MARITIME HERITAGE ASSOCIATION JOURNAL

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C/o: The Secretary (Marcia Van Zeller),
59A Waneroo Road
Tuart Hill W.A. 6157

Editor: Peter Worsley. 12 Cleopatra Drive, Mandurah, W.A. 6210
Email: mha.editor@gmail.com

The gun deck on HMS Victory
This deck has no bulkheads across it, but runs uninterrupted from end to end.

See article page 12

Photo courtesy Royal Navy

The Maritime Heritage Association Journal is the official newsletter of the Maritime Heritage Association of Western Australia, Incorporated.

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The Editor, 12 Cleopatra Drive, MANDURAH, Western Australia, 6210. mha.editor@gmail.com

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EDITORIAL

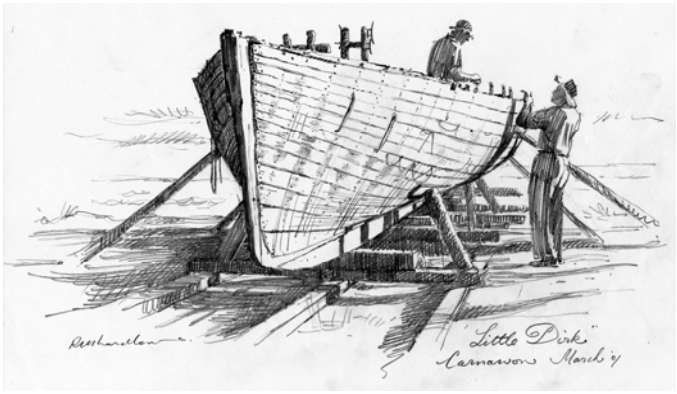
At the AGM held on 29 March the President, Vice-President, Committee Members, Treasurer and Editor were re-elected unopposed, as was the Auditor, Jim Hunter.

The publishing of *Albany and the Whalers* was discussed at length, and hopefully this booklet should be printed fairly soon. It is proposed that this will be the first of a series of approximately A5 size booklets on maritime subjects that the MHA will publish.

A few of our members attended the Australian Wooden Boat Festival held in Hobart earlier this year and one of our esteemed Darwin members, Tony Duvollet, has written an article on his work there, together with some photos. See pages 8–9. Thankyou Tony for your contributions to this journal. Keep them coming!

By the time you read this, Ross and Barbara Shardlow should be back from their long sojourn in Guam. We hope they had fun, and we look forward to their future contributions (both literary and artistic).

I am sure that there are many more stories to be told, so how about a few more of you who have not yet contributed putting fingers to keyboards? As editor I am dependant on a constant flow of new stories.



Ross Shardlow's drawing of MHA members measuring Little Dirk *at Carnarvon. This vessel is now displayed close to* Albatross. *See end of President's Report—page 4.*

Did You Know?

In 2006 the aircraft carrier USS *Oriskany* was sunk off the west coast of Florida to become the world's largest artificial reef. Using 22 charges the demolition experts sank the ship in 65 metres of water. US$13,000,000 had been spent on the preparation and scuttling of the *Oriskany*, including the removal of toxic materials, removal of internal obstructions to divers, sealing some areas dangerous to divers, and the removal of masts and aerials which could snag nets.

The 40,600 ton (full load) USS *Oriskany* was launched on 13 October 1945. She saw action in both Korea and Vietnam, and was involved in the Cuban missile crisis of 1962. The ship had a length of 899 ft, a beam of 106.5 ft, an extreme width of flight deck of 195 ft and a draught of 31 ft. The thickness of steel on the sides and hangar deck of the ship is between 2½ and 4 inches with a 1½ inch thick flight deck, so it should last a good few years before rusting away.

MARITIME HERITAGE ASSOCIATION INC.

PRESIDENT'S ANNUAL REPORT, 2015.

The Maritime Heritage Association was launched on 30th March 1990, twenty-five years ago tomorrow, having been first formed in November 1989.

A significant change to the direction and focus of the MHA was announced last year, and I am pleased to report that we have made real and solid progress in the shift to emphasis on promoting maritime heritage through research and publication.

Once again, much of what the Association has achieved has been achieved while I've been overseas, though the committee has had to cope with my meddling and disruption at several meetings. I commend their patience and persistence.

I have represented the Association at international maritime history and archaeology conferences in the Sultanate of Oman and Thailand.

An important, even essential, advance in our positioning the Association as a major player in the publication of maritime history and heritage has been achieved in compiling an MHA style manual. This might sound somewhat overly focused on dull or nit-picking detail, but it is a necessary element of producing really high-quality publications.

In our collaboration with Hesperian Press, the publication of Rod Dickson's multi-volume *Maritime Matters* has continued this year and his autobiographical *Mother's Grey Hair* was launched at our end of year celebrations.

Also at that end of year publication, the limited edition book of Brian Lemon's ship and boat models, produced by David Nicolson with his arrestingly attractive white-etched photographs was launched. A special presentation edition was presented to Brian from the MHA, and a slightly different personalized edition was presented to Barry Hicks. I would also like to note, although it is not strictly an MHA accomplishment, Brian's winning of every prize for ship and boat modelling at the WA Scale Model Expo last year.

We have collaborated with the Australasian Institute of Maritime Archaeology and the Maritime Archaeology Department of the Western Australian Museum in applying for a Lotteries grant to fund the publication of the third volume of Peter and Jill Worsley's splendidly produced and meticulously researched series recording the maritime heritage of Western Australian coastal regions. The Association has agreed to provide funds to make up a shortfall in the Lotteries grant. The volume, to be published very soon, is entitled *Green Sea and White Horses*, and focuses on the south coast.

Another publication scheduled to appear very soon in all good bookshops, is the MHA's new and improved edition of *Albany and the Whalers* by Les Johnson, edited by Peter Worsley and layout design by Julie Taylor. It will be a thing of rare beauty.

A publication which is not close to being launched, is Bill Leonard's drawings, photographs and histories of Historic Fishing Vessels of Western Australia. It will be a wonderful publication when it is eventually published. The MHA is keen to be involved but in negotiations with the Western Australian Museum, Bill's employer, we were unable to reach agreement about how our contribution might be acknowledged and might return some benefit to the Association. We did, however, succeed in reducing by more than 50% the production costs which the Museum require to be covered before publication can proceed.

The MHA Journal is the publication that consistently bestows on the Association prestige and well-justified pride. Many thanks to Julie Taylor and Par Excellence who print and bind the *Journal,* and to our indefatigable editor Peter Worsley. Peter unfailingly produces an attractive, meticulously proofed and always interesting Journal, now with full-colour illustrations on back and front cover.

The MHA Journal is now fully archived on line as searchable portable download files (.pdf). Thanks to Julie Taylor and Bob Johnson who have worked long and hard to prepare back numbers for up loading to the web-site. This outstanding research resource enhances the renown of the Association as Google and other search engines make the *Journal* known to researchers around the world. A number of requests for further information have come from around the world. One of our Northern Territory members wrote: *I have started reading the MHA archives – they're very distracting, It's a fantastic resource – the MHA has done very well; very impressive.*

Bob has continued to serve us as a very expert web-master in addition to executing his duties as treasurer. The MHA web-site, which is now a fairly large archive, is hosted at no cost to the Association thanks to the generosity of Lloyd Johnson – many thanks Lloyd.

The official opening of the One-Mile Interpretive Centre of the Carnarvon Heritage Group was held on 7th May last year. The 32ft naval cutter *Albatross* which we have donated to them is a central display along with the lifeboat from the WWII German raider *Kormoran*.

We note the passing of Leigh Smith and remember with gratitude Leigh's years of service on the committee, particularly his excellent work as secretary.

MHA committee meetings have been hosted by Murray and Shelley Kornweibel of Otway Street and Ross and Barbara Shardlow in the refurbished Stateroom. Many thanks.

Our thanks to Barry and Doris Hicks for hosting the end of year gathering at their splendid museum, and to Brian and Irene Lemon who, as always, assisted the Hicks with the arrangements.

Thanks to Peter and Jill for hosting this AGM in the penthouse of their Peel Inlet estate.

And thanks to all of you on the committee.

Nick Burningham

Jarrah for Ship Building

The first part of a report from 1871 on the suitability of jarrah for ship building.

On 22 November 1870 the Colonial Secretary requested that James Manning, Clerk of Works, 'report on the qualities of Jarrah Timber for ship building, with a view of removing as far as practicable the obstacles existing in consequence of its not being recognised at Lloyd's as a timber for ship building purposes' (*Inquirer*, 13 September 1871: 3c-f). From his own experience and after consulting the leading shipwrights in Perth and Fremantle, Manning reported back in September the following year. His report was endorsed by the Harbour Master, Captain James Nias Croke. It was a lengthy report:

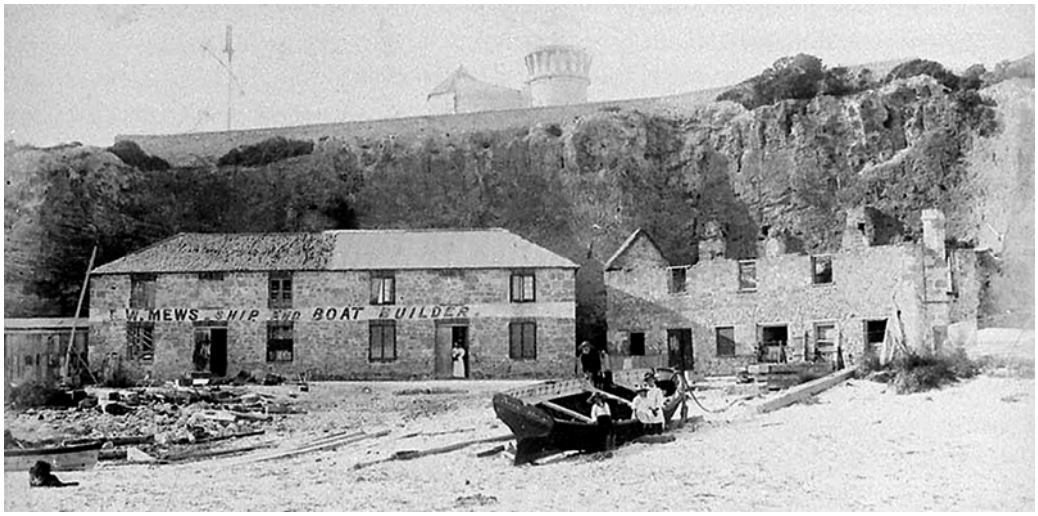
> *I have the honor to state that, from over twenty years' experience with Jarrah, in which time many thousand loads have been used under my direction in Buildings, Sea Jetties, Bridges, and Furniture, in fact in every way in which Timber is required in the ordinary wants of life, Jarrah is available, and has been used. It is strong and dense; its specific gravity being 1.12, but from concurrent testimony of ship-builders it bends freely, and is not deteriorated to any extent by iron fastenings; it does not destroy iron when used in solid timber, and in the repair of old vessels new fastening of iron, a very little larger than the former ones are put into the same holes. The tree being evergreen, there is some difficulty in determining the proper time for felling; as the period of the least flow of the sap is of short duration, it is important that the timber should then be felled. A peculiarity of this wood is, that it is defective at heart, and the older the tree is prior to felling, the greater the extent of decay in the centre. The sound timber resists the attack of the "Toredo Navalis" and white ant. On analysis by Professor Able, it was found to contain a pungent acid that was destructive to life; this principle, however, was not found to be present in the unsound portions. Great care is therefore necessary in preparing the wood for use by flitching the log, so as to cut all the defective portions of the heart out, and using only the perfectly sound timber…It is remarkably free from the action of nearly all the ordinary forms of decay incidental to woods in contact with or buried under ground, under water, as mortices or other joinings; in piles, in sea-jetties and planking of sea-going vessels, without sheathing or other protection, it has proved sound and enduring to an extent which appears to denote exemption from decay, so far as evidence can be derived from observation on timbers exposed for upwards of thirty years. I have recently taken up piles that were driven for a whaling jetty in the year 1834 or 1835, making a period of at least thirty-five years; the timber is small but perfectly sound and free from insects although the place is swarming with "Toredo". My experience here, as also observations on works executed prior to my arrival in the colony, goes to prove that, if the timber is sound in the first place, there is no fear of decay setting in afterwards, or of it being destroyed by insects; but I would strongly urge the ne-*

cessity of cutting out all shakes, heart-lags, and defective portions before using. Very much has been said about the Jarrah being split when exported to India or to England in log. It must be borne in mind that its density renders seasoning very slow, and that the inner portions of the larger trees are in a state of decay even while the outer portions are in full vigor. A tree under these conditions, the inner portion comparatively dry, and the outer full of sap, shipped at once to a hot climate like that of India, or such a variable one as that of England, very naturally bursts from unequal shrinkage, being also exposed to very great change of temperature. To obviate this peculiarity and apparent defect, let the Jarrah be fallen when the sap is at the lowest ebb, and flitched, as previously suggested. For piles, however, it is important that they should be used round, simply barked, for, as previously shewn, the best and strongest is the outer portion of the tree. To square a tree for a pile is simply to destroy so many of its annular rings, and detract from the strength of the piece. Timbers for piles, too, are generally of small dimensions, not exceeding two feet diameter, and consequently comparatively young, and not much decayed at heart; in fact, it is frequently seen that there is scarcely any defect at heart in trees up to that size, yet if they are sawn there will be indication of the heart being shaky, so that too much care cannot be taken in this respect. With reference to the value of the timber for ship building. I have obtained from practical men, who are quite competent to give an opinion on the subject, and I enclose their testimony, which will go farther than anything I might be able to say in this matter. I have also obtained testimonials from men who have been long resident in the colony, and interested, to give a faithful on the subject. The former are:- Messrs Wrightson, Jackson, Lawrence, Mews, Sen., Storey, Mews, Jun., and Chas. Watson, Ship Builders. And the latter:- Mr Thomas and Messrs Bateman, Ship Owners; Mr Trigg, many years Superintendent of Public Works in this colony; Mr Samson, one of the early settlers, and many years a merchant in Perth and Fremantle, and Mr Bickley (an early settler) who was afterwards several years in the employ of the Government of India, and has been some fourteen or fifteen years again in the colony, and has been Lloyd's Agent for fourteen years. Mr Bickley, referring to the tenacity of the Jarrah, considers it deficient in this quality, but from the testimony of Messrs Wrightson, Jackson, and Lawrence, all practical ship-builders of considerable standing, the wood is quite equal to the ordinary ship-building timber, and superior to many of them in this respect. I have ascertained from Mr Bickley that the unsatisfactory result of the Salween*'s cargo consisted principally in the logs splitting and in the timber shrinking and warping. Mr Clifton, who supplied the timber, writes me on the subject, and says: 'The* Salween *called here on her way to Van Diemen's Land, in February 1848, for timber, as per specifications, to be prepared for her on her return. The timber was cut between the middle of February and the end of March, and I perfectly well remember with what facility the bark peeled off, showing the sap to be rising at the time. The fact of the timber being cut under unfavorable circumstances is sufficient to account for its shrinkage, and the other unfavorable characteristics.*

I have, &c.,
James Manning
Clerk of Works.

I concur in the above report; also with the Shipwrights. J.N. Croke, Harbor Master Port of Fremantle, Lieut. R.N.

The various reports sent to James Manning by the shipwrights make interesting reading, and will be given in future editions of the journal.



T.W. Mews Ship and Boat Builder. Fremantle

Photo courtesy Fremantle City Library

The Ditty Bag

An occasional collection of nautical trivia to inform, astound, amuse and inspire.

(The inspiration could take the form of contributions to this page!)

To qualify as a Bristol Channel Pilot during the 19th century, a man was apprenticed on a pilot cutter for five years. He then had to spend no less than 12 months on a deep-water square-rigged vessel, and then a steamship for the same period. He also had to gain at least a 1st Officer's certificate, but preferably a Master's. Having got the qualifications he could wait for up to 10 years for a vacancy to occur in the ranks of the pilots.

Chain cable for anchors is said to have been first introduced in 1811, superseding the bulky, awkward and destructible hempen 'cable' which was used prior to then. By 1850, chain was also being used in the more important parts of the running rigging, such as the topsail halyards and sheets, where the strains were most severe.

When it is evening, ye say, it will be fair weather; for the sky is red.
And in the morning, it will be foul weather today; for the sky is red and lowering.

Matthew 16: 2–3

On 6 December 1917 the Marseilles-registered munitions ship *Mont Blanc* was steaming into Halifax Harbour when it collided with the outward bound ship *Imo*. Neither ship suffered severe damage, but the sparks set off the cargo of ammunition and explosives on board the *Mont Blanc*. The resulting explosion was the greatest man–made explosion until the atom bomb at Hiroshima.

The largest battleship ever built was the Japanese *Yamato* at 65,000 tons. It had nine 18.1 inch guns, each capable of firing a 3,200 lb (1.43 ton) shell a distance of 27 miles.

On a clear day the Canary Islands can be seen from the African mainland

The man who would be fully employed should procure a ship or a woman, for no two things produce more trouble.

Plautus, 254–184 BC

About 1,500 shipwrecks have been found in Lake Michigan, USA.

The first four-masted barque appeared in 1878; can any reader name the vessel?

In 1850 Captain George McKenzie of New Glasgow, Nova Scotia, built the 314-ton barque *Koh-i-nor*. It was only 90 days from the date of the laying of the keel through launching, rigging and loading of a cargo of black birch timber, through to the day it sailed for Glasgow, Scotland.

Henry Eckford designed and built sailing ships in New York during the early 19th century. In 1803 he launched the 427-ton ship *Beaver*. So well built was this vessel that after 40 years of service her live-oak frames were used in the construction of another vessel.

A wandering albatross shot of the coast of Chile on 20 December 1847 had a vial tied to its neck in which was a note: *December 8th, 1847. Ship,* Euphrates*, Edwards, 16 months out, 2,300 barrels of oil, 150 of it sperm. I have not seen a whale for 4 months. Lat. 43° South, Long. 140.4° west. Thick fog with rain*. The albatross had covered in a direct line (not counting its wanderings) 3,150 miles in the 12 days.

During the famous voyage of HMS *Beagle* 1831-36 in which Charles Darwin took part, the ship carried 22 chronometers. These were required to enable accurate surveys to be carried out. The present whereabouts of four of these chronometers is known. One of the six personally owned by Captain Fitz Roy was subsequently sold to the Admiralty, and was in use by that organization up to and including World War II. It recently sold for £100,900 in London.

False Muster: The listing of children as crew on a Royal Navy ship so that they could accrue the six years of sea time needed for promotion to Lieutenant before they actually went to sea. Thomas, Lord Cochrane, appeared on the crew lists of *Vesuvius* at age five, *Carolina* at age seven and *Sophie* at age nine. He did not actually go to sea until he was seventeen and a half years old.

QUIZ

Answers to March

1. The highest lighthouse in Australia is on Tasman Island, Bass Strait (elevation 276m). It used to be Deal Island, also in Bass Strait (elevation 305 m), but this light was abandoned in 1992.
2. P.D. stands for Position Doubtful.
3. The 232-ton whaling barque *Cervantes* was wrecked in June 1844.

Quiz

1. What was the name of the vessel that Francisco Pelsaert used to rescue the survivors of from the wreck of the VOC ship *Batavia*?
2. Who was the captain in 1829 of the ship *Rockingham* , after which the coastal town south of Fremantle is named?
3. What is the name of the legendary Flying Dutchman, the ghostly sailor who haunts the waters off the Cape of Good Hope?

Charlotte Padbury

Michael Gregg answers the query posed in December 2014 regarding this barque

Apropos of the question you asked in the MHA Journal of Dec 2014, I can confirm that the *Charlotte Padbury* did indeed survive until 1916. The confusion has arisen due to an accident on 9 April 1903, when she ran aground in the Pentland Firth. Whilst successfully towed off, she then sank before she could be slipped. As this was right on the closing deadline for the 1903–1904 Lloyd's Register, her record was hastily over-stamped as "wrecked 04/03" in that edition. In fact she was refloated and repaired, and returned to service under the same owners, but with her name now shortened to just *Charlotte*, leading to her assumed loss by many commentators.

Incidentally, there is a bit of a murky question mark over her ownership between 1888 (when her registry was transferred to London) and 1896 when she was sold to Norway. Allegedly she was sold to her master, Captain Barber, in 1888 but she continued to operate as before for Walter Padbury, under the management of his London agent, Frederick Edelston.

Australian Wooden Boat Festival, Hobart 2015

Darwin MHA member Tony Duvollet writes of his work at the above festival.

Billed as one of the largest festivals of its type in the World, the 2015 Australian Wooden Boat Festival at Hobart certainly deserves the epithet. Covering 1.5 square kilometres the four day event in held Sullivans Cove stretched from Macquarie Wharf through to Princes Wharf taking in Victoria Dock, Constitution Dock, Kings Pier Marina and Watermans Dock. Berthing some 575 wooden boats, three square riggers, numerous gaff-rigged schooners, ketches, yawls, cutters and sloops, a steam launch and dinghies, old and new, some were traditionally-built clinker and some carvel, others were built using more modern methods such as double diagonal and strip planking. But all built with the same attention and care and with the boatbuilders' satisfaction of creating an item that is so pleasing to the eye. Most of the vessels are in immaculate condition, whilst a few are in an obvious state of restoration.

Shore-based exhibits included displays of vintage outboard and inboard engines, some working, some forever silent; a collection of polished brass, bronze, and copper fittings as well as traditional boatbuilding tools. Some of the latter I was using in the Shipwrights Shed, conveniently located just in front of the Drunken Admiral Pub, as I was a volunteer demonstrating the ancient art of traditionally caulking a carvel planked boat. Next to me was Mike spinning spools of cotton threads, on a home-made spinning jenny, into the balls of caulking cotton that I would then 'make and set' into the seams of a planked demonstration board. On my other side was a couple from Queensland making rope fenders, decorative but functional mats, monkeys fists, etc., using natural fibre ropes. Nearby was Pete, a young but enthusiastic boatbuilder just out of his apprenticeship. His passion for timber was so obvious as he lovingly used wooden planes and spokeshaves to carefully craft pairs of oars. Behind Pete was Jeff demonstrating woodturning on a unique foot–powered treadle lathe built entirely of bush timber (and a bit of string!). He would eight–side the timber using a draw knife before turning it onto a chair or table leg. Just outside the shed door was Bill the blacksmith making fancy wrought iron hooks and eye bolts. All six displays drew consistent crowds over the four days...but wait, suddenly the shed empties, for outside there is excitement! A six-team bullock dray (in the middle of the city?) has just arrived carrying a number of logs which were unloaded into the yard, next to the Shipwrights Shed, where they were split, squared, then shaped into posts, rails and slip rails using splitting wedges, maul, two-handed axe, broad axe, cross-cut saw and adze. The next morning the bullock team returned, the worked timber was then loaded back on the dray, transported to the ketch *Storm Bay* at the Victoria Dock where the cargo was carefully stowed for the voyage down the River Derwent, across Storm Bay clearing Cape Raoul and entered Port Arthur to unload her cargo of timber fencing materials for the new yards being built at the historic convict prison there.

With the bullock dray and the ketch both now out of sight finally attention was drawn back to the stars of the show...us in the Shipwrights Shed! I don't think any of us expected the amount of interest and enthusiasm shown by our visitors. Surprised at the number of people who wanted to feel and smell the oakum after I told them it was hemp! (tarred, of course) Both Jeff the wood

turner and myself encouraged people to have a go. It was inspirational to watch two women doing an excellent job...um, not as good as me, of course! And I was so impressed by the determination of two seven-year old boys, who could barely lift the mallet, let alone swing it, that I left their efforts on the board for the rest of the festival.

Well, the festival is long over but I give thanks to the dedication of the organisers, the volunteers and the enthusiasm of the boat owners. I feel sure that the next boatfest in 2017 will be even bigger and better. My first visit to Hobart and certainly not my last...but, coming from Darwin, I think I might have to wait for Global Warming to kick in first!

Tony Duvollet,
Ketch *Arkenstone*,
Darwin. NT.

Footnote: Both the sailing ship *James Craig* and bark *Endeavour* were to be star attractions, but were rebuffed by 40 knot head winds and 7 metre seas. *Endeavour* damaged a sprit and also had a passenger medi-vaced out at sea. *Endeavour* eventually arrived in Hobart two weeks later and I was a volunteer guide for four days. A very satisfying experience.

The Sinking of the Submarine *Thetis*

By Nilufer Atik.

It was one of the worst ever sea disasters in naval history – a maiden voyage which should have gone smoothly, yet ended in terrible tragedy. The year was 1939 and the ill-fated vessel, a 270-foot Royal Navy submarine called HMS *Thetis*.

The boat had been built by the Cammell Laird shipping company in Merseyside, England, and was first launched on 29 June 1938. But in a trial run the following April, it was found to have a technical fault – the forward hydroplanes jammed at hard dive meaning the submarine was not yet safe to dive. Returned to the dock for repair work, it was ready for another trial a few weeks later, before which the submarine's torpedo tubes had been given one last coat of paint. A minor detail, you may think, but this small alteration had catastrophic consequences. The employee who carried out the work accidentally blocked a tiny test-cock hole with the enamel in the fifth torpedo tube. It was this error that eventually caused the submarine to sink, killing 99 people on board.

When the *Thetis* left Cammell Laird in Birkenhead, Merseyside on that fateful day of 1 June 1939, she was carrying 103 people – 53 sailors, 26 Cammell Laird employees, nine dockyard managers and fitters, nine Royal Navy officers, four Vickers Armstrong employees and two caterers to provide food for those on board. A tug boat led her out to sea, around 13 miles from land.

It was around 2pm when the submarine reached its diving position. Before the dive commenced however, the non-sailors were offered the chance to leave the boat and head back on the tug. But they all chose to stay.

The crew on board the tug watched as the *Thetis* began to descend beneath the waters. When 25 minutes had passed and the submarine hadn't re-surfaced, they became concerned that something had gone wrong. In fact, water was gushing into the boat and sinking it down to the sea bed.

Seawater had burst in after Lieutenant Frederick Woods decided to flood the torpedo tubes to add extra weight and quicken the descent. He'd checked that none of the tubes contained any water and found them empty, so gave the go ahead for their rear doors to be opened so they could be filled with water. Unbeknown to him, the outer door on the fifth tube was actually open to the sea. But because the test-cock on it was blocked by paint, there was no evidence of water.

Although the people on the tug had been alarmed by how quickly the *Thetis* had dived, soon they were nowhere near it and so unable to check whether everything was okay. In a second blunder, they'd drifted half a mile away because their boat wasn't properly anchored. Nearly three hours had passed by the time they managed to get a message to the submarine's headquarters. But because the telegraph boy at the nearest post office was mending a bicycle's puncture, the telegram didn't get to its destination until 6.15pm, leaving the crew on board the *Thetis* desperately fighting for survival.

They sent an S.O.S and could do nothing but wait for help to arrive. It took a staggering 17 hours

before the skipper, Lieutenant Commander Guy Bolus, and the other most senior officer, Captain Harry Oram, thought of a way to rework the air pumps on the boat to try and get it as near the surface as possible. Sixty tons of drinking water and fuel were released, allowing the submarine to rise stern first out of the water for a while. Only four men managed to escape through a hatch that was just 20ft below the waves before it sank down again. They were Captain Oram, Lieutenant Woods himself, Leading Stoker Walter Arnold and a Laird engine fitter called Frank Shaw. The rest of the people on board were left cramped inside the submarine, with a limited amount of air to keep them alive. The men who'd managed to get out begged for rescuers to help the others. But even though there were 26 vessels circling the submarine crammed with Navy personnel, salvage experts and heavy cutting equipment, they were ordered to wait.

After 50 hours trapped inside their airless tomb, all the crew died of carbon dioxide poisoning, killed by the very breath they had exhaled. It was the Royal Navy's worst peacetime submarine disaster.

It was claimed in a document uncovered by author Tony Booth in 2009 (while carrying out research for his book, Thetis *Down: The Slow Death Of A Submarine*) that the rescue was deliberately held off because the Admiralty had decided it was more important to save the vessel than those trapped on board. Rescuers could have reportedly saved all of the remaining 99 men by cutting air holes through the steel when the *Thetis* partly resurfaced, then making a larger hole to get them out. But they didn't want to damage the boat.

Booth found a memo dating back to 1940 at the National Archives in Kew, Surrey, England, signed by Prime Minister Neville Chamberlain's private secretary Sir John Colville, in which Colville commented on why a hole was not cut. He said: "This was not attempted until matters became desperate, in order that the submarine might be as little damaged as possible."

The revelation angered the surviving relatives of those killed in the tragedy, including 80-year-old Barbara Moore from Wirral, Merseyside, whose father, Arthur Robinson, was Cammell Laird's chief engineer and aged 45 when he died. Barbara was just 10. She said: "I am still deeply bitter about how I lost my father and I firmly blame the Navy top brass for his death. Cammell Laird's divers and rescuers were desperate to act but the Navy insisted the submarine had been officially handed over to them. The naval authorities forbade the rescuers from cutting into it."

What made it worse for the loved ones of those killed was that they had to wait four months before they were able to hold funeral services. The bodies of the 99 men who suffocated remained inside *Thetis* for all that time until the submarine was salvaged from the bottom of Liverpool Bay.

Thetis was first beached at Traeth Bychan in Anglesey, Wales, and then towed to nearby Holyhead. Large crowds watched as the horrific business of removing the corpses was carried out. Many of those who died were buried with full naval honours – their coffins draped with the Union Jack. Forty-four of the victims were interred in a mass grave in Holyhead, where a memorial was dedicated to them on November 7 1947. An inquiry was held after the accident, but failed to conclude exactly who was responsible for the tragedy. Since then all submarine torpedo tube doors have been fitted with a special safety clip – it is still called the 'Thetis Clip' to this day.

HMS *Victory*

The first part of Geoff Vickridge's articles on John Pollard appeared in the September 2014 Journal, which had a cover illustration of Nelson falling on the deck of HMS *Victory*. For those interested in trivia, here is some information on this famous ship.

Rigging: 22,880 fathoms (26 miles) of hemp rope used in the standing and running rigging.

Blocks: 768 – in the rigging, ranging from 6" long to 26" long.
628 – in working the guns.

Sail area: A full suit of 37 sails measures 6,510 square yards (including studding sails).

Armament (at Trafalgar):
30 x 32 pdr
28 x 24 pdr
30 x long 12 pdr
12 x short 12 pdr
2 x medium 12 pdr
2 x 68 pdr carronade
1 x 18 pdr carronade (used in launch)

Weight of guns:

32 pdr	55 cwt (2.75 tons)
24 pdr	50 cwt (2.5 tons)
12 pdr long	34 cwt (1.7 tons)
12 pdr medium	32 cwt (1.6 tons)
12 pdr short	31 cwt (1.4 tons)
68 pdr carronade	35 cwt (1.75 tons)
18 pdr carronade	10 cwt (0.5 tons)

Range of guns:

32 pdr	400–2640 yards
24 pdr	400–1980 yards
12 pdr	375–1320 yards
68 pdr	450–1280 yards
18 pdr	270–1000 yards

For standard guns, maximum range is given with guns elevated at 10º, an angle rarely used at sea. With carronades, maximum range is given with guns elevated at 5º, an angle that could be set at sea.

Muzzle velocity: 32-pdr—approximately 1,600 ft/second.

Gunpowder used to fire a 24 lb shot:

Extreme range	half the weight of the shot.
Point blank	quarter the weight of the shot.
Reduced range	one fifth the weight of the shot.

At Trafalgar *Victory* used 7.625 tons of gunpowder to fire a total of 29.4 tons of shot.

Small arms & weapons:
142 muskets
142 bayonets
187 cutlasses
100 pikes
70 pairs of pistols
200 grenades
1 halberd
1 drum

Anchors: 7 anchors weighing from 84 cwt (4.2 tons) to 5 cwt (0.25 tons), with 15 x 24" hemp cables.

Boats:
34 ft launch
32 ft barge
2 x 30 ft cutters
28 ft pinnace
18 ft cutter

Stores & Provisions:
35 tons gunpowder
120 tons shot
50 tons coal
30 tons beef & pork
55 tons bread/biscuits & flour
2 tons butter
15 tons peas
50 tons beer
300 tons water
20 tons, sand, pitch, tar, etc.

Steering wheel: 5 ft 9½ in diameter.

Pumps:
4 chain
2 elm-tree

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Whaling

Most members will have read about 19th century whaling from open whaleboats. But what happened after the whale was towed, often for many miles, back to the whale-ship? This is an extract from the 1928 book *The American Whaleman*, and deals with the trying out of sperm whales.

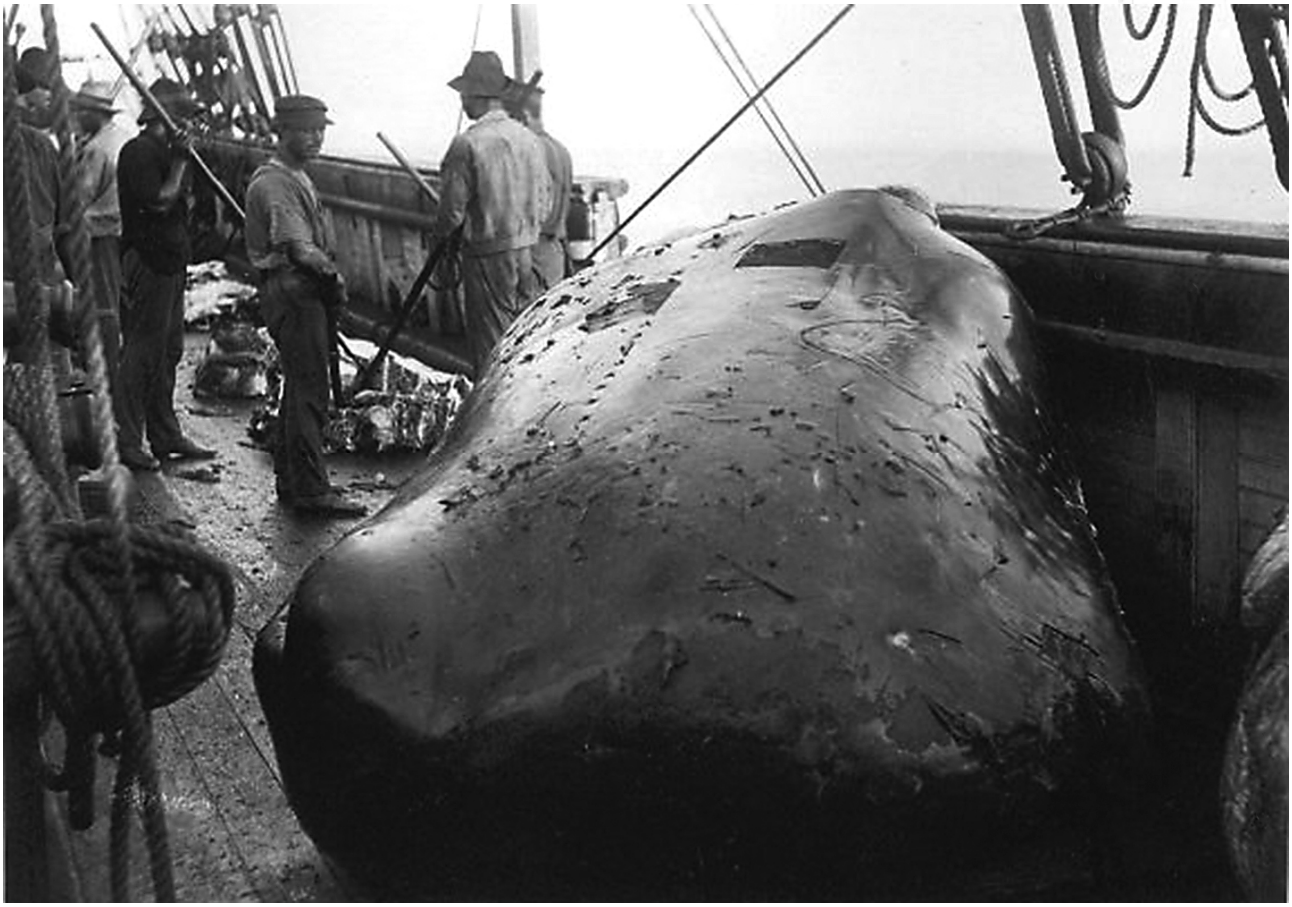
Even after reaching the end of the weary pull it was necessary to attach the valuable prize securely to the vessel before rest period could be allowed. This operation was by no means an easy one, especially when carried out after dark, as was often necessary. Two boats, one on each side of the animal, began to row from behind towards the head. Each boat held one end of a light line with a weight attached to the middle, by means of which it was sought to pass the line underneath the great body. Since the flukes, in particular, extended under water for an uncertain distance, it required both judgment and patience to bring about the end desired. Having achieved it, however, the light line was replaced first by a stout rope, then by a hawser, and finally by a heavy iron chain. This last was secured about the whale's "small," or portion of the tail between the body and the expanding flukes and by means of this chain the body was then made fast to the starboard side of the vessel, with the head toward the stern.

With the whale at length firmly secured in this position, preparations were begun at once for the laborious and exacting of stripping off the blubber, known as "cutting-in." Every effort was made to complete this task in the shortest possible time. For not only did the ravages of sharks result in an appreciable loss of blubber, but the weight and size of such a ponderous mass of flesh alongside rendered it difficult to handle the vessel in rough weather, in pursuing other game, in keeping a definite course, and in any emergency. This was especially true when, as sometimes happened, two or more carcasses were alongside at the same time.

The first step was to rig the "cutting-stage" in such a manner that a narrow plank platform, with a railing on the inside, was provided just outside of and several feet above the body of the whale. From this platform the captain and first and second mates, armed with long-handled cutting-spades, began to attack the carcass. The master and first mate usually undertook the task of severing the head, containing the valuable oil and spermaceti of the "case" and "junk," from the remainder of the body, while the second mate began the process of "scarfing," or cutting the blubber crosswise into long strips twelve to eighteen inches wide. These strips were then peeled off and hoisted on deck by turning the body round and round in the water, just as a layer of tape may be stripped from a cane.

While the blubber was being taken on board, it was necessary for one of the boatsteerers to get down on the slippery heaving carcass, which was only partly out of water and covered with oil and blood, in order to adjust the hooks used in hoisting. In the lurching, rolling, tossing motion of a heavy or even moderate sea, and with such an exceedingly treacherous footing, this duty was unpleasant and dangerous in the extreme. In addition to the possibilities of being struck by the swaying iron blubber-hook, of sliding on to one of the mates' keen-edged cutting-spades, of tumbling into the sea on one side and of being drawn between the whale and the ship on the other side, there was the ever-present danger of being torn by the multitudes of sharks attracted by the flesh of a dead cachalot. In recognition of this precarious situation the boatsteerer always had a rope fastened under his arms and a man on deck detailed to pull him out of danger whenever necessary.

When the first strip of blubber was ready for hoisting, the hook was inserted into a hole cut near the fin and the word given to heave away. Through the combined efforts of most of the foremast hands, who were heaving at the windlass, the blubber was peeled off and hoisted many feet into the air by means of a great block and tackle depending from the main-yard. When this strip had reached the utmost length allowed by the height of the block, a second hook was caught near the bottom and the blubber cut with a boarding-knife just above this. The pendent piece of blubber which resulted from this operation, known as the "blanket-piece," many feet long and twelve to eighteen inches in width, was lowered through a hatchway into the blubber-room, where it was immediately cut up into smaller "horse-pieces," about six by twelve to eighteen inches in size. This process of hoisting "blanket-pieces," to be forthwith converted into "horse-pieces" and stored in the blubber-room, was continued until



The whale's head or case on deck

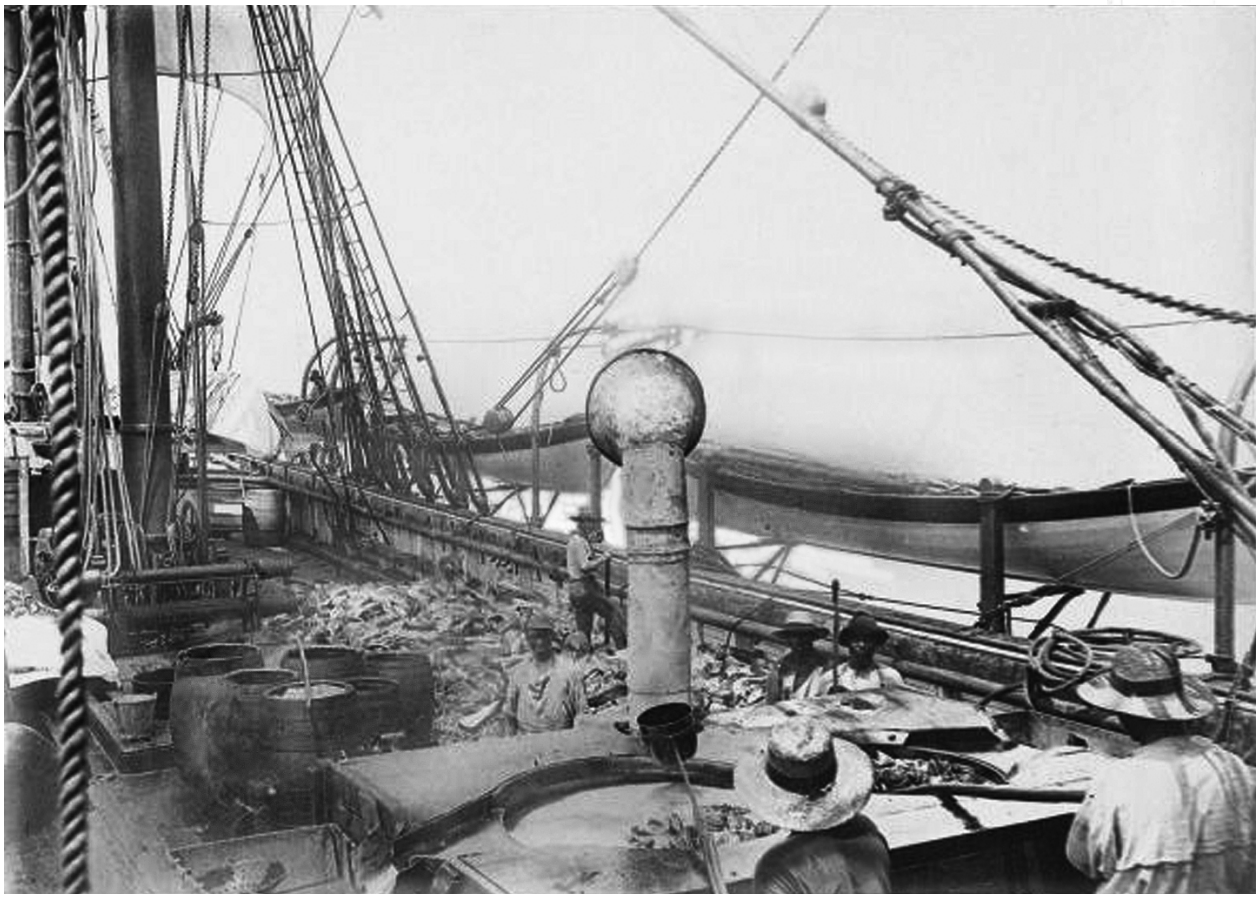
Photo courtesy National Library of Australia

all the available blubber had been stripped from the carcass.

Meanwhile the head was being completely severed from the tinder of the body and divided into three portions – the lower jaw, the "junk," and the "case." The jaw, with its heavy, white bone and huge, glistening teeth, had no commercial value; but both bone and teeth formed the raw material for the numerous objects which resulted from the long hours of "scrimshawing," and therefore an adequate supply was always kept on board. The junk and the case, on the other hand, constituted the most valuable parts of the whole animal. From the junk came spermaceti, a spongy, oily, fatty, inodorous substance used particularly in the manufacture of fine candles and of various ointments and unguents; and from the case came the finest grade of sperm oil in such a pure, liquid state that the large reservoir containing it had only to be bailed out. When all the oil and spermaceti readily procurable had been obtained, the mangled remains of the case and junk, which had been half hoisted on deck, were simply pushed overboard; and then the mutilated body, minus the head and the covering of blubber, was cut adrift to become a magnificent prize for countless sharks and seabirds.

An illuminating account of these cutting-in operations was set down by a contemporary writer who had often participated in such orgies of blood and oil.

> *When the whale has been towed alongside by the boats, it is firmly secured by a large rope attached to the "small" by a running noose. The fluke rope is then made fast on the forecastle, and the flukes are hauled up to the bow, or as near as they will reach, leaving the head pointed aft...To prevent concussion, the whale is always on weather side. The progress of the vessel, which is usually under easy sail during the time of cutting in, keeps the whale from drifting out at right angles from the side; though, in most cases, the head is kept in its appropriate position by a small rope made fast aft.*
>
> *The cutting tackle is attached to a powerful strap, or pendant, passing round the mast in the main-top by two large blocks. There are in fact, two tackles, the falls of which pass round the windlass. To each of these tackles is attached a large blubber hook, which upon being made fast to the blubber, are hauled up by the windlass, one only being in operation at a time, so that when the first strip of blubber, or "blanket-piece," reaches the stationary block on the pendant, the other can be made fast by*



Trying out the blubber

Photo courtesy National Library of Australia

a strap and bolt of wood to a hole cut below the point at which that blanket piece is to be cut off.... The blanket pieces are stripped off in a spiral direction, running down toward the flukes; the whole turning, at every heave of the windlass, till the whole covering of blubber is stripped off to the flukes, which are hoisted on board, and those parts containing oil cut off, and the remainder thrown overboard. The head having in the first place, been cut off and secured to the stern, is now hauled up with the nose down, if too large to be taken on board, and hoisted as far out of the water as may be found convenient, and the liquid spermaceti bailed out with a vessel attached to a long pole, and thus taken in and saved. As there is no little risk attending this mode of getting the spermaceti, and a great deal of waste, the head is always taken on board, when not too large or heavy.

The "case," which is the name given by whalers to the head, sometimes contains from ten to fifteen barrels of oil and spermaceti. A single "blanket piece" not infrequently weighs a ton or upward. In hauling it up by the tackles, it careens the vessel over frequently to an angle of fifteen or twenty degrees, owing to its great weight, combined with that of the whale, the upper surface of which it raises several feet out of the water. When the blanket piece has reached the stationary block in the top, it is cut off by a boat-steerer, who stands by with a boarding-knife, having first, however, been secured: below by the other blubber hook, which is hauled taut to prevent it from breaking away by too sudden a jerk. The upper piece then swings in, and, when it ceases its pendulating motion, is dropped down into the hold or blubber-room, where it is cut up into blocks of a foot and a half or two feet in length, and eight or ten inches in width. These blocks are called "horse-pieces."... The carcass of the whale, when stripped of its blubber, is cast loose, and soon sinks from the want of its buoyant covering.

During these cutting-in operations the work of the entire crew was carried on at a pace and under conditions which would have become intolerable if continued over longer periods. The task in hand was pressed forward unremittingly, allowing only the barest minimum of time for food and sleep.

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Ships of the State Shipping Service

By Jeff Thompson

No. 36 *Irene Greenwood* IMO No. 7906954

The largest vessel to be operated by the State Shipping Service was the *Irene Greenwood***,** chartered to replace the *Kimberley* , then going out of charter. The *Irene Greenwood* was built as the *Stephen Reeckmann* for the Halstead Shipping Corp by VEB Mathias-Thesen-Werft-Wismar, (Yard No 124) East Germany.

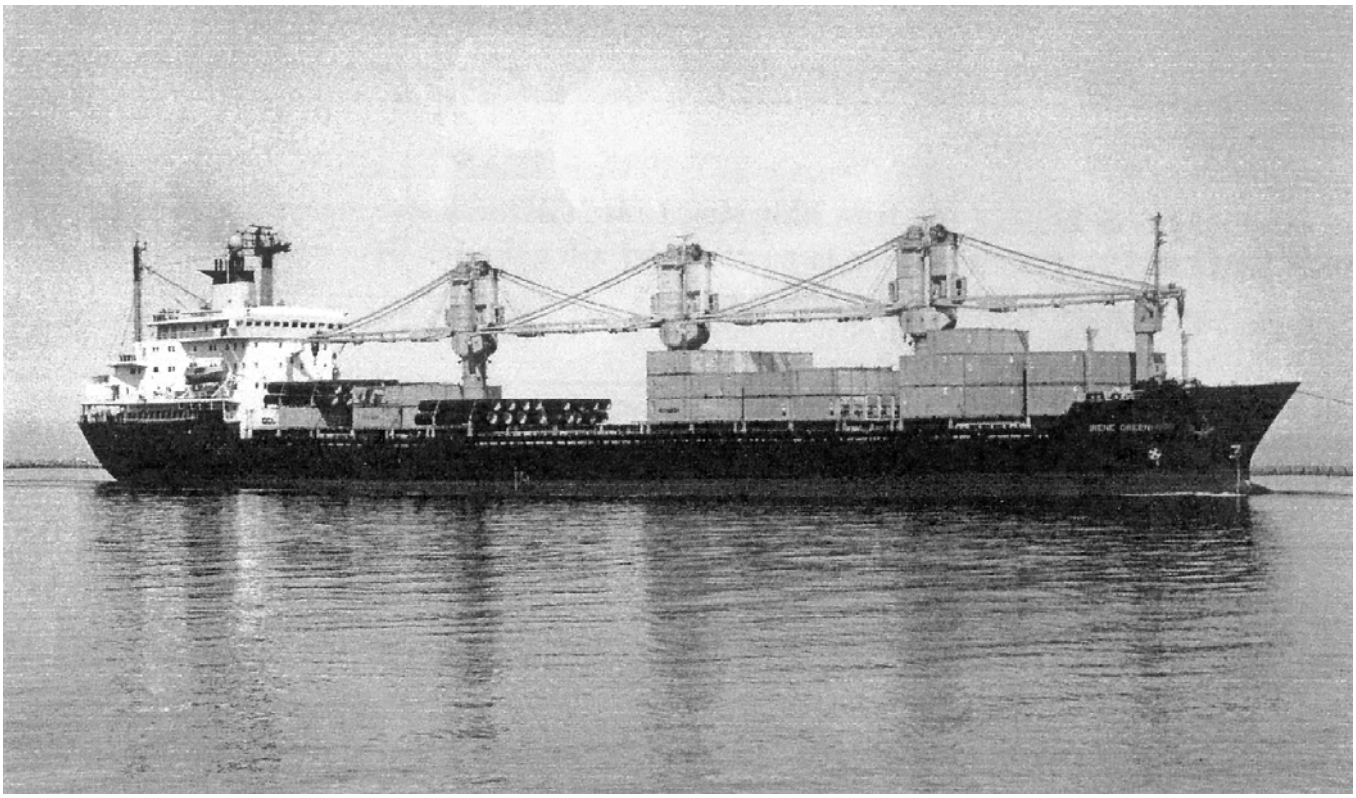
As built she was 13,482 gross registered tons, 21,894 deadweight tons, being 178.2 metres overall length, 22.8 metres breadth with a draught of 10 metres. One MAN K8Z 70/120E diesel of 11,200 bhp with a single screw gave a service speed of 16 knots. Being a fully containerised ship of 863 TUE and being strengthened for navigation in ice.

On 20th December 1983 the vessel was renamed *Irene Greenwood* in Hong Kong after alterations were carried out by Hong Kong United Dockyards to meet the operational requirements of the State Shipping Service. Arrived at Fremantle on 28th March 1984 from Hong Kong on its maiden voyage for the State Shipping Service. This was the first State Shipping Service vessel to be named after a prominent West Australian person.

In 1988 the vessel was purchased by the State Shipping Service. On 24th July 1989 *Irene Greenwood* completed its last voyage for the State Shipping Service.

On 28th July 1989 the vessel was sold to Compania Financiera y Annadora SA , Argentina for around $A7 Million and renamed *Marbonita***,** and left Fremantle under the Liberian flag for Melbourne on 31st July 1989. During 1995 she was sold to Nordic Maritime Ltd, Liberia and renamed *Thorswave***.** In 1996 sold to Panama Shipping Co Ltd, Cyprus and renamed *Stella K* . In 1997 renamed *Stelina K* with the same owners, being renamed *CMBT Esprit* in 1998 by the same owners.

The same owners renamed the ship *Tasman Pioneer* in 2000, *Stelina K* in 2001 , *CMA CGM Tigris* in 2002 and *Stelina K* later in 2002. In 2004 the vessel was sold to Polaris Shipping Ltd, Cyprus and renamed *Dubai Gold***.**



My time on the *Singa Betina*

Part 3 of Ted Whiteaker's article.

Before leaving Darwin, in order to obtain a sailing permit for Indonesian waters, we had to get the required forms from the Indonesian Consulate in Darwin, fill in a mass of details on the vessel and personnel, cough up the prescribed fee, return the forms to the Consulate, and wait for a month or two for the permit to appear from Djakarta - if all went well. We went through the process six months before our departure. At that stage we had no clear idea of where we wanted to go in Indonesia. We took a stab at an end destination in Borneo, and after checking a few charts we named a route for the sailing permit: Darwin-Kupang-Maumere-Benoa-Bawean-Banjarmasin and return to Darwin. The permit was considered an essential document, but the contents could be amended and were generally only loosely consulted by the authorities. As long as there was the right look about the official stamps and signatures on the paperwork, the details were relatively unimportant. The permit eventually arrived and was filed away.

As time went on and *Singa Betina* was readied for departure, our ambitions changed and we decided to head for Kuala Terengganu in Malaysia, the birthplace of the boat. Amendments to the sail permit were overlooked, and our existential optimism drove us on into the hands of the Harbourmaster at Tanjung Pinang.

We anchored off the jetty in the late afternoon, and went ashore the next morning to do the official shuffle. The Immigration, Customs and Quarantine people were fine, but the Harbourmaster made it quite clear that our sailing permit stated that we would exit Indonesia to Darwin, and he would not clear us for our onward passage to Singapore. When I asked what he would require to give a clearance for Singapore, he stated that we had to return to Jakarta and obtain a new sailing permit from there. I apologised, explained about the long process to get the permit in the first place, and our change of plans, and pointed out that the season was changing and the winds would be against us if we had to go to Jakarta, which was around 500nm away. We had no money, and needed to get to Singapore where we expected to have funds in the mail. The Harbourmaster was unmoved, and took me to the end

Singa Betina *sailing in Darwin Harbour*

of the jetty, indicating that I should bring *Singa Betina* alongside so they could keep us under close surveillance. I had noticed during the previous night that the area dried out on the low tide, and asked him if there was enough water there to float the boat. He dismissed my question, insisting that I come alongside. I pointed out that there were many ferries coming in and out, with many, many people, and we didn't have a WC on board. If we had to go to the toilet over the side of the boat, it would not look very nice with all those people about. He threw up his hands and stormed off to arrange for an old rust-bucket of a patrol boat to anchor close by, with a crew of shady characters to observe our ablutions through binoculars for the remainder of our stay.

The next day, and daily thereafter, I had to front up at the Harbourmaster's Office while various groups of officials discussed our case. The meetings did not improve our prospects. It seemed that the Navy was critically important to any approval process, and someone suggested that I approach Naval Intelligence HQ, a little way out of town, to see if they would oblige with permission to leave the port for Singapore. We were fortunate to deal with a Major Andris, who had pleasant memories of an earlier naval training visit to Australia, and listened carefully to our story. He said that he personally couldn't see any reason for stopping us, but he would confer with Jakarta for official confirmation. This might take a couple of days.

In view of the uncertainty of the future, two of the crew left by ferry for Singapore. Jude, Peter Kirkham and I were left on board. One afternoon I got chatting with a well-dressed young fellow on the jetty who said he was a journalist. He was more likely an agent checking us out, but either way I felt I had nothing to hide. He had heard something about our situation, and wanted to talk about it. I invited him out to the boat and we talked over a game of chess. His advice was to pay the Harbourmaster a bribe. My cultural conditioning had no provision for bribes, and I said that I wouldn't know how to go about it. He said to place the money in between the ship's papers, and just hand them to the Harbourmaster. When I told him we only had about 30,000 rupiah all up (about AUD $35, which I would have thought insulting for a bribe for someone at Harbourmaster level), he asked how much it was costing us to live each day and how long we expected to be there. The economics of our survival were very shaky, and I understood his point very keenly. I decided to give it a punt and psyched myself up to offering 20,000 rupiah.

The next day I fronted up to the Harbourmaster with my papers in hand sandwiching a 20,000-rupiah note. As I entered the building, the Harbourmaster immediately appeared, took me by the elbow, and ushered me into an office that seemed packed with officials in all manner of uniforms and peaked hats. The Harbourmaster took his seat at his desk and gestured for my papers. With a sense of rising dread at the gravity of the surrounding audience, I fumbled as I passed the papers over, and the 20,000-rupiah note wafted out like a falling leaf on a long, slow journey to the floor. There was a sudden moment of silence as the assembly processed the vision and I scrabbled about trying to catch the wafting note, and after a marked pause of acute personal embarrassment the meeting continued, to finally end inconclusively with no change to our status. On a positive note, we still had the 20,000 rupiah with which to face our uncertain future.

After a couple of days, I got a message asking me to see Major Andris at Naval Intelligence. He told us that as far as the Navy was concerned, it was now officially confirmed that we were free to go. The Harbourmaster was purportedly aware of this. I thanked the Major heartily and headed for the Harbourmaster. He was in a foul mood, and would not stamp our papers because I did not have any documentation from Major Andris. Another day passed with visits to Naval Intelligence and procurement of the requisite document. When I finally fronted the Harbourmaster again, the stamping process took place in a stony silence. We immediately checked out with Immigration next door, and got back on board *Singa Betina* to have the anchor up and engine revving as we waved our last goodbyes to the binocular crew on the patrol boat.

In hindsight, while being a tad bloody-minded, the Harbourmaster had every right to enforce the rules, and we were fortunate to have such a happy ending. The loss of face to the Harbourmaster by being over-ruled by the Navy must have been considerable. While I did not enjoy dealing with him, I can sympathise with his situation. It was not an enjoyable situation for anyone, particularly when there was no end in sight. We were virtually under port arrest for the six days we were there, and I resolved to do a better job with my sailing permits in future.

Filled with renewed optimism, we faded into the night heading up Rhio Strait to Singapore Strait.

My charts for this area were old salvage from somewhere, and the burgeoning plethora of lights and channel markers in the darkness bore little resemblance to the map. There were ships of indeterminately huge proportions criss-crossing in front of us, and we were about to thread our way through the traffic. As a wooden boat with not much radar reflection, I was somewhat concerned about our visibility on the ships' radar screens, but with Tanjung Pinang behind us we were committed and on our way. It did not take long to realise that the ships were aware of us, and occasionally made subtle course adjustments calculated to avoid a collision. We came out of the main stream of traffic and passed through miles of ships on moorings; ships of every description imaginable in the night time landscape, with lighters, tugs and ancillary craft chugging away between.

No observable features could be related to our chart. Singapore had been reclaiming land for many years, and the coastline had altered significantly since publication of our chart decades beforehand. A Singapore Customs Patrol boat came close and shone a whopping great searchlight into our eyes, and stayed on us for five minutes or so before turning off the stabbing light and peeling off into the darkness. We had no idea where we were. We were nominally heading for Finger Pier, where entry formalities were conducted, but with the dodgy chart and restricted night visibility, it was going to be a challenge. A while later a Police Boat came past. I hailed them, and one of them jumped on board. I took him down below to look at the map and tell me where we were. He studied the map from a few angles, stabbed his finger at a nebulous spot and hastily left us to our own devices. We pottered on uncertainly for a while, and then got as close in to the shore as depth would allow, and anchored for the remainder of the night, wondering what maritime rules we were breaking by being there.

No one harassed us, and a pick-up in the volume of small boat traffic at dawn woke us up. We gave up on Finger Pier and headed round the eastern end of Singapore Island into Johore Strait and an anchorage at Changi. Now, at least, we knew where we were.

We spent two weeks idling in Singapore before resuming our journey. On 4th November 1981, we left for Pulau Tioman, a volcanic outcrop off the east coast of Malaysia. Approaching the southern end of the island, we came to anchor at Kampong Mukut, a tidy village at the edge of jungle stretching down to the beach. The rainy season looked as if it was setting in, with squalls about, and there were little watercourses and babbling brooks in the steep and rocky surrounds. The salt water was stunningly clear and there were heaps of fish. There were no officials to deal with, and we spent two very pleasant days soaking up the ambience. While there, we scrubbed the bottom of the boat, and scraped off billions of tiny barnacles that had proliferated during our stay in Singapore. When we set off again on the final leg to Kuala Terengganu, our speed under way picked up noticeably with the cleaner hull.

After two days of variable winds to 12 knots from the northwest to northeast, the breeze picked up in the late afternoon to a consistent 15-20 knots from the north. We motored into it, copping it on the nose. With a strong current running against us, and a short, steep chop that made conditions rather unpleasant, a fuel line sprung a leak. This was quickly fixed with spare tubing, and we found anchorage in the lee of Tanjung Labohan in reasonable shelter around 9:00 pm, to discover the generator-mounting bracket on the engine was cracking and needed welding. The following morning I spoke to some passing fishermen who said that there were no welding facilities available nearby, and suggested Dungun, a fishing port some 20nm further on, as a place to get the repair done. We covered the distance without the mounting bracket failing completely, and crossed the bar into the shelter of Sungai Udang ('Prawn River') late in the afternoon.

Next morning a local boatyard obligingly welded up the bracket, and we crossed the bar again on the high tide late in the afternoon, motoring into the wind for Pulau Kapas, a distance of 30 miles. We anchored after midnight in the lee of the island, and covered the remaining 12 miles to Kuala Terengganu the following morning. The wind was a light west-nor' westerly, but the prevailing swell from the South China Sea created a crashing surf over the entrance bar. There were no channel markers that we could see, so we did a few wide orbits while we thought about the situation. A Customs boat passed us and headed in, so we followed him and after a lot of steep pitching *SINGA BETINA* was finally in calm river water; back in the womb, so to speak. It was 12th November 1981. Henri Bourdens had launched *SINGA BETINA* here in July 1966.

To be continued...

Perahu secoci on the beach near Kuala Terengganu

Maritime Heritage Association Inc.
PO Box 1080, Guilderton, Western Australia, 6041.

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