



## Technical Report

Report No. SYD/2017/12

At the request of the NSW Department of Primary Industries - Lands, the undersigned prepared this report from information gained from a review of a report prepared on the 18<sup>th</sup> April 2017 by McLennan's Diving Service following their underwater inspection on 13<sup>th</sup> April 2017, of the vessel Ex - HMAS Adelaide were she rests following the vessels scuttling.

The vessel's details are:

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

### 1. Introduction

Ex-HMAS Adelaide is a former guided missile armed frigate de-commissioned from the Royal Australian Navy. The vessel was scuttled at a position off Avoca, New South Wales on 13 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 April 2017, by McLennan's Diving Service.

### 2. Report

From the divers report the underwater inspection of the vessel found that the steel to be substantially unchanged since the previous underwater inspection which was carried out 17<sup>th</sup> June 2016.

It is reported that during the inspection there was no sign of any cracking or deformation of the hull and deck. The hull and deck has built up a uniform coverage of marine growth. There are very few signs of new corrosion. The divers report the corrosion level appears to be very low.

The divers report indicates that the hull is still fully supported by the sand. There was no scouring observed by the divers. The sonar dome was just visible above the sand at the bow and the sand level was very close to the ship's design waterline.

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No additional cracking was found by the divers of the aluminium upper works of the vessel. The cracks noted in the earlier reports that exist in way of the lift shaft area on Deck 02 have not propagated. The cracks which were previously jagged and bright metal are now completely covered in marine growth which would indicate minimal movement.

In our report 23<sup>rd</sup> June 2015 it was noted that starboard helicopter hanger side structure was damaged. The divers report notes that the edges of this damage have now been covered up with marine growth and most visitors would not notice that the plating is missing as it now appears to be a normal opening in the wreck. The structural members that hold up the remaining bulkheads are still fully intact and appear to be undamaged. The centre and port side hangar bulkheads are fully intact. The remaining hangar components appear to be tolerating the ocean forces very well.

The vessel developed a 4 degree list to port in 2012. The divers confirmed that this list remains unchanged.

### **3. Conclusion**

It is my opinion that, the vessel is still structurally sound and the vessel is stable. Therefore, from the information in the divers report I consider there are no new factors that may affect recreational divers.

### **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,



L. H. Michaels  
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for Shearforce Maritime Services Pty. Ltd.  
20<sup>th</sup> April, 2017