

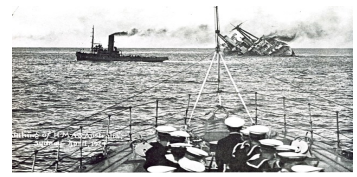
The History of the Royal Australian Navy (RAN) and some History of the Harbour.

The protection of the colony in the early days by a Royal Navy squadron of ships. The Navy surveyed the Harbour and the NSW coast.

The formation of the RAN and the fleet entering the Harbour in 1913. HMAS AUSTRALIA I, HMAS SYDNEY I, HMAS ENCOUNTER, HMAS MELBOURNE, HMAS WARREGO, HMAS PARRAMATTA and HMAS YARRA.



The story of HMAS AUSTRALIA I – our first flagship in WW I. HMAS AUSTRALIA was scuttled outside the heads as required by the Washington Naval Treaty.



The role and motto of the RAN and the history of the white ensign which is flown by all RAN commissioned ships.



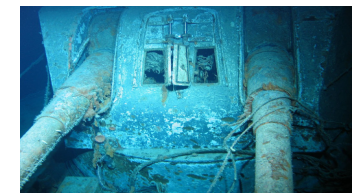
First mission, to capture German New Guinea during WW I.



The story of our first submarines – AE1 and AE2. AE1 was a lost in the Rabual campaign with all 35 men and AE2 was scuttled in the Gallipoli campaign with the crew becoming POW's.



THE RAN's first battle and first victory. The HMAS SYDNEY (I) SMS EMDEN battle in the Indian Ocean. EMDEN was severely damaged and run aground on an island.



The SYDNEY II story. The pride of the RAN in early WW II having sunk an Italian cruiser. Lost off the West Australian coast with no survivors from a crew of 645. Sunk by the German raider KORMORAN which had disguised its guns.



The HMAS MELBOURNE HMAS VOYAGER collision. The only time in the history of Australia when it took two royal commissions to find out what really happened.

The finding of lost RAN ships to bring some closure to family and friends.

Ships found include HMAS SYDNEY II, AHS CENTAUR, the hospital ship sunk by a Japanese submarine and AE1 and AE2 submarines have been found.



The History of Cockatoo Island including ship building and ship repair.

The history of Cockatoo Island as a convict jail, reformatory for girls and ship training for boys. The construction of buildings and silos and the quarrying of sandstone for the buildings of the Sydney.



The construction of the FITZROY and SUTHERLAND docks and their operation. The FITZROY dock took 10 years to build with convict labour. Both were extended to accommodate larger ships.



The shipbuilding program for the Navy from 1913 to 1986. 38 Navy ships were built. The unique way we built our first ship HMAS WARREGO and the story of the last and biggest ship HMAS SUCCESS.



The conversion of passenger ships to troop transports in WW II including the story of the QUEEN MARY. Ships converted in WW I carried both horses and troops.



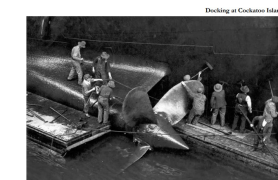
The launching of ships including HMAS VAMPIRE the destroyer at the Maritime museum. How ships were launched.

Ship repair including the extensive torpedo damage on USS NEW ORLEANS and HMAS MELBOURNE after the collision with HMAS VOYAGER. After the fall of Singapore ships damaged in battle in the Pacific came to Cockatoo for repair.



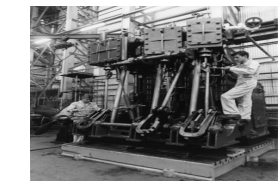
HMAS MELBOURNE ENTERING SUTHERLAND DOCK AFTER COLLISION WITH HMAS VOYAGER - 1964

Many ships were in the dock to have their hulls cleaned and repainted with a toxic anti-foul paint.



Docking at Cockatoo Island

The extensive apprentice training program and key apprentice projects. The construction of a steam engine for the POWERHOUSE museum and the refurbishment of the Japanese midget submarines.



WARSHIP REPAIRS FOR THE AUSTRALIAN NAVY

The variety of projects undertaken at Cockatoo Island. The repair of the SOUTHERN CROSS plane after a crash. The construction of the huge keel for GRETEL - our first challenger for the America's cup financed by Kerry Packer. The construction of the twin engined plane CODOCK.



PREPARATION OF CODOCK FOR FIRST FLIGHT

The submarine maintenance program to ensure safety at sea for the crew. The submarine would be out of the water for 2 years during which every component was removed and tested.

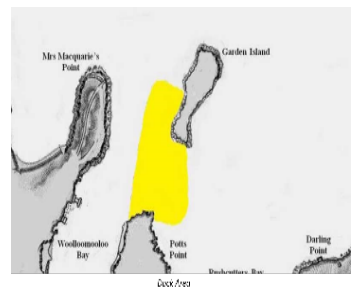


The History and Operation of Garden Island

Just 16 days after the arrival of the First Fleet in 1788 Garden Island became part of Australia's naval history. The island was selected for the ship's company of HMS SIRIUS to grow fresh vegetables, a dietary priority after a lengthy sea voyage to prevent scurvy.



The island was joined to Potts Point in 1941. Millions of tons of fill were required to reclaim a large part of the Harbour.



The material for the reclamation was extracted from a quarry at Balls Head using very basic tools during WW II.



A major building program was conducted in the late 18th century and early in the 19th century. A barracks was built as accommodation for sailors when their ship was alongside. The sailors slept in hammocks.



The chapel was opened in 1902. It is located in part of the Rigging House. The remembrance chapel was added in 1996. Special wall plaques remember Navy personnel placed on walls regardless of rank. The chapel has many magnificent stained glass windows depicting Navy ships and important Navy events.



To reclaim the Harbour a coffer dam was built to hold back the seawater. Then the area was dewatered by pumping so excavation for the dock could commence.

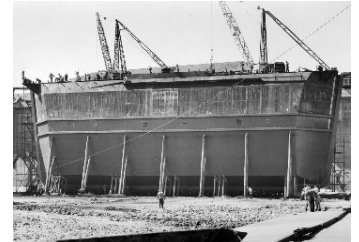


The History and Operation of Garden Island (continued).

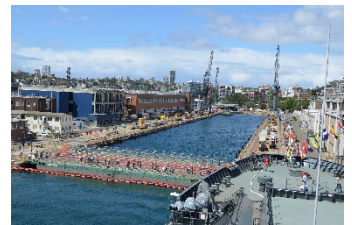
The construction of the dock was the second largest project – larger than the Harbour Bridge. The Snowy Hydro project was the largest. Over 4,000 men were employed at the peak of the project. Work was done 24X7. The dock had its own power station to provide power to the massive pumps and the island facilities.



A caisson is the “gate” that opens and closes the entrance to the dock. It can float or be sunk in place. When it sinks it locks itself into the walls of the dock. There are two caissons that can divide the dock in two allowing two or more ships to be docked simultaneously.



Before a ship is docked the dock is emptied and blocks placed to support the particular ship. Docking is a complex operation to ensure the ship sits on the blocks correctly.



Tunnels were built under the island as air raid shelters during WW II. After the fall of Singapore with its huge naval base and the bombing of Darwin both Garden Island and Cockatoo Island were seen as possible targets by the Japanese.



The first ship to use the dock was HMS ILLUSTRIOUS a British aircraft carrier badly damaged by kamikaze planes. This was before the official opening by the Governor General.



The Hammerhead crane took 7 years to build - 1944 to 1951. It could lift 250 tons. This capacity was required to lift gun turrets and other heavy machinery off warships. It was the largest crane in the southern hemisphere. Demolished in 2013.



The Japanese Midget Submarine Attack on Sydney Harbour

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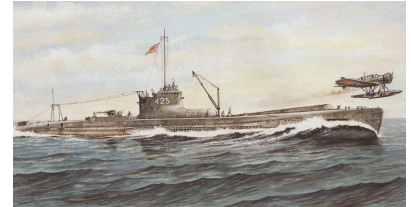
The Japanese Navy was unique in WW II. It had submarines that could launch a plane or carry a midget submarine. No other Navy had this capability.

The Royal Navy had midget submarines – however these had to be towed to the targets location. Several were lost during long tows.

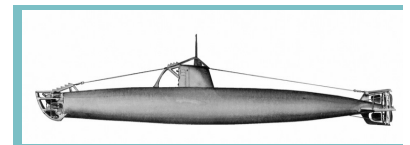


The Japanese midget submarines were difficult to control. They would surface or dive out of control. It took three years to train the crew. Over 500 were built.

There were 5 midget submarines used in the attack on Pearl Harbour. None survived the attack.



There were three reconnaissance flights by planes from the mother submarines over Sydney Harbour before the attack.



The Harbour was protected by underwater magnetic loops and a partly completed boom net. The loops on the harbour floor detected any vessel passing over it.

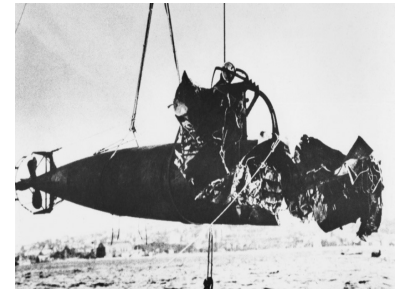
Three midget submarines entered the Harbour on the night of May 31 st 1942.

There were 6 harbour defence vessels on patrol that night.

The submarines were detected by the loops – however no action was taken.

One became entangled in the boom net and set off its demolition charge killing the crew.

Another was destroyed by depth charges in Taylor's Bay.



The main target was the USS CHICAGO that had been involved in the battle of the Coral Sea where for the first time the Japanese invasion Army was turned back from its planned invasion of Port Moresby.

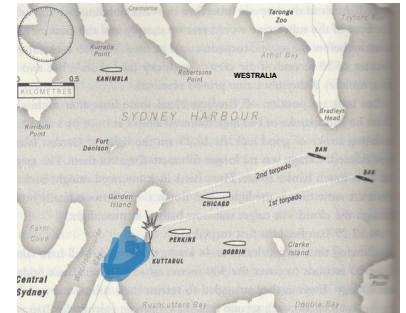
The Admiral in charge of the Harbour was entertaining the captain and officers of CHICAGO at TRESCO, the admiral's house on the night of the attack.



The Japanese Midget Submarine Attack on Sydney Harbour (continued)

The third submarine fired two torpedoes and escaped the Harbour to the northern beaches. This submarine was found in 2006. It is now a protected war grave.

The torpedoes ran either side of USS CHICAGO with one exploding under HMAS KUTTABUL with the loss of 21 lives. KUTTABUL was an old ferry used as accommodation for sailors.



The other torpedo which had defective depth control hit a sea wall at Garden Island and did not explode.



The Navy divers attached steel slings to the submarines and cranes brought them to the surface. A very brave dive given the circumstances.

The two submarines were salvaged and taken to Clark Island for inspection. They were then taken around NSW, Victoria and South Australia on a truck to raise war funds.



Each year on the anniversary of the attack a ceremony is held at the KUTTABUL memorial on Garden Island.



Exploring Australian Naval History