernised to provide heated saloons,



*Lifeboat Jane Hannah Macdonald III was delivered by train to a railway wharf at East-the-Water before being launched into the Torridge and rowed to Appledore.*  
Courtesy North Devon Maritime Museum.

bar, buffet, shop and an information area. Tide times determine the timetable of sailings to Lundy either from Bideford or Ilfracombe, taking passengers, fuel, food, drink and other requirements for life on the island and returning with bags of rubbish. The name Lundy derives from the Norse name for puffin and these birds can still be seen nesting on the island. The seas around Lundy were one of the first marine protected areas to be created in the UK.

Not yet open to the public is the historic lifeboat *Jane Hannah Macdonald III*. This lifeboat operated out of Appledore between 1910 and 1923 and is credited with saving 23 lives. Constructed of mahogany on oak planks with calico between and corked in double diagonal, *JHM III* is a fine, yet typical, example of a Self-Righting, 'Pulling & Sailing' ketch rig standing lugsails lifeboat. Built with two steel drop keels, with ten oars and weighing just short of four tons, she was registered with the RNLI in 1910, Official Number (ON) '611'. She was replaced at Appledore by V.C.S., the first motorised lifeboat on station.

In 1940 *Jane Hannah Macdonald III* took part in Operation Dynamo as one of the 'little ships' in the evacuation at Dunkirk. She was thought lost, later recovered in the channel and towed back to England. For many years she was a private family boat and eventually ended up with a French collector. A group of local businessmen raised the money to purchase *Jane Hannah Macdonald III* and bring her back to Bideford where volunteers are restoring her. The ambition is to display and row her at regattas and festivals.

### The Torridge Estuary and Nature

Mud flats and salt marshes are important as flood defences and habitats, especially for fish and overwintering wading birds. Estuaries worldwide are under pressure for building land and from pollution.



*Over the stern of the Oldenburg, the crane is loading ball clay on Bideford Quay during September 2022.*  
Courtesy Mike Teare

The Torridge estuary is a major feature within the UNESCO North Devon Biosphere Reserve. The nearby North Devon Coast is an area of outstanding natural beauty (AONB) and the seas around Lundy Island were the UK's first marine nature reserve.

Balancing up protection for nature and economic development are always going to be a difficult mix and the estuary is under pressure from these competing interests.

### Waterfront Development

At East-the-Water, joined to Bideford by the medieval Bideford Long Bridge, the wharves along Barnstaple Street have for many years been lying almost unused. Plans to redevelop this brownfield site with a mix of residential and retail units around an open square, preserving the view between Bideford and The Royal Hotel, have been approved. By early 2022 demolition of remaining buildings and an archaeological survey were completed. With no significant or surprising finds, the survey confirmed that the wharves area was created over the Victorian period. As the deep water channel moved westward across the river, successive seawalls were built until the current line, established by the Board of Trade, was reached.

The developer and district council have now agreed payment terms for the government grant to help repair the seawall, essential to raise flood defences by up to two metres, before building work can start. The site will have pedestrian access through the bridge gardens and along the seawall leading onto a central square. This will create a waterside walkway along land that has previously always been private and industrial.



Repairs to sea wall at East-the-Water in May 2023. This section of wall originally was constructed in 1887 after the closure of the last shipyard. Courtesy Mike Teare

The charity Way of the Wharves recently published 'A History of East-the-Water, Bideford', which covers the importance of the east bank of the river in the economy of Bideford. Over its history, in addition to the warehouses and import/export trade, East-the-Water was home to tobacco warehouse, boat building yards, limekilns, pottery, coal mine, railway, gas and electric works, builders and coal merchants, iron church, pubs and community. Artwork and interpretation panels, recording the history of the site, are planned. A design competition for local artists, co-ordinated by The Burton Art Gallery and Museum, has been organised.



Bideford's maritime connections, old and new, were presented in a series of public talks at The Burton Art Gallery & Museum during Spring 2023.

### Shipbuilding today and into future

While the number of shipyards along the estuary has decreased, shipbuilding continues at Harland & Wolff, Appledore. The company has recently announced, as part of a consortium, securing contracts with the Ministry of Defence. Over the next two years the company expects to more than double its workforce, to over 300 and including new apprenticeships.

The new contract is to deliver the bow section for three crucial support ships to the Royal Fleet Auxiliary (RFA). The final assembly for the three 216 metre long vessels will be completed at Harland & Wolff's shipyard in Belfast. Now, just as in the past, vessels built on the Torridge will end up all over the world.

At the same time the government announcement in 2023 of levelling up funding for a clean tech maritime innovation centre, on land next to the Harland & Wolff shipyard, is an exciting development. The Universities of Exeter and Plymouth will be undertaking projects looking at green fuel systems for maritime use.

For the towns and communities along the Torridge, it is both the future and the past that are anchored in the maritime environment.

**Michael Teare**  
**Way of the Wharves**  
[www.thewharves.org](http://www.thewharves.org)



## The Sophia Damman – Saudi Arabia – 1980

Kevin Patience

During the refloating of the motor vessel *Monte Cristo* off Dammam port in Saudi Arabia, I noticed two other ships in the anchorage that had seen better days. One we passed was the *Fairsky*, a cargo ship that had sunk laden with cement, and another on the reef named *Sophia*. Having taken some photographs, I showed these to my partners Mike and Hans in Bahrain and we soon had a copy of 'Lloyds List' on the table to check the ships' details. The *Fairsky* was not an option with little buoyancy due to the cement cargo in bags. The *Sophia*, however, presented a possible lucrative opportunity as she was a standard 1950s three island cargo ship with the accommodation and bridge burnt out and empty of cargo. Some weeks later, it turned out that Hans and a friend had bought the *Sophia* in the anchorage for scrap as is / where is, and could Kevin refloat it?

We could certainly try and a week later, with another supply boat and a ton of diving and salvage gear, we arrived alongside. Around the stern I could just make out 'SOPHIA - PIRAEUS'. She had been Greek owned by the Crydon Shipping Company. The price of scrap steel delivered to Pakistan at the time was about \$150 a ton and the light displacement of the ship was around 5,000 tons so this was potentially worth over half a million dollars. Deduct the salvage, towing and insurance fees to Karachi and there was still a healthy profit.

The *Sophia* was built in 1950 by Akers Mekaniske Verksted A/S, Oslo, Norway as the *Heina* for Mowinkel Rederi A/S, Bergen. She had a length of 454 feet and was powered



*Heina in service during 1960.*

by a Burmeister & Wain, 5,600hp six cylinder diesel engine giving a speed of 15 knots. In 1967 the ship was sold to Maraguila Cia Naviera CA, Monrovia and renamed *Achaios* and in 1970 sold again and renamed *Sophia*. Having loaded a cargo of clay pipes at the port of Immingham, England, the ship arrived off Dammam, Saudi Arabia in September 1977 where story has it the crew set fire to the ship as they had not been paid.



*The foredeck of the Heina in 1965.*

Lloyds Register records show it was an explosion in the engine room followed by fire. The main superstructure burnt out and the vessel was declared a total loss. After the cargo discharge, the ship was beached in October on a coral reef outside the port and abandoned.

My initial inspection showed the ship flooded in No.4, 5 hold and engine room, with Nos.1, 2 and 3 hold dry and the ship aground from the engine room aft with the bow afloat at high water. The salvage plan was to empty No.5 hold then No.4 and finally the engine room. As the after peak was full of fresh water, we cut a hole in the bulkhead and drained it into No.5 hold. Having set up four electric submersible pumps with a capacity of 1,200 tons an hour in the hold, we started the pumps and three of us began an inside inspection of the flooded hold which also had the shaft tunnel running through it. With the water being pumped over the side, we soon found that hundreds of rivets in the hull were leaking. Two



*Sophia aground off Dammam in April 1980.*

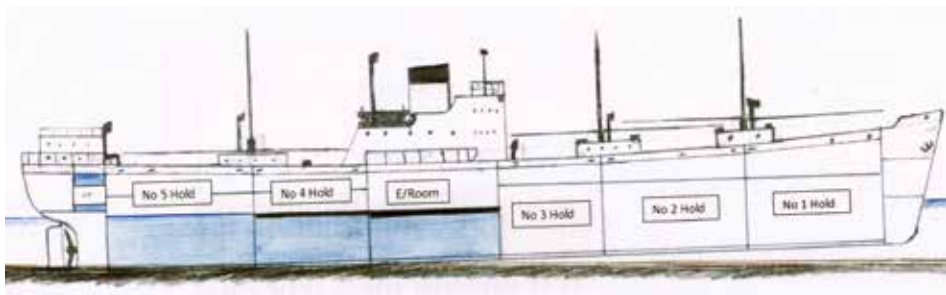
divers worked on the outside of the hull and myself and another on the inside and we sealed these using epoxy putty which set hard in thirty minutes. Over the next two days we sealed over five hundred rivets and the water level dropped but we then found a crack along the base of the shaft tunnel. This was letting water in from the engine room. All pumping stopped while we patted cement into place which quickly set hard underwater.



*View of the foredeck during the salvage.*

The pumps were started and by midnight the hold was relatively dry and one pump could hold the water ingress.

Hold No.4 was going to be difficult as it had two inches of black fuel oil on the surface of the water. How to get into the hold without getting covered in fuel? The answer was to create an oil free pool of water using a fire hose spraying the surface hanging down from the 'tween deck and jump through the centre into the clear water beneath. It may have been clear to begin with but was pitch black and the silt in the bottom of the hold quickly cut visibility to zero. Having fuel oil or petrol on one's skin underwater can cause severe burns as it cannot evaporate. Three pumps were rigged and we quickly discovered more loose rivets in the hull plating. These were caused by the ship's back and forth movement while sitting on the coral reef due to tides and weather. Hours of epoxy filling showed we were making progress and the water level dropped. While two divers were sealing the rivets, my co-diver and I investigated the engine room and discovered we had a serious problem with fuel oil on the water surface that was eight inches thick. This had apparently leaked out of the double bottom tanks once the engine room flooded. Now that Nos.4 and 5 hold were making progress, it was time to create a moon pool in the oil in the engine room and rig the pumps. With three pumps rigged and 700 tons an hour of water discharging, we watched



*Diagram of Sophia aground in 1980.*

the level but the water remained static. We had a major hole in the bottom plates of the engine room.

I took my co-diver for a swim on the high tide and examined the hull beneath the bilge keel either side under Hold No.3 and here the rivets had not been affected by the ship's movement. With the forward end of the ship off the seabed, it was time to slide in under the hull and investigate the bottom plating. With the space between hull and seabed decreasing as we swam aft, it became a tight squeeze but in the light of the torches we could see the hull plating had been completely worn away under the main engine, exposing the main transverse frames under the engine room bed plate. The black hole extended into the darkness. The sheer size of the missing area meant it was time to review the entire operation. I called a meeting with Pat, the tug captain, and my partner Mike in Bahrain on the VHF radio. Explaining the extent of the bottom damage and impossibility of diving within the engine room to access the damage from within, we regretfully stopped the pumps and transferred all the equipment back to the tug. By that evening we had our port clearance and sailed back to Bahrain. I had hoped that the combination of drying Nos.4 and 5 holds plus the buoyancy in holds 1, 2 and 3 would enable us to tow the ship off the reef rotate it and push it back on the reef stern first and patch the underneath. There had been another option – to burn a three feet square hole in the hull ten feet below the surface leading into the engine room and try and blank the hull from inside the engine room but the safety aspect of working in a very confined space under a massive engine in total darkness apart from torches and light from the underside of the ship ruled that out.



*Kevin and Pat discuss the salvage plan.*



That was not the end, however, as some months later the salvage company Smit International called me as consultant and we set off for another look at the *Sophia* on behalf of a new interested party. But after a further day's diving and exploration, the ship was abandoned once more. It was some years later that I was passing the ship in the distance in bound to Dammam on another salvage job that I could see that great sections of the hull had been cut out. Was this an attempt to cut the ship for scrap where she lay? We shall probably never know.

We had lost a potential small fortune on this job, which in the few days we had lay alongside had cost my partner around \$8,000. Forty years later, the remains of the *Sophia* remain on the reef, the stern having collapsed and sunk. The remaining forward section stands corroding gently away until that too will disappear. The internet brought some interesting photographs of the ship taken in the 1960s by the crew, including one that nearly matched mine of the main deck taken during the salvage operation.



*Sophia breaking up in 2012.*



*Sophia two years later.*

## SS Shieldhall, some facts and figures

**Graham Mackenzie**

**Many of** you will be familiar with the good ship *Shieldhall*, so a brief resume.

*Shieldhall* was built for Glasgow Corporation in 1955 by Lobnitz of Renfrew. Her sole reason for being was to take treated sewage sludge to sea for dumping. Uniquely, the Clyde sludge ships would take non-paying passengers to sea for the day, making good use of a public asset. More details can be found on our website, [www.ss-shieldhall.co.uk](http://www.ss-shieldhall.co.uk) or in the two books available from our on board shop.

*Shieldhall* features part riveted and part welded construction due in the main to the transition in the ship building industry to the cheaper and quicker method of construction.

However, both oil-fired Scotch boilers are riveted and have a working pressure of 180psi. Both main engines are open crankcase, triple expansion engines producing up to 800hp each. There are also numerous steam-operated auxiliary pumps and equipment around the ship.

Writing this, while *Shieldhall* is in drydock, we have had to have seven inserts into the bottom area of hull plating, due to pitting corrosion over many years. Although inactive, the pits were too close together to ignore and working with the MCA, the relevant 14mm plate work is being replaced. This will supplement the work that was carried out last year to



Leaving Lobnitz' shipyard for builder's trials. The ship is light and will take on either seawater ballast or cargo to bring it down to the marks.

provide full coverage and protection of the hull into the future. Our bill is circa £150,000, compared to £230,000 last year. This is one of the challenges of operating a vessel nearly 70 years old and these sort of costs will come up when least expected.

The fuel we burn is Marine Gas Oil, a diesel fuel that complies with the IMO standards of 0.1% maximum sulphur content. Current price is around £700/ton and typically, we burn 0.6 tons/hour and it costs around £1,500 to raise steam over three consecutive days.

These are the challenges that face our heritage vessels that wish to remain active and afloat.

Over the years, in addition to the general public who pay to come aboard and keep *Shieldhall* running, we have been privileged to welcome people such as Prince Michael of Kent, Baroness Floella Benjamin, Robbie Coltrane, Fred Dibnah, David Shepherd, Anthony Horwitz to name a few. Some have been in association with various filming contracts that we have had over the years. A key source of income, when it comes.

*Shieldhall* was nominated as Flagship of the Heritage fleet in 2009, the first time the award had been made, and again in 2018, as Regional Flagship. We enjoy a good relationship with National Historic Ships and have been able to provide advice regarding operating one of the largest ships in the Historic Fleet.

When we bought *Shieldhall* in 1988, the ship had been laid up for three years, but was very much a going concern and early members of our Society kept watches on a



Showing off the revised hull colour scheme introduced in 2012. The blue/black maintains its colour better than grey and is more distinctive at sea.

continuous rota for 24 hours a day and every day of the year. After purchasing the ship, the Saloon was returned to its original open aspect and advertised for public functions to enable funds to be raised to return the ship to operation, which was successfully achieved in 1991.

Berthed in Southampton, we are very fortunate to have a secure berth within Southampton Docks and all of our excursions pass any of the cruise ships in port and also allow our passengers to see how large the container ships are that visit the port. The Solent area provides smooth waters, and cruising within the Solent offers excursions of six hours or so, and in addition to the commercial shipping, large numbers of pleasure craft are also to be seen. We do try to make sure all of our excursions have something interesting to see, and this year we are marking the 75th anniversary of the Windrush migration with a West Indian theme.

Of necessity, I have tried to keep this article brief, but interesting with a small selection of photographs. To do otherwise would require a book!

We work closely with *Freshspring* and *Balmoral* to share ideas and initiatives and share good and bad experiences, as it is the best way for our individual projects to exist.



In No.4 drydock at Falmouth for annual docking and survey, April 2023. Blue antifouling applied in 2022 is a biocide free coating with Silicon to reduce marine growth.



## Alex O'Connell

I am a British seafarer currently running a marine engineering consultancy based in Southampton.

My family has always worked at sea. My grandfather sailed on the *Queen Mary*, and my father has been involved in many maritime projects, including those on the *QE2* and other large cruise ships. I grew up seeing the adventures and excitement of my family working in environments so dissimilar to life in the UK.

Like many people, when I left school I did not really know what I wanted to do. Guided by my parents, I searched hard to find options. I knew that working and repairing things was something I enjoyed, having spent months rebuilding bikes in my parents' garage. Even with such clear links to the maritime industry, I found very little information on the careers that it offered and struggled to find a company willing to accept someone directly from school.

After a summer spent shoreside as an apprentice electrician, I managed to secure a cadetship with SSTG, with the sponsorship company being BPOS (Seacor Marine).

I began my career at sea at the age of 16. After completing an observation trip in the North Sea during a very rough winter period, I had my doubts but decided to persevere. I was soon told I would be attending South Shields Marine School to study marine engineering.

College life was challenging at a young age, with many people on the course being much older and already with so much life experience. I will forever be grateful to the people around me at that time who offered so much support and encouragement. The fun we would later go on to have as a group of young cadets far from home will forever be one of the highlights of my life. I cannot stress enough that



On board the *Pufford Ajax*, Alex's last trip as a cadet aged 18.



On the *Ruby Princess*, after being promoted to 2nd Engineer, aged 22. The other chap was 19 and acting 3rd Engineer.

although this period can seem daunting to many people, this section of your training will often be reflected on as one of the best times of your life.

During my time at college, I met my colleague and dear friend, Tom Puddy. Tom and I have worked together extensively since and we now co-manage a small engineering firm. Life at sea presents so many unique opportunities to meet people who will impact your life significantly.

Once the first college phase was complete, it was time to go to sea.

Working on offshore support vessels was a challenging and demanding environment, but I relished every opportunity to learn and improve. I enjoyed all aspects of marine engineering, but particularly loved the technical proficiency required for fault finding on



On the *Ruby Princess*, many of the people pictured are now in senior positions in the company's head office.



On the *Emerald Princess*, Alex's last trip on a commercial vessel.

complex systems. One of the biggest attractions to marine engineering for me was not being limited to one discipline. You need to have strong mechanical knowledge, backed up with electrical and IT skills.

I would not describe myself as someone who was naturally competent at solving problems. This would come after many mistakes and hours of careful mentorship by very patient senior engineers! The training programme was three years and consisted of sea phases as well as time at college. This seemed like such an impossible task at the start but we all soon found ourselves well up to speed and ready to take on the full time roles.

Once graduation came around, I spent another 18 months in the North Sea; it was an interesting job and the rotation allowed for six months off a year. But I always knew that I wanted to move on to larger vessels and travel more.

Eventually, I decided to

broaden my experience and join the world of luxury cruise ships. Over the course of five years, I worked alongside people from all around the world, learning about their unique cultures and customs. The work was busy but fun on the cruise ships, and I even had the opportunity to travel and socialise in my free time. I believe that working on a cruise ship for any of the major lines is a fantastic way to train your skills. The machinery is vast and complex; if you are determined you can progress quickly.

It was on board cruise ships I met my wife, Gosia. We now share two beautiful children and travel frequently together. I reflect often that if it were not for choosing a life at sea, I would have missed this opportunity. I will forever be grateful for having the chance to meet and marry such a caring person.

Although I enjoyed my time on luxury cruise ships, I knew there were better conditions available in the superyacht industry. It had always been my ambition to become a Chief Engineer before I turned 30, and I was determined to achieve this goal.

I soon landed a job on a prestigious 100m superyacht as an Engineer Officer. The superyacht's complex systems and equipment required a high level of expertise, but I was confident in my ability to navigate these challenges. Over the course of several years, I worked tirelessly to change my skill set from heavy handed commercial engineering to the precise and carefully planned actions that a superyacht engineer should use.

Superyachts are all unique and offer very different experiences depending on where they were built and who they were built for. They also offer you the chance to work to the highest standard imaginable. Many owners will not accept anything less than everything working all the time. This can add pressure to your working day but generally speaking, you have the tools and parts to succeed.

Finally, two weeks after gaining my class 1 COC, I was offered the opportunity to become the Chief Engineer. It was a proud moment for me, and I felt that all of my hard work and dedication had paid off. As Chief Engineer, I worked closely with the captain and other crew members to ensure the vessel was always operating at its best. I also enjoyed mentoring and training other young engineers to follow their dreams in the maritime industry.

Recently, I have taken my at-sea experience and have formed a company OP-CO; we now specialise in offering tailor made engineering-led solutions to a variety of shipboard issues. This would never have been possible without meeting my co-director at college and the years spent at sea involved with such a broad range of issues.

I strongly believe that life at sea has so many unique offerings. Anyone with a sense of adventure should consider this career path.



*Installing a new propellor on a large superyacht.*

## Leaving a legacy to the SS Freshspring Trust

The Steamship Freshspring Trust has benefitted greatly from the generosity of its members and friends who have left or given money to the Trust.

Legacies provide very necessary financial support in helping the Trust to meet its stated objectives of preserving the past and inspiring knowledge for the future

If you would like to think of giving the SS Freshspring Trust a legacy, it could not be easier: The following codicil can be completed by you, witnessed, and kept with your Will.

### CODICIL

I (full name).....

of (full address).....

.....

declare this to be the (1st/2nd/other.....) codicil to my Will dated.....

I give, free of Inheritance Tax, the sum of

£..... (.....pounds)

to the SS Freshspring Trust of Little Cleave, Lower Cleave, Northam, Devon EX39 2RH (Registered Charity Number 1151907), absolutely for its general charitable purposes.

In all other respects I confirm my said Will.

Testator's signature:.....Date.....

Signed in the presence of:

First witness

Second Witness

Signature

Signature

.....  
Full name

.....  
Full name

.....  
Address

.....  
Address

.....  
Occupation

.....  
Occupation

Note: The witnesses must not be your executor, your executor's spouse or a beneficiary of your Will.



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