

EX-HMAS ADELAIDE DIVE SITE

www.hmasadelaide.com



The Ex-HMAS Adelaide Artificial Reef Project is an exciting initiative to create an artificial reef and dive site on the NSW Central Coast that will be a draw card for Australian and international visitors. Being the first of its kind in NSW, the Ex-HMAS Adelaide has been prepared to make it attractive to divers of all levels of experience.

About the Ex-HMAS Adelaide

The HMAS Adelaide was a long-range escort frigate with roles including area air defence, anti-submarine warfare, surveillance, reconnaissance, and interdiction. Built in the United States, HMAS Adelaide was commissioned in November 1980 and was the first of six Adelaide class guided-missile frigates to be delivered to the Royal Australian Navy.

The ship is 138.1 metres long, with a beam of 14.3 metres and original displacement of 4100 tonnes.

The HMAS Adelaide participated in the 1990/91 Gulf War, in peacekeeping operations in East Timor in 1999 and 2006, and was deployed to the Arabian Gulf in 2001 and 2004. The ship was also involved in the high profile search and rescue of solo yachtsmen Thierry Dubois and Tony Bullimore from the Southern Ocean in 1997.

Location of the dive site

The Central Coast is approximately 1 hour and 30 minutes drive from Sydney and 1 hour and 15 minutes drive from Newcastle on the F3 freeway. It is serviced by rail as well as by airports in Sydney (domestic and international flights) and Newcastle (domestic flights).

Site selection

The site selected for the Ex-HMAS Adelaide is approximately 1.4km from The Skillion and 1.8km from Avoca Beach in approximately 32 metres of water at Lowest Astronomical Tide (LAT).

The ship will be oriented ESE so that the bow is facing into the general direction of the largest waves which are from the SE, ESE and S.

To create the artificial reef a range of site attributes were considered in selecting the ideal location to scuttle the ship, those being:

- a bare sandy bottom without extreme conditions (eg, no strong rips or currents)
- the ability to attract marine life to colonise the artificial reef
- a depth of sand of at least two to five metres
- a depth of water between 30 to 35 metres
- no navigational safety hazards
- minimal impact on commercial fisheries
- proximity to on-shore infrastructure.

Preparing the Ex-HMAS Adelaide for diving

The Ex-HMAS Adelaide has been prepared to make it attractive and safe to divers of all levels of experience as well as to minimise the impact on the surrounding marine environment.

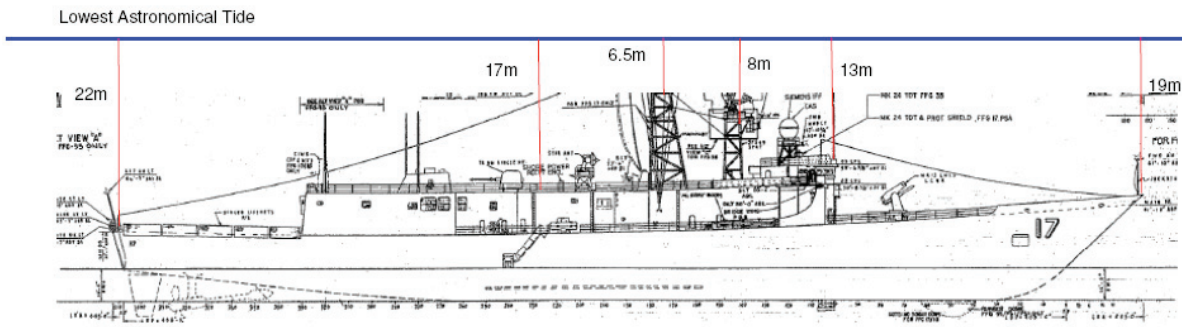
Diver access holes (both vertical and horizontal) have been placed strategically throughout the vessel to allow easy access to and from the shipwreck. As far as practical, divers will have at least one, but preferably two, access points from all compartments within the shipwreck.

For safety reasons a number of compartments have been sealed or made inaccessible, including fuel, water and ballast tanks; void spaces; and any space considered to be a potential entrapment point.

Based on diver safety considerations, the following items have also been removed:

- Electrical cabling that could break loose and cause an entanglement hazard;
- Sharp edges and snag points; and
- Items that could break loose over time causing an entrapment hazard or block access to an area of the shipwreck.

The figure below gives an indication of the estimated depths to some of the key locations on the ship.



Note: depths in relation to Lowest Astronomical Tide (LAT) do not take into account settlement which is expected to be 0.5m initially and approximately 2m in the longer term.

Figure 1: Approximate Depths to Ex-HMAS Adelaide Dive Site

What can you expect to see of the former warship?

While safety is paramount, careful attention has been placed on retaining as many of the original features as possible to maximise the level of interest and enjoyment by divers to the site.

The Ex-HMAS Adelaide will provide scuba divers with a large wreck with internal access over a number of levels. Some of the doors and hatches within the shipwreck have been retained to allow divers to get a better sense of the ship as it was in operation. These hatches have been welded closed and alternative access holes cut immediately adjacent in order to maintain access to and from each compartment.

In order to maintain interest for more experienced divers, some areas of the vessel have been prepared with lower ambient light levels. By reducing light levels in areas such as the laundry and Auxiliary Machine Rooms, it is planned to increase the sense of exploring a natural shipwreck.

Key features that have been retained on various decks of the wreck include:

- The Bridge, including the captain's chair and console from where the ship was manoeuvred



Figure 2: Bridge console and instrument panel

- The chart table near the Bridge
- The helicopter hangars
- The operations room (Combat Information Centre), which includes the shell of various weapons and sensor consoles
- The crew's cafeteria where most of the crew took their meals
- A limited number of bunks and amenities



Figure 3: Two berth Officers cabin



Figure 4: Junior female crew bathroom. Mural has listing of mess members from the decommissioning crew.



Figure 5: Torpedo racks (excluding the torpedos of course!)

- The space which previously contained the missiles and missile launcher
- Sick bay
- The large machinery spaces where you can see the modules that used to house the gas turbines that powered the ship through the water and the engine blocks that used to generate electrical power for the ship's requirements
- The central control station for the ship's machinery, including the damage control and fire fighting services
- The laundry

Divers should only dive within the limits of their qualifications, experience and capability, and should book a tour with an appropriately qualified guide.

What marine life can you expect to see?

The Ex-HMAS Adelaide artificial reef will provide an exciting opportunity over the coming years for divers to see the shipwreck evolve into a diverse marine habitat.

Experience at other similar artificial reefs such as the ex-HMAS Brisbane has shown that the establishment of an artificial reef enhances the marine ecology of the area. The 2005 scuttling of the Ex-HMAS Brisbane off the Queensland Sunshine Coast resulted in the first week algae appearing, followed by aquatic mammals (dolphins) in the second week, molluscs and arthropods (e.g. barnacles and crabs) in the third week and bony fish and cephalopods (e.g. squid) in the fourth week. Over the following eight months cartilaginous fish (e.g. rays), marine worms, marine reptiles (e.g. turtles) and echinoderms (e.g. sea urchins) were also observed. After 12 months, 21 attached marine species were recorded, 16 resident species, 17 frequent visitors and 40 species that occasionally visited the site (see www.epa.qld.gov.au).

Colonisation of the Ex-HMAS Adelaide by marine algae and bottom-dwelling invertebrates will, in turn, attract free-moving invertebrates and many fish species. The artificial reef created by the scuttling of the Ex-HMAS Adelaide will provide food and shelter for a number of species and it is expected to develop into an important habitat, increasing the biodiversity of the area.

Managing the dive site

A Crown reserve (the HMAS Adelaide Reserve) has been declared over the final resting place of the Ex-HMAS Adelaide.

Anyone wishing to dive or snorkel at the site will need to purchase a permit, which will soon be available through Central Coast Tourism. Divers will be able to book a tour through commercial dive operators, or make their own booking for a club or private mooring through Central Coast Tourism. The fees to access the site will support the ongoing management and maintenance of the dive site to ensure it remains a world class dive attraction.

Six moorings will be located at the dive site. Two moorings have been allocated for exclusive licence to commercial dive operators. The other four moorings to be provided at the dive site comprise two for hire by commercial dive tour operators on a casual basis, and two for public and club dive bookings.

The NSW Government has engaged Central Coast Tourism to undertake all booking and marketing activities for the site on its behalf. Central Coast Tourism will market the opportunity to dive to the tourism industry, issue permits to dive the Ex-HMAS Adelaide and take bookings for moorings.

Terrigal Dive Shop and Pro-Dive Central Coast have each been offered a licence for exclusive use of two of the six moorings at the Ex-HMAS Adelaide Dive Site.



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