

SIA Technology Conference 2011 – Draft Program

The three day program is now close to final - please, however, use the program below for planning purposes as some changes may occur. The overall plan is:

Day 1: Tuesday 8 November 2011 - Science & Technology - Invited Speakers - generally from Defence and Systems Institute (DASI) and Universities

Day 2: Wednesday 9 November 2011 - Plenary Session - Invited Speakers - Keynote Addresses

Day 3: Thursday 10 November 2011 - Presentation of Papers - Now that most papers have been refereed, we have four separate and parallel streams.

It is also likely that there will be tours to defence-related industry sites such as the Techport Common User Facility on Friday 11 November.

Tuesday 8 November 2011 - Science & Technology		
0730-0830	Registration and Coffee	Crowne Plaza breakout area (top floor)
0830-0845	Welcome	RADM Peter Clarke RAN Rtd - Master of Ceremonies; and Mr Peter Horobin MBE FAICD - President, SIA
Session 1: Defence Science and Technology Organisation (DSTO and Defence And Systems Institute (DASI))		
0845-0905	Trends in Autonomous Underwater Vehicles	Professor Anthony Finn - DASI
0910-0930	Developing and Sustaining Engineering Talent for large-scale Naval Projects	Mr Ken Grove - Director, Business Development Australia, Babcock Australia Pty Ltd
0935-0955	TBA	TBA
0955-1015	Morning Coffee Break: Sponsorship Opportunity	Crowne Plaza breakout area
1015-1035	Test & Evaluation and Trials Management - Timing is Everything	Dr Vivian Crouch - DASI
1040-1100	Submarine Support - Lessons Learned the Hard Way	Mr Jock Thornton - DASI
1105-1125	Systems Engineering - the Key to Successful Submarine Building	Professor Stephen Cook - DASI
1130-1150	The Requirements for Defence S&T in the FSM Program	Ms Janis Cocking - Chief, Maritime Platforms Division, DSTO
1155-1210	Questions & Answers	Master of Ceremonies and Speakers from Session 1
1210-1310	Lunch sponsored by Saab Systems Pty Ltd	Crowne Plaza breakout area
Session 2: Academia and Industry		
1310-1330	Recent Developments in Submarine Vibration Isolation and Noise Control	Dr Carl Howard - University of Adelaide School of Mechanical Engineering
1335-1355	Recent Advances in Diesel Engine Combustion Control for Quietness and Efficiency	Dr Manfred Zockel - University of Adelaide School of Mechanical Engineering
1400-1420	Experimental and Computational Investigation into the Hydrodynamics of Conventional Submarines	Professor Dev Ranmuthugala - Australian Maritime College (AMC), Launceston, Tas
1425-1445	Afternoon Coffee Break: Sponsorship opportunity	Crowne Plaza breakout area

SIA Technology Conference 2011 – Draft Program

Tuesday 8 November 2011 - Science & Technology		
1445-1505	Engineering Masters Programs to support Submarine Design and Maintenance	Dr Margaret Law - Innovation Manager, ASC Pty Ltd
1510-1530	Delivering a World-Class Submarine Capability for Australia	Ms Wendy Wates - Strategic Business development, QinetiQ Pty Ltd
1535-1555	Designing and Building Australia's Future Submarine	Mr Jim Duncan - Representing ThyssenKrupp Marine Systems
1600-1620	Submarine Energy and Propulsion Considerations	Mr David Williams - Engineer, Deep Blue Tech Pty Ltd
1620-1630	Questions & Answers	Master of Ceremonies and Speakers from Session 2
1630-1645	Expert Panel Discussion	Presenters from Day 1
1645-1745	Opportunity to inspect Anechoic Chamber and other related facilities	University of Adelaide (tbc)
1830-2030	Opening Cocktail Party sponsored by MacTaggart Scott Australia Pty Ltd	Crowne Plaza breakout area

SIA Technology Conference 2011 – Draft Program

Wednesday 9 November 2011 - Plenary Session		
0745-0845	Registration and Coffee	Crowne Plaza breakout area (top floor)
0845-0900	Welcome	RADM Peter Clarke RAN Rtd - Master of Ceremonies; and Mr Peter Horobin MBE FAICD - President, SIA
Session 3: Keynote Addresses		
0900-0910	Welcome to South Australia - the Defence State	Premier of South Australia (invited)
0910-0930	Opening Address	The Hon Stephen Smith MP - Minister for Defence (invited)
0935-1000	Succession planning for the RAN Submarine Force	VADM Ray Griggs AO CSC RAN - Chief of Navy (invited)
1005-1030	Submarine Engineering Oversight - a Parent Navy's Responsibility	RADM Mick Uzzell AM RAN - Head RAN Engineering Branch (invited)
1030-1050	Morning Coffee Break: Sponsorship Opportunity	Crowne Plaza breakout area
1015-1035	The Challenges for Australia in undertaking the Future Submarine (FSM) Program	RADM Rowan Moffitt AO RAN - Head FSM Program
1125-1150	The Future Submarine as a Nation-Building Activity	Mr Steven Ludlam - Chief Executive Officer, ASC Pty Ltd
1155-1205	Questions & Answers	Master of Ceremonies and Speakers from Session 3
1205-1310	Lunch sponsored by Pacific Marine Batteries Pty Ltd	Crowne Plaza breakout area
Session 5: Invited Speakers		
1310-1335	Government Strategy for Defence Industry in the FSM Program	The Hon Jason Clare MP - Minister for Defence Materiel (invited)
1340-1405	Lessons Learned from the UK Successor Program	Mr Michael Owen - Head, Future Submarine, MoD UK (invited)
1410-1435	Allied Collaboration in Submarine capability Development - What can Realistically be Achieved?	RADM David Johnson USN - Program Executive Officer (Submarines), Naval Sea Systems Command (invited)
1440-1500	Afternoon Coffee Break: Sponsorship opportunity	Crowne Plaza breakout area
1505-1530	Workforce Development for the FSM Program	Senator the Hon Chris Evans - Minister for Tertiary Education, Skills, Jobs and Workplace Relations (invited)
1535-1600	Managing the Transition from Construction to Support	AVM Chris Deeble - Program Manager, Collins and Wedgetail, DMO
1605-1630	Facing the Technical Challenges of the Future Submarine - the Coalition's Perspective	Senator the Hon David Johnston - Shadow Minister for Defence
1630-1645	Questions & Answers	Master of Ceremonies and Speakers from Session 4
1830-1900	Pre-Dinner Drinks sponsored by BAE Systems Pty Ltd	National Wine Centre - corner Botanic & Hackney Street, Adelaide
1900-2230	Conference Dinner sponsored by Sonartech Atlas Pty Ltd Dinner Wines sponsored by Navantia	National Wine Centre Dinner Speaker: H.E. RADM Kevin Scarce AC CSC RANR - Governor of South Australia (invited)

SIA Technology Conference 2011 – Draft Program

Thursday 10 November 2011 - Plenary Session				
0700-0830	13th Annual General Meeting of the SIA (Members Only)		Hindmarsh 4, Crowne Plaza	
0800-0840	Day 3 Registration and Coffee		Crowne Plaza breakout area (top floor)	
Session 6: Technical Papers				
Click here for Venue Layout	Stream A: Hull, Mechanical and Electrical Hindmarsh 1	Stream B: Combat Systems, Communications Hindmarsh 2	Stream C: Systems Engineering, Safety, Design and Logistics Support Hindmarsh 3	Stream D: Submarine Energy and Uninhabited Vehicles Hindmarsh 4
0840-0900	Welcome and Review of the Program for the Day Chair: TBA	Welcome and Review of the Program for the Day Chair: TBA	Welcome and Review of the Program for the Day Chair: TBA	Welcome and Review of the Program for the Day Chair: TBA
0900-0925	Electric Actuation of Submarine Equipments - Niall Skinner, MacTaggart, Scott and Company	Submarine Sonar - Outboard Acoustic Array Technologies - Tim Kane, Thales Australia Pty Ltd	The Need for a Systems Engineering/Architectural Approach to the Design of Submarine Mission Systems - Michael Irrgang, Engineering Director, Raytheon Australia Pty Ltd	Air-Independent Propulsion Based on Fuel Cells and Methanol Reforming - Peter Hauschildt, Director R&D/Conceptual Design/German Navy, Howaldtswerke-Deutsche Werft GmbH
0930-0955	Dynamics of the Swash Plate Mechanism - Josh Trainor, Chief Engineer, Rix Industries	Periscopes and Optronics - Future Submarine Visual Systems - Adam Waldie, Business Development Manager, Submarines, Thales Underwater Systems	Designing for the Future - Modularity and Transformability in Submarine Design - Gunnar Ohlund, Senior vice President, Kockums AB	Electrical Platform and Fuel Cell-based AIP Systems for Submarines - Albert Hammerschmidt, Director PEM Fuel Cells, Siemens
0955-1015	Morning Coffee Break: Sponsored by Moog Inc.		Crowne Plaza breakout area	
1015-1040	Innovative Solutions to reduce the Environmental Impact of Future Submarines - Eric Fusil, Naval Architect, DCNS	Developing Proven Submarine Combat System Technology to Future Customer Needs - Phil Stanford, Business Development Manager, Sonartech Atlas Pty Ltd	Achieving the Goal of a Submarine Modular Mission Payload System - Babcock	Presentation of the S-80 AIP System - Antonio Perez de Lucas, Director Engineering and Innovation, Navantia
1045-1110	Electrohydrostatic Actuators for Control of Undersea Vehicles - Steve Smith and PEJ Irving, Moog Industries	The Benefits of Wireless Networking Technology for use in existing and future submarines - Martin Childs, Platform Systems Manager, ASC Pty Ltd	Analysis of Submarine Availability in the Concept Phase - Babcock	Presentation of the S-80 AIP System Land-Based Test Site - Donato Martinez Perez de Rojas, Navantia

SIA Technology Conference 2011 – Draft Program

Thursday 10 November 2011 - Plenary Session				
1115-1140	A search method for localising a noise source on a submarine - Stewart Kanev, Specialist Signatures Engineer, ASC Pty Ltd	Networks of Underwater Systems - Craig Benson, Senior Lecturer, ADFA	Model-based Systems Engineering and its Application to Submarine Design - Paul Pearce, Lead Systems Engineer, Deep Blue Tech Pty Ltd	Naval Architecture Challenges for the Integration of UUVs in Submarines - Eusebio-Angel Martinez-Conesa, Navantia
1145-1210	Submarine Manoeuvring and Appendage Design - Mr Martin Renilson, Technical Director, Renilson Marine Consulting Pty Ltd	Virtual Ship Training and Information Systems (ViSTIS) for Submarines - Tom Reynolds, BD Manager, Maritime KBR Pty Ltd	Early Stage Tools for Submarine Design - "Boat-by-Numbers" - Paul Plant - A/Concept Team Leader, Deep Blue Tech Pty Ltd	Design and Development of a Small, Low-Cost UUV for Shallow Water Operations - Alam Khairul, PhD Student, ADFA`
1210-1310	Lunch: Sponsored by Siemens Pty Ltd		Crowne Plaza breakout area	
1315-1340	Human Factors and Habitability - Anders Folbert, Team Leader, Deep Blue Tech Pty Ltd	High Capacity Underwater Communications - Mr Craig Benson, Senior Lecturer, ADFA	The S-80 Submarine Building Program - Nicolas Monereo, S-80 Head of Program, Navantia	Design and Development of a "6-Inch Submarine" - Joshua Fearnley, ADFA
1345-1410	Development of Composite Pressure Vessels for Submarine External Stowage - David Miller, ASC Pty Ltd (tbc)	An Integrated Data Environment for the Future Submarine in Australia - Malay Pal, Director, Shipbuilding, Siemens Industry Software, India	Establishment of a Cost-Effective Submarine Support Capability in Canada - Babcock	6-DOF Particle Filter-based Navigation System for AUV - Andrew Lammas, PhD Student, Flinders University
1415-1440	Dewpoint Measurement on High Pressure Air Systems (<20MPa) - James Gregor, ASC Pty Ltd (tbc)	Augmenting the Collins AN/BYG-1: Supporting In-Country Combat System Capability Evolution - Ted Huber, Managing Director, Acacia Research Pty Ltd	Infrastructure Considerations of Possible Investment in an SSN Option - Jock Thornton, University of South Australia	The Utility of Virtualisation Technologies to Combat Submarine Combat System Obsolescence - David Culpin, Engineering Manager, Raytheon Australia
1440-1510	Afternoon Coffee Break: Sponsorship Opportunity		Crowne Plaza breakout area. Rooms to be reconfigured	
1515-1545	Open Forum		MC and all Authors of Day 3 Papers	
1550-1610	Closing Remarks		President SIA	