# Shipwrecks

Along the

New South Wales

Coast

Michael McFadyen

# Shipwrecks Along the New South Wales Coast

# This edition:

Fourth Edition Version C - September 2003

### **Previous editions:**

First Edition – July 1995 Second Edition – August 1997 Third Edition – November 2000 Fourth Edition Version A – May 2002

© Copyright Michael McFadyen 46 Gannon Street TEMPE NSW 2044

AUSTRALIA

Internet Web Site: members.ozemail.com.au/~diving

Email Address: diving@ozemail.com.au

Comments, corrections and suggestions welcome!

Cover Photo: MV *Malabar* aground on Long Bay, 1931

# **Shipwrecks Along the New South Wales Coast**

Short Histories of some of the Ships that have been wrecked or scuttled along the NSW Coast and information about diving them.

Michael McFadyen

# Foreword

For more than 15 years I have dived a considerable number of the shipwrecks of New South Wales. My interest led me to find out more about the history of these ships and how they came to be sunk. After amassing a great deal of information, I decided to share my knowledge, so I wrote articles for *DIVE Log Australasia*. In the mid-1990s, with the expansion of the use of the World Wide Web, I set up my own Web Site (Michael McFadyen's Scuba Diving — <a href="www.michaelmofadyenscuba.info">www.michaelmofadyenscuba.info</a>) and published the articles there. This book is a consolidation of those articles together with a very comprehensive index and a table that provides details of how to find the wrecks.

While this book does not include every wreck in the State, the major ones are covered as well as some minor wrecks. There are 48 ships and 1 aeroplane covered in this book, including a few scuttled ships. Some purists will scoff at me for including the scuttled ships, but they are interesting wrecks for divers and some have quite fascinating stories to tell.

Except where indicated (only two of the ships), I have dived all these wrecks, at least where wreckage still exists. Not all the wrecks in the book are suitable for all divers. Where a wreck is for experienced (or even very experienced) divers, I have indicated this in the relevant chapter. Please be certain, this comment is not included lightly, unless you are of the experience stated, do not attempt to dive that ship.

I would like to thank a number of people who have helped me. First, thanks to Tamara Fleet and Brian Bennett who were my first regular diving buddies and to Terry Bartlett who accompanied me many times on many wreck dives, especially the SS *Tuggerah* and SS *Undola*. More recently, Eddy Labour, Daryl Gibbs and Andreas Thimm have been my most regular diving buddies, especially on wrecks. I would also like to thank Les Caterson and John Beddie who have taken me out on their boats countless times to dive Sydney's many wrecks (and also for buddying with me). John especially has shown me a lot of shipwrecks for the first time, including many on the north side of Sydney and the far South Coast. Thanks also to Peter Fields (co-discoverer of the SS *Myola*) for letting me dive with him as well as passing on a lot of information about wreck diving and Sydney wrecks.

Secondly, to Barry Andrewartha and Belinda Barnes of Mountain Ocean and Travel Publications, heaps of thanks for encouraging me to write for their publications, *DIVE Log Australasia* and *Sportdiving*.

Thirdly, thanks to Frances Prentice of the National Maritime Museum Library who has been of great assistance in permitting me to use the resources of the Library. Many a time I have called her for information on a ship and the next day I have received copies of the information via her husband and my work colleague, Michael.

Max Gleeson and John Riley must also be thanked for the books and articles that they have written on the shipwrecks of NSW. Max also took me to dive the TSS *Currajong* for the first time. These books have also provided information and ideas for my articles. Over the years people have given me copies of articles on shipwrecks that did not include details of the author or even the publication in which they originally appeared. I thank these people as well.

This is not meant to be a definitive book on the shipwrecks of NSW or even a complete listing. It is purely a record of my journalistic output to date on the subject of New South Wales shipwrecks that can be dived. Thanks also to sometimes dive buddy, Russell Stoker, for proof reading this manuscript in an earlier edition.

I accept that there are errors in this book as some things included have not been able to be confirmed as correct. In addition, I am unsure about copyright of some photos that were given to me by people. My apologies if I have inadvertently breached copyright. My intention is only to publish a few copies for my friends and a couple of libraries. I welcome comments, suggestions and corrections which can be sent to me as per the inside cover.

### **IMPORTANT NOTE:**

Note that the GPS Readings contained in this book are based on the Australian Geodetic Datum (AGD) adopted in 1966. On GPS units, this is usual referred to as AGD66 or AUS66. AGD84 and AUS84 are virtually identical to this datum. If you use another datum on your GPS unit without converting my readings, you will end up off the wreck's location by almost 220 metres. If you do normally use another datum, change it to AUS66/AGD66, enter the readings, and then change back to your normal datum. This should change the reading to reflect the difference (check, it will be different to what you entered).

Michael McFadyen Sydney, Australia 13 May 2004

# **Contents**

FOREWORDI
CONTENTSIII
PS AGNES IRVING1
SS ANNIE M. MILLER2
TSS BELBOWRIE5
BELLUBERA7
SS BIRCHGROVE PARK11
SS BOMBO14
SS BONNIE DUNDEE
SS CATTERTHUN22
SS CENTENNIAL25
CENTURION27
SS CITIES SERVICE BOSTON29
SS CITY OF SYDNEY36
COOLOOLI39
TSS CURRAJONG41
SS DEE WHY44
SS DUCKENFIELD48
DUNBAR50
SS EMPIRE GLADSTONE52
FAIREY FIREFLY VX38155
SS GOOLGWAI57
TSS HALL CAINE60
HENRY BOLTE62
SS HILDA65
HIMMA67
SC VELLOE 70

Shipwrecks Along the New South Wales Coast	Page iv
SS LADY DARLING	72
LANERCOST	75
SS LY-EE-MOON	77
SS MACLEAY	82
PS MAITLAND	85
MV MALABAR	87
MEGGOL - FORMERLY HMAS DOOMBA	94
TSS MERIMBULA	99
SS MINMI	101
SS MYOLA	104
SS NEW GUINEA	108
NO FRILLS HOPPER BARGE	111
SS OAKLAND	112
OLIVE CAM	116
SS ROYAL SHEPHERD	119
SS SATARA	121
TASMAN HAULER	125
SS TEKAPO	128
TITAN	131
TRIO	135
SS TUGGERAH	136
SS UNDOLA	140
VALIANT	144
TSS WANDRA	146
SS WONIORA	148
NEW SOUTH WALES SHIPWRECK MARKS AND GPS READIN	GS150
INDEX	156

# PS Agnes Irving

# History

The PS Agnes Irving was a iron hulled vessel over 203 feet in length and displaced 440 tons. It was built in 1862 at Deptford Green, London, England. It was named after Clark Irving's eldest daughter (owner or manager? of Clarence and Richmond River Steam Navigation Company - CRRSNC) and was specially adapted for crossing the shallow river bars of NSW. She operated on the east coast of Australia for CRRSNC without incident. In November 1879 the Agnes Irving came back into service after 4,500 pounds was spent on refurbishing her.

At 1 pm on Christmas Day 1879 the PS Agnes Irving left Sydney bound under the command of Captain McGee for the Macleay River with 12 to 15 passengers and a small general cargo. While trying to enter the Macleay River (the old entrance which is located at about five kilometres north of the current entrance at South West Rocks) at about 1 pm the next day (Sunday 26 December 1879) the Agnes Irving hit bottom while crossing the bar and became stuck on the South Spit. She was immediately hit by a large swell which drove her onto the spit and the engines became useless. All of the passengers and crew were taken off the vessel at about 9 pm (Captain McGee was the last to leave) and only their luggage was saved.

The Agnes Irving was valued at about 12,000 pounds and insured for 9,000 pounds. By 12 noon on 27 December the ship was breaking up and the Captain advised Mr John White, Manager of CRRSNC, that there was no hope of saving the vessel. I am not sure whether the cargo was removed.

### Location

The wreck is located to the north-west of South West Rocks and north of the present entrance to the Macleay River. The GPS Reading for the wreck is 30° 38′ 19″S 153° 00′ 14″E. Note that all the GPS Readings in this book are taken using AUS66 as the map datum. If you use another datum you may be about 220 metres off the wreck. See GPS and Marks Page (page 150) for more details.

### Diving

The trip north to the old entrance of the Macleay River does not take long and you will soon be in the water on the wreck.

What a fantastic dive site!! I cannot believe that people do not dive it more often. After many years of visiting South West Rocks on the mid-north coast of NSW, I had never dived the wreck of the paddle steamer PS *Agnes Irving* till June 1994. Even though it sank in 1879, its intactness is quite amazing. Its shallow depth (13 metres) means that you can spend ages exploring the wreckage.

The bow is in one piece, tipped on its port side and nearby is a small boiler (auxiliary power for winches?). Further along is the middle section of the boat, almost covered in sand. Adjacent to this is the most impressive part of the oscillating engines and the huge boiler. The fishlife on the wreck is also very good, with fish inside every part of the wreck. A great dive, with 10 metre visibility being very good although you could make do in four metre visibility.

# References:

- The Register of Australian and NZ Shipping 1876/77 page 11
- Scuba Action Sept/Oct 1986 page 6 Riley's Wrecks The Top 20 Wrecks in NSW
- Sydney Morning Herald 30/12/1879 page 5
- North Coast Run by Michael Richards page 157

# SS Annie M. Miller

### History

The majority of the real shipwrecks off the Sydney coastline are colliers that were lost while engaged in the coal trade from the southern and northern coalfields to Port Jackson (Sydney Harbour). The wreck of the SS *Annie M. Miller* is no exception.

The Annie M. Miller was built for R. W. Miller and Company in 1928 by the Clyde Shipbuilding Yard in Port Glasgow, Scotland. As was typical for one of R. W. Miller's ships, the new vessel was named after one of Miller's daughters. It was a typical coastal collier, displacing 707 tons with a length of 48 metres and beam of 9 metres (about the same size as the SS\_Tuggerah but as a wreck it appears to be considerably smaller). Although built

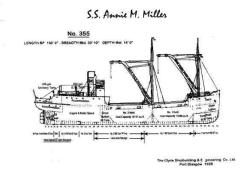


Figure 1 - Plans of the SS Annie M. Miller
Courtesy of Les Caterson

for use as a collier, she was primarily used to carry blue metal from Shellharbour (Bass Point) to Sydney. In fact, the *Miller* only carried coal as a cargo three times in her short career, one of which was to be her last voyage.

Only six months after being launched and less than three months after taking up service, the SS *Annie M. Miller* was to sink in tragic circumstances.

When the *Annie M. Miller* entered service, Captain Herbert Pilling, a 45 year veteran, became her master. On 8 February 1929 at 5.30 am, the *Annie M. Miller* left Sydney for Bulli

to take on a load of coal. She arrived just after 9 am and began loading coal. Problems arose and twice she took on a dangerous list, solved only by moving water in and out of the ballast tanks. Finally, all the coal was loaded but the engineers refused to take her to sea until the hatches and tarpaulins were in place. The Captain ordered the hatches to be put on but not the tarpaulins. The *Miller* left the wharf some time after 2 pm in a moderate choppy sea. Twenty minutes after departure, the list to port returned. A check showed no water in the bilges. By all accounts, the seas were not too bad and of no real influence on the final outcome.

Passing Botany Bay, the list was now so bad that two feet of water was lapping number two hatch. Despite this, Captain Pilling continued towards Sydney rather than take shelter in the Bay. The list got worse until the port railing was underwater. Captain Pilling ordered the lifeboats to be prepared, but due to the list, only the port boat could be launched.

At 7.35 pm as she approached the Macquarie Lighthouse near the outer South Head of Sydney Harbour, a rocket flare was fired. It was seen by the lighthouse keeper but not by the nearby signal station which had the only telephone (you would think that in 1929 the lighthouse would have a telephone or, at the very least, a radio). After a 20 minute delay while the lighthouse keeper summoned help, the pilot steamer *Captain Cook*, left Watsons Bay to assist the *Annie M. Miller*.

The launching of the lifeboat did not succeed as a large wave swept it away. Able Seaman Kenneth McRae leapt in after it and somehow managed to clamber aboard. He rowed back to where he last saw the *Annie M. Miller*, but she had sank. He immediately found one crew member and after some time, a total of six crew were in the lifeboat. The cook, George Wheatley, later stated that he was worried about sharks while in the water. It is just as well that he was not aware that a fatal shark attack had occurred at Bondi Beach that afternoon. Bondi Beach is only a few kilometres from where the ship sank.

No trace of the missing six crew members, including Captain Pilling, was ever found.

On 5 March 1929, a Marine Court of Inquiry found that the *Annie M. Miller* left Bulli with a decided list to port, caused by improper loading and that she was overloaded by 30 tons. The Inquiry also found that the Captain failed to place the tarpaulins on the hatches. The Inquiry stated that while it could not definitely come to a conclusion as to the direct cause of the sinking, its opinion was that the improper loading and the failure to place the tarpaulins led to the ship's loss.

### Location

The wreck of the SS Annie M. Miller was found by Rick Latimer and Peter Harper of South Pacific Divers' Club (so I believe) in the early or mid-1970s. However, I also understand that fishers knew of the location a long time before this discovery. I was told that Rick and Peter were out looking for the wreck when they approached some men fishing and asked them if they knew of any wrecks nearby. The fishers responded that they were fishing on the wreck of the Annie Miller!

The wreck is very easy to find using the attached marks. A GPS Reading for the wreck is 33° 52' 06"S 151° 17' 52"E. Run in on the western mark till the north-western mark (the Hornby lighthouse at South Head) just disappears. See GPS and Marks Page (page 150) for more details. Today the wreck lies in a rough north/south direction at a maximum depth of about 46 metres (average 43). As with most real Sydney



Figure 2 - The western mark for the SS *Annie M. Miller* 

shipwrecks, she lies on her port side. The above marks should find you anchored in front of the boiler.

### Diving

The whole front third of the wreck, including the bow section, has collapsed inwards. The hull is flat and not very interesting at first glance. However, swimming forward on the western side of the wreck gives a diver the opportunity to look under the outer starboard side of the hull. There are often some big fish to see inside this section of the wreck. There is a

large mast running out on the sand on this side and further along, right at the bow, another smaller one. At the bow, there is a piece of metal twisted into a crazy loop de loop. This is the top of the hull. There is also a bit of bow off the main section of wreck. After rounding the bow (I have yet to see an anchor), come back down the eastern side (this is the hull bottom) until you reach the broken up section.

This area, the middle third section of the hull, has broken into two pieces, the bottom of the hull still in place with the sides broken away. You will come across the boiler sitting on its port side. This is still very intact. Have a look in and around the boiler before swimming past it on the western side where you will see the funnel lying out



Figure 3
Peter Fields and the boiler of the *Annie Miller* 

on the sand with a winch closer to the engine. There are some other pieces here as well.

To your left you will see the large steam engine. This is lying, of course, on its side as well. The bottom of the hull sticks up a good deal, as high as the top of the boiler. The plates on the hull are gone, although the hull bottom itself is here. The side hull plates are totally gone in this area although the main machinery is intact. This whole rear section of the wreck has moved to the east a few metres, separating from the boiler area. The propeller is buried in the sand with only one bit of one blade showing. The rudder is apparently totally under the sand but you can see the tiller (I think this is what it is called). You can examine under the engine at the front of this section.

In May 2000 I found some vertebrae in the area of the engine. I knew that they were not human as they appeared to be too large for a man. Later that month I found out what they were. A month or more earlier, a friend of a friend saw a dead dolphin on the wreck. The dolphin had a shark bite out of its body, but whether this was the cause of death, who knows. Anyway, the vertebrae are the dolphin's and as well there is at least the upper jaw of the dolphin there as well.

You will now be next to the boiler again and here the hull bottom has collapsed outwards, away from the wreck. This area is often home to very large wobbegong sharks and in a large pipe that runs out east, there is a resident moray eel.



Figure 4
The top of the main mast

Fishlife is very good, in fact sometimes almost as good as the SS *Tuggerah* (on page 136) and SS *Undola* (on page 140) and I have sometimes seen tropical fish like short-finned bannerfish here. Visibility is not usually as good as the above two wrecks as it is located closer to shore and it is also near the mouth of Sydney Harbour. Of course, this means that it is also not as prone to southerly currents as the *Tuggerah*. However, my two dives here in August/September 1998 had very good visibility. One thing to look for are golf balls. On every dive here I have found at least one. I assume that they are hit into the water from the North Bondi Golf Course a few kilometres to the south and they are then pushed along the sand bottom by currents and swells before being stopped by the wreck.

An excellent dive, with one dive enabling a cursory examination of the wreck. Multiple dives are definitely required to properly see the complete wreck but, of course, this dive is only for experienced deep divers.

### References:

- Scuba Action (date unknown), article by John Riley
- The Vanished Fleet of the Sydney Coastline by Max Gleeson (highly recommended)
- Sydney Morning Herald, 9 February 1929 pages 1, 17, 18;11 February pages 12, 14; 12 February, page 12
- Scuba Divers Guide Southern NSW Coast by Tom Byron, pages 70 to73

# TSS Belbowrie

# History

The TSS *Belbowrie* was built by Rock Davis at Blackwall, Brisbane Water on the NSW Central Coast in 1911. It was 37 metres long and displaced 218 tons. Built for J. Weston, the vessel was powered by two two cylinder steam engines manufactured by Morts Dock and Engineering Co Ltd, Balmain. In about 1914 the vessel was sold to Coastal Shipping Cooperative Co Ltd and the next year to the Coffs Harbour Co-operative Steam Ship Co Ltd. In 1918 the *Belbowrie*'s list of owners grew when she was purchased by Bell and Frazer Ltd and in the early 1920s ownership changed again to Kirsten and Earnshaw Ltd (I am not sure of this as the entry in *Lloyd's Register* of 1924-25 that I checked is crossed out) and in 1923 or 24 sold again to Shoalhaven Steam Ship Co Ltd. In 1928 she was again sold to A. Auland and about 1932 onto Aulco Pty Ltd of Bond Street, Sydney. The *Register of Australian and NZ Shipping of 1937* gives the owner again as A. Auland (presumably associated with Aulco P/L).

As well as having a few (heaps in fact) owners, the *Belbowrie* had a few incidents in her life. On Monday 25 June 1923, the *Belbowrie* left Red Head near Ulladulla to travel to Sydney via Sussex Inlet, She was carrying 25,000 feet of timber. The weather was bad and Captain H. Chamberlain decided to miss Sussex and go straight to Sydney. At 4.30 am on Tuesday 26 June 1923, the TSS *Belbowrie* ran aground on Wanda Beach about five and a half miles north of Cronulla on Sydney's southern outskirts. There were gale force south-easterly winds and very heavy rain. Somehow the *Belbowrie* either travelled between the mainland and Jibbon Bombora or around the bommie and then headed right into Bate Bay and, I assume, rode straight over Merries Reef (which must have been breaking) as where it ended up, the reef is on a straight line from anywhere south!

After removing the timber to the beach, the *Belbowrie* was refloated on Sunday 2 July 1923 with the help of the lighter *Zelma*. The ship sailed to Sydney and was found to have suffered no damage. An interesting aspect is how the timber was removed from the beach when it is considered how far this spot was from the nearest road or track!

On 24 November 1938, the *Belbowrie* rescued two fishers off Norah Head on the NSW Central Coast after their boat sank. Less than two months later, the *Belbowrie* was to suffer the same fate.

At 7 pm on 16 January 1939 she departed Balmain in Sydney Harbour with 10 crew to travel to Shellharbour to take on a cargo of blue metal. By 8.10 pm the *Belbowrie* had left the Harbour and at 8.50 pm was off Ben Buckler (the northern headland of Bondi Beach). It was poor weather, with a strong southerly wind and very heavy rain. Despite this, it was reported that the seas were not exceptionally rough and apparently nothing undue could be seen. The skipper, Captain P.R. Dixon, went below as he thought they were well out to sea. Edgar Charles Ladd (41), the Mate, was left in control and the *Belbowrie* was travelling at 6.5 knots

Mr Ladd reported that at first he thought that he could just see white-caps on the sea through a break in the weather but this was not correct. He then realised that what he could see was rocks ahead. All of a sudden, the vessel crashed onto rocks as Captain Dixon lay in his bunk. The Captain thought that they had hit a heavy sea but then realised they had hit the shore. Captain Dixon rushed to the bridge and found they were hard on the rocks at the southern end of Maroubra Beach. He ordered the engines to be reversed but after a few minutes the engine room was flooded and all was lost. Waves were breaking right over the *Belbowrie* and the ship was already breaking up with its back broken. Captain Dixon fired off a dozen rockets but the last one would not go off. A lifeboat was lowered but the seas flooded it.

By now people had arrived at the scene and the *Belbowrie*'s crew attempted to get a line to shore. After several unsuccessful attempts, the line was tied to a buoy. One of the people on shore, Keith Tracey, risked his life by rushing into the seas on the rock platform and the rope was held secure by a squad of Police. The crew then went hand over hand the 60 feet across

the boiling seas and rock platform to safety. Only one person was injured, one of the two fireman, John Joseph Duffy of Balmain, who hurt himself when he fell from the vessel. The last person to leave the ship was, of course, Captain Dixon. He became exhausted when travelling down the rope and he fell into the surf with a cry of "I'm done". Luckily, a number of men dashed into the seas and dragged him to shore. Apparently Captain Dixon put his failure to make his way down the line to the fact that "...I'm so fat, that's why I fell off".

The crew was transported to Maroubra Ambulance Station where they were warmed up and treated for shock. Within a few hours the stern of the ship was below water and by the next morning the vessel was declared a total loss by Captain D.W. Gibson for the underwriters. She was valued at 6,000 pounds.

### Location

The wreck is located about 200 to 250 metres off the southern end of Maroubra Beach. The normal way to dive the wreck is to walk from the South Maroubra Surf Club car park across the rock platform. The wreckage starts about 15 to 20 metres off the rocks.

### Diving

Today there is still wreckage to be found in the area, although very little is identifiable as specific parts of either this ship or the nearby wreck of the SS *Tekapo* (on page 128). There are iron plates and girders all over the place, as well as some brass pieces.

### References

- Sydney Morning Herald 17 and 18 January 1939
- Lloyd's Register 1913-14, 1915-16, 1916-17, 1919-20, 1924-25, 1929-30
- The Register of Australian and NZ Shipping 1937 page 21, 1933 page 19
- Some Shipwrecks in the Randwick Municipality by Trevor L. Brignell pages 29-32

### Bellubera

### History

On 26 April 1910, the *Bellubera* was launched at Morts Dock, Woolwich, Sydney, the largest and fastest Manly Ferry built to date. She was 210 feet long and 32 feet wide with a gross tonnage of 499 tons. Two boilers provided steam for the two triple expansion engines which drove the single props at either end of the ferry. Like the *Dee Why* (on page 44), the *Bellubera* was a double ended ferry built for the Port Jackson and Manly Steamship Company for the Manly run.

Carrying 1,529 passengers, it did not take too long for the *Bellubera* to achieve a reputation as a hoodoo ship. On 10 May 1910, soon after being launched and while been fitted out, chains holding one of the 40 ton boilers broke and it fell into the hull causing considerable damage.

The next trouble the *Bellubera* got into was off Dobroyd Head (opposite The Heads) on 2 April 1914 when she cut in half the *Kate*, a tug which was towing a lighter. It was lucky that the lighter was not hit as it was carrying a considerable amount of high explosives. The *Bellubera* was not damaged. The next 21 years appear to have been fairly uneventful.

The steam powered ferries were expensive and inconvenient to operate.



Figure 5 The *Bellebera* at Circular Quay in the 1950s or 1960s

For this reason, it was decided to convert the *Bellubera* to diesel electric power. In September 1935 after just over 25 years service, the *Bellubera* went into have her steam engines removed and be converted to diesel-electric. The *Bellubera* was only the second British vessel (note this anachronism) to be so converted. After the steam engines and boilers were removed, the *Bellubera* had four Harland & Wolff (builders of the RMS *Titanic*) five cylinder two-stroke diesel engines of 450 bhp installed. These drove direct-current generators which supplied electric current to four electric-propulsion motors of 615 hp each. Two 85 bhp diesel engines were installed to power the generating plant for lighting and auxiliary power.

On 28 June 1936, the *Bellubera* returned to service but from then on the hoodoo really got worse. Sometime after this an engineer cut his finger on a section of the engine. Within two weeks he was dead from blood poisoning. On 16 November 1936 while at the Kurraba Point ferry yards, a fire started on board the *Bellubera* when sparks from an oxy torch fell onto a seat and burst into flames. Five men were trapped inside the ship for nearly an hour until the fire was extinguished. The *Bellubera* was a burnt out shell with damage estimated at £40,000. Worse still, two men, Robert Findlay, 38, fitter and Sidney Tight, 44, greaser, died as a result of the fire. Two other men were injured, including one who spent almost two years in hospital.

In October 1937 the *Bellubera* returned to service after extensive repairs at the Cockatoo Island dockyard. The diesel engines were overhauled but not replaced. The engines gave trouble after that time and later they were to be replaced.

On the night of 9 September 1941 during heavy rain, Sidney Rose, 54, died when the *Bellubera* ran down the 30 foot *Sydbridge* off the current site of the Opera House.

The next incident occurred on 6 February 1945 as the *Bellubera* approached the Heads when Captain Wally Dohrn (Snr) collapsed and died of a heart attack. In September of the same year, a young woman, apparently feeling seasick, leaned too far over the railing and fell overboard. Luckily, two soldiers saw what happened and they dived in and rescued her.

Soon after this incident, a young man leaped over the side of the *Bellubera* shouting that he wanted to die. The *Bellubera* turned around and lowered a boat which dragged him (fighting) back to safety. The *Bellubera*'s horror year continued when on 31 January 1946 a man fell from the top deck of the ferry as it passed Clifton Gardens. He drowned.

The strangest story about the *Bellubera* happened on the night of 17 August 1948 when she was near the spot where Captain Dohrn died. Passengers heard loud moans coming from the water. Searchlights were used to comb the water but nothing was seen and no-one was missing. It is reported (the Australian Government Environment Web Site) that on 19 October 1948 she was in a serious collision near Sydney Heads. I have not been able to confirm this report. Perhaps it is an error of dates, see the next paragraph about the collision near Bradleys Head.

On 16 August 1949 a Navy stoker fell from the *Bellubera*. Fifteen minutes later in the pitch black darkness, passengers on the *Dee Why* heard shouts from the water. The ferry stopped and the lucky man was saved. As if all this was not enough, just over a year later on 18 October 1950 the *Bellubera* collided with a 7,000 ton freighter, *Taurus*, off Bradleys Head. Fifteen feet of the ferry's lower deck was smashed.

It was to be five years before the *Bellubera* made news again but first it was to be reengined. In February 1954 the *Bellubera* went to the NSW Government State Dockyard at Newcastle and had three English Electric diesel engines installed to replace the four old engines. On 21 October 1954 she returned to service and continued for another 19 years using these engines.

On the night of 20 August 1955 a man fell off the *Bellubera* but this was not reported to the crew until she docked at Manly. The ferry quickly returned to where the passenger said the man would be and there they found him swimming. He was handed over to the Police. Off Fort Denison on 27 February 1958 a woman fell overboard. The Water Police found her completely submerged. She recovered.

At about 10.15 pm on 25 June 1960, the *Bellubera* stuck an object, believed to be a log, at The Heads, which buckled the rudder and fouled the prop. The engines stopped and she began to drift towards Dobroyd Head and then Manly Point. Finally after 35 minutes the anchor took hold saving her from further damage.

On 14 October 1960 a man jumped off her near Middle Head. He was found some time later by the collier *Mortlake Bank* clinging to a channel marker.

The next year another skipper of the *Bellubera* died at the wheel. On 3 February 1961 Albert Villiers collapsed and died of a heart attack while berthing the ferry for refuelling. Later the same year on 13 December she broke down near The Heads and she was towed into Watsons Bay after nearly hitting the rocks below Middle Head.

Another decade was to pass before the *Bellubera*'s last incident. On 28 February 1970 she rammed the anti-submarine destroyer HMAS *Parramatta* while the warship was refuelling off Clifton Gardens and tore a hole 6 feet by 8 feet in the warship's side. The *Bellubera* was also damaged but I am not sure of the extent of this damage.

After 63 years of faithful, if somewhat dangerous service to Sydney, the *Bellubera* made its last run to Manly on 29 November 1973 (or 29 October if other records are to be believed).

By my reckoning, the *Bellubera* had collided with at least four (possibly five) vessels, sinking two of them, seven persons had died through direct association with the ferry and at least seven people had fell or jumped off the ferry in mid-Harbour.

After lying on the Harbour for almost seven years, the *Bellubera* was scuttled off Long Reef as part of the artificial reef on 1 August 1980. Stuart McPherson contacted me and told me

that as a teenager with a camera and an interest in Manly Ferries, he was around quite a lot as this vessel was being broken up in Cockle Bay in the first half of 1980. The following is an almost verbatim report of what he told me. The *Bellubera* almost managed to kill one more person as she was being broken up. The vessel had been purchased by a company named "Trouble Shooter", run by a Dutchman called Jensen. He had purchased her so certain equipment could be stripped from her and installed into an ex-RAN minesweeper, the former HMAS *Gull*. The *Gull* (renamed *Trouble Shooter*, with its hull painted bright yellow) was to become a rescue vessel of some sort, but at the time was a hull in the water with no engines.



Figure 6 Workmen salvaging parts of the Bellubera before she was scuttled

Stuart advises me that in the end, Bellubera's English Electric diesels were removed and provided to the Public Transport Commission to help keep the North Head and Baragoola in service. In exchange, Trouble Shooter was given a pair of engines (presumably by the PTC) for installation into the minesweeper.

What subsequently became of this minesweeper is not known, but during 1980 it sat in Cockle Bay next to *Bellubera*, and across the bay from the SS *South Steyne* which was at that time also in a neglected state.

Stuart says that part way into the stripping of the vessel, large sections of the teak decking were removed whole. The steel deck stringers were cut with an oxy, and then an entire

section of decking lifted out by crane in one piece (presumably for sale). It was a faster way of removing the decking timber, because the company had a deadline from the Maritime Services Board (1 August 1980) for the hull to be scuttled. Things were done in a hurry. (Stuart tells me that he has none of the decking timber, but did obtain a pair of the distinctive padded upper-deck benches, which currently live in his garage.)

One of these sections was removed at the bottom of the after stairway. Directly below this lay the gearbox for two electric motors to drive the aft propeller. This gearbox (a large piece of equipment) had also been lifted out of the hull, leaving a number of large threaded rods in rows sticking up vertically (it was these that "bolted" the gearbox to the hull). One wet day Stuart arrived at the wharf. The guys from Trouble Shooter were gathered around and the mood was gloomy. Apparently he had just missed the ambulance. One of the employees had skidded down the wet stairway and gone straight through the big hole where the decking used to be. He landed on the bed where the gearbox used to be, right between two rows of these tall threaded rods. Had he landed slightly to the right or the left, he would have been impaled.



Figure 7
The stripped Bellubera about to go down to her final resting place off Long Reef

Stuart managed to score a ride on a privately-owned cruiser when she was towed out the heads and scuttled on 1 August 1980. Fortunately, following some time in hospital the injured man was intact enough to ride on the same boat as Stuart and watch Bellubera sink. Stuart forgets his name, but he appears in one or two of his photos of the day. He remembers him being

particularly glad to see her go down.

Stuart also reports that the *Bellubera* went down completely level, unlike the *Dee Why* (see page 44) which had her bow (or stern?) stuck high in the air. The ship appears to have broken into two parts when she sank.

### Location

The GPS reading for the main section of the *Bellubera* is a latitude of 34° 42' 48" S and longitude of 151° 21' 00" E. Marks for the wreck are to have the vertical section of Bangally Point (to the north) just intersecting with the ridge on the northern side of Broken Bay. The eastern mark is the Bahai Temple lined up exactly between two houses on the ridge about one third of the way to the water. Also, there are two large towers (light towers at a sports field I think) close to the water. Take the distance from the left tower to the right one and then place the right one about the same distance to the left of the Bahai Temple. The wreck comes up from about 46 metres to 42 metres or so. The wreck lies east-west.

# **Diving**

On 31 August 2002 I finally got to dive this wreck. The ship lies on its side in about 45 or 46 metres. The bow section here (remember that there were two bows - this is the eastern bow) is very intact. The wreck here comes up to 41 or 42 metres on the top of the bow. You can see the rudder as well as where the prop used to be. On the top of the bow you can see the rudder assembly. You can enter the wreck and it is an interesting explore. There is a broken toilet here. This section of the wreck has a huge number of nannygai as well as some huge Sergeant Bakers (we saw one eating a nannygai).

About 15 metres along the hull is broken and the upper part has fallen



Figure 8
The eastern bow of the *Bellubera* 

to the southern side. Past here the wreck is more intact again. The next 20 metres of the wreck has some places to explore. Then the wreck comes to an end. The hull on either side is very twisted, and it appears to me that the ship broke into two when she was scuttled. The other section is apparently 30 metres or so away and used to be connected by a rope. I have not yet examined this section.

Not a bad dive, fairly easy with some simple penetrations. Visibility on my two dives so far has been between seven and fifteen metres or so.

### References

- Manly Ferries of Sydney Harbour by Tom Mead
- Personal comments by Stuart McPherson (themcphersons@bigpond.com) to Michael McFadyen

# SS Birchgrove Park

### History

The last real shipwreck to occur in the Sydney area was the loss of the SS *Birchgrove Park* on 2 August 1956. The *Birchgrove Park* was lost off the far northern beaches of the City in a terrible storm while on a regular trip from Newcastle to Sydney.

The loss of the SS *Annie M. Miller* on 8 February 1929 (on page 2), less than three months after its acquisition, meant that R. W. Miller and Company. needed another collier. In mid-1930 when its finances were in a better state, an order was placed for a new vessel. The *Birchgrove Park* was a collier built by J. Lewis and Sons of Aberdeen, Scotland and launched in November 1930. The *Birchgrove Park* (Lloyd's Register 157592) was 640 tons, 47 metres long and 10 metres wide. Constructed of steel and powered by a coal powered boiler and a three cylinder steam engine (producing 93 bhp) turning a single screw, the *Birchgrove Park* represents the end of an era, that of coal transport to Sydney by ship.

Leaving the UK on 5 November 1930, the *Birchgrove Park* arrived in Sydney on 18 January 1931. Within two weeks she entered service, first working from Bulli but then Newcastle.

On 9 May 1941, the ship was requisitioned by the Royal Australian Navy for conversion into an auxiliary minesweeper. HMAS *Birchgrove Park* (FY15 – carried the large letters BP on bow) was commissioned into the Navy on 22 August 1941. Fitted with two Oerlikon heavy machine guns and a large 12 pounder gun, *Birchgrove Park* was then recommissioned in 1942 as a stores carrier. In August 1943 the *Birchgrove Park* arrived in Port Moresby and for the next two years she served various New Guinea ports.

In April 1945 the Birchgrove Park was paid off but on 25 July 1945 she was

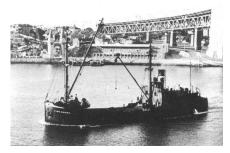


Figure 9
The SS Birchgrove Park passes
Luna Park after just passing under
the Sydney Harbour Bridge

recommissioned as a tender. In December of the same year she was finally paid off and returned to R. W. Miller and Company. in February 1946. She went back to her regular Newcastle/Sydney run, although from all reports, by early 1956 her condition had deteriorated to such an extent where she was soon expected to be scrapped.

Although the last Sixty Miler did not disappear from service till mid-1993, in reality they were doomed from the late 1950s or early 1960s. Instead of having power stations in the middle of the city (eg Pyrmont, Balmain, White Bay and Bunnerong), a decision was made to replace these old dinosaurs by constructing the new super-stations on the coalfields themselves.

This did away with a reason for the small colliers to ply their loads the short distance from Wollongong and Newcastle to Sydney. The other reason for transporting coal to Sydney was to replenish the bunkers of international coal-powered vessels. These had, of course, by now mostly switched over to diesel or oil powered engines.

At 1.45 pm on 1 August 1956, the *Birchgrove Park* left Newcastle with a slight list to port. The weather was fine and sea conditions were calm. No change was predicted for more than 12 hours. However, just like now, the weather bureau was wrong and a half hour after leaving Newcastle a southerly buster hit.

Waves started coming over the deck and the holds quickly took in water as the tarpaulins had worked loose. Although they were put back in place, an hour later they were again loose and more water was in the hold. The list increased and despite attention, water continued to enter the holds.

The *Birchgrove Park* was now off Broken Bay and the winds were over 40 mph, every wave crashing over the deck. Still Captain Laurence Lynch did not seek the safety of Broken Bay. It was now midnight and water was entering the ship through a corroded steampipe and the vents on the forecastle. Soon after, the Leading Fireman, Erl Olsen, reported that the water could soon flood the boiler fires, disabling the ship.

Captain Lynch ordered the crew on deck and attempted to prepare the lifeboats for launching. Due to the list, this was not successful. In addition, the ship's calls for help were never received as the aerial had not been erected before leaving Newcastle. The *Birchgrove Park* was still steaming on and at 2.35 am Captain Lynch asked Olsen to return to the engine room to shut down the engines. Despite the risk, Olsen successfully completed the task as Captain Lynch got an SOS away to the South Head Signal Station by lamp.

At 2.45 am, the *Birchgrove Park* turned over and sank. The crew went into the water, clinging to the debris which came from the ship. A lifeboat was found and three crew clambered aboard, including Olsen. Waves were crashing over the boat and Olsen and the only oar went into the ocean. Olsen managed to get back into the boat but the oar was lost.

The collier *William Macarthur* heading north was informed of the loss and the Sydney Harbour pilot vessel, *Captain Cook*, set out at 3.30 am. Unfortunately, they started searching off Long Reef, almost 10 kilometres to the south of where the *Birchgrove Park* had gone down

Early in the morning the RAN sent three vessels, including a submarine, to assist in the search. Thirty minutes later two Neptune aircraft from the RAAF were also in the search.

At 6.00 am one of the crew in the lifeboat had died and five hours later the other two were washed ashore at Lobster Bay. One of the plane sighted a number of objects in the water and dropped flares to locate each for the searching ships. HMAS *Wagga* responded to one flare and found a crewman alive but in very poor condition. Two crew ended up diving in to save and assist getting him out of the water. About the same time, HMAS *Thorough*, a submarine, rescued another crew member, the last to be found alive. Ten crew died in the sinking, two bodies never to be found.

### Location

Today, the *Birchgrove Park* lies on a sandy bottom of 51 metres approximately eight kilometres south-east from Barrenjoey Head at Broken Bay. A Global Positioning System (GPS) reading gives a latitude of 33° 38' 24" S and longitude of 151° 22' 39". The marks in Tom Byron's book *Scuba Divers Guide - Northern NSW Coast* are generally accurate but the Lion Island/Barrenjoey mark must be opened up with a larger gap in between. See GPS and Marks Page (see page 150) for more details. These marks will enable you to accurately find the wreck which protrudes only about four metres above the sand.

### **Diving**

The *Birchgrove Park* is but a shell of her former self. In less than 40 years the ship has suffered from the dual ravages of the weather and the scuba divers who found her only a few years after it sunk. The wreck now lies on her port side facing the west, with the bow and stern fairly intact.

Starting from the stern, you can look at the large prop and rudder, before swimming along the keel towards the bow. After just a few metres you will see a large hole in the hull and then a major disintegration of the hull behind the boiler. The whole hull has come apart from the main section of the ship for the length of the boiler. You can swim through the space between the hull (which has sort of rolled out from the ship a few metres) and the boiler and come out in front of the boiler. There are conger and moray eels living in the boiler pipes and sometimes wobbegongs in the firebox.

From here, you can come out on the deck area of the ship and explore the engine back towards the stern. After a quick look, swim over the sand adjacent to the wreck and you will soon see the funnel. Behind the funnel on the sand is a memorial plaque to Rick Latimer, one of Australia's best known wreck divers (see note below).

In front of the funnel the whole bridge is lying detached from the main hull. You can easily enter the bridge from the main wreck side and explore the upper and lower levels. In front of the bridge there is a very large mast lying on the sand in front in front of this there is another smaller mast and some other pieces of wreckage.

In this area the wreck is again split. The hull overhangs quite dramatically in the front section of the *Birchgrove Park*. You can swim under this area, and, with proper training, planning and equipment, you can enter some of the tighter sections.

Further towards the bow you can enter the forecastle (the section under the actual bow) and exit from a number of holes. You can see the bow section has broken away from the rest of the wreck and has dropped over a bit.

It takes a large number of dives on the SS *Birchgrove Park* to fully appreciate the wreck, although one dive will give you a good overview.

Despite all this damage, the *Birchgrove Park* is probably the most intact wreck in the Sydney area (discounting scuttled vessels) and makes a great dive for the experienced deep diver.

The *Birchgrove Park* does not normally suffer too much from current and is generally blessed with fairly good visibility, although after prolonged periods of rain the Hawkesbury River could impact on the wreck. Only for the experienced and well-equipped deep diver.

### Note:

On Sunday 17 August 1997, a memorial to the late Rick Latimer, one of Australia's most renowned wreck divers, was placed adjacent to the funnel by members of the South Pacific Divers' Club. This large concrete block has a plaque on it remembering Rick's love of shipwrecks, especially his favourite, the SS *Birchgrove Park*.

### References:

- The Vanished Fleet of the Sydney Coastline by Max Gleeson, pages 155-165
- Sportdiving, Aug/Sept 1992, pages 30-33
- Scuba Divers Guide Northern NSW Coast by Tom Byron, pages 183-8
- Sydney Morning Herald, 3/8/56 pages 1 and 3, 4/8/56 page 1
- Sun-Herald 5/8/56 page 2
- Lloyds Register 1931-32, 1945-46, 1955-56
- Royal Australian Navy Profile No 3 by Michael Wilson pages 60 & 67
- Australian Warships of Second World War, page 174
- Australian Ships by Ross Gillett, pages 121-2
- A Log of Australian Ships by Graeme Andrews page 27
- Australian Coastal Shipping by Barry Pemberton page 202

# SS Bombo

# History

The twenty second day of February 1949 had been a typical late summer's day on the NSW South Coast. At about 3 o'clock a southerly buster had passed the Wollongong area and the sea conditions had dramatically changed for the worse. Since then the ship had battled the deteriorating seas, first in an attempt to reach Sydney and then in a battle to make the safety of Port Kembla. By 10.00 pm it was only four kilometres away from safety when suddenly the list on the ship worsened. Within minutes the ship had "turned turtle" and sank, taking four crew to their immediate death.

So were the last minutes of the SS *Bombo* a coastal steamer built for the NSW Government owned State Metal Quarries by H. Robb at Leith in the UK and launched in February 1930. The 540 ton and 46 metre *Bombo* arrived in Sydney on 23 April 1930 and commenced service transporting blue metal from the Bombo Quarry between Kiama and Sydney. In December 1935, together with the assets of State Metal Quarries, she was sold to Quarries Pty Ltd.



Figure 11 HMAS *Bombo* during World War II

On 22 February 1941, the *Bombo* was requisitioned by the Royal Australian Navy and on 28 May 1941 commissioned as HMAS *Bombo* (designation BB), an auxiliary minesweeper. Two Oerlikon heavy machine guns, a 12 pound gun were installed and four depth charges carried at the stern. The 12 pounder was mounted on a bandstand on the foredeck. She apparently served between Sydney, Melbourne and Hobart until May 1944 (also reported November 1943) when she was converted into a stores carrier. She was reported

to leave Sydney in February 1944 and spent the next 18 months in Darwin and the Northern Australian area. She may have served in Papau New Guinea, but I am not sure of this fact.

She was reported to have been used towing targets outside Darwin Harbour and may have visited the islands of New Year, West Montalivet, Peron and North Goulburn. On 11 September 1945 the *Bombo* was part of a force that occupied Koepand, East Timor. In late November 1945 the *Bombo* sailed from Darwin to Sydney. The *Bombo* was paid off on 25 February 1946, returning to its owners on 25 July 1947.

The *Bombo*'s regular skipper, Captain Arthur Bell once again took control of her on the run from Kiama to Sydney. In September 1947 Captain Bell brought the SS *Bombo* into Kiama for the first time since Feburary 1941. On 29 December 1948, the *Bombo* grounded on the Kiama bar, suffering some damage. It was quickly repaired and returned to work by mid-January.

At 11.55 am on 22 February 1949, the *Bombo* left Kiama for Sydney with 650 tons of blue metal aboard. Among the 14 crew was one Thorvald Thomsen who almost 30 years earlier had survived the wreck of the SS *Tuggerah* (on page 136) and was lucky to be absent ill when the SS *Myola* (on page 104) sank a few weeks before the *Tuggerah*. Just off Port Kembla, a southerly change hit the vessel turning a pleasant day into a nightmare. At 4.00 pm when north of Stanwell Park, a huge wave went right over the ship causing a list to port as the cargo shifted.

Captain Bell decided to make a run for Port Kembla Harbour where the *Bombo* could shelter while the blue metal was retrimmed. At 5.00 pm a message was sent to the coastal radio station at La Perouse that the *Bombo* had turned around. When only four kilometres from safety, the ship sank.

Ten men escaped from the ship, the other four going down with the wreck. Thomsen was one of the survivors clinging to two planks. Two crew decided to swim to shore but they never made it. At dawn, Captain Bell and another crew member were dead, six still hanging on to the planks. The land was sighted and the remaining survivors decided to set out at 15 minute intervals for the shore.

At 10.00 am, Thomsen was dragged ashore by a beach inspector at Bulli Beach while Michael Fitzsimmons, the fireman, came ashore at Woonona Beach. Two RAAF Catalinas were brought into the search but no more survivors were found. Only two bodies were recovered. Captain Bell's body was recovered by the Wollongong trawler, *Pacific Pearl* skippered by Captain A. Barnet. The body of Charles Barhen was also found. Of the crew of 14, 12 died that day. Dead were:

- Captain Arthur Robert P. Bell Skipper
- Percy J. Carroll Chief Engineer
- Henry Stringer First Mate
- Charles Barhen Able Seaman
- W. J. Cunningham Able Seaman
- John Stevenson Second Engineer
- Edward Nagle Donkeyman
- Ernest Norris Fireman
- Thomas Belvoir ?
- Arthur Lightburn Cook
- G. Riddell Seaman
- Laurence Lucey Able Seaman

A dog, believed to be the ship's dog, was found on Bulli Beach covered in grease and sand. Thomsen and Fitzsimmons were of the view that the ship sank because the load of blue metal shifted.

When the *Bombo* sank, a great deal of its cargo of blue metal dropped out of the holds and fell to the sea floor (remember the ship turned turtle). This pile of metal is now located about 50 metres to the east of the wreck. As the ship went down it ploughed into the sandy bottom bow first. This caused some damage to the bow area. Soon after, the bridge hit the bottom and then the great weight and momentum caused the ship's back to break and the *Bombo* buckled right across the hull almost in the middle of the ship. At the same time the weight squashed the bridge beyond identification. As she sank, some pieces fell and ended up on the sand next to the remains of the ship. This includes a hopper used to load coal/gravel and parts of the masts. Lying roughly north-south, the *Bombo* was now in water 32 metres deep and upside down almost in the middle of the shipping channel.

The wreck lay undiscovered by divers until 1978 when Don Morrison and his mate Bruce Hammond were directed to a location by a couple of fishermen who fished this spot regularly. They did not know what was there but it was a good fishing spot. Don and Bruce dived on the spot and thereby discovered the wreck of the SS *Bombo*. They dived it regularly over the next few years and took nothing from it (except a few bits and pieces, viz, one leather shoe, one pressure gauge and several light bulbs). The light bulbs were a fascinating find. Don reports that they were floating inside the engine room, the metal caps had corroded off, but there was a bit of filament extruding through on most of them. He actually got one to light up when he put power to it.

In 1983 they made the location of the wreck known to the diving public. Don has told me that within months of making the wreck's location known, the *Bombo* was literally stripped of just about everything that could be removed. Don says that this was the most

disappointing thing for him. Don reports that discovering the *Bombo* was certainly one of the highlights of his diving career.

Don and Bruce corresponded with the Navy Hydrographic Department at the time of the announcement. They were very grateful for the location of the wreck and they sent Don the first hydrographic chart produced showing the location of the *Bombo*.

### Location

Nowadays, the *Bombo* is an excellent deeper dive for the experienced diver. The marks in Tom Byron's Southern NSW book (note the south western mark no longer exists), as well as the local dive operators, will generally put you on the wreck in the vicinity of the stern. The wreck's approximate location by GPS is 34° 26' 46.5' S and 150° 55' 28.8' E. See GPS and Marks Page (see page 150) for more details.

You should also note that before you attempt to dive this wreck in your own boat, you will need to do some work. The wreck is located almost right on the approach path to the Port Kembla Harbour. As such, huge ships pass right by the wreck, very close indeed. In recent years, the harbourmaster has insisted that boats are not permitted to be at anchor when ships are entering or leaving the port. Although you do not need a permit, you need to check that there is no ship entering or leaving during the time that you are planning to dive. You can do this by going to the port authority's web site <a href="www.kemblaport.com.au">www.kemblaport.com.au</a> and selecting the shipping movements page and scrolling down to the day(s) you are interested in diving. This will show the anticipated shipping movements and you can plan your dive accordingly. Then, on the morning of the dive day, you will need to phone the duty officer on 4275 0159 or 4274 4571 and check to see that it is still all clear to dive the wreck.

### **Diving**

For almost 48 years until late August 1996, the wreck of the SS *Bombo* lay upside down on the seafloor, almost fully intact except where it broke in half when it sank. However, a huge storm on Saturday 31 August 1996 (I think) caused considerable damage to the wreck. However, as strange as it may seem, the damage has made the wreck a far better and more interesting dive. The photo at left shows the prop in January 1992 when it was upside down. More recently there has been some damage to the bow. This occurred in late 1998 or early 1999 and some even more recently. More about this later.

As you descend to the wreck (if you are anchored on the stern - which is likely as this is the only place anchors will easily take hold), you will see either the open engine area and boiler or the broken stern section. What has happened is that the section of the stern hull, from just behind the front of the boiler right back to the stern itself has broken off and is now sitting upright on the ocean side of the rest of the wreck. The prop is still attached to the broken away stern section but is now the right way up. One of the blades of the propeller broke off during the storm and is very obvious.

The main section of the wreck looks as if someone has used a giant can-opener and cut the side of the hull about 0.5 metre off the sand. The engine is now freely accessible with the steam engine's pistons, conrods and driveshaft visible as well as the donkey boiler on the eastern side. You can still enter the area in front of the boiler from either side and examine the boiler in detail.

The rudder still sits on the sand right at the stern where it fall when the *Bombo* hit the bottom in 1949, although it has sunk a bit into the sand since 1997.

Head north along the eastern side of the wreck and you will pass the broken hull area. On this side the sand has covered the hull for a few metres. Past here the hull is opened up for a few metres giving another entrance to the inside of the *Bombo*. This section was almost intact till 1998/99 but now the hull has broken a few metres off the sand and the main section of the hull has dropped right down. In 1999 you could still swim from this spot right across the bow to the western tip of the bow but it was quite low and cramped (it used to be open and large). I stated back then it is only a matter of time before the whole section collapses flat. In 2002 my friends dived the wreck (I was sick and looked after the boat) and

they informed me that you cannot now enter the bow at all. In April 2003 I dived the wreck and it sure has changed, you certainly cannot really enter the section first mentioned above but you can enter from the other side of the bow if you are very adventurous, but I would not recommend it. Head to the bow and see the damage caused when she hit the bottom.

Return to the stern on the western side. Along the way you will see a hopper and a bollard, as well as what appears to the part of a hatch cover, a few metres off the wreck before again passing the broken hull section. Examine the damage caused when she broke her back. There is a sand patch about five metres long here before you see the wreck again. When you return to the stern, you may still have a few minutes to kill before ascending. Have a look at the bits and pieces on the western side of the wreck before checking out the top (bottom) of the hull. This should enable you to travel straight to the anchor line.

This is a square profile dive, with a Aladin Pro dive computer allowing about 17 minutes bottom time. The visibility can be quite varied, often not matching the apparent sea conditions. It is probably best done on an incoming tide, although most times the tide will not be relevant.

This is another great dive for the experienced diver.

### References:

- Personal comments dated 3 August 1998 by Don Morrison, co-discoverer of the wreck
- The Vanished Fleet of the Sydney Coastline by Max Gleeson, pages 145 to 154.
- Sydney Morning Herald 24/2/49 pages 1 and 3, 25/2/49 pages 4.
- Lloyd's Register 1930-31, 1937-38, 1948-49.
- Australian Warships of Second World War, page 174.
- Royal Australian Navy Profile No 3 by Michael Wilson pages 60 & 67
- Scuba Divers Guide Southern NSW Coast by Tom Byron, pages 102 and 103.
- Warships of Australia by Ross Gillett, pages 223
- Australian Coastal Shipping by Barry Pemberton pages 84 and 203
- Sydney Morning Herald 24/2/49 pages 1 and 3, 25/2/49 page 4 (NSW State Library SMH Microfische 441)
- South Coast Times 24/2/49

### SS Bonnie Dundee

### History

George Wallace Nicoll and his younger brother Bruce Baird Nicoll were sons of a Scottish shipwright who came to Australia in about 1840. The elder Nicoll had a shipyard in Sydney and the younger Nicolls started running ships from Sydney to the Northern Rivers area of Far Northern New South Wales. Apparently they were the first to introduce screw steamers to NSW (replacing sail or paddlewheelers). Part of their business was timber and they used their vessels to move the valuable product to Sydney. Their early vessels included *Wallace and Bruce* (1869 to 78) and *Wallaby*. Other ships included the steam power ships *Australian*, *Lismore*, *Truganni* and *Richmond*.

On 2 March 1877 a new ship was launched Miss Jane Nicoll, cousin the owners, from the Gourlay Brothers shipyard in Dundee, Scotland, for G. W. Nicoll of Sydney. I am not sure if this was the name of the Nicolls' company or if it was just Mr George Nicolls. Some reports that the new ship was built for G. and B. Nicoll. The new vessel was named SS Bonnie Dundee after the birthplace of George and Bruce Nicoll, Dundee. The ship was 39 metres long and 6 metres wide and displaced 121 tons gross. Its was powered by a 40 hp twin cylinder compound steam engine with the steam coming from a single coal burning boiler. A compound engine is one which has different sized cylinders. The high pressure steam first goes into the smaller diameter cylinder and then, when it has expended a lot of its energy and is at a lower pressure, it goes into a far bigger cylinder which enables the steam to still create power this cylinder. It is far more efficient than a simple engine where the steam is used just once (a triple expansion engine is more efficient again). The Bonnie Dundee had two masts and was a coastal cargo and passenger ship to be used mainly on the North Coast of New South Wales.

The SS *Bonnie Dundee* sailed from Dundee on 28 March 1877 and arrived in Sydney on 18 July 1877. It appears to have travelled via the Suez Canal and Ceylon (now Sri Lanka) and Brisbane. It is also said to have visited the Clarence River on the North Coast (Grafton is on this river). The skipper of the ship was John A. Greig, 47, from Aberdeen, Scotland. The vast majority of the crew on this trip were Scottish. The crew was:

Name	Position	Age	Home Town
John A. Greig	Captain	47	Aberdeen
W. Ramsay	Mate	32	Dundee
David Cobb	Boatswain	45	Montrose
John A. Gunn	First Engineer	34	Dundee
Malcolm McDowell	Asst Engineer	21	Belfast
Thomas Souter	Third Engineer	24	Dundee
John Jackson	Fireman	24	Bathgate
George McIntosh	Fireman	44	Dundee
Alex McLaren	Fireman	27	Lockie
Samuel Thorburn	Cook and Steward	48	Isle of Rum
David Souter	Able Seaman	24	Dundee
James Rattray	Able Seaman	30	Dundee

Matthew Campbell	Able Seaman	34	Dundee
David Heare	Able Seaman	44	Montrose

On board was a passenger, Mr K. G. Erolis who was from Ceylon.

The ship was registered in Sydney and given the Lloyd's of London number 75200. She entered service, presumably almost immediately. On 17 May 1878 the *Bonnie Dundee* was towing the *Rob Roy* out of the Clarence River when the tow line broke. The *Rob Roy* ran aground and was dismantled over the next month.

At 12.30 pm on 10 March 1879, the SS *Bonnie Dundee* left Sydney bound for the Manning River (Taree is on the Manning). The skipper was Captain J. Alexander Stewart and there was a crew of 21 crew on board, one of whom was a female steward. There were at least three female passengers. At about 6 pm, she was off the Central Coast of New South Wales making her way north from Sydney and the Mate, Thomas Crawford took over command. It is said that he checked at this time to make sure that the ship's navigation lights were lit. A little later she was approaching Swansea at the entrance to Lake Macquarie.

Travelling in the opposite direction was the SS *Barrabool*. This ship was a lot larger, 68 metres long and 9 metres wide, displacing 948 tons gross and 588 tons net. She was built by Palmers Ship and Engineering Company, Jarrow, Newcastle, England in 1874 for the Howard Smith Company. On 3 August 1876, the *Barrabool* collided with the SS *Queensland* off Wilsons Promontory, Victoria, and sank her. A coincidence of that accident was that both ships had been built in the same English shipyard and more than that, at the exact same block. No one died.

The *Barrabool* had left Newcastle under the command of Captain John Clarke, entering the open water at 6.30 pm. She was heading for Melbourne. At 6.45 pm the Second Officer took over command of the vessel and after this Captain Clarke was sitting on the deck talking to a passenger. The ship's lookout bell sounded at 7.35 pm and this was a report that a light had been sighted on the starboard bow. The light was about three and a half miles (just over 5.5 kilometres) away. The light came closer and soon the light approaching became green (indicating that the starboard side of the approaching vessel could be seen).

The ships had been in sight for some time but at about 8 pm, the *Barrabool* collided with the SS *Bonnie Dundee*. The *Bonnie Dundee* was hit amidships on the starboard side, putting a huge dint at least one metre at the deck and holing her under the waterline. The ship filled with water extremely quickly and within four minutes, the SS *Bonnie Dundee* sank off Caves Beach, just south of Swansea. This is about 15 kilometres south of Newcastle.

Some passengers and crew leapt from the *Bonnie Dundee* onto the *Barrabool* but the cabin boy failed and fell instead into a lifeboat. He was killed when it was cut in two. Four women who were given life buoys and told to jump into the ocean refused and were sucked under when the ship sank.

The Mate, T. Crawford, who was in command of the vessel at the time, was found guilty of negligence and had his Master's Certificate cancelled for 12 months. The ship was insured for 6000 pounds.

The *Barrabool* later sank another ship, the *Birksgate* in 1884. By this time the ship had earned the nickname "The Great Australian Ram" and was said to steer so badly that other ships got out of her way when they saw her approaching. She ended up laid up in Sydney in 1912.

Today the *Bonnie Dundee* lies in about 35 metres of water about 5.1 kilometres off Caves Beach and about 4.4 kilometres from the mouth of Swansea Channel (the entrance to Lake Macquarie). To find the wreck, head out on about 115° once you have cleared the channel and Moon Island.

### Location

The GPS mark for the anchoring spot is 33° 06' 25.6"S 151° 42' 10.2"E (note that all my GPS Readings are using AUS66 - if you use any other datum, you will need to convert the reading - see my New South Wales Shipwreck Marks and GPS Readings page for more details). The wreck is not very big but it is quite easy to pick up on your depth sounder due to the huge amount of fish that live here. However, anchoring is a bit different, the small size of the site means that it can be hard to get the anchor to hook into the wreck. Adding to that, the wreck is in two pieces, the larger stern section and the smaller bow section. There is a gap of about 25 to 30 metres between the two sections. The wreck lies facing the northeast.

### Diving

Once you have reached the wreck you will almost certainly be anchored on the stern section of the ship as this is the largest part of the ship. The boiler is not all that big and sits mostly clear of the sand. In front of the boiler there is a small donkey boiler which has probably fallen from above this location. On the top of the main boiler there is a very large steam dome. Behind the boiler is the steam engine. As mentioned above, this is a compound twin cylinder engine. The drive shaft from the engine cannot be seen as it is buried under the sand.

At the stern, you can see the steering gear and rudder. Under this is the propeller. Only part of one blade of the prop can be seen. Along this section of the ship the hull is mostly intact.

In front of the boiler the ship does not really exist. On the starboard side the is a small section of hull and on the port side there are three or four ribs protruding high above the sand. Everywhere else is just sand. If you swim out past these features and keep going in the same direction for about 25 to 30 metres you will come to the bow section of the ship.



Figure 12 The port hull in front of the boiler Photo by Peter Trayhurn

This consists of about five metres of ship. The bow is tipped over to starboard at an angle of about 45°. I did not see any anchors but there are lots of bits and pieces here.

This wreck has some of the most prolific fishlife I have seen anywhere. It rates with the wrecks of the SS *Tuggerah* (page 136) in Sydney and SS *Lady Darling* (page 72) off Narooma. Huge schools of yellowtail, nannygai and seapike hang over the wreck and other fish like silver sweep, black reef and leatherjackets mix in with them. On the sand there are wobbegong sharks and in and around the boiler and engine there are huge moray eels.

As mentioned above, this wreck is about 35 metres deep and as such, not for inexperienced divers.

### References:

- Destination Never Reached by Max Gleeson pages 27-37
- Riley's Wrecks The Top 20 Wrecks in NSW by John Riley in Scuba Action, Page 7 September/October 1986

- North Coast Run page 158
- Wrecks on the NSW Coast by Jack Loney, pages 71-2
- Aqua Zero Dive Centre Web Site <a href="http://www.aquazero.com.au/bonnie.htm">http://www.aquazero.com.au/bonnie.htm</a>
- Big River Nicolls <a href="http://jonicol.customer.netscape.net.au/history\_2.htm">http://jonicol.customer.netscape.net.au/history\_2.htm</a>
- Free Settler or Felon Web Site <a href="http://www.jenwilletts.com/shipwrecks\_1879.htm">http://www.jenwilletts.com/shipwrecks\_1879.htm</a>
- Australian National Maritime Museum Web Site <u>http://www.anmm.gov.au/lib/isnidx.htm</u>
- Encyclopedia of Australian Shipwrecks http://oceans1.customer.netspace.net.au/portjackson-wrecks.htm

### **SS Catterthun**

### History

Probably the single most exciting wreck I have dived in NSW is the wreck of the SS *Catterthun* which is located off Seal Rocks just north of Port Stephens. On my first dive here I dropped the 60 metres onto the wreck and was astounded to see almost the whole wreck laid out in front of me. The visibility of 35 metres meant that nearly every inch of the 92 metre long vessel was visible from where our anchor was caught near the engine. What an

introduction to a wreck!



Figure 13
The SS Catterthun is the ship on the right

The SS Catterthun was launched in April 1881 from the Sunderland (Belfast, Northern Ireland) shipyards of W. Doxford and Sons for the Eastern and Australian Steamship Company. The new iron-hulled vessel displaced 2179 tons gross and was 92 metres long with a beam of 11 metres. Twin boilers supplied steam to a two cylinder compound engine of 250hp also made by W. Doxford and Sons. This was a big ship for its day.

The Catterthun departed Sunderland on 26 May 1881 and when 80 miles from Hong Kong, she encountered the barque, Fabius, which was taking

water. She towed the ailing vessel into Hong Kong before continuing on to China. A load of 2,500 tons of tea was taken on board and on 18 August 1881 the SS *Catterthun* arrived in Sydney Harbour. As well as carrying cargo, the vessel was fitted out for carrying up to 38 passengers. The *Catterthun* entered into service on the Australia/China run, usually carrying tea to Australia and gold and other cargo for Hong Kong.

The *Catterthun* operated without real incident for more than 14 years. The *Sydney Morning Herald* reported on 11 June 1886 that in the previous month the SS *Catterthun* had carried a passenger, George Fletcher, from Hong Kong to Sydney. Mr Fletcher had departed Sydney over a year earlier. He was shipwrecked in the Caroline Group (the Caroline Islands?) and had lived amongst the natives for over 12 months until he was rescued by a passing ship. A very amazing tale.

On 31 July 1895 the ship left Sydney and steamed down to Port Kembla to load coal for her boiler. She returned to Sydney on 2 August and loaded passengers and cargo. Of interest were the 8,915 gold sovereigns contained in 10 boxes that were loaded in a large iron tank known as a specie chamber. Access to the tank was through a small manhole in the chartroom floor.

At 4.30 pm on 7 August 1895, the SS *Catterthun* left Sydney Harbour for the last time on her way to Hong Kong. There were seven European passengers on the trip, the remaining being Chinese on their way home from the Australian goldfields. There was a southwesterly gale blowing and the seas were big enough for waves to come over the deck. The conditions got worse and by three hours after sunset there was an almost fully fledged gale hitting the *Catterthun*.

At thirty minutes past midnight on 8 August 1895, the vessel was off Port Stephens Lighthouse and heading N 30 E. The conditions were still getting worse, with rain and extremely strong winds. By 2 am the *Catterthun* was six miles south of Sugarloaf Point Lighthouse (at Seal Rocks) and the crew on the bridge became concerned about the closeness of the shore. Captain Neil Shannon was consulted (he was in the chartroom) and it was agreed to alter course to N 40 E. Within a short time breakers were seen ahead (Big Seal Rock) and the Second Officer, Alfred Lanfear, ordered a change to N 80 E which unfortunately was straight towards Little Seal Rock. It was not until the vessel was almost right on the reef off Little Seal Rock that it was seen but it was too late. At 2.25 am the SS *Catterthun* hit the reef at full speed (about 11 knots) and carried on until it hit again eight

seconds later. It still continued and was now past the reef but her days were numbered. These reefs were probably Little Seal Rocks and/or some reef nearby.

Most of the sleeping crew and passengers were awoken by the two impacts and were soon up but many went back to bed after finding nothing awry. Meanwhile, the crew examined below deck and found the forepeak and number four hold almost full of water. The Captain ordered that the lifeboats be prepared for launching but the passengers had not yet been informed of the impending problem. Very soon the ship was listing to starboard and the boat was becoming difficult to handle. The Captain decided to try to beach the ship in Seal Rocks Bay and the course was altered to almost due west. By now there was a foot of water in the cabins on the Saloon Deck and only ten minutes had passed from the first impact.

The Captain and two others were washed off the bridge by a wave and one of them, Joshua Fawkes (a Torres Strait Pilot), watched as the ship powered on without anyone in control. Some lifeboats were launched and just 20 minutes after hitting the reef (at 2.45am), the *Catterthun* went down. One boat had 26 people in it and after considerable rowing, they came across a small sailing boat, the *Olga*, anchored south of Charlotte Head. The small vessel then towed the lifeboat to Foster, arriving at 11am.

After taking the two vessels over the bar, the tug Marion Mayfield headed towards the wreck site but had to turn back because of the seas. The next morning she attempted again as did the tug Gamecock which left Newcastle. The Gamecock did not find anything but the Marion Mayfield found one lifeboat with a dead Chinese in it and two more crew. A total of 55 people died in the accident. A Coroner's Inquest into the three bodies was held at Foster on 12 August 1895.

On 19 August 1895 the *Stirling* departed Sydney to search for the *Catterthun* so that salvage could be attempted. Captain John Hall from Sydney Underwriters Association, was in charge of the vessel. On 23 August they found the wreck (in itself an amazing feat as the wreck is a considerable distance off the shore) and the next afternoon a diver was sent down to confirm that what had been found was the wreck. Arthur Briggs and William May, the expert salvage divers who had salvaged the SS *Centennial* (on page 25) and SS *Duckenfield* (on page 48) in Sydney as well as almost 70 other vessels were brought in to do salvage on the wreck, especially the gold sovereigns. Over a considerable period of time, the majority of the sovereigns were salvaged.

### Location

Today, the wreck of the SS *Catterthun* lies at a maximum of 60 metres pointing towards the safety of the shore. Unfortunately the wreck is located in a position where it is often subject to strong currents. As if this is not bad enough, the site is very open to southerly and southwesterly winds. Its GPS location is 32° 25′ 57″S 152° 34′ 38″E. See GPS and Marks Page (see page 150) for more details.

### Diving

I have now dived this wreck five times but on two dives on the wreck on the one weekend (my first two dives), the conditions varied from 35 metres on the Saturday to less than four metres on Sunday while sea, current and wind conditions remained identical. Despite this change, the second dive was still extremely exciting and thrilling.

The wreck lies upright and fairly intact. As I indicated in the opening to this article, my first dive started at the engine and we headed forward. The huge engine juts up four or five metres off the rest of the wreck and immediately in front there are the twin boilers, the starboard one with another tank on top and a donkey boiler further to starboard. Going towards the bow you pass over the refrigerator and then the refrigerated cargo hold. The specie room (where the gold was stored) is between the boiler and the refrigerator but there is no evidence of it remaining. Past the hold there is a flatter area with coal and winches.

The immediate bow of the ship is broken off from the rest of the wreck and has fallen on its starboard side. As you approach it there are numerous bones. They are not human but horse shanks being carried as cargo. Some of these can be found back on the main part of the

wreck and more on the left side as you approach the bow. Part of the *Catterthun*'s name can be seen on the bow (the letters "HUN") and the Chinese crew's quarters can be entered. A huge pile of anchor chain can be found in the lower part of the bow.

A friend of mine has found a sovereign on the wreck and also found a gold watch previously owned by William Loring and being carried by his widow and daughter when they were on their way home to England after visiting relatives in Melbourne. Both Mrs and Miss Loring died in the sinking.

This is a huge wreck, and even after doing five dives I have not yet seen but a small percentage the wreck has to offer. The stern area is fairly intact but the prop is not visible although the rudder can be seen. A large winch sits just behind the engine and you can see into some of the compartments in this area. The bottom of the wreck at the stern is just over 60 metres, the sand on the starboard side of the wreck is 59 metres (it is a metre or two shallower on the port side) and the main part of the wreck is 56 to 57 metres deep. A bottom time of 22 minutes on the wreck (and 19 in the deeper sections) means that you have to do decompression of 3 minutes at 12 metres, 6 minutes at nine metres, 14 minutes at six metres and a massive 31 minutes at three metres. With a five minute safety margin, you must do a huge 59 minutes decompression or even more.

Of course, this is a dive only for the very experienced and properly equipped. Not only do you need twin tanks (88 cf preferably), you need spare air, oxygen, proper deco bars, safety sausages, reels etc etc.

As an extra to the thrill of the wreck, divers often encounter sharks on this dive. On my first dive here we saw three or four bronze whalers swim past us as we ascended the anchor line. Friends on another boat only 50 metres away at the same time were hassled by more than 30 sharks. They ended up leaving the water before their indicated deco time was up they were so threatened by the swarming sharks. The wreck itself is covered in some of the most colourful growth that you will ever see. The soft corals almost glow in the reds, greens, yellows and purples that are lit up by your torch.

This dive can be difficult to do as no charter boats regularly visit the wreck. In most cases you will need to use your own boat although I believe that at least one of the Forster dive shops will take experienced divers to the wreck.

In summary, the most exciting dive in NSW, if not Australia, as well as being just behind the best two dives I have ever done (100 hammerhead sharks in the Philippines and the stern of the SS *President Coolidge* in Vanuatu).

### References

- Sydney Morning Herald 11/6/86 page 5, 9/8/1895 page 4, 10/8/95 pages 9-10, 12/8/95 pages 5-6, 13/8/95 page 6, 14/8/95 page 5, 15/8/95 page 5 and 16/8/95 page 5
- Lloyds Register 1884-5, 1895-6
- DIVE Log article by Margaret Little, February 1991
- Article by unknown person March 1991
- Australian Geographic July/Sept 1992 article by Mark Spencer, pages 100-115
- Shipwrecks, Storms and Seamen by Max Gleeson pages 30-73

# SS Centennial

### History

The SS *Centennial* was an iron single screw steamship built as the SS *Albion* in Greenock, Glasgow, Scotland, in 1863. She was 66 metres long and displaced 668 tons. A passenger and cargo vessel, the *Centennial* was a regular sight on the Sydney/New Zealand run.

On 23 August 1889, the *Centennial* arrived in Sydney and quickly took on a load of 52 passengers and wool before leaving for Wellington, New Zealand at 8.45pm. As she approached Bradleys Head, the collier SS *Kanahooka* in-bound from Wollongong, was travelling up the western channel (that is, the correct channel). As the *Centennial* passed Bradleys, the two vessels came together, the collier striking the passenger liner on the starboard (right) side. The blow was such that coal started falling into the water and the passengers on deck could see that the *Centennial* was doomed.

Captain C.G. Lessing attempted to run the ship aground on Taylors Bay Beach which is adjacent to Bradleys Head but she could not make it. Within six minutes, the *Centennial* had sunk, with its masts sticking out of the water. All 52 passengers and 30 crew were taken off the ship without incident by a number of vessels, including the *Kanahooka*, the *Bee* and the *Captain Cook*. The chief cook, Edward Sargent, died in the accident.

The *Kanahooka* then continued to Circular Quay where she off-loaded the victims, including one man who had ended up in the water with badly smashed legs. The *Kanahooka* then uploaded its cargo of coal into the P&O ship SS *Victoria* before herself being drydocked to repair the severe damage she suffered.

A couple of days later, Arthur Briggs, famed salvage diver (see SS *Catterthun* on page 18 and *Duckenfield* on page 48), dived on the wreck of the *Centennial* and brought up passengers luggage. He also found the body of Edward Sargent in his bunk, apparently drowning while drunk.

# Location

Today the wreck of the *Centennial* lies on the eastern side of Bradleys Head in Taylors Bay. It is closer to the tip of Bradleys Head than it is to the head of the bay. The depth of the water is approximately 13 metres. To find the wreck place the lighthouse at Bradleys Head behind the head and then you will see a tall tower with a black box on top on the skyline (this is to south-west). This left side of this building needs to be right on the edge of the rock platform. To the north-east, the outside of North Head needs to be just off the left side of the old house on the inside of South Head. The depth around here is about 14 to 15 metres but the wreck comes up to about 12 to 13 metres. In April 2004 there was a large yellow buoy a few metres to the west of the wreck. I am not sure if it goes to the wreck (but see later). The GPS reading for the *Centennial* is a latitude of 33° 50' 58" S and longitude of 151° 14' 56" E. Note that all the GPS Readings on my Web Site are taken using AUS66 as the map datum. If you use another datum you may be about 220 metres off the wreck. See my GPS Page for more details and how to convert readings.

### Diving

The wreck is very broken up. Not just that, the wreck has been colonised by millions of mussels over the more than 115 years since the *Centennial* sank. In addition, the sand from the bottom nearby has built up against the remains of the wreck. As such, the bottom here appears to be a hill but in reality, this is the wreck, covered with millions of tonnes of sand. Therefore, when searching for the wreck with your depth sounder, do not expect to see a distinct sharp outline of a wreck, it is a small hill with some wreckage on the top and sides.

Once you have anchored, drop to the bottom. You will see lots of wreckage. The wreck does not now really resemble a wreck but now and then you will see ribs, hull plates and other sections of the wreck. The bow appears to be facing the north. Swim up one side of the wreck and then back along the other. The only real thing I could identify was a bollard (and this was upsidedown).

The fishlife was quite good, with lots of bream, some nannygai, yellowtail on the wreck. I also saw a few small moray eels as well as a school of catfish

The visibility in Taylors Bay is not real good, sometimes less than three



Figure 14 An upsidedown bollard

metres but on my dive in April 2004 it was about seven metres. Not a wreck you would do too often, but worth at least the remainder of a tank after another dive. A total dive of about 20 minutes would be more than enough time.

# **References:**

- Sydney Morning Herald 24 August 1889 page 11, 26 August 1889
- A History of Union Steamship Co. of New Zealand Vol 1 The Company by A. L. Arbon
- Shipwrecks, Storms and Seamen by Max Gleeson page 49

### Centurion

### History

The *Centurion* was a timber barque constructed by Walter Hood & Sons in Aberdeen, Scotland in 1864. She was 63 metres long and displaced 1004 tons. I do not yet know much of the early history of the vessel but from 1870 till 1887 she was a common sight on the route between London and Sydney.

On the morning of Sunday 16 January 1887, "one of the most extraordinary accidents to shipping that has been recorded for a long time past happened..." (*Sydney Morning Herald* 17 January 1887).

At 1 am that Sunday morning, the *Centurion* left its wharf at Dawes Point (at the spot on the southern side of the Harbour where the Sydney Harbour Bridge now stands) being towed by the J. & A. Brown steamer *Phoebe*. The *Centurion* was loaded with 400 tons of coal and was bound for Honolulu via Newcastle. Under the command of Captain Sutherland of the *Phoebe*, the two vessels proceeded down the Harbour for the open ocean. As they neared the Heads, another barque, the *Manhegan*, was seen to be anchored right in the middle of the Heads



Figure 15
The Pilot Vessel *Captain Cook*, probably at Watsons Bay in Sydney Harbour

Captain Sutherland saw that if he kept going they would get tangled up with the Manhegan. At the same time, a massive rain squall appeared dropping visibility to almost zero. He therefore put his engines into reverse. Unfortunately, the tow rope went slack and got fouled around the Phoebe's prop. As you could imagine, this caused a lot of problems. The Centurion drifted towards the rocks at North Head and very soon the tow line was cut by the prop. The Centurion was close to the rocks so Captain Charles Taylor (this was his first trip on the

Centurion) let an anchor go but under the strong southerly blowing, the ship was soon aground near Old Mans Hat (halfway between the Inner and Outer Head).

The pilot vessel, Captain Cook was assisting the Manhegan by taking the strain from the anchors in the strong winds. It quickly came to the aid of the Centurion but it was too late. The Captain Cook dropped two lifeboats into the water and then approached the stranded vessel with some difficulty. They proceeded to the bow of the Centurion and the crew jumped off the wreck to safety. Captain Taylor was the last to leave. Within 30 minutes, the Centurion slipped off the rocks and disappeared beneath the seas. Neither the ship (valued at £9,000) nor its cargo (valued at £250) was insured.

### Location

The *Centurion* is now located just off Quarantine Point, well inside the Heads. See GPS and Marks Page (see page 150) for more details. This is many hundreds of metres from where it is supposed to have hit the rocks.

### Diving

In about 18 metres of water on a sandy bottom, the wreck consists of twisted iron, masts, timber and some other pieces of the ship. The wreck is in two parts, with a major section of the wreck located under the sand.

While the actual wreck site is not very large and can be explored in 15 minutes or so, the wreck has attracted a lot of fish life which greatly adds to the quality of the dive.

A very good introductory wreck dive or also good as a night dive. The visibility here is never very good, but more than enough to enable you to enjoy the dive.

### References:

• Sydney Morning Herald 17/1/1887

## SS Cities Service Boston

#### History

The Cities Service Boston was an oil tanker being used during World War 2 to supply the Australian and Allied forces with fuel. Built by Bethlehem Ship Building Corporation Ltd at Sparrows Point, Maryland, USA, for Atlantic, Gulf and West Indies Steamship Lines and launched as the SS Agwipond in April 1921, the ship displaced 8,024 tons and had a waterline length of 141 metres. Its overall length was 146 metres. The ship was powered by a four cylinder steam engine of 636 hp.

About February 1929 the *Agwipond* was purchased by Cities Service Oil Company of USA and renamed SS *Cities Service Boston*. A special survey in July 1932 showed it displaced 9,348 tons but there was no increase in length. Upon the entry of the United States into World War II, she was requisitioned by the US Department of War Administration and operated by them until its sinking. On 16 May 1943 the *Cities Service Boston* was returning to the Middle East from Sydney in convoy when it went off course and ploughed into the rocks of Bass Point, less than 100 kilometres south of Sydney.

The weather for the week around the fatal date was extremely poor and the *Sydney Morning Herald* reported that the rainfall on this section of the South Coast was said to be the heaviest for nine years.



Figure 16
The SS Cities Service Boston soon after hitting Bass Point

Although the ship sank on 16 May 1943, the only report of the incident at the time was in the *Herald* on 19 May when it was reported that four soldiers were drowned when washed off a rock platform on the South Coast. It was reported that eight soldiers were swept into the sea out of 34 standing there. It did not report why they were there or give any explanation as to what happened. Absolutely no indication was given to the fact that a ship was sunk that night.

This was because of wartime censorship preventing most bad news from reaching the public. It is interesting to note that the same edition of the *Herald* carried the good news of the

"Dambusters" which happen only a short time before. The same edition also had the bad news of the loss of the hospital ship *Centaur* on 14 May 1943, two days before the *Boston* was lost (this made the Japanese out to be heathens for sinking an unarmed hospital ship) and was included for obvious reasons.

No other mention of the wrecking appeared in the media until 16 November 1943, exactly six months after the wrecking, when an article appeared in Sydney's *Daily Telegraph* actually mentioning the wrecking and the loss of the soldiers. As well as reporting what happened, it reported on the Wollongong Coroner's Court inquiry into the deaths.

From the *Telegraph* article and visits to the Bass Point area, I knew that what actually occurred was that the soldiers were from a local Army Camp and they had been sent to Bass Point to assist with the rescue of the crew from the *Cities Service Boston*, but that was about all. I was also aware that while all the crew were saved, the only deaths were four of the saviours

I was able to find out far more information when I was invited to the 50th Anniversary celebrations of the wrecking held on 16 May 1993. The celebrations were organised by the Sixth Australian Machine Gun Battalion which was the Army group involved in the rescue. At the memorial service at Bass Point I met Harry Turner (75), Bill Wells (72) and Theo McFadden (72) who were part of the rescue team. I also met Ben Helling (71) of Carmichael near Sacremento, California, who was a sailor on the SS *Cities Service Boston* and one of

only four known ship crew members to be still alive in 1993. In April 2001 I was contacted by John Utvich of San Marino, California, who was Commanding Officer of the Armed Guard Unit on board the ship. The Armed Guards were part of the regular US Navy who guarded all merchant ships in the war. He has sent me copies of the reports he made about the ship's voyage and sinking, as well as copies of some photographs I had not seen before. The following is mostly based on his reports and emails to me, with some information from Mr Helling.

Mr Helling was an able seaman on his first trip on the SS *Cities Service Boston* and Mr Utvich was an Ensign in the US Navy, in charge of the Armed Guard Unit on the ship. There were, by my reckoning (based on Mr Utvich's reports), 15 Armed Guards on the ship including Mr Utvich. The *Boston* had left San Pedro (Mr Helling told me Long Beach - is this close?), California, on 3 April 1943 at 1200 hours bound for Brisbane, Queensland, carrying a load of diesel and fuel oils (Mr Helling told me it was carrying high-test aviation fuel). It sailed alone, zig-zagging as she crossed the Pacific. At 1930 on 1 May 1943, when travelling at 9.5 knots (the normal speed), the bow lookout sighted a submarine ahead. However, when the ship changed direction to permit its stern gun (operated by the Armed Guard) to face the ship, it did not appear to Mr Utvich's men that the object was a submarine, appearing to be too high out of the water to be a submarine. The ship was at 26° 49'S 156° 28'E, about 300 kilometres to the east-north-east of Brisbane.

Shortly after this, at 2140, Mr Utvich was called to the bridge and advised that a lookout had contacted the bridge but no voice contact was possible (Mr Utvich's reports continually state that their battle telephones are very fragile and not suitable for use in wet weather). Mr Utvich went aft and heard aircraft engines. The plane crossed the ship and dropped a bomb or depth charge about 100 yards off the starboard side. The lookouts and Mr Utvich opened fire with machine guns and 50 calibre gun as the plane circled, crossed over the ship and flew away. Mr Utvich told me that this plane was in fact a Consolidated PBY Catalina Flying Boat of the Royal Australian Air Force (RAAF). This incident was also told to me by Mr Helling, but I had thought that it was one day after leaving Brisbane. The ship was at 26° 51'S 156° 30'E (?? - in Mr Utvich's report this was give as 26° 51'S 156° 03'E, clearly an error). The ship continued on a course of 260° true.

The *Boston* continued and at 0230 on 2 May 1943, a message was received that enemy submarines had been sighted at 26° 57'S 156° 17'E, perhaps 15 nautical miles away. The SS *Cities Service Boston* arrived at Brisbane at 1800 on 2 May 1943. She discharged her cargo here. While in Brisbane, five additional Armed Guards taken aboard, making a total of 20 on the ship.

At 0800 on 11 May 1943, the SS *Cities Service Boston* departed Brisbane (empty) as part of an 11 ship convoy (code named PG 50) the *Boston* then travelled to Sydney with a support of four warships, HMAS *Colac, Bendigo, Ballarat* and *Moresby*. At 1420 on 12 May 1943 when the convoy was off Coffs Harbour on the New South Wales North Coast (30° 10'S 153° 23'E), the Japanese submarine *I-180* fired two torpedoes. One of the convoy, the SS *Ormiston*, was hit by one torpedo. No periscope was sighted prior to this time but a few minutes later a periscope was seen off the *Boston*'s port quarter. Unfortunately, the Armed Guards could not open fire as there was another ship in the line of fire. Five minutes later a small wake was seen in the same area (range 4000 yards) and the guards opened fire with their gun. Three rounds were fired and this was the last of the action.

Despite being hit in the hold, the *Ormiston* stayed afloat and was still manoeuvrable so it was escorted to Coffs by HMAS *Ballarat*, arriving in Sydney on 15 May 1943. Another ship, the SS *Caradale*, was also hit by a torpedo but it did not explode. The *Boston* arrived in Sydney at 1830 on 13 May 1943.

In Sydney, three of the Armed Guards were taken off the ship, two for causing friction with the ship's crew and the other for a Court Martial. One other guard went AWOL (absent without leave). Mr Utvich says "These men had been serving [time] in the brig, and were assigned to my ship. They were not the kind of men that the navy needs - Trouble makers". Four new Armed Guards came on the ship to take their place. While in Sydney, the *Boston* 

is alleged to have taken on 110 tons of grain but Mr Utvich's report says that the ship was empty.

At noon on Saturday 15 May 1943, the SS *Cities Service Boston* left Sydney in another convoy for Melbourne, Victoria. There were 18 ships in the convoy (Mr Helling guessed 12 to 20), a mixture of types. They were escorted by four warships, reportedly including an Australian destroyer, an American destroyer and a Canadian corvette. After Melbourne, the *Boston* was to travel alone to Iran. There were 62 men on board the ship, including 20 Armed Guards.



Figure 17 Another shot of the ship up on the rocks

Leaving the protection of Sydney Harbour, a heavy sea was encountered. During the night, heavy rain fell. Due to the recent active Japanese submarines on the NSW coast, it appears that the convoy was travelling as close to the shore as possible to lessen the chances of being attacked. The ship was under charter to the British Ministry of War Transport and after arriving in Amadan (Abadan), Iran, it was to take on a load of fuel for Madagascar.

At 0545 on Sunday 16 May 1943, Corporal Fred Tieck was asleep in the Volunteer Defence Corps hut at Bass Point (just to the east of The Gutter dive

site) when he was awoken by the man on duty. They could see a light tossing about in the huge seas not far away, but could not understand what could be so close to shore. Soon it was almost level with the hut and then it hit the bombora just offshore. Note: why did it take the *Boston* so long to travel the short distance to Bass Point?

The weather was very bad. Seaman Anthony John Sliva was one of the Armed Guards. He was on duty as the starboard lookout, amdiships. His report states that "There was a very heavy sea all night, driving rain, high wind, no visibility. Couldn't see the bow or the gun tub 40 feet ahead." He said that he sighted the reef, ran and told the First Mate who ordered hard left and full astern but at 0550 on 16 May 1943, the ship's bottom grated the reef and then hit hard.

Mr Helling told me that at 0555 he was thrown out of his bunk in the bow when ship hit the reef. He went up on deck but at first the crew did not know what had happened. They thought they maybe they had been torpedoed considering what had happened only a few days previously. Mr Helling said that he is sure that Captain Anthony Bartholomew knew the ship was mortally wounded and so he drove it further up the reef to avoid it sinking. The ship shuddered every time a wave hit. The waves were so big they were going over the funnel and most lifeboats and rafts were washed away. The crew waited for orders. "We were a goner" said Mr Helling. Assistance was offered by other naval vessels but knocked back by the Captain because of the severe conditions. The Captain gave the order to abandon ship but there was no way they could due to seas and rocks. An SOS was sent by the ship's radio operator, Jay Epstein.

Corporal Tieck could not phone for help as the storm had put the phone lines out. He sent his lance corporal the two miles into Shellharbour to get help. By 0700 Sydney knew of the shipwreck.

The authorities decided to send the Sixth Australian Machine Gun Battalion to assist from their camp at Dapto. Mr Wells and Mr Turner told me that when the accident happened the majority of the battalion was up in Sydney working on the wharves as the wharfies were on strike. Only a few soldiers were left behind. The train line went right through the middle of the camp at Dapto. The men used to sneak up to Sydney but they had to be back in camp in time for roll-call in the early morning.

They said that the group training at the camp before them had created havoc with the Dapto locals causing heaps of trouble. When the Sixth Machine Gun battalion arrived, they were

not well received so they tended to go up to Sydney a fair bit for a drink (plus to meet up with girls).

They used to catch the midnight mail and paper train back on Saturday from Central Station. They used to jump into the empty boxcars and sleep all the way back. As the train went through the camp, they asked the driver to slow down so that they could jump off easily. Sometimes they had to jump off anyway (the train did not travel too quick). This day they had not too long arrived back from Sydney when they had to go out to Bass Point. They said that they were not asked to volunteer, they were told to get in the trucks and were taken away, not knowing where they were going.

They arrived at about 0830 after travelling through very deep water on the way. There were about 30 or more soldiers and a lot of others (VDC and Police) as well as civilians. They had heavy gear on, ponchos for protection from rain etc.

Another local civilian from Shellharbour, Eric Dunster (?), was driving a milk truck. During a break in the weather, he saw a ship up on Bass Point. He drove out and left the truck near where the gates are now into the reserve. He walked out at 45° due to the strength of wind. Looking back towards Shellharbour he saw there were huge seas hitting the rocks. He got out there about the same time that the soldiers arrived. The rain was horizontal. He helped set up the gear and after a while he left due to the weather.

Bob Simpson, a local civilian, told me that at 0500 he heard a siren. There was so much rain there was 3 feet in his front yard. Bill Hovel (a butcher) and he went to the search light battery who were trapped by rain. They got them out after some time. Later a Ford truck came along with 10 men in it. The driver was frozen and could not go any further. Bob could drive a Ford so he drove the truck, which contained some survivors (maybe even including Mr Helling), to get food and warm clothing.

On board the *Boston*, the ship's second officer was put in charge of the rescue from the vessel's point of view. He attempted to get a line to shore by tying a lifejacket to a line and throwing it into the sea. Unfortunately it went in on one wave but the next one brought it back. Mr Helling said that it was no use. When the Sixth Australian Machine Gun Battalion arrived they saw that someone had to jump into water to retrieve the line. In the end, two men from the Sixth, Lieutenant Sam Matchett (a lifesaver) of Wollongong and Captain Bob Harris (a dentist) of Katoomba, who were champion swimmers, swam out and grabbed the lifejacket.

A bosuns chair was set up with the Australians working in shifts, six pulling the line in and six pulling the line out. First, they pulled the man to shore and then pulled the chair back to the ship. Others were assisting the crew and resting. The crew of the *Boston* were taken off one by one. It was very hard work, waves were hitting the bosun's chair and sometimes the rescuers. First off the ship were 20 young trainees who were on the ship for part of the trip. Mr Helling was taken off about 20th. It was freezing cold, and the rescuers had blood coming off their hands due to ropes, the boat had started to crack and oil was leaking everywhere. The rain, together with the oil, and the waves made it very slippery and cold. It was also very windy.

The radio operator, Jay Epstein, had a camera with him when he was rescued from the ship and he took some photographs. He apparently sold a copy of each to a reporter for \$2.50 each. Who said on-the-spot reporting was new?

At one time, one of the lines from the bosun's chair got away and fell into the water and Mr Turner jumped in after it and grabbed the line. Eventually they had got all but two sailors off (maybe four). The tide was coming in, it was almost high tide, and the time about 4 pm or so. A huge wave went right over the ship, maybe two storeys high, and hit onto the rocks. About 12 (maybe) soldiers were washed into the sea. In the oil and boiling seas it was impossible to see what was what.

After the wave, most of the ones washed in clambered out onto the rock platform. Four soldiers died but only two bodies were ever found. After a while the rescue of the two

sailors left on the ship was abandoned as it was too dangerous to continue and the boat did not look like it was going to break up now.

Mr Helling was not there when the soldiers were swept into sea as he had been taken to dry himself and warm up with a cup of coffee. At the same time, Mr Wells was up at the VDC Hut having coffee. He told me that the men would not have had any hope (it was miraculous that the ones who survived got out) as they were wearing bulky army gear and the rain ponchos made them very heavy and waterlogged. Mr McFadden said he had just come back to the rescue site from a break at the VDC hut (see later) when the fatal wave hit. "I heard a yell and turned around to see about 10 men being swept into the sea. I started running away but I slipped on the oily rocks and fell over. I was hit by part of the wave". Luckily, Mr McFadden was further up the rock platform and was caught by the end of the wave.

The men who died were:

- Sergeant William F. Allen NX 133805
- Private Geoffrey M. Pitt NX 127791 (body found)
- Private Raymond J. Snell NX 118174 (body found)
- Private Bruce M. Symons NX 111705

The above soldiers were awarded The Soldiers Medal by the Government of the United States of America on 4 June 1944. The medals were presented to the mothers of Sergeant Allen, Private Pitt and Private Symons and the widow of Private Snell at a ceremony in Martin Place, Sydney.

Mr Helling thinks that the ship was the victim of weather, lightness and travelling close to shore. As the storm increased, and due to the threat of submarines, (about 25 ships were sunk off NSW coast during the war) the vessels were given the opportunity to dismiss the convoy and travel close to shore. This is what the Captain of the *Cities Service Boston* had done.

Mr Helling said that as soon as he was taken off the ship he was taken to a small hut near the bushes at the back of the rock platform. All four agreed that it was just to the east of where the memorial is now. It was presumably the VDC Hut where Corporal Tieck was based. Here he was given a cup of coffee to warm up before being taken in a truck to a pub for a brandy and then to a mission (?) of sorts where they were fed and dried. They were taken up to Sydney the same day.

Mr Helling heard about the accident later that day but although he stayed two weeks in Sydney he did not ever get a chance to say thanks to the rescuers. At a reunion luncheon at the Shellharbour Workers Club after the memorial service at Bass Point, Mr Helling told me that when he went home to US he was interviewed by local paper about the wrecking (he later sent me copies of this).

After the wrecking he went back to the US and then served on another Cities Service Oil ship in the Aleutions, India and South Atlantic. He said he was not involved in any action for which he was glad.

Mr Utvich reported that his group were taken back to the Armed Guard Barracks in Sydney and returned to the Armed Guard Centre (Pacific) at Treasure Island (where is this?). Mr Utvich was subsequently retrained as a gunnery officer and assigned to the USS *Duffy* for the rest of the war. He told me served in Tulagi in the Solomon Islands and he ended up a Lieutenant, US Navy Reserve.



Figure 18 A considerable amount of salvage work has already been undertaken

The soldiers of the Sixth Australian Machine Gun Battalion were taken back to their camp but it had flooded and they had no hot water or warm clothes. The publican of the Dapto Hotel invited them there and opened up his rooms and bathrooms for their use. He also threw on free beer. After this, the locals treated them better and when they finally left Dapto for New Guinea, the whole town turned out to farewell the Sixth Australian Machine Gun Battalion.

When Messrs Wells and Turner were in New Guinea they each received letters from the US Department of War Administration thanking them for their efforts in saving the crew.

Mr Wells came down ill in New Guinea with severe acne (possibly a case of allergy) and had to be put out of the army. After spending time in hospital at Goulburn, he spent the rest of the war in the South Head forts and Green Point (near Camp Cove).

Mr Turner ended up driving trucks and in charge of the motor vehicle pool at North Ryde.

After the wrecking it was certain that the SS *Cities Service Boston* would never be refloated as it was high and dry on the large rock platform. The ship was stripped of her engines and machinery as well as all fittings. The hull was then sold to Australian Iron and Steel Ltd (AIS), part of the Broken Hill Propriety Ltd (BHP) conglomerate.

A rail track was constructed from near the now location of the toilet block at Bass Point over the rock platform out to the ship. Contractors using oxy cutters began dismantling the ship. First to go were the masts, funnel and gun mounts. The deck, interior and hull were then cut into pieces no larger than 16 feet by 7 foot 6 inches. These were then transported by placing on skips that were then pulled along the railway to trucks. The steel was then taken to the Port Kembla steel furnaces and melted down. The resulting metal was then sent to Whyalla in South Australia to be used in the building of new ships.



Figure 19
The stern of the ship has now broken away and only the bow remains ashore

A few weeks after the salvage began, heavy seas broke the SS *Cities Service Boston* in two and the stern section ended up on the bommie. The salvage work continued for several months until what remained was too small to be safely worked on during high tides.

On 21 May 1989, the four known surviving crew of the ship visited Bass Point. They were Ben Helling, Ed Webster, John Wirdzek and Bud Rickert

At the 1993 luncheon, Mr Helling presented Mr Wells and Mr Turner with a medallion each as a token of his appreciation. Mr McFadden had already received his.

## Location

Today, the wreck is almost non-existent so that its exact location is not really relevant. Basically, the bits that do remain are on the northern side of the tip of the Bass Point Reserve.

### Diving

All that remains are twisted pieces of metal on the rock platform and in the water around the bommie. A part of a boiler can be seen in the surf line at the western end of Bass Point Reserve.

## References:

 Personal conversations dated 16 May 1993 with Australians Harry Turner (75) of Forestville, Bill Wells (72) of North Manly and Theo McFadden (72) of Sans Souci who were part of the rescue team.

- Personal conversations dated 15 to 16 May 1993 with Ben Helling (71) of Carmichael near Sacremento, California, USA.
- Personal conversations dated 16 May 1993 with Bob Simpson
- Sydney Morning Herald 16 19 May 1943, 5 September 1944
- Daily Telegraph 16 19 May 1943, 16 August 1943
- Lloyd's Register 1921, 1929, 1932 and 1939
- The Secret Battle 1942-44 by Robert Wallace, page 72
- Summer News Index June 1943 (a newspaper from Washington State, USA)
- Transcript of ABC Radio Broadcast, 1944, with Fred Tieck
- Letter dated 7 January 1989 from Clyde "Bud" Rickert, Cottonwood, California
- Contact, May 1949 (Australian Iron and Steel Ltd newsletter)
- Daily Mercury, 15 and 20 May 1968
- Letter dated 15 December 1943 to Mr M.N. Boyd, from the War Shipping Administration, Washington, DC
- Community Voice 16 June 1978 article by Bill Carwardine
- Community Voice unknown date, probably early June 1978 article by Bill Carwardine
- Note from King George VI, Buckingham Palace
- E-mail and letters from John Utvich of San Marino, California, Commander of US Armed Guards on the ship when it sank
- Reports dated 4 May (x2), 14 May and 10 June (x3) 1943 by John Utvich of San Marino, California, Commander of US Armed Guards on the ship when it sank

# SS City of Sydney

#### History

The SS *City of Sydney* was built in 1853 by Smith and Rodger (perhaps Roger) in Glasgow, Scotland. She was a single screw steamship of 735 tons, almost 208 feet long and exactly 27 feet wide. The new vessel was also barque rigged, with three masts. The ship was a cargo/passenger liner built for the Australasian Steam Navigation Company Ltd. This was the first screw steamship built for the company.

The new vessel sailed to Sydney, Australia under the command of Captain R.T. Moodie. The trip took 74 days. The ship was intended for use on the passenger/cargo service between Sydney, Melbourne, Brisbane and New Zealand. She was once used to replace the mail ship SS *European* on the Sydney/Columbo (in Sri Lanka formerly Ceylon) trip when the *European* was being repaired in Sydney. The return journey from Colombo was a record, beating the normal mail ship by 10 days. On arrival in Sydney, the skipper was given a testimonial dinner.

Around this time, Captain Moodie struck trouble for firing his cannons in Sydney Harbour while (prematurely) celebrating the fall of Sebastapol in Ukraine (now called Sevastopol'). This was during the Crimean War (1853-56). The city finally fell to the England/French/etc coalition on 9 September 1855 and sometime after he again fired his cannon, getting fined five pounds for his exuberance.

The *City of Sydney* was also used to transport troops during the New Zealand Taranaki War (a Maori uprising). The Australian 12th Regiment and the Royal Artillery were moved from Sydney to New Zealand.

Other than the above, the ship appears to have had an uneventful life until the night of 5-6 November 1862 (not October as reported in *Shipwrecks of Twofold Bay/Disaster Bay* by Tim Smith, NSW Heritage Office and one other source).

At 6 pm on Tuesday 4 November 1862 the *City of Sydney* left Sandridge Pier in Melbourne bound for Sydney. Included in the approximately 100 passengers were "the Sydney Volunteers" who I had originally thought were possibly coming home from the Taranaki War but I have also been told that they were a rifle club returning from Melbourne. Both these may be true. The ship left Port Phillip Bay at about 10 pm. The weather was fine, the wind light but there was a heavy southerly swell. The ship rounded Wilsons Premontary at 8am on 5 November 1862 and she passed Gabo Island at about 12 midnight on the night of 5-6 November 1862. The seas were calm and there was a light wind. Captain Moodie left the bridge at 12.15 am after telling the First Officer the new course to steer. Just before 2 am, the First Officer called the Captain to the Bridge as there was now a great deal of fog around. Arriving on the deck, the skipper was told that the ship was three miles off Green Cape.

Green Cape is about 26 kilometres to the south of Eden and just north of the New South Wales/Victoria border. Later on in 1883, a 29 metre high lighthouse was to be constructed there (it is still there but no longer in use).

The Captain was obviously worried as he ordered the ship's course to be altered one point (11.25°) to the east to take the ship further clear of Green Cape. By this time the fog was even denser. Apparently he went back to his cabin to get his watch when the call of "breakers ahead" was given. Captain Moodie ordered the engine to be put in reverse but before this occurred, the *City of Sydney* went aground. The engine was reversed but to no effect.

The impact had thrown many passengers out of their bunks and smashed many of the lamps in the saloon. The passengers and crew were ordered to the rear of the ship in an attempt to loosen the bow. The ship was now taking water at a considerable rate and the heavy southerly swell was rocking the ship severely. The sea looked like swinging the ship around so that she was parallel to the shore. For this reason the port boat was lowered and the

starboard anchor put into the boat. The boat took the anchor out to the south-east and dropped it in deeper water. An attempt was made to pull the bow off the rocks by winching in the anchor. Unfortunately, the anchor came in towards the ship and nothing was achieved. The passengers were perfectly at ease during this work.

All the remaining boats were now lowered and the women and children put in one of them. Captain Garrard was put in charge of this boat and took them a short distance away from the sinking ship and landed them in a protected cove. The last to leave the ship were the Captain, engineer, carpenter, steward and two quartermasters. Apparently Captain Moodie had to be dragged off the ship and as they were getting into the smaller vessel, the *City of Sydney* suddenly tipped over on her starboard side and sank. So quick was this that the two quartermasters were thrown into the water and swam to the boat. As the ship rolled over, the mizzen topmast hit the ship's boat but luckily they got clear with little damage. The ship was now almost totally underwater, with only a small section of the bow and topmast showing.

The other boats also went to the same small cove where the first boat landed and the Captain was cheered ashore by the passengers, obviously delighted that everyone had survived. During the night fires were lit to keep warm. At dawn, they could see they were about three kilometres from Green Cape (in fact exactly 3.56 km). All the boats then set out to row the almost 30 kilometres to Eden. The first one arrived after six or seven hours and the SS *Hunter* was dispatched from Merimbula (a short distance north of Eden) to help. She met the remaining three boats and towed them the remaining distance to Eden. The survivors were received at the Crown and Anchor Hotel in Eden by the owner Mr T. Matthews.

In any case, when the first boat arrived, the Water Police, two whaleboats and the Customs launch were sent to see if they could salvage anything from the wreck. The ship was a total loss, with the estimate given of £25,000 for the ship and cargo. The cargo was said to include machinery, axes, ale, brandy, opium rope hats and boots, quite a mixture. A Mr and Mrs Shannon, recently married, were said to have lost all their wedding presents.

#### Location

Today the wreck lies in 15 to 21 metres of water. As the *City of Sydney* is quite close to the shore, it can only be dived in calm seas. Luckily, the wreck site is protected from some winds, especially north-easterly and easterly winds. However, due to the distance from Eden (about 30 kilometres to the wreck), the local charter operators do not generally dive this and the nearby wrecks and it is a long way to run down in anything but very calm seas. Therefore it is likely that you will need to use a private boat. If you have a smallish boat (say 5 metres), the best bet is to run out of the small coastal village of Womboyn. This requires a lot of planning as the lake, river and bar are very shallow and you can only travel to the sea from the boat ramp in the period about two hours either side of high tide. Therefore you need a high tide of about 1.8 metres, occurring about 9 am to 12 am enabling you to exit the bar at 7 am to 10 am. Also, you need calm seas, no swell at all from the south but even very strong north-easterly winds and seas should be okay.

The actual wreck site is quite easy to find. The GPS Reading for the site is approximately 37° 15' 28"S 150° 00' 40"E. This will put you off "City Rock", named after the shipwreck. It is a very large rock that slopes down to the east. Line up off the corner, about 50 metres out and drop anchor. This should put you very close, if not in the middle of, the main part of the wreck. The seabed here is a rocky reef, with some kelp and sponges.

### Diving

The *City of Sydney* is a very broken up ship, with the main features being the large engine, the prop shaft and the remains of the stern section. This piece has the propeller, rudder and a bit of the hull in one piece, still lying on its starboard side as it was over 135 years ago when it sank. In addition, the blades of the prop (four I think), are nearly all broken off, making it certain that then engine was still running when the ship turned over and the prop hit the rocky bottom, breaking the blades before the steam ran out.

There are other things to see, including largish pieces of keel and hull as well as the occasional bollard and winch. To the south east are the two anchors, both lying out from the remains of the ship. The port anchor lies where it fell when the ship sank and the starboard one is on the sand where the lifeboat carried it.

Once again, this is a very attractive shipwreck, although people not interested in shipwrecks may find it a bit boring. In my view, well worth the effort involved in the long trek to dive her.

- Scuba Action, unknown date, late 1980s article by John Riley,
- Shipwrecks of Twofold Bay/Disaster Bay by Tim Smith, NSW Heritage Office
- Wrecks on the New South Wales Coast by Jack Loney
- Sea Adventures and Wrecks on the N.S.W. South Coast by Jack Loney
- Sydney Morning Herald 8 November 1862 page 4, 10 November 1862 page 4
- E-mail from Ian Wilkey dated 9 September 2003

### Coolooli

### History

The bucket dredge *Coolooli* was built in 1955 at the NSW Government State Dockyard at Newcastle (NSW). The new vessel *Coolooli* displaced 150 tonnes and was 50 metres long and 10 or 11 metres wide. She was unpowered. The dredge was owned by the NSW Maritime Services Board and used to keep NSW ports navigable. Some time before 1975, it was laid up and on 19 August 1980, the *Coolooli* was sunk as part of the reef. She now lies on her starboard side on sand in 48 metres of water.

#### Location

After heading out of Sydney Harbour (or Broken Bay) travel until you are off Narrabeen Beach to GPS Reading 33° 43' 11"S 151° 20' 53"E. Using the following marks (also see GPS and Marks Page – see page 150), line up the water tower to the south-west with the right hand side of the northern block of units on Collaroy Beach and in the middle of the third block behind the beach. The north-west mark is the Bahai Temple at Ingleside above the second set of Norfolk Island pines from the northern end of North Narrabeen Beach. After running out to sea past the north-west mark, slowly head towards the Bahai Temple until the two marks line up. The depth on your depth sounder will come up from 48 metres to less than 40. Immediately turn to the north and drop anchor while still over the wreck. If the anchor misses the wreck and hits the sand to the north of the wreck, the anchor will not take hold as the hull lies along the north and eastern side and the anchor will just slip past the wreck in a north-easterly sea breeze. The wreck lies in a north-south direction.

#### **Diving**

After descending to the wreck, check the anchor as sometimes it can fall into a very hard position from which to later remove it (I have seen an anchor go through two hatches right to the bottom of the wreck). On your first dive here it will generally be possible to only examine the wreck from the outside as a leisurely swim around the wreck will take at least 15 minutes with only short stops at parts of the wreck. This is a very large and impressive

Once on the wreck, you should follow the wreck to the north (on the western side of course as the eastern side is the flat bottom) and you will see the superstructure. You can easily penetrate this part of the wreck safely as it is very open. You can even enter the funnel (exhaust for machinery) and come out through a hole in its side. After you reach the stern, head back to the south and follow the buckets right to the bow. You can swim through the opening where the buckets returned from the seafloor. From here you can go around back to where you started. As indicated, the maximum depth is about 48 metres, but a dive probably averages 44 to 46 metres. Before completing the dive, remove the anchor from the wreck and drop it on the sand. However, be aware of the barge about 20 metres to the south.

On subsequent dives here, you can examine in more detail small sections of the wreck including the bucket arm, the bridge and the upper deck areas.

I have never encountered any current on the *Coolooli* but you should check for one after anchoring. The visibility is usually good and all my dives here have averaged 12 to 15 metres. Of course, its depth means that this is not a dive for the inexperienced or even an experienced diver without deep diver training. On 20 March 1994, a tragic incident occurred on the *Coolooli* when noted Sydney diver, Paul Cavanagh, died while undertaking a dive. There are two plaques to Paul's memory deep inside the funnel.

The fishlife on this wreck is very disappointing, with so few fish compared to the SS *Tuggerah* and SS *Undola*. You get a few red morwong, sergeant baker and trevally but that is about it. One thing worth examining are the jewel anemones that totally cover some ropes or wires below the middle of the vessel and also in the bucket dredge slit. The pinks and blues really liven up the wreck.

Despite the lack of fish, the Coolooli is a great dive site, worth visiting many times.

#### References:

• The Ships that Serve Australia and NZ (Vol 1 Ed 1 – 1975) by R.D. Fildes page 124

## TSS Currajong

#### History

In 1875 the shipbuilding firm of T. Wingate and Co started construction of a vessel that was to be named the *Marquis of Lorne*. However, before she was finished she was renamed the *Victory* but completed as *The Clarence*. This indicates that the purchaser, the Clarence and New England Steam Navigation Company, had acquired the unfinished hull from another shipping company, probably because it had lost a ship, the *Helen McGregor*, on the Clarence River bar in March 1875.



Figure 20 - SS *Currajong* coming down Sydney Harbour

In August 1875 the new vessel was launched from the Whiteinch shipbuilding yards in Glasgow, Scotland. The 603 ton vessel, the TSS *The Clarence*, was a three masted steamer built to carry passengers and cargo on the North Coast of NSW run. It arrived in Sydney four days after Christmas and was lauded in the *Sydney Morning Herald* as being "judiciously fitted out for her intended trade."

In March 1883 *The Clarence* was sold to the Australasian Steamship Navigation Company Ltd and in June was renamed TSS *Currajong*. After most of the ASNC fleet was sold to the Australasian Union Steamship Navigation

Company in April 1887, the *Currajong* was laid up in Lavender Bay in Sydney Harbour until she was sold to Mitchell and Woolcott-Waley in 1888. The ship was then converted to a collier to serve the company's South Bulli mine.

In 1892 or 1893 the *Currajong* again changed owners. The Bellambi Coal Company purchased the vessel and used her to carry coal from the Illawarra area to Sydney. For 11 years the *Currajong* was incident free until 27 September 1899 when she ran down and sank the *Lansdowne*, a ketch carrying timber from the North Coast. On 4 April 1904 the *Currajong* collided with the ferry *Victoria* opposite Circular Quay, causing damage to the ferry.

On the evening of 8 March 1910, the *Currajong* entered Port Jackson and headed up the Harbour. As the *Currajong* neared Bradleys Head, the huge 6000 plus tons passenger liner, SS *Wyreema*, bound for Cairns approached from the west. As was later to be shown at the Marine Inquiry, the *Wyreema* was travelling on the wrong side of the channel and hit the *Currajong* amidships on the port side. The *Currajong* started sinking immediately and the helmsman, Hans Neilson, was killed.

Soon after the sinking, divers visited the wreck but she was not salvaged. However, the masts and funnel were removed as they were considered a shipping hazard. According to Max Gleeson, the wreck was blown up in the early 1980s, presumably to deepen the Harbour's depth in this area.

### Location

The *Currajong* now lies 230 metres off Bradleys Head in 26 metres of water. Unfortunately, it also happens to lie in the main incoming shipping channel for Sydney Harbour. Every incoming ship and each Sydney bound Manly Ferry and Jet Cat passes right over the wreck. As well, dozens of tourist ferries, private boats and yachts pass by Bradleys Head each hour. Many pass straight over the wreck or the area between the wreck and land. As can be imagined, this makes for a very difficult and potentially dangerous dive. I am not sure of the legalities of diving the *Currajong* (it is certainly illegal to do it from a boat). GPS Reading is 33° 51' 24"S 151° 14' 52"E. See GPS and Marks Page (see page 150) for more details but remember the dangers and possible illegalities.

If you are going to do this dive as a shore dive, start at the bottom of the stairs and head out at  $110^{\circ}$  for about 220 to 230 minutes. This will take about 10 minutes. Once you hit 20 metres deep, you have gone too far so turn to your left and within 20 or 30 metres you should see the wreck. The depth actually comes up a bit as the sand has built up around the wreck for most of the length. I have more recently done this wreck using scooters, very easy to find then.

#### **Diving**

The wreck of the TSS Currajong is considered the most intact shipwreck in NSW (by John Riley) and "one of the foremost wreck dives in NSW" (by Max Gleeson). See the above section on how to get to the wreck from the shore. As I

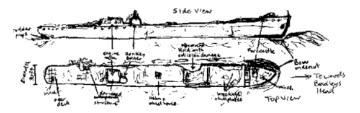


Figure 21 – Diagram of the wreck as it is today Courtesy of Scott Leimroth

indicated above, the hull of the *Currajong* is almost completely intact and sits upright with the bow pointing straight towards Bradleys. The deck here is in 18 metres while under the bow the sand has been removed by the tidal currents and you can reach 23 metres or so. The *Currajong* is a fairly large wreck, almost 70 metres long and it takes a good seven minutes to swim slowly along its length, examining it briefly as you go.

At the stern, the depth of the deck is 22 metres and the sand under is 26 metres or so. The rudder is hard a'starboard but you cannot see the two props which are buried in the sand. Above the rudder, the poop deck sits up from the main deck level and is full of huge bream and luderick. Returning along the wreck you pass the rear hold before encountering the bridge/engine area. The higher structures are now gone but a fair bit of the lower cabin area still remains fairly intact. You can swim partially into them but a huge volume of dead oysters has almost filled the cabins. In fact, the whole ship is covered in oyster shells, filling every hold and hole.

The donkey boiler is exposed in this area and in front of this there is another hold. Further up the wreck on the port side you can see the spot where the SS Wyreema rammed the Currajong. This is right on the forward hold. A couple of large winches can be seen just in front of this hold and on top of the forecastle. You can look under the deck here but the clearance is only a foot or so.

This is an amazing wreck, but one that will only ever be experienced by a few divers due to its hazardous location. The visibility varies from a few centimetres to 10 metres or more. It is best done on an incoming tide, towards high tide.



Figure 22 – A Sonic Sidescan of the wreck Courtesy of xxxx

In summary, one of NSW's best wreck dives but only for the experienced and brave (or crazy).

- Shipwrecks, Storms & Seamen of the New South Wales Coast by Max Gleeson (pages 119-30)
- Scuba Action Riley's Wrecks article (date unknown) by John Riley
- Sydney Morning Herald 9 March 1910
- Lloyd's Register 1878-79, 1891-92, 1910-11
- North Coast Run by Michael Richards page 169

## SS Dee Why

### History

One of the common fallacies about Sydney's Manly Ferries is the idea that they were all built in Great Britain and sailed out to Australia. In fact, the majority of the ferries were built in Sydney (eg *Binngarra*, *Kuring-gai*, *Bellubera*, *North Head*) and of the larger ships only the last three, including the greatest of them all, the SS *South Steyne*, were built overseas.

On 25 August 1927 in the Sydney Morning Herald, the Port Jackson and Manly Steamship Company announced that new identical steam ferries would be purchased for the Manly run. They were to be called the Curl Curl and Dee Why (named after northern Sydney beach suburbs) and were to be built by Napier and Miller Ltd at Old Kilpatrick, Glasgow, Scotland.



Figure 23
The *Dee Why* coming into Circular Quay

The *Dee Why* was launched on 23

December 1927 and was 220 feet long and almost 36 feet wide. She had a main deck that stretched almost the whole length of the ship (at either end were the toilets and other non-passenger areas) as well as a promenade deck that went the whole length of the ship. There were bridges at either end. Her gross tonnage was 799.44 tons and she was powered by an inverted direct acting triple expansion steam engine powering a single screw at either end of the ferry. The four boilers could be powered by coal, tar or oil giving a top speed of over 18 knots. Considering the *Dee Why* could carry 2,000 passengers, it was a bargain for £73,000.

The *Dee Why* left Scotland on 26 May 1928 under the command of Captain A.W. Brown and after an eventful voyage she arrived in Sydney Harbour at 2 am on 1 November 1928. During the trip she had to be towed into Algiers for repairs, suffered a mini-mutiny, had a stowaway and was forced to wait five weeks to enter the Suez Canal

For the next 40 years, the *Dee Why* gave reliable service, with only a few incidents. In November 1931 the *Dee Why* collided with the small ferry *Kirrule* off Kirribilli Point and her skipper, Captain Harold Liley lost his Master's Certificate for two months. On 16 November 1936 a fire started on board the ferry *Bellubera* at the Point yards. The *Dee Why*, which was tied up nearby, was lucky to have enough steam to move away from the inferno without suffering any damage. In December 1939 a woman fell overboard while the *Dee Why* was crossing the Heads. She was dragged from the Harbour within five minutes but she was already dead.

At 10.05 pm on Christmas Night 1946, heavy fog caused the *Dee Why* to lose her way and she ran aground on rocks off Obelisk Beach opposite the Heads. The damage was considerable, with one rudder torn off, the prop and hull damaged and part of the keel buckled. I have some suspicions about what caused this incident given when it occurred (who has experienced fog in Sydney in December?!)! On the night of 16 August 1949,

passengers of the *Dee Why* heard shouts from the water. The ferry stopped and rescued a Navy stoker who had fallen off the *Bellubera* 15 minutes earlier.

The *Dee Why* ran aground once more during its long career, ironically (as I will explain later) after an incident with the tug *Himma* (see page 67 for more details of accident). Off Kirribilli Point near the Bridge, the two collided and the *Dee Why* ran aground. Similar damage to the other time she ran aground put her out of service for some time. A funny story about this incident was that a woman was in the toilet when they collided and she was locked inside. An axe was needed to smash through the door to free her and she was found to be drinking Remy Martin brandy. A few other times the *Dee Why* hit the wharf a bit hard causing a small amount of damage.

Two engineers died on duty on the *Dee Why* from heart attacks, but apart from the 1939 death, no other fatalities are known to have occurred on her.

Why and another Manly Ferry the Balgowlah were used to produce gas for the North Shore when the gas company's boilers broke down. At that time, the Dee Why was doing 6658 trips to and from Manly each year but by 1960 it was only doing 2734. The more expensive steam powered ships (the North Head, Baragoola and Bellubera were now diesel-electric) were about to come to the end of their life. In 1960, CurlCurlthe was withdrawn and for the last few years the Dee Why was used only as a relief vessel.



Figure 24
The *Dee Why* about to go to her end

Withdrawn from service in July 1968, the *Dee Why* was sold to Stride Brothers for scrapping. They presumably salvaged the engines, props, interior fittings and other bits of use. After this, she sat around the Harbour for another eight years until on 25 May 1976 two tugs pulled her out of Rozelle Bay and down the Harbour. At 9.15 the sea-cocks were opened and 45 minutes later, the *Dee Why*'s bow (although she was double-ended, there was a bow and stern) suddenly dived and the stern rose up out of the water as she slid to her resting place off Long Reef.

Today, the *Dee Why* is part of the Long Reef Wreck Site which was originally planned as an artificial reef. It also contains her former combatant, the *Himma* but there is a remarkable lack of fish on the wrecks compared to the southern wrecks of SS *Tuggerah* and *Undola*. The *Dee Why* lies on a sandy bottom of about 48 metres 4.25 kilometres off Narrabeen Beach. Sitting upright and with her bow facing east and stern to the west, the once proud ferry is but a mere shell of its original beauty. Stripped of her superstructure, the ferry when sunk consisted only of the hull, main and promenade decks and the boilers and some machinery.

### Location

Due to its large size, the *Dee Why* is very easy to find, but you can sometimes accidentally hook onto the wreck of the *Meggol* (ex-HMS *Wexford* and HMAS *Doomba - on page 94*)

which is only about 20 metres from the *Dee Why*'s starboard side near the eastern end. A GPS Reading of 33° 43' 02"S 151° 20' 46"E will put you near the wreck and then use the marks from the GPS and Marks Page (see page 150). You must drop your anchor right on the wreck as it will not grab if it lands on the sand.

#### Diving

The top level of the wreck used to be about 40 metres but it is now 43 metres or so (see comments later) and reaches to 46 metres inside the hull. Features of the wreck include the massive bows (two of course, as it is double-ended), the rudders (one on the sand), the propeller shaft, both inside and outside the wreck. There are toilets at the bow (eastern end) and there are many holds to explore.

While the engine has been removed, the four enormous boilers are still in great condition and you can swim between them very easily. Of interest is the fact that the boilers are not in the centre of the ship as you might initially expect. As there was only one engine, the boilers and engine were set so as to balance each other out. Photographs show that the twin funnels were actually located aft of the centre and the boilers are just rear of the centre-line.

Although the *Dee Why* is now over 70 years old, the ship was in relatively good condition until 1997. On my earlier dives here the ship hull was basically still fully intact with only a few holes in the stern area (western end). The ferry still had the

Figure 25
The western end of the wreck

promenade deck supports and floor beams in place although the promenade timber decking had been removed before she was scuttled. You could swim along the main deck, especially along the outside passageway. You could also get inside the main cabin area in the space between the main and promenade decks. As well, you could explore the area below the main deck level at either end of the ferry.

As I indicated above, in 1997 (I am not sure when), the wreck suffered a great deal of damage. I have been told that it was caused by a ship dragging an anchor through it but I cannot believe that a big vessel would anchor in the vicinity of the Long Reef Wreck Site as it is well marked on all charts of the area. Personally, I think it was probably caused by normal erosion and possibly some heightened seas.

Today the bow section of the *Dee Why* (the eastern end) has fallen



Figure 26 Looking from the deck to the below decks at the western end

over to the port (north) and the main deck in this area has collapsed inwards. The promenade deck (or at least its supports and beams) has totally disappeared along the whole length of the wreck. Whereas the sand around the wreck used to be totally void of wreckage, there are now bits of metal nearly all the way along the wreck on both sides.

You can still drop down into the lower deck area and explore the boilers as well as some smaller compartments and the driveshaft alley.

Despite the recent degradation of the *Dee Why*, this is a nice dive (I formerly would have called it a great dive) and worth a few return visits (formerly many). Of course, due to its depth, it is only for trained and experienced deep divers.

- Manly Ferries of Sydney Harbour by Tom Mead
- Sydney Morning Herald 25/8/27
- Scuba Diver's Guide to Northern NSW by Tom Byron
- Australian Ships by Ross Gillett, pages 99 and 100
- A Log of Australian Ships by Graeme Andrews page 49
- A Century of Ships on Sydney Harbour by Ross Gillett and Michael Meller-Phelps, page 96

## SS Duckenfield

#### History

In mid-1875 construction of a new ship started at Cubitt Town, London, England. The vessel was the SS *Duckenfield* and the shipbuilder was J. & W. Dudgeon. Late that year, the *Duckenfield* left London for Newcastle where she was due to join the fleet of J. & A. Brown. As well as delivering the ship, cargo was being carried, namely 31 wagons and 40 sets of wheels for the Minmi colliery in the Hunter Valley (interestingly, a ship called the SS *Minmi* - on page 101 - was later to be wrecked off the Southern Sydney coast).

The new ship was 161.2 feet long and 24 feet wide with a displacement of 368 tons gross. She was powered by a two cylinder vertical steam engine (also built by J. & W. Dudgeon) turning a single prop. After sailing to Australia she off-loaded the cargo at Hexham, up the Hunter River from Newcastle. The *Duckenfield* was then towed to Sydney to have her propeller fitted. For an unknown reason, the *Duckenfield* travelled to Newcastle under sail rather than steam. On 29 March 1876, she started work for J. & A. Brown. The vessel's regular trip was from Newcastle to Sydney but occasionally she transported coal from the southern coalfields to Sydney.

For more than 13 years, the *Duckenfield* worked at her trade without problems. On Friday 24 May 1889, she left Newcastle for Sydney. As well as her usual cargo of coal and coke, the *Duckenfield* was carrying 50 tons of copper ingots, in transit from South Australia to London. The skipper of the ship was Captain Thomas Hunter. He had been in charge of the *Duckenfield* for six years, doing more than 600 voyages.

As the *Duckenfield* passed Broken Bay, heavy rain began to fall and the land was lost from sight. At 7.00 pm, the ship approached Long Reef and a few minutes later the *Duckenfield* was aground on the rock platform. Although the ship was on the shore, the water was 60 feet deep under the bow and already two feet of water was in the engine room.

Victor Nelson and James Struthers, the donkeymen, swung the lifeboat out when a large wave hit them, knocking Struthers into the water. He was never seen again. The ship was abandoned and the remaining 13 crew safely left the vessel in the lifeboats. Picked up by the *Hawkesbury*, the crew arrived at Watsons Bay in Sydney Harbour at 10 pm. The Marine Board of Inquiry found "that the *Duckenfield* was lost by the wrongful act or default of Thomas Hunter, the Master, in navigating too close to the coast and approaching Sydney from the northward without opening out the South Head light". His certificate was suspended for six months. This was not to be the last incident involving Captain Hunter. Just over a year later, on 14 July 1890, the SS *Royal Shepherd* (on page 119), also under the command of Captain Hunter, sank as it left Sydney Harbour.

The cargo of copper was quite valuable so an attempt was made to salvage it. The *Duckenfield* had slipped off Long Reef and a week after the accident, a search showed two masts sticking out of the water in 80 feet north of Long Reef. On 11 June 1889 (18 days after the sinking) the masts could not be found but on 18 August 1889 one mast was sighted. Two buoys were tied to the mast and a team of salvage divers from the Sydney Marine Underwriters' Association under the direction of Captain John Hall began to salvage the copper from the wreck. The two divers used, Arthur Briggs and William May, recovered 32 tons of copper from the wreck over a week's work. The same team salvaged 69 ships over a 13 year period, the most famous being the recovery of gold from the wreck of the SS *Catterthun* (on page 18) off Seal Rocks in 1895/6.

The *Duckenfield* was lost to knowledge from 1889 till it was rediscovered by Alan and Neil McLennan almost 100 years later in 1987. On 24 May 1989, exactly 100 years after the sinking, the McLennans released details of the wreck to the diving public in a gala event at the University of NSW.

#### Location

The GPS Reading for the wreck is 33° 43 11"S 151° 19' 23"E. See GPS and Marks Page (see page 150) for more details.

#### Diving

The wreck today is extremely broken up (understandable considering Briggs and May used explosives to remove the copper). The main features remaining are the lower section of the hull together with the ribs. The twin cylinder engine sits up a fair bit off the wreck and is the most prominent piece of the wreck. A short distance away is the boiler and nearby the donkey boiler. The driveshaft extends out of the engine and a single blade of the propeller lies just past its end. Further on is the rudder. Strangely, the main section of the prop lies at the opposite end of the wreck.

Further up the wreck is a winch and in this area the remaining copper ingots lie. Past here there are two anchors from the salvage effort and nearby is the bow section. Here there are the ship's anchors as well as the chain and a davit.

The wreck is very interesting, and can easily be seen in one dive given its 23 metre maximum depth.

Note that the wreck is protected and a permit is required to dive it.

- The Vanished Fleet of the Sydney Coastline by Max Gleeson
- Scuba Action The Dukenfield (sic) by John Riley, May 1989
- Sydney Morning Herald 27 May, 4 June, 18 June 1889, 24 May 1989 pages 3 and 17
- DIVE Log Australia The Wreck of the SS Duckenfield, June 1989 unknown author, probably Alan and Neil McLennan
- Duckenfield (1875 1889) a report by Marcus Wright and Robert Otto
- Lloyds Register 1888-9
- Nicholls Collection Vol 33 p 52 Mitchell Library
- Australian Ships by Ross Gillett, pages 34 and 35

### Dunbar

#### History

The three masted clipper *Dunbar* was built by James Laing and Sons of Sunderland, England in 1853 for Duncan Dunbar. She was 61 metres long and 10.5 metres wide, with a displacement of 1,321 (or 1,800) tons. She had taken 16 months to build and cost £30,000. At the time, she was the largest ship ever built in Sunderland. She did not immediately enter the London to Sydney run, being used at first to transport troops to and from the Crimean War. The ship presumably ran from London to Turkey or thereabouts.

The first trip to Australia was in 1856. For some reason, the ship stayed in Sydney for three months. In May 1857 the *Dunbar* started her second and last trip to Sydney. On the night of 20 August 1858 the *Dunbar* was only a kilometre from the entrance to Sydney Harbour after sailing all the way from London. Carrying 63 passengers and a crew of 59, the *Dunbar* encountered a gale and poor visibility just as she approached Sydney Harbour.

Just before midnight, Captain Green (who had skippered the ship on the previous trip) decided that the ship was six miles off Sydney and ordered the ship to head into the harbour. Soon breakers were seen straight ahead and it was obvious that the ship was not six miles off shore when she turned. Just after midnight on 21 August 1858, the *Dunbar* hit the coastline just to the south of The Gap on South Head.

All of the 63 passengers died as did all but one of the 59 crew. One, James Johnson, an able seaman, was washed up onto the rocks and landed on one of the shelves. The next morning it became obvious that a ship had been lost, with wreckage washed up in Sydney Harbour. Bodies were found but no survivors.

On 22 August 1858, more than a day after the wrecking, James Johnson was spotted on the rock shelf below the cliff top. He was rescued by Antonio Woollier who was sent down on a rope. Johnson was unharmed and later on he became coxswain of the harbour master's boat at Newcastle, New South Wales. In 1902 it was reported that he lived at Petersham. It is reported that on 24 August 1857, 20,000 people lined George Street for the funeral procession.

In 1910 anchors, chain and some coins were recovered from the wreck site and in 1955 scuba divers started visiting the wreck. Many artefacts have been found over the years, especially in the 1950s and 1960s.

### Location

Today the wreck of the *Dunbar* consists of not much more than scattered remains. The wreck is located to the south of The Gap, just before the next small point, in the little inlet.

#### Diving

The wreckage is in 4 to 7 metres. You need absolutely flat seas, with winter westerly winds the best. Anchor away from the shore and swim in. You should see pieces of wreckage almost immediately. There are iron ballast blocks, dozens and dozens of them. As well, there is a lot of copper sheathing (that used to cover the timber hull) and plenty of other bits like a swing anchor, chain, sections of masts and other things.

In between the boulders (and under them), you will see fragments of bottles (green, black, clear, blue and other colours) as well as pieces of china. These are all covered with ornate decorations. The ship was carrying a considerable amount of gold coins and these have been found over the years. There are also pennies and tea tokens (like copper coins, penny size) to be found. There are also two anchors located to the north of the ballast. Of course, this ship is protected and it is illegal to take anything off the wreck.

An interesting dive in calm seas. The worst shipwreck in NSW history, total loss of 121 lives.

Shipwrecks	Alono	the N	ew South	Wales	Coast
Dilipwiechs.	211U112	<i>1116 1</i> 11	ew South	' ' uics	Cousi

Page 51

# References:

• Wrecks on the New South Wales Coast by Jack Loney

## SS Empire Gladstone

### History

During World War II both the British and American constructed vast numbers of warships and supply ships. In both cases, they picked a small number of "core" designs and built numerous almost identical ships. This procedure enabled the ships to be built cheaply and quickly and produce ships that were easy to adapt to common uses. There were some 1300 to 1400 such ships built in the United Kingdom alone. The British ships were generally about 7,100 tons gross displacement and 430 to 450 feet long. Many shipyards were used, including those at Newcastle, Glasgow and Sunderland (Belfast).

In 1944 a new ship was launched from the Shipbuilding Corporation Ltd (Wear Branch) at Sunderland in Belfast, Northern Ireland. This was the third of 11 identical ships built here. The new ship was christened SS *Empire Gladstone* in accordance with the policy that all such ships bore the *Empire* prefix (a huge number of American Liberty ships were called *John* ....). The new ship was 7,090 tons and 450 feet overall (430 feet waterline) and 56 feet wide. Owned by the British Ministry of War Transport, the *Empire Gladstone* was powered by a triple expansion steam engine built by George Clark (1938) Ltd at Sunderland with three coal powered boilers supplying the steam. The *Lloyds Register* of 1944-45 says that it was managed by J. Chambers and Company.

The ship was used for the rest of the war for transporting supplies around the Allied fronts. After the war, the ship remained under the ownership of the Ministry of Transport and in 1949 she was managed by Blane Steamships Ltd. She appears to have been re-engined at some time as the *Lloyd's Register* of 1949-50 indicates that the triple expansion steam engine was built by Markham and Co Ltd, Chesterfield. As indicated, the British Government still had ownership of the ship and the managers had rechartered the vessel to Adelaide Steamship Company Ltd about August 1949.

On Friday 1 September 1950, the SS *Empire Gladstone* left Whyalla in South Australia for Sydney and Newcastle in New South Wales. Her cargo was iron ore for the BHP steelworks in Newcastle as well as 159 Dodge utes (variously reported as being bodies or whole vehicles). There was a crew of 44 on board (I am not sure if this number included the skipper). The afternoon of Tuesday 5 September 1950 saw the *Empire Gladstone* pass Green Cape to the south of Eden on New South Wales Far South Coast. As night fell, the skipper of the ship, Captain John Lennie, OBE, a Scotsman on his last voyage before retiring, ordered the ship to keep close to the shore to avoid the current.

Just before 8 pm on 5 September 1950, the Fourth Engineer, Mr O. Eynon, who had just taken over watch, reported that the ship was steering for a point to the sea of a lighthouse. However, suddenly the lights taken to be the lighthouse were surrounded by many more lights, the township of Merimbula. The "lighthouse" turned out to be the lights of the Merimbula Wharf. Anyway, action was taken and the ship turned hard to starboard. However, at 7.55 pm the *Empire Gladstone*'s stern section hit the reef of Haystack Rock (eight kilometres south east of Merimbula) and she was stuck hard. Attempts were made to power the ship off the reef but the engine would not turn over. It was reported that the prop was jammed in the rocks and the rudder bent.

When it was obvious that the ship would not be able to get off the reef herself, the crew were ordered to take positions near the lifeboats. The ship was not noticed by locals until 6 am the next morning. Two fishermen, Jack Warn and Ben Buckland collected together rescue gear and travelled the short distance to the wreck site. Many other small boats followed. The seas were reported as being calm.

On Wednesday 6 September 1950, Captain G. A. Johns, a Lloyds assessor, inspected the ship and reported that the ship was already mortally wounded, her back broken with water already in both holds. The bow and stern sagged, ballast tanks damaged and the whole ship expected to split into two pieces. He stated that the ship would never be moved.

The Sydney Morning Herald reported on 7 September 1950 that the crew were still on board the ship and that they had waved to the reporter as he flew overhead in a light aircraft the previous day. On 7 September 1950, 10 of the crew (there were only three Australians) were put ashore by the ship's lifeboats with the remaining 34 staying to unload the ship's cargo. During that day, a number of trawlers from Eden were used to move the car bodies from the wreck to Merimbula. By 7 pm a total of 24 had been successfully moved to shore. By this time the water was 20 feet deep in the forward holds and was also seeping into the engine room.

The ship's cargo was valued at £750,000, but most of this was the iron ore and impossible to remove. Until about 11 September 1950, the trawlers continued to remove the car bodies until they were all safely ashore. Around this time the weather deteriorated and the seas increased dramatically. The vast number of the crew were still on board and they hurriedly abandoned ship into liferafts, one powered. The trawlers towed the rafts to Merimbula. Of interest are two crewmen, Fireman Harris and Ernest Wood. Mr Harris was from London and the *Herald* reported that this was the ninth time he had been shipwrecked! He said "I've had it. I'm going to find myself a nice quiet job ashore. Even cats only have nine lives, and I've used up my quota." Mr Wood, the donkeygreaser, of Hull, had been shipwrecked four times before.

The bell of the SS *Empire Gladstone* was salvaged at sometime. In 1995, Lori and Russell Chesnutt of New Zealand purchased a boat called *Nadgee* (which is the name of the nature reserve to the south of Eden). This boat was built in 1968 for the late Doug Everett of Eden. The boat has a bell on it which is obviously the *Empire Gladstone*'s. It is enscribed "Empire Gladstone, Sunderland, 1944". Mr and Mrs Chesnutt still have the bell on their boat.

#### Location

Today, the wreck of SS *Empire Gladstone* lies at a maximum depth of just over 10 metres on the southern side of Haystack Rock.

#### Diving

I have only dived this wreck once, back in January 1989. This length of time on, I find it hard to recall much about the wreck although I do remember a couple of "advanced" Melbourne divers panicking about running low on air - in less than 10 metres!! Anyhow, from what I do remember this was at the time an excellent wreck. It lies roughly east-west, with the hull being fairly well intact. The top of the wreck is flat and amidships there are the three boilers sitting just in front of the remains of the huge steam engine. The boilers have turned on their ends, two with the front part up. One of the best features of this wreck is the propeller shaft which runs from the engine to the stern. You can swim along the prop shaft tunnel to the stern and exit in front of the prop.

The stern section has a level higher than the main part of the wreck and the bow steps down a bit. You can swim into the wreck in a number of places and there are some interesting sections to explore.

I have attempted to dive the SS *Empire Gladstone* a number of times since 1989 but unfortunately the weather conditions have been against me.

Well worth doing if you get a chance.

- Empire Ships of World War II by W.H. Mitchell and L.A. Sawyer
- Sydney Morning Herald 7/9/50 page 1, 8/9/50 pages 1 & 3, 9/9/50 page 4, 10/9/50 page 3
- Scuba Action August 1986 page 5, Riley's Wrecks by John Riley
- Scuba Action Sept/Oct 1986 page 7, Riley's Wrecks by John Riley

- DIVE Log December 1991 article by unknown person, probably Dave Worth of Merimbula Divers' Lodge
- Lloyds Register 1944-45 and 1949-50
- Various emails from Lori and Russell Chesnutt dated April 2002

# Fairey Firefly VX381

### History

The Fairey Fulmar was designed to meet the British Admiralty's urgent need for a modern shipboard fighter. The prototype flew on 13 January 1937 and the first production Fulmar was flew on 4 January 1940 and went into service in August 1940 on HMS *Illustrious*. In 1939 the Admiralty issued Specification N.5/40 for a two-seat reconnaissance fighter to follow up from the Fulmar. It was to be a far more advanced plan, with greater speed and armaments. The plane was built by the Fairey Aviation Co. Ltd of the United Kingdom.

The design was completed in September 1939 and an order was placed for 200 planes on 12 June 1940. The first development plane flew from Fairey's Great West Aerodrome (now part of Heathrow Airport in London) on 22 December 1941. The second plane flew on 4 June 1942 (crashing about mid-July) and the third on 26 August 1942. Carrier trials aboard the HMS *Illustrious* were carried out in late 1942.

The first production aircraft from the Hayes plant were delivered in March 1943 and the planes entered service with No 1770 Squadron at Yeovilton on 1 October 1943 and were placed on the carrier HMS *Indefatigble*. They were used against the German pocket battleship, *Tirpitz* in Norway in July 1944. The planes were widely used from late 1943. The Firefly was only used by Great Britain during the war but afterwards many other countries purchased them.

Marks I to IV were built during the war and afterwards, there were Marks 5 and 6. These latter versions were powered by a single V12 2,250hp Rolls Royce Griffin 74 engine, it was mainly used as a carrier based anti-submarine, reconnaissance and strike aircraft. A pilot and observer were the crew and the plane carried four 20mm guns mounted in the wings and 16 60lb rockets or two 1,000 pound bombs. The wingspan was 12.55 metres and length was 11.56 metres. The empty weight was at least 4,423 kg with a maximum takeoff weight of 6,359 kg.

The Royal Australian Navy operated two versions of the Fairey Firefly, Mark 5 and Mark 6 (the designation used changed from Roman numerals after Mark IV), from 28 August 1948 until March 1966. The aircraft carrier, HMAS *Sydney*, had 816 and 817 Squadrons based on it and they were also based at RANAS Nowra (HMAS *Albatross*) when the carrier was at Garden Island in Sydney Harbour. They were also used for training at *Albatross* by 723, 724, 725 and 851 Squadrons. During the Korean War, the Fireflies saw operational service over Korea when based on HMAS *Sydney*.

On 16 December 1948, a new aircraft carrier was commissioned into the Royal Australian Navy. This was HMAS *Sydney*. In early 1949, the first 26 new Fairey Fireflies (a total of 108 were purchased) were handed over to the RAN and flights took place of some or all in the UK before they were placed aboard HMAS *Sydney* for the trip back to Australia. Two were Mark IV FR (fighter/reconnaissance) and the rest Mark AS.5 models. The AS designated anti-submarine model first flew in March 1949 with the Royal Navy. One of the AS.5s was serial number VX381. A total of 352 Mark 5s were built between January 1948 and May 1950.

HMAS *Sydney* departed England on 12 April 1949 and arrived at Jervis Bay, south of Sydney, on 25 May 1949. This was the new aircraft carrier's maiden voyage. As well as the 26 Fireflies, there were 27 Sea Furies. It is possible that VX381 saw service in the Korean War on the *Sydney*.

In March 1953, 20 new Fairey Fireflies were delivered to the RAN and this time placed on HMAS *Vengence* (on loan from the RN while HMAS *Melbourne* was being built) for the trip back to Australia. These were all Mark AS.6 models. One of these was serial number WD887. Also on board were 10 Sea Furies and three Bristol Sycamore helicopters.

In November 1956 both VX381 and WD887 were based at HMAS Albatross.

On 27 November 1956, two Fairey Fireflies of the RAN (VX381 and WD887) collided over Jervis Bay, both crashing into the bay. The Fireflies, carrier borne anti-submarine torpedo bombers, were based at nearby HMAS *Albatross*. Sub Lieutenant Eagles and Midshipman Debus were flying VX381 and Sub Lieutenant Arundel and Midshipman Fogarty were in WD887. S/Lt Eagles managed to put VX381 down on Jervis Bay and they were rescued by Lieutenant. O'Farrell and Petty Officer Maby flying a Fleet Air Arm Sycamore helicopter XA902. They had been scrambled off HMAS *Melbourne* to rescue the pilots and crew of these two planes. I am not sure, but I believe that the bodies of S/Lt Arundel and Midshipman Fogarty were never found. On 29 November 1956 Captain Harding RAASC and Petty Officer Maby flew over Jervis Bay and dropped a wreath at the site where S/Lt Arundel and Midshipman Fogarty perished. On this day they flew a Fleet Air Arm Sycamore helicopter XA220.

In 1983, local Charlie Pickering found VX381. It is intact, apart from some gauges stolen since then.

#### Location

Difficult to locate, the marks are not commonly available, although the charter boats will take you there. I have both GPS readings and marks for the plane but I have failed to find it on my last two attempts. However, I have been given a new GPS Reading by Steven March from the Canberra Deep Space Communication Complex. It is 35° 0′ 53.3"S 150° 44′ 19.1"E using Datum WGS84. This equates to It is 35° 0′ 59.0"S 150° 44′ 14.9"E using Datum AUS66, my normal datum. When I originally did the GPS Readings, it was early in the use of GPS's and I do not recall what datum I used for this recording. Hence my problems in relocating it.

### **Diving**

With a wingspan of 13 metres and length of 12 metres, this is not a huge site and its shallow depth of 13 metres means that it is a dive you do using the remains of one tank. The wings site flat on the sand or even under the sand at times. The fueslage sticks up from the sand and you can look into the cockpit. The other plane has yet to be located, although some people claim to have found it over the years.

After diving the Fairey Firefly, you can see a Firefly which is still capable of flying at the Naval Aviation Museum at HMAS *Albatross*. To find the airbase, turn left at BTU Road which is a few kilometres back up the Princes Highway towards Nowra.

Unique for NSW and probably Australia.

- Allied Fighters of World War II by Bill Gunston
- Jane's Fighting Aircraft of World War II
- Sea Fury, Firefly and Sea Venom in Australian Service by Stewart Wilson
- British Warplanes of World War II edited by Daniel J. March
- E-mail from Michael St John-Maby dated 23 March 2001 whose father was one of the rescuers of the survivors of the collision

## SS Goolgwai

### History

In 1919 a "Castle" class trawler, the SS *Almeria*, was launched from the Collingwood Shipbuilding Company Ltd shipyards at Collingwood, Ontario, Canada. During World War II, 145 "Castle" class auxiliary minesweepers were built for the Royal Navy. After the war, additional ships were built as trawlers and many of the minesweepers were converted to trawlers (see SS *Olive Cam* on page 116 for another example). The ship was 125.7 feet long (136 feet overall), 23.5 feet wide and displaced 271 tons.

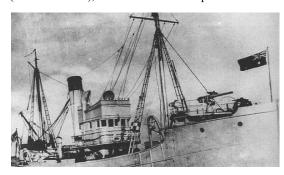


Figure 27 HMAS *Goolgwai* early in World War II

The new ship was powered by a triple expansion steam engine built by National Shipbuilding Company Ltd, Goderich, Ontario. The steam came from a single coal powered boiler.

I am not yet sure of the early history of the ship but in 1928 the *Almeria* was sold to Red Funnel Fisheries Ltd and arrived in Australia the same year. The ship was renamed SS *Goolgwai*. In 1933 the name of the company changed to Red Funnel Trawlers Pty Ltd with its headquarters being located at Woolloomooloo Bay in Sydney Harbour.

On 13 September 1939, only a few days after the start of World War II, the *Goolgwai* was requisitioned by the Royal Australian Navy (RAN) and fitted with one 12 pound gun, one .303 Vickers machine gun and four depth charge launchers. Minesweeping equipment was also installed and on 6 October 1939 she was commissioned into the RAN as HMAS

Goolgwai (FY94), an auxiliary minesweeper. Crewed by two officers and 20 men, she operated out of Sydney at first and then moved to the Cape York/Thursday Island area of Queensland. On 29 October 1945, the Goolgwai was paid off from the RAN and on 17 June 1947 she was returned to her owners, Red Funnel Trawlers. It is not clear why it took so long to return her to the owners. Two other Red Funnel trawlers were also requisitioned for war use, HMAS Durraween and HMAS Korowa. They were also "Castle" class ships.



Figure 28 HMAS *Goolgwai* later on in the War, a bit worn and weary

Presumably the *Goolgwai* returned to her normal trawling work and operated out of Sydney Harbour. For seven or eight years there does not appear to have been any problems.

On about 18 May 1955, the *Goolgwai* headed out of Sydney Harbour for the Far South Coast of New South Wales for its regular fishing trip. After 11 days, she was approaching

Sydney with 400 boxes of fish aboard when thick fog was encountered. Captain Mullarkey ordered soundings to be taken. The depth was reported to be 37 fathoms (222 feet) then one minute later the Goolgwai was aground on North Point, Malabar, better known Boora Point as (however, see later comments by Dennis about Simpson wreck location). This point is the outer northern point of Long Bay. The claim about the depth and time is unlikely as



Figure 29
The *Goolgwai* in Sydney Harbour during her trawling days

the depth even two kilometres south of here is only 51 metres (190 feet). The Captain ordered the engines full astern but the prop was fouled on the rocks.

Sydney Button of Botany was fishing on the point at 7 am on Sunday 29 May 1955 when he heard a crashing sound. Looking around, he saw the shape of the *Goolgwai* on the rock platform. The seas were very large and photos taken later that day show waves breaking right over the wreck.



Figure 30 - This is possibly the prop from the *Goolgwai*, located behind the engine of the MV *Malabar* 

Ten of the 11 crew jumped from the ship onto the rock platform and were assisted up the cliff face by fishers. Two crew were also injured. John Munro, the fireman, broke his kneecap when a wave washed him off his feet and swept him through a scupper into the ocean. He was assisted onto the rocks by two crew of the crew. Once there, Jack Punton of Leichhardt carried Mr Munro on his back 100 yards along the rocks.

When the vessel hit the rocks, Albert Tahtinen cut his head on the hull while having a shower. He went up on deck to see what had happened. Finding the ship aground, he returned to the bathroom to get his trousers before leaving the doomed ship. The ship's dog, *Sluggo*, died when washed

overboard but the ship's cat was saved.

The *Goolgwai* was racked by heavy seas and waves washed right through the bridge. Two days later the ship was wrecked, holes pounded in the bow and probably right along the hull. The ship was listing at 45° to port and on 6 June 1955, the ship broke into a number of pieces and was washed off the rock platform into the water.

The ship was valued at £10,000 and the cargo of fish at £1,500.

#### Location

Dennis Simpson of Chifley has e-mailed me as follows:

I've lived at the suburb of Chifley since 1948 and can remember going down with some of my mates to look at the SS *Goolgwai* aground on the rocks at Malabar.I can

recall where this boat was grounded because while we were there, Movietone News actually filmed us pointing and looking at the wreck and it was shown on the matinee news at the Vocalist Theatre (Maroubra Junction) the following Saturday. Our 15 minutes of fame!

I've now been down to this spot and taken a GPS reading of where I am sure the SS *Goolgwai* was wrecked. There is wreckage around the rocks here probably from the SS *Goolgwai*. The reading is -- Lat. 33°58'11"S Long. 151°15'28"E.

Dennis has sent me a map of Long Bay showing where the *Goolgwai* is located from his memory. This is located above at left. On 26 January 2001 he also showed me where the location is. In fact, despite what the papers said, the location is about half way along the north-eastern shore of Long Bay, about 150 metres out from the small boat ramp.

#### Diving

There is wreckage in the location Dennis has identified, although none of it is disenable as being from the *Goolgwai*. It is possible that some parts have become mixed up with the *Malabar*'s wreckage and some may have moved off the rock reef onto the sand. There is a prop located next to the engine of the *Malabar* but it is certainly not the prop off that ship (the bronze prop was salvaged salvaged – see page 87). I had thought that perhaps this was the *Goolgwai*'s prop rather than cargo but this is unlikely considering weight and distance to actual wreck site. No trace of the engine or boiler has been found on the site. It may be that the boiler rolled across the sandy bay under heavy seas. Who knows?

Any advice would be appreciated.

- Shipwreck Atlas of NSW 3<sup>rd</sup> Edition 1992
- Sydney Morning Herald 30 May 1955
- Lloyds Register 1948-49, 1954-55
- Some Shipwrecks in Randwick Municipality by T.L. Brignell, pages 33-35
- Australian Warships of Second World War page 175
- RAN Profile No 3 by Michael Wilson
- Century of Ships in Sydney Harbour by Ross Gillett and Michael Melliar-Phelps page 78
- Warships of Australia by Ross Gillett pages 213
- Australian Warships Profile No 6 pages 88 and 90
- E-mail from Dennis Simpson of Chifley

## TSS Hall Caine

### History

The TSS *Hall Caine* was built in 1912 at Coopernook on the Manning River on the Mid North Coast of New South Wales. The new timber ship was 131.2 feet long, 29 feet wide and displaced 214 tons. Built by D. Sullivan, the *Hall Caine* was a coal powered steamship with twin compound two cylinder engines. The ship was purchased by Rocco Edmund Caminili of Bondi, Sydney, on 29 October 1934.

It was used as a collier but at the moment I do not know any more.

The ship sank on 17 March 1937 off the northern side of Broken Bay but again, I am yet to find out more details.

The wreck was apparently known to fishers but was not revealed to scuba divers until 1976 when a fisher told Les Graham, owner of Terrigal Diving Centre. The fisher told Les that he pulled the bell to the surface one day when fishing (a bit hard to see how a fisher could catch the bell!). When Les dived on the wreck the same year, he said that the timber had already rotted away. However, all the engine room gauges were still in place in front of the engines and on either side of the boiler there were pressure gauges galore. They all sat on the ends of copper piping and brass fittings, swaying in the surge. Apparently the wreck became known to quite a number of divers on the Central Coast but for about five years, not one piece of the brass or one gauge was removed from the wreck. Then, the wreck was plundered and every gauge and "stealable" item was removed as was a great deal of the copper and brass.

#### Location

Today the TSS *Hall Caine* lies in 45 metres of water off Bouddi National Park on the Central Coast. A GPS Reading of 33° 32' 49'S 151° 25' 20"E will put you near the wreck. There is normally a buoy on the wreck to make it easier to find. For more details, see GPS Page (see page 150).

#### **Diving**

As you drop down the mooring to the wreck, the first part you see is the huge boiler which reaches up to 38 metres. The top of the boiler has some very nice sea fans of many different colours as well as some sponges and sea squirts. The mooring is attached to the port engine. The twin engines are quite large and there is a considerable amount of copper and brass in the area between the engines. The prop shafts can sometimes be seen but in October 1997 they were both under the sand. The large props have three blades, two of which can be seen. There is a good deal of fishing netting and ropes in this area.

Returning to the engine area, the boiler is a very interesting part to examine. You can see under the boiler which sits clear of the sand. There are some conger eels and large flatheads in this area. The front of the boiler has two large fireboxes. These are also home to some conger eels, at least three on my dive here. There are more in the boiler pipes. From here, swim forward and you will see a small winch and some unidentified circular ring-like objects which are also home to conger eels.

In front of here there are a couple of steel girders (possibly parts of a crane system?) but there is not much else.

This is a very compact wreck site, not even as big as the wreck of the TSS *Wandra* (on page 146) which it resembles in a number of ways. It is quite easy to explore the whole wreck in detail in one dive of about 14 or 15 minutes. Worth a dive every year or two.

As with other deep wrecks, you must be experienced and properly equipped before attempting to dive the TSS *Hall Caine*.

### References

Personal conversation with Les Graham, owner Terrigal Diving Centre, 11 October 1997

- Shipwreck Atlas of NSW 3<sup>rd</sup> Edition 1992
- Hall Caine entry in the Register of Shipping, Port of Sydney

## Henry Bolte

#### History

The *Henry Bolte* was launched in January 1966 from the NSW Government State Dockyard at Newcastle for the Victorian Department of Ports and Harbours and named after an (infamous) Victorian Premier. Displacing 383 tons and measuring 40.7 by 10.2 metres, the *Henry Bolte* was a firefighting tug used primarily in Westernport, Victoria. It was powered by an eight cylinder diesel motor of 1,500bhp connected to the prop by flexible couplings. The engine was built by Crossley Brothers of Manchester, England.

In about 1985/1986 the *Bolte* was sold to Westernport Tug Services. It is reported (the Australian Government Environment Web Site) that about April 1986 (Lloyds Register shows that it did not change hands till about 1987/88) it was sold again to Charter Craft and Marine Services Pty Ltd of Eden. However, the *Henry Bolte*'s survey expired in January 1986 and the 1988-89 Lloyd's Register of Ships records it as being laid up. As we will see later, it probably should have said "Laid Down". I have been told that it was purchased for spare parts for the *Tasman Hauler* which was also owned by the same company. I was also told that it was then sold to the Navy for target practice. However, it was never used for this purpose.

In 1988 the *Henry Bolte* and the *Tasman Hauler* were purchased by the then Eden dive operator, Gary Becus, for \$1 each. In that year he sank the tugs (the *Hauler* on 1 October and the *Bolte* eight weeks earlier - about 1 August 1988) just south of Red Point off Ben Boyd National Park to start artificial reefs and to provide alternate wreck dives for his divers.

#### Location

It is only a 10 minute run south from Eden across Twofold Bay to the tug's location just south of Red Point. The GPS Reading for the wreck is 37° 06' 46"S 149° 57' 46"E. See GPS and Marks Page (see page 150) for more details. The wreck is normally moored.

#### Diving

On 28 January 1989 I dived the *Tasman Hauler* and although it had only been down about six months, the growth and fishlife were quite incredible. Despite returning a number of times to Eden in the year after, I did not dive this wreck again or the *Henry Bolte* until 1993 due to inclement weather.

When I dived the wreck of the *Henry Bolte* in 1993, the wreck was basically intact with a 45 degree list to port on a mostly sandy bottom. The *Bolte* then had a little bit of damage, most of which seemed to occur as it sank. The vessel came down onto a small patch of rocky reef which ripped a big hole in the starboard hull near the bow opening one of the fuel tanks up. The impact of hitting the reef also caused buckling of the hull and the walls and roof inside the crew's compartment area. In 1992 the superstructure above and behind the bridge collapsed onto the sea-floor. The only other major damage in 1993 appeared to be to the propeller shroud which was been ripped up by the reef.

However, today the wreck of the *Henry Bolte* is dramatically different to 1993. In 1997 (as I was told by then local dive operator Peter Hall), the tug was damaged, probably by a combination of age and extra large seas. Now, the wreck is broken up into four major pieces and some smaller bits.

As indicated above, there is a mooring attached to the bow area and as you arrive on the wreck the ship appears fairly intact. The bow sits in a similar fashion to the way it has for the past 10 years, with a heavy list to port. You can enter a small hold at the front of the ship on the main deck. This is quite compact and there is not really much to see. Swim to the bridge and you can enter the main level through the doors. Inside you see the first real evidence of the deterioration of the wreck. The right side as you look away from the bow is badly damaged, collapsing down. There is a hatch from here to the upper deck but leave that

for the moment. You can squeeze into the area between the lowered upper deck and the floor but there is not much to see. The lower deck does not seem to be accessible (it used to be).

Instead, take the door exiting to your left and you will see some of the living compartments. You can exit outside from here. This is where you will really see the damage to the wreck. The area behind the bridge has broken into two pieces and each has fallen outwards. The wreck here has basically ripped right from the bottom of the hull, up to the main deck, across the deck and right to the other side of the ship. Devastating!!

The section on the port side of the wreck is not very interesting but the starboard side is well worth a look. Swim over to it (on your left) and you will find a compartment that can be entered and explored. As you go in, you will see a lot of engine bits and pieces, but nothing really outstanding. On both my recent dives here there were 10 or more extremely large bastard trumpeters in this area. Go though the doorway and there are a couple of toilets to sit on, a corridor and some other small compartments/cabins. You will exit out the rear and as you do you will come out onto the sand.

From here the largest section of the wreck can be seen as it sits very high off the bottom. This is the stern section of the ship. As you approach you will see that the hull has ripped from the keel right up the huge side of the ship to the railing and across the deck. Here it appears to have chosen the rear of the engine room hatch as the weakest point and then started on the other back corner of the hatch before going across the deck and back down the hull to the keel. This section has rolled over further to port and has a list of 80°. You can swim inside the hull from the opened up bit but there is little to see other than a huge school of nannygais that lives in the protection of the hull. Below you will see the gearbox, split opened and showing the driveshaft, gears and other bits. Forward there are two large oil or fuel tanks and a bit further on the port side the muffler (a bit crushed from water pressure as it sank).

For now, head to the stern along the sand on the port side. You will see a hatch just off the sand and behind it, the huge winch and bollards for the ropes used to tow ships into port. The lower hatch goes into the steering compartment where you can see the hydraulic arms that moved the flexible prop for steerage. You can exit the hatch on the starboard (higher) side of the wreck and then drop over the hull towards the bow. The prop is immediately visible, the shroud which was partly damaged by the rocks when it sank now totally in pieces. Despite the damage, you can still swim around the prop, take a picture or video of the huge propeller, shroud and shaft. Return to the bow along the keel of the wreck.

As you come back past the site of the first break, you might like to look for the engine. Well, despite a detailed search for it, I could not find the actual eight cylinder engine, even though it is extremely large. It must be covered under parts of the wreckage. Previously you could enter the engine room and swim right around it. A pity, it was very interesting.

On your left as you swim forward there is more wreckage. This is primarily the remains of the superstructure of the tug, basically the upper bits where the firefighting apparatus was located. This fell over, you might recall, in 1992.

For the final minutes of the dive, explore the upper two levels of the bridge and then ascend. This wreck does not have the colour of the *Tasman Hauler* nor its intactness. However, it has some very nice fishlife and the jumble of the wreck is very interesting to explore and put back together in your mind. An excellent dive.

The depth on the wreck ranges from about 20 metres (on the top of the bridge), 22 metres on the top of the rear section down to 25 metres on the sand/reef. This dive is suitable for all divers with a bit of experience but the inexperienced divers under close supervision should have no problem.

Visibility on the *Henry Bolte* is not normally as good as the *Tasman Hauler* and averages, in my experience, about 10 to 15 metres.

Divers using dive computers will find themselves at a distinct advantage when diving this wreck.

- Lloyds Register 1967-68, 1985-86, 1988-89
- The Ships that Serve Australia and NZ (Vol 1 Ed 1 1975) by R.D. Fildes page 142
- The Ships that Serve Australia and NZ (Vol 1 Ed 2 1983) by R.D. Fildes page 148

# SS Hilda

## History

Built in 1878 by Cuncliffe and Dunlop in Port Glasgow, Scotland, the SS *Hilda* was a collier that ran on the short coastal run between the Newcastle and Illawarra coalfields (to the north and south of Sydney respectively) to the city. Displacing 222 tons and with a length of 125.2 feet and width of 21.2 feet, the *Hilda* was not a large ship by even collier standards. The ship had two masts with fore and aft sails to assist the steam engine. The ship was owned by Alexander Stuart who started and owned the Coalcliff Mining Company. Mr Stuart later became Sir Alexander Stuart and from 1883 to 1885 he was Premier of New South Wales. He also owned a number of other colliers.

The *Hilda* left Glasgow on 8 March 1879 skippered by Captain F. Granger and arrived in Sydney Harbour on 24 May 1879. This was a pretty quick trip of 78 days (compare that to the 124 days the SS *Woniora* (see page 148) took in 1863).

The ship was skippered in 1880 and 1886 by Captain Henry Wyatt who was a long-time employee of E. Vickery and Sons Ltd which owned the Coal Cliff coal mine in the Illawarra. The official records show that in 1886 ownership changed from Alexander Stuart to H. Robinson. Sir Alex died in 1886 so it was presumably sold at that time. In reality, the ship was still owned by Coalcliff Mining Company. This company was now owned by Sir John Robertson (also a Premier of NSW) and Charles Cowper. In 1892 the mine and ships were sold to Ebenzer Vickery and then on sold to E. Vickery and Sons.

Unlike most of the ships that sunk off Sydney, the *Hilda* was not to meet its end, not during a violent storm as might be expected, but when conditions were perfect. On a regular run from Port Kembla to Sydney the *Hilda* left port on the evening of Wednesday, 19 July 1893 carrying an experienced crew of 11. The seas for the trip were smooth and the weather fine. She was loaded with coal for the French ship SS *Armand Behic* which was to depart Sydney Harbour on the next evening.

The mate, Joseph Braithwaite, was in charge for the first part of the short trip up the coast. At 12.15 am the next morning the *Hilda*'s master, Captain Charles Phillipson took over. Captain Phillipson had been the skipper of the *Hilda* for 14 months. All went well until 1 am when the *Hilda* was off Cronulla Beach. For some unknown reason, Captain Phillipson departed the bridge to go below. While he was away, he left the helmsman, Able Seaman Peter Martin, in charge of the vessel. He said that he ordered a course of north east by north and to contact him if necessary. This decision was to be the master's fatal mistake.

The Captain returned to the bridge 10 minutes later (some reports say 45 minutes) and, seeing the ship was almost ashore, immediately gave the order to reverse the engines. The *Hilda* suddenly crashed ashore on the rocks below the steep sandstone cliffs but under the reverse action of the engines it came off again almost straight away. The engineer, George Henderson, reported that the vessel would sink within five minutes. Captain Phillipson ordered the crew to abandon ship. Two minutes later the SS *Hilda* was at the bottom of the Tasman Sea and the Captain and crew in the lifeboat. They rowed to Botany Bay and then walked to Svdnev.

Later that month a Marine Board of Inquiry met in Sydney to consider the wrecking of the SS *Hilda*. In short, the Board decided that the course laid down by the Captain was the correct one but his offence was having left the bridge with no-one in charge (Able Seaman Martin stated that he was steering north east by west). Accordingly, the official finding of the Board on 31 July 1893 was that the sinking of the SS *Hilda* was caused through the wrongful act or default of the master, for carelessly navigating the said ship and not taking sufficient precaution to see that she was properly steered. The Board suspended his certificate as master for three months.

It was never revealed why the Captain left the bridge, but an assumption could be that he went below to go to the toilet, or even perhaps, for a drink.

Located less than two hundred metres off Cape Baily Lighthouse on the Kurnell Peninsula on the southern outskirts of the city, the wreck of the SS *Hilda* is in reasonably good condition considering its relatively shallow depth, the extremely rough seas that pound this stretch of coast and its age. For a lot of wreck divers in Sydney, the wreck of the *Hilda* is considered to be not interesting enough (or more truthfully, probably deep enough) for them to dive. While there are wrecks that are far more intact, its shallow depth makes it accessible to virtually all divers and there is still a lot to see.

It is reported that in 1958 the *Hilda* was blown up with a full case of dynamite by Sydney diver Barry May who was after the "valuable" metal of the vessel. Unfortunately, he further damaged the ship for no real gain as the prop was of iron construction and therefore of no value.

### Location

The remains of the SS *Hilda* now rest between 21 and 27 metres deep on a rocky bottom, with the majority in the 24 to 27 range. GPS Readings of 34° 02' 23"S 151° 13' 25"E will put you near the wreck and by running in square to the lighthouse (keep northern side of wall invisible to you) the depth will come up from 27 metres. Drop anchor here. See GPS Page (see page 150) for more details.

### Diving

Although well broken up, the remains of the *Hilda* are still roughly lie in the shape of a ship. The engine is situated on a flat rock area about 24 metres deep immediately above the prop. It is still in very good condition and is accompanied by a section of the hull.

Just below a short wall, the main wreckage of the *Hilda* runs in an south-west to north-east direction. The diagram by Tom Byron in his book *Scuba Divers Guide - Southern NSW Coast*, is fairly accurate in locating the main parts of the wreck.

The prop and rudder are the first sections encountered as you drop from the engine area. Today the prop, minus one and a half of its four blades, lies in one piece with a bit of the prop shaft and rudder. Nearby, the rest of the rudder is lying on the sea-floor. Other substantial parts such as boiler casings and boiler pipes are found to the north-east from the rudder. Some of this was damaged in mid or early 1997 by big seas and more damage in late July 2001 by even bigger seas. Further along you encounter the anchors (at least two) and chain, capstans, winches, davits, hull, plates, etc.

A dive on the *Hilda* can be extremely worthwhile and with a dive computer you can spend at least 25 to 28 minutes examining the wreck without the need to go into decompression diving. If you are a photographer, you can get some good shots of the prop and rudder and the large engine makes an impressive backdrop. All in all, the SS *Hilda* is a very good and interesting wreck dive for the occasional dive, say once every 18 to 24 months. I do not know who has the bell of the ship, but the whistle is in the position of a friend who found it in 2001.

- Marine Inquiry NSW Archives 2/10547
- Sydney Morning Herald 21/7/1893, 25/7/1893 page 5 and 1/8/1893 page 3
- Vanished Fleet of the Sydney Coastline by Max Gleeson pages 28-30

# Himma

## History

The *Himma* was built by Cochrane and Sons in Selby, UK, as the *Empire Pat* (Lloyd's Register 168788) for the Royal Navy (British Ministry of Transport). Launched in August 1942, the *Empire Pat* was a "Coastwide" class tug. She displaced 274 tons and was 34.0 metres long overall and 8.1 metres wide. The ship was powered by a triple expansion steam engine, the steam provided by a single coal powered boiler. The engine was built by Amos and Smith Ltd of Hull, England.

The ship first moved to Kuwait (in 1949) where it was owned by the Kuwait Oil Company Limited and was renamed the *Himma*. In January 1951 it was sold to J. Fenwick and Co in Sydney and became one of the working tugs on Sydney Harbour.

Sometime after this the *Himma* was involved in an incident on the Harbour when it collided, ironically as I will explain later, with the large Manly Ferry, *Dee Why* (on page 44). Halfway between Fort Denison and Kirribilli Point (near the Sydney Harbour Bridge), the *Dee Why*, skippered by Captain Harold Liley, was on an early morning trip with 225 passengers and preparing to enter Circular Quay. The *Himma*, skippered by Captain John Boothby, came down the Harbour. The ferry passengers heard sirens blare then the two vessels collided. People were thrown from their seats and the ferry's chief engineer was thrown across the engine room floor. Seconds later the *Dee Why* ran aground on the rocks of Kirribilli Point.

The *Himma* had only suffered minor damage while the ferry had smashed one of its rudders and propellers as well as suffering damage to hull plates on the port side where the vessels collided. Soon after 8 am the *Dee Why* was pulled off the rocks by three tugs, including the *Himma*. A little known story is that a lady was stuck in the women's toilet by the force of the collision (the toilets were at each end of the old ferries) and the rescuers had to chop through the door to get her out. It was also said that she was in there drinking a flask of Remy Martin brandy!



Figure 31 - The Himma just about to go under

The *Himma* remained in service on Sydney Harbour until 1972. In 1972 it was sold to Pimco Shipping Pty Ltd of Port Moresby, Papua New Guinea. It may then have been on-sold to another Port Moresby shipping company, W.J. Byers. One source (the Australian Government Environment Web Site) says that it was to be

converted to a small cargo ship for use in New Guinea but during conversion she was damaged by a collision with a berthing containership. It is reported that the new owner died and she never left Sydney and remained derelict until scuttled on 30 August 1977 at the artificial reef off Long Reef. Other sources (*Ships that Serve Australia and New Zealand* - Vol 1 Ed 1 by R.D. Fildes published 1975) reports that in 1975 the *Himma* was a hulk lying in Mort Bay, Sydney Harbour (owned again by J. Fenwick). The *Himma* was not registered after 1978.

Despite the claim about being scuttled in 1977, my research has shown that the *Himma* was acquired by Fisheries for the fledgling artificial reef and taken out to its final resting place in 1980 and scuttled.

### Location

The irony of the *Himma*'s collision with the *Dee Why* is that today it is only a few hundred metres to the south east of its old Sydney Harbour workmate the *Dee Why*, the first ship placed on the reef. The GPS Reading for the wreck is 33° 43' 13"S 151° 21' 01"E. See GPS and Marks Page (see page 150) for more details.

### Diving

If judged on its originally intended purpose as an artificial reef for fishers, the reef must be viewed as a dismal failure (at least to date) as the quantity and quality of fishlife to be found on the wrecks is very poor. However, its real success lies with the excellent wreck diving the *Himma* and the other wrecks provide. The only real problem is that the wrecks are at a depth beyond the magical 40 metre sportdiving limit.

The *Himma* had an uneventful life after its accident with the *Dee Why* until 7 October 1991. On this day, two Sydney divers, Bradley Smith and Richard Yarrow, died inside the wreck when they entered the lower front compartment and could not find their way out again. In 1992 I attended the Coroner's Inquest into their deaths and since that time I had wanted to dive the *Himma* to see for myself what had gone wrong. If you are interested in learning more about the accident, contact me for a copy of an article I wrote for *DIVE Log* about the deaths based on the Inquest. It is also attached to my home pages, see inside cover for contact details. However, despite making plans to dive it a number of times, I was not able to dive it till 1996.

The *Himma* lies at a depth of about 50 metres, although you can reach 52 metres when swimming through a hole in the hull that provides entry into the first hold. This is a deep dive, but with care it can be undertaken quite safely. On my first dive on this wreck, the weather was perfect and the seas calm, almost millpond. When we hit the stern deck of the tug we had very good visibility (15 to 20 metres) and we fastened the boat's anchor to one of the huge bollards. Swimming down the port side we moved a bit deeper until we saw the second hold. We quickly had a look in but did not enter as we wanted to explore the whole wreck a bit first. Further along we saw the large holes in the hull and we dropped over the side and swam through the hole into the first hold. We exited and went forward into the bridge area. We saw the entry to the next level down so we stuck our heads inside. From here we could see the entry to the lower compartment where Smith and Yarrow died. We had already decided that we would not go to the middle deck as we wanted to get a better feel of the wreck before we went down there. Note as of February 2000 the whole bridge area has collapsed and it is now very difficult, if not impossible, to enter the lower bridge area and the front compartments.

We went right to the bow and looked back at the wreck. Very impressive. From here we went to the top of the bridge before moving back towards the stern. From the deck just behind the bridge (47m) we could see the sun glistening on the surface, this was a great dive. As we neared the first hold I saw a yellowtail kingfish swimming around the hold. It had a fishing line attached to it and on the line there was something white attached. I swam into the hold with the attention of grabbing the line and cutting it off. Bad luck, the kingfish swam quicker than I did and I missed getting hold of it. I decided to drop right to the bottom and as I did, I noticed the narrow walkway leading back to the second hold. As I easily swam along the way I spied one of the biggest sergeant bakers I had ever seen. It was huge, sitting guard on the sand/silt in the middle of the hold.

Time was running out (we had been down about 12 minutes so far) and we quickly looked at the stern winch before dropping over the stern to look at the prop. Unusually, the prop was not removed when the tug was scuttled. We returned to the stern and started to ascend after 16 minutes bottom time.

A few metres from the bottom I looked up and to my surprise I could see the dive boat on the surface. Shocked, I looked at my computer and found I was still 37 metres down. Amazing! Four and a bit minutes after leaving the bottom we reach the first of our decompression stops at six metres. We have to spend about five minutes here and as we float

around under the boat the other two divers from our boat enter the water and descend to the wreck. We do our five minutes and then ascend to three metres and spend our required 11 minutes as well as another five minutes for safety.

Just over 40 minutes after leaving the boat we return to the surface. We have had a fantastic dive and I learnt a bit more about what might have occurred on that fateful day back in 1991. I have since dived the *Himma* again and on that dive I looked into the compartment where Bradley Smith and Richard Yarrow died. I then found out much more about that fatal dive and that some of the things said at the Inquest were incorrect. An article on the second dive is also attached to my web site.

- Manly Ferries of Sydney Harbour by Tom Mead
- Ships that Serve Australia and NZ (Vol 1 Ed 1 –1975) by R.D. Fildes page 105
- Lloyds Register 1949-50, 1950-51, 1973-74 and 1977-78
- Empire Ships of World War II pages 44 and 48

# SS Kelloe

# History

One of the best of the deeper wrecks off Sydney is the SS *Kelloe*. The *Kelloe* was a iron hulled collier built by J. Laing in Sunderland, Belfast, Northern Ireland, for J. Forster of London. It was launched in either April or August 1866 (the records say both). The *Kelloe* displaced 500 tons and was almost 50 metres long and 8 metres wide. A single screw steam ship powered by a 70hp two cylinder compound engine built by G. Clark at Sunderland, its first regular destination was Hamburg, Germany.

In the early 1870s the *Kelloe* was sold to J.D. Hill and in about 1876 it was sold again to J. Young, Ehlers and Co. The *Kelloe* remained in the UK, its home port being London. In early 1891 the *Kelloe* was purchased by the Wallarah Coal Co. Ltd for use in conjunction with its Australian coal mines. On 23 April 1891 the *Kelloe* left London under the command of Captain Hagan. It arrived in her new home port of Sydney on 9 July and started its regular run from Catherine Hill Bay on the southern outskirts of Newcastle to Sydney. It also made some journeys from the southern coalfields to Sydney and Brisbane.

On 11 February 1893 the *Kelloe* was proceeding down Sydney Harbour when she collided with HMS *Ringarooma*. She suffered some damage to the bow area and the licence of the master, Captain George F. Mason was suspended for three months. The *Kelloe* appears to have been incident free for the next nine years.

At about 10 pm on 12 May 1902, the *Kelloe* left the South Bulli jetty on the southern coalfields. She had a full load of coal aboard, bound for Sydney with Captain Hector Boyle as master. Just over two hours later, the wooden steamer SS *Dunmore* left Sydney for Shellharbour (south of Wollongong) under the command of Neils Hanson to load blue metal. The *Dunmore* was in its 12th year of incident free service but the early hours of 13 May 1902 would change that luck.

At about 1.30 am in almost perfect conditions to the immediate north of Botany Bay, the two vessels approached each other. On the *Kelloe*, Captain Boyle was in his cabin changing clothes. Captain Hanson saw the *Kelloe* and decided that the lights showed that the two would comfortably pass each other, the *Dunmore* to the seaward side of the *Kelloe*. To make certain, the Dunmore turned slightly to port. Suddenly, the *Kelloe* made a turn to starboard and a collision was imminent. As soon as Captain Boyle reached the *Kelloe*'s bridge he "realised that the steamer was doomed". He ordered full reverse and blew the ship's whistle. Moments later, the *Dunmore* rammed the *Kelloe*'s starboard side.

The *Dunmore* lowered one of its boats to help the *Kelloe* but she was also in trouble. Captain Boyle ordered the *Kelloe* to be abandoned and her boat was put in the water. All 15 crew climbed aboard and were soon met by the *Dunmore*'s boat. Within 15 minutes, the *Kelloe* had sunk, stern first, her engine still running (confirmed by its current damage - see later).

The Kelloe's crew, taken on board the Dunmore, were not yet really saved as she herself was in a bad situation. Water was streaming in through the damaged bow, slowed a bit by a tarpaulin placed over the hole. Captain Hanson decided to take the Dunmore into Botany Bay and he beached the ship off Kurnell. The next morning, the crew of the Kelloe were taken over to the Botany Pier and caught a tram into Sydney. Temporary repairs to the Dunmore were carried out and on 16 May she returned to Sydney under her own power. However, the Dunmore was now on the road towards an accident in January 1909 when she ran down a Navy boat killing 15 Navy crew. This was the greatest maritime disaster to happen on Sydney Harbour to that time. In April 1914 the Dunmore was to again strike trouble when she collided with SS Kiama at Sydney Heads and was driven up on Lady Bay Beach where she remained for three days. In September 1915 the Dunmore ran aground at Bradleys Head and in February 1918 she collided with the tug Champion off Botany Bay. The Dunmore was surely not one of the luckiest vessels around.

An inquiry into the 1902 accident found that the Second Officer of the Kelloe, George Alstrope, was at fault for not keeping a proper lookout.

#### Location

Today the wreck of the *Kelloe* lies about 1.25 kilometres off the Sydney suburb of Little Bay. Sitting on a sandy bottom broken by bits of the adjacent edge of the rocky reef, its depth is 48 to 51 metres. The wreck is sitting upright with the bow facing north. The marks on the GPS and Marks Page (see page 150) show how to find it. I suggest running in or out on the water tower/St Michael's Golf Club mark (depending on wind direction). As mentioned, the wreck is just on the edge of the main reef and only shows up a couple of metres unless you run right over the boiler.

## Diving

The main features of the wreck are the very large boiler and the engine. To the port side of the boiler are the remains of the funnel and further on an unidentified object. In front of the boiler are a couple of winches (there is another one near the engine) and further on again, another large winch, possibly for the anchors. Right at the bow there are two enormous anchors, one standing upright, and off to your right as you face the boiler is the bowspit. Behind the boiler, the engine sits, damaged greatly. Until late 1996 or early 1997 (possibly January I think), it was intact and sat upright. However, it was damaged and ripped open, presumably by a ship of some sort. Whether it was a trawler or a larger ship's anchor is unknown. Anyway, the cylinder top of one cylinder is lying upside down on the east side of the engine. The cylinder has collapsed totally, the wall of the cylinder lying also to the east. The piston and conrods lay to the west.

Behind the engine the driveshaft runs back towards the stern but it does not quite make it, breaking before it reaches the prop. The stern section is separated by a few metres from the main part of the wreck, to the east. At the stern, the prop is connected to another piece of driveshaft while the prop itself has three blades showing, two of which are broken and one intact. This damage occurred when the still turning prop (the engine was running when she sank) hit the reef and broke the blades. Only a metre away lies the remains of the rudder.

The hull is opened out like an onion and is pretty messy and flat. On the eastern side the hull sits up a metre or two but otherwise, the main part of the wreck is absolutely flat.

On recent dives here (in 1998 to 2000), we have seen humpback whales while preparing to dive, huge schools of dolphins circling our boat (including babies) and a sunfish circling us as our divers did their deco. In August 1999, this huge short sunfish, at least 2.5 metres high, swam around our boat for more than 15 minutes as divers decompressed. It came within a metre of the divers and I even reached out and touched it when I jumped back in the water to snorkel with it. In September 2000 we had a mako shark (albeit a very small one, about one metre long) swam past us as we did our decompression.

Once again, because of the depth this is a wreck for the very experienced deep diver. Like most places, the conditions can vary wildly. The very first time I attempted to dive here I saw absolutely nothing due to visibility on the wreck of 25 centimetres. Since then the visibility has been pretty good. It is also prone to currents and once some friends had a very scary dive due to a current that picked up while they were down making decompression extremely difficult. Due to the depth I would definitely recommend only diving the *Kelloe* if you have twin tanks or a large tank and a pony bottle. A great dive worth doing many times.

- Lloyds Register 1871-72, 75-76, 77-78, 88-89, 1900-01.
- The Vanished Fleet of the Sydney Coastline by Max Gleeson (highly recommended)

# **SS Lady Darling**

## History

The SS *Lady Darling* was built at the W. H. Peller and Company shipyards in Liverpool, England. She was launched in 1864. A three masted steam powered collier, she was 239 feet (72 metres) long, 28 feet (8.4 metres) wide and had a gross displacement of 895 tons. Power was from a single coal burning boiler powering a simple 90 hp two cylinder engine. This ship is one of only two shipwrecks in NSW with such an engine, the other being the SS *Woniora* (see page 148). The new ship was owned by James Patterson of Melbourne. I do not yet know any more of her early history.

On 10 November 1880 the SS *Lady Darling* was on a routine journey from Newcastle to Melbourne carrying a load of coal. Skippered by Captain L.A. Roberts, the ship had passed Narooma on the South Coast and was intending to pass between Montague Island and the mainland. The island is about six and a half kilometres from the closest part of the coast and it is said that Captain Roberts was about half way between the island and mainland as he passed the island. It appears that he turned a bit to the east to clear Bermagui well to the south.

South of Montague Island there are two shallow reefs. The largest of these is Aughinish Rock which is about 2.5 kilometres south-west of the southern end of the island. A further two kilometres south there is another reef. Both of these reefs break in any sort of swell and are shallow enough to wreck any large boat that crosses over the reefs. The *Lady Darling* drew about 16 feet 5 inches (five metres) and in even a two metre swell she was likely to hit a reef that was shallower than 7 to 8 metres at low tide.

As indicated, Captain Roberts must have changed course from south to south-east or south-south-east. At about 5 am, the SS *Kamerooka* (not sure at the moment if this is correct spelling as there was also an SS *Kameruka* around at the same time) passed the *Lady Darling* south-west of Montague Island. This must have been about the time it was nearing Aughinish Rock.

At about 5 am the SS *Lady Darling* hit a reef on her port side, near the engine room. Despite that water was up to the boilers within five minutes, the ship did not sink straight away. Captain Roberts later reported that the ship hit something about 3 kilometres south of Montague Island, so this makes it very likely that the ship hit Aughinish Rock rather than the other reef.

Lifeboats were launched but the Captain did not order the immediate evacuation of the ship and it was not until 12.30 pm that the ship was abandoned. The ship sank before 1 pm and the crew rowed to Montague Island, arriving there at 4 pm.

The SS *Lady Darling* lay undiscovered until August 1996 when the net from a Bermagui fishing trawler became entangled on something off Cape Dromedary. The skipper of the trawler approached Bert Elswyk, the operator of a local fishing and diving charter boat, to recover his valuable net. He also told them that a piece of riveted plate had come up with the net that he had retrieved. On 16 August 1996, Bert and local dentist, Paul Mood, went out with the aim of recovering the net and gear.

Imagine the surprise that awaited Bert and Paul when they descended to the sea floor! The net was not caught on a reef, but hooked over the remains of a shipwreck.

## Location

Located 5.5 kilometres south-west of Aughinish Rock, 8 kilometres south-west of the southern end of Monntague Island and 2 kilometres off Cape Dromedery, they had found the wreck of the SS *Lady Darling*. The ship is located at 36° 19' 06"S 150° 10' 06"E. Note that you cannot dive this wreck without a permit from the NSW Department of Heritage. The only permits that have been ever issued are to charter boats.

When the wreck was found and the permit system implemented, I was invited by the State's Maritime Archaeologist to apply for a permit to dive the wreck from my boat. Despite offering to submit to any conditions (eg phoning the Narooma Police and asking them to search the boat for any wreck relics), I was refused a permit. Even after complaints to the Minister and the Ombudsman about discrimination, I was refused a permit. I was told that I could use the permit of the commercial operators but of the (then) seven licensees, only one replied to my letters and he said that he was not permitted to loan the permit. After complaining to the Department that operators either ignored my request or told me that they could not let me use their permit, they wrote to all licensees. I then applied to them again and of the seven, only two responded (from memory). One told me that he would not let me use the permit and the other said that it could be used if we paid him \$25 per person on the boat (I think) and that he or his crewman had to come on our boat with us. This was not acceptable to us as it would make the dive prohibitively expensive and would have cost a spot on the boat for one of our friends. It is about time the Department reviewed this policy and issued permits on a one-off basis to private boats who agree to strict conditions.

One of the conditions of the permit system is that anchoring is not permitted on the wreck. A complicated mooring system was implemented where two buoys rose from mooring blocks set off the wreck with a line stretched in between. The resulting system looks like a H shaped goal post. The permit holders drop their anchor to a designated depth and hook onto the cross-bar of the goal post. However, this system has its faults, principally that the wind must be from the right direction to work properly and the moorings and line are too light for the boats from Narooma. As of October 2001 the system is broken and cannot be used. A far simpler system of two heavier moorings with lines right to the surface (and the wreck marked on charts so boats stay clear and do not foul the lines) would work better.

### Diving

The wreck lies at a depth of about 30 metres on a sandy bottom. The wreck is facing south, with the bow section separated from the main stern section. Starting from the stern a description is as follows.

The stern rises about four or five metres off the sand. One blade of the prop is visible under the stern. A huge winch dominates the stern deck and there is still metal decking in this area. From memory there are a couple of decks. In front of this area is the engine, sitting upright, its two cylinders very prominent. The driveshaft can be seen running to the stern. The huge boiler is located further south of the engine. Only about half the boiler can be seen, the bottom half is buried under the sand. The sides of the ship protrude a metre or two from the sand.

This whole section of wreck is completely covered in fixed marine life, sponges, jewel anemones, yellow commensal zoanthids, sea squirts of all colours, gorgonias and giant jelly ascidians cover every square millimetre of the ship. The fishlife has to be seen to be believed. The wreck of the SS *Tuggerah* in Sydney (see page 136) has the most prolific fishlife of any wreck I have ever seen but the *Lady Darling* is even more spectacular, with many more species than the *Tuggerah*. Fish seen include yellowtail, silver sweep, mado, bullseyes, nannygais, leatherjackets of many species, striped morwong and other species. I even saw a few butterflyfish on the wreck in October! There are also huge bailer shells, at least six on the dive I did there.

If you look south from the boiler you see sand. About 20 metres across you encounter the first pieces of the bow section. At first you only see bits of hull and other pieces protruding from the sand but enventually, larger pieces are visible. The bow itself is fairly intact, tilted to the starboard. The anchor is here and back closer to the stern on the starboard side are some larger bits, including the donkey boiler. The growth and fishlife is still great, but not as prolific as the stern.

This is a magnificent wreck, the best perhaps in New South Wales. There is no doubt that a permit system is needed, but a more enlightened attitude to private boats is required by the

NSW Government. I think that now you can only dive the wreck with two Narooma charter operators. One has told me that he is charging a reasonable price.

- Sportdiving Number 62, June/July 1997, article by Paul Mood and Bert Elswyk, pages 50 to 53
- Scuba Diving, Snorkelling and Spearfishing Guide to Southern New South Wales by Tom Byron, pages 195-6
- Wrecks on the New South Wales Coast by Jack Loney, page 76
- Scuba Diver November/December 1996, article by Andrew Green pages 16 to 18

# Lanercost

### History

The *Lanercost* was launched in October 1865 at Harrington, UK. She was a timber barque, 123.7 feet long and almost 26 feet wide and displaced 358 tons. She was originally constructed for the Holland to England trade. The early life of the ship is not known but the final owner was Mr Simpson of Adelaide.

On 21 November 1872 the *Lanercost*, under the command of Captain Simpson (not sure if this was the owner) departed Newcastle (New South Wales) for Adelaide with 580 tons of coal. At 5 am on 24 November 1872, the ship strayed a bit too far to the west and ran aground on a small point just north-west of Mowarry Point, south of Eden. The *Sydney Morning Herald* reported that the wreck was half a mile south of Mowarry Point but it is more likely that this was an incorrect report as there is no wreck at that location except the much more recent wreck of the *Olive Cam* (see page 116). The crew all managed to get shore.

Men from the Eden pilot boat attempted to board her in a salvage attempt but big seas prevented the crew from succeeding. The seas were breaking over the ship's lower years and soon smashed the *Lanercost* to bits.

In the 1960s divers found the wreck and there was some minor salvage undertaken, including sand dredging of a major section on the sand. Sydney wreck diver John Riley found an American one cent coin on the wreck in the 1970s. This is dated 1864 and confirms the wreck as being the *Lanercost* rather than the *Olivier Frost* which sank south of here in 1856. Eden diver John Mathieson recovered some items over the years, including a key, a silver-plated spoon, a ship's log vane, the lens of a telescope and a copper spike.

# Location

The actual wreck site is quite easy to find. The GPS Reading for the site is approximately 37° 08′ 17″S 149° 59′ 29″E. This will put you off a small point that juts a bit to the north from the shore. The wreck is scattered in the long gully to the east of the point and there is a major piece of hull on the sand in front of the second gully. You will need westerly or southerly winds to dive this wreck as you must have absolutely millpond seas.

## Diving

After anchoring in this area, drop to the reef and swim to the south-east till you hit the sand. This is in the second gully. Follow this gully to the north-east and when you are in 20 to 21 metres, go out on the sand about five or ten metres and have a look around. If you are lucky, the sand overlaying the largest part of the wreck may have receded a bit exposing some hull timbers and the keel.

From here, swim back up the gully a bit before crossing over the ridge to the west and dropping into the main gully. Follow this gully up to the shallows, keeping primarily to the left side but zigging out a bit as you go. When you reach five metres, cross to the other side and work your way down deeper. Again, zag away from the wall and look for pieces of wreck. Along this side you will see an anchor a little bit up the wall on a small ledge. The bits of wreckage are mainly small pieces of iron, some copper (nails mostly) and some timber remnants.

Like most of the other Eden/Green Cape wrecks, people not interested in shipwrecks may find it a bit boring. In my view, it is worth a dive or two.

- Scuba Action, unknown date, late 1980s, article by John Riley
- Shipwrecks of Twofold Bay/Disaster Bay by Tim Smith, NSW Heritage Office
- Wrecks on the New South Wales Coast by Jack Loney

- Sea Adventures and Wrecks on the N.S.W. South Coast by Jack Loney
- Sydney Morning Herald 23 November 1872, page 6, 2 December 1872 page 21

# SS Ly-ee-Moon

## History

The *Ly-ee-Moon* was built as a paddle steamer in 1859 by the Thames Shipbuilding Company of Blackall, London, England. She was designed by J. Ash specifically for use in the opium trade. The ship was just over 282 feet long and 27 feet wide. She displaced 1,202 tons and was powered by a coal powered steam engine which turned paddle wheels. She was also rigged with three masts and sails. At trials, the new ship attained 17 knots, an amazing speed for the time and the fastest speed ever attained to that time by a British built vessel. Not only was she the fastest steamer around, she was also lavishly furnished. It is stated that she was built for Dent and Company. It is also said she was a sistership to the Royal Yacht, *Victoria and Albert*.

Of interest, the first captain of the *Ly-ee-Moon*, Norman Hill, built a house in South Norwood in South London. He called the house Ly-ee-Moon after the ship. It is now pulled down.

In 1860 or 1861, the *Ly-ee-Moon* was used as a blockade runner during the American Civil War. Apparently she ran in and out of Charleston, South Carolina and this was far more profitable (and one imagines, dangerous) than her intended trade. At the end of the war in 1865, she moved to Hong Kong. One of her first owners was Messrs Jardine, Matheson and Company of Hong Kong and she was used in Chinese waters for the next 7 or 9 years. Apparently she was renamed the *Tahei Maru* (one report says in 1863) and was under Japanese ownership or at least management (possibly a company called Mikado) till 1872. In 1872 (or perhaps 1874) the ship was rammed when at anchor in Hong Kong Harbour and she sank. Refloated, the *Ly-ee-Moon* was repaired and sailed back to England using her sails. Here, she was fitted with new engines and converted to a screw ship to cut down on coal usage. It is not clear where this occurred.

The SS *Ly-ee-Moon* was sold to the Australasian Steam Navigation Company Ltd (ASNC) on 5 February 1877 and Captain G. R. Stevens brought her to Australia. He then sold the ship to. The aim was to use the newly purchased ship on the Fiji and Pacific Island runs. On 4 November 1877 the ship caught fire while she was being refitted in Sydney at the ASNC's premises at Pyrmont. This may have involved her being fitted with a new compound engine (built by Ouseburn Engine Works of Newcastle-Upon-Tyne in England). It is reported that she was scuttled to put the fire out and the engines saved due to watertight compartments. The damage was reported at £8,000, although this is contradicted somewhat by other reports.

The ship was again raised and repaired at a cost of £4,000. Some modifications were made, including removing a mast and making her schooner-rigged and putting the saloon on the main deck. In 1878 the *Ly-ee-Moon* returned to service and ran on the Sydney to Melbourne run. The refitted ship was quite popular and held in high esteem by all who travelled on her.

On Saturday 29 May 1886 at about noon, the SS *Ly-ee-Moon* left Melbourne bound for Sydney. Aboard were 55 passengers as well as 41 crew. Captain Arthur W. Webber, who had 14 years experience with ASNC, was the skipper. The cargo of the ship included hats, benzine, tobacco, stationery, pepper, oatmeal, vegetables, potatoes, bran, tea, soap, chaff, hap, guano (bird crap!), wine, flour and 250 cases of whisky. At about 7.45 pm on 30 May 1886, Captain Webber left the ship in charge of the Third Officer, James Fotheringhame. Note that this is the correct spelling of his name as advised to me by the great grand-daughter of Mr Fotheringhame, Sue Strachan (see references). The ship was approaching Gabo Island (just south of the New South Wales/Victoria border) and the lighthouse there had been sighted. He instructed Fotheringhame of the course to steer and told him to call him when the ship was nearing Green Cape. Green Cape is just north of the border and about 26 kilometres south of Eden. In 1883 a 29 metre high lighthouse was constructed at Green Cape. The light was 44 metres above sea level and the light could be seen 18

kilometres away. The weather was said to be fine and clear, with a west-south-west wind and a heavy sea.

Sue Strachan has told me that her family's oral history of the sinking records that Captain Webber was drunk in his cabin and Mr Fotheringhame attempted many times to get him to come to the bridge before he did.

At about 9 pm the Captain returned to the bridge and found that the Ly-ee-Moon was heading straight for the rocks on Green Cape. As he ordered the engines to be reversed, the ship hit the rocks under the lighthouse. It was too late and within 10 minutes the ship was broken into two sections. The stern was on the outer reef (perhaps a bommie - see later) and the bow floated towards the shore.

The bow section was close to shore and after a while, the foremast fell and reached the rock platform. Three seamen and the boatswain crawled along the mast to safety. They joined the lighthouse keepers and attempted to rescue the remaining crew and passengers. An attempt was made to fire a light line from the shore to the bow section but this failed. A fishing line was thrown to the ship and a rope was tied to it and hauled to shore. A passenger, Herbert Lumsdaine, went hand over hand along the rope and made it to the shore. Fotheringhame and Alfred Smith (an employee of ASNC) tried to carry another line ashore but failed according to newspaper reports. However, Mr Fotheringhame's family oral history records that he did make it ashore with a line. He apparently kept a penknife that he cut the line with and eventually gave it to his grandson. The newspapers report that the Chief Steward, W. Thomson, was successful and the remaining 11 people alive on the bow section made it ashore, including the Captain who was the last one to leave the wreck. The lighthouse keepers assisted in the rescue. Daniel Whelan, the Second LighthosueLighthouse Keeper, was recommended for an award from the Royal Humane Society for saving six persons. Ola Thorpe, boatswain, and George Walters, telegraph operator at the lighthouse, were also recommended for an award for saving two persons. Andrew Bergland (a passenger) and James Fotheringhame were recommended for an award as well for attempting to save a lady. Mr Fotheringhame was awarded a Gold Medal by the Society and it is now with his descendants on his son Ralph's side of the family. It was now about 3 or 4 am.

There were about 20 people on the stern section and they could be heard during the night but by morning, they were all dead and the stern washed into the sea.



Figure 32 The Pilot Vessel *Captain Cook*, probably at Watsons Bay in Sydney Harbour

The news reached Sydney the next day and the Premier of New South Sir Patrick Wales, Jennings, dispatched the pilot vessel Captain Cook to Green Cape. She arrived there at 5.15 pm on 1 June 1886. The steamer SS Bega was also ordered to assist and she departed Eden for Green Cape at daylight on 1 June 1886. She left Green Cape at 9.30 am the same day and then departed for Sydney from Eden and 10.30 am.

An Inquest was held on 1

and 2 June 1886 at Eden before the Coroner, Mr Magnus, JP, of Eden. The jury delivered its verdict at 8.30 pm on 2 June 1886. It said in part that "...gross neglect has been shown, but there has not been sufficient evidence before us to point to the guilty person or persons".

The Captain Cook stayed in the Green Cape area searching for bodies. On Wednesday 3 June 1886 the ship was reported to be totally broken up and bodies were seen floating off the point. The next day the Captain Cook collected several bodies, including one of an elderly lady. This was Mrs Flora Hannah MacKillop of St Kilda, Melbourne. Mrs MacKillop was ah "elderly lady, mother of the Mother Superior of St Joseph's Provident Institution". The Mother Superior was Mother Mary MacKillop, the person most likely to be canonised by the Catholic Church as Australia's first Saint. Mrs MacKillop, one of the Saloon passengers, was on her way to Sydney to see her two daughters, Mary and another who was also a nun. Mrs MacKillop's body was identified by her nephew, Mr Macdonald.

Mrs MacKillop's funeral was held on 7 June 1886 at St Michael's Church, Lower Fort Street, The Rocks (Sydney). The Reverend Father Murphy, SM, conducted the mass and the church was said to be filled to overflowing. Mother MacKillop attended of course as did many of her nuns. Mrs MacKillop was buried at St Charles Cemetery at Ryde but later the body was moved to North Ryde Cemetery where it now rests.

Another to die was Mr K. McGregor, also a Saloon passenger. He was said to be a promising young actor on his way to join the Howloways Dramatic Company in Brisband. Also lost was a considerable amount of manuscripts, plays, music and equipment belonging to the company.

A Mr Griffen who died on the ship apparently boarded the Ly-ee-Moon instead of his intended vessel.

A total of 71 people died, 21 out of 26 saloon passengers (17 men, 6 women and 3 infants), all 19 steerage passengers and 31 of the 41 crew. The survivors (without the Captain and Third Officer) arrived in Sydney on the *Captain Cook* at 3 pm on 4 June 1886. Five of the bodies recovered (not including Mrs MacKillop) were buried at Green Cape at 9.30 am on 4 June 1886. The bodies of most of the dead passengers and crew that were recovered were buried at the same location (just north of the Green Cape Lighthouse and about 100 metres into the scrub off the access road). The ship was not insured.

It was reported that the Third Mate, James Fotheringhame, had been arrested at Bega by local Police and it was intended that he and Captain Webber would be prosecuted for manslaughter.

On Friday 5 June 1886, Fotheringhame was brought up before the Eden Police Court before Mr G. Keon, PM, Mr S. Solomon, JP, and Mr F. Keon, Court before Mr G. Keon, PM, Mr S. Solomon, JP, and Mr F. Keon, JP. He was charged with manslaughter. The court granted him bail of £80 and required two sureties of £40 each. He was remanded to the Water Police Court, Sydney and released after the bail and sureties were paid by telegraphic transfer.

Around 7 June 1886, at least 12 Sydney churches held services to remember the dead. A public meeting was held at 8 pm on 7 June 1886 at the Town Hall. By 7.15 pm all the seats were full and many dignitaries attended. Sympathies were expressed and funds raised for the *Ly-ee-Moon* Relief Fund. By 11 June 1886 it was reported that £200 had been pledged.

On 8 June 1886, Captain Webber and Mr Fotheringhame appeared before Mr Marsh, SM, in Sydney. Captain Webber was charged with "feloniously slaying Antonio Pothymutos" and Mr Fotheringhame with "wilfully and feloniously killing and slaying Antonio Pothymutos". Captain Webber was bailed at £500 or two sureties of £250. Both were remanded to 9 June 1886.

The Marine Board of Inquiry opened on 9 June 1886 but after some evidence, Justice Faucett of the NSW Supreme Court stopped the proceedings. He ordered that Captain Webber and Mr Fotheringhame could not be further questioned at the Inquiry.

On 11 June 1886, Justice Windeyer heard a request by Captain Webber to make absolute Justice Faucett's ruling. On 14 June 1886 Justice Windeyer renewed his injunction.

I have not yet been able to find out what happened after this.

### Location

Today the wreckage of the *Ly-ee-Moon* is located in the gully between a bombora (probably where the stern section was caught), the reef to the west and the shore (on the southern side of Green Cape Lighthouse). There is also some wreckage on the rock platform (some boiler plating perhaps and parts of the rigging). This can be seen from the shore.

The *Ly-ee-Moon* can only be dived in extremely calm seas and there are only a handful of days in a year where the right conditions are available. Due to the distance from Eden (about 26 kilometres), the charter operators do not generally dive this and the nearby wrecks. Therefore it is likely that you will need to use a private boat. If you have a smallish boat (say five metres or less), the best bet is to run out of the small coastal village of Womboyn but if it is very calm and no likelihood of a change, then you can come from Eden. Using Womboyn requires a lot of planning as the lake, river and bar are very shallow and you can only travel to the sea from the boat ramp in the period about two hours either side of high tide. Therefore you need a high tide of about 1.8 metres, occurring about 9 am to 12 am enabling you to exit the bar at 7 am to 10 am. Also, you need calm seas, no swell at all from the south and very calm from north east at the most.

Arriving at Green Cape below the lighthouse, anchor between the bombora and the western reef but out a bit. GPS Reading for the anchor point is approximately  $37^{\circ}$  15' 55"S  $150^{\circ}$  03' 01"E.

### **Diving**

Swim into the gap between the bommie and the western reef and next to the bommie you will find the first pieces of wreck. In amongst the small boulders you will find bits of metal, mostly unidentifiable. There are also some pieces of plating jammed at the bottom of the bommie wall. A bit further on there are two bollards, some copper piping and pieces of pipe bent in strange shapes.

The depth here is between 12 and 14 metres. Travelling further to the north, the depth decreases gradually and there is no wreckage. Keep going and follow the eastern wall. Here you will find more pieces of wreck in 7 to 9 metres. You will see some iron bits and then a stainless steel propeller and shaft attached to a bit of timber located under a large boulder. This is obviously not from the *Ly-ee-Moon* as it is too small and not of the appropriate metal. It is probably from a fishing vessel.

Behind the boulder there are some much more interesting items. One of these is a diesel engine, also not from the *Ly-ee-Moon* and most likely from the same fishing vessel. It is covered in a great deal of growth and appears many years old.

Adjacent to the engine is an anchor that appears to be from the *Ly-ee-Moon* and part of the cylinders from the steam engine. There is not much else here, perhaps some boiler bits. I had a look in the shallows at five metres but it was far too surgy and totally covered in dense kelp.

As mentioned above, up on the rock platform there are more bits of the wreck, mainly some plating and girders. There also appears to be some sections of a boiler and fittings from the mast rigging.

Although there does not appear to be a huge amount to see, it is nevertheless an interesting wreck well worth visiting.

- Daily Telegraph 1 March 1991, page 36
- Scuba Action, unknown date, late 1980s, article by John Riley,
- Shipwrecks of Twofold Bay/Disaster Bay by Tim Smith, NSW Heritage Office
- Famous Wrecks by Jack Loney
- Mary Mackillop Place a museum dedicated to Mother Mary Mackillop, Sydney

# Shipwrecks Along the New South Wales Coast

Page 81

- Sea Adventures and Wrecks on the N.S.W. South Coast by Jack Loney
- Sydney Morning Herald 1 June 1886 page 7, 2 June 1886, 3 June 1886 page 5, 4 June 1886 page 7, 5 June 1886 page 11, 7 June 1886 page 5, 8 June 1886 page 5, 9 June 1886 page 7, 10 June 1886 page 7, 11 June 1886 page 4, 12 June 1886 page 10, 15 June 1886 page 5
- The Phoenix Suburb by Alan Warwick (Blue Boar Press, London, 1972)
- Email from Sue Strachan, Davenport, Tasmania, great grand-daughter of Mr Fotheringhame, strachan@microtech.com.au
- A Log of Australian Ships by Graeme Andrews page 49

Formatted: Bullets and Numbering

# SS Macleay

## History

The SS *Macleay* was a single screw coastal cargo and passenger vessel built by Forrest and Sons at Milwall (Millwood?) on the River Thames, London, England, for B.B. Nicoll in 1883 as the SS *Woodburn*. The *Woodburn* left England on 12 December 1883 and arrived in Sydney on 22 March 1884. It was 47 metres long with a beam of 8 metres and displacement of 398 tons. The vessel carried 28 passengers as well as cargo and was powered by a two cylinder steam engine and sail when needed.

Ownership passed to the Clarence and Richmond River Steam Navigation Company in 1884 and in 1889 or 1890 the ownership again changed when CRRSNC merged with John Slee and Company to form the North Coast Steam Navigation Company. The name of the vessel was changed to SS *Macleay* about the same time.

The ship had an excellent reputation on the North Coast run and was even famous in 1900 when it was involved in the rescue of 17 crew from the *Harvester*. On 9 June 1900 the *Harvester* had hit Big Seal Rock and the crew had taken to lifeboats and were drifting out to sea when intercepted by the *Macleay*. The ship had another minor incident in November 1906 when it collided with SS *Tarshaw* in Newcastle Harbour. There was not much damage.

Another five years were to pass uneventfully until the night of 11 October 1911. The *Macleay* had by now stopped carrying passengers and was a pure cargo vessel. At 4 pm on that day, the SS *Macleay* departed Newcastle for the Clarence River and Grafton with a cargo of coal, three horses and other items. At 7 pm Captain Keith Donald "spoke" to the Port Stephens light keeper by signal lamp and before he left the bridge, he gave orders for the vessel to head north-northeast. For some unknown reason, the officer on duty, Henry Goldsmith altered course to northeast which one would imagine was safer. All of a sudden, the helmsman, Charles Petterson shouted that he saw breaking waves but Goldsmith declared it to be "a school of mullet.

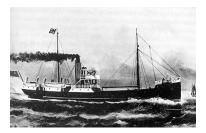


Figure 33 A drawing of SS *Macleay* 

Goldsmith declared it to be "a school of mullet..". Petterson attempted to steer away from the approaching reef but it was too late.

The *Macleay* had hit Boondelbah Island off Port Stephens. The weather was a strong southerly but it was apparently an otherwise fine night. The Captain ordered that the lifeboat be made ready. Already the ship was doomed, it had a list to port. The ship was apparently stuck on the rocks for a short while but it now came loose and developed an even worse list. The ship rolled completely on its port side and the crew and horses (which had been cut loose) went into the water. Within 10 minutes of hitting the island, the SS *Macleay* had sunk to the north of Boondelbah Island. The crew started dieing right from the time the ship sank.

The 17 crew attempted to use whatever was floating to assist them but only two were to survive, Charles Petterson from Finland and William Swanney from Scotland. Mr Petterson clung to a hatch cover with William Jones but Jones was lost when he tried to swim to Cabbage Tree Island as they passed to the south of it. Mr Petterson was washed ashore to the north of Yaccaba Headland where he landed at about 9am.

Mr Swanney was with two other crew, Hans Hanson from Norway and donkeyman E. Bogli (some sources also state Fireman Thomas Monks was with Mr Hanson) and they floated on a raft made from a plank, rope and other pieces of wreckage. Just before they reached land, Mr Bogli was lost from the raft (the same source as above says Mr Monks) and died and a few minutes later Messrs Hanson and Swanney swam through the surf towards the shore. Mr

Swanney reached shore and looked back where he saw Mr Hanson standing in the surf but he was hit by a wave and swept back into the raging ocean.

The bodies of Jones, Hanson and Monks were found that day on the beach as was a quantity of the ship's cargo, wreckage and the remains of a shark savaged horse.

At the Court of Marine Inquiry, it was found that the accident occurred because the mate, Henry Goldsmith, altered course from north-north-east to north-east.

#### Location

Today the SS *Macleay* lies straight out from Little Island (to the north of Boondelbah Island) facing the south west, broken into two pieces just behind the engine. The GPS reading for the *Macleay* is a latitude of 32° 22' 20" S and longitude of 152° 14' 43" E. Note that all the GPS Readings on my Web Site are taken using AUS66 as the map datum. If you use another datum you may be about 220 metres off the wreck. See my GPS Page for more details and how to convert readings. See the diagram and marks at left and the GPS and Marks Page for more details. At 43 metres, the wreck is fairly deep. When I first dived the wreck a mooring was tied to the prop shaft immediately adjacent to the engine which is tipped on its side. However, in 2004 there was no mooring. The bottom is a jumble of small and large rocks, although to the east of the bow and north-west of the boilers there is sand.

## Diving

You are most likely to anchor near the boiler or engine. The wreck appears to lie north-west south-east, with the bow to the south-east. Swim to the north-west and you will pass the engine, keep going for now and you will see that the stern is very broken up. At the back of the engine you can see the prop shaft running back towards the stern. Despite what I said before, the stern is a bit more intact than other parts of the vessel but this is a mostly flat shipwreck. The shaft ends after about 10 metres and so does the main part of the wreck. Keep swimming and after 10 metres of swimming across the rocky bottom you will see the stern section. This consists of the remainder of the prop shaft, the rudder assembly and the propeller. The main section of the prop is buried in the little bit of sand that fills in the gaps between the rocks.



Figure 34
John Black on the starboard side of the boiler

Return back the way you have come and examine the engine which is lying on its side, the cylinder heads facing the south. A bit further you will see the single boiler, medium size considering the ship's size. Reaching up to about 39 metres, it is covered in growth and is home to some small moray eels and sometimes covered with red morwong, blue morwong and large bream. Off the starboard side of the boiler is the funnel and towards the bow there are the the remains of a hatch, a large winch and some bollards. At the bow itself there are two large anchors, located a little to the south. The wreck is even flatter in this area. On the northern side of the bow there is a large section of reef that extends up to perhaps 37 metres.

The fishlife on the wreck is quite good, with giant cuttlefish, hundreds of red morwongs and huge schools of yellowtail floating over the wreck. I have also seen wobbegong, large bream, seapike and blue morwong. The visibility on the first time I dived was quite good, say 18 metres or so but my most recent dives had about 5 metres. There can be a current running in towards Port

Stephens in between low and high tides and also a oceanic current at times. Visibility is dependent on the tides, generally far better at high tide.

On my first dive the current make us use more air so the maximum bottom time I could do was 19 minutes. This entailed a two minute stop at six metres and 13 minutes at three metres. Unfortunately, the current had increased a bit and after 10 minutes of deco it picked up dramatically and made it quite uncomfortable.

I have dived the wreck with Pro Dive Nelson Bay (other dives have been from private boats) and the service was first class. They do this quite regularly.

A very good wreck worth diving many times.

- Shipwrecks, Storms & Seamen of the New South Wales Coast by Max Gleeson
- The North Coast Run by Michael Richards
- Sydney Morning Herald 11 June 1890, 13 and 14 October 1911
- Unpublished article by Geoff Cook of South Pacific Divers' Club, circa 1995

# PS Maitland

### History

The Paddle Steamer *Maitland* was built by McCulloch and Co at Port Glasgow in Scotland and launched in September 1870. The first owner of the ship was the Hunter River New Steam Navigation Company which named the ship after the main town of the Hunter Valley (apart from Newcastle), Maitland. The new vessel was 69 metres long and 8 metres wide. It displaced 880 tons. As suggested, the ship was an iron-hulled paddle steamer powered by a two cylinder compound engine constructed by Macnab & Co of Greenock, Scotland. Steam was supplied by four boilers, in twin pairs, which fed two funnels.

In 1877 the *Maitland* ran down and sank a barge near Newcastle. In 1891 ownership of the *Maitland* passed onto the Newcastle and Hunter River Company which may have actually been the same company with a name change. All the time, the *Maitland* worked on the Newcastle to Sydney run.

At 11 pm on Wednesday 6 May 1898 the *Maitland* left Sydney bound for the north. The weather was very poor (the storm that night would forever be known as the *Maitland Storm*) and a strong southerly gale was blowing and the waves were said to be "mountains high". The seas in the open ocean were so big the deckhouses on the starboard side were damaged by waves. Repairs were carried out as best far they could be but it was not completed.

The *Maitland* passed Broken Bay, apparently quite a few kilometres out to sea, but finally Captain Skinner decided to turn around and head for shelter. As she approached Broken Bay and Barrenjoey Lighthouse appeared ahead, the ship's condition worsened. Cargo was being jettisoned overboard. Attempts were made to remove water from the holds and engine room by crew and passengers but without success. Kerosene and wood were added to the boilers in an effort to keep the fires raging. However, water entered the boilers and one by one they were extinguished.

The ship was now about two miles off the northern shore of Broken Bay and drifting rapidly towards land. It was very obvious that the ship was doomed. Lifebelts were issued to all passengers but from reports I have read, there did not appear to have been lifeboats on board.

The *Maitland* soon hit the reef that extends out from what is now named Maitland Bay and some huge waves came over the wreck and broke her in two. The stern section was now up on the rocks as well as the bow. Soon after another huge wave hit the wreck and all the passengers and crew in the forward part of the ship were washed into the sea. It is believed that no-one from this part of the wreck survived.

Either 21 or 26 people died in the wreck (there are differing reports) and 37 are believed to have survived. Of those who died, nine were buried in a small cemetery nearby. The bell of the *Maitland* was salvaged and placed for a time in a monument in Bouddi National Park. This bell was replaced with a replica (for security purposes) and the original bell is now housed elsewhere.

The same night, the barque *Hereward* was wrecked on Maroubra Beach in Sydney's South Eastern Suburbs, such was the strength of the storm.

## Location

Today the main parts of the wreck left are up on the rock platform in the intertidal zone. This includes the remains of the boilers.

## Diving

There is very little to be seen in the water (I have dived here once and never saw a thing) but I have been told it exists.

- Scuba Action date unknown, article by John Riley
- Lloyds Register 1891-92
- Sydney Morning Herald 5 to 12 May 1898
- Various papers on National Parks and Wildlife Service file on PS Maitland
- A Log of Australian Ships by Graeme Andrews, page 51

# MV Malabar

# History

The motorship *Malabar*, Port of Registry, London, Official Number 148681, of 4,512 tons gross register, George William Leslie, Master, left Melbourne on 31 March 1931 with a complement of 109 officers and crew and 28 passengers, on a voyage to Singapore, with Sydney, New South Wales, as the first port of call.

So began the statement of the case against George Leslie over the stranding and subsequent total wrecking of the MV *Malabar* in Long Bay, Sydney. A Court of Marine Inquiry was held in Sydney on 15 and 16 April 1931 before John Laidlaw, Esq., Chief Stipendiary Magistrate of NSW, at which Captain Leslie was charged with failure of duty in a matter relating to the navigation of the *Malabar*.



Figure 35
The *Malabar* during trials on the Firth of Clyde, Scotland

The story of the wrecking of the *Malabar* really begins in the early 1920s when the economic advantages of the motorship over the steamship became more obvious. The increased cargo capacity caused by the absence of coal bunkers alone was enough to justify shipowners to bring into service diesel powered motorships. The Australian shipping line Burns, Philp & Company Limited placed an order in 1924 for such a vessel, its first, to replace the *Montoro* on the Java to Singapore run. The new vessel was launched from the West Shipbuilding Yard of Barclay, Curle and Company., Scotstoun, Glasgow, Scotland on 9 July 1925.

The ship was named the MV Malabar after a small town in Java about 32 kilometres south-

west of Bandung. An interesting fact is that the names of all the ships of Burns Philp were seven letters long and started with the letter M! The length of the *Malabar* was 350 feet 0 inches, breadth 48 feet 6 inches and depth 25 feet 3 inches (to the upper deck) and the gross tonnage was 4,512 tons. Power was supplied by a single acting 2700 horsepower eight cylinder Burmeister & Wain type four stroke blast injection diesel engine (diameter 750 mm, stroke 1500 mm) constructed by J.G. Kincaid and Company, which drove a single screw. The engine was the second completed by Kincaid and it gave the *Malabar* a top speed of 13.2 knots. An auxiliary exhaust gas boiler was installed in the engine room for domestic purposes and was oil fired when the main engine exhaust was not available. It was the first ship to be such equipped.

Accommodation was provided for 156 passengers in one, two and four berth cabins. There were five cargo holds as well as insulated holds for carrying fruit and frozen meat. The total cargo capacity of the *Malabar* was 202,920 cubic feet. Six hundred and two tons of oil could be carried in the two oil bunkers and the double bottom tank. As can be seen from these figures, the *Malabar* was a fairly substantial ship.

During trials in the Firth of Clyde in October 1925, the *Malabar* rammed the Wemyss Bay railway pier when the steering failed. This was an ominous sign of things to come.

On 10 October 1925 the *Malabar* was taken over by Burns Philp's London Branch and left Avonmouth on 17 October 1925 for Australia via Colombo (Sri Lanka) and Singapore. She was carrying 2188 tons of cargo as well as 17 passengers. The *Malabar* arrived in Sydney on 17 December 1925 on its maiden voyage. It was the pioneer motorship to operate on the east coast of Australia and became the second motorship in Australia. The first voyage of the *Malabar* on the Singapore run commenced from Sydney on 2 January 1926 with a full load of cargo and a large number of passengers. The voyage was via Brisbane, Townsville,

Thursday Island, Darwin, Sourabaya, Smarang and Batavia (Djakarta) on Java, now part of Indonesia. The *Malabar*'s regular service was from Singapore to Melbourne via the above ports, with a visit to Port Moresby in New Guinea once every three to four months.

The crew of the *Malabar* was a varied lot. The cooks were Chinese, the cleaners and engine room staff Indian, the deck hands Malay and the officers, of course, whites.



Figure 36
The *Malabar* passes under the incomplete Sydney Harbour Bridge on 4 December 1930

In September 1926 the *Malabar* attempted to tow the stranded British tramp steamer *Rio Claro* off Scott Reef, about 48 kilometres south east of Cairns but was unsuccessful. The *Rio Claro* was still aground when the *Malabar* passed by on its return trip and remained there for 39 days before being refloated. In the photograph above, the MV *Malabar* passes under the Sydney Harbour Bridge on 4 December 1930.

In February 1929 Burns Philp came to an agreement for a five year mail contract for the Pacific Islands with the Australian Government. This took effect in April 1929. As part of the agreement, the company agreed to build a new

vessel for the Singapore run within three years and planned to move the MV *Malabar* to the Sydney to Rabaul (in then Papua) run. However, before this new vessel (MV *Macdhui*) came into service on May 1931, an accident to the *Malabar* would change the company's plans.

Apart from the *Rio Claro* incident, the *Malabar* had an incident-free life for the first five years of its life and proved to be a very successful and economic purchase. It was the practice for Burns, Philp ships on the Singapore run to relieve certain members of the crew at Sydney on the south bound voyage. The relief crew would take the ships to Melbourne and back to Sydney. Captain George Leslie often relieved the regular master of the *Malabar* on these occasions.

On 31 March 1931, the MV Malabar, under the command of Captain Leslie, set sail from Melbourne for the regular trip to Singapore. This was to be her 32nd trip. At about 6.35 am on 2 April 1931, the Malabar passed Cape Baily near Cronulla, about 25 kilometres south of Sydney Harbour. Its course was 18° magnetic and the Cape was three-quarters of a mile distant. At about 6.45 am it was one mile abeam of Cape Banks, the northern headland of Botany Bay. The weather became hazy and the course of the Malabar was said to have been altered to 23 degrees magnetic. Shortly after the vessel entered a dense fog and at 6.52 am it ran aground on the northern side of Long Bay, about 14 kilometres south of the Harbour. Photographs taken later that day



Figure 37
The Malabar soon after hitting the rocks at Long Bay

show the seas to be absolutely calm, although reports in the *Sydney Morning Herald* the next day state that at high tide the swell became more pronounced.

The *Malabar* hit the rocks about 50 metres inside the northern headland of Long Bay and Captain Leslie immediately put the ship full speed astern but the *Malabar* was well and truly stuck on the rocks. Captain Leslie stopped the engines and ordered the evacuation of the

ship. All the passengers and the Chinese and Malay (there were 63 Chinese and 26 Malays among the 108 crew) crew members were put ashore by lifeboats within half an hour. Three valuable stud horses being shipped from Melbourne to Darwin were swum ashore. The trawler *Charlie Cam* (which itself was to sink on the South Coast of NSW only a few months later) came on the scene about 10 am and attempted to tow the *Malabar* off the rocks but the line gave way. The tug *St Aristell* was made ready to attempt salvage but it was too late and no further attempts were made. The only life lost was that of the ship's cat which refused to leave the stricken vessel.

The Captain, three officers and the doctor stayed aboard the *Malabar* until noon and then they stood by in a small boat until 1.30 pm when it had developed a critical list to starboard. The ship was filling up and submerging aft.



Figure 38 The wreck the day after hitting Long Bay - 3 April 1931

"There were two principal places of amusement [in Sydney] on the Good Friday holiday - the [Royal Easter] Show and the Malabar - and it appeared that everyone went to both" said the *Sydney Morning Herald* on 4 April 1931. The newspapers of the day state that huge crowds of people came out to see the new wreck and photographs show people all over the headland and rock platform. The Daily Telegraph and the Herald reported that on 4 April, Good Friday, 150,000 people visited the site of the wreck. The ship completely broken up earlier

that day in heavy seas and the cargo was washed into the sea. The newspaper reports tell stories of people salvaging goods from the coastline between Sydney and Newcastle and even in Sydney Harbour. The *Herald* reported some young men risked their lives to get a keg of beer out of the sea near the wreck.

The crowds continued to visit the wreck over the Easter weekend, with the *Telegraph* estimating on 7 April that 500,000 people had visited so far. People set up booths selling fruit, sandwiches and soft drinks. Photographers sold photos of the wreck and musicians busked. Thirty police were on duty keeping the crowd in order, together with another eight traffic police who controlled the cars.

On 5 April a snake charmer, George Aither of Surry Hills, was bitten on the hand by one of his snakes while performing at the wreck site. He was taken to the nearby Coast (Prince Henry) Hospital where he was treated and later released. On 6 April two men were arrested after stealing the ship's compass. Bruce William Tilley appeared in Central Police Court on 20 April charged with stealing the compass, value £90 and was released on £30 bail. It was not reported what happened to the accomplice or what was the outcome of the case against Tilley. It was not reported who the other person was.

Another very interesting story concerns the crew of the ship. Apparently some of the Chinese crew were smuggling opium into Australia. The Police had learnt of this and were waiting at the wharf for them. When news came of the stranding, they rushed to Long Bay. Here they followed one of the Chinese crew and 10 days later, on 12 April 1931, the Police raided a Dixon Street (Chinatown) opium den. They smashed down a brick wall and found 16 cans of opium. Among the Chinese arrested were three of the *Malabar*'s crew. It is not reported what happened to them.

The wreck was sold for £140 and the cargo for £41 to the Penguin Salvage Company on 7 April 1931. It is interesting to note that the wreck of the SS *Minmi* was purchased by Penguin Ltd in 1937 (see page 101). Salvage started on 8 April and the binnacle stand, some furniture and basins were removed but work was suspended on 9 April due to heavy seas. The Union Jack and bosun's store were rescued on 10 April. The *Sydney Morning Herald* reported on 16 April that a diver was in extreme peril on the sea floor at Long Bay the previous day. Some fishermen had secured a diving suit and were searching for goods when the safety line was lost and the diver "walked helplessly about the bay". Eventually he removed his weighted boots and shot feet first to the surface. He was not injured.



Figure 39 The *Malabar* on 2 April 1931

After these salvage attempts, the wreck lay basically untouched for over 25 years until the introduction of scuba. In the late 1950s and early 1960s some of the pioneer divers in the Sydney area dived on the wreck and salvaged the valuable metal items that remained. Barry May blew the wreck up in his attempt to salvage the remains. Together with John Bissett, he salvaged the prop sometime prior to 1962. This was 15 foot 6 inches across and had to be broken up before they could move it. The total weight was estimated at six tons, all bronze!! The boss alone was 2.5 tons

Pieces such as the bell (taken in 1961 by Sydney diver Jon Jacobs and still owned by him) and other valuable momentos were also taken during this time. Another bell was also recovered during the salvage in the days after the sinking. It was purchased by the father of Richmond farmer Bob Power at a sale of items salvaged from the wreck. Inscribed "Malabar 1926", it was passed on to Mr Power but was stolen in late 1990 from the veranda of his farmhouse. This must have been installed after the ship arrived in Australia.

The relatively shallow depth that the wreck is in and the fact that the site is totally open to the worst seas that afflict Sydney have meant, together with May's efforts, that the hull, deck and superstructure of the *Malabar* are now

null, deck and superstructure of the *Malabar* are now nothing but rusted and twisted pieces of metal. However, this does not mean that the wreck is not worth visiting.

Then, just when scuba diving became more available to the general public, the site became virtually inaccessible to divers.

Unfortunately, the *Malabar* happened to be not only located right next to Sydney's largest sewage treatment plant, but within metres of the ocean outfall. This meant that the (basically) untreated sewage was being dumped straight into the sea next to the wreck. Not only did it make the wreck site undiveable, but it affected Long Bay to such an extent that the NSW Health Department and Randwick Council closed Malabar Beach and a nearby ocean pool about 25 years ago because of the extreme pollution.

On 22 September 1990, the Malabar Sewage Treatment Plant deep-water ocean outfall system was activated. The opening of this outfall, the first of three under construction for Sydney's major sewage treatment plants, marked the beginning of the end of a 202 year policy of dumping sewage directly into the water off Sydney's shoreline. The new outfall deposits the partially treated sewage 3 to 4 kilometres off-shore in deep water. It also represented the first stage in a long term upgrading strategy for the disposal of sewage in Sydney.

As simple as this change was, it produced immediate results. Within hours of being switched on, the water around the old outfall at Yellow Rock was dramatically clearer. After having

lived near the sewage treatment plant nearly all my life, it was apparent to me within one day that the water quality in the ocean and adjacent Long Bay had improved to such a degree that swimming and diving would be a healthy pursuit to undertake in the bay.

On 5 October 1990, the first occasion we had after the new outlet was operating, my brother Stephen McFadyen and I decided to dive on the wreck of the MV *Malabar* which we knew was located very close to the old outfall. This dive site had long been known to us, but because of the pollution we did not know of anyone who had dived there.

The first dive was basically an exploratory one, as we were not all that sure of the exact location of the main part of the wreck. We found large sections of the ship scattered all over the northern edge of Long Bay. Our next dive a few days later showed us even more pieces of the wreck including the anchor, rudder, davits and capstans.

After interesting other friends with our tales of what we had found, including the number and size of fish (Yellow Rock is Sydney's best and most dangerous rock-fishing spot), we dived again and found the driveshaft, bollards, propeller (see comment later) and engine as well as other large but unidentifiable pieces of wreck. A few more dives enabled me to roughly map the dive site. The major pieces of the *Malabar* were found in only five to nine metres of water.

All of the above dives were done as shore dives as at that time there were no dive boats visiting the site. This soon changed as word spread of how good the site was. A number of dive boats started to irregularly dive this site.

#### Location

For boat diving you should line up the spire of St Andrew's Catholic Church, Malabar, over the middle of the rock platform and the large chimney with the headland. Make sure you are about 20 to 30 metres off the small point just inside Boora Point. This should put you over the engine. See GPS and Marks Page (see page 150) for more details.

To dive the *Malabar* from the shore, drive to the far end of Fishermans Road, Malabar, and park in the rough car-park above the boat ramp. Gear up and walk along the rock platform right out to the point just below the huge wind powered generator. If possible, walk around the small bay to the next small point. About 20 metres or so south is the engine. This is a long walk and should not be attempted by the unfit or in hot weather.



Figure 40 The huge rudder lies at the end of the driveshaft

If entry is not possible as above, there is an excellent entry point off the eastern side of the first point. Snorkel out to the south-east for 30 metres and submerge.

## Diving

You should find pieces of wreckage almost immediately. Head in an east to north-east direction and the wreckage should get denser. When you find the rudder or anchor, continue further on in the same direction.

Only 5 to 10 metres further on you should see sections of the drive shaft that once connected the engine to the propeller. Some sections are lying separate from each other but four sections are still connected together by huge bolts at the

flanged ends. Part of this larger section has two big rocks lying on it and another has a huge rock almost completely covering it. If you follow the driveshaft to the north and progress on past the end in the same direction you will firstly come to a gear of some sort. About 10 metres further on is the engine. This consists of the pistons, conrods, crankshaft and bearings

within its housing. This impressive structure is basically lying on its side and you can swim in, around and under the whole engine. Large numbers of blackfish and bream can be seen within its components.

Just at the south-west end of the engine is a large propeller which has one blade missing. As the main prop of the Malabar was salvaged by Barry May, this may have been a spare prop or an item of cargo. I had thought it could even be the prop of the SS Goolgwai (on page 57) but I do not believe this to be true now. Swim past the prop over the flat rock towards the south-west and at a distance of about 10 metres you will drop off the flat rock onto a sand bottom where you will find an enormous wheel-like structure. This is the fly-wheel with a shaft attached. The top of the shaft reaches to within 3 metres of the surface. Nearby is a cylindrical object. Turning south you will see other objects, including more davits and bollards before returning to the large driveshaft sections.



Figure 41
I had thought that this may be the prop of the *Goolgwai* rather than an item of cargo but I am now not so sure



Figure 42
Driveshaft coming off
the flywheel of MV
Malabar

After looking at this section, back track to the north and you will see the bow section, in less than four metres of water. This section has a huge pile of anchor chain piled on top of wreckage. There are some interesting things to see in this area, including huge glass sections of a skylight (wall?).

No matter where you look near this wreck there are interesting bits and pieces to see.

In the years since the *Malabar* became diveable, it has become a very popular dive location. The dive site is regularly blessed with good visibility, with 15 metres being quite common. Not only is there the interest of the wreck for divers, the fishlife is very prolific and huge numbers of luderick, bream, yellowtail and other fish can be seen around the wreck site. As well as doing it as a shore dive, if you have a very small boat or a rubber duck, you can launch off the boat ramp at the end of Fishermens Road.

The wrecking of the *Malabar* will forever be remembered in Sydney's history, as the suburb of Long Bay was renamed Malabar after the ship. Of interest, a book about the origin of names of Sydney suburbs claims that the suburb was already named Malabar (after an area of India) and that by coincidence the MV *Malabar* was wrecked there. I think not! The name was adopted sometime after the wrecking, but it was not until June 1977 that the NSW Geographical Names

Board officially approved Malabar for the suburb. The name Malabar lives on not only in the of the Sydney suburb, but in this easily accessible dive for all divers.

The Court found the charge proved and cancelled the Certificate of George Leslie.

- Lloyds Register various years
- Sydney Morning Herald 3, 4, 6, 1617, April 1931

- The Main Line Fleet of Burns Philp by B. A. Wilkinson and R. K. Willson pages 117 to 120, 122
- The Australian Presence in the Pacific Burns Philp 1914 1946 by K. Buckley and K. Klugman
- The history of Burns Philp The Australian Company in the South Pacific by K. Buckley and K. Klugman
- Result of Marine Inquiry issued 16 April 1931
- Various photographs from Burns Philp Company Ltd collection
- Some Shipwrecks in Randwick Municipality by T.L. Brignell, pages 16 to 23
- Conversations and correspondence with Joan Humphreys, Archivist for Burns Philp Co. Ltd, 1991
- Personal conversation with Barry May at 1995 Scuba Expo
- Australian Skindivers' Annual 1962 Article by Barry May on pages 38 and 39
- Southern Courier 5 May 1991
- Eastern Herald 4 April 1991
- Sydney Morning Herald Column 8, 1, 3 and 9 April 1991
- Australian Ships by Ross Gillett, page 102
- Australian Coastal Shipping by Barry Pemberton, pages 216, 217 and 222
- A Log of Great Australian Ships by Graeme Andrews, page 90

# Meggol - formerly HMAS Doomba

### History

Originally built for the Royal Navy, the *Meggol* was constructed as the *Aberdare* class minesweeper HMS *Wexford* by Simons in the UK in about 1917 or 1918. She had a displacement of 800 tons, a length of 231 feet (70.4 m), a width of 28.5 feet (8.68 m) and a speed of 16 knots It served with the Royal Navy for the remainder of the First World War and perhaps a bit after.



Figure 43 HMAS *Doomba* retrieves her minesweeping equipment

In 1921 representatives of the Brisbane Tug and Steamship Co. Ltd travelled to Montrose in the UK to look at surplus and paid off vessels. They selected HMS Wexford and in December 1921 it was sold to the Brisbane Tug and Steamship Co. Ltd and brought to Australia. In Brisbane, it was overhauled and made capable of carrying 1,524 passengers and renamed SS Doomba. Its new role was as an excursion boat to Stradboke Island across Moreton Bay. The company also used another ship. In 1923 the ownership changed to the Doomba Shipping Company. This may have been the same company and just a change of name but from other information it might also have been a totally separate company. It continued to be used in the same role as a day trip boat across Moreton Bay.

In 1928 the *Doomba* was withdraw from regular service as the clientele had dropped off due to the increasing number of cars now owned by the general public. She was now only used when the bookings required a second vessel. In 1936 the *Doomba* was laid up permanently. In 1937 she was resold back to the Brisbane Tug and Steamship Co. Ltd, confirming that the previous owner may have been a

different company.

On 3 September 1939, the *Doomba* was one of the first civilian vessels requisitioned by the Royal Australian Navy. The ship was renamed HMAS *Doomba* and had one 4 inch gun installed, two 20 mm heavy guns, four machine-guns and two series of depth charge launchers.

Commissioned as N01 on 25 September 1939, the *Doomba* served the war, first as a minesweeper around the Wilsons Promontory , Cape Otway area in South-Eastern Victoria and along the the East Coast of Australia, that is New South Wales. In 1940 she was purchased outright by the RAN for £12,000. From June 1942 heavier armament was added and her role changed to an anti-submarine vessel/patrol boat (J01). She was based in Sydney and had a complement of 74 crew.

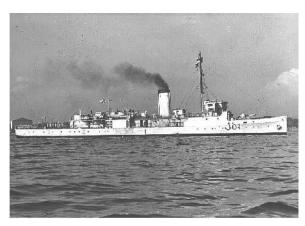


Figure 44
Another shot of HMAS Doomba,
this time on Sydney Harbour after June 1942

On 31 May 1942, two Japanese midget submarines entered Sydney Harbour and attempted to sink the heavy cruiser USS Chicargo which was anchored off Darling Point (they failed, sinking instead the converted ferry, HMAS Kuttabul, which was being used accommodation for troops. The explosion and sinking killed 19 Australian and 2 British seamen. Early the next morning another midget submarine entered the Harbour (it was delayed due, it is thought, to problems with its buoyancy) and preceeded up towards the Sydney Harbour Bridge. At 3.50 am it was seen near

Neutral Bay and at about 4.50 am HMAS *Doomba* reported seeing the submarine off Robertsons Point. The submarine was later sunk in Taylors Bay, to the east of Taronga Zoo. It was later raised, together with the first submarine and the composite submarine is now on display at the Australian War Museum in Canberra. A third submarine was never heard of again.

On 11 June 1942, Convoy CO2 (CO was code for journeys from Newcastle to Melbourne) formed off the coastline off Newcastle, New South Wales. There were eight ships in the convoy escorted by USS *Perkins* and HMAS *Whyalla*. One of the ships was the Panamanian

cargo ship SS *Guatemala* (also spelt as SS *Gautamala* in one reference) which was under charter to the Commonwealth Government. The *Guatemala* was travelling from Newcastle to Whyalla in the convoy with 4,200 tons of coke for the new shipyard and sank with the loss of no lives. At about 0115 the next day, the *Guatemala* was at the end of the convoy making seven knots when a torpedo fired from a Japanese submarine, the I21, hit her adjacent to hold one. The I21 was involved in the attack on Sydney

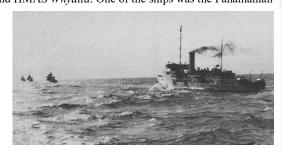


Figure 45 HMAS *Doomba* on convoy patrol off NSW

Harbour 12 days earlier, its float plane being used to scout the Harbour for possible targets. There were no casualties and the ship did not sink till 0230. The crew had got into the lifeboats as soon as the ship had been torpedoed but waited alongside till their ship disappeared under the waves.

Later that morning, HMAS *Doomba* rescued the 51 crew and took them to Sydney. I am not sure where this event occurred, but it was off the NSW coastline, probably off Sydney due to the fact that the *Doomba* was based in Sydney and she appears to have arrived on the scene fairly quickly.



Figure 46 The *Doomba* laid up after World War II

In 1944 the *Doomba*'s role changed again. She became a training vessel and also did minesweeping duties. The *Doomba* served until it was paid off on 13 March 1946. On 3 February 1947 it was sold to Penguin Ltd. This company was the same company that purchased the wreck of SS *Minmi* in 1937 (see page 101) and was presumably the same as the Penguin Salvage Company which purchased the wreck of the MV

Malabar in 1931 (see page 87). They were shipbreakers and apparently they removed the superstructure and engines.

The hulk was sold (perhaps in 1951) to Meggitt Ltd, vegetable oil merchants and renamed *Meggol* (from Megg and oil?). From 1950 or 1951 to 1969 or 1970 the hulk was used as a mobile and then stationary oil barge. I am not sure if the ownership stayed the same or what type of oil was carried. It is possible that she was used to offload vegetable oil from overseas ships and then transport it to a place where Meggitt Ltd could unload it into their factory.

One source (the Australian Government Environment Web Site) says that it was sold straight away for use as an oil barge on Sydney Harbour and Parramatta River.

In any case, in 1970 she was again laid up and sold to the breakers. The rusty hulk of

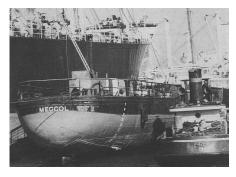


Figure 47
The Meggol alongside a big ship, possibly taking on a load of vegetable oil

the *Meggol* lay abandoned in Homebush Bay, Sydney, a short distance from the State Brickworks. There may have been some salvage work done on her during this time. On 8 December 1976 she was refloated and towed out of Sydney where she was sunk off Long Reef at 1.12pm. The same source above states that it was scuttled on 9 December 1976.



Figure 48
The *Meggol* about to disappear under the waves

## Location

To locate the *Meggol*, see the GPS and Marks Page (see page 150). On the depth sounder the depth rises from 49 metres up to 43 metres. If it comes up to 40 metres you are on the *Dee Why*. As soon as you are over the wreck turn to the north and run along the wreck. Making sure that you are still over the wreck, drop your anchor and cut your motor. You will need to drop the anchor onto the wreck as it is unlikely that you will hook up if you

drag back onto the wreck. The GPS reading for the wreck is 33° 43' 04" S and 151° 20' 45" E.

### Diving

Sunk as the second vessel for the artificial reef, the Meggol now sits upright on a sandy bottom of 49 metres. The deck is 43 metres down and not much protrudes above the deck. Photographs of the Meggol when it was HMAS Doomba show it has obviously been substantially modified since its days as a warship, although the hull and deck appear to be similar (see photo at left). The vessel is sitting upright and lies north-south with the bow only 20 metres or so from the Manly Ferry Dee Why (on page 44). In good visibility it is possible to see the old ferry from the bow and you can even swim over to it when it is like that. To the south



Figure 49
The bow of the *Meggol* 

of the stern of the *Meggol* lies another wreck, although not of a ship. About 20 metres away is a ferry pontoon which sits upright on the sand, looking like a huge artillery piece.

The Meggol has suffered greatly in the time since it was sunk and is in far worse condition relative to wrecks such as the Dee Why, the Coolooli and the Bellubera even though the Dee Why and Bellubera are broken in two and the Dee Why suffered badly in the late 1990s. The Meggol's hull and deck are rusting through quite badly and in many places it is possible to look though to the inside. In some places it is almost possible to manoeuvre inside. However, there is no need to enter the vessel this way as there are numerous hatchways and holes through which you can see and enter the vessel.

After descending to the wreck, secure the anchor line to the railing, one of the bollards or inside anywhere you can. Straight away you will see that the wreck is totally collapsed.

Follow one side of the vessel to the north until you come to the bow. Drop to the sand (49 m) and look at the deterioration of the hull. When you reach the bow, if the visibility is very good, you may be able to see the Dee Why to the north. In March 2004 there is a rope running across to the ferry. In 1993 the deck was intact but now it has collapsed almost totally. The wreck used to stand upright and was bascially still in the shape of a ship. The hull from the bow back to the first hold has collapsed to the starboard and is almost level with the sand at the rearmost section.

Return to what was the wreck's deck and follow it back to the south and examine the many holes. Below deck, the oil compartments used to drop away below the level of the sand, although some had considerable amounts of sand in them. Now the deck sits either right on or only a few metres above the sand. Towards the stern you used to find a doorway and ladder/stairs going down to a large hold. Further along there was a skylight hatch which had two hatches missing. You could enter into the hold here quite safely as there was a considerable amount of light entering through the hatches, the stairway and a number of large holes in the hull. However, I did not dive this section of the wreck in March 2004 so I do not know if it is still intact as it used to be. If it is, do not enter any of the compartments leading off from this one without proper penetration diving procedures.

Behind the hold there are the remains of the steering compartment. Again, if the viz is very good you should be able to see the ferry pontoon to the south. By now you will have taken

15 minutes or so and on a single tank you will need to return to the anchor to ascend. On twins, a little longer will be able to be spent here before returning to the anchor. Throw the anchor on the sand (making sure it will not connect with the ferry pontoon) and ascend.

This is not a dive for the inexperienced. You should be trained to dive deep and must have considerable deep diving experience to dive the Meggol. Preferably you will also be accompanied by a diver with knowledge of diving here. I would always recommend that any dive deeper than 40 metres should be done on a minimum of a main tank with a pony bottle backup.

- Australian Warships of Second World War page 175
- Royal Australian Navy Profile No 3 by Michael Wilson pages 60, 65, 67 & 68
- Australian Warships Profile No 6 pages 88 to 90
- Australian Ships by Ross Gillett pages 70 to 71
- A Log of Great Australian Ships by Graeme Andrews page 51
- Australian Coastal Shipping by Barry Pemberton page 113
- Warships of Australia by Ross Gillett pages 211, 213 and 214
- Lloyds Register 1924-25
- Scuba Divers Guide Northern NSW Coast by Tom Byron, pages 184 and 189
- The Secret Battle 1942 1944 by Robert Wallace pages 15, 49 and 50
- Hitting Home The Japanese Attack on Sydney 1942 by David Jenkins page 42
- Warships Web Site <a href="http://www.dva.gov.au/commem/commac/dandd/warships.htm">http://www.dva.gov.au/commem/commac/dandd/warships.htm</a>

# TSS Merimbula

### History

The TSS *Merimbula* was a twin screw steel steamship built by Ailsa Shipbuilding Company at Troon, Scotland in 1909. It was over 209 feet long and displaced 1111 tons. She was built for the Illawarra and South Coast Steam Navigation Company (ISCSNC) following the loss of the SS *Bega* on 5 April 1908.

The new ship was powered by two triple expansion coal powered steam engines built by Ailsa with two boilers built by Hudson and Sons of Glasgow, Scotland. The ship was also rigged as a two masted schooner. The largest ship built for the ISCSNC, the *Merimbula* was primarily a passenger vessel with some cargo capability. There was accommodation for 96 First Class passengers and 10 Second Class passengers.

The new ship left the Clyde River (Scotland) on 20 October 1909 (also reported as 14 October) for Sydney under the command of Captain Plugge. She travelled via the Suez Canal, Aden, Colombo, Fremantle and Albany. She arrived in Sydney on 19 December 1909 and immediately went into service on the South Coast run, going from Sydney to Bermagui, Tathra, Merimbula and Eden. She normally did two runs a week. During the first few months of service, it was discovered that the *Merimbula* was unstable in certain seas so some heavy cast iron blocks were added to the hold for stability.

During World War II, the *Merimbula* was used to refloat the *Cumberland* off Gabo Island (July and August 1917) after she had hit a German mine and been run aground in an attempt to save her. This ended up being unsuccessful as the *Cumberland* foundered and sank while being towed to Eden.

While she continued on her normal southern route, at times the *Merimbula* was used elsewhere. In 1918 she was chartered to J. Rowe and Sons of Hobart to carry produce (mostly apples) and passengers between Hobart, Sydney and Brisbane. In August 1920 she was used to carry coal from Newcastle to Hobart. I am not sure if these were single or multiple trips but they only happened when there was insufficient trade on her normal route.

On 25 March 1928, the *Merimbula* left Sydney bound for Eden under the command of Captain O'Connor. She carried 13 or 14 passengers and 35 crew. As she travelled south, the weather worsened. At 1 am on 27 March 1928, the *Merimbula* ran aground on Whale Point at Currarong, just north of Jervis Bay. No lives were lost but the ship was mortally wounded. It was believed that the ship was salvageable, so there was no great rush to evacuate. The passengers and crew drank coffee, ate sandwiches and walked around in their lifejackets.

Later that morning, the passengers and crew entered the lifeboats and rowed to Currarong Creek, only a couple of kilometres away. They sheltered in a fisherman's hut as it was raining. While this was going on, the Captain and some crew walked to the lighthouse at Point Perpendicular, the northern headland of Jervis Bay. Using the lighthouse keeper's telephone, he phoned ISCSNC in Sydney and the keeper phoned Sergeant Matheson of Nowra Police.

The passengers were taken back to Nowra by three cars. The marine assessors arrived on 28 March 1928 and decided that there was a possibility of salvage as the bow was well out of the water and the stern was just above water. Unfortunately, the next day saw the ship taking so much water that the planned attempt to refloat was abandoned. The skipper and crew left Currarong on 31 March 1928 and the ship was sold at auction on 2 April 1928. The price was £300. The salvor was going to try to refloat the ship but this did not succeed so she was blown open to assist the removal of certain items. The ship soon slipped off the rocks.

## Location

Today the wreck lies in very shallow water (in fact some is still up on the rocks). The bow section is on the rocks and the ship runs away from the reef in a north-north-east direction.

# **Diving**

I have not dived this wreck but I am told that it is a very interesting dive in calmer seas. The hull bottom lies on a rocky reef, basically uncovered. Half way along there are the remains of the two engines, each lying where they fell outwards from the ship. The prop shafts run towards the stern from each engine. The port boiler is adjacent to the port engine while the starboard one is towards the rear.

There is an anchor up towards the shore on the port side and between it and the boiler there is a large winch. On the starboard side there is a large piece of machinery. A piece of the stern is located off the reef edge on sand in a direct line with the main part of the wreck.

The TSS *Merimbula* was declared an historic wreck many years ago even though at the time it was not yet 75 years old.

- SS Merimbula Wreck Inspection Report Department of Planning, 1992
- Sydney Morning Herald 28/3/28 Heritage Conservation News Tales of Danger, Drama and Despair by Timothy Smith pages 14-15
- Scuba Action Riley's Wrecks article by John Riley, unknown date
- Scuba Action Riley's Wrecks article by John Riley, Sept/Oct 1986 page 7
- Shipwrecks, Storms & Seamen of the New South Wales Coast by Max Gleeson pages 158-162
- Australian Ships by Ross Gillett, page 100

# SS Minmi

## History

The SS *Minmi* was built at Meadowside, Glasgow, Scotland for J. & A. Brown and Abermain & Seaham Collieries Ltd in 1927. The new vessel was 75 metres long and displaced 1455 tons. A collier, she was named after either the Lower Hunter Valley town of Minmi or the nearby Minmi Colliery. The *Minmi*'s main route was between Newcastle and Melbourne, carrying coal on the southward trip and returning empty.

On Saturday 8 May 1937 the *Minmi* left Melbourne to return to Newcastle and at about 8 pm on 13 May 1937 she passed Port Kembla. At this time Captain Robert Clark Callum (usually the Chief Officer - the normal Captain, J. McPhail, was on leave in Melbourne) and the Second Officer, C. L. W. Jones set their usual course which should have taken them three miles off Cape Banks at the mouth of Botany Bay. There was an incoming tide and the sea was from the starboard side.

Just after 10 pm the *Minmi* was off Botany Bay to the south of Sydney Harbour. The seas were reported to be "fairly heavy" and a dense fog covered the shore and nearby sea. At 10.15 pm the ship struck the outside of Cape Banks, the outer northern headland of Botany Bay. It was reported that at 10.30pm, soldiers at the nearby Cape Banks artillery garrison were awoken by the sound of escaping steam. They rushed out and saw the ship hard up on the rocks and soon distress flares were seen. The Police were telephoned and rocket firing equipment was requested.

Soon after hitting the rocks, the ship's cook, Frederick Boulton suddenly collapsed and died immediately of a heart attack. Mr Boulton was a veteran of the Great War, said to have been blown up twice.



Figure 50
A photo of the *Minmi*, date and location unknown

At 12 midnight another ship passed by without seeing the wreck and 15 minutes later the pilot vessel *Captain Cook* arrived on the scene from Sydney Harbour but it was too rough for her to get close to the *Minmi* to launch a rescue bid. The more than 20 crew were trapped on the vessel, unable to get off due to the rough seas.

At about 12.45 am the ship suddenly lurched and broke her back, splitting into two just in front of the funnel. The stern section, with nine or ten men on board, slewed around and broke free of the front of the ship. The funnel and mast swayed

dramatically, the mast held in place by the stays. As the break between the two sections increased, it became very dangerous for the crew as the aft of the ship rolled 30 degrees as every wave hit it. The funnel almost came loose, threatening to hit the crew who were holding on for their very lives.

It is unclear from newspaper reports, but it appears that 15 men were trapped on the front section of the ship. They were all rescued, apparently without too much incident.

Many attempts were made to rescue the crew from the rear section. Finally a line was tied off to an iron stanchion and 90 feet away on the rock platform, the other end was held by 10 or 12 men. Working by the light of torches, the rescuers were frequently washed from their

feet by huge waves. One by one, the men used the rope to haul themselves to safety. Even the strongest and youngest found the going very hard. The rope whipped up and down as the ship rolled back and forth, the line taut one second and then slack the next. As the men neared the shore, the line would go slack and they would be bashed onto the rocks amongst the breakers

The rescuers rushed to help pull the men to safety, both at times being rolled over across the barnacle covered rock platform. Four men were rescued and the fifth fell into the surf, disappearing from view. The rescuers jumped into the water and pulled him out of a large pool. He was cut rather badly on his legs, his pants ripped to pieces.

The sixth person, Robert (Bob) Burnside, was coming along the rope and he nearly made it to safety when a very big wave hit the ship and the line went tight. He was flung back along the rope but miraculously held on to the line. He became weak and lost grip with his hands. He was now hanging by his feet. Another huge wave hit the vessel and Mr Burnside was thrown into the air and into the wave as it passed under him. He disappeared from view and then his head bobbed back above the raging water. He was seen a couple of times and attempts were made to throw him a line. These failed. Yet another huge wave hit him and he was dragged towards the broken section of the ship. He was never seen again.

By now the back section was completely free from the bow section and therefore rolling even more when hit by a wave. The next person to attempt to flee the ship was Thomas William Skye, the mate. He slid 30 feet along the line but a wave hit the ship, the line went slack and he was dipped into the water. The next moment he was lifted high, losing his grip. Like Mr Burnside, he had his legs wrapped around the rope but suddenly he was flung into the air and he fell into the water. The wave took him out towards the ship but the next one carried him onto a break in the rocks where he was propelled around in circles by the sea. Another wave pushed him onto a rock and Mr Skye held on for dear life. A rope was thrown to him and he held on long enough to be lifted six feet where rescuers grabbed hold of him and dragged him to the top of the rock.

An enormous wave, said to be one of the biggest of the night, hit Mr Skye and the rescuers, knocking them all off their feet. They were washed all over the place but amazingly they managed to hold on to anything available, each other, the rope or the rocks and no-one was washed back into the ocean.

Mr Skye reported that the remaining men on the rear section were old and "will never make it". Detective-Sergeant McRae of the Eastern Wireless Patrol, who was in charge of the rescue, decided that it was too dangerous to attempt to rescue the remaining two men who were both over 60 years of age. It was now about 3.30 am. It was also thought that another man might have been in the rear section. They were rescued the next morning in daylight.

Sydney again turned out to look at a shipwreck on its eastern shore. Just under six years earlier an enormous crowd had turned out to see the wreckage of the MV *Malabar* (on page 87). It was estimated that 40,000 people trekked out to La Perouse on Saturday 15 May 1937 and 60,000 on the Sunday. Six Police were on point duty at La Perouse and shifts of eight Police guarded the cliffs. It was reported that at 4 pm on Sunday cars were banked up for four miles along Bunnerong Road (now Anzac Parade and Bunnerong Road) towards the city. The *Sydney Morning Herald* reported that "an army of pie sellers, hot-dog merchants, ice-cream sellers and also beggars of various descriptions lined the route".

The location of the wreck meant that the easiest way to get to the wreck was for the sightseers to cross the NSW Golf Course. The Club used caddies (hired for a total of £5 on Sunday morning) to protect the course's greens but the players were so overwhelmed by the people, they gave up playing golf. It was estimated that 20,000 people crossed the course, causing damage of between £60 and £70.

The wreck was sold for £200 to salvagers Penguin Ltd. This is presumably the same company (Penguin Salvage Company.) that purchased the salvage rights to the MV *Malabar* in 1931 (see page 87). They started work on the Sunday morning and at the same time, the *Minmi*'s crew salvaged what they could of their personal belongings.



Figure 51 - The clock of the SS *Minmi* now owned by Dale Currey of Adelaide, South Australia

lived in shelters they erected in caves at the scene. By Tuesday they had recovered winches, steering gear, the compass and other pieces from the front section. One item that appears to have been salvaged was the ship's clock. It was made by Whyte Thomson and Company of Glasgow and was brass, looking a bit like a porthole. It is now owned by Dale Currey of Adelaide, South Australia. It was reported that the lifeboats and fittings were damaged and that the aft section still could not be accessed.

The salvage crew of 11, with a cook,

On 26 May 1937 the Commonwealth Court of Marine Inquiry, presided over by Mr G.A. Stevenson with Captains Day and Howell as assessors, exonerated the Master of the SS *Minmi*, Captain Robert Callum, of neglect of duty. He had been charged with failing

in his duty to navigate the ship safely.

Late evidence presented to the Court came from Captain Callum's deviation book which was only recovered from the wreck on Saturday 22 May 1937. This showed that Captain Callum had set a course to pass 2.5 miles off Cape Banks, a distance that was considered to be safe.

#### Location

Nowadays, the largest section of the wreck of the SS *Minmi* is the stern section which sits up on the rock platform, albeit on the inside of Cape Banks rather than the outside where it originally hit.

# Diving

The bay inside Cape Banks, Cruwee Cove (also called Pussycat Bay) is littered with pieces of wreckage, although there is nothing but girders and plates to be seen.

There must be other sections of the wreck (for example the boiler, engine, prop etc) located off the rock platform but I have yet to find them. I suspect that they are in shallow water near where the ship hit the rocks although a dive in late 1998 in this area found nothing at all. There is a lot of coal to the south-west of the piece of wreckage on the shore. This lies at 23 metres on the sand adjacent to the reef.

- Lloyds Register
- Some Shipwrecks in Randwick Municipality by T.L. Brignell, pages 24 to 28
- Sydney Morning Herald 14 May 1937, 27 May 1937, 12 October 1993
- Australian Ships by Ross Gillett, page 35
- E-mails from Dale Currey of Adelaide, South Australia

# SS Myola

#### History

The SS *Myola* was a collier built at Middlesborough in the UK by Smith's Dock Company Limited for Howard Smith. The new ship was 54 metres long, almost 9 metres wide and powered by a triple expansion steam engine of 150 hp. The two coal powered scotch boilers provided steam to enable the ship to make 12 knots. The ship was quite large for a collier of this era, much larger, for example, than ships like the SS *Tuggerah* and SS *Undola* which plied the run from the southern coalfields to Sydney. The *Myola* also had two masts and could use the sails to gain an extra knot or two in the right winds.

In November 1913 she started the voyage to Sydney arriving on 7 January 1914. The *Myola* was on the Newcastle/Sydney run and does not appear to have had any major incidents. In January 1919 she had a refit and was declared in good condition. At this time the vessel was possibly owned by Australian Steamship Limited, although other reports say it was still owned by Howard Smith.

At 8.20 pm on 31 March 1919 the SS *Myola* left Sydney for Newcastle arriving at 3 am the next morning. It was under the command of a temporary captain and crew as the whole of the regular crew were in quarantine. One of the crew had contracted influenza (a deadly disease which killed millions upon millions all around the world after the Great War) so all the crew had been placed in quarantine. This was the first return trip to Newcastle for the crew and captain.

The ship was loaded with 675 tons of coal destined for the North Shore Gas Company and a Shipping Inspector who went aboard later stated that the ship was not overloaded. At 5 pm on 1 April 1919 the SS *Myola* left Newcastle for Sydney. The weather was not very good and there was a 30 mph south-easterly blowing creating heavy seas. The ship was under the control of the Master, Captain Higgins and the Second Officer E.J. Casey till 10 pm when the Chief Officer James Robertson (of Campsie) relieved them. It was later reported that the Second Engineer A. McNicholl remarked to the Chief Engineer I. McCanish about this time that the ship had a list to port. However, they did not consider it serious enough to report this to the Master. At 10.30 pm (or perhaps 10 pm) the fireman, E. G. Roberts, reported water had been entering the boiler room, perhaps for 30 minutes. It is reported that the Chief Officer ordered the engines to be made slow.

Just after midnight (perhaps 12.20am) on 2 April 1919 the *Myola* was off Long Reef on Sydney's northern beaches. The ship suddenly listed to port then starboards and back to port again. The actions of the skipper was unable to save the *Myola* and she gradually went over and started to sink, port side first. The crew left their posts with the engine still running flat out and were unable to launch the lifeboats, all they could do was undo the lashings. The time was about 12.30 am.

A little over eight minutes later the *Myola* disappeared from sight, although it was reported that the crew of the SS *South Bulli*, following about four miles behind the *Myola*, saw distress flares at about 12.45 am. All the 15 crew appears to have got off the ship. Once in the water, the Chief Officer Robertson reported that he heard some calls and swimming away from the ship, found three of the crew already in one of the lifeboats. They soon found two more men sitting on an upturned boat and pulled them aboard. It is reported in the 3 April 1919 edition of the *Daily Telegraph* that they found another man as well, giving a total of seven on board the lifeboat but it also reports that one man, the Second Engineer, A. McNicholl, was pulled aboard the *South Bulli* directly from the water (see next paragraph as well).

About 30 minutes later at 1 am, the crew of the SS *South Bulli*, making passage from Catherine Hill Bay to Sydney, heard calls for help from the water. The skipper of the *South Bulli*, Captain E. Tucker, stopped and pulled the men aboard from the lifeboat. They launched their own boat and immediately they found wreckage and four men clinging to it. Among these was the skipper. There is obviously an error in the *Telegraph*'s reporting as the

numbers add up to 12 overall but only 11 survived. They spent some time looking for further survivors but none were seen.

The survivors were taken to Sydney by the SS South Bulli. Assistant Steward Alfred Cove, not even 20 years old, had already been shipwreck once before. He had been torpedoed in the Great War when on the Galway Castle. Even on board the South Bulli crew were experienced with shipwrecks. For the South Bulli's Second Mate, T.R. Richardson, this was also the second time he had been sunk. During the War he had been on the Moorina in the Mediterranean when she was shelled by a German U boat. He was then captured and spent five months as a prisoner of the Senussi Arabs before being rescued in a dramatic raid.

For Thorvald Thomsen, one of the regular crew of the Myola, luck was on his side. He was not on the ship because of the influenza quarantine. He soon joined another vessel, the SS Tuggerah (see page 136) where he was to be one of eleven survivors when she sank only a few weeks later and almost 30 years later one of only two survivors of the sinking of the SS Bombo (see page 14).

The missing men from the SS Myola were:

- D. Cooper Cook
- ? Nelson Able Seaman
- W. Carroll Fireman
- H. Churchill Able Seaman

### Those rescued were:

- Captain Higgins Master
- James Robertson Chief Officer
- E. J. Casey Second Officer
- I. McCanish Chief Engineer
- A. McNicholl Second Engineer Alfred Cove - Assistant Steward
- A. Joyce Donkeyman
- G. Weir Bosun
- Nicholas Cost Able Seaman E. G. Roberts Fireman
- A. Ferguson Fireman

The famous pilot steamer, the Captain Cook was sent to the area to search for the missing crew. They found three lifeboats, two were still on the water and were recovered. The third was found on Mona Vale Beach, smashed up. It was left there. Other wreckage was sighted but no signs of the missing me was found.

An Preliminary Inquiry into the sinking was started at 11 am on 3 April 1919 under Captain Fergus Cumming, Superintendent of Navigation. Captain Cumming found that "...I consider that loose water had in some manner entered the ship and when she listed over to port more water entered the vessel in great volume through the ventilator and the engine room door causing her to list more until she foundered". He receommended that there should be a Court of Marine Inquiry but I am unaware if this was held.

Until 1994, the wreck of the SS Myola lay undiscovered. Over the more recent years, many people had looked for the wreck but to no avail. In August 1985, Peter Fields and John Riley started searching for the wreck of the Myola. Later that month John purchased a magnetometer and over the next three months they searched on and off for the wreck with no luck. They abandoned the search but not the idea. In late May 1994 they resumed the search, with the first real searching taking place in early July. On the fourth day of this search they located the Myola.

Today the Myola lies in about 50 metres well off Long Reef and a bit to the south. John and Peter released information that they had found the wreck at the 1994 Scuba Expo in Melbourne although the location was still secret. They continued to dive the wreck as they recorded it in detail. Many times we saw Peter's car and trailer at Rose Bay and the temptation to go out and find where they were was overwhelming. Finally, on 27 December 1994 the location of the wreck became public after they were seen on the wreck (actually just off it). In January numerous people were aware of its location but an extremely bad weekend of weather meant that it was not until the Australia Day Holiday (26 January) that it was dived in quantity. I dived it two days later and was amazed at its intactness. Except for the bell, which had been removed by Peter and John with approval, everything was still on the wreck.

#### Location

Its GPS Marks are 33° 46' 41"S 151° 21' 44"E. For more details, see GPS and Marks Page (see page 150). The wreck lies on a rocky reef and this makes it a bit harder to find than if it was on sand.

#### Diving

The wreck is facing south-south-west and like most real Sydney wrecks, the *Myola* lies on its port side, although the stern section has broken away from the rest of the wreck and sits upright. If you are using the mooring, this will bring you down on the prop. The first thing you will notice is that the propeller blade is broken. Of the four blades, one is almost completely missing, the second one almost as bad, the third is half broken and the final one is missing the end third. My guess is that this damage happened when the ship sank and the engine, (remember it was still running flat out when the ship sank), turned the prop over and it hit the rocky reef, breaking the blades. The rudder lies on the sea floor on the port



Figure 52 – Peer Fields and the prop of the *Myola* 

side and the steering gear and steering engine are a bit further away.

It would seem that the ship landed on its port side. I assume that this is because the engine was running and the torque of the engine caused the ship to go over onto its port side (most Sydney wrecks are on their port side, including SS *Tuggerah* - see page 136, SS *Annie M. Miller* - see page 2, SS *Birchgrove Park* - see page 11). At some time, the damage from the



Figure 53 - Andreas Thimm and one of the anchors

sinking and the normal wear and tear from corrosion meant that the ship broke up. One of these main breaks was in front of the engine, behind the boilers. When the hull broke here, the bottom-heavy engine area caused the stern to flip itself upright. However, the engine still lies over to port, connected to the drive shaft by the conrods.

To the east of the engine there is the condenser (a series of tubes) and the generator a bit further on. The first of the two boilers lies right near the main part of the wreck. The second boiler is about 15 metres away to the east, facing back towards the other boiler. In between the two boilers, but close by the first one, there used to be the engine room telegraph and some steam gauges. However, they were stolen some time after my first two dives on the wreck in 1995. There were also many portholes all over the wreck. Today there are none left visible on the wreck itself, although I know the location of two.

Only two metres shorter than the SS *Tuggerah*, the *Myola* covers a much larger area. The stern and the two boilers are the only parts that sit up as the hull has collapsed flat in front of

the boiler. This is not a very interesting section of the wreck. Swim right forward and you will see some bollards, the two anchors, the anchor pipes and a pile of chain.

Halfway back to the boiler, there is another bollard. Out to the east from here, about five metres or so there used to be the ship's steering pedestal, compass and telegraph. However, these items have also been stolen (on one dive in 1998 I found a pile of brass rings that someone had collected and hidden, awaiting another day when they could be removed. I took them and scattered them in selected parts of the wreek).

Since my first dive on the *Myola*, it has been stripped of nearly all its brass bits (portholes, telegraph etc) and damaged by crowbars. However, there are at least two portholes still on the wreck and I know the location of both. So much for responsible Sydney divers. On 4 September 2003, huge seas (8 metres) damaged some of the hull plates towards the bow, bending them at right angles. Despite this, the wreck is really worth diving.

Once again, only for the experienced deep diver.

- Myola Sydney's Last Shipwreck by John Riley and Peter Fields
- The Vanished Fleet of the Sydney Coastline by Max Gleeson

# SS New Guinea

#### History

The SS New Guinea is a fascinating shipwreck, one of the most enjoyable of the many New South Wales shipwrecks that I have dived.

The New Guinea was constructed at the Sunderland , Northern Ireland dockyards of W. Doxford and Sons and launched on 7 October 1884. The new ship was yard number 160, official number 89634. It was an iron hulled single screw steamship of 2,674 tons, length 300 feet and width 40 feet. Powered by a coal fed boiler and a Simplex compound engine built by Doxford, the ship was built for McIlwraith, McEacharn and Company of Melbourne. She also had two masts and sails. The new ship was a collier but occasionally carried general cargo.

The ship appears to have had an uneventful life until 1911 although she had a new prop shaft fitted in 1910. Still owned by McIlwraith, McEacharn and Company, the *New Guinea* was under charter to Huddart, Parker and Company Ltd and carrying general cargo. At 11.50 am on Monday 13 February 1911 while on a trip from Melbourne to Sydney (and then Newcastle) and under the command of Captain Coleman, the ship ran into dense fog near Gabo Island. The fog dispersed a bit and was patchy but just before Green Cape, about 26 kilometres to the south of Eden and just north of the New South Wales/Victoria border, the heavy fog returned. Green Cape is at the end of a narrow peninsula that juts out from the coast to the south and in 1883 a 29 metre high lighthouse was constructed there. The light was 44 metres above sea level and the light could be seen 18 kilometres away. However, at 11.50 am on 13 February 1911, the light was not much help to the *New Guinea* when it ran aground exactly 1.25 kilometres to the west of the lighthouse. The engines were ordered to be reversed but it was too late, the ship was doomed.

The engine room and bow filled with water very quickly and the 28 crew abandoned ship. As this is a very rugged coastline and no persons living nearby except for the lighthouse keepers (now no longer living there), the crew set off in two or three lifeboats for Eden. One was taken 15 kilometres out to sea by the wind and currents before making it back to the Green Cape area. Another had trouble and turned back when she approached Green Cape and went back to the wreck. I think the remaining boat made it to Eden.

Three vessels were sent to the wreck, the Fenwick and Company tug *Heroic* and a motor vessel *S.E.A.* and a launch *Excelsior*, both sent by the Eden pilot. Finally the crew were found and towed back to Eden, by the *S.E.A.* Even then, the action was not over as one vessel was cut adrift and the other put into Bittangabee, a few kilometres north of Green Cape. Finally, the crew arrived in Eden at 9.30 pm on 13 February 1911.

Within two days it was reported that the *New Guinea* had sunk. The ship and cargo was said to be valued at £20,000 and that there was valuable machinery being carried as deck cargo (more about this later). It was also reported that the ship and cargo was to be auctioned on 20 February 1911 and that a Marine Court of Inquiry was to be held in Sydney. It is not clear if the ship and cargo were sold. The Sydney Marine Court of Inquiry decided that Captain Coleman was at fault for being too close to the shore and sailing a full speed in thick fog. His licence was suspended for six months.

In the 1960s, Carlo Filippetti (now owner of Gosford Diving Services at Umina on the NSW Central Coast), headed a salvage team that visited the *New Guinea* and carried out some salvage work, using explosives. It is not known what things were taken. It was also reported to me by Barry Andrewartha, Editor and Publisher of *DIVE Log Australasia*, that the wreck was also "ratted" by many people in the 1960s, including former Sydney diver Barry May.

#### Location

Today the wreck lies in less than 10 metres of water. Accordingly, the *New Guinea* can only be dived in extremely calm seas. Luckily, the wreck site is protected from some winds, especially north-easterly and easterly winds. However, due to the distance from Eden (about

28 kilometres to the wreck), the local charter operators do not generally dive this and the nearby wrecks and it is a long way to run down in anything but very calm seas. Therefore it is likely that you will need to use a private boat. If you have a smallish boat (say under five metres), the best bet is to run out of the small coastal village of Womboyn. This requires a lot of planning as the lake, river and bar are very shallow and you can only travel to the sea from the boat ramp in the period about two hours either side of high tide. Therefore you need a high tide of about 1.8 metres, occurring about 9 am to 12 am enabling you to exit the bar at 7 am to 10 am. Also, you need calm seas, no swell at all from the south but even very strong north-easterly winds and seas should be okay.

The actual wreck site of the SS *New Guinea* is quite easy to find. The GPS Reading for the site is approximately 37° 15' 37"S 150° 02' 16"E. On the cliff face to the north you will see that the rock layers are not horizontal but saucer-like or concave. The end bits of the concave rocks run down into the sea as ridges. In addition, on the shore you will see many pieces of wreckage, including an anchor on the inside of the ridge to the west. There is also a small bombora to the east and you will be in a direct line from the lighthouse to the east and a prominent cave to the west. Anchor on the top of the western ridge.

#### Diving

The depth of the wreck is less than 10 metres and the majority of the wreck is between the two ridges. The main features in this area include the keel and large sections of the hull still intact, with plating and supports everywhere. There are also some other interesting things, including two huge detachable propeller blades. These are not from the ship, but were being carried as cargo, probably the deck cargo mentioned previously. They are placed in such a manner that the blades appear to be joined together, especially as they have bolts and nuts through the holes in the bases. However, if they are, it is only for ease of storage. Near here there are dozens of lead ingots. Each of them is about 150 by 150 by 20 mm with a round hole in the middle. I have been unable to ascertain whether they served any purpose on the ship or were just part of the cargo. There is a small strange object here. This looks like a rectangle cage but is definitely part of the ship. There are also some pieces of the remains of the boiler all over this area.

Very close to the two blades is the start of the propeller shaft. This is partly hidden by kelp and runs in a westerly direction over the next ridge. Once you cross the ridge there are another three detachable prop blades, each identical to the previously mentioned ones except that they do not have bolts and nuts. There is another smaller section of prop shaft that runs further west across the gully. At the end of this there is a large bearing and on the rocks below, a small broken section of shaft. There are more broken sections nearby. A bit further to the west is the ship's prop. It is a four-bladed prop with a smallish hub. The blades are all broken off, with only the stubs remaining. I am not sure if the blades were broken off by the salvage attempts, but the appearance is consistent with the report that the engine of the *New Guinea* was placed in reverse once the ship ran aground and once the ship took on a bit of water, the prop hit the shallow reef and the blades broke off as the engine still turned over.

To the south of the ship's prop is a very interesting item. On page 37 of *Shipwrecks of Twofold Bay/Disaster Bay* by Tim Smith, NSW Heritage Office, this is alleged to be the prop of the *New Guinea*. However, I do not believe this is true. This prop consists of a large hub, with two detachable blades bolted to it. These blades are identical to the other five blades on the wreck. In the place where the other two blades should be, there are only bolts and nuts. This, together with the fact that there are five other blades, none of which are damaged, leads me to think that the hub and two blades is an item of cargo, being carried like this to simplify storage and for ease of movement.

Near here I thought that I saw the engine, or at least the remains of the engine. It looked to me like broken sections of the compound engine, the cracked cylinder heads. However, I have since read that the engine is located to the east, on the side of the bombora. I will have to check this out on my next visit.

Along this gully towards the shore there are more interesting items, including winches, pulleys and in about five metres, two large double bollards. Back to the east from here, and in the shallow section of the main gully, there are many pieces of wreckage. The main thing I found was the other anchor (remember the other is on the shore). However, it is very difficult to find items here as the whole area is covered in a dense layer of kelp and there are many boulders for the wreckage to be hidden under.

In summary, this is an excellent shipwreck, one of the most interesting I have ever dived in New South Wales. If you get a chance, dive it as many times as you can.

- Personal comments to author by Barry Andrewartha, Editor, DIVE Log and Sportdiving
- Scuba Action, unknown date, late 1980s, article by John Riley,
- Shipwrecks of Twofold Bay/Disaster Bay by Tim Smith, NSW Heritage Office
- Famous Wrecks by Jack Loney
- Sea Adventures and Wrecks on the N.S.W. South Coast by Jack Loney
- Sydney Morning Herald 14 February 1911 page 9, 15 February 1911 page 11, 18 February 1911 page 14

# No Frills Hopper Barge

### History

This wreck is one of the many vessels sunk at the Long Reef wreck site off northern Sydney. It is a very large and strange looking hopper barge. I have yet to discover the history of this vessel.

#### Location

It was sunk in December 1979 and is located at GPS reading  $34^{\circ}$  08' 21'' S and  $151^{\circ}$  09' 02'' E. You need to run east-west to cross the wreck. Best anchor is in westerly winds when you need to anchor on the western side. Anchoring on the top is unlikely to achieve a result.

The name comes from the No Frills Dive Club which may have rediscovered it but Tom Byron's book (see references) lists this vessel.

#### Diving

The wreck appears to lay north-south and sits on a sandy bottom of 50 metres. The top of the barge comes up to about 43 metres. The barge itself appears to be a very narrow and deep barge. It is about 61 metres long and 8 or so metres wide. It is perhaps 15 or so metres deep. The barge is lying on its side, so the width is the height of the wreck off the sand and the depth is the width of the wreck. The top of the wreck is a flat and slightly sloping surface, almost devoid of growth except for a covering of algae(?). Hence there is little for an anchor to catch on to.

The top is on the western side and at either end there are some shallow holds. In the middle there is a deeper and larger hold. This also has a large rust hole over it. You can safely enter and swim through the hold area.

The bottom of the barge (the eastern side) is quite strange to look at. It appears to be designed to sit low in the water with water able to enter the hull through the ends. You can also enter this area although extreme care needs to be taken as there are many cross-members and bits of metal to get caught up on. It is also very dark inside and could easily be stirred up to give nil visibility.

A different dive, but only worth doing a few times but only by experienced deep divers.

#### References

• Scuba Divers Guide to Northern New South Wales Coast by Tom Byron, page 189

# SS Oakland

## History

The SS *Oakland* was launched in 1890 at the Murray Brothers shipyard in Dumbarton, Scotland (a very nice little town to the north of Glasgow). The *Oakland* was 47 metres long, had a beam of 7 metres and displaced 398 tons. The single screw steamship was powered by

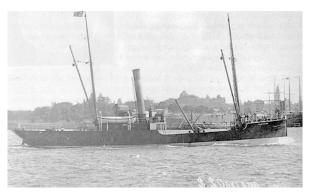


Figure 54
The SS *Oakland* coming up Sydney Harbour

a triple expansion engine built by Kincaid and Company of Greenock, Scotland, Scotland (just across the Clyde) and it had a single scotch boiler. She was also rigged as a fore and aft schooner.

The new ship was built for William T. Yeager, who had a timber yard in Pyrmont in Sydney and a sawmill in the Northern Rivers area of NSW. The ship was designed as a general cargo/passenger ship, presumably to carry the

owner's goods. As such, the vessel had two holds with two steam winches serving a revolving steam crane.

The new ship was named after the owner's residence and sawmill on the Richmond River on the Far North Coast of New South Wales. The *Oakland* left Greenock, Scotland on 10 May 1890 for the trip to Australia. Under the command of Captain Rice, she took 89 days (this was possibly 81 days at sea) to travel to Sydney, arriving on 7 August 1890. She stopped over in Teneriffe (Canary Islands), St Vincent and Cape Town. She carried all her own coal for the journey and as additional cargo, steam engines for a new vessel built for Mr Yeager by Rock Davis at his Blackall shipyard, Brisbane Water (just north of Sydney). Of interest, Davis was later to build the TSS *Belbowrie* (on page 5) which was to later sink at South Maroubra in Sydney.

The *Oakland* was subjected to a quick overhaul and entered service on 27 August 1890 under the command of Captain Benjamin Alley. She immediately commenced operations between Sydney, Newcastle and the Richmond River, doing 72 voyages in 1891. The regular skipper was Captain Alley but at times Captain Rice was in command. For three years the *Oakland* transported timber and general cargo to Sydney as well as supplies to the far north of the State. On 24 June 1893 the ship collided with the PS *Sydney* near Bird Island off Catherine Hill Bay on the Central Coast. There was little damage to either vessel. Captain Alley was still the captain in 1894. The ship was fairly quick, on one journey she left the Richmond River at 10.24 on 24 January 1894 and arrived at Yeager's Wharf at Pyrmont, Sydney, at 2 am on 26 January 1894, a trip of just over 39 hours.

On 13 November 1898 the *Oakland* was sold to the North Coast Steam Navigation Company. Another ship, the *St George*, was also sold to NCSNC at the same time. Captain Alley remained skipper. In 1899 certain modifications to the ship were made including strengthening of the hull and the installation of a new bulkhead in hold one, dividing it into two. Captain Evans was skipper at this time.

At 6.30 am on 26 August 1901 the SS Oakland hit the Richmond River bar and crashed onto the southern wall of the entrance. For five weeks the ship was stuck (see the photo at right which shows water right across the deck). Damage to the ship included holes in the hull, the stern frame was bent, the stern-post broken in three places, the port side hull damaged and many frames twisted. The Sydney Marine Sydney Underwriters' Association refloated the ship on 1 October (or possibly 2 October) and after emergency repairs at the Richmond River dockyard, she was taken to Sydney for more extensive repairs. It took three months in Morts Dock at Balmain for the damage to be rectified and on 13 February 1902 she was relaunched. The whole port side of the hull had been replaced and other work carried out. Some more work was carried out at Morts Dock in November 1902 when four tanks when were installed into hold two (two on either side) to carry molasses from the northern river sugar cane refineries. The skipper around this time was Captain Beach.



Figure 55
The SS *Oakland* aground on the Richmond River bar

This was not the only time that the SS *Oakland* hit the Richmond River bar. It was reported by the Chief Engineer Surveyor, James Shirra, on 9 June 1903, that the ship "has been frequently under repairs necessitated by going on the rocks at the bar or in the river".

May 1903 saw the Oakland having her annual refit in Sydney and her licence was renewed for another six months.

On 25 May 1903 at 9 pm, the SS *Oakland* left Sydney on what turned out to be her last voyage. She was not carrying cargo on the first part of the trip, just water ballast in her ballast tanks. She arrived in Newcastle at 5 am the next morning and loaded 300 (or perhaps 350) tons of coal, four bundles of railway tracks, 9 tons of flour, 10 tons of gravestones and other cargo. The cargo loading did not start till 3 pm. At 1 am on Wednesday 27 May 1903 the *Oakland* left Newcastle after this short stop on her way to the Clarence and Richmond Rivers. The only passenger was a monumental stonemason, Thomas Gaites, owner of the gravestones.

The weather was a moderate to strong south-westerly with a large sea. The ship passed Port Stephens Outer Light at 3.15 am and within 20 minutes, the cargo shifted to port and the *Oakland* started to list dramatically. Despite many attempts to find the cause of the list, no reason was found by the crew or Captain. As if this was not bad enough, the ship was now taking water and slowly sinking bow first. The sail was raised in an attempt to speed and steady the ship. Captain William Slater (age 41), an employee of NCSNC for 16 years and on his last planned trip on the ship, ordered the helmsman to steer for the northern side of Cabbage Tree Island but by this time the ship was too far gone. Captain Slater decided to turn her around to make Port Stephens (a few kilometres away) and then ordered that they head for Port Stephens lighthouse. When this turn was attempted, the *Oakland* began to go around in circles and the funnel was almost in the water.

Nearly all shipwrecks of the 1800s and early 1900s have one thing in common, the inability to successfully launch the lifeboats because of the list of the vessel and poor design. Such was the case with the *Oakland*. Many attempts were made to release the boats but they remained connected to the davits.

In the end, the funnel was in the water and the crew had now clambered onto the hull. From this position they were able to release one lifeboat. Unfortunately, the waves had caused the davit to punch a hole in the lifeboat and it filled with water. When all 18 crew and the one passenger climbed in, it capsized. The *Oakland* rolled over and sank, her prop clear of the water and still slowly turning. The lifeboat was righted and three crew climbed aboard and ten crew and the passenger clung to its side, the buoyancy tanks keeping it afloat. Four crew were now missing. An attempt was made to row towards nearby Cabbage Tree Island but against the prevailing winds and seas and in a vessel totally full of water, it was impossible. Eventually seven men climbed in the boat with the rest hanging on to the side.

The seas and wind were carrying the lifeboat towards Broughton Island, about five kilometres away. As the sun rose, the cook, John Bradbury (34) died and 30 minutes later the chief engineer, A. Fisher (35) also died. At about 7.15 am Captain Slater passed away and soon after, Alec Cargill (16), the officers' boy joined him. The second engineer, Robert Steel (22) was next to go when he suddenly exclaimed "This is lovely" and jumped from the boat into the raging sea. After each person died, they were put into the water and a person hanging on to the side climbed aboard the lifeboat.

By now the submerged boat was off the entrance to Esmeralda Cove on Broughton Island but rescue was near. The SS *Bellinger* was approaching Broughton Island from the south after unsuccessfully attempting to enter Port Stephens to shelter from the gale. Her crew had sighted wreckage and were on the lookout for survivors as they headed for refuge behind the big island. Unfortunately, time was up for Able Seaman J. Johnson (40) and he died just before the remaining seven crew were pulled aboard the rescue vessel. (Note: there is a discrepancy of two persons here, as there were 18 crew and one passenger on board. Seven survived, six perished from the lifeboat and four died when the *Oakland* sank leaving two unaccounted for in this description of events). The survivors, Second Mate John Howes (57), Able Seaman G. Gustavson (31), Able Seaman Isaac Holm (48), Able Seaman J. E. Ohlsson, Able Seaman T. Willberg, Able Seaman W. Jacobson and the passenger Thomas Gaites, were taken to Newcastle and then on to Sydney.

The ship was, of course, a total write off and the North Coast Steam Navigation Company received £4,000 insurance. The wreck was located by Captain H. Warne, skipper of the Newcastle and Hunter River steamer SS *Namoi*. The water was said to be 12 fathoms deep (72 feet or 21 metres - it is actually a bit deeper) and the masts stuck out of the water six feet. The salvage rights to the wreck were sold to Captain Weston of Balmain, Sydney, for £40. He proposed to salvage the ship and cargo.

Using three divers (Peter Anderson, Tas Coutts and a Frenchman called Tommy), Captain Weston and his ship *Maud Weston* anchored over the wreck. Over a period they salvaged 100 tons of coal, the fore and after winches, the steering gear, 175 fathoms of anchor, blocks, derricks, a steam windlass and hawsers. A total of £300 worth of equipment was recovered. Already, the masts had fallen, the bridge collapsed into hold two and the funnel broken off

Captain Weston stated that he intended to refloat the ship by pumping air into the molasses tanks. This was supposed to happen in the second week of July, 1903. However, there is no record of what happened, if indeed the attempt took place. The salvage appears to have been abandoned around this time.

The Marine Court of Inquiry could find no reason for the tragedy but expressed the view that the cargo must have shifted.

### Location

Today, the *Oakland* lies to the north of Cabbage Tree Island in about 26 metres of water, facing the south (exactly the same direction as its flee for safety). A mooring is located about 70 metres to the west of the wreck and a line runs from the mooring to the centre of the wreck. Approximate GPS readings for the mooring are 32° 40' 47"S 152° 13' 56"E. For more detail, see GPS and Marks Page (see page 150).

#### Diving

The wreck is in one piece, with the deck totally missing as is the bridge area and funnel. The surrounding sand comes right up to a level almost equal to the normal sea level on the boat when she plied her trade and the wreck only rises two metres off the sand. From the mooring line you encounter the boiler which is almost totally buried in the sand and behind this is the triple expansion engine. On either side of the engine and boiler against the hull you will see the molasses tanks installed in November 1902.

As you swim to the stern you pass the many ribs of the hull which stick up out of the sand on either side of you. At the stern you can see the rudder turned hard to port and the tip of one propeller blade. The stern is a much more significant part of the vessel and sits three or four metres above the sand.

Swimming back along the wreck you again pass the engine and boiler before seeing the remains of the forward mast. The holds can sort of be made out and as mentioned, the tanks in number two hold can be seen. Like the stern, the bow sits up higher and from the rear looks intact. However, the hull is almost totally missing from the sides of the bow and all that remains are the deck and the ribs of the hull. Despite this, it is still quite interesting as it enables you to enter easily (and safely) inside the forecastle. The bowsprit sticks up high from the vertical bow. As indicated earlier, the anchors are missing, salvaged in 1903.

The fishlife on this wreck is excellent, with catfish by the dozen in the bow, up to 30 or more porcupine fish on the sand adjacent to the wreck and red morwong all over. As well, huge schools of yellowtail float over the wreck and 20 or so squid come in off the sand. A few moray and mosaic eels inhabit the boiler and engine and nice sponges cover most parts of the wreck. All in all, a very good and interesting dive.

- The Steamship Oakland by Adam Wolfe in The Bulletin of the Australian Institute for Maritime Archaeology 1992 Vol 16 No 2 pages 25 to 30
- Shipwrecks, Storms & Seamen of the New South Wales Coast by Max Gleeson
- Surveyor's Report, 1903, Department of Navigation: SS *Oakland* General report for the information of the Crown Solicitor
- Sydney Morning Herald 8/8/91, various issues in April and May 1891, January and February 1894, 28/5/03, 30/5/03, 1/6/03
- *Telegraph* 30/5/03, 10/6/03, 12/6/03, 9/7/03
- Sydney Mail 3/6/03
- Star 10/6/03, 7/7/03
- Scuba Action, Riley's Wrecks, Sept/Oct 1986
- DIVE Log, article by Mike Cleare, unknown date

# Olive Cam

### History

The *Olive Cam* was built in 1920 as the *Nodzu* by Cook, Welton and Gemmell Ltd of Beverley, England. She was 128.5 feet long and 23.5 feet wide and based on the "Castle" class minesweepers built during World War II (see SS *Goolgwai* on page 57 for more details). Displacing 281 tons gross, the new vessel was powered by a coal burning triple expansion steam engine with steam from a single boiler. It was capable of being at sea for 10 days at 9.5 knots and was crewed by up to 24 men. The new trawler was delivered to Neale and West Ltd of Cardiff, Wales. In 1929 Cam and Sons purchased the *Nodzu* and renamed her the *Olive Cam*.



Figure 56 SS *Olive Cam* on Sydney Harbour

Cam and Sons was a Sydney-based company that over the period from the late 1920s till the 1950s operated a total of 16 trawlers off the New South Wales Coast. The company had headquarters at Blackwattle Bay in Sydney Harbour. On 2 April 1931, one of the new company's trawlers, Charlie Cam, unsuccessfully attempted to tow the MVpassenger liner. Malabar (on page 87) off the rocks at Long Bay in Sydney. By 1938 the

company had nine trawlers. During World War II many of the company's trawlers were requisitioned for service as auxiliary minesweepers. In fact, of Australia's 35 requisitioned auxiliary minesweepers, eight came from the Cam and Sons fleet. These included *Mary Cam, Patricia Cam, Alfie Cam* and *Olive Cam.* Of the 12 trawlers requisitioned, 11 were of the "Castle" class or variants.

During the latter half of 1935, the *Olive Cam* was chartered by the Royal Australian Navy (RAN) for use in minesweeping trials.



Figure 57 HMAS *Olive Cam* alongside two other identical ships during World War II

On 18 September 1939, the *Olive Cam* was requisitioned by the Defence Department for use as an auxiliary minesweeper. She sailed to Melbourne shortly after, arriving on 23 September 1939 and was converted for war service by the addition of minesweeping equipment. In addition, two 20 mm guns, one Vickers .303 machine gun and a 12 pounder gun were installed along with four depth charge launchers. On 6 October 1939 she was commissioned as HMAS *Olive Cam.* FY76.

On 21 October 1939 the new RAN ship left Melbourne and sailed to Fremantle in Western

Australia, arriving 3 November 1939. She was attached to Minesweeping Group 56 and remained in service in the Western Australian area till September 1945. On 29 June 1943, the ship was purchased by the RAN. In November 1941, HMAS *Olive Cam* was involved in the unsuccessful search for survivors of HMAS *Sydney*, sunk by the German raider *Kormoran* which in turn was also sunk by the *Sydney*. During the war *Olive Cam* had 20 crew and carried 200 tons of coal permitting her to stay at sea for 25 days at 8 knots.

After the end of the War, HMAS *Olive Cam* sailed for Sydney, leaving Fremantle on 19 September 1945 and arriving in Sydney on 17 October 1945. She was placed in reserve on 14 November 1945 and on 24 April 1946, the *Olive Cam* was sold back to Cam and Sons Ltd for £3,000.

Once again the *Olive Cam* returned to her pre-War work, trawling the NSW coastline. By 1950, Cam and Sons only had six vessels in service and by 1954 only five. Increased costs, both labour and caused by the age of the vessels and increased industrial action was to lead to the company's demise.

On the first Tuesday in November 1954, Australia's greatest sporting event, the Melbourne Cup horse race, was held as usual at Flemington Racecourse. The winner this year was *Rising Fast*, one of the most famous of the more than hundred winners. Two days later, the twin .45 Colt revolvers of Hopalong Cassidy were to be seized as they came through Customs at Sydney's Kingsford Smith Airport (Cassidy himself was arriving a few days later). The same day as the Melbourne Cup, 2 November 1954 (other sources say 1950 and 1955 but these are incorrect), the *Olive Cam* was fishing the stretch of coast between Eden and Green Cape on the Far South Coast of New South Wales under the command of Captain William Glackin, 57. At 9 pm the *Olive Cam* was north of Green Cape.

The Second Engineer, Patrick Noctor, 35, was later to tell the *Sydney Morning Herald* that a "...howling south-westerly had been blowing for 24 hours. The waves got bigger and the weather rougher. The skipper decided to get as close to the shore as possible and make for Eden." The *Olive Cam* strayed too close to the rocks and hit a bommie. Captain Glackin order that the engine be reversed but the prop was lost (more about this later). The trawler was aground just south of Mowarry Point, south of Eden. As soon as the ship hit the rocks, Captain Glackin apparently said "It is hopeless" and ordered life jackets to be donned. The crew attempted for an hour to free the ship, but without a prop, it was, indeed, hopeless.

The lifeboat was launched but it was bashed against the ship and then pushed away from the crew. The lifeboat was then smashed to pieces on the rock platform. The sea was already starting to smash the ship apart. A decision was made to abandon ship. A line was taken ashore by two or three crew members and the crew started to transfer to the land. All the while, the radio operator, A.J. Pearson, 35, continued to send SOS by morse code. After nine had made it safely, the remaining crew, Captain Glackin, Patrick Noctor, A.J. Pearson and the Second Mate, Leslie Wood, 35, started to drag themselves along the line. Mr Noctor may have been already ashore, holing the line. Mr Noctor reported that a huge wave hit the line and then a series of other waves hit them again. Captain Glackin disappeared and then Messrs Pearson and Wood were washed away. The time was now just after 10 pm. Mr Pearson's body was later found three miles to the south.

The 10 crew decided to walk to Eden but after only a short distance, they tired. Mr Noctor and Neville Stanley, 35, the Fireman, went on alone and they reached Edrom guest house (which is still there on the southern side of Twofold Bay, near the now site of the chip mill). They were given food and warm drinks and then sent to bed. The others were picked up by a rescue party, perhaps dispatched in response to the SOS or maybe sent by the Edrom owners. A launch took the other eight men to Eden and two were reported to have been taken to Pambula Hospital, north of Eden.

### Location

Today the wreck of the *Olive Cam* lies in less than nine metres, many bits in only three metres. The actual wreck site is quite easy to find. The GPS Reading for the site is approximately 37° 09' 02"S 150° 00' 24"E. This will put you a few metres south of a small

unnamed point and off three gullies. The main part of the wreck is in the middle gully and other parts in the southern gully. To dive here you will need millpond seas, with westerly or south/south-easterly winds preferable.

#### **Diving**

After anchoring in 12 metres or so, swim towards the southern gully. As you enter it, you will see many pieces of wreckage. This includes a small section of drive shaft, copper pipe and some brass fittings. If you look carefully, you will find the remains of the rudder and one and a half cylinders of the triple expansion steam engine. Ahead there is a very large "rock". In fact, this is the boiler of the *Olive Cam*, turned on its end. It is very large and reaches up to within a few metres of the surface. Past the boiler there are more pieces of wreck, including a winch. Continue up the gully until no more wreckage is seen before returning along the northern side of the gully back to the open sea.

From here, follow the rock wall north till you come to the next gully. Enter the gully and you will find a great deal of wreckage. This goes right up to three metres or even shallower. As you exit the gully, turn left and you will see one of the ship's anchors (a Lt Rodges).

This is a very attractive shipwreck, although people not interested in shipwrecks may find it a bit boring. In my view it is a very interesting dive, capable of keeping a keen "wreckie" interested for well over an hour.

- Article by John Riley, Scuba Action, August 1986
- Shipwrecks of Twofold Bay/Disaster Bay by Tim Smith, NSW Heritage Office
- Royal Australian Navy Profile No. 3 by Michael Wilson
- Sydney Morning Herald 4/11/54 page 1
- Warships of Australia by Ross Gillett pages 213
- Australian Warships Profile No 6 pages 88 and 91

# SS Royal Shepherd

#### History

One of Sydney's most compact shipwreck sites would have to be the wreck of the SS *Royal Shepherd*, located only a few hundred metres outside Sydney Harbour off South Head.

The *Royal Shepherd* was built by Blackwood and Gordon of Paisley, Scotland and launched in 1853. Originally owned by the Launceston and Melbourne Steam Navigation Company., the *Royal Shepherd* was 331 tons, 42 metres long and 6 metres wide. Powered by a twin cylinder oscillating steam engine, the ship was at first based in Melbourne before moving to Tasmania, Adelaide and finally Sydney. The ownership changed many times over the years, with owners including Tasmanian Steam Navigation Company, Spencer Gulf Steamship Company Ltd, H.J. Cattanach, W.A. Firth, T. Elder et al and finally J.Warburton and Son of Pyrmont, Sydney.

Originally built as a passenger/cargo vessel for the Bass Strait service with capacity for 50 passengers, it was converted a number of times over its 37 year career, with its final role being a collier and a latter role as a sewage ship taking wastes out to sea!!

On Monday 14 July 1890 at 9.35 pm, the *Royal Shepherd* left Sydney Harbour for Bulli under the command of Captain Thomas Hunter to load coal. An interesting point is that Captain Hunter was the skipper of the SS *Duckenfield* (on page 48) which sank less than 14 months earlier in May 1889 only a few kilometres north of the Harbour at Long Reef. He had only just received back his master's certificate after that incident.

On the way out of the Harbour, the *Royal Shepherd* was towing the schooner *Countess of Erroll* (also owned by Warburton) which was bound for Wollongong. The Heads were cleared at 10.30 pm and a course to the south was steered. At 11 pm the lights of three or four vessels were seen and at 11.15 pm the SS *Hesketh*, a heavily laden collier heading into Sydney Harbour, collided with the *Royal Shepherd* and bumped the *Countess of Erroll*. The *Royal Shepherd* sank within 10 minutes, the skipper of the *Countess of Erroll* cutting her free when he saw the *Shepherd* was going to sink. He set sail for Wollongong but due to strong head winds he put about and went to Newcastle. It is not known why he did not assist with the rescue but I assume that he was worried his vessel may have been blown ashore. Meanwhile, the *Hesketh* rescued all the crew of the *Royal Shepherd* and entered Sydney Harbour.

A Marine Board of Inquiry found that the skipper of the *Hesketh*, Captain Marcus Osborne, was responsible for the collision "for not stopping and reversing in time to avert a collision". His master's certificate was cancelled for six months.

The wreck of the *Royal Shepherd* was revealed to the Maritime Archaeological Association of NSW in February 1979. Since then, many thousands of divers have dived this wreck.

#### Location

The GPS Readings for the wreck are 33° 50' 12" S 151° 17' 14" E, see GPS and Marks Page (see page 150) for details of how to find the wreck.

### Diving

The wreck now consists only of the boiler, engine, driveshaft and prop sitting upright on the sand at 30 metres. About 20 metres past the boiler lies a windlass.

The engine, now almost 150 years old, is, according to noted wreck authority John Riley, the best presented example of an early steam engine in Australia. Unfortunately, there is little else left apart from the engine and mechanicals. It is especially interesting in that the compound steam engine is inverted, with the cylinders at the bottom of the engine and the crankshaft at the top. Also, the boiler is square, not round like most boilers.

At a depth of 27 to 30 metres, the wreck is one that is easily accessible to all experienced divers. However, due to its close proximity to the entrance to Sydney Harbour, the *Royal* 

Shepherd is subject to dirty water, especially after periods of heavy rain. An incoming tide is best. The wreck can easily be found using the marks in Tom Byron's book Southern NSW. In summary, the SS Royal Shepherd is a very good, if somewhat small, dive site, that is a bit too small to be dived more than once every now and then.

- Sydney Morning Herald, 15 and 17 July 1890
- The Register of Australian and NZ Shipping, 1876/77
- Scuba Action, article by John Riley, (date unknown) includes diagrams of engine and wreck
- Scuba Action, Riley's Top 20 Wrecks of NSW, Sept/Oct 1986, page 6
- The Vanished Fleet of the Sydney Coastline by Max Gleeson, pages 24-27
- Scuba Divers Guide Southern NSW Coast by Tom Byron page 59-61
- Report and diagram by John Riley, unknown date

### SS Satara

#### History

The SS *Satara* was launched on 30 October 1901 from the W. Denny and Brothers shipyard at Dumbarton, Scotland. Dumbarton is a few kilometres north of Glasgow on the Firth of Clyde. The new ship was 410.8 feet long with a beam of 50.7 feet. She displaced 5,156 tons. The engine of the vessel was a huge triple expansion steam engine built by an associated company, Denny and Company. There were two enormous coal powered boilers.



Figure 58
The *Satara* underway, probably about to come alongside this wharf

The new ship was a cargo vessel for intended the India/Australia/Asia route. The Satara was the third of three identical ships built for the British India Steam Navigation Company Ltd and as such, the ship was named after a small Indian town east of Mumbai (Bombay). At a cost of £89,170, the ship was said to be well appointed. The ship was completed in December 1901 and sailed soon after for India. The Satara's first voyage to Australia was in September 1902 when she sailed under Captain C. Goss to Fremantle, Western Australia. Each trip to Australia involved an anticlockwise circumnavigation of the country, with ports of call normally being Adelaide, Melbourne,

Sydney, Newcastle (for coal) and sometimes ports in Queensland. For seven and a half years the *Satara* continued on this route. It is not clear if she only did this route.

The *Satara* left Calcutta in March 1910 under the command of Captain Charles Hugill. She visited Fremantle, Adelaide and Melbourne before arriving in Sydney on 8 April 1910. The *Satara* left Sydney empty on 12 April 1910 for Newcastle where she loaded a cargo of 4,500 tons of coal and 1,200 tons for her engine.

On 20 April 1910 at 6.50 am, the SS Satara left Newcastle bound for Gladstone, Queensland. Aboard were 84 crew and two passengers. The passengers were aboard to care for 100 horses that were bound for the British Army in India. They were to be loaded at Gladstone. Also on the ship was Captain Frank Binstead, a Torres Strait Pilot under the employ of the Queensland Government Pilots. His job was to guide the ship through the Great Barrier Reef and Torres Strait.

As she left Newcastle, the ship encountered large seas and Captain Binstead was granted control of the ship by Captain Hugill. There was a disagreement between Captains Binstead and Hugill as Captain Hugill left the bridge. This was related to recording the course navigated.

Port Stephens was 2.5 miles abeam at 9.35 am and the course was changed to 30°. She was soon passing Broughton Island with the seas worsening. Ahead lay Sugarloaf Point and Seal Rocks. In 1895 the SS *Catterthun* had struck Little Seal Rock and sank with the loss of 55 lives (on page 18).

Captain Binstead made the fatal decision to sail between Seal Rocks and Sugarloaf Point, hoping to save five miles. Making slow headway, at 11.25 am the Third Officer, John Passmore, questioned the ship's course. At 11.30 am Captain Binstead changed the heading to 45°. There was a crew change at midday and Second Officer Reading took over. Captain

Hugill arrived on the bridge at 12.07 pm and there was some discussion with Captain Binstead over the course.

At 12.15 pm the *Satara* hit Little Edith Breakers, a reef that rises more than 30 metres to less than seven metres. It is approximately four kilometres south-west of Big Seal Rock. Captain Binstead ordered the engine stopped but Captain Hugill overrode this order. The *Satara* hit the reef again.

An examination by Chief Engineer Thomas Black revealed a great deal of water in the engine room. A decision was made to beach the *Satara* on Seal Rocks Beach (north of the lighthouse). The lifeboats were readied and by now the ship was settling by the bow and the rudder was now so high out of the water that the vessel would not respond to the helm. Suddenly, the beach to the west of the lighthouse was very attractive. By now the prop was more out of the water than in and it was obvious she only had minutes afloat.

Around this time, the SS *Orara* caught up to the *Satara*. The *Orara* was a 1,297 tons gross 240 foot long cargo/passenger coaster owned by the North Coast Steam Navigation Company. During World War II she was commissioned as HMAS *Orara* and served as an auxiliary minesweeper and then as a mobile escort training vessel. The *Orara* was out to sea, intending to pass outside Little Seal Rock. When level with Sugarloaf Point, the skipper of the *Orara*, Captain Hunter, decided that the *Satara* was in trouble and he gave the order to steam to help. Of interest, is this Captain Thomas Hunter who was skipper of the SS *Royal Shepherd* (see page 119)and the SS *Duckenfield* (see page 48) when they sank? Even though the *Satara* sank 34 years after the *Duckenfield*, it is possible.

Finally, the *Satara* launched her lifeboats. The *Orara* arrived at the same time and Captain Hunter placed his ship between the lifeboats and the prevailing sea.

At 1.10 pm the *Satara* sank leaving five men still aboard. They leapt into the sea grabbing pieces of wreckage to keep them afloat. One of the lifeboats overturned and in an heroic effort, the Second Officer of the *Orara*, Mr Bensen, jumped in to rescue the *Satara*'s engineer, Mr Smith.

By now the SS *Dorrigo* had also drawn up to the wreck site. She went north in search of the five men. She found all five (including Captain Hugill) and got them aboard. The *Orara* and *Dorrigo* moved to the protected area of Seal Rocks Beach and all the *Satara*'s crew were moved to the *Dorrigo*. At 5.45 pm, the left for Sydney, arriving at 9 am the next morning. A comical note is that the *Satara*'s dog was thought to have drowned in the sinking but was found a few days later by the lighthouse keeper at Sugarloaf Point.

On 29 April 1910, a Court of Marine Inquiry started. It heard evidence from all concerned. Its finding was that the *Satara* sank because of "...the wrongful act of the Master, Charles Alfred Hugill in recklessly, considering the state of the weather, navigating his vessel...". Even though Captain Binstead was in charge of the *Satara* in the events leading up to the sinking, Captain Hugill was held responsible for permitting Captain Binstead to navigate.

The wreck of the SS *Satara* was discovered on 17 September 1984 by a group of Port Stephens and Newcastle divers led by Owen Griffith.

#### Location

Today the wreck lies upright at a depth of less than 44 metres. The stern is on reef and the bow on sand. It sort of lies in a large gutter (at least the stern). It lies bow to the north.

The *Satara* is located to the south-west of Little Seal Rocks. It is not far from Edith Breakers, the reef that caused its demise. The GPS reading for the *Satara* is a latitude of 32° 28' 50" S and longitude of 152° 31' 11" E. Note that all the GPS Readings in this book are taken using AUS66 as the map datum. If you use another datum you may be about 220 metres off the wreck. See my GPS Page for more details and how to convert readings. See the diagram and marks at left and the GPS and Marks Page for more details. This will put you in the middle of the wreck, probably near the engine.

### **Diving**

Assuming that you start in the middle, swim towards the north and the bow. This will take you pass the huge three cylinder engine which lies fallen to port. Just past here there are the twin boilers, very large (see the attached photo). In front of the boilers the wreck is quite broken up. The deck and hulls lie flat and for your first dive, I would not suggest going past here.

Return back along the port side (western side). Just past the boilers you will see another smaller boiler just off the wreck on the sand. This is the donkey boiler, the largest I have ever seen (normally they are small). Keep going and you will soon see the rear mast (see the historic photo of the ship). This runs from the centre of the wreck and goes right across the port half of the boat and onto the sand. It extends for about 15 metres from the side of the wreck. I would follow the mast to the centre of the wreck. Here you will see the propeller shaft which runs from the engine towards the stern

Near here the shaft is out in the open but soon it disappears into the shaft tunnel



Figure 59 John Black and the propeller

which goes the rest of the way to the stern. The stern will come into view soon. On the way you will pass some very large deck winches and a couple of huge ones. There are also lots of enormous bollards, the biggest I have seen on a shipwreck.

The stern, the shallowest section of the wreck, is basically intact but has tipped over at 45° to port. You can swim inside this part, but for your first dive, leave it alone as there is more to see. At the rear of the stern you will see the rudder post sticking up above the wreck. Swim around the top part of the stern and then drop under wreck. Here you will see the huge six metre four bladed bronze prop. This is a great spot for photos. The rudder is also visible.



Figure 60 John Black off the side of the port boiler

Swim through the prop and along the starboard side of the hull. By now it is probably time to return to the anchor.

On this wreck I have seen grey nurse sharks, wobbegongs and schools of red morwong.

Since this wreck is relatively isolated (about 43 kilometres from Port Stephens and 40 kilometres from Forster - the two closest ports), it does not get dived much. It can have raging currents (I did on my first attempt to dive and we had to cancel) and normally has clear water. On my only dive I had in excess of 20 metres. As this is a deep wreck, it is only for experienced divers, with proper equipment. Since it is far from anywhere, most divers use twins and do long bottom times. On my dive I

did 23 minutes and had to do 1 minute at 9 metres, 6 minutes at 6 metres and 22 minutes at 3 metres. I used twins but basically only used one tank.

You can dive this wreck with Ron Hunter from Fisherman's Wharf, Forster, or Chris Norman from Pro Dive Nelson Bay, although both only go their on rare occasions.

- Shipwrecks, Storms and Seamen of the New South Wales Coast by Max Gleeson
- Lloyds Register 1904-5, 1910-11
- Scuba Action, Sept/Oct 1986, page 8, article by John Riley
- DIVE Log, November 1991, article by Ron Hunter
- Royal Australian Navy Profile No. 3 by Michael Wilson pages 60, 65 and 68
- Business History Vol XVI No 1 January 1979 pages 35 to 47, article by Paul L. Robertson, Shipping and Shipbuilding: The Case of W. Denny and Brothers

### Tasman Hauler

#### History

The *Tasman Hauler* was built by Evans Deakin and Company Ltd of Brisbane for BP (Kwinana) Pty Ltd. Launched in November 1959 as a firefighting tug, it was originally named the BP *Cockburn* and was registered in Fremantle. The *BP Cockburn* was 419 tons and measured 42.4 metres long overall and 10.0 metres wide. She was powered by an eight cylinder diesel motor of 1,500bhp connected to the prop by flexible couplings. The engine was built by Crossley Brothers of Manchester, England (identical to the *Henry Bolte* – see page 62). In 1975 the *BP Cockburn* was sold to P & O Australia Ltd and renamed the *Cockburn*.

Leased to Kwinana Towage Services, the *Cockburn* changed hands again in 1983 when it acquired the name *Tasman Hauler* and was purchased by Lease Industrial Finance and Phipson Nominee Pty Ltd. The vessel was now registered in Sydney and leased by Charter Craft and Marine Services Pty Ltd of Eden. In 1986 this company purchased the *Tasman Hauler* which meant that as of about 1987, Charter Craft and Marine Services owned both the *Henry Bolte* and *Tasman Hauler*.

On 6 July 1988, the *Hauler* was stranded on rocks at Twofold Bay (presumably after dragging or breaking its mooring). She was refloated and was apparently declared a total loss. The *Hauler* must have had a fire around this time as the lower forward compartments appear to have been burnt at some time.

The *Tasman Hauler* and *Henry Bolte* were purchased by the then Eden dive operator, Gary Becus, for \$1 each. I am not sure if this was before or after the stranding mentioned in the above paragraph. On 1 October 1988, he sank the *Tasman Hauler* just south of Red Point off Ben Boyd National Park as an artificial reef and to provide an alternate wreck dive for his divers. This was about eight weeks after he sank the *Henry Bolte* only a few hundred metres away.

On 28 January 1989 I dived the *Tasman Hauler* and although it had only been down less than four months, the growth and fishlife were quite incredible. Despite returning a number of times to Eden in the year after, I did not dive this wreck again (or the *Henry Bolte*) until 1993 due to inclement weather.

#### Location

It is less than a 10 minute run south from Eden across Twofold Bay to the location of the wreck, just south of Red Point. The GPS Reading for the wreck is 37° 06' 38"S 149° 57' 47"E. See GPS and Marks Page (see page 150) for more details.

## Diving

Although only 1.7 metres longer than the *Henry Bolte*, the *Tasman Hauler* appears to be a much larger vessel as soon as you see it on your descent. The *Hauler* has not changed dramatically since my first dive on it in 1989. The only deleterious impact of the sea that I noticed is the fact that all the timber decking (that overlaid the steel deck) has been eaten away by worms and that some of the upper railings are now paper thin or have disappeared altogether.

However, the major change to the *Tasman Hauler* in the past seven years has been the massive growth of sealife all over the vessel. Apart from where traces still remain of antifouling below the waterline, a prolific amount of invertebrate life covers almost every inch of the ship. Lace coral, jewel anemones, sponges, soft corals and small gorgonias abound. The colours are brilliant, especially those of the jewel anemones. Even if you are not interested in wrecks, a dive on the *Tasman Hauler* is a must just to see the marine growth. As well as the fixed life, a good deal of fishlife can usually be found on the wreck. In addition to the usual bream, yellowtail, black reef leatherjackets, six-spined leatherjackets,

red and striped morwong and trevally, you often get schools of yellowtail kingfish circling the upper parts of the wreck.

The *Tasman Hauler* is still fully intact (except as advised above) and lies with a slight list to starboard. The depth goes from 15 metres on the top of the mast down to just over 30 metres on the sand near the prop. The bridge area is 20 metres, the main deck is 23 to 26 metres and the inside of the engine hold is 28 metres.

A good starting point for an exploration of the wreck is to go to the propeller which is huge, more than three metres across. You can swim through the prop (it is surrounded by a shroud that directs the thrust as the prop itself swivels since there is no rudder). This gave the tug extremely good manoeuvrability. There are normally a lot of leatherjackets in this area.

From here, ascend to the stern (notice how the hull is basically bare of growth below the old waterline where the anti-fouling was applied) and enter the rear hold. This is quite compact but two divers can easily get inside without any problems. There is not much to see, but do it anyway.

Forward of here there is the engine room. You can drop down through the very large engine access hatch which is at least five metres by four metres in size. There is a lot to see here but it is very dark once you get away from the hatch, you will need a torch). The gearbox can be see straight below you and forward of this is the enormous diesel engine. There are eight cylinders, easily identifiable. On either side of the engine there are other pieces of machinery etc. At the front of the engine there are more things to see, including electrical boxes, valves, pumps etc (on a funny note, since 1997 there has been a scuba diving doll and great white shark attached by cable ties on the front, port side of the engine).

At the front of the engine there is a ladder/catwalk that gives access from the engine room to the area below the bridge. It is a bit of a squeeze, but unless you are quite large, you should be able to make it through. This brings you to the main deck level. There are two corridors, one on either side of the ship. You can take either door from here and explore the deck or exit to the rear through doors that open onto the main outside deck. Towards the bow there are a number of ways you can leave this level. You can swim right through the main room and exit out the large door like hole (actually not a door) onto the bow, drop down through another hatch to the living compartments or ascend through a hatch to the lower bridge level.

For now, drop through the hatch and you will see a corridor running forward and cabins on either side of this corridor. These cabins used to be the living areas and there appears to have been a fire, at least in the forward port side compartment. After examining both sides, go to the forward part of the corridor and you will see a hatch above you. Ascend through the hole and you will find yourself immediately in front of the bridge, on the bow.

Before returning to the bridge, go right to the bow and drop over for a quick look (if you have a camera or video, take a shot from here of the bow and the impressive bridge).

You can enter the bridge on the level above the main bow deck through one of the windows or by going through the doors on either side and then through the doors into the bridge. There is another level of bridge above this one.

The *Tasman Hauler* has a very impressive upper superstructure that used to house firefighting equipment. This is now home to the most incredible array of jewel anemones I have ever seen. They are on the railings (what's left), ropes and wires, the underside of the deck of the superstructure and on the mast. The colours include red, green, pink, orange, yellow, white, purple, brown and mauve. Fantastic for photography and video. Make sure you keep air and time for this pure hit of enjoyment.

The wreck of the *Tasman Hauler* is one of the most enjoyable dives I have ever done, both in Australia and overseas. This dive is for the more experienced, although open water divers under close supervision could stick to the upper parts of the wreck. Visibility on the *Tasman Hauler* is usually very good and better than the *Henry Bolte*.

Divers using dive computers will find themselves at a distinct advantage when diving both this wreck.

- Wrecks on the New South Wales Coast by Jack Loney page 158
- Lloyds Register 1961-62, 1979-80, 1985-86, 1988-89
- The Ships that Serve Australia and NZ (Vol 1 Ed 1 1975) by R.D. Fildes page 33-34
- The Ships that Serve Australia and NZ (Vol 1 Ed 2 1983) by R.D. Fildes page 109
- Personal conversations with Gary Becus, January 1989

# SS Tekapo

#### History

One of the larger vessels to strike the New South Wales coastline is the Union Steam Ship Company of New Zealand ship, SS *Tekapo*. Completed in September 1881 by R. Steele and Company of Greenock, Glasgow, Scotland, as the SS *Cape Clear*, the ship was originally owned by Abram Lyle and Sons of Greenock. Its first use was transporting migrants to Tasmania from Europe and a photograph in the State Library of NSW shows the *Cape Clear* at port in Hobart in 1883.

In November 1884 she was purchased by the Union Steam Ship Company of New Zealand for £36,500 (one source says £34,000) and renamed SS *Tekapo*. The *Tekapo* displaced 2,439 tons and was 89 metres long and 12 metres wide. It was allegedly originally a pure cargo vessel (note that this contradicts paragraph one) but after the purchase it was modified by W. Denny and Brothers of Dumbarton, just north of Glasgow in Scotland. After the modification, the ship carried cargo as well as passengers. The two cylinder steam engine made by R. Steele and Company driving a single screw gave it a maximum speed of 11 knots. The *Tekapo* was iron hulled and could carry 133 passengers, 82 in Saloon Class and 51 in Steerage. In its day it was one of the bigger ships operating in the Australian region.

After purchase it appears that the *Tekapo* was utilised on the NZ to Australia run until October 1887 when it sailed from Lyttelton, Christchurch, New Zealand, for Calcutta, India. The *Tekapo* made two more voyages to Calcutta in June and September 1888, each time carrying about 250 horses for the British Army. On the return trip, the ship brought back thousands of bales of woolpacks and cornsacks for the New Zealand agriculture industry as well as tea and other merchandise. This was more profitable than the forward trip. The ship stopped at Adelaide and Melbourne. In between these trips to the sub-continuent, the *Tekapo* continued on the Trans Tasman run. It appears that the *Tekapo* was also used for some time on the Launceston to Sydney run, bringing Tasmanian produce back to Sydney and also on the Sydney to the South Seas run.

In preparation for the 1889 Centennial Exhibition held in Sydney, the Union Steam Ship Company had all their larger passenger steamers refitted in anticipation of an upsurge in business. The SS *Tekapo* was the last to be worked on and accommodation for an additional 50 passengers was installed.

At 2.30 am on Tuesday 16 May 1899 the *Tekapo* left Sydney Harbour under the command of Captain Herbert Sams for Port Kembla (just south of Sydney) where it was to take on coal to replenish its bunkers before returning to Sydney for another trip to New Zealand. Fog settled over the coast and the course set should have let the ship sail safely to Port Kembla. The fog got worse (why is it that having lived almost all my life in the Eastern Suburbs, I have never once seen fog that went even a dozen metres off the coast??) so Captain Sams kept to half speed. Crew were stationed forward as lookouts. It is stated that the fog was so bad the bridge could not even see the foremast. Why the Captain did not hove to in such conditions is one of those questions that will never be known.

The *Tekapo* did not get far, only 14 kilometres from Sydney Harbour, when she came to grief on the southern headland of Maroubra Beach. The vessel bumped twice amidships and lifted onto flat rocks off the main rock platform. The bow smashed heavily against a wall of rock. The time was 3.45am.

A check of the engine room showed no water so Captain Sams ordered the ship to be placed in full reverse. Nothing happened. Rockets and distress guns were fired but South Head lighthouse saw and heard nothing. Residents of Randwick, Coogee, Rockdale and along the Cooks River heard the signals (obviously considering the fog, they saw nothing) and reported it to the authorities. Captain Sams then ordered the lifeboats to be launched as the fog prevented the crew from seeing that they were actually right on the shore.

The first boat ran onto rocks almost straight away. It took two hours for the ship to be located and the boat under the command of Second Officer, Mr Fisk, did not reach the Coogee Bay Hotel until 7 am (Maroubra was still not settled). At 9 am the pilot vessel Captain Cook and the tug Vigilant started on their way to Maroubra Beach. Together with the tugs Fearless, Newborough and Greyhound the ship was not able to be moved an inch.

Plates were opened up by hitting the rocks and water was in the forward hold. The swells were moving the wreck, lifting her up and dropping her on the rocks. Three tugs remained on location but stood out to sea during the night of 16 May. By the next morning the vessel was further up the platform. Divers reported that the hull was holed in the ballast tanks and bow. Meanwhile, salvage work went on and everything possible was removed and put on the tugs.

As attempts to refloat the *Tekapo* failed, the Union Steam Ship Company of New Zealand. submitted the hulk to the insurance company. Salvage went on till Friday 19 May when the hull was sold for £380, to, of all people, the Union Steam Ship Company. The seas had been very calm since 17 May 1899 and the ship had not suffered any more damage so it was still thought possible to refloat the ship.

On Monday 22 May 1899, the seas picked up dramatically and the *Tekapo* was hit by the swells. However, little additional damage was caused. The Union Steam Ship Company of New Zealand. had by now sold the wreck to Mr Mountenay (who had also purchased the *Hereward* just one year and a few days earlier - located less than 2000 metres to the north on North Maroubra Beach). His intention was to take the wreck apart piece by piece.

Wednesday 24 May 1899 was the Queen's Birthday Holiday and the residents of Sydney came in their tens of thousands to see the wreck. This was a forerunner of activities to come just over 30 years later when hundreds of thousands trekked out to Malabar and La Perouse to see the wrecks of MV *Malabar* (on page 87) and SS *Minmi* (on page 101) respectively. The people caught trams to Coogee and either walked or came by coach and bike to the southern end of Maroubra Beach. Some people walked nine miles from the city along Bunnerong Road.

The last report of the *Tekapo* wreck was on 31 May1899 when it was reported that the ship had broken into three pieces but "There is...a prospect of good salvage".

As usual, a Marine Board of Inquiry was held and it found that the wrecking of the *Tekapo* was caused by the wrongful act or default of Captain Herbert Sams by navigating too close to the shore and setting a course that set the ship on shore during fog. Captain Sams' Foreign Going Masters Certificate was suspended for six months from the date of the wreck.

On 22 June 1986, the anchor of the *Tekapo* was raised by Maroubra diver Greg Tannos and some other divers and taken to Rose Bay by boat. The anchor was then treated and it now stands adjacent to the Maroubra Surf Life Saving Club.

#### Location

To date I have not found any part of the wreck that would confirm it as coming from the SS *Tekapo*.

### Diving

There is some wreckage about 200 metres out from the sand of South Maroubra Beach in five metres of water. This could be from the *Tekapo* or from the SS *Belbowrie* (on page 5) which was wrecked not too far away on 16 January 1939. The wreckage here includes some bollards, plates (possibly confirming this as the *Tekapo* as the *Belbowrie* was a timber vessel) as well as a smallish winch.

Considering the size of the *Tekapo*, there must be a considerable amount of the wreck here as the boiler, engine and prop would not have rusted away.

If anyone has any more information on the exact location of the main part of the wreck, I would be happy to hear from you.

- Union Fleet 1875-1975 by I J. Farguhar. Published NZ Ship & Marine Society 1976
- Union Fleet by I J. Farguhar. Published NZ Ship & Marine Society 1968
- A Century of Style by NH Brewer. Published 1982 AH & Ald Reed Ltd ISBN O 589 014145
- Lloyds Register 1884-5, 1885-6
- The Union Steamship Co Steam Ships by J.E. Hobbs
- Some Shipwrecks in Randwick Municipality by T.L. Brignell pages 10 to 15
- Dickson Gregory Collection photographs 1.23, 2.13, 2.78, 18.32, 18.33, 18.42 and 18.43
- Nicholls Collection photographs 2:14, 7:14, 21:49, 34:8, 11 and 18
- Ernest G. Best Collection photographs 3858 (ashore on 12/4/1899!)
- History of Union Steam Ship Company of New Zealand Ltd 1875 1940 Union Steam Ship Co
- Union Line A Short History of the Union Steam Ship Company of New Zealand Limited 1875 – 1951 Union Steam Ship Co
- A History of Union Steamship Co. of New Zealand Vol 1 The Company by A. L. Arbon
- The Line that Dared A History of the Union Steam Ship Company A Centenary Edited by Gordon McLauchlan
- Merchant Fleets: Union Steam Ship Company of New Zealand by Duncan Haws, page 35

### Titan

#### History

In late 1992, in one of the more stupider acts against Australian cultural heritage by a Government, the NSW and Australian Governments permitted the giant floating crane, *Titan*, to depart Sydney Harbour for Singapore. The *Titan* crane was built in 1919 and had spent the past almost 75 years working the Harbour.

The crane was 58 metres high and able to lift 150 tons at a 27 metre radius and 100 tons at a 38 metre radius. The hull of the crane was 176' 10" long and 79' 8" wide and displaced 2,125 tons. The crane was not self-propelling and required two or three tugs to move around the Harbour. There were two steam engines driving generators (220kw) which provided the power for winches etc. A coal fired boiler 11 feet in diameter and almost 10 feet long heated the water to create steam.



Figure 61 - The *Titan* unloading the *Lady Southern Cross* from SS *Mariposa* 

On 16 July 1934, the Titan unloaded Altair Lockheed aircraft (rego VH-USB) from the freighter SS Mariposa. This plane was to be known as the Lady Southern Cross and was owned by Sir Charles Kingsford Smith. This place was was to be used by him in a number of record flights. breaking Kingsford Smith set records for Melbourne to Sydney, Melbourne to Perth, Perth to Adelaide, Adelaide to Sydney, Sydney to Brisbane and Brisbane to Sydney. Smithy flew the plane to the US and on to London. On a flight to Sydney, the plane crashed into the sea off Burma in November 1935. The plane has never been

During World War II, the *Titan* was used 24 hours a day, 7 days a week loading and unloading warships and cargo ships. During the construction of the Iron Cove Bridge, Spit Bridge and Gladesville Bridge the crane was also used.

I still have not researched the majority of years of the crane's life but the final owner was Cockatoo Island Dockyard. In 1976 the *Titan* was retired from normal work, although many times during the late 1970s and early 1980s when I worked in a building overlooking Darling Harbour, I would see the mighty crane, moved by a tug, come alongside a 50,000 tonne freighter. With great skill, the *Titan* would delicately lift a large power or sail boat off the deck and gently place it in the water. Sometimes even more interesting things would be taken off and placed on the wharf, including once a Sikorsky S61 helicopter bound for the Queensland island resorts.

Despite what I saw, apparently she was no longer in fulltime use and only brought into work when the conditions dictated. For example, on 24 January 1984 the *Titan* lifted the ferry *Karrabee* to the surface after she sank at Circular Quay at the end of the Great Ferry Race. In 1985 she lifted the three sections of the two Japanese midget submarines that were sunk in Sydney Harbour in World War II off a wharf, onto her deck and then transported them to Cockatoo Island where they were restored before being sent back to the Australian War Memorial in Canberra. In 1985 she also lifted the old timber Sydney ferry *Kanangra* from the water onto the island.

In 1989 the *Titan* lifted the famous British steam locomotive the "Flying Scotsman" onto a ship for her return to England. The train had been in Australia for a Bicentennial event where it was on active duty with her Australian conterpart, 3810.

Apparently the same year the Cockatoo Island Dockyard surveyors decided to only survey the *Titan* for three months instead of the normal 12 months. It is alleged that this was because the were concerned about the condition of the hull plating but I am not certain about this, it may just have been that the dockyard did not want or need the *Titan* to be surveyed for the whole year (eg save money or defer major repairs).

In 1990 the *Titan* was classified as an example of early 20th century heavy industrial structures by the National Trust. Around this time the decision was made by the Federal Government to close Cockatoo Island Dockyard. The *Titan* was put up for sale and she was purchased by McKenzie Salvage Corporation of New Zealand for \$25,000. There was an uproar over this and to make matters worse, McKenzie sold the *Titan* to Wirana, a Singapore company. As part of the sale, the steam engines and generators were removed and kept for later display (where are they now??). Wirana applied for an export permit under the Protection of Movable Cultural Heritage Act 1986 (since the crane had been classified by the National Trust) and a "temporary" export permit was appoved. A condition of this was that the *Titan* had to be returned to Sydney by July 1995.

It is also stated by Jack Clark (see references) that the move from Australia to Singapore was only temporary to offload burnt containers from a ship called *Ocean Blessing* and to assist the salvage of a Russian naval vessel stranded in India. The crane was to come home to Sydney in June 1993. However, I do not recall any such information being published at that time that supports such a claim, but it may be correct.

Therefore, for reasons that now seem unfathomable, the *Titan* was sold overseas. The outcry over this action was huge. People attacked the loss of this unique piece of Sydney's heritage and mariners stated that it was impossible to safely tow the crane to Singapore. Most of this concern appears to have been based on the top-heavy design of the crane rather than the condition of the hull itself. A committee of independent experts inspected the crane and stated that they had reservations about the ability of the *Titan* to be towed to Singapore. Despite this, they did not find any reasons to prohibit export.

Eventually, on 22 or 23 December 1992 the *Titan* left Sydney Harbour bound for its new home of Singapore under the tow of the ex-New Zealand Government fisheries research vessel *Rapuhia*. It was towed stern first. The hull of the crane had allegedly been sealed (however there are now holes to enter the hull so this seems not to be true) and the crane placed in its lowest position to lower the centre of gravity.

The weather was strong northerly winds (up to 20 knots) and a strong current from the north of around five knots. On Christmas Day the winds were up to 26 knots and seas up to two metres. That night at 10:50 pm, disaster struck the *Titan* as forecast by all the experts (except those paid for their advice by the new owners). It is stated that at that time the towline jerked and towline parted. It is also said that the crew discovered that the *Titan* had capsized. However, news reports at the time indicated that it was not until morning that the crew of the *Rapuhia* saw that something was wrong. That was a giant understatement! The crane was now upside down and all that could be seen at the end of the towline was the hull of the *Titan*. News reports at the time indicated that it had turned turtle sometime during the night off the coast near Smoky Cape, South West Rocks (near Kempsey). Imagine, the crew

had not even noticed what had occurred to the crane except to think that there had been a bit of a current during the night slowing them down.

The *Titan* was towed south and into shallower water and after consideration (advice from commercial divers and others), it was decided to drop the *Titan* in 40 metres off Perpendicular Point at North Haven, just south of Port Macquarie. This was at 9 pm on 27 December 1992 after divers had inpsected the crane and discovered that the top section of the crane was not longer there (it fell off at Smoky Cape).

There was an investigation by the Maritime Incident Investigation Unit of the Commonwealth Transport and Communication Department under Captain Kit Filor. He found that the *Rapuhia* was not registered, in fact her papers stating that it was registered in Honduras were forged. In addition, the Mate and Chief Engineer also had false papers. However, he could not find an exact reason why the *Titan* capsized but he theorised that rivets had failed and water entered through hull plates. Further, he stated that the high centre of gravity of the crane jib may have caused or at least contributed to the the tragic loss. However, I am certain that it was the high centre of gravity and the large seas that caused the *Titan* to tip over.

In early 1993, Paul Doney, former owner of Sydney's Pioneer Diving (now Pacific Coast Diving Clovelly) was hired to do some work on the wreck to make it safer for divers. In February 1993 he invited Jim Glass up to dive the wreck and Jim wrote an article for *DIVE Log* which was published in the March 1993 issue. Jim also prepared a drawing of the *Titan* as he saw it.

#### Location

I do not have an accurate description of the wreck's location.

#### Diving

I had attempted to dive the *Titan* since Easter 1993 but the weather conditions had defeated me time after time. Finally, in September 1995 I had the chance to dive the *Titan* with a Sydney dive club of which I am a member. The then dive operator (he has now gone out of business) pointed out that this is a dive for divers certified as "advanced divers" and would only take persons certified as such.

On the first day of our dive weekend, we arrived over the site and anchored. There was a current of about 1.5 knots but I had no real problem swimming against it to the anchor line. However, the trip down the line was a problem. The current continued all the way to 40 metres and I used 50 bar of air during my trip down, primarily because I was carrying a video camera and could not assist my descent by pulling myself down. I also took four minutes to reach the hull compared to one and a half minutes normally. My air consumption during this part of the dive reached 33.4 litres per minute (surface rate) as measured by my Aladin Air X dive computer. Compare this to my normal rate of 13 to 14 litres/minute on a deep wreck. Once I reached the wreck I found myself still in the current so I dropped down a bit on the hull where I rested till the others arrived. Straight away I realised that the wreck was very different to that shown in Jim Glass's diagram. The shallowest part of the wreck is now just over 30 metres, compared to 20 metres in February 1993.

My breathing rate stabilised after a minute or two and I dropped off the hull (after another hard swim) to the sand bottom. I soon saw why there was a difference. The superstructure of the *Titan* (the crane base) has sunk into the sand so that the wreck is now almost totally upside down. The depth of almost 40 metres means you only have about 11 or 12 minutes (using Aladin computers) before entering decompression diving. I soon encountered more trouble when I moved under the wreck to get footage of my buddies. I put my hand on the sand to stabilise myself and was hit by a electric shock from a hidden numbray. My hand and arm started to hurt and I wondered whether my Air X might have been affected (it was not). More care is needed, I thought, as one buddy disturbed yet another numbray.

Finally, I get to see the wreck. The deck has bollards, a cabin of some sort and the giant circulating crane base. We swam under nearly half of the deck before deciding to surface a

little early due to the current. It had not decreased and I used even more air while ascending (33 litres/minute) and it was very difficult to hold on to the line while holding a heavy camera. I decide against trying the deco bars for a number of reasons. As I return to the ladder, I see the bars at 45 degrees without anyone even touching them.

As we get aboard, we all agree that it has not been a pleasant dive but due to the experience of the divers in our group, we have not encountered any real problems. Later that day, more members of the group dive the *Titan* and the current is even stronger than in the morning, probably just over two knots. These divers collectively are even more experienced than the morning group so they survive.

The next morning we do the *Titan* again (we are persistent if nothing else) and find the current about the same as my first dive. I did not take my camera and found it considerably easier. We swim around the entire deck area and look inside some of the hatches (thus disproving the claim that the hull had been sealed before leaving Sydney). We also found that it was dangerous to get too close to the end of the hull as the current could easily sweep us away from the wreck into the murky water.

Well, what are my thoughts now as I write this article? Firstly, I am dismayed at the stupidity that permitted the *Titan* to leave Sydney Harbour. Secondly, it is a now very good dive site that could provide a number of enjoyable dives to experienced (rather than "advanced") divers who have done some deeper diving in similar waters. Thirdly, even experienced deep divers must take great care due to the almost constant current present on the wreck (everyone I know who has dived it has encountered strong currents). However, for reasons I cannot go into here, I stated in 1995 that I would not recommend this dive to anyone. Why? Because the dive operator was dangerous.

#### Note:

I understand that the local dive shop is no longer operating. I believe that the Port Macquarie dive ship will dive the *Titan*.

- Cockatoo Island Sydney's Historic Dockyard by John Jeremy pages 185 to 191
- AFLOAT.com.au (a monthly magazine), February 2000 issue, page 11 to 13, article by Jack Clark. See <a href="http://www.afloat.com.au">http://www.afloat.com.au</a>.
- A web site about planes http://www.adastron.com/lockheed/altair/h54vhusb.htm

## Trio

#### History

While most of the wrecks off the Northern Side of Sydney were deliberately scuttled (see other articles) there are a couple of excellent "real" shipwrecks. One of the these is the *Trio*, a large barge about 50 metres long. It is located off Mona Vale Beach at a depth of 51 metres. The deck of the barge sits about five metres off the sand. Just how this wreck came to be located here I am not sure. I am not even certain that the wreck's name really is the *Trio* as I have not been able to find any record of the vessel in Lloyd's Register or any Australian books or registers. The story I was told is that it was being towed from Pittwater to Sydney Harbour when it sank along with its cargo.

#### Location

To find the wreck, travel about 4 kilometres north of the Long Reef wreck site towards Bangalley Head until you are two kilometres off Mona Vale Beach. GPS marks of 33° 41′ 01″S 151° 21′ 54″E puts you near the wreck. Line up the Bahai Temple (the white dome on the horizon) above the right-hand side of the top floor tower of Mona Vale Hospital. Run out to sea until Barrenjoey Head appears behind Bangalley Head. Turn your depth sounder on and run slowly back in on the marks. The depth will be 54 to 52 metres and will come up slightly to 51 as the northern mark of Barrenjoey starts to disappear behind the Bangalley Head. Just before it is completely lost, the wreck will show on the sounder, the wreck being 46 metres. Manoeuvre over the wreck and drop anchor. Unless you drop right on the wreck you are unlikely to drag back onto it. See GPS and Marks Page (see page 150) for more details.

# Diving

As indicated above, the sand below the wreck is about 51 metres and the hull sits about five metres off the sand. Even more interesting about the wreck is that it has a fair sized ferrocement yacht in the middle hold. In about 1991 the yacht was in pretty good condition but today it is completely stuffed. The other large rear hold as well as a smaller forward hold is empty and the steering compartment stands right at the stern. Inside the compartment is a toilet. In front of the compartment is a below deck compartment. A large winch and a number of bollards are located at the bow.

Only worth a couple of dives every now and again.

# SS Tuggerah

#### History

The SS *Tuggerah*, lying 2.2 kilometres off the coast of Royal National Park on Sydney's south, was one of the "Sixty Miler" steam powered colliers that plied the New South Wales coast for about 140 years from the mid-1800s till the 1990s (yes, the last one did not actually finish until the early 1990s). Built by Clyde Ship Building and Engineering Company Ltd at Port Glasgow, Scotland for the Wallarah Coal Co. Ltd, the *Tuggerah* was launched in October 1912. Displacing 749 tons and 50 metres long, it was powered by a triple expansion steam engine with the steam provided by two scotch boilers.

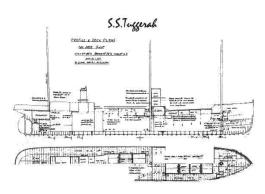


Figure 62 - Plans of the SS *Tuggerah* Plans Courtesy of Les Caterson

The *Tuggerah* was used on both the southern and northern coalfield runs and had a relatively incident free career until she ran aground near the entrance to Wollongong Harbour on 26 October 1918. It suffered a fair bit of damage and required repairs back in Sydney at the Morts Dock.

Less than five months after the loss of the SS *Undola* (on page 140) off Garie Beach in Royal National Park and less than six weeks after the loss of the SS *Myola* (on page 104) north of Sydney Heads, the *Tuggerah* was to be lost in a violent storm.

After loading 820 tons of coal at the Bulli Jetty on Saturday 16 May 1919, the *Tuggerah* put to sea at 2.30 pm. During the preceding few days, fairly strong seas had been running along the coast but the weather was not exceptionally rough at the jetty. When she left Bulli, the *Tuggerah* was noticed to have a slight list to port and coal was not evenly distributed in the holds and 10 tons of coal was on the deck. Rather than trim the boat and fix the hatches before leaving the wharf, the skipper, Captain McConachie, decided to do it at sea. It is not known why the coal was not trimmed before she left Bulli, but a good guess is that it would have delayed the *Tuggerah* and cost the owners money. Soon after passing Bulli Reef, it became obvious that the seas were worse than previously thought. Despite this, the ship continued north, all the way taking water on board due to the list and the fact that the two hatches were not in place. The crew faced considerable difficulty in trimming the coal due to the seas.

Just after 4 pm when off Marley Beach in Royal National Park, a huge wave, later estimated as six metres, came over the port side. Within a few minutes the *Tuggerah* "turned turtle, and sank"

As the ship rolled, Captain McConachie saw she was doomed and ordered the lifeboat to be launched. The *Tuggerah* went down stern first and the survivors scrambled into the only lifeboat salvaged. After an hour searching for other survivors, the 11 lucky crew rowed to Port Hacking, arriving there at 7.15 pm. Six persons died, including Captain McConachie. However, one survivor was Thorvald Thomsen. Six weeks earlier he had been absent from the SS *Myola* (on page 104) when she sank (all the crew were in quarantine due to influenza) and almost 30 years later he survived the sinking of the SS *Bombo* (on page 14).

A Marine Court of Inquiry was held but it did not find anyone to blame for the sinking. Subsequently, a Royal Commission into the loss of the *Undola*, *Myola* and *Tuggerah* was held (as well as the trade generally) but it did not really achieve anything.

I am not sure when the wreck was found by scuba divers, but in mid-1973, one anchor was raised and given to the Gooyong Sea Scouts at Woronora and a well-known Sydney wreck diver has the bell.

#### Location

The *Tuggerah* is an easy wreck to find and the marks and my GPS readings will bring you right over the wreck. The GPS reading for the *Tuggerah* is a latitude of 34° 08' 21" S and longitude of 151° 09' 02" E. See GPS and Marks Page (see page 150) for more details. While running in towards the south-western mark, the wreck will show up huge on your depth sounder due to the quantity of fish hovering over the wreck. Turn and follow the wreck to the north-east, dropping anchor on or just off the wreck (in a north-easterly). The maximum depth is almost 49 metres (under the prop) and a dive averages 45 metres.

### Diving

Once you are sure the anchor has bitten, quickly head to the bottom and secure the anchor. It should be noted that the *Tuggerah* very often has strong currents on it, normally from the north but sometimes from the south. These are normally only at the surface but occasionally go right to the bottom. At such times you will sometimes have to use a cross-over line to pull yourself to the anchor line. Be extremely careful as it is very common for divers to be swept away from their boat here.

It may even be that you will not be able to dive due to the current. This, of course, almost always coincides with blue water! This has happened at least twice to me in 1998, most recently 5 August 1998 when the visibility looked to be in excess of 30 metres but the current was too strong to dive. If in doubt, play it safe and forget about the dive (try the SS Undola as it is closer in and normally diveable when the *Tuggerah* is not). I have now dived the *Tuggerah* over 40 times and I have not dived it at least 15 times due to currents that made us abandon our attempts. This is, without doubt, the best dive in Sydney. The wreck, the fishlife and the normal visibility combine to make this an unbelievable dive location.

The first thing you will see as you descend is fish. Millions of them! The bullseyes, nannygais and yellowtail totally envelope the wreck, making it very hard to see the wreck itself. Once you hit the bottom and have secured the anchor, look around. If you see large items, bigger than you, you are at the stern, if the pieces are broken up (girders, RSJs etc) you are towards the bow. The sand in this area was cleaned out by a metre or more in about 2002.

Today the *Tuggerah* is lying on its port side at a maximum depth of almost 48 metres off Wattamolla in Royal National Park. Like all of the older Sydney wrecks, the depth of the wreck has not really protected the "Tug" and it has been greatly affected by the huge seas that pound the Sydney coastline from time to time. While the rear of the ship is intact to a certain degree, the area in front of the boilers is totally destroyed by the combination of seas and rust. In mid-March 1994, the huge seas caused a large plate in front of the rudder to come free of the rest of the hull, a further breakdown of the wreck's structure.

On the weekend of 10 and 11 May 1997, further damage was caused to the wreck by the worst seas I have seen in Sydney since the infamous storms of May 1974. A large plate above the boiler fell down between the boiler and hull, partially blocking the swim-through that used to be in this area. This has now fallen even further down and the area is again clear. Another hull plate has fallen from in front of the rudder and the whole plate area behind the engine is now very rocky. There is also some more damage in the rudder/prop area with large hull plates coming totally or partially free.

If you see the broken up part of the wreck, follow the wreckage to the south-west. After a maximum of 20 metres you will come across the boilers. Normally, the fishlife is so prolific that you have to be as close as two metres to actually see the boilers and a strong torch is required due to the light being blocked by the fish. Careful looking will show you that there are indeed two boilers, with the starboard the boiler the one you can see and below it, mostly buried in the sand, the port boiler. The boilers are virtually intact and often home to

wobbegong sharks. As you look at the front of the boiler, there is a toilet a metre or two from the right hand corner and the hull of the *Tuggerah* looms up to your left. On a later dive, when you have a better understanding of the layout of the *Tuggerah*, you can swim between the boiler and the hull to the remains of the engine room.

For now, swim around the right side of the boiler to its rear. On the sand to your right you will see the remains of the ship's funnel and behind the boiler the huge pistons and conrods of the steam engine. Behind this there are the remains of the steering gear compartment. On one dive I discovered a human vertebrae under the engine and close to the rear of the boiler.



Figure 63
Looking back towards the starboard boiler of the Tuggerah – the large item top right is the boiler and the hull bottom is to its left

Off on the sand near the bridge you will sometimes be able to see the extremely difficult to find stargazers. These incredible (and ugly) fish bury themselves completely in the sand and leave only their eyes visible. On a dive here in mid-June 1997, I saw two stargazers. One was a very large specimen and the other was a small (25cm) fish. When disturbed by another diver, the second stargazer started to rebury itself in the sand only to be attacked and eaten by a giant cuttlefish. Both of us watched in amazement as this swift and deadly attack (it certainly could not be called a fight as there was no response from the stargazer) occurred right under us less than a metre away. To make it even better, I caught the whole thing on video! Since then I have seen a stargazer on every dive here.

Continue past here and you will see the prop and rudder. Under the prop there is a concrete filled tyre, the remanent of a pollution experiment buoy which was dragged onto the wreck by a fishing trawler in late 1992.



Figure 64 Sheila Baldock and Les Caterson approach the prop and rudder

Photographers will want to go under the prop (with one blade broken) to take the obligatory photo but beware of the wobbegongs and numbrays that are often found here. On the sand below this section of the wreck you can nearly always see serpent eels and fat sea pens.

Continue your dive along the shear walled hull of the vessel until you see the broken bits lying on the sand (see the above photo). You are now just in front of the boiler. Return to your anchor.

All over the *Tuggerah* you will find wobbegongs and giant

cuttlefish. The wobbegongs inhabit every nook and cranny. Many a time I have accidentally knelt on one in the dark steering compartment while setting up a photograph. As well as these fish, yellowtail kingfish, trevally, bream and red morwong can be found. Divers regularly see seals, both on the bottom and on the way down or up, and even sunfish, dolphins and penguins have been seen on the wreck. During late Winter, up to 75 Port Jackson sharks can be seen on a single dive on the wreck. In August 1999 I saw at least 100 sharks at the bow. In August 1998 and 1997 I saw 50 to 75 in the same area. In July 2000 there were about 100 on the wreck (I gave up counting at 85).

The sand is also home to large numbers of numbrays, serpent eels and sea pens.

As I indicated above, this is a magnificent dive, possibly the best in NSW. The combination of the interesting wreck, the prolific and varied fishlife (and marine mammal life), makes every dive there exciting. Even after 50 dives on it, I never tire of it as a dive location.

As with the nearby SS *Undola*, the *Tuggerah* is a very deep dive, only for the trained and experienced deep diver. More so than the *Undola*, the *Tuggerah* needs additional care due to the currents and its deeper depth.

- Sydney Morning Herald 19, 20, 22 May 1919
- St George and Sutherland Shire Leader 20 June 1973 page 27
- Lloyds Register 1917-18
- Vanished Fleet of the Sydney Coastline by Max Gleeson page 101-110

## SS Undola

## History

The SS *Undola* was a sixty mile collier designed by William Sinclair of J. Wildridge and Sinclair Ltd, Sydney. Originally she was designed for E. Vickery and Sons Ltd which owned the Coal Cliff coal mine. However, in April 1909 the ownership of the coal mine changed to Coal Cliff Collieries Ltd, the majority shareholder of which was E. Vickery and Sons Ltd. Therefore the plans for the new ship were taken over by the new company and in May 1909 an order was placed for the construction of the new ship by J. Fullerton and Company, Paisley, Scotland. The contract cost of the vessel was £7,675, paid in five equal instalments of £1,535.

The ship had a triple expansion coal powered steam engine with a rating of 580 hp. The front hold of the collier held 160 tons of coal and the second hold 260 tons. There was a mast between the two holds and this held the coal handling grabs. The *Undola* was specially built for the Coal Cliff wharf from which it was expected to mainly operate. The new design had a quite shallow draught and also had self-trimming hatches to minimise time spent at the wharf. Of note is the fact that the ship did not have electric lighting as the owners decided that the cost of £225 was excessive.

The original plan was for the new ship to be named SS *Hilda* after the collier that sank 13 years earlier off Cape Baily on Sydney's southern edge (on page 65). Instead, it was named SS *Undola*, presumably after the locality in the southern section of Royal National Park, when the British Board of Trade declined to register the name *Hilda*.

The ship was launched on 13 October 1909 (one source says November, but this may be when it was handed over to the owners). The *Undola* displaced 429 tons and had a length of 41 metres and a beam of 8 metres. On about 13 November 1909, the *Undola* left Scotland under the command of Captain James Leslie. She arrived in Sydney on 26 January 1910 after a voyage of 74 days. The cost of the delivery voyage was £1,365. On arriving in Sydney she was given a quick overhaul at Grants Wharf, Pyrmont, had her coal handling equipment installed and was dry docked at Morts Dock where her hull was scraped and painted. In late February 1910 she entered service on the southern coalfield run. Virtually all her career was spent on this run but in her later years she made a few runs to the Newcastle coalfields.

Although owned by Coal Cliff Collieries Ltd, the *Undola* carried coal for an organisation called "The Southern Coal Owners' Agency" for a great deal of her life. From when she entered service in February 1910 till June 1915 the ship was hired by the organisation for certain trips and payment was on the basis of the tonnage carried. From July 1915, the arrangement changed to one where the ship was chartered to the organisation for £150 per month.

The Coal Cliff wharf was used by the *Undola* only till 1911 when it was closed. Despite the fact the ship was especially designed for the wharf, she continually hit bottom while loading and sometimes had to abandon loading altogether. For this reason, the wharf was closed and the mine sent its coal to Sydney by the railway. She then operated out of the other wharves on the southern coalfields, presumably including Bulli, Wollongong, Port Kembla and Bellambi.

During her first five full years of operation, the *Undola* was heavily used. The annual carrying capacity of the ship was 63,200 tons of coal and the attached table shows her usage. This indicates that even though the ship was often subjected to poor sea conditions, it was still heavily used. Note also the profit (or lack of) made by the ship.

Financial Year Ending 31 March	1910/11	1911/12	1912/13	1913/14	1914/15
Coal Carried - Tons	46,382	45,226	48,348	44,459	46,830
Percentage of capacity	73.4%	71.6%	76.5%	70.4%	74.2%

Despite this, the ship only turned a profit in 1912/13 (£304) and lost a total of £2,159 in the other years for a total loss of £1,855.

It is reported that the *Undola* was a good ship and she handled rough seas quite well. In addition, the ship was well maintained and the designer, William Sinclair, supervised all work on her.

In November 1910 the ship was drydocked for a routine maintenance. During this work, it was noticed that the keel of the ship under hold one was "hogged", that is, pushed upwards by 2 1/2 inches. After some consideration, it was agreed that this damage was caused on 13 September 1910 when in a heavy south-easterly gale and carrying 45 tons of water ballast in hold one, the *Undola* rose considerably out of the water and hit hard. Only minor repairs were possible at this time.

In June 1911 the *Undola* was dry docked for more substantial repairs at Morts Dock in Sydney. At a total cost of £1,082, the hull was strengthened, the damage repaired (£499) and routine maintenance carried out.

On 14 April 1911, the collier SS *Brisbane* had just loaded 1,300 tons of coal at Port Kembla when she broke her moorings and ran aground on rocks between Big Island and the shore. The *Undola* was at Wollongong Harbour and went to the larger ships aid. A boat from the *Undola* carried a large rope over to the stranded vessel but it snapped. A second rope suffered the same fate. However, the third attempt was successful and the *Brisbane* was pulled off the rocks and the rope later also snapped. The Coal Cliff Collieries Ltd sent the owners of the *Brisbane* a bill for £1,500 but was awarded £600 by the Admiralty Court. Of this sum, the owners received £350 and the crew shared £250.

In May 1911 the *Undola* broke her steering chains off Bondi, an event that apparently happened more than once.

Some time in 1912 (possibly December or just before this), the *Undola* collided with the SS *Moana* owned by the Union Steam Ship Company of New Zealand. This was obviously only a minor incident as the cost of damage to the NZ ship was only £25. At another time the ship collided with a launch owned by Morts Dock and caused £15 damage.

Apparently, in 1916, an offer to purchase the *Undola* was rejected. The price mentioned, £14,000 was considerably above the purchase price and as it was losing money every year, it is a wonder that the owners did not sell her then.

From 8 August 1917 to 21 February 1918 the *Undola* was idle due to the prolonged coal miners' strike. In July 1918 the *Undola* gave assistance to the *Malachite* (I am not sure where or how).

Late in the afternoon of 20 December 1918, the *Undola* finished loading its cargo of coal at Bellambi, 70 kilometres south of Sydney Harbour. The weather that day was extremely hot, with the Sydney temperature hitting 101°F at 1 pm. At 2 pm a southerly buster hit, dropping the temperature over 30°F in less than two hours. The winds picked up to 44 mph and presumably the seas also became very large. Despite this, the *Undola* left for Sydney as planned under the command of Captain Arthur McDonald.

The next morning, the *Undola* did not appear at its berth in Sydney Harbour as planned. Alarm was raised and later some wreckage was found on the Cronulla beaches. This led to the fear that the *Undola* had gone down somewhere off Royal National Park. Search parties were sent out but all that was found was more wreckage on the beaches and rocks. The owners of the ship hired the tug *Koputai*(now scuttled off Sydney in 75 metres) for £45. The

tug searched for the wreck for a few days after the sinking. A few days later a lifebuoy with the *Undola*'s name on it was discovered on a Wollongong beach, confirming that the ship had sunk with the loss of all 11 crew members.

Over the years many different theories have been put up as to why the *Undola* went down, including one that it hit a German mine (some were put down in the First World War off Gabo Island on Victoria's northern coastline). However, the most likely theory, in view of the weather and the loss of other ships (the SS *Myola* sank off Sydney Heads just over three months later - on page 104 - and the SS *Tuggerah* went down near the *Undola* only five months later - on page 136) was that the seas, possibly combined with an unstable cargo, caused the *Undola* to either take water and sink or to turn turtle and sink.

#### Location

Today the wreck of the *Undola* lies 2.5 kilometres off Garie Beach in Royal National Park at a maximum depth of 45 metres and an average depth of 43 metres. The location of the ship by an average of GPS readings is 34° 10′ 51″S and 151° 05′ 32″E. The *Undola* is a bit more difficult to find than the Tuggerah as it is a much smaller and lower wreck. However, once you have the right marks, it is fairly easy to locate. See GPS and Marks Page (see page 150) for more detail. Of course, its depth means that this is not a dive for the inexperienced or even an experienced diver without deep diver training.

#### **Diving**

Today, the *Undola* lies upright on the bottom (supporting my theory that it did not turn turtle), with its bow facing to the north-east. The rear section of the ship is the most intact, with the prop, rudder (turned to starboard indicating an attempt to turn to the right) boiler and engine easily visible. The engine is a triple-expansion steam engine and it sits up high over the rest of the wreck. Under the engine area, a number of interesting things have been found. On one dive, my buddy found a fob watch and on another I found a human vertebrae.

The area in front of the boiler is well broken up, with only beams, cross-members and some hull remaining. However, the bits are still very much in the shape of a vessel. Towards the bow on the port side you will find the remains of one of the two most photographed features of the *Undola*. This is a toilet which sits out in the open. You can still read the name of the manufacturer, "Shanks and Co. Ltd....Barrhead", on the inside of the bowl! The second feature was the fishing nets which were hooked onto the wreck and used to reach towards the surface, supported by numerous buoys. However, the nets are now gone (they disappeared in late 1994 or early 1995) and only bits remain.

The only major changes to the wreck itself in the past decade is that some small sections of the starboard hull have collapsed outwards, sometimes pulling other parts with them. The small size of the wreck means that even on your first dive here you can get a brief overview of the whole wreck without going too far into decompression.

Like its more famous neighbour, the SS *Tuggerah*, the SS *Undola* is alive with fish. As well as the millions of nannygais and bullseyes over the wreck, schools of yellowtail kingfish often visit and circle the wreck while huge old man snapper were present in 1996 and 1997 in large numbers. Sunfish and seals have been known to drop in on divers. The boiler tubes are home to conger and moray eels and the sand supports numbrays, sea pens and serpent eels.

The *Undola* sometimes has a current from the north so you will need to check after anchoring. However, many times I have dived here after abandoning attempts to dive the *Tuggerah* due to the extremely strong currents there. On these occasions we have normally found no current at all although on 5 August 1998 after abandoning an attempt to dive the *Tuggerah* due to the current, we also had to abandon a dive here as well. The visibility is usually good and my last seven dives here have averaged 15 metres and on 21 June 1998 we had at least 35 metres. Do not be put off by dirty water on the way down, it can be quite clear at the bottom.

A fantastic dive for the very experienced deep diver.

- SS Undola A Collier in the Illawarra Trade by B. Rogers
- Sydney Morning Herald 24, 25, 28 and 30 December 1918, 1 and 7 January 1919
- Lloyds Register 1917-18
- State Archives of NSW
- Vanished Fleet of the Sydney Coastline by Max Gleeson

## Valiant

#### History

The *Valiant* was apparently commissioned in 1945 by the Ministery of Munitions. The tug was 22.5 metres long, 5.4 metres wide and displaced 72 tons. A sistership, the *Fury*, was built at the same time. The *Valiant* was powered by a Crosley HR4 diesel engine giving a top speed of only 8 knots.

After the end of World War II, ownership of the *Valiant* passed to the Melbourne Harbour Trust Commissioners. It appears that the ship was modified at this time, with water tanks added, the foredeck lowered and equipment added to suit her new role as a fireboat. It appears to have operated out of Melbourne. I do not know much more about its history but in 1975 it was still registered to the Commissioners.

I have read that it was purchased in 1978 by a Sydney company and taken to Pittwater on the northern side of Sydney for conversion to a fishing vessel (presumably as a charter vessel to take people out fishing). The *Valiant* was reported to have failed the Maritime Services Board survey.

Another report, says that the vessel was sold in 1980 to David Jackson and taken to Sydney. On the way, there was a fire on board. On arriving in Pittwater, the northern boundary of Sydney, there was work done in an attempt to get her in a condition to make the vessel useable. However, this was beyond Mr Jackson's abilities and it was decided to strip the vessel.

One report says that in 1981 after a complicated series of events while under tow to be scuttled, the tow ropes broke and the *Valiant* sank approximately one kilometre east of Barrenjoey Head. However, it is also reported that it sank in 1982 "sunk about 0.5 km off Palm Beach.....while being towed to its burial at sea.....was a 25m former firefloat.....". Yet another report says that when an explosive device was used to remove the prop, the ship started coming apart at the seams. The ship was quickly towed out to sea to be scuttled in deep water but she sank well before reaching the target area. I am not sure what year this was, but I expect that it was 1981.

### Location

The *Valiant* is now located approximately one kilometre east of Barrenjoey Head at GPS Reading 33° 34' 48"S 151° 20' 40"E. See GPS and Marks Page (see page 150) for more details. There is normally a mooring owned by Atlantis Divers on the wreck and you can use it but be prepared to make way for their boat if they come along.

### **Diving**

The wreck sits at a depth of 27 metres and sits upright with an increasing list to port. It is basically intact and is now covered in marine growth which attracts large numbers of fish species. Due to the depth it is advisable to spend only 25 minutes exploring the wreck but this is generally satisfactory as the whole wreck only covers a fairly small area. You can swim around and over the wreck as well as exploring the tug's insides a number of times during a dive. The engine room, cabins, crew quarters and bridge are accessible and well worth examining.

The wreck can have visibility varying from excellent to extremely poor and the surface conditions are not always an indication of what it is like at the bottom. It is also possible to have a tidal current on the wreck, though it does not generally extend past 5 or 10 metres.

Fishlife on the wreck include yellowtail, white ear, bream, mado, stripey, black-tipped bullseye, common bullseye, sergeant baker and the occasional yellowtail kingfish.

This is an excellent dive for those wishing to do deeper or wreck dives.

## Note:

Despite what you may read elsewhere, even in the literature of the local dive shop, the correct name of the wreck is Valiant and not Valiant.

- Scuba Diving in Northern NSW by Tom Byron page 163-4
- Ships that Serve Australia and NZ (Vol 1 Ed 1) by R.D. Fildes, 1975, page 127
- Drawing by unknown person

## TSS Wandra

#### History

Although the TSS *Wandra* is an extremely small wreck, it is one of the most enjoyable wreck dives in NSW. The *Wandra* was a wooden coastal cargo ship constructed by D. Sullivan at Coopernook in the Taree area of NSW in 1907. Owned by Allen Taylor and Company, the ship was 36 metres long and displaced 164 tons. The small vessel had twin

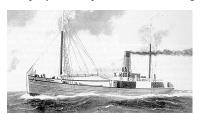


Figure 65
A drawing of the TSS Wandra

compound engines which were powered from a single boiler.

On 15 December 1915 at 2pm, the TSS Wandra left Moruya Heads with a cargo of timber for Sydney. She passed the Point Perpendicular Lighthouse (at the entrance to Jervis Bay) at 9.20 pm with a moderate south-easterly winds and sea. One mile off Crocodile Head (a few kilometres to the north of the light), a wave came over the bow and then another. The hull's timbers came apart under the pressure of the waves and water flowed inside. She listed badly to port (why do most ships in NSW list to port before sinking?). The

ship's pumps were started but made no difference. The *Wandra* was out of real control but Captain Reubin Lucey managed to steer her further along the coast and into the relative safety of The Drum and Drumsticks where the anchor was dropped.

The crew lowered one of the lifeboats and climbed aboard. As Captain Lucey entered the lifeboat, the *Wandra* sank. The 12 survivors (everyone on board) rowed to shore (probably a small protected inlet to the west-north-west) and then walked to Point Perpendicular where they arrived at 1.30am.

### Location

The remains lie at 26 metres on a sand bottom straight next to the rocky reef at GPS Reading of 35° 02' 49"S 150° 50' 18"E. See GPS and Marks Page (on page 150) for more details.

#### Diving

The wreck of the *Wandra* does not cover a large area, but it makes up for it in quality. The large boiler is only metres from the reef and nearby are the twin engines, still connected to the props by the driveshafts with the rudder nearby. The timber of the hull can still be seen in parts as can the bolts that held her together. A local Jervis Bay diver has the ship's telegraph. He found it under the sand.

The load of timber carried by the vessel is scattered about as are other pieces like winches. There is a winch right behind the engines and another huge one in front of the engines where the bow would have been located. There is a bollard near here and some anchor chain can sometimes be seen above the sand. The remaining cargo is rotting away, victim of time and marine animals.

An excellent dive, usually with calm seas and good visibility.

- Shipwrecks, Storms and Seamen of the New South Wales Coast by Max Gleeson
- Scuba Action Riley's Wrecks article by John Riley, date unknown
- Scuba Action list of top NSW wrecks by John Riley, Sept/Oct 1986
- Sydney Morning Herald 17 December 1915
- North Coast Run by Michael Richards

- *Jervis Bay* by Tom Byron
- *Lloyds Register* 1910-11, 1913-14

## SS Woniora

## History

The SS *Woniora* was a collier built in Newcastle, England, by Richardsons and launched in April 1868. The new vessel was 42 metres long, 6 metres wide and displaced 226 tons. She had a simple two cylinder engine, one of only two to be found on NSW shipwrecks (the other is the SS *Lady Darling* at Narooma – see page 72). The original owner was Lloyd & Co of Sydney.

At sometime between 9pm and 10pm on Saturday 28 October 1882, the *Woniora* was on her way from Bulli to Sydney with 242 tons of coal when she was hit by a "tremendous cross set". The ship rolled on her beam ends and gradually sank. She was south-east of the entrance of Botany Bay. Fifteen of the sixteen crew went to their deaths. The ship was reported to be not overladen for calm weather but considering the seas were at times enormous on the day in question, it was severely overloaded. The decks were constantly filled with water as waves came over the bow and sides.

Heinrich Frederickson, the survivor grabbed a plank and soon after came across a boat which he strapped the plank to, making a sort of outrigger canoe. Using an oar he found, Mr Frederickson steered his makeshift boat and landed at Kurnell opposite La Perouse in Botany Bay. He was so exhausted he lay down in the scrub and but in the morning he heard a cock crow and following the noise he found the residence of Mr Beaker.

Mr Beaker contacted the telegraph station at La Perouse (in the Cable Station) and they advised the authorities in Sydney. The pilot steamer *Captain Cook* was sent to Botany Bay and collected Mr Frederickson. They arrived back in Sydney at 9.30pm on 29 October.

Wreckage from the *Woniora* was washed ashore at Botany. The wreckage included a plank with the name *Woniora* painted on it in two places, boats, rudder, four hatches, a door and other items. No bodies were recovered.

In 1985, Max Gleeson, well known Sydney wreck diver and author, became aware of a wreck off Botany Bay. On 24 May 1987, Max was shown the position of the unknown wreck by a fisher. He actually recorded the wreck on his depth sounder but as it was in 64 metres and he had never dived this depth in Sydney, he sought the assistance of John Riley who was more experienced in diving to this depth. Their first attempt to dive (apparently on 31 May 1987) was unsuccessful due to a very strong current and a south-easterly wind. Max decided to dive in a few weekends time with his regular buddy, Mae Elliott (who worked some weekends). In the meantime, (and this is where Max and John's stories differ), John went out with someone else to (as he apparently told Max) run his magnetometer over the site to see if it was indeed a wreck. This was to occur on 14 June 1987 (in Max's article he mistakenly says he saw John at his house on Friday 13 June but it was Friday 12 June). Max told John there was no need as the fisher had told him he had pulled pieces of wreckage up.

On Sunday 14 June 1987 (according to Max), John turned up at Max's place with the bell of the *Woniora*. As one can imagine, Max was a bit upset and this was the end of their diving relationship.

Therefore, it is probably true to say that the wreck of the *Woniora* was found by Max Gleeson (at least as far as scuba divers are concerned) but John Riley was the first to dive it.

#### Location

The GPS Mark is 34° 01' 23.1"S 151° 15' 32.0"E. The wreck comes up quite large on a depth sounder and it is fairly easy to find. The best bet is to run in or out on the centrepoint tower mark (put the tree in middle or left side of building) until the wreck shows up on your depth sounder. It is, however, hard to anchor on and you need to drop right on the wreck.

#### Diving

The wreck is lying roughly north-south, with the bow facing the north. As mentioned above, the sand is about 63 metres, and the dive averages at least 62 metres. Starting from the stern, you will find the stern post, rudder and prop. One blade of the prop sits above the sand, the other two are totally buried (normally). Forward, there is the engine, standing quite high (59 metres) above the rest of the wreck and in front of it, the boiler. This stands even higher, reaching 58 metres. On the top of the boiler you can see the bottom of the funnel.

All along this section of the wreck, and even forward from here, the sides of the hull stand a metre or so above the sand. The main part of the wreck is 21 metres long. In front of the boiler, the hull is not visible but there is an item (which John Riley identifies as the donkey boiler) and a large winch. There are also some other items which I have not yet identified.

There are also many items on the eastern side of the bow. I am not sure yet what they are.

Fishlife is also quite prolific on the wreck, with lots of nannygai, yellowtail and other fish.

Considering the size of the wreck, it was quite a surprise to me to see the size of the wreck on my depth sounder, it looks much larger than the description and is easier to find than the wrecks of the SS *Undola* (see page 140) and SS *Annie M. Miller* (see page 2).

I have only dived the SS *Woniora* once (with one other attempt when the anchor came off the wreck as we were descending). It is a wreck I intend doing a few more times.

#### Warning:

This is a very deep wreck, located in an area prone to currents and tides. It should only be dived by very experienced and properly equipped deep divers when the conditions are very good. Do not take this warning lightly.

- Lloyds Register 1869-70
- Sydney Morning Herald 30/10/1882
- Scuba Action Riley's Wrecks article by John Riley, unknown date
- DIVE Log October 2000, article by Max Gleeson
- DIVE Log August 2000, article by John Riley

# **New South Wales Shipwreck Marks and GPS Readings**

### NOTE:

- Most of these GPS Readings have been taken using AUS66 as the Map Datum. If you use any other datum (eg WGS84), then you need to modify the readings for use with your GPS by either using AUS66 or by subtracting 5.6" from the given latitudes and adding 4.2" to the given longitudes.
- Please send any comments/additions to me.
- There are some shipwrecks included here but not covered by this book.
- These marks and GPS Readings are based mostly on my own experience but some have been provided to me by others and not tested. Where the mark and GPS Reading is mine, I will note with a "TESTED" under the name of the wreck.
- The GPS Readings are generally degree-minute-second although a couple of readings that are not mine are degree-minute-100th of minute.
- For more information on GPS and an explanation of how it works, see http://ares.redsword.com/gps/.

Shipwreck	Location	Latitude	Longitude	Description of Marks	Depth (Top of wreck)
SS Annie M. Miller "TESTED"	Off Dover Heights	33° 52' 06"	151° 17' 52"	Line the left hand side of the water tower (on ridge top) with the right side of southern block of units. The northern block should be almost, but not quite, touching the southern block. Run in until Hornby Light at South Head just disappears.	46 metres (41 metres)
TSS Belbowrie "TESTED"	South Maroubra	unknown	unknown	About 250 to 300 metres off beach and 10 metres of rocks.	5 to 7 metres
Bellubera	Long Reef Wreck Site	unknown	unknown	Unknown	48 metres
SS Birchgrove Park "TESTED"	Off Whale Beach, just south of Palm Beach	33° 38' 24"	151° 22' 39"	On northern end of Whale Beach, have white house between right most pine trees, line house above centre of higher side of surf club. Have a very small gap between Barrenjoey Head and Lion Island and water reservoir lined up with right of the island.	51 metres (46 metres)
SS Bombo "TESTED"	Off Wollongong Harbour in channel to Port Kembla	34° 26' 43"	150° 55' 25"	Line the right side of large water tank on ridge behind BHP with large black chimney on waterfront. Have Toothbrush Island and Gap Island overlapping, the tops aligned.	32 metres (25 metres)

SS Catterthun "TESTED"	Off Seal Rocks	32° 25' 57"	152° 34' 38"	Line the green grassed area in front of Seal Rocks shop with gap between mainland and rocks. Line left side of the third set of rocks to south of lighthouse with headland in distance.	60 metres (<54 metres)
SS Centennial	Taylors Bay, Sydney Harbour	unknown	unknown	Unknown	13 metres
Centurion "TESTED"	In Sydney Harbour off Quarantine Head	Not available	Not available	Place large tree at Mosman on ridge in front of Centrepoint Tower. Almost square on to block of units to north, place red roof of building behind and just showing to left. Place flag staff at Quarantine Station to left of large tree on ridge.	18 metres (16 metres)
SS City of Sydney "TESTED"	Disaster Bay, west of Green Cape, Far South Coast	37° 15' 28"	150° 00' 40"	Anchor about 50 metres off corner of sloping rock	15 to 21 metres
Coolooli "TESTED"	Long Reef Wreck Site	33° 43' 11"	151° 20' 53"	Run in on Bahai Temple over second from right clump of pine trees on water's edge. Line left side of water tower on ridge with right side of units on water edge.	48 metres (38 metres)
TSS Currajong "TESTED"	Off Bradleys Head in Sydney Harbour	33° 51' 24"	151° 14' 52"	Line up left of brown Supreme Court building with right side of Centrepoint Tower column. Place white light under very large tree on ridge towards the east.	24 metres (18 metres)
Dee Why "TESTED"	Long Reef Wreck Site	33° 43' 02"	151° 20' 46"	Run in on Bahai Temple over faint white house above ridge that runs down to water.  Centre water tower with right side of large units behind right most of two blocks on water's edge.	48 metres (43 metres)
SS Duckenfield "TESTED"	North of Long Reef	33° 43' 11"	151° 19' 23"	Run in on Bahai Temple centred over cream flats with white balconies. Place Centrepoint Tower between two bushes/trees on ridge.	23 metres (<20 metres)
SS Empire Gladstone	South side of Haystack Point, Merimbula	unknown	unknown	South side of point	under 10 metres
Dunbar	Below The Gap, South Head	unknown	unknown	Unknown	under 10 metres
Fifeshire -	Central Coast	<del>33° 27.577'</del>	151° 26.872'	<del>Unknown</del>	21 metres

				1	
<u>Fifeshire</u>	Central Coast Wrecked 5 am 23 May 1886 off Moores Beach, Terrigal (SMH 15/6/86 pg5)	33° 27.577'	151° 26.872'	<u>Unknown</u>	21 metres
SS Galava	Off Terrigal on Central Coast	32° 22.645' NOTE: I suspect that this is incorrect	151° 30.741'	Place water tower over point at Terrigal (with gap above on ridge). Run out till Barrenjoey Lighthouse appears. Run back in till it disappears.	51 metres
SS Goolgwai	Off Yellow Rock, Long Bay	unknown	unknown	Exact location not known	24 metres ?
TSS Hall Caine "TESTED"	Off Bouddi National Park, Central Coast	33° 32' 49"	151° 25' 20"	Line Barrenjoey Lighthouse above the whitish rock half way down northern side of headland. Line head to north with second patch of trees on horizon.	45 metres (38 metres)
Henry Bolte "TESTED"	Just south of Eden, past Ben Boyd Tower	37° 06' 46"	149° 57' 46"	Normally has a mooring at site. Line two trees on ridge with flat face on rock to west. Run in till right side of Ben Boyd Tower is lined with left side of rock face	25 metres (18 metres)
SS Hilda "TESTED"	Below Cape Baily Light at Kurnell	34° 02' 23"	151° 13' 25"	Have Cape Baily Light square on (cannot see sides) and just south of north black mark on cliff. Run in till three units at Cronulla are over rock platform. Anchor when reef jumps from 27 to 24 metres.	21 to 27 metres
Himma "TESTED"	Long Reef Wreck Site	33° 43' 13"	151° 21' 01"	Run in on water tower centred on right side of northern (shorter) units on beach. Line Bahai Temple to left of grey roofed building and over last set of trees at end of beach.	48 metres (42 metres)
SS John Penn	Brush Island, Mossy Point, South of Batemans Bay	35° 51' 08" "NOT TESTED"	150° 11' 00" "NOT TESTED"	At west line left of gap in ridge with right of second house from left. Centre two small white posts over chimney of house above cliff.	Unknown
SS Kelloe "TESTED"	Off St Michael's Golf Club, Little Bay	33° 59′ 12″	151° 15' 56"	Place left side of water reservoir above third column from right of St Michael's Golf Club house Run in till large light tower at Long Bay Gaol is centred in building with four chimneys and square building to north on skyline just behind cliff face.	49 to 51 metres (45 metres)

SS Kiama "NOT TESTED"	Central Coast	33° 22.329'	151° 32.844'	Unknown	47 metres
Lanercost "TESTED"	North West of Mowarry Point South of Eden	37° 08' 17"	149° 59' 29"	At the GPS location there is a long gully and a short gully. The wreckage is scattered in the long gully and part of the keel is on sand off the short gully.	5 to 21metres
SS Ly-ee-Moon "TESTED"	Green Cape, South of Eden	37° 15' 55"	150° 03' 01"	Far end of gully between bombora in front of lighthouse and reef to west	5 to 12 metres
SS Macleay "TESTED"	Off Port Stephens	unknown	unknown	Line breaking reef at left of Little Island with pine tree to north of Yaccaba Head and Boondelbah Island just hidden. Line mountain behind Tomaree in centre of headland dip. (??) Normally has a mooring, perhaps just under water.	43 metres (39 metres)
MV Malabar "TESTED"	Malabar, at entrance to Long Bay	33° 58' 13"	151° 15' 43"	Line chimney to right of St Andrew's Church and Malabar RSL over edge of cliff face. Use depth sounder Wreck is to north and east	7-11 metres
Meggol ex HMAS Doomba "TESTED"	Long Reef Wreck Site	33° 43' 04"	151° 20' 45"	Run in on by lining up the right side of water tower against the right side of the units behind the northern-most units on beach.  Line Bahai Temple over the second house which is to the right of pine trees on ridge.	49 metres (43 metres)
TSS Merimbula	Whale Point, Currarong	35° 00' 16"	150° 49' 42"	East side of far point	4 to 13 metres
SS Minmi	Cape Banks at entrance to Botany Bay	unknown	unknown	Parts of wreck inside small cove inside Cape Banks. Major part believed to be on outside of point.	7 metres inside
SS Myola "TESTED" Hard to find	East-South- East of Long Reef	33° 45' 46"	151° 21' 44"	Line Centrepoint over white rock on cliff top and over black vertical mark on cliff face. Line lift well of units to the right side of small dip in ridge to west. Line water tower over centre of North Head Sewerage Works. Line right side of red house to NW on sloping ridge with left side of lift well of large block units below.	48 metres (45 metres)

North Head Trawler Name not known "TESTED"	Off North Head	33° 49' 38"	151° 18' 15"	Place tower (?) at South Head between two Navy houses.	unknown - 30 metres??
Olive Cam "TESTED"	Just south of Mowarry PointError! Bookmark not defined., south of Eden	37° 09' 02"	150° 00' 24"	Line up off three gullies. Wreck is in middle and southern gullies	3 to 9 metres
SS New Guinea "TESTED"	Disaster Bay, west of Green Cape, South of Eden	37° 15' 37"	150° 02' 16"	Run in on many pieces of wreckage, including an anchor.  In a direct line from the lighthouse to the east and a prominent cave to the west.	3 to 10 metres
SS Northern Firth	Off Brush Island to south of Ulladulla	unknown	unknown	Line dark house on western horizon over white house. Overlap right side of Brush Island (not platform) just with rock on mainland behind. Place left most shrub on top of island between two pieces of wreckage.	20 metres
SS Oakland "TESTED"	Off Port Stephens	32° 40' 47"	152° 13' 56"	Line right side of Cabbage Tree Island with left side of dip in Yaccaba Head. Line small rocks to left of Cabbage Tree Island with top of ridge to right of Fingal Light. Line two trees to west just north of top of hill on horizon. Normally has a mooring.	26 metres (24 metres)
SS Royal Shepherd "TESTED"	Off South Head	33° 50' 12"	151° 17' 14"	Run in with chimney of house just hidden behind Hornby Light at South Head. Place cross-bar of mast in Navy station level with red brick house/hall. Church just visible to left of cliff-face.	27 metres (25 metres)
Sutherland Caisson a large pontoon "TESTED"	To south of Long Reef Wreck Site	unknown	unknown	Line water tower between the two units on water's edge. Place Bahai Temple over red house (with two houses to right) to north- west.	48 metres (?)
Tasman Hauler "TESTED"	South of Ben Boyd Tower, south of Eden	37° 06' 38"	149° 57' 47"	Mooring located on site. Run in on bunch of trees on horizon over lighter vertical marks on rock face to west. Place white rock at Eden township over very edge of rock platform to right of Ben Boyd Tower.	29 metres (20-23 metres)

SS Tekapo	South Maroubra	unknown	unknown	Approximately 300 to 400 metres from beach, just off rock platform.	5 to 10 metres
Trio May not be correct name "TESTED"	Off Mona Vale Beach	33° 41' 01"	151° 21' 54"	Run in on Bahai Temple, left side against right side of higher part of Mona Vale Hospital. Barrenjoey Head just showing behind Bangalley Head.	52 metres (46 metres)
SS Tuggerah "TESTED"	Off Wattamolla, Royal National Park	34° 08' 21"	151° 09' 02"	Place the road leading down to Wattamolla Lagoon just off the northern headland of the lagoon. Place the left-most of the four buildings at Bondi Junction just off Marley Head.	48 metres (39 metres)
SS Undola "TESTED"	Off Garie Beach, Royal National Park	34° 10' 51"	151° 05' 33"	Run in on notch in Cape Baily in line with end of black rocks at Marley Head. Line up left side of top red house (at far right) with left side of house below.	45 metres (41 metres)
Valiant "TESTED"	Off Barrenjoey Head at mouth of Broken Bay	33° 34' 48"	151° 20' 40"	Line platform at right side of Lion Island with left side of white house. Line 2 storey white house to SW with house on horizon. Normally has mooring.	27 metres (22 metres)
TSS Wandra "TESTED"	Between Jervis Bay and Currarong	35° 02' 49"	150° 50' 18"	Run in with right-most drumstick of Drum and Drumsticks with highest part of rock face behind. Anchor when reef comes up.	26 metres (23 metres)
SS Wauchope	Off Port StephensErro r! Bookmark not defined.	unknown	Unknown	Line aerial on top of hill with footpath on beach (3rd from south of Tomaree Head). Have right side of Broughton Island touching Boondelbah Island.	Unknown
Wollomstrom "TESTED"	Gunnamatta Bay, Cronulla	34° 03' 34"	151° 08' 45"	Line left side of pink block of units to north over centre of white building on water's edge. Place light pole on left of pool with vertical mark near right side of tall units.	7 metres (5 metres)
SS Woniora	Off Botany Bay	Unknown	Unknown	Line left of two pipes to SW with right-most black vertical mark on rock face. Place right side of Bare Island just behind Henry Head. Place building to right of Centrepoint behind left-most of three trees on horizon. Place radio tower to north over black mark.	60 metres (?) (58 metres?)

# **INDEX**

Note that references to Sydney are not indexed as there are mentions of the capital city of New South Wales on virtually every page.

	Barrenjoey Head12, 135, 144
1	Barrenjoey Lighthouse
•	Bartlett, Terryi
12th Regiment and the Royal Artillery36	Bass Point
	Bass Strait
A	Batavia
Abadan31	Bate Bay5
Aberdare class minesweeper94	Beach, Captain
Aberdeen, Scotland	Beaker, Mr
Abermain & Seaham Collieries Ltd 101	Becus, Gary
Adelaide	Beddie, Johni
Adelaide Steamship Company Ltd52	Bee
Aden	Belfast, Northern Ireland22, 52, 108
Ailsa Shipbuilding Company99	Belfast, Northern Island70
Aither, George89	Bell, Captain Arthur 14, 15
Alfie Cam	Bellambi Coal Company41
Allen Taylor and Company146	Bellubera
Allen, Sgt William F33	Belvoir, Thomas
	Ben Boyd National Park
Alley, Captain Benjamin	Dennatt Drian
Alstrope, George	Bennett, Brian i Bensen, Mr. 122
American Civil War	Bergland, Andrew
Amos and Smith Ltd	Bermagui
Anderson, Peter	Bethlehem Ship Building Corporation Ltd
Andrewartha, Barryi, 108	D
Anzac Parade	Beverley, England
Armed Guard Unit30	BHPSee Broken Hill Propriety Ltd
Arundel, Lieutenant	Big Seal Rock
Atlantic, Gulf and West Indies Steamship	Binngarra44
Lines	Binstead, Captain Frank 121, 122
Aughinish Rock72	Bird Island
Auland, A5	Birksgate
Aulco Pty Ltd5	Bissett, John
Australasian Steam Navigation Company	Black, Thomas
Ltd36, 77, 78	Blackall
Australasian Steamship Navigation	Blackwattle Bay
Company Ltd41	Blackwood and Gordon
Australian18	Blane Steamships Ltd
Australian Iron and Steel Ltd34	Bogli, E
Australian Steamship Limited	Bombay121
Australian War Memorial	Bombo Quarry14
Avonmouth87	Bondi Beach
_	Boondelbah Island
В	Boora Point 58, 91
Balgowlah45	Boothby, Captain John67
Balmain	Botany Bay2, 70, 88, 101, 148
Bandung87	Boulton, Frederick
Baragoola9, 45	Boyle, Captain Hector70
Barclay, Curle and Company87	BP (Kwinana) Pty Ltd 125
Barhen, Charles	BP <i>Cockburn</i> 125
Barnes, Belindai	Bradbury, John
Darnes, Dennia	Bradleys Head 8, 25, 41

Braithwaite, Joseph65	Ceylon18
Briggs, Arthur23, 25, 48	Chamberlain, Captain H5
Brisbane 5, 18, 36, 70, 87, 99, 125, 141	Chambers and Company, J52
Brisbane Tug and Steamship Co. Ltd94	<i>Champion</i> 70
Brisbane Water112	<i>Charlie Cam</i> 89, 116
Bristol Sycamore55	Charter Craft and Marine Services Pty Ltd
British India Steam Navigation Company	
Ltd121	Chesnutt, Lori and Russell53
British Ministry of War Transport52	Chesterfield52
Broken Bay 12, 39, 48, 60, 85	Christchurch, New Zealand128
Broken Hill Propriety Ltd34	Churchill, H
	Circular Quay25, 41
Broughton Island	
Brown, Captain A.W44	Cities Service Oil Company of USA29
Brown, J. & A	Clarence and New England Steam
<i>Bruce</i> 18	Navigation Company41
Buckland, Ben52	Clarence and Richmond River Steam
Bulli 2, 3, 11, 41, 119, 136, 140, 148	Navigation Company
Bunnerong11	Clarence River18, 41, 82, 113
Bunnerong Road	Clark (1938) Ltd, George52
Burmeister & Wain	Clark, G
Burns, Philp & Company Limited87	Clark, Jack132
Burnside, B102	Clarke, Captain John19
Byers, W.J67	Clifton Gardens8
	Clyde River, Scotland99
C	Clyde Ship Building and Engineering
~ 11	Company Ltd136
Cabbage Tree Island 82, 113, 114	Coal Cliff coal mine
Cairns88	
Calcutta 121, 128	Coal Cliff Collieries Ltd 140, 141
Callum, Captain Robert Clark 101, 103	Coalcliff Mining Company65
	G . II . 1
	Coast Hospital89
Cam and Sons116, 117	Cobb, David18
Cam and Sons	Cobb, David
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19	Cobb, David
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101,	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Co Ltd         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         .7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Co Ltd         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Co Ltd         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Co Ltd         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         36, 87, 99
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       57,	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carsoll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       57, 116	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       57, 116         Caterson, Les       i	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       57, 116         Caterson, Les       i         Catherine Hill Bay       70, 104, 112	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128           Coogee         128           Coogee Bay Hotel         129
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       57, 116         Caterson, Les       i         Catherine Hill Bay       70, 104, 112         Cattanach, H.J       119	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Co Ltd         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Commonwealth Transport and           Convoy CO2         95           Coogee         128           Coogee Bay Hotel         129           Cook, Welton and Gemmell Ltd         116           Cooks River         128
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castel class auxiliary minesweepers       57, 116         Caterson, Les       i         Catherine Hill Bay       70, 104, 112         Cattanach, H.J       119         Cavanagh, Paul       39	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128           Coogee Bay Hotel         129           Cook, Welton and Gemmell Ltd         116           Cooks River         128           Coolooli         39, 40, 97
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       .57, 116         Caterson, Les       i         Catterine Hill Bay       70, 104, 112         Cattanach, H.J       119         Cavanagh, Paul       39         Caves Beach       19	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128           Coogee Bay Hotel         129           Cook, Welton and Gemmell Ltd         110           Coolooli         39, 40, 97           Cooper, D         105
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       57, 116         Caterson, Les       i         Catterine Hill Bay       70, 104, 112         Cattanach, H.J       119         Caveanagh, Paul       39         Caves Beach       19         Centaur       29	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128           Coogee Bay Hotel         129           Cook, Welton and Gemmell Ltd         116           Cooks River         19           Coolooli         39, 40, 97           Cooper, D         105           Coopernook         60, 146
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       57, 116         Caterson, Les       i         Catterine Hill Bay       70, 104, 112         Cattanach, H.J       119         Caveanagh, Paul       39         Caves Beach       19         Centaur       29	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128           Coogee Bay Hotel         129           Cook, Welton and Gemmell Ltd         116           Cooks River         128           Coolooli         39, 40, 97           Cooper, D         105           Coopernook         60, 146           Cost, Nicholas         105
Cam and Sons       116, 117         Caminili, Rocco Edmund       60         Campbell, Matthew       19         Cape Baily       140         Cape Baily Lighthouse       66         Cape Banks       88, 101, 103         Cape Dromedary       72         Cape Otway       94         Cape Town       112         Cape York       57         Captain Cook       2, 12, 25, 27, 78, 79, 101, 105, 129, 148         Cardiff, Wales       116         Cargill, Alec       114         Carroll, Percy J       15         Carroll, W       105         Casey, E.J       104, 105         Castle class auxiliary minesweepers       .57, 116         Caterson, Les       i         Catterine Hill Bay       70, 104, 112         Cattanach, H.J       119         Cavanagh, Paul       39         Caves Beach       19	Cobb, David         18           Cochrane and Sons         67           Cockatoo Island         7           Cockatoo Island Dockyard         131           Cockburn         125           Coffs Harbour         30           Coffs Harbour Co-operative Steam Ship         5           Coleman, Captain         108           Collaroy Beach         39           Collingwood         57           Collingwood Shipbuilding Company Ltd         57           Colombo         36, 87, 99           Commonwealth Transport and         Communication Department         133           Convoy CO2         95           Coogee         128           Coogee Bay Hotel         129           Cook, Welton and Gemmell Ltd         116           Cooks River         19           Coolooli         39, 40, 97           Cooper, D         105           Coopernook         60, 146

Cove, Alfred105	Edrom guest house117
Cowper, Charles65	Elder, T. et al119
Crawford, T	Elliott, Mae
Crimean War50	
	Elswyk, Bert
Crocodile Head146	Empire Pat67
Cronulla	Epstein, Jay 31, 32
Crossley Brothers	Erolis, Mr K. G
Cruwee Cove	Esmeralda Cove114
Cubitt Town48	Evans Deakin and Company Ltd 125
Cumberland99	Evans, Captain112
Cumming, Captain Fergus105	Everett, Doug
Cuncliffe and Dunlop65	Excelsior 108
Cunningham, W. J	Eynon, Mr O52
Curl Curl44, 45	
Currarong99	F
	E-1:
D	Fabius22
	Fairey Aviation Co. Ltd55
Dambusters29	Fairey Firefly56
Daniel Whelan78	Fairey Firefly VX38155
Dapto31, 34	Fairey Fulmar55
Darling Harbour	Faucett, Justice79
Darwin	Fawkes, Joshua
Davis, Rock	Fearless
	Fenwick and Co, J
Day, Captain	F
Debus, Midshipman56	Fenwick and Company
<i>Dee Why</i> 7, 8, 44, 45, 46, 47, 67, 97	Ferguson, A
Denny and Brothers, W 121, 128	Fields, Peteri, 105
Denny and Company121	151
Dent and Company77	Filor, Captain Kit
Deptford Green1	Findlay, Robert7
Dixon Street, Chinatown89	Firth of Clyde 87, 121
Dixon, Captain P.R	Firth, W.A
DjakartaSee Batavia	Fisher, A
Dobroyd Head	Fisk, Mr
Dohrn, Captain Wally (Snr)8	Fitzsimmons, Michael
Donald, Captain Keith82	Fleet, Tamarai
Doney, Paul	Fletcher, George
Doomba Shipping Company94	Flying Scotsman
Doxford and Sons, W	Fogarty, Midshipman56
Drum and Drumsticks146	Forrest and Sons
Dudgeon, J. & W48	Forster, J
Duffy, John Joseph6	Fort Denison
Dumbarton, Scotland 112, 121, 128	Fotheringhame, James77, 78, 79
Dunbar50	Frederickson, Heinrich
Dunbar, Duncan50	Fremantle 99, 116, 117, 121, 125
Dundee, Scotland18	Fullerton and Company, J140
Dunster, Eric32	<i>Fury</i> 144
$\mathbf{E}$	$\mathbf{G}$
Foolog Cub Ligutament 50	Coho Island 00 100
Eagles, Sub Lieutenant	Gabo Island
Eastern and Australian Steamship	Gaites, Thomas
Company22	Galway Castle105
Eden36, 37, 52, 53, 62, 75, 77, 80, 99,	<i>Gamecock</i> 23
108, 117, 125	Garie Beach
Eden Police Court79	Garrard, Captain37
Edith Breakers	George Street50
	G

Gibbs, Daryli	Hill, Norman77
Gibson, Captain D.W6	<i>Himma</i> 45, 67, 68, 69
Glackin, Captain William117	HMAS <i>Albatross</i> 55, 56
Gladesville Bridge131	HMAS Ballarat30
Gladstone121	HMAS <i>Bendigo</i> 30
Glasgow, Scotland2, 36, 41, 44, 52, 65,	HMAS Birchgrove Park11
85, 87, 99, 101, 112, 121, 128, 136	HMAS Colac30
Glass, Jim133	HMAS <i>Doomba</i> 45, 94, 95, 97
Gleeson, Maxi, 41, 42, 148	HMAS Durraween57
Goldsmith, Henry82, 83	HMAS Goolgwai
Gooyong Sea Scouts	HMAS Gull9
Goss, Captain C	HMAS <i>Korowa</i>
Gourlay Brothers18	HMAS Kuttabul95
Grafton82	HMAS Melbourne55
Graham, Les60	HMAS Moresby30
Granger, Captain F65	HMAS <i>Olive Cam</i> ,116
Great West Aerodrome55	HMAS <i>Orara</i> 122
Green Cape. 36, 37, 52, 75, 77, 78, 79, 80,	HMAS <i>Sydney</i> 55, 117
108, 117	HMAS <i>Thorough</i> 12
Greenock, Scotland25	HMAS Vengence55
Greenock, Scotland 85, 112, 128	HMAS <i>Wagga</i> 12
Greig, John A18	HMAS Whyalla95
Greyhound129	HMS Illustrious55
Griffen, Mr79	HMS Indefatigble55
Griffith, Owen122	HMS <i>Ringarooma</i> 70
Gunn, John A	HMS Wexford45
Gustavson, G114	Hobart
Gustavson, G	Holm, Isaac
Н	Homebush Bay96
<del></del>	Hong Kong
Hall, Captain John23, 48	Hood & Sons, Walter27
Hall, Peter62	Hopalong Cassidy117
Hamburg70	Howard Smith104
Hammond, Bruce15	Howard Smith Company19
Hanson, Hans82	Howell, Captain
Hanson, Neils70	Howes, John
Harding, Captain56	
Harland & Wolff 7	Howloways Dramatic Company79
Harper, Peter 3	
11a1 pc1, 1 ctc1	Huddart, Parker and Company Ltd 108
	Hudson and Sons99
Harrington75	Hudson and Sons
Harrington	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48	Hudson and Sons       99         Hugill, Captain Charles       121, 122         Hunter River       48         Hunter River New Steam Navigation       Company         Company       85         Hunter, Captain       122
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52	Hudson and Sons       99         Hugill, Captain Charles       121, 122         Hunter River       48         Hunter River New Steam Navigation       S         Company       85         Hunter, Captain       122         Hunter, Captain Thomas       48, 119, 122
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19	Hudson and Sons       99         Hugill, Captain Charles       121, 122         Hunter River       48         Hunter River New Steam Navigation       Company         Company       85         Hunter, Captain       122
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55	Hudson and Sons       99         Hugill, Captain Charles       121, 122         Hunter River       48         Hunter River New Steam Navigation       85         Company       85         Hunter, Captain       122         Hunter, Captain Thomas       48, 119, 122
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34         Henderson, George       .65	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34         Henderson, George       .65         Henry Bolte       .62, 63, 125, 126	Hudson and Sons       99         Hugill, Captain Charles       121, 122         Hunter River       48         Hunter River New Steam Navigation       85         Company       85         Hunter, Captain       122         Hunter, Captain Thomas       48, 119, 122         I         I-180       30         I21       95         Illawarra       41, 65         Illawarra and South Coast Steam
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34         Henderson, George       .65         Henry Bolte       .62, 63, 125, 126         Hereward       .85, 129	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34         Henderson, George       .65         Henry Bolte       .62, 63, 125, 126         Hereward       .85, 129         Heroic       .108	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34         Henderson, George       .65         Henry Bolte       .62, 63, 125, 126         Hereward       .85, 129         Heroic       .108         Hexham       .48	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34         Henderson, George       .65         Henry Bolte       .62, 63, 125, 126         Hereward       .85, 129         Heroic       .108         Hexham       .48         Higgins, Captain       .104, 105	Hudson and Sons
Harrington       .75         Harris, Bob       .32         Harris, Fireman       .53         Harvester       .82         Hawkesbury       .13, 48         Hayes       .55         Haystack Rock       .52         Heare, David       .19         Heathrow Airport       .55         Helen McGregor       .41         Helling, Ben       .29, 31, 32, 33, 34         Henderson, George       .65         Henry Bolte       .62, 63, 125, 126         Hereward       .85, 129         Heroic       .108         Hexham       .48	Hudson and Sons

J	Latimer, Rick	13
Jackson, David144	Launceston	28
Jackson, John	Launceston and Melbourne Steam	
Jacobs, Jon90	Navigation Company11	19
Jacobson, W	Lease Industrial Finance and Phipson	
Japanese midget submarines 95, 132	Nominee Pty Ltd 12	
Jardine, Matheson and Company77	Leith	
Jarrow, England19	Lennie, Captain John	
Java88	Leslie, Captain James	10
Jennings, Sir Patrick78	Leslie, George William87, 88, 9	
Jensen9	Lessing, Captain C.G	
Jervis Bay 55, 99, 146	Lewis and Sons, J	
Jibbon Bombora5	Lightburn, Arthur	
Johns, Captain G. A52		
Johnson, J114	Little Edith Breakers	
Johnson, James50	Little Island	
Jones, C. L. W101	Little Seal Rock22, 121, 12	"
Jones, William82	Little Seal Rocks	
Joyce, A105	Liverpool, England	
	Lloyd & Co	
K	Lockheed Altair	
Kanangra132	London	
<i>Karrabee</i> 132	Long Bay58, 87, 88, 89, 90, 91, 92, 11	16
<i>Kate</i> 7	Long Reef 12, 45, 46, 48, 96, 105, 11	
Keon, Mr F79	119, 135	,
Keon, Mr G79	Loring, William2	24
Kiama14, 70	Lucey, Captain Reubin 14	
Kincaid and Company112	Lucey, Laurence	15
Kincaid and Company, J.G87	Ly-ee-Moon Relief Fund	
Kingsford Smith, Sir Charles131	Lyle and Sons, Abram 12	
Kirribilli Point 44, 45, 67	Lynch, Captain Laurence	
Kirrule44	Lyttelton12	28
Kirsten and Earnshaw Ltd5	3.6	
Koepand, East Timor14	M	
Koputai141	Maby, Petty Officer	56
Kormoran117	Macdonald, Mr	
Kuring-gai44	MacKillop, Mother Mary	
Kurnell	MacKillop, Mrs Flora	79
Kuwait Oil Company Limited67	Macleay River	. 1
Kwinana Towage Services125	Macnab & Co	
Rwillalla Towage Scrvices123	Magnus, JP, Mr	
L	Maitland Bay	
	Malabar58, 92, 12	
La Perouse14, 102, 129, 148	Malabar Beach	
Labour, Eddyi	<i>Malachite</i> 14	
Ladd, Edgar Charles5	Manchester	
Lady Bay Beach70	Manchester, England	
Lady Southern Cross131	Manhegan	
Laidlaw, John87	Manly Ferry	
Laing and Sons, James50	Manning River	
Laing, J70 Lake Macquarie19	March, Steven	73
Lanercost75	Maritime Archaeological Association of	ر۔
Lanfear, Alfred22	NSW	
Lansdowne41	Maritime Services Board	14

Markham and Co Ltd52	<i>Montoro</i> 87
Marley Beach136	Mood, Paul72
Maroubra Ambulance Station	Moodie, Captain R.T 36, 37
Maroubra Beach 5, 85, 128, 129	Moorina
Marquis of Lorne41	Moreton Bay94
Marsh, SM, Mr79	Morrison, Don
Martin, Peter	Mort Bay67
Martin, Peter65	Mortlake Bank8
Mary Cam116	Morts Dock7, 113, 136, 140, 141
Mason, Captain George F70	Morts Dock and Engineering Co Ltd5
Matchett, Sam32	Mountenay, Mr129
Matheson, Sergeant99	Mowarry Point 75, 117
Mathieson, John75	Mullarkey, Captain58
Matthews, Mr T37	Mumbai121
<i>Maud Weston</i> 114	Munro, John58
May, Barry 66, 90, 92, 108	Murphy, Reverend Father79
May, William23, 48	Murray Brothers112
McCanish, I	MV Malabar 87, 88, 91, 96, 102, 116, 129
McConachie, Captain	111 + 111111111111111111111111111111111
McCulloch and Co85	N
McDonald, Captain Arthur141	14
	<i>Nadgee</i> 53
McDowell, Malcolm	Nagle, Edward15
McFadden, Theo29, 33, 34	Napier and Miller Ltd44
McFadyen, Stephen91	Narooma
McGee, Captain1	Narrabeen Beach
McGregor, Mr K79	National Shipbuilding Company Ltd57
McIlwraith, McEacharn and Company 108	National Trust
McIntosh, George18	Naval Aviation Museum
McKenzie Salvage Corporation132	
McLaren, Alex18	Navy (British Ministry of Transport67
McLennan, Alan and Neil48	Neale and West Ltd
McNicholl, A104, 105	Neilson, Hans41
McPhail, Captain J101	Nelson, ?105
McPherson, Stuart 8	Nelson, Victor48
McRae, Detective-Sergeant102	Neutral Bay95
McRae, Kenneth	New Year14
Meadowside	New Zealand Taranaki War36
	<i>Newborough</i> 129
Meggitt Ltd96	Newcastle 8, 11, 12, 23, 27, 39, 48, 50, 52,
<i>Meggol</i> 45, 94, 96, 97	62, 65, 72, 75, 82, 85, 95, 99, 101, 104,
Melbourne 14, 24, 36, 53, 72, 77, 87, 88,	108, 112, 113, 114, 119, 121, 140
89, 101, 105, 108, 116, 121	Newcastle and Hunter River114
Melbourne Cup117	Newcastle and Hunter River Company .85
Melbourne Harbour Trust Commissioners	Newcastle, England
144	Newcastle-Upon-Tyne77
Merimbula 52, 53, 99	Nicoll, Bruce Baird
Merries Reef 5	
Middle Head 8	Nicoll, George Wallace
Middlesborough104	Nicoll, Miss Jane
Mikado77	No Frills Hopper Barge111
Miller and Company, R. W	Noctor, Patrick
Milwall	<i>Nodzu</i> 116
Ministery of Munitions	Norah Head5
Minmi Colliery	Norris, Ernest15
Mitchell and Woolcott Walay 41	North Coast Steam Navigation Company
Mitchell and Woolcott-Waley41	82, 112, 113, 114, 122
Mona Vale Beach	North Goulburn14
Monks, Thomas	North Haven133
Montague Island72	

<i>North Head</i> 9, 27, 44, 45	Port Kembla Harbour16
North Point	Port Moresby
North Shore Gas Company104	Port Phillip Bay
Norway55	Port Stephens22, 82, 113, 114
NSW Golf Course	Port Stephens Lighthouse
NSW Government State Dockyard 8, 39,	Pothymutos, Antonio
62	Power, Bob90
02	Prince Henry Hospital89
0	Protection of Movable Cultural Heritage
U	Act 1986132
Obelisk Beach44	PS Agnes Irving
<i>Ocean Blessing</i> 132	PS Maitland85
O'Connor, Captain99	PS Sydney
O'Farrell, Lieutenant56	Public Transport Commission9
Ohlsson, J. E114	
Old Kilpatrick44	Punton, Jack
Old Mans Hat27	Pyrmont 11, 77, 112, 119, 140
<i>Olga</i> 23	1 yilliont 11, 77, 112, 117, 140
Olive Cam75, 116, 117, 118	Q
<i>Olivier Frost</i> 75	
Olsen, Erl12	Quarantine Point27
Ontario, Canada57	Quarries Pty Ltd14
Osborne, Captain Marcus119	Queensland Government Pilots 121
Ouseburn Engine Works77	
n.	R
P	R. Steele and Company 128
P & O Australia Ltd125	Rabaul
Paisley, Scotland 119, 140	Ramsay , W
Palm Beach144	Randwick 128
Palmers Ship and Engineering Company	<i>Rapuhia</i> 132
19	Rattray, James
Papau New Guinea14	Reading, Second Officer121
Parramatta River96	Red Funnel Fisheries Ltd57
Passmore, John121	Red Funnel Trawlers Pty Ltd57
Patricia Cam116	Red Head5
Patterson, James72	Red Point
Pearson, A.J117	
1 0415011, 71.0	Rice, Captain112
Peller and Company, W. H72	Rice, Captain
Peller and Company, W. H	Rice, Captain       112         Richardson, T.R.       105         Richmond       18
Peller and Company, W. H	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113
Peller and Company, W. H	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34
Peller and Company, W. H	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G       15
Peller and Company, W. H.	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G       15         Riley, John       142, 75, 105, 119, 148, 149
Peller and Company, W. H.	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G       15         Riley, John       15         Rio Claro       88
Peller and Company, W. H.       72         Penguin Ltd.       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Petersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G       15         Riley, John       15         Rio Claro       88         Rising Fast - racehorse       117
Peller and Company, W. H.       72         Penguin Ltd       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Petersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, Johni, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82
Peller and Company, W. H.       72         Penguin Ltd       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Petersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, Johni, 42, 75, 105, 119, 148, 149       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19
Peller and Company, W. H.       72         Penguin Ltd       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Petersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56         Pilling, Captain Herbert       2, 3	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, Johni, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H       14
Peller and Company, W. H.       .72         Penguin Ltd.       .96, 102         Penguin Salvage Company       .90, 96, 102         Peron.       .14         Perpendicular Point.       .133         Petersham       .50         Petterson, Charles       .82         Phillipson, Captain Charles       .65         Phoebe       .27         Pickering, Charlie       .56         Pilling, Captain Herbert       .2, 3         Pimco Shipping Pty Ltd.       .67	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, Johni, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H       14         Roberts, Captain L.A       72
Peller and Company, W. H.       72         Penguin Ltd.       96, 102         Penguin Salvage Company       90, 96, 102         Peron.       14         Perpendicular Point       133         Petersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56         Pilling, Captain Herbert       2, 3         Pimco Shipping Pty Ltd       67         Pioneer Diving       133	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G       15         Riley, Johni, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H       14         Roberts, Captain L.A       72         Roberts, E. G       104, 105
Peller and Company, W. H.       .72         Penguin Ltd.       .96, 102         Penguin Salvage Company       .90, 96, 102         Peron.       .14         Perpendicular Point       .133         Petersham       .50         Petterson, Charles       .82         Phillipson, Captain Charles       .65         Phoebe       .27         Pickering, Charlie       .56         Pilling, Captain Herbert       .2, 3         Pimco Shipping Pty Ltd       .67         Pioneer Diving       .133         Pitt, Pte Geoffrey M       .33	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G       15         Riley, John i, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H       14         Roberts, Captain L.A       72         Roberts, E. G       104, 105         Robertson, James       104, 105
Peller and Company, W. H.       72         Penguin Ltd.       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Pettersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56         Pilling, Captain Herbert       2, 3         Pimco Shipping Pty Ltd       67         Pioneer Diving       133         Pitt, Pte Geoffrey M       33         Pittwater       144	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, John i, 42, 75, 105, 119, 148, 149       88         Rior Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H       14         Roberts, Captain L.A       72         Roberts, E. G       104, 105         Robertson, James       104, 105         Robertson, Sir John       65
Peller and Company, W. H.       72         Penguin Ltd.       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Pettersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56         Pilling, Captain Herbert       2, 3         Pimco Shipping Pty Ltd       67         Pioneer Diving       133         Pitt, Pte Geoffrey M       33         Pittwater       144         Plugge, Captain       99	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, Johni, 42, 75, 105, 119, 148, 149       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H.       14         Roberts, Captain L.A.       72         Roberts, E. G.       104, 105         Robertson, James       104, 105         Robertson, Sir John       65         Robertsons Point       95
Peller and Company, W. H.       72         Penguin Ltd.       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Pettersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56         Pilling, Captain Herbert       2, 3         Pimco Shipping Pty Ltd       67         Pioneer Diving       133         Pitt, Pte Geoffrey M       33         Pittwater       144         Plugge, Captain       99         Point Perpendicular       99, 146	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, Johni, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H.       14         Roberts, Captain L.A       72         Roberts, E. G.       104, 105         Robertson, James       104, 105         Robertson, Sir John       65         Robertsons Point       95         Robinson, H.       65
Peller and Company, W. H.       72         Penguin Ltd.       96, 102         Penguin Salvage Company       90, 96, 102         Peron.       14         Perpendicular Point.       133         Petersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56         Pilling, Captain Herbert       2, 3         Pimco Shipping Pty Ltd       67         Pioneer Diving       133         Pitt, Pte Geoffrey M       33         Pittwater       144         Plugge, Captain       99         Pont Jackson and Manly Steamship	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G       15         Riley, Johni, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H       14         Roberts, Captain L.A       72         Roberts, E. G       104, 105         Robertson, James       104, 105         Robertsons Point       95         Robinson, H       65         Rockdale       128
Peller and Company, W. H.       72         Penguin Ltd.       96, 102         Penguin Salvage Company       90, 96, 102         Peron       14         Perpendicular Point       133         Pettersham       50         Petterson, Charles       82         Phillipson, Captain Charles       65         Phoebe       27         Pickering, Charlie       56         Pilling, Captain Herbert       2, 3         Pimco Shipping Pty Ltd       67         Pioneer Diving       133         Pitt, Pte Geoffrey M       33         Pittwater       144         Plugge, Captain       99         Point Perpendicular       99, 146	Rice, Captain       112         Richardson, T.R.       105         Richmond       18         Richmond River       1, 112, 113         Rickert, Bud       34         Riddell, G.       15         Riley, Johni, 42, 75, 105, 119, 148, 149         Rio Claro       88         Rising Fast - racehorse       117         River Thames       82         Rob Roy       19         Robb, H.       14         Roberts, Captain L.A       72         Roberts, E. G.       104, 105         Robertson, James       104, 105         Robertson, Sir John       65         Robertsons Point       95         Robinson, H.       65

Royal Australian Air Force30	South Head 2, 12, 34, 48, 50, 119, 128
Royal Australian Navy 55, 94, 116	South West Rocks1
Royal National Park136, 137, 140, 141,	Sparrows Point, Maryland29
142	Spencer Gulf Steamship Company Ltd119
Royal Navy94	
ROyal Navy94	Spit Bridge131
Rozelle Bay45	Sri Lanka
	SS <i>Agwipond</i> 29
S	SS <i>Albion</i> 25
	SS <i>Almeria</i> 57
S.E.A108	SS Annie M. Miller 2, 3, 11, 106
Sams, Captain Herbert128, 129	SS Armand Behic
San Pedro30	
Sandridge Pier36	SS Barrabool
Sargent, Edward25	SS Bega78, 99
Scotstoun87	SS <i>Bellinger</i> 114
C 4 D f 00	SS Birchgrove Park11, 12, 13, 106
Scott Reef88	SS <i>Bombo</i> 14, 15, 136
Sea Furies55	SS <i>Bonnie Dundee</i>
Seal Rocks22, 23, 48	SS <i>Brisbane</i> 141
Seal Rocks Beach122	
Sebastapol36	SS Cape Clear128
Selby67	SS <i>Caradale</i> 30
Sevastopol'36	SS Catterthun22, 23, 25, 48
	SS Centennial23, 25
Shanks and Co. Ltd142	SS Cities Service Boston 29, 31, 34
Shannon, Captain Neil22	SS City of Sydney36
Shannon, Mr and Mrs37	SS Doomba94
Shellharbour2, 5, 31, 32, 33, 70	
Shipbuilding Corporation Ltd52	SS Dorrigo
Shirra, James113	SS Duckenfield23, 48, 119, 122
Shoalhaven Steam Ship Co Ltd	SS <i>Dunmore</i> 70
Simons94	SS <i>Empire Gladstone</i>
	SS <i>European</i> 36
Simpson, Bob32	SS Gautamala95
Simpson, Captain75	SS <i>Goolgwai</i> 58, 92
Simpson, Dennis58	SS Guatemala95
Simpson, Mr75	SS Hesketh
Sinclair, William140, 141	
Singapore 87, 88, 131, 132	SS <i>Hilda</i> 65, 66, 140
Sixth Australian Machine Gun Battalion	SS <i>Hunter</i> 37
31, 32, 34	SS <i>Kamerooka</i> 72
	SS <i>Kameruka</i> 72
Sixty Miler11, 136	SS <i>Kanahooka</i> 25
Skinner, Captain85	SS <i>Kelloe</i> 70
Skye, Thomas William102	SS Lady Darling 72, 73, 148
Slater, Captain William113	SS <i>Ly-ee-Moon</i>
Slee and Company, John82	
Sliva, Anthony John31	SS <i>Macleay</i>
Sluggo58	SS <i>Mariposa</i> 131
Smith and Rodger36	SS <i>Minmi</i>
Smith, Alfred78	SS <i>Moana</i> 141
	SS Myola 14, 104, 105, 106, 136, 142
Smith, Bradley68	SS Namoi114
Smith, Mr122	SS New Guinea108, 109, 110
Smith, Tim36, 109	SS Oakland112, 113, 114
Smith's Dock Company Limited104	SS <i>Orara</i>
Smoky Cape132	
Snell, Pte Raymond J33	SS <i>Ormiston</i> 30
Solomon, Mr S79	SS Queensland
Sourabaya88	SS <i>Royal Shepherd</i> 48, 119, 120, 122
Souter, David	SS Satara 121, 122
	SS South Bulli
Souter, Thomas18	SS South Steyne
	,,,,,,,,,

SS <i>Tarshaw</i> 82	Tasmanian Steam Navigation Company
SS <i>Tekapo</i> 6, 128, 129	119
SS Tuggerah2, 4, 14, 39, 45, 73, 104, 106,	Tathra99
136, 137, 138, 139, 142	<i>Taurus</i> 8
SS Undola 4, 39, 104, 136, 137, 139, 140,	Taylor, Captain Charles27
141, 142	Taylors Bay25, 26, 95
SS <i>Victoria</i> 25	Teneriffe
SS Woniora 72, 148, 149	Thames Shipbuilding Company
SS Wyreema41, 42	the Australian War Museum
St Andrew's Catholic Church, Malabar .91	<i>The Clarence</i> 41
<i>St Aristel</i> 89	The Gap50
St Charles Cemetery79	Thimm, Andreasi
<i>St George</i> 112	Thomsen, Thorvald 14, 15, 105, 136
St Joseph's Provident Institution79	Thomson, W
St Michael's Church79	Thorburn, Samuel
St Vincent	Thorpe, Ola
Stanley, Neville117	Thursday Island
State Metal Quarries14	Tieck, Fred
Steel, Robert	Tight, Sidney7
Steele and Company, R128	Tilley, Bruce William
Stevens, Captain G. R77	<i>Tirpitz</i>
Stevenson, G.A	<i>Titan</i> 131, 132, 133, 134
Stevenson, John	Tommy
Stirling23	Townsville87
Stoker, Russelli	Tracey, Keith
Stradboke Island94	<i>Trio</i>
Stride Brothers45	Troon, Scotland 99
Stringer, Henry15	Trouble Shooter 9
Struthers, James	Truganni
Stuart, Sir Alexander65	TSS <i>Belbowrie</i>
Suez Canal	TSS Currajong
Sugarloaf Point	TSS <i>Hall Caine</i>
Sugarloaf Point Lighthouse22	TSS <i>Merimbula</i>
Sullivan, D	TSS Wandra
Sunderland22, 52, 70, 108	Tucker, Captain E
Sunderland	
	Turkey 50
Sutherland Cantain 7/	Turkey
Sutherland, Captain	Turner, Harry29, 32, 34
Swanney, William82	
Swanney, William         82           Swansea         19	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19	Turner, Harry29, 32, 34
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41,	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70,	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M.       33	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M       33	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M       33         T         Tahei Maru       77	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M       33         T       Tahei Maru       77         Tahtinen, Albert       58	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M       33         T       Tahei Maru       77         Tahtinen, Albert       58         Tannos, Greg       129	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M       33         Tahtinen, Albert       58         Tannos, Greg       129         Tasman Hauler       62, 63, 125, 126	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M       33         T         Tahei Maru       77         Tahtinen, Albert       58         Tannos, Greg       129         Tasman Hauler       62, 63, 125, 126         Tasman Sea       65	Turner, Harry
Swanney, William       82         Swansea       19         Swansea Channel       19         Sydbridge       7         Sydney Button       58         Sydney Harbour 2, 4, 5, 10, 22, 36, 39, 41, 44, 47, 48, 50, 55, 57, 65, 67, 68, 70, 88, 89, 96, 116, 119, 128, 135, 141         Sydney Harbour Bridge       27, 88, 95         Sydney Underwriters Association       23         Symons, Pte Bruce M       33         Tahtinen, Albert       58         Tannos, Greg       129         Tasman Hauler       62, 63, 125, 126	Turner, Harry

<i>Victoria</i> 41	White, John
Victoria and Albert77	Whiteinch4
Victorian Department of Ports and	Whyalla34, 95
Harbours62	Whyte Thomson and Company 103
<i>Victory</i> 41	Wildridge, J. and Sinclair Ltd 140
Vigilant129	Willberg, T
Villiers, Albert	William Macarthur
v inicis, riiociv	Wilsons Promontory
W	Windeyer, Justice
	Wingate and Co, T41
Wallaby18	Wirana
<i>Wallace</i> 18	Wirdzek, John
Wallarah Coal Co. Ltd70, 136	Wollongong 11, 14, 25, 29, 32, 119, 136
Walters, George78	140, 141, 142
Wanda Beach5	Womboyn
Warburton and Son, J119	Woniora148
Warn, Jack52	Wood, Ernest
Warne, Captain H114	
Watsons Bay2, 8, 48	Wood, Leslie
Wattamolla137	Woollier, Antonio
Webber, Captain Arthur77	Woolloomoolo Bay57
Webster, Ed34	Woolwich
Weir, G105	Wyatt, Captain Henry65
Wells, Bill34	V
Wells, Harry29, 31, 33	
Wemyss Bay87	Yaccaba Headland82
West Montalivet14	Yarrow, Richard68
Westernport62	Yeager, William T112
Westernport Tug Services62	Yellow Rock91
Weston, Captain114	Young, J., Ehlers and Co70
Weston, J 5	<i>5,</i> ,
Whale Point99	${f Z}$
Wheatley, George	7.1
White Bay11	Zelma



Michael McFadyen is an extremely keen (some would say obsessed) Sydney scuba diver. He has dived in most South Pacific countries, mostly on shipwrecks. Countries where he has dived on wrecks include Papua New Guinea, Vanuatu, New Caledonia, the Solomon Islands, Federated States of Micronesia (Chuuk Lagoon) and the Philippines. In Australia he has dived in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. As you could guess, his interests include shipwrecks but he also enjoys diving reefs, especially off Sydney and New South Wales. As of 16 September 2003 he has almost than 1,900 dives

As well as been a keen diver, Michael has had more than 300 articles published. These have appeared in *Sportdiving*, *DIVE Log Australasia*, *DIVE Log New Zealand* and *Scuba Diver*. His web site is one of Australia's most popular diverelated web sites and attracts tens of thousands of hits a year. He regularly presents talks for dive clubs and other similar organisations.

Michael was the President of St George Scuba Club from 1998 to 2002 and is now a life member. He was the inaugural President of the Scuba Clubs' Association of New South Wales (SCAN).

This book is the product of Michael's research into the Sydney and New South Wales shipwrecks he has dived on over the years.

© Copyright Michael McFadyen 46 Gannon Street TEMPE NSW 2044 AUSTRALIA

Internet Web Site: <a href="mailto:members.ozemail.com.au/~diving">members.ozemail.com.au/~diving</a>
Email Address: diving@ozemail.com.au