

Southern Ocean Exploration Maritime Archaeology Report

Subject: Aircraft wreckage located off Stanley Tasmania

Position: S40.17.522 E145.15.836

Report Date: 14-11-2023

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Introduction

Southern Ocean Exploration (SOE) have been requested by representatives of Fallen Diggers to locate the wreckage of the DAP Beaufort Bomber A9-304. On 28 April 1943, during a training exercise off King Island, the aircraft crashed into the sea with the loss of its four crew. (RAAF 1943).

Fallen Diggers mission is to research missing WW1 and WW2 Australian military personnel. (Fallen Diggers 2023).

On 11 October 2023 Fishermen from Stanley Tasmania notified SOE's Mark Ryan that scallop fishermen had pulled up pieces of aircraft wreckage whilst trawling north of Three Hummock Island. There was a possibility that this material may have been part of the missing Beaufort Bomber.

Initially the fishermen provided photos of the artefacts and based on these photos it was decided that the material should be collected for closer examination.

On 29 October, SOE's Mark Ryan, Terry Cantwell and Darren Cook flew to Stanley to meet with the fishermen and collect the artefacts. Martin Tozer, SOE Maritime Archaeologist, was provided the artefacts and commenced the examination. The artefacts had been in salt water for possibly 80 years and recently been left out on dry land. There was evidence of accelerated corrosion on the alloy surfaces. In order to slow the rate of corrosion the artefacts were placed in a tub of sea water until further anti corrosion measures could be undertaken.

Initial Analysis of Artefacts

The recovered material consisted of two identical alloy brackets of which one was broken into three pieces – Fig 1. 2a, 2b & 2c. The three pieces of bracket 2 aligned at the break point and it appears that bracket 2 was originally intact and subsequently damaged during to process of being caught in the scallop dredge. The brackets appeared damaged and distorted from other actions prior to being retrieved from the sea floor.



Fig. 1. – Brackets 1 & 2 front view.



Fig. 2. Brackets 1 & 2 rear view.

The curved section of the bracket is 540mm (21.5") diameter with the total bracket width 945mm.

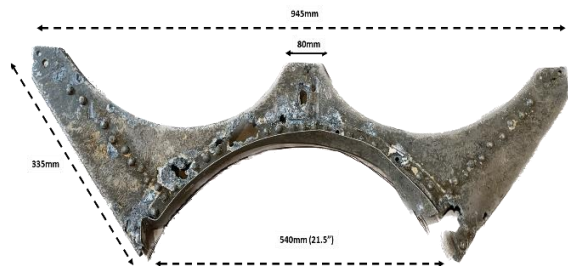


Fig. 3. Bracket 1 dimensions.

Bracket 2 had two steel rods inserted along the channelled section that would pivot 180° at the base. There is a locking pin position on both sides of the pivot point whereby the rod could be locked in two positions 180° opposing. The steel rod on part 2c was locked in the upright position with the pin still in situ. The rod on part 2a had no pin present and could rotate freely. Bracket 1 rods were absent.

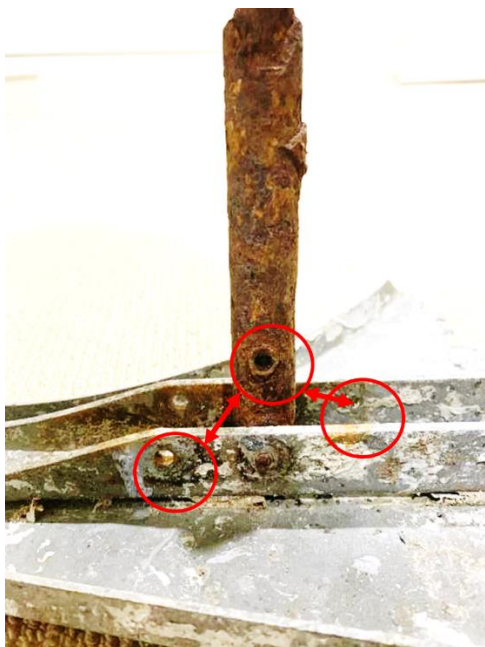


Fig. 4. Bracket 2a rod locking pin position.

After consultation with multiple aviation experts Jason Stagg (Fallen Diggers) and the Australian Aviation Heritage Centre, it was concluded that this material was not from a Beaufort Bomber.

Part Number

The question then remained as to what aircraft these artefacts belonged to and how did they end up on the sea floor. The key to this identification was to locate a part number on either of the brackets. Jason Stagg identified where the part number was likely to be located. Martin Tozer carefully removed the marine growth and paint to locate any numbers. Two partial numbers were found on bracket 1 channelled sections. However, the full number was obscured by rivets installed over the numbers.

From combining the two partial numbers a part number was determined as being 32898-7.

Part numbers could not be located on Bracket 2.



Fig. 5. Part numbers from either side of Bracket 1 channelled sections.

Additionally the number 8 was identified stamped on the middle gusset (Fig. 6).



Fig. 6. Middle gusset part number "8".



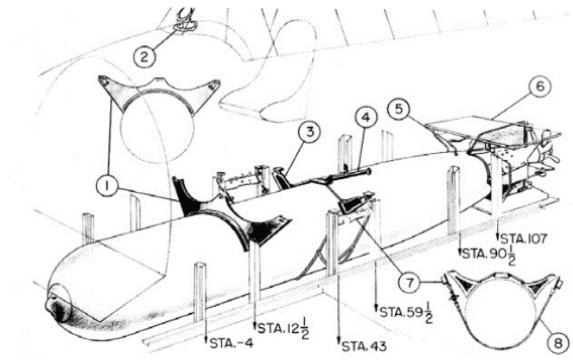
Fig. 7. Bracket part number locations on each channel and the middle gusset.

Aircraft Identification

With the part number identified, the team continued researching for the aircrafts identity. Darren Cook posted the question on an Aviation Historical Society Australia forum and the answer was soon forthcoming. The aircraft components were identified by Tristan Masterson as the torpedo / bomb Front Sway Brace of a Gruman TBM Avenger.



Fig. 8. Gruman TBM Avenger (Warbird registry)



- | | |
|--------------------|----------------------|
| 1 Front Sway Brace | 5 Lanyard |
| 2 Mk. 8 Gun Sight | 6 Torpedo Stabilizer |
| 3 Rear Sway Brace | 7 Shackie |
| 4 Brace Assembly | 8 Sling |

Fig. 9. Avenger Torpedo Rack Assembly – note item 1 Front Sway Brace. (Jason Skagg).

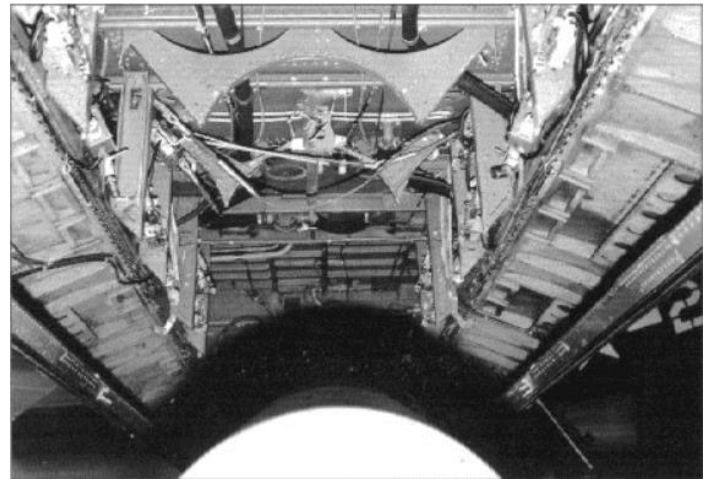


Fig. 10. Avenger Torpedo Rack Bomb Bay with Front and rear Sway Brace. (Jason Skagg)

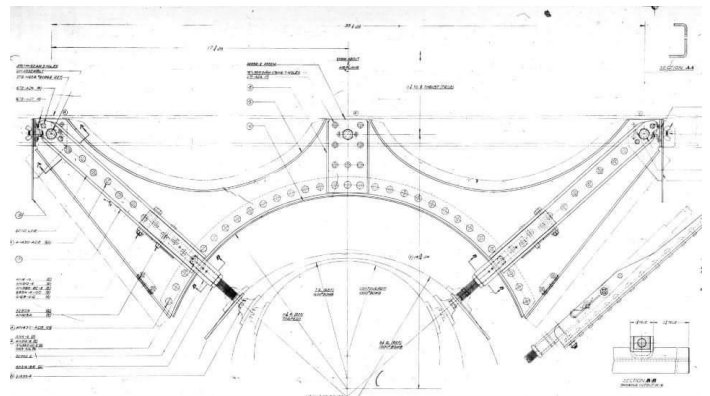


Fig. 11. The Avenger Front Sway Brace Blueprint. (Tristan Masterson).

Conclusion

The fishermen who inadvertently retrieved the artefacts, detailed how there were two fishing boats each trawling a single scallop dredge side by side. Each dredge had collected a single brace. There was no other wreckage recovered. As the Sway Brace is located well inside the Avenger bomb bay (Fig. 10), it would be improbable to trawl up the Sway Brace only without damaging and collecting other aircraft wreckage. As the two recovered brackets are identified as the Front Sway Brace, they can only have come from two different aircraft. To recover the exact same item from two different aircraft at the same time is even more improbable.

Due to these circumstance's it is unlikely that the artefacts were recovered from aircraft on the sea floor. As the parts are confirmed as belonging to the Gruman Avenger, it is more reasonable to assume that the Sway Brace's were jettisoned off a passing warship.

At the end of WWII the Avenger was obsolete and no longer required by the RN or USN. (Rikard, J). The parts may have been discarded from a passing allied aircraft carrier in the mid to late 1940's.

Acknowledgements

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SOE: Mark Ryan, Darren Cook & Terry Cantwell.

Fallen Diggers: Dennis Frank & Jason Stagg.

Aviation Historical Society Australia: Tristan Masterson

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