

**Mission Rehearsal and Training Exercise
Queenscliff 04-07 FEB 2007
Report of Activities**

Aims

The MRTE was held to provide training in the operation of the specialised data gathering instruments, to brief team members in the conduct of the Maritime Archaeological Assessment and to build team spirit and confidence. This activity also reduced the risk to participants and was an important element of the Risk Reduction and Management Strategy.



Fig 1 the Diving Team

Safety

Safety was repeatedly stressed during the briefings and presentations throughout the MRTE.

Maritime Archaeological Assessment [MAA] Activities

Planned MAA activities rehearsed during the MRTE during the first day's serials diving in 40m of water on J5, included;

- Standard video and still photographic documentation using both divers and an ROV
- Conventional Mapping
- Examination of a submarine site through deployment of remote sensing instruments
- Corrosion Studies & Metallurgical Status
- Ambient Environmental Measurement
- Biological Data gathering
- Analysis & Interpretation and Reporting

- The 70 m serials scheduled for the second dive were not completed because of unsuitable weather however; very good training value was achieved during the shore activities as detailed below.



Fig 2 Data gathering and imaging

Team Building

Team building measures included;

- Briefings by SIA AE2CF leadership on the project.
 - Peter Briggs President SIA and Chairman AE2CF,
 - Terry Roach VP SIA, Director AE2CF and Director of Operations for the MAA,
 - Tim Smith, Director of Archaeology,
 - Mark Spencer, Director of Creativity and
 - Richard Taylor, Diving Supervisor
- Presentations by supporters and enthusiasts including
 - John Thompson – grandson of AE2 signalman ‘Bunts’ Thompson,
 - Dr Ross Bastiaan – Plaques project,
 - Fred & Elizabeth Brenchley – co-authors “Stoker’s Submarine”,
 - John Basarin – author “Gallipoli the Turkish Story”,
 - Marcus Falay – “Fairy Chimney’s” Travel Agency,
 - Andrew Ogilvie – Film Maker, MD Electric Picture, and
 - Crispin Sadler – UW Film Producer, Mallinson Sadler Productions.

- Instruction in various aspects of the MAA including
 - Technical Diving,
 - UW Communications,
 - Maritime Archaeology,
 - Conservation, Corrosion,
 - Non Destructive Testing & Sampling by experts including
 - Tim Smith,
 - Richard Taylor,
 - Dr Ian MacLeod and
 - Dan Stevenson.

Much of this will go towards the award of a Certificate in Maritime Archaeology awarded by the Australasian Institute for Maritime Archaeology in conjunction with the Nautical Archaeology Society (UK).



Fig 3 Lecture UW Communications

Publicity/Communications

Celia Roach as the Media Manager for the AE2CF looked after

- ABC 7.30 Report interviewer Scott Bevan with camera crew attended and took images and interviews with team members [Expected to go to air week commencing 12 February]

- Neil Wilson from the Melbourne Herald Sun attended the initial briefing on Sunday afternoon; a two page feature story was published in the Saturday 10 February edition.
- Crispin Sadler and Dan Stevenson, the underwater camera crew provided footage from Electric Pictures for release to the media

The Borough of Queenscliffe [the Mayor - Cr. Pat Semmens, and CEO - Mr. Gary Price] approved the use of the Town Hall (and waived the fee as they considered the MRTE to be 'of significant community interest') for briefs and presentations.

Queenscliff Dive Centre staff led by Jason & Fiona Salter provided access to the wreck of submarine J4 off Port Phillip Heads, the pool and fill station, accommodation and outstanding victuals.

Participants

Name	Title	Position
Peter Briggs	Rear Admiral RAN Rtd	SIA President & AE2CF Director
Terry Roach	Commodore RAN Rtd	2007 Expedition Operations Director
Tim Smith	Mr.	2007 Expedition Archaeology Director
Mark Spencer	Dr.	2007 Expedition Creative Director & Diver
Becca Saunders	Ms.	Imaging Management & Logistics Manager
Richard Taylor	Mr.	Diving Supervisor
Stuart Cannon	Dr.	Diver
Helena Cannon	Ms.	Diver
Jeff Hughes	Dr.	Diver
Paul Garske	Mr.	Diver
Samir Alhafith	Mr.	Diver
Craig Howell	Mr.	Diver
Mike Wynd	Mr.	Diver
Mervyn Maher	Mr.	Diver
Steve Pearson	Mr.	Diver
Peter Graham	Mr.	DSTO ROV Pilot
Brad Knox	Dr.*	DSTO ROV Pilot/Handler
Paul Dixon	Mr.	DSTO ROV Handler
Ian MacLeod	Dr.	Conservator, West Australia Museum Corrosion Adviser
Mike Rikard-Bell	Mr.*	Naval Architect Adviser
John Basarin	Mr.*	Turkish Cultural Adviser, Plaques Project, Media Relations (Turkey)
Marcus Falay	Mr.*	Travel Agent
Ross Bastiaan	Dr.*	Plaques Project
John Thompson	Mr.*	AE2 Enthusiast
Fred Brenchley	Mr.*	Author & AE2 Enthusiast
Elizabeth Brenchley	Ms.*	Author & AE2 Enthusiast

Andrew Ogilvie	Mr.	Film Maker, Managing Director Electric Pictures
Steve Westh	Mr.	Film Director
Crispin Sadler	Mr.	Film Producer- Mallinson Sadler Productions
Dan Stevenson	Mr.	Underwater Cameraman
John Manning	Mr.*	Engineering + NA Review
Lance Marshall	Mr.*	Engineering + NA Review
Celia Roach	Ms.*	Media Relations + Business Development
Ken Greig	Captain RAN Rtd	2007 Expedition Project Manager

*Denotes part time attendance

Expedition members unavoidably absent were;

Roger Neill	Dr.	DSTO, 2007 Expedition Science & Data Management
Costa Dongas	Mr.	Diver

Risk Management

The Risk Register was reviewed by the Expedition Directors Terry Roach, Tim Smith and Mark Spencer as required by the Project Risk Management Plan. Risks with a Hazard Risk Index of Extreme (E) were re-assessed. In some instances additional risk mitigation measures were instigated; with additional information others were re-assessed as now being at acceptable levels. There are now no Red Flags in the Risk Register...

Engineering & Naval Architecture

A meeting of the Eng & NA sub-committee was held during which the numbers and locations of measurement/sample sites were determined. These are the sites at which hull thickness and the state of corrosion activity will be measured to provide a sound basis to assess the structural integrity of the hull of the submarine. The sub committee members were confident that these are the significant parameters necessary to make this assessment.

Project Planning

The project plan was reviewed by the leadership/management group. Several amendments resulted and areas were identified for further development during the forthcoming PM's visit to Turkey (23 Feb – 06 Mar).

- In particular the preferred configuration of the Dive Support Vessel (DSV); together with its mooring arrangements whilst on task (4 point moor) have been better defined.
- Permit and visa processes were clarified and progressed during the MRTE and measures agreed to progress or advance the approval process for the permit application.
- The communications plan was discussed and several items noted for investigation by the PM such as internet access in Karabiga, mobile phone coverage and cost.
- The comms fit of the selected vessel, and
- The Medical Evacuation Plan was discussed and agreed that the cover provided by the insurance policy together with the engagement of the Turkish diving physician was a sound basis for further development of the plan by the PM during the logistic planning mission to Turkey.

Logistics

Aspects of the Logistics plan e.g. travel; accommodation, insurance and freight were able to be trialled during the MRTE and valuable lessons learned as a result. Logistic arrangements have been modified or increased accordingly. With a clearer definition of the Expedition tasks emerging; equipment, consumables (diving gases etc) and spares were all better able to be quantified.

Equipment

Although some deficiencies in equipment performance were discovered during the MRTE, in particular with

- The ROV and Drop Camera, workarounds were developed and repairs instigated which demonstrated the initiative and resourcefulness of the DSTO crew.
- Deployment arrangements for the drop camera need further development; although it was encouraging how several ideas with good potential for a solution, emerged through 'work-shopping' the issue.
- Underwater communications were trialled in the QDC pool and valuable feedback obtained from the divers for the dive supervisor who is pursuing this matter, and
- Both the corrosion meters and the ultrasonic thickness gauge were trialled and as anticipated, issues arose which will be easily resolved in the expedition equipment.

Outstanding Issue

One matter arose during the MRTE which remains outstanding. The MAA method of mapping (which was instructed on by Tim Smith) does not currently meet the requirements for the location of hull plate measurement spots. Our preference is for one system of marking a grid, using tapes laid across and over the hull, to cater for all activities. The matter will be resolved by working with both sets of requirements and developing satisfactory solutions to both.

Summary

The Mission Training and Rehearsal Exercise was extremely successful in developing a good understanding amongst all team members on the background to the project, data measurement, conservation issues and the intended plan of action. An excellent level of team bonding, training in the use of the instrumentation by the divers and coordination with a camera crew was achieved. There is now a high degree of confidence of being able to collect the necessary data to make informed assessments of the structural integrity of the hull of AE2.



Fig 4 Data gathering and Imaging

Terence Roach
Director of Operations

11 February 2007