



Technical Report

Report No. SYD/2020/06

At the request of the NSW Department of Planning, Industry & Environment – Crown Lands, the undersigned prepared this report from information gained from a review of a report prepared on the 13th March 2020 by McLennan's Diving Service. This is following their underwater inspection carried out on February 28th and March 12th and 13th 2020, of the vessel Ex-HMAS Adelaide where she rests following the vessel's scuttling.

The vessel's details are:

Ship name:	Ex-HMAS Adelaide
Displacement Tonnage:	2954.90 tonnes
LBP:	407ft
Breadth Moulded:	47ft

1. Introduction

Ex-HMAS Adelaide is a former guided missile armed frigate (FFG) decommissioned from the Royal Australian Navy. The vessel was scuttled at a position off Avoca, New South Wales on 13th April 2011 to create an artificial reef for scuba diving.

An underwater inspection of the wreck is carried out annually. The latest inspection was carried out as mentioned above, in February and March 2020, by McLennan's Diving Service.

2. Report

From the diver's report the underwater inspection of the vessel found that the steel hull structure was substantially unchanged since the previous underwater inspection which was carried out 13th June 2019.

No corrosion, cracking or displacement of fittings was observed on the outside or inside of the steel hull. All entrance ways inspected were found clear.

All the long-term monitoring points were inspected, and no deterioration was found since the last inspection. These points are in way of:

- the Missile launcher opening,
- the Forward screen,

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- the Hangar frames, and
- the stern

The diver's report indicates that the hull is still fully supported by the sand. The report states the sand level was very similar to previous years with the sand being very close to the vessel's design waterline. This is similar to that reported last year.

The vessel developed a 4-degree list to port in 2012. The divers confirmed that this list remains unchanged. Indicating the vessel has now settled.

The diver's report states that the aluminium superstructure has suffered from some additional deterioration in the last nine months. During this inspection they observed the following areas of deterioration have occurred since the last inspection in 2019:

- On the main deck a section of the exterior side plating is missing on the port side of the ship, just forward of the main mast. This is between frames 150-160. The hole is approximately 4 meters long and 2m high.
- On the opposite side of the vessel in line with the damage noted above are two areas on missing side plating on the starboard side. These two areas are approximately 2 metres long by 1.5 metres wide and 2 metres square respectively.
- The elevator shaft on the 01 deck has plating missing.

As noted in our last report, "In our report 23rd June 2015 it was noted that the starboard helicopter hanger side structure was damaged". The diver's report at that time noted that the edges of this damage had been covered up with marine growth, but most visitors would not notice that the plating is missing as it then appeared to be a normal opening in the wreck. The structural members that hold up the remaining bulkheads were still fully intact and appeared to be undamaged. In the diver's current report, they indicate that in 2019 the port side plating has also broken away. The structural members of the hanger are still intact.

As with last year, from the latest report it would appear the light aluminium plating is continuing to deteriorate, but the main support structure is still intact. This does not affect the structural integrity of the vessel.

3. Conclusion

It is my opinion that, the vessel is still structurally sound, and the vessel is stable. However, as with my previous reports, the light aluminium plating in way of the accommodation and hanger decks is continuing to deteriorate. It is my opinion that this deterioration will continue as the plating continues to break away from its supports thus allowing it to move with the currents and the weather. It is also

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my opinion that the corrosion of the aluminium plating will continue as the light structure continues to work in the seaway. This area is also in the upper region of the vessel so in the area where the seawater becomes aerated in adverse weather.

From the information in the diver's report I consider there are no new factors that may affect recreational divers though the Dive Masters should take precautions when taking divers near the damaged accommodation structure.

4. Disclaimer

The under signed shall not be liable in any way to any person or company in respect to any claim for any kind, including claims for negligence, for loss occasioned to any person or company in consequence of any person or company acting or refraining from action as a result of material in this report.

Signed,



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for Shearforce Maritime Services Pty. Ltd.
27th March 2020