

MARITIME HERITAGE ASSOCIATION JOURNAL

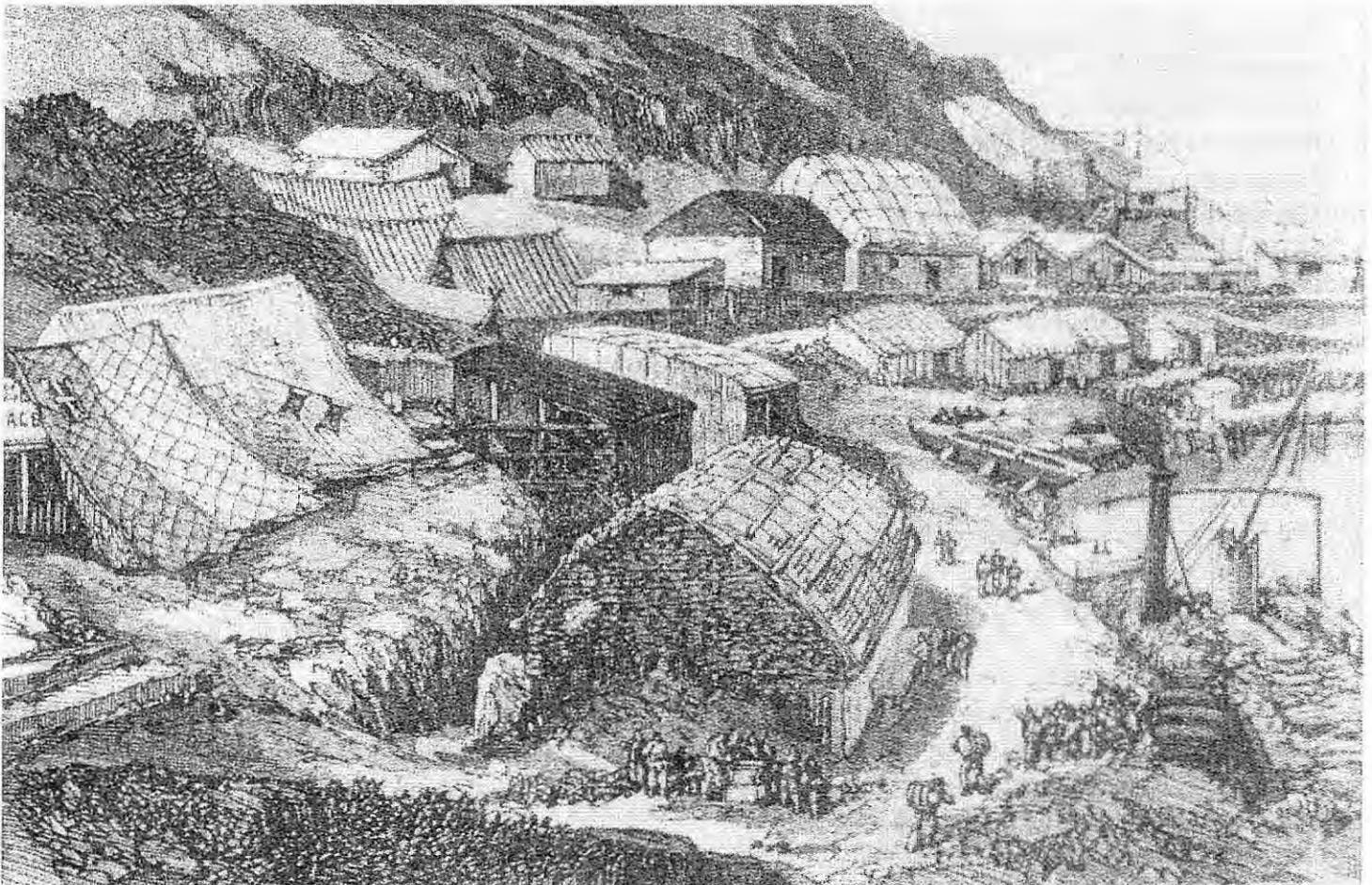
Volume 13, No. 4 . December, 2002

*A quarterly publication of the
Maritime Heritage Association, Inc.*

**C/o: 12 Cleopatra Drive,
Coodanup,
W.A. 6210.**



Editor: Peter Worsley. 12 Cleopatra Drive, Coodanup, 6210.



Part of the camp set up on St. Paul Island after the wreck of HMS Magaera in 1871. The crew were initially taken to Albany on King George's Sound when rescued.

See article on page 5.



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

All of the Association's incoming journals, newsletters, etc. are now archived with Ray Miller who may be contacted on 9337 2614, and are available to members on loan. Please note that to access the videos, journals, library books, etc it is necessary to phone ahead.

(If you have an unwanted collection of magazines of a maritime nature, then perhaps its time to let others enjoy reading it. Contact the Association; we may be interested in archiving the collection.)

Material for publishing or advertising should be directed, preferably typed or on disk, to:
The Editor, 12 Cleopatra Drive, COODANUP, Western Australia, 6210.

Except where shown to be copyright, material published in this Journal may be freely reprinted for non-profit purposes provided suitable acknowledgment is made of its source.

EDITORIAL

The end of another year. It has been an eventful one for me. I spent six very interesting weeks in Thailand, China and Vietnam, including a bit of fairly hard trekking (well, hard for someone my age!). This was a trip that I thoroughly enjoyed. I saw little in the way of maritime matters but noted that in north Vietnam some of the small boats used both on the rivers and close to the coast are made of woven bamboo. They are made just like a shallow woven basket then coated with tar. Light in weight and seemed to be eminently practical.

I have been busy on other fronts also. Jill and I are doing research at the Fremantle Maritime Museum for a book on shipwrecks that the Museum will arrange to have published. It will cover the wrecks on the mainland between the Moore and Murchison Rivers and will complement the book of shipwrecks in the Perth area by Sarah Kenderdine.

The basis for the book is research on shipwrecks along part of that coast carried out over twenty years ago by David Totty.

In this edition there are two replies to queries raised in the last journal. Readers are encouraged to send in questions they may have or reply to any queries others may voice. Participation makes the journal more informative and more interesting. So get involved!!

For some months now the Fremantle Maritime Museum has been training Maritime Archaeology students in the practical side of the discipline. The students do part of the course at James Cook University in Townsville and part in Fremantle. This post-graduate course has been substantially re-structured since Jill did it twenty years ago. I wish them good luck in their studies and in their future employment.

The committee is investigating setting up a web page for the Maritime Heritage Association. Progress has been made and can be viewed at <http://www.mhawa.tk/> This is not the final product but will give people an idea of what will eventually be available for anybody to access. In this way we hope to interest a wider public in our association and its aims.



**A Happy Christmas
and
A safe, healthy and
prosperous
New Year**



Presidential Tidings

Tidings: from the Old English Tidung meaning news and information. (Ed.)

S.S. NORTHWEST STORMPETREL,
At sea, 7 / 11 / 2002.

The Presidents Report from Yonder.

Firstly, A MERRY CHRISTMAS AND A
HAPPY AND PROSPEROUS NEW
YEAR TO ALL.

A special thanks to the committee members who have put in time and energy throughout the year to enhance our reputation as upholders of W.A.'s Maritime History. It is specially pleasing to see our association growing in strength and imparting more of the states maritime history to the general public via our new website and congratulations must go to young Mr Johnson for his efforts in getting the site up and running. How these young people do these things on computers is, I'm afraid, beyond the mental capacities of myself !!!

We, the committee, have had some discussions on which would be the next historic vessel to have the lines taken off and the records preserved for all time and it was becoming a difficult decision to make, when nature lent a hand in the shape of a strong gale that struck the Perth metropolitan area. While out riding my bicycle

the next afternoon I noticed a yacht washed up and lightly damaged on the foreshore near Canning Bridge. The owner was there putting a patch on the damaged hull and preparing to tow her off the beach. The yacht looked fairly old, to my unprofessional eye, so I spoke to him and he confirmed that the yacht was indeed about sixty years old. I rang Ross Shardlow and Ray Miller, they being more experienced in this field, and we arranged to meet at the South of Perth Yacht Club, where she was on the slips, to evaluate the vessel's worth. After studying her lines and a few quick measurements we agreed that she would be a worthy subject for our next project. What made it even more appealing was the fact that she would be on the hardstanding for some time, undergoing repairs and that there would be no rush to hurry up and finish. Hopefully by now most of the work on her will be done and your esteemed president will be spared the lying on his back for days holding things up !!!

As I will be back at sea for the festive season please spare a thought for the poor bloody seamen, like myself, wandering around on the big blue desert.

Rod Dickson.

The Price of a Pearl.

Rod's latest book has now been published by Hesperian Press. It would be great if someone would send me a review of this book for inclusion in the next journal!!

The editor of the MHA Journal is now on the internet and can be contacted through the e-mail address:-

peterandjill@westnet.com.au

The Ditty Bag

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



Keckling or cackling. In the days of hempen cables, winding old rope about a cable – or the winding of iron chain round it to prevent chafing in the hawseholes.

A Dutch ship, *Maan*, was so unstable that when she fired a salute off Dover in 1598, she capsized and sank.

Cockburn Sound was named by Captain James Stirling in March 1827 in honour of Vice-Admiral Sir George Cockburn G.C.B., Lord Commissioner of the Admiralty.

In saltwater, rowing is when a man is working a pair of oars – one in each hand. When he is working with both hands on one oar it is called pulling.

In freshwater, rowing is when he is working one oar and sculling is when he is working two sculls.

Hovelling. The transport of all manner of necessities out to the ships lying off, namely men, mail, food, ground tackle and general ship's chandelry. This term used in England from the Downs westward.

The Cape Leeuwin Lighthouse was officially dedicated on 10 December 1896 by Sir John Forrest, Premier of Western Australia. It's foundations go down 6.71 metres (22 feet) and its elevation is 56 metres (184 feet) above Mean Tide Level. The white light has a power of 1,000,000 candlepower and a range of 25 nautical miles.

The *Mary Rose*, one of the first purpose built warships, was 35 years old when she sank in 1545. She was rebuilt in 1536 so that her fire-power was increased from 43 heavy guns and 37

lighter weapons to 71 guns and 20 anti-personnel weapons.

Extract from The Naval Chronicle dated 24 September 1799.

24. *Wind S.W. Cloudy...* This morning Mr Whitford, coroner, took an inquest on a poor boy, who was carrying into the dockyard his father's dinner while the bell at the gate was still ringing; the clapper fell off, struck the boy on the head, and fractured his skull in three places. Verdict, accidental death.

The Roman writer Pliny the Elder (23-79AD) recommended sprinkling vinegar as a method of dispelling waterspouts.

During World War II US submarines based in Fremantle sank 409,760 tons of Japanese oil tankers as well as 54 warships of various types. The leading submarines were *USS Rasher* which sank 18 ships totalling 61,494 tons and *USS Flasher* which sank 17½ (sharing one with *USS Crevalle*) for a total of 93,918 tons.

The replica of *Endeavour* rounded Cape Horn on 16 April 2002 during her voyage to Whitby.

The world record for a 24 hour run by a Volvo 60 yacht was set in the recent Volvo Round the World race. The yacht *Team SEB* sailed 460.4 miles in one 24 hour run during the Capetown to Sydney leg.

The greatest loss of life at sea occurred when the German ship *Wilhelm Gustloff* was torpedoed by the Russian submarine S-13 in the Baltic Sea on 30 January 1945. There were 10,582 people on board fleeing the advancing Russian army. 9,343 of those died, many from hypothermia in the near freezing waters.



HMS *Magaera*

A little known story of an incident in 1871 that caused the Royal Navy to be severely censured by the public and the press.

Although *HMS Warrior* was the first major warship built of iron she was not the first warship the Royal Navy had built of that material. In 1839 the East India Company had two iron steamers built, the *Nemesis* (700 tons) and the *Phlegethon* (550 tons), both armed with 32 pounders. The builder, Laird, built an 800 ton iron frigate on spec but the Navy were not interested. The Admiralty had a distrust of iron for shipbuilding, tradition staying with the "wooden walls". Armed with 24 and 68 pounders the spec ship was sold to Mexico and named *Guadaloupe*. Initially the Admiralty's only venture into iron ships was the building of tenders, packet boats and the general purpose paddle steamer *Rocket* (70 tons) in the early 1840s. The success of these together with the higher costs involved in wooden shipbuilding as compared to ships of iron must have influenced the Admiralty. By 1844 orders for nine iron sloops and frigates had been placed with shipbuilders. One of these orders was for the frigate *HMS Magaera*. Another was *HMS Grappler*, a 4-gun paddle steamer launched early in 1845 and used on anti-slavery patrols off the West African coast from 1846 to 1849. Here she took thirteen prizes, freeing over 2,000 slaves. She was sold out of the Navy when it was found that severe corrosion had occurred, particularly around copper inlet pipes. Other sloops were also disposed of and this seemed only to reinforce the Admiralty's original prejudice against iron hulls. The Navy was also very suspicious of the ability of cast iron plates to withstand cannon shot. Initial experiments appeared to confirm these suspicions.

It appears that *HMS Magaera* was built because the Admiralty had signed a contract with William Fairbairn of Millwall on the Thames and could not break this contract. It was 1849 before she was launched at a final price of about £75,000. *HMS Magaera* was 207 feet in length with a beam of 37 feet 8 inches, depth of 24 feet 3 inches and a displacement of 1,395 tons. She was fitted with horizontal direct-acting steam engines rated at 350hp and a 13 feet diameter propeller as well as her three masted barque rig. When under sail the

screw was detached and winched clear of the water and the funnel hinged down. A spare screw was carried onboard. Initial trials gave an average speed under steam of nearly ten knots although her normal service speed was below 9 knots in actual practice. She carried fourteen guns ranging from 32 to 68 pounders.

For the next 20 or so years *HMS Magaera* served not as a frigate but as a troop carrier with her guns reduced to six and extensive alterations made to her interior to accommodate troops and supplies. Voyages were made to the Cape of Good Hope, the West Indies, the Mediterranean, South America and a number to the Black Sea during the Crimean War. During this period she was found to be slow and with many defects in hull, rigging, engines and pumps – in fact she was not well liked by crew or passengers and seemed to be constantly in need of repair. Repairs to corroded rivet heads had to be made in 1859. This was a fairly common occurrence in the riveted iron ships as the bilge water sloshed back and forth over the rivets in the bilge. In 1866 an inspection revealed that many of her plates were quite thin and two estimates by Woolwich Dockyard, for replacing the defective plating or doubling them (£4,331 and £2,070 respectively), were rejected. Instead she was patched up at a cost of £250. In August 1870 she was put into reserve.

In January 1871 there was a need to take relief crews to Sydney for the sloops *Blanche* (1268 tons) and *Rosario* (673 tons) on the Australian Station. This would save sailing these two vessels back to England. *HMS Magaera* was brought out of reserve and she sailed on 22 February 1871 under the command of Captain Arthur Thomas Thrupp (1825-89). Her crew consisted of the 180 relief crew for the *Blanche* with the 120 relief crew for the *Rosario* as passengers. Captain Thrupp was to take command of the *Blanche* on arrival in Sydney and on the return journey the *Magaera* would be manned by the crews from the two sloops. Besides the crews the *Magaera* carried supplies, ammunition, and a new set of sails



for *HMS Clio*, another sloop on the Australian Station. Her total complement on sailing was 42 officers, 44 marines, 180 ship's company and 67 boys. Conditions were crowded and complaints were made regarding the ship's seaworthiness. She was frail and had suffered badly from corrosion and was not fit to make the long voyage to Australia.

HMS Magaera left the naval base of Simonstown (Cape of Good Hope) on 28 May 1871 and on 8 June a marine was lost overboard. The same night she sprang a leak that was producing an inch an hour of water in the hold. The pumps were manned but the leak worsened and the crew were using buckets to help the pumps. No source for the leak could be found until 14 June when a 2 inch by 1½ inch hole in the iron plating was located under a coal bunker near the keel. The iron plate here was so corroded that it was not possible to screw another plate over it to stop the leak. The captain

The *Magaera* anchored off and diver Ableseaman J.A. Pow, who had been sent along to check the propeller of *HMS Blanche* in Sydney, immediately made an inspection of the problem. Steam was maintained to keep the pumps going and this was just as well as the ship dragged anchor a number of times in squalls. The diver's adverse report coupled with his engineers' advice on the corrosion, not only of the plates but of the frames near the leak, and the constant choking of the pumps by large lumps of rusty iron convinced Captain Thrupp that he had no alternative but to abandon the rest of the voyage. They were still 1,800 miles from Australia. Unloading of the crew and stores to enable them to exist on the island until rescue arrived was then started.

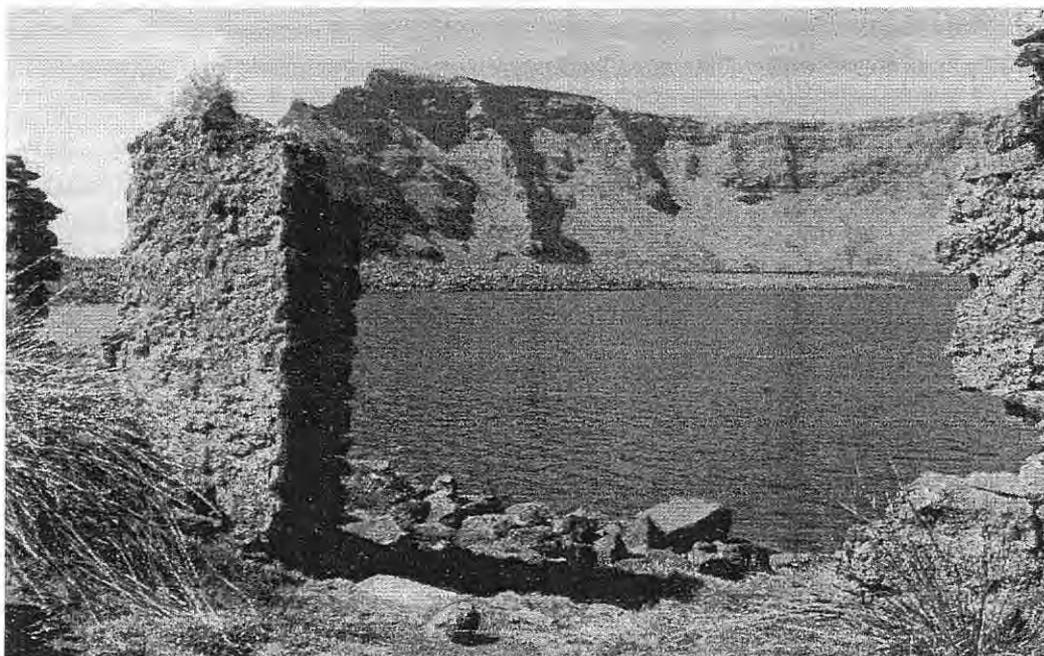
By dark on the day Thrupp made that decision (18 June 1871) enough stores for 4 months had been taken ashore. Problems continued with the frigate

as one by one her anchors were broken during squalls and she had to be continually manoeuvred to keep loading the ship's boats, and four other boats found on the island, with stores. The leak grew worse and the anchors would not hold in what by then was a rising gale so the decision was made to run *HMS Magaera* aground. This was done on the bar right in the middle of the entrance where she stuck upright with 12 feet of water in the forward

hold and 17 feet in the aft hold.

Some crew continued to live aboard until as many of the stores that could be salvaged were carried ashore. Even the water tanks were extracted and moved ashore as was some ammunition, casks of paint, oil and other supplies. Some two thirds of all the stores on the vessel were ferried ashore. A seaman refused to help in the unloading and was given 48 lashes.

On shore a large village was set up with tents made



St. Paul Island crater in 1990. The entrance is to the left of the picture. Photo - Ed Smidt.

made the decision to call at St. Paul Island to see if repairs could be effected.

St. Paul Island is a very remote island in the southern Indian Ocean at latitude 38° 42'S and 77° 32'E about halfway between South Africa and Australia. It is only about 2 miles by 1½ miles in size. It is an extinct volcano that has been flooded by the sea breaking through one side of the crater. There is however a bar across the gap, denying entrance to the shelter of the crater to all but shallow draft boats.



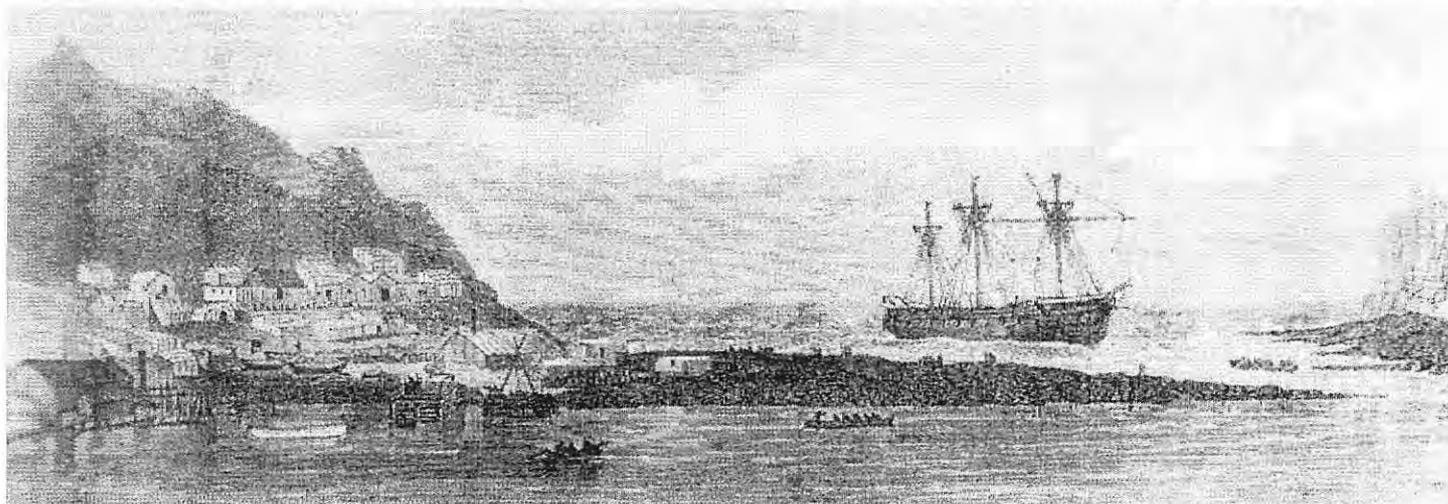
from sails and these together with some old sheds and houses built by the French, and some new ones quickly built of stone and turf, housed everybody. A long spar was hauled to the top of a high cliff (860 feet) and the Union Jack placed on it upside down as a signal of distress. Although there was a considerable quantity of water in rock holes, and these were refilled almost daily by the rain, a condensing plant was erected to produce more water. This was initially fuelled by coal (they had salvaged 35 tons from the ship) but later they used turf supplemented by wood from the wreck. This only produced about half the 360 gallons a day that the condenser had produced when it had been coal fired.

Barricos or small casks were set adrift with messages in them telling of the shipwreck, and Lieutenant Lewis Jones was delegated to board the first vessel to come close enough. He was to bring her in if possible but to go with her to her next port if not. On 16 July 1871 the Dutch barque *Aurora* came close to investigate the flag. Lieutenant Jones boarded her and was taken to her destination, Sourabaya on Java, on 2 August. Jones immedi-

They were to be taken to Singapore to catch the mail steamer to England.

On 26 August the *Oberon* arrived with some provisions and news that both the *Rinaldo* and the *Malacca* were on their way. *HMS Rinaldo* arrived on 29 August and the *Malacca* the following day. A couple of days later a great storm blew up and *Malacca* and *HMS Rinaldo* weathered it at sea with some damage, not getting back to St. Paul until 3 and 5 September respectively. The *Magaera* was destroyed during this storm. The *Rinaldo* had used all her coal during the storm and could not manoeuvre sufficiently to load the members destined to attend the court martial. It was therefore agreed that all those on the island would board the *Malacca* and rendezvous with the *Rinaldo* at Albany in Western Australia.

Late in the afternoon of 5 September the last person was aboard and on 14 September the *Malacca* arrived in King George Sound some two days ahead of *HMS Rinaldo*. By 30 October Captain Thrupp was in London and soon appeared before a court martial aboard *HMS Duke of Wellington* at



HMS Magaera after she was run aground on the bar at the entrance to the crater on St. Paul Island

ately telegraphed the Commodore of the Navy's China Station in Hong Kong and the British Consul in Batavia. The Commodore chartered the P & O three masted iron steamer *Malacca* (1,709 tons) to go to St. Paul to rescue the men and take them to Sydney. Meanwhile the consul in Batavia arranged for the tea clipper *Oberon* to take supplies to St. Paul on her voyage back to England. *HMS Rinaldo* was detailed to go from Singapore to St. Paul and collect Captain Thrupp and those officers and crew that would be needed for a court martial inquiry.

Portsmouth. He was honourably acquitted, his actions being fully justified considering the condition of *HMS Magaera*.

Public censure was directed at the Admiralty for allowing a vessel in such a poor state of seaworthiness to go to sea. Gladstone, the Prime Minister, was forced by this outcry and the pressure exerted by the press to set up a Royal Commission into the circumstances leading up to the loss of the *Magaera*. *The Times* had stated that the Admiralty



was guilty of a 'parsimonious recklessness and of a cruel incompetence which deserve the most severe approbation'. The technical journal *Engineering* had an editorial which certainly did not pull its punches. '...the blindest and most unscrupulous defenders of an incompetent Administration will have hard work to explain away even to their own satisfaction the criminal stupidity that so nearly caused the loss of all on board the worn out vessel.'

Captain Thrupp's career prospered and he retired as a vice-admiral in 1885. The rest of his crew were taken on to Sydney by the *Malacca* which then took the crews of *HMS Blanche* and *HMS Rosario* back to England.

To this day St. Paul Island has a hut on it loaded with provisions for the use of shipwrecked sailors. This is maintained by the French Government and, naturally, includes wine.

Peter Worsley
Bibliography

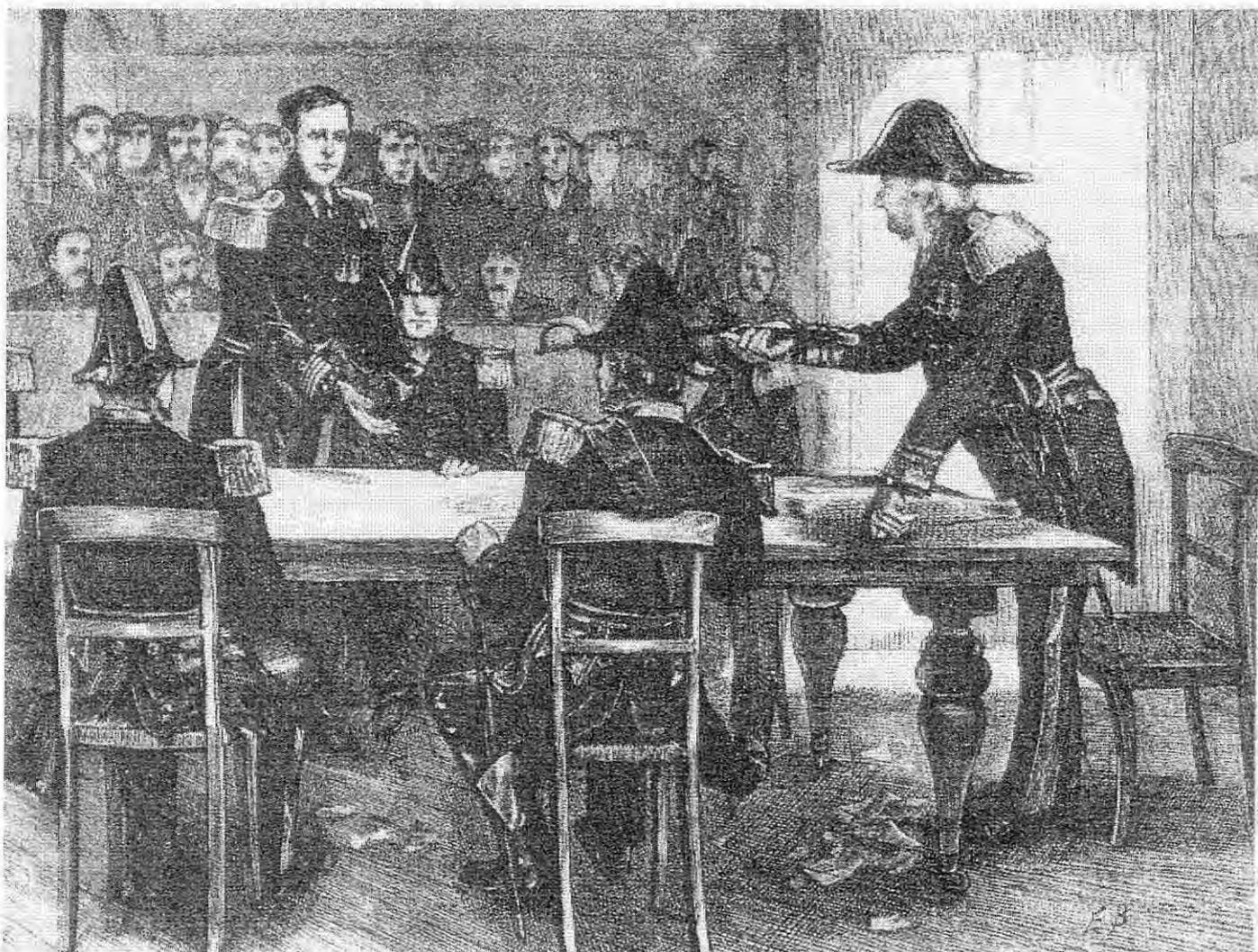
Corlett, E., 1975. *The Iron Ship*. Arco Publishing Co., Inc., New York.

Haywood, R.A., 1978. *The Story and Scandal of HMS Magaera*. Moorland Publishing Co Ltd, Buxton, England.

Kemp, P., 1988. *The History of Ships*. Black Cat, London.

Smidt, E., 1990. Personal correspondence to the writer.

Captain Thrupp being handed his sword by Vice-Admiral Loring after his acquittal at the court martial in November 1871.





Rottnest Island Pilot Boat

Here is a short article by Brian Lemon on his building a model of the Rottnest Island Pilot Boat as researched and designed by Ross Shardlow, together with the original specifications and notes by Ross.

Ross Shardlow was “given” the task of researching, and then drawing up the set of plans for the *Rottnest Pilot Whaler*. I was fortunate enough to see a copy of these plans about the time that the full size boat was being built at “Tuppy’s” Wooden Boat Works. I immediately decided that this would make a delightful model at 1”-1’ scale. I also decided this would go to Ross as a reward for all his research work.

The Model

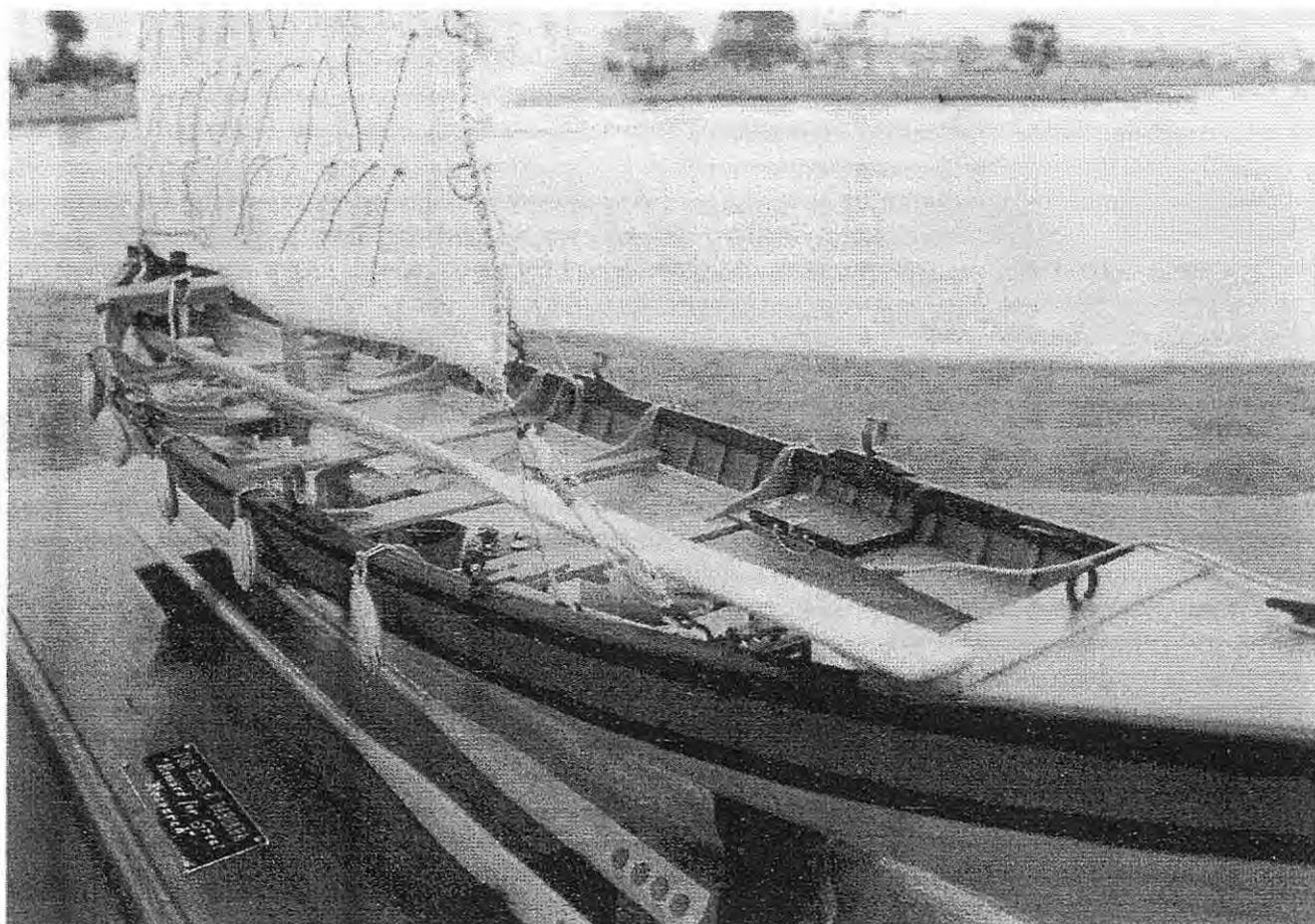
From a piece of 6mm 12 ply marine quality ply I cut the keel. This included the stem and stern posts as one piece, and at 1”-1’, this measured 28” plus an inch more all round to allow me in the initial building to hold the model firmly in my vice during construction. On both the stem and stern I marked the position of the individual clinker planks. Starting from the keel the planks were laid one each side with approximately ¼” overlap on each plank. Prior to this the keel, stem and stern were rebated to ac-

cept the appropriate part of each plank. Once the hull was complete up to the gunwale the detail and fitting out was started. Prior to fitting the floors, which come quite high up each side, the appropriate number of frames were shaped and glued at their relevant positions.

There are five thwarts, held in place by knees, plus an additional seating arrangement at the stern. Incidentally the boat is steered by a very large oar. The second thwart from the bow is fitted with a securing system for the mast. There are three oars on the starboard side and two on the port.

Internally there are a fixed freshwater barrel and a portable wooden water container. A boat hook is carried inboard as is a bailing bucket. There is a small chest which carries the depth sounding cord. An oil lamp is also carried plus a flat metal case with official papers. One will assume that someone in the crew would carry a ship’s telescope. I made

this





from brass tubing plus a brass carrying case.

The model was mounted on a piece of "Swan River Mahogany" shaped and finished by Robin Hicks. The model was shown to the Wooden Boat Works who were satisfied that it was an exact replica of the full size boat which is permanently stationed at Rottneest., and was then presented to Ross Shardlow at Barry Hick's museum.

Brian Lemon

Notes On Whaleboats Used For The Pilot Service During The 1850's by Ross Shardlow.

Several whaleboats were used for the service during this period and their specifications varied. Some were built specifically as pilot boats while others were purchased second hand including boats from the whale fishery.

INSTRUCTIONS FROM THE HARBOUR MASTER

Issuing particulars relative to the building of a five-oared whaleboat for the Rottneest station.

Length overall – twenty eight feet (28 ft)

Extreme breadth – five feet seven inches (5 ft 7 in)

Depth – two feet one inch (2 ft 1 in)

Keel, stem, sternpost and gunwales to be mahogany or other suitable hardwood.*

Planking best yellow deal or Singapore cedar free from knots and rents.

One floor between every two timbers. Timbers and floors to be notched to receive the planking.

Thwarts to be dovetailed into rising.

Mast thwart to be double knee'd.

Gunwales to be fitted with iron crutches instead of thole pins and with tack and sheet hooks.

The boat to have a good flat floor, not less than the usual spring of a whaleboat, and to be fastened with wrought, copper nails clenched with roves throughout.

Bilge pieces to save the lands in hauling up and launching the boat, the whole to be covered with two coats paint.

19 August 1852

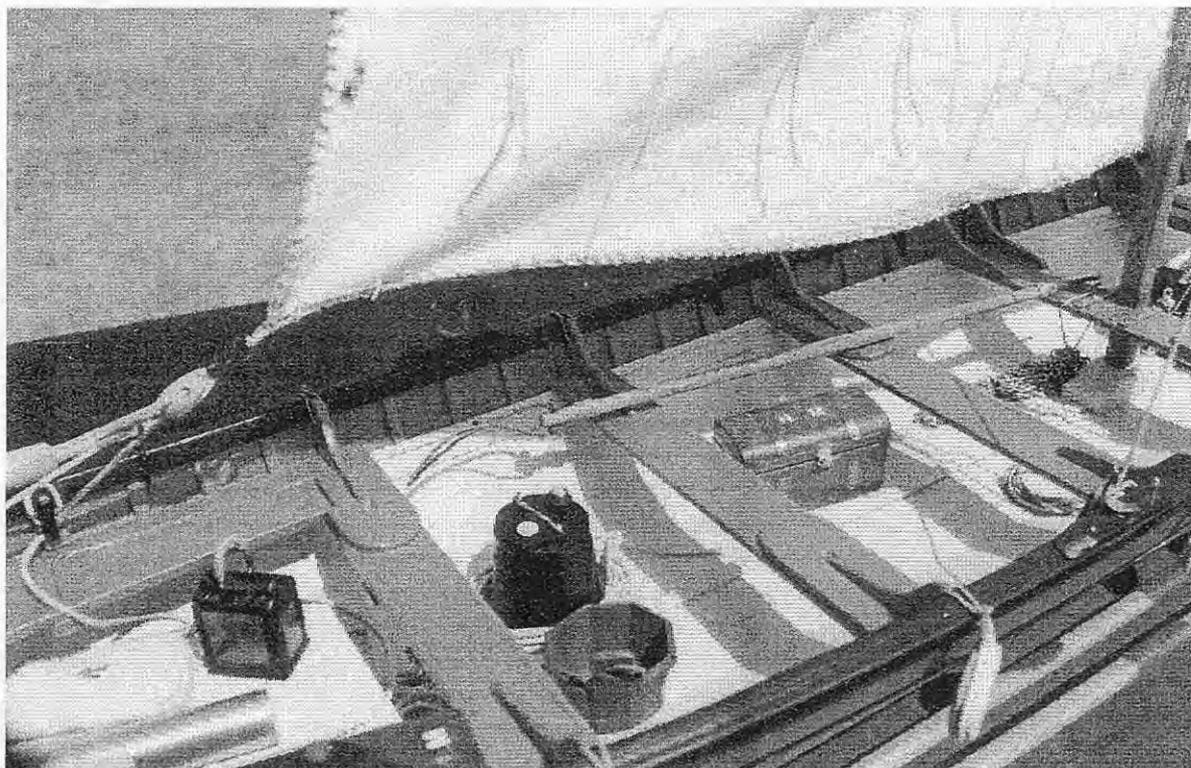
** Swan River Mahogany (Jarrah)*

These instructions were reissued 27 January, 1853 with the contract being awarded to Fremantle boatbuilder William Hugh Edwards, 10 March, 1853, construction time being set at one month. The boat was completed on 27 June 1853 at a cost of £33.0.0.

Though often used for sailing this boat was not fitted with a centre case or rudder.

The copper fastenings, floors, notched timbers and dovetailed thwarts indicate a finer finish than the whale fishery boats.

Also note that this boat carried her loggerhead in the bow and not the stern as per the usual practice in whaleboats.





MANX FAIRY or WESTRALIAN?

Here, by kind courtesy of Martin Navarro, Editor of the World Ship Society, Fremantle Branch Newsletter, is the answer to Rod Dickson's query in the September 2002 edition of the MHA journal.

Bobby Brookes, of Launceston has sent the basis of the following about the Australasian Shipping record July/August 1992

WESTRALIAN

The vessel commenced life in 1887 as the *Manx Fairy* O.N 76309 built by T.B.Seath, Rutherglen, for the Mona Steamship Co. Ltd., and registered at Douglas, Isle of Man. She was a steel hulled twin screw, twin funnelled steamship measuring 123 gross tons on dimensions of 128.5 x 16.0 x 7.55 with twin compound direct acting engines developing 42 nominal and 300 indicated horsepower that were constructed by Hudson & Corbett, Glasgow.

In 1893 she was sold to the Manchester Ship Canal's passenger company with the view of becoming an excursion steamer on the canal. The idea was not a success and in 1895 she was sold to the West Australian Steam Packet & Transport Co Ltd and, along with two other vessels of about the same size *St. Mawes* and *Water Lily*, was despatched, under sail, to Fremantle.

No doubt for financial reasons the registration remained in Manchester. The *St. Mawes* didn't make it to Australia being wrecked on the voyage. The owners apparently were not very successful and in 1898 both the *Manx Fairy* and *Water Lily* were transferred to Fremantle register, W. A. Packers & Transport Co and enrolled in the names of E. Lane F. Wilson. The *Water Lily* was resold immediately but the *Manx Fairy* remained in their names until Dec. 1900. Then she was transferred to A.T. Bernier; passing in March 1902 to Manx Fairy Limited who, in a letter dated April 26, 1906, advised the Registrar of British Ships, Fremantle, that the vessel had been broken up and destroyed. That may have been technically true of the *Manx Fairy* but it was not absolutely correct for on July 1st 1905 (There is doubt in my mind about the following, re her rebuilding site as it has also been stated that she was rebuilt in vicinity of Mill St,

Perth.) she was hauled upon the bank of the Swan River, at Rocky Bay, just below the what is now the Rocky bay Childrens Home, where she was completely replated, re-boilered and refitted, by Hoskins Ltd, but retained her original engines, re-launched in November 1905, broadside on, as *Westralian* 120grt, O.N. 120008. The only outward change in her appearance, was that she now had round port holes in her hull, whereas they were originally square

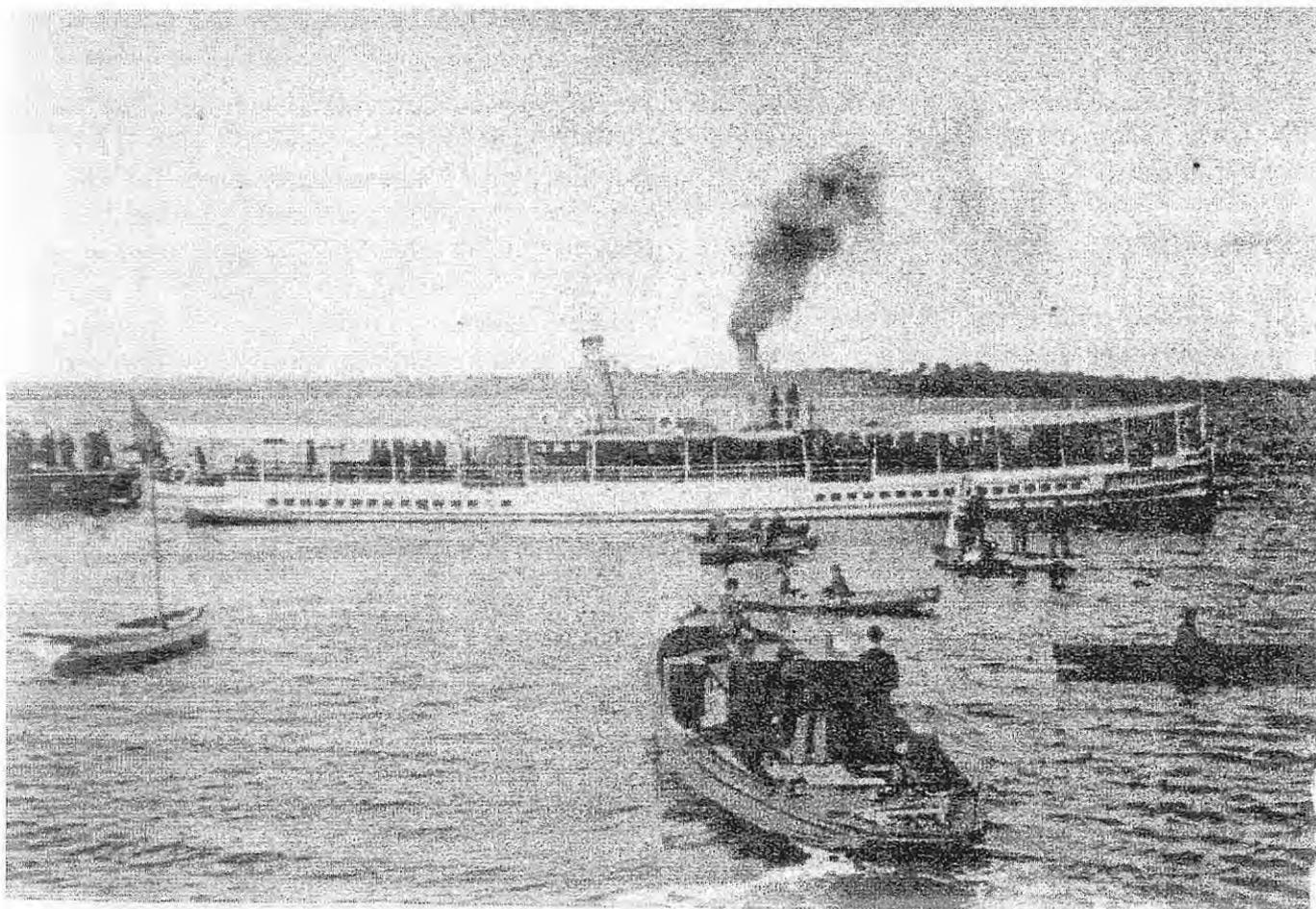
She had been so changed, in the eyes of the Registrar (if he was ever consulted) that she was given a new official number and declared to have been BUILT in 1905. It is more than likely that she was declared to be a new ship by her owners and thus they unintentionally misled the Registrar.

Whatever the reason, in January 1906 she was enrolled in the Customs at Fremantle as folio one of 1906 by Manx Fairy Ltd., and in Sept 1906 the name of the Company was altered in the Customs records to Westralian Pleasure S. S. Co. That Company and the ship was sold in May 1913, to McIlwraith, McEacharn Ltd who kept her operating on the Swan until, December 1921, when they sold her to E.L. Speare, of Strathfield, Sydney and in 1923 she was sold to James Rowe & Sons, Hobart, for the Huon apple trade and later to A.J. Challenger. She was unique in that she was the only two funnelled vessel to trade on the Derwent and although claimed to be fast - 14 knots - she did not endear herself to Hobartians. She did not take part in any of the popular riverboat races but she did take passengers on excursions, a speciality being trips to New Norfolk on New Year's Day.

With motor vehicles biting into the river trade in the 1930s the *Westralian* was laid up in Constitution Dock. In 1937 she was sold for demolition but her career did not end then and she was used as a sort of floating home for elderly people. During W.W.II the RAN considered using her but did not proceed with the idea. Early in the 1950s her steel hull was cut down to the waterline and shipped to



Japan as scrap and the remaining section of the hull was ultimately scuttled in the Derwent near Otago Bay. As *Manx Fairy* her official number was 76309 and as *Westralian* it was 120008.



The *Manx Fairy* with its square portholes. As the rebuilt *Westralian* she was fitted with round portholes.

Editor's Note: The dimensions given for the engines, in extra notes from Martin, are 11" (2) x 22" (2) x 18". The two boilers were of steel and rated at 110 lbs/ cubic inch in the *Westralian* and 100 lbs /cubic inch in the *Manx Fairy*. Net tonnage was 26.69. She was clinker built.

Ron Parsons of the Australasian Maritime Historical Society has given a name to the "What Vessel is This?" article by Rod Dickson on page 5 of the September 2002 journal. Ron states that the "vessel is, undoubtedly, that one which was inscribed in the Custom House Register of British Ships for Fremantle as folio 9/1906 under the name *Zephyr* which my records show arrived under her own steam at Fremantle April 2, 1906 and was granted official number 120017. That register was closed in March 1966 with the remarks 'broken up'. The last registered owner being Alfred E. Tilley & Co. Ltd."



The Brig *River Chief*

During 1844 a shipwright, Joseph Morris, decided that the Mandurah area would be suitable for shipbuilding and that he would build a 250-ton brig from jarrah. Morris intended that she should be a shining example of the marvelous shipbuilding qualities of Western Australian hardwoods. She would sail to London with a cargo of 220 tons of hardwood, specifically tuart, and so publicize the timbers from the colony. In September 1844 he purchased the rigging of the wrecked American whaler *Halcyon* to use in his new vessel. Joseph Morris was reputed to have spent £1,500 building the brig that had dimensions of:

Length overall	71.9 feet
Breadth	27.5 feet
Depth	11.7 feet
Registered tonnage	158 tons
Burthen	220 tons

Morris had originally intended naming the vessel after himself. However Thomas Bates had carved a very fine figurehead of an aboriginal spearing fish and the name *Joseph Morris* was replaced by *River Chief*

The *River Chief* was launched broadside on into the Peel Inlet on 2 December 1845. The plan was to warp her over the bar and sail under jury rig to Peel's Harbour in Warnboro Sound for fitting out. Evidently Morris had the furniture already made, sails, ship's boats and most of the other fittings required to complete the brig. Costs, however, had been higher than he had anticipated and Joseph Morris went bankrupt, owing £112. The *River Chief* was auctioned on 16 March 1846 for sale where she lay at Mandurah, the auction being held in Fremantle. Captain John Thomas, the successful bidder, then on-sold her to an Adelaide company for £500. In June 1846 the *River Chief* eventually crossed the bar and was taken to Safety Bay. Here she was fitted out, most of the work being carried out by Morris, at a cost of £280. The vessel was painted black and was variously described as "ugly" and "unsightly". Some final work was done at Fremantle and she sailed for Adelaide on her maiden voyage on Saturday 5 December 1846. The shipping agents were the well-known firm of L. & W. Samson of Fremantle.

Under the command of Captain Starling and with twenty passengers and a cargo of whale oil, timber and shingles the *River Chief* headed for South Passage between Garden and Carnac Islands. Captain Starling had decided he did not require a pilot. This error of judgement resulted in the brig striking a rock in South Passage, doing damage to the bow and causing a leak. It was a very strong impact and it was only the excellent craftsmanship that had gone into her building that prevented greater damage and sinking there and then.

A northwest gale prevented Captain Starling from making to Fremantle and he was obliged to run before the wind to the Vasse on Geographe Bay. With the *River Chief* making 28 inches of water an hour it must have been a nightmare trip. At the Vasse she was repaired over the next 6 weeks or so and set out again for Adelaide on 20 January 1847.

Again she ran into trouble with a severe gale that took away her topmast. In fact fears were held for her safety. It was thought that she had foundered; as the captain of the *William Badger*, which had been in the same gale, had seen the *River Chief* disappear. However she limped into King George's Sound and was repaired at Albany. An uneventful, fast voyage from there saw her arrive in Adelaide on 12 March 1847. Here she was registered with Official Number 32578.

The voyage was not financially successful and the *River Chief* was sold to Hobart interests for £900 and later sailed to San Francisco where she was sold. Another source says that she was wrecked at the Richmond River heads in NSW in November 1865. There also appears to be a difference of opinion as to whether the *River Chief* was built by Joseph Morris or financed by him and built by William Hugh Edwards.

References.

- Dickson, R. *They Kept This State Afloat*. Department of Maritime Archaeology, Western Australian Maritime Museum Report No. 89.
Richards, R. 1978. *The Murray District of Western Australia: A History*. Shire of Murray, Pinjarra.

Peter WORSLEY.



Pearling Statistics

Some statistics that Rod Dickson picked up during his research into the pearling industry in the northwest of Western Australia.

As the readers know my main field of research is the pearling industry, centred on Broome and lately I have concentrated my efforts on one single year so as to get a snapshot of the industry its employers, employees the townspeople and ancillary industries. Just to give an idea of the size of the industry, following is a series of statistics for the year.

Vessels owned and registered at Broome	302. Includes schooners and luggers.
Vessels working during the 1915 season	177. The others were laid up due to the war.
Value of vessels and equipment	131,992 pounds.
Quantity of pearlshell raised.	1,096 tons, 7 cwt; 2 qtrs.
Value of pearlshell raised.	£220,859/19/10.
Value of pearls obtained.	£69, 204/12/2.
Total number of crewmen in fleet.	1335.
Comprised of 81 "white shellopeners, owners and masters" 357 divers, 2nd divers and try divers, mainly Japanese. The rest were Koepangers, Manillamen, Ambonese, Malays, Javanese, South Sea Islanders, South Americans and Aru Islanders.	

Of these 21 divers died while working down below. Dozens more got the bends in varying degrees. 9 divers were treated in the newly installed decompression chamber at Broome. 7 were treated successfully and two died due to too much time spent getting them back to Broome.

Yarns

Another couple of yarn by Sid Davies.

The captain of an old tramp steamer in the 20s suspected that his second mate was snoozing on watch during the 12 to 4 watch at night. The ship was plodding along at full speed (7 knots) on passage from Aden to Colombo and far from land. He woke up in the early hours and went outside and looked up at the starboard bridge wing and sure enough, there was the second mate slumped against the dodger, head down, and obviously snoozing. He crossed over to the Port side and crept silently up the ladder and peered into the wheelhouse. Lo and behold, the quartermaster was leaning back against the bulkhead, hands off the wheel and obviously snoozing.

The captain silently and swiftly made his way down to the engine room and borrowed a large spanner and a rag and returned to the bridge where the situation was as before. He tiptoed into the wheelhouse and using the rag to silence the spanner he unscrewed the brass boss which held the wheel in place and then gently eased the wheel off its spindle and tiptoed out again taking the wheel with him and descended to his deck. He then crossed over to the Starboard side and shouted to the Second Mate " Alter course hard A'starboard -I can see something in the water abeam". The Sec-

ond Mate shook himself awake and shouted to the Quartermaster - " Hard A'starboard". The Quartermaster was by this time fully alert only to discover he had no wheel; he grabbed the greasy boss with both hands and was attempting to turn it to starboard as the Captain climbed onto the bridge clutching the wheel!! I cannot recollect the outcome.

Getting the ship painted up for homecoming.

I was told that when this captain was an apprentice in a Northeast coast tramp steamer company he was busy chipping away with a chipping hammer whilst they were getting ready for their home port. The ship was ancient and very rusty. He suddenly found that his hammer had gone straight through the deckhouse plating which was paper thin after years of rust being chipped away. Anxiously he sought the Mate to tell him and, far from being concerned he instructed the apprentice to mix some flour and water glue and paste brown paper over the hole. When it was dry it was painted over and the end product was a good freshly painted deckhouse.



A Naval Bloke

Here is another story by Captain Peter Piggford.

I have known a lot of Blokes, been one myself even, but there are Good Blokes and Bad Blokes. The Oxford Dictionary defines a Bloke as:- Man, fellow, chap, dull or rustic person and (Nav.SI) Ship's Commander and it the latter of these definitions to which I refer.

When a seaman joins any naval ship, his first question for the old hands is likely to be, "What's the Jimmy like?" closely followed by, "And the Bloke?"

The Jimmy is navalese for the senior executive officer or First Lieutenant who is the Second in Command and responsible for the day to day running of the ship and its discipline and thus the most immediate concern of any newcomer. He is known among the other officers as "Jimmy the One". The Commanding Officer though is of the greatest interest in the longer run, as on his skill and personality depends whether the ship is a happy one or otherwise. Among themselves the officers would usually refer to him as the "Old Man" and to the crew generally "The Bloke" was more common.

I refer to the Commanding Officer advisedly, as any rank from Sub Lieutenant to Post Captain may be in command of a ship depending on its size, category and mission. But ranking four stripe Captains are jealous of their title and object strongly if it is conferred on lesser mortals, for instance a Sub Lieutenant in command of a motor launch.

In the Merchant Navy, Captain is a courtesy title given to the person in command. His (or her) correct designation is "The Master". This is the old naval name for the ship's navigator when ships of the line were often commanded by men of title and aristocratic origins who were not equipped with the necessary skills to take the ship from A to B, or even to hold formation in a fleet.

It is interesting to recall that the Master's Assistant in the Navy is always to this day known as the "Tanky" as he was responsible for the ship's fresh water. The reasoning being that only the navigation department would know with any certainty how

long it might be before they could replenish, and therefore know how to ration precious drinking water. The Tanky also had the daily duty of winding the ship's chronometers, and had to do this always before he sat down to breakfast and therefore be unlikely to forget the chore.

There were other persons of interest to the newcomer to a ship. The most immediate was the Master at Arms, known as the "Jaunty". He was the Senior Chief Petty Officer in charge of discipline under the First Lieutenant, his offsidiers the Regulating Petty Officers were known as the "Crushers" as they were all reputed to have big feet like policemen. Indeed many Crushers were ex-policemen. In smaller ships, the senior CPO was the Coxswain usually abbreviated to "Swain". There are many other strange titles in a naval ship as well as many traditional nicknames. Everyone with the surname of White is "Knocker", Martins are "Pincher", red-headed men are "Blue", the tall are "Tiny". The small are "Lofty", the left-handed "Kakhanded", the dour are dubbed "Smiley", and so on.

To return to Blokes I have known, probably the best I ever served with in the Navy was an RNR Commander, a professional seaman who before the war had been a Tanker Master in the Socony Fleet. He was a brilliant seaman and one of the most decorated officers in the Navy. DSO and Bar, DSC, twice Mentioned in Despatches and a whole gamut of campaign medals, yet he had none of the annoying arrogance so many career naval officers adopt. One can hardly blame them I suppose as in Naval College it is drummed into them that they are the salt of the earth and superior to all other men. Some of them mature and become almost human by the time they are about thirty and are promoted from Lieutenant to Lieutenant Commander, but in others the arrogance persists and they are hard to serve under or with in a ship, and I should imagine at home too.

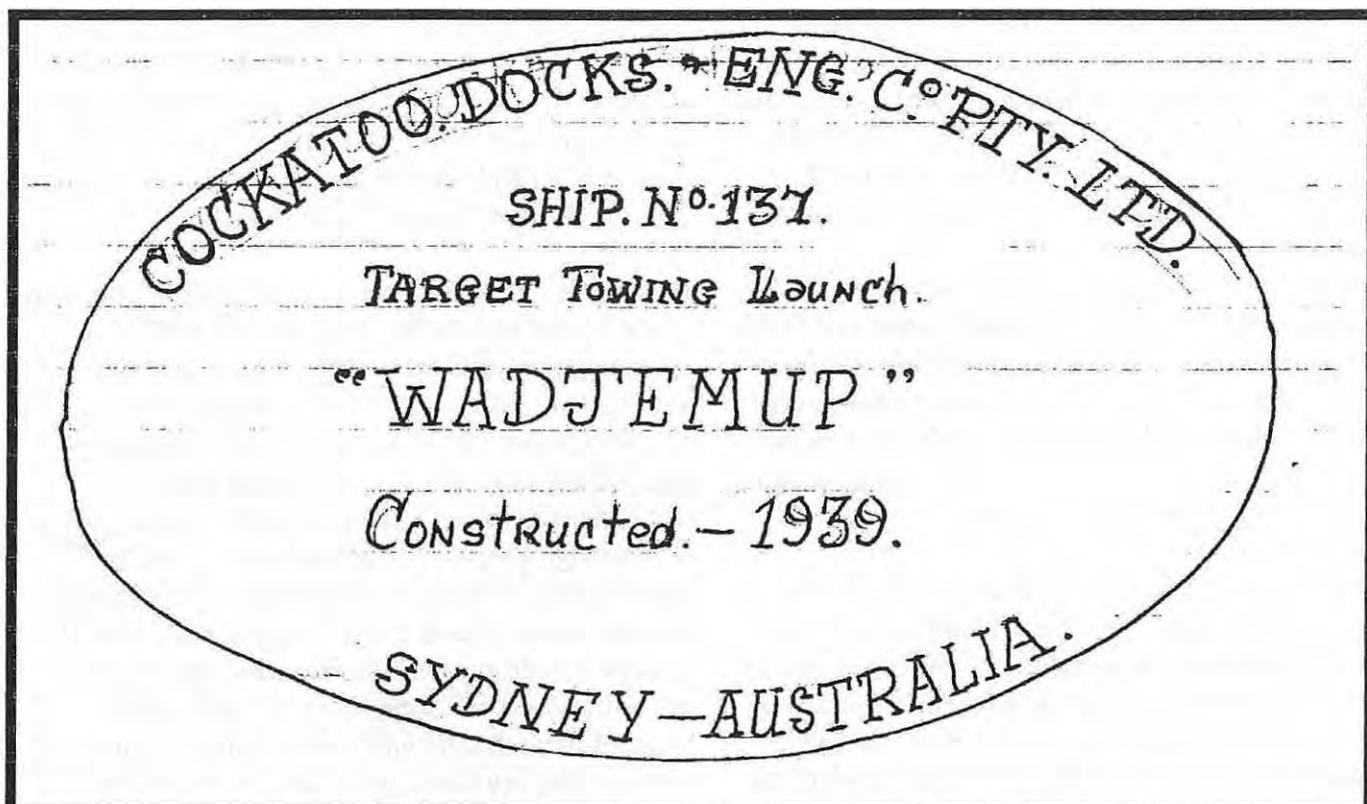
The Bloke I mentioned above was the complete antithesis of that type. At one stage of the Second World War I was his First Lieutenant in the Flotilla



of Fleet Minesweepers he Commanded. It was a pleasure to work under a man who achieved the peak of efficiency without all the usual naval "Bull".

I had to ask someone else how he had won his many medals for gallantry as he himself never mentioned the subject. The DSO was for capturing an Italian submarine intact. He was not just the senior officer present, but personally led the boarding party and was first down the conning tower hatch of the submarine which had been brought to the surface by depth charges. He had other medals from running the gauntlet into Torkbruk when it was besieged, he had rammed a sub-

marine on the surface in the Western Approaches when they had run out of depth charges and ammunition after a week long convoy battle. His first consideration was always to take the war to the enemy in the most immediate and effective way, yet he would never risk anyone or anything unnecessarily. The men would have followed him without question anywhere because he commanded their total respect and confidence in every situation. There were 120 men in the crew and over a thousand in the flotilla. I never heard a single criticism of him or his style and we went through some rough times. He was indeed a "Good Bloke"



In the September 2002 edition of the journal the question was posed "who built the *Wadjemup*?" I have received from Jeff Thompson of the Fremantle Branch, World Ship Society, a drawing of the maker's plate from the *Wadjemup* which explains all. This plate is on display at Whaleworld in Albany. My thanks to Jeff for the drawing and information.

General arrangement plans of the *Wadjemup* are held in the Richard McKenna Collection at the Fremantle Maritime Museum.



The Flute: histories and mysteries and myths.

Nick Burningham

“The Ditty Bag” in the *MHA Journal* 13(2) contained some interesting notes about ship-types called “fluit” and “flûte”. I would like to offer some further information and some musings on the significance of the flute.

Fluit (*fluitschip* or *fluyt*, plural *fluyten*) is the Dutch term which was rendered *flûte* or more usually *flutte* in French and “flute” or “flight” in English.

Ditty Bag also observed that the term *en flûte* described a ship of the line with a deck of guns removed. In fact, the term *en flûte* could be used, both in English and French, to describe any ship with a row of empty gunports. Those empty gunports were seen to resemble the finger holes of a flute, specifically *flûte à bec*, now called “recorders” in English.

The Invention of the Fluyt

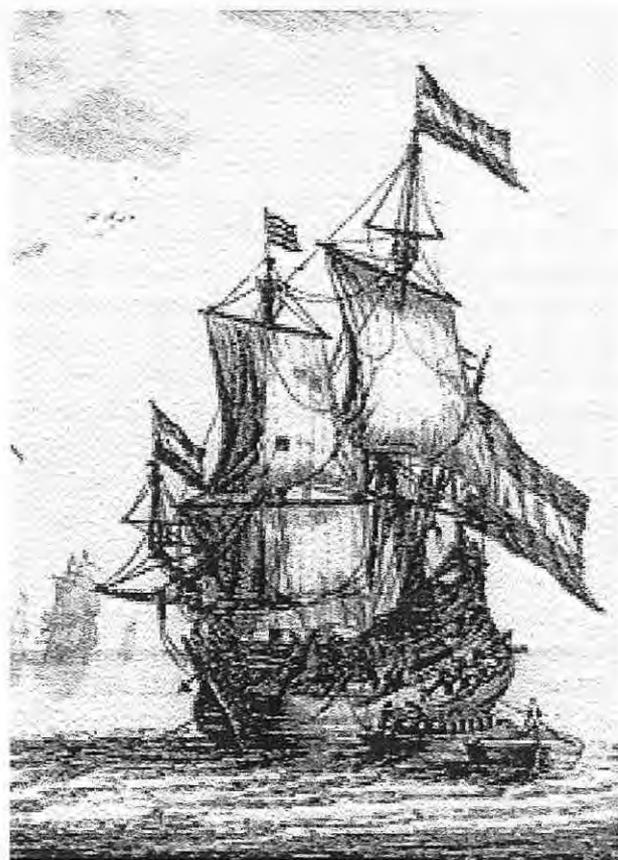
The *fluyt* is said to have been invented by in 1595 by Pieter Jansz Lioorne, a merchant from Hoorn who traded successfully to the Italian port of Livorno or Lioorne (called Leghorn by the English). The claim for the fluyt’s invention was made by a historian of Hoorn, Velius, in 1648. Lioorne’s original invention seems to have been a round-sterned, high capacity, unarmed merchant vessel with the same ratio of length to beam as that recorded for Noah’s Ark in the Bible. The ratio is 6:1 which was very long and narrow by the standards of Lioorne’s time, or almost any other time. At the end of the 16th century the beam was not necessarily measured externally or at the widest point so the ships were probably not quite as narrow as the ratio 6:1 implies. Lioorne was a member of the Mennonite sect which promoted strongly pacifist views, therefore his ships were presumably unarmed despite the Eighty Years War which was raging in 1595. Being unarmed, and probably lacking a high stern, they could get away with very narrow-beamed hull form.

The *fluyt* invented by Lioorne was apparently successful and widely copied, but because of the interminable war there was a need to arm ships, and perhaps for that reason the length-beam ratio reverted to about 4:1, even for unarmed *fluyten*. This seems reasonable as far as it goes, but it raises questions about what was invented and what characteristics defined the *fluyt*. The original *fluyt* was a long narrow version of a ship-type usually called *boot-schip*. A *fluyt* that did not have the unusual length-beam ratio was still an ordinary *boot* or *boot-schip*. (In the *MHA Journal* Vol 9, No.4 an illustration of a round-stern Dutch ship from 1565 is reproduced.)

The Origin of the term Flute

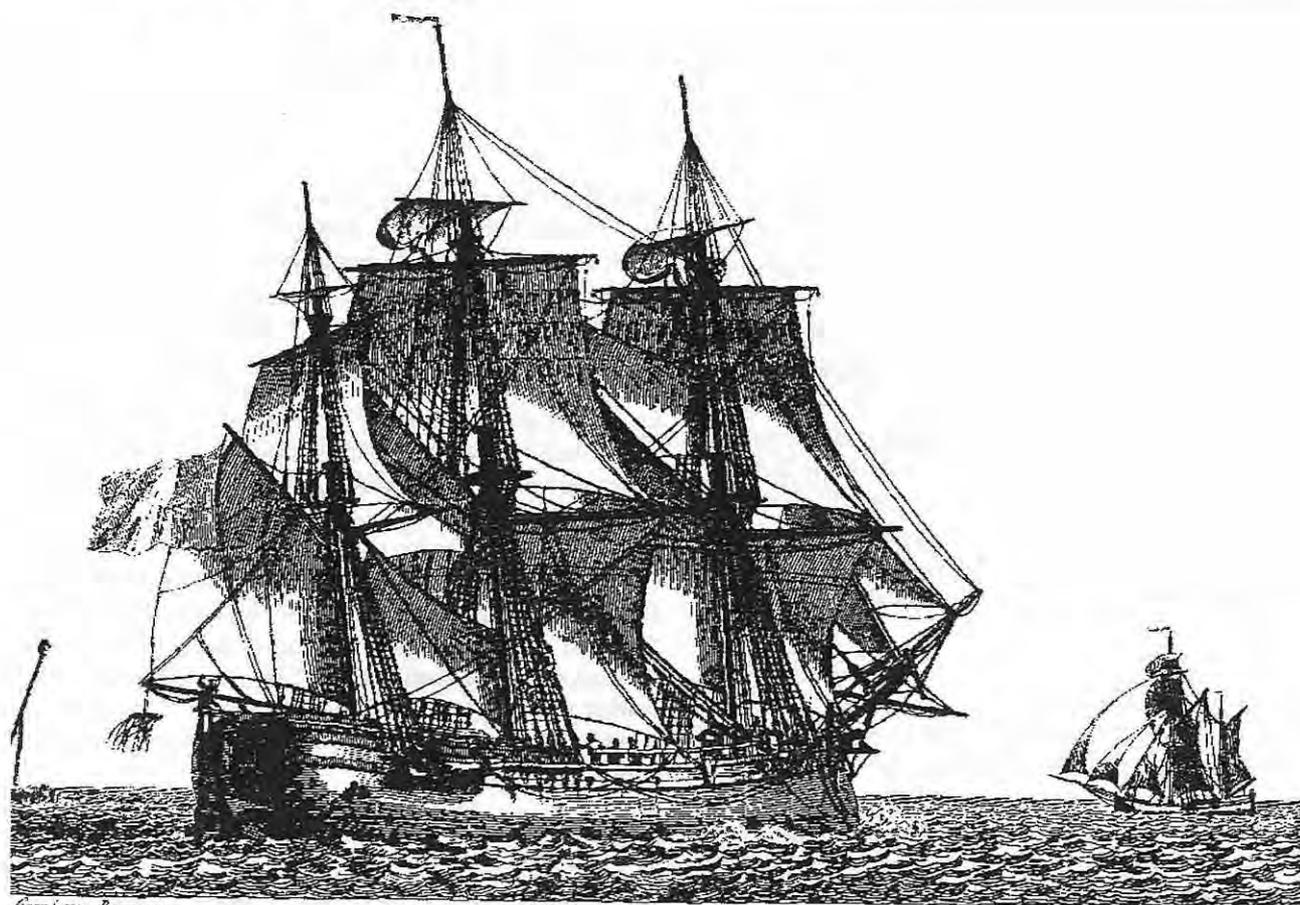
The name *fluyt* did not enter popular usage until about the middle of the 17th century at which time it seems to have denoted a round-stern ship with a great tumblehome and a

peculiarly narrow aftercastle and poop. For a time the extreme tumblehome was advantageous because of the way ships were measured for assessment of the Sound Toll when sailing into the Baltic. So, there was a distinct form of round stern ship with great tumblehome but that wasn’t precisely what Lioorne had invented and round-stern ships with great tumblehome weren’t always termed *fluyt*. Velius gives the name *fluyt* as an alternative for *Hoornesche Gaing* and it may be that *fluyt* was originally a foreign term for the Dutch. In the earliest captioned depiction of the type we are discussing it was called *vlieten*, presumably the plural of *vliet*, and possibly a contraction of *vlie-booten*. The term “flyboat” is sometimes said to be an alternative English name for the flute. This is half true. The *vlieboot* was usually a small, fast, and often well-armed version of the *boot schip*. A *vlieboot* was not normally a bulk-cargo merchantman, and neither was a flyboat. *Hekboot* (hagboat in English) was another common Dutch name used for ships that could be called *fluyt*, as was *kat*.



De Kat een Frans-Vaender

This flute was seen as a kat that traded to France by contemporary Dutchmen.



When is a flute not a flute?

Flutte Hollandaise courant au plus près du vent, les amures à tribord.

Defining the Flute

Vessels that could be termed *fluyt* certainly enjoyed considerable success and popularity used as cargo carrying ships in many different trades, particularly trades where ships were unarmed or lightly armed, and also as whaling ships. There is an argument that the *fluyt* was revolutionary in that it carried its beam and capacious mid-section shape right into the bow and stern giving great capacity relative to registered dimensions in a barge-like hull. Many *fluyt* did have that hull form which was very well suited to the carriage of bulk cargoes such as grain and the carriage of timber, they were often called *katten* and were said to be “slow as donkeys”. But if that hull form is settled on as the defining characteristic of the *fluyt*, it is necessary to discount various models and pictures that show *fluyten* with a different, more rounded kind of hull form. It seems safer to accept that the *fluyt* style (great tumblehome and a high narrow stern with square taffrail) could be given to a whole range of underwater hull shapes for many different uses. The name *fluyt* probably denoted a particular styling rather than a total design package.

It seems that the foreign terms *flute*, *flûte*, *flutte*, etc were more often used and remained in use for longer than the Dutch *fluyt*.

In 1789, the Dutch maritime artist Groenewegen published a collection of eighty-four engravings illustrating various types of Dutch ships, barges and small craft in their many uses. He illustrated six round-sterned, ship-rigged vessels, not one of which was captioned *fluyt* or *fluit*. Almost simultaneously the French artist Baugean published a similarly large collection of engravings (72 prints) illustrating various European ships in their many trades. Baugean illustrated one “*Flutte Hollandaise*”, which is strikingly similar to two ships that Groenewegen captioned as a three-mast hookers (*Driemast Hoeker* and *driemasthoeker*) and another captioned as a three-mast galliot (*Drie-mast Galyoot*). Baugean’s *flutte*, like the hookers and galliot, had the tiller on the weather deck and did not have a square-ended aftercastle surmounting the round-stern, therefore, it could be argued, it was not properly a *fluyt* since the *fluyt* was originally a round-stern ship with an aftercastle and square taffrail. Groenewegen did illustrate round-stern ships with square taffrails and aftercastles, and for two of those he used the original name *Boot Schip*, while the other was simply a *Groenlandevaarder* — Greenland-goer, i.e. a whaler.



The Success and the Myth of the Flute

Dutch *fluyten* were widely used in Europe. Dutch shipwrights worked in several European countries building flutes for local merchants. English shippers were forbidden foreign built ships by the Navigation Acts except when foreign ships were war prizes but the flute was widely respected as a very useful class of ship.

Both the Dutch Admiralty and the Dutch East India Company used *fluyten* and other types of round-stern ships. Abel Tasman's storeship was the *fluyt* ZEEHAEN and Willem de Vlamingh's storeship was the hooker NIJPTANGH.

To some extent the revolutionary success of the flute was an invention of 20th century maritime historians who wished to provide a simple explanation for the phenomenal success of Dutch shipping. The *fluyt*, as a revolutionary and consciously invented type existed only briefly in the late 16th century, and was probably not called the *fluyt*. Attempts to explain the success of Dutch shipping through the success of a distinct and revolutionary ship-type called the flute are mistaken and unnecessary. Dutch shipping succeeded not because of one definitive advantage but because all their ships were of practical design and almost every aspect of the industry was better organised.

Flutes, lyncke ginnes and recording ships' lines.

The flute was widely admired and used by merchants (and pirates) from Turkey to the Baltic. (Turkish pirates would accept nothing else.) Dutch shipwrights built flutes in foreign shipyards, and yet curiously it seems that the design was not copied by foreign shipwrights. English merchants were said to "covet to have great floors [meaning a wide nearly flat-bottomed hold] in their ships for gaining stowage" and it was the Dutch or Flemish ships that "have great broad floors".

Documents such as Matthew Baker's works known as "Fragments of Ancient English Shipwrihty" show that English ships had very narrow floors, not more than one-third the ship's breadth and sometimes only one-fifth or one-sixth. They were designed by the "three sweep" system using three reconciling tangent-arcs to draw the underwater cross sections. It is a system that cannot be made to work if the floors are broad or the lowest sweep has a large radius.

In reality it is unlikely that the majority of English merchant ships were designed by the "three sweep" system. They would not have been able to work to and from harbours that dried out nor would they have been able to load to and from beaches. Naval ships with three sweep sections and narrow floors could not be beached "for fear of bruising or oversetting" — on a hard beach they would be damaged with their weight spread over too small an area; on a softer beach they would fall over. Both the REVENGE and

the ARK ROYAL fell over and flooded when they dragged anchor and sat on banks in the Medway and Thames respectively.

It was not until the invention of contours and the application of contours to drawing ships' lines that it was possible to properly record the shapes of ships that were not designed by one of the tangent-arc systems. That use of contours occurred in the second half of the 18th century. Once the technique was available a wide range of hull forms, many of them with very broad floors were recorded (e.g. Cook's ENDEAVOUR). It seems most unlikely that they suddenly came into existence just when the technique for recording them appeared. Surely unschooled shipwrights had been producing capacious ships for merchants since the Middle Ages.

Though no technique for drawing those hull shapes had been invented there is a curious clue that shipwrights had known how to copy hull shapes since Matthew Baker's time or earlier. Back in 1572 a man named William Bourne wrote a treatise explaining how to calculate the "proportion of the mould of any ship, whereby is known the weight of any ship with all her lading and furniture". In essence Bourne was calculating displacements by measuring the cross-section at regular intervals and calculating sectional areas. As an alternative for those less inclined to mathematics, he discussed measuring the actual displacement of scale models as a basis for the calculations. Bourne acknowledged that to make the calculations, or a suitably accurate scale model of a ship's hull, one would need to measure the shape "as it may be done with precise diligence". He described how "you may measure the mould of a ship . . . with such a thing as the ship carpenters do take the mould of a ship, and that they do call a mould, or lynck ginne [link engine], and that is made of many pieces, a foot long, or thereabouts, and it is clenched together with roves and clenck nails, that the jointing will be put to and fro at your pleasure, and will stand stiff as you do leave it."

The link engine was a wooden chain of stiffly articulated links that may be bent to the curves of ship's section and will retain that shape. (We made a plywood one during the *Duyfken* project to take the shapes of frame timbers.)

Bourne said you could "get some cunning carpenter to take the true mould of [a] ship, as though he should build another of that mould and proportion in all points . . . That being exactly done, then cause him to make the true mould and proportion. Then cause the carpenter to cut out of a peece of timber the true proportion of the mould of the ship in all points."

How would a cunning carpenter have done Bourne's bidding?

History and archaeology provide clues but the nature of archived records and the processes of decay mean that there is so much about the history of shipwrihty and ship design that is unknown to us and probably always will be.



QUIZ

Answers to September 2002 quiz

1. A snow is a similar rig to a brig (2 masts, both square rigged and also having a gaff mainsail). The difference lies in that in a snow, the gaff mainsail is hooped to a try-sail mast just behind the main mast.
2. The Eglinton was wrecked on 3 September 1852. The Eglinton was a 462 ton wooden barque enroute London to Fremantle. One passenger and one crew were drowned.
3. At the equinox, which occurs twice each year, the sun is over the equator.

Questions

1. When and after whom were the Rowley Shoals named?
2. What, in nautical terms, is an eyebrow or wriggle?
3. What is a futtock and where does the word come from?

Maritime Heritage Association Inc.

137a Marmion Street, Fremantle, Western Australia, 6160

