

Project Profile

Ex HMAS Adelaide Scuttling



Client	NSW Land & Property Management Authority
Location	Glebe Island Wharf No. 2, Sydney Harbour, New South Wales
Duration	18 months, 2011
Contract	Scuttling of Ex HMAS Adelaide Vessel for use as an Artificial Reef
Cost	\$6.5 Million

Project Overview

Stripping and preparation of former war ship to a virtual skeleton and scuttling off the NSW mid coast.

This ship participated in the 1990/91 Gulf War, peacekeeping operations in East Timor in 1999 and deployed to the Arabian Gulf as part of the International Coalition against Terrorism in 2001 and 2004. She was Australia's first guided-missile frigate and was home-ported in Western Australia.

McMahon Services were contracted by NSW Land & Property Management Authority to prepare the vessel for scuttling off the NSW mid coast. This was an enormous task – stripping a fully operational war ship to make it a virtual skeleton. All environmental hazards required total removal.

We had to develop methods to make the vessel do what it was never design to do...sink. The vessel was littered with specially cut holes to let water in and air out when it was scuttled. The main task was to penetrate bulkheads and clearing pathways through the vessel so that divers had enough room to manoeuvre through safe thoroughfares.

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Key Milestones:

- › Milestone 1: Establishment and Vessel Delivery
- › Milestone 2: Initial Preparation and Towage
- › Milestone 3: Design and Ship Preparation
- › Milestone 4: Scuttling
- › Milestone 5: Post Scuttling Activities
- › Milestone 6: Handover – including ballasting details and Dangerous Goods & Materials Register

Unique Processes:

- › Removal of zinc chromate and lead based paint prior to hot work or friction cutting
- › Removal of 80 tonnes of lead ballast “pigs” sealed inside the ballast tanks and in the Auxiliary Motor Room bilges attached to the keel between the ribs and stringers

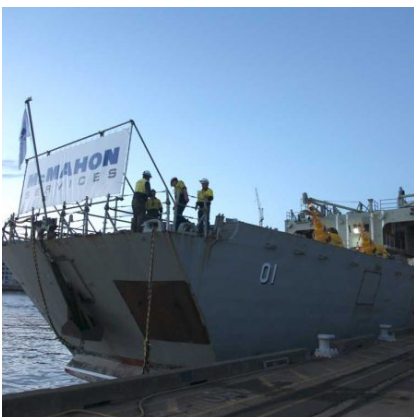
The client and end user groups, including the dive community and environmental groups, were very pleased with the dive design and the considerable items of interest that were retained in the vessel from the Bridge to the Engine Rooms.

Environmental groups were impressed with the standard of clean lines particularly the removal of the hydro carbons, insulation and dangerous materials.

The project took approximately 18 months to complete, with man hours in excess of 30,000 hours with a steady crew of 20 personnel.

Statistics on materials removed:

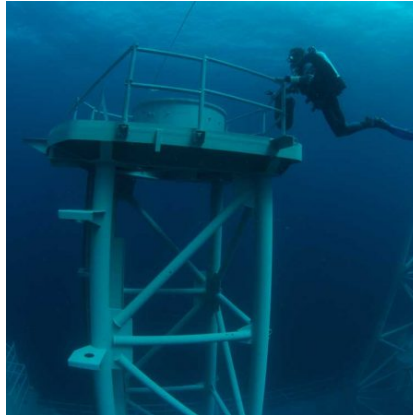
- › 80 tonnes of lead ballast
- › Hydrocarbons – 145,000 Litres of Hydraulic oil lube oil JP5 Aviation Fuel Diesel/Oily Bilge water
- › Mercury switches in fire system – 143 in total and sent to licenced Recycler
- › Capacitors from over 1,000 fluorescent lights that potentially contain PCB's (2000)
- › 2,000 Fluorescent tubes that contain Mercury Gases removed and sent to licenced Recycler
- › 50 Transformers that contain potential PCB's
- › 4,800 globes from lights on instrument panels and battle lamps, landing lights, etc.
- › 5,100 fuses from electrical boards, communication boards, radars, instrument panels
- › 450 various capacitors in electrical boxes and communication appliances
- › Approximately 600 9 Volt Batteries in battle lamps
- › Asbestos from various areas including ducting, pipe flanges, and switchboards by cutting each side so as not to disturb asbestos and disposed of to a licenced Contractor

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