- 1. I write to advise on the outcomes of the examination of the contact of interest located by HMAS YARRA in position 04 13.283S, 152 28.347E in 175m of water, designated Y1.
- 2. Following a debrief by the command team of HMAS YARRA at MHQ on 28Oct15, Find AE1 Ltd began pursuing opportunities to visually examine Y1. An option to examine it using manned submersibles operating from the MV Alucia lapsed when we were unable to raise sufficient funds to cover the owner's costs.
- 3. Leveraging off the interest aroused by a briefing to the SIA Conference in November, Find AE1 Ltd obtained sponsorship pledges for \$90K, sufficient to cover the cost of an examination by Land & Marine Pty Ltd (L&M), a Sydney based offshore survey company experienced in PNG operations and the Duke of York Islands area. L&M's offer included generous in kind sponsorship from themselves, Imbros Pty Ltd, Simon Hills, Adam Fitzhenry and Paul McGraw who supplied equipment and services at no charge to reduce costs.
- 4. The necessary logistic preparations were made to ship L&M's equipment and personnel to Kokopo and charter a local vessel. The Find AE1 Ltd team included a camera crew, maritime archaeologist and myself to provide identification of any objects located. A representative from the Australian National Maritime Museum was included in the team as an observer.
- 5. The L&M team of 4 arrived in Kokopo on Saturday, 11Jan15 after fitting their equipment onboard the support vessel MV Karavas on Sunday morning they proceeded to examine the Y1 site on Sunday afternoon. All images and information used in this report are provided by L&M.



Fig 1 – MV Karavas with cantilevered pulley system for orange spectra shot line attached to the flying clump and ROV yellow umbilical in Starboard waist opening.

- 6. The equipment worked well and excellent images were obtained of the Y1 site; the surrounds within 100m were examined:
 - I suggest there are some useful lessons for the RAN in the methodology employed for placing an ROV on an object in deep water with currents present.
 - The track plot of the examination with numbered fixes on objects is attached.

7. Y1 is a significant boulder field of 1-3m high, limestone boulders, probably spawned from the nearby cliffs visible on Maulin Island.



Fig 2 – ROV image of large limestone boulder in the Y1 location (the ROV date top left is incorrect it should read 1/11/2015).



Fig 3 Passage between Jacquiot Point and Mualim Island showing undercut limestone cliffs, the possible source of the boulder field.

The sea floor between the boulders is very soft silt and sand with a slope of 1:20 - 1:7.

- 8. Over 3 km of survey lines were completed and I am satisfied that the site has been exhaustively and professionally examined by Captain Dan Fitzhenry and his team.
- 9. Captain Fitzhenry took the opportunity to also inspect the two possible grounding sites:
 - The 2m coral outcrop off Mioko Island (Reference Chart Aus 679, 152 4 13.87S, 152 28 19E) is not present, current water depth is at least 10m.
 - The coral outcrop off Mualim Island (4 13.255S,152 28.08E) is accurately charted and could have presented a hazard for AE1.
 - The line from Y1 to the non existent 2m shoal was inspected by ROV to ensure AE1 was not present.
- 10. Early advice of the Y1 examination enabled the movement of the Find AE1 Ltd team to Kokopo to be cancelled, avoiding nugatory expenditure.
- 11. Find AE1 Ltd intends to proceed with searches of the remaining primary and secondary probability areas identified in the AE1 Search Report, using modern sensors including side scan sonar, multi beam echo sounder

and magnetometer. ROVs will be used to visually examine contacts of interest.

- This will require fundraising, attracting sponsorship and hopefully, 12. obtaining a Government grant.
- 13. I will keep you advised of progress.

Yours sincerely,

P. D. Briggs AO CSC Rear Admiral, RAN Rtd Chairman, Find AE1 Ltd

19 January 2015