

MONDAY 9 NOVEMBER

1300-1645 Industry visit, Babcock, Rosyth (*Fully booked*)

TUESDAY 10 NOVEMBER

0615 Becky's run club - 5k run around Arthurs Seat

0830 Registration and coffee

0915 Introduction from the Conference Chairs: **Captain (Rtd) Neil McCallum, MIMarEST.** Royal Navy and **Captain Rinze Geertsma, FIMarEST.** Netherlands Defence Academy

0930 Keynote: **Rear-Admiral Brian Metcalf.** Deputy Portfolio Acquisition Executive Maritime for Combatants, US Navy

0945 Keynote: **Rear-Admiral Rachel Durbin, FIMarEST.** Head of Navy Engineering, Royal Australian Navy

1000 Keynote: **Rear-Admiral Steve McCarthy, FIMarEST.** CNEO, Royal Navy

1015 Keynote: **Vice Admiral Sanjay Sadhu, AVSM, NM.** Controller of Warship Acquisition and Production, Indian Navy

1030 Keynote Discussion

1100 Coffee Break

Morning Parallel Sessions

SESSION	FUTURE CAPABILITIES	POWER AND PROPULSION SYSTEM CONTROL	DIGITAL SUPPORT	Interactive Sessions	
				THE INTERNAL BATTLE AND SURVIVABILITY	SURVIVABILITY
Room	Pentland	Prestonfield	Holyrood	Salisbury	
Chair	Rob Skada, FIMarEST. Director, Fawks Systems Ltd	Prof Mehdi Zadeh. NTNU	Philipp Schmelzer. Naval Architect, NVL, B.V & Co. KG	Prof Yuanchang Liu. UCL	
1200	Autonomous Mine Hunting Capability Data Exploitation: Charting a Course Through the Digital Minefield. Speaker: Cdr Stephen Taylor, FIMarEST. Royal Navy	Multi-Objective Optimisation of Diesel Engine Dynamics for Variable-Speed Naval Generators. Speaker: Lars Mulder. TU Delft	Pirate Maths, Data Lions and Robot Birds: Emergent behaviour and misaligned incentives in the digital transformation of RN Support. Speaker: Cdre Suzanna Seagrave, MIMarEST. Royal Navy	3D Naval Visualizations for increased Situation Awareness within the Internal Battle for Future Ready Navies. Speakers: Bart-Peter Smit and Jasper Wieringa. CGI Netherlands BV	Non-Causal Multi-Agent Control for Proactive and Smart Maritime Search and Rescue in Stochastic Wave Environments. Speaker: Yutong Song. University College London
1225	Design and Development of a Large USV Series. Speaker: Jelle W. Moerdijk. Daman Naval.	Dynamic Programming Analysis of Optimal Mode Selection in a Series-Parallel Hybrid Boat: A basis for Rule-based EMS Design. Speaker: Luca Di Biase. Politecnico di Torino	Designing Future Naval Support: A Requirements Led Digital Architecture Shaped by IPS, HFI, and Enterprise Data. Speaker: Steve Wilding. Babcock International Group	Improving the contribution that centre fed hose reels can make to firefighting response on ships and submarines. Speakers: James Glockling and Richard Alker. BAE Systems Maritime Submarines	Design and automation of an ROV docking system for an XLUVV. Speaker: Martin Gülland. University of Rostock, Institute of Automation

TUESDAY 10 NOVEMBER - CONTINUED

SESSION <i>Continued</i>	FUTURE CAPABILITIES	POWER AND PROPULSION SYSTEM CONTROL	DIGITAL SUPPORT	Interactive Sessions	
				THE INTERNAL BATTLE AND SURVIVABILITY	SURVIVABILITY
1250	Arctic: the Next Generation of Naval Platform. Speakers: Robert Taylor and Pilar Morales. <i>Babcock</i>	Analytical Derivation of an ECMS Based Energy Management Strategy for Hybrid Powertrains. Speaker: Francesco Novello. <i>Politecnico di Torino</i>	Development of a Health Risk Assessment Screening Tool for Shipboard Indoor Air Exposure. Speaker: Dr Nur Sarah Fatimah Tamsi. <i>MZ Services & Consultancy Sdn Bhd and International Islamic University Malaysia</i>	Sick Boat Syndrome (SBoS) among Naval Ship Crews: The Importance of Indoor Air Quality (IAQ) Monitoring and Standard Compliance. Speaker: Amirul Faiz Kamaruddin. <i>Royal Malaysian Navy</i>	
1315	Session discussions				
1330	Lunch Break				
Afternoon Parallel Sessions					
SESSION	NUCLEAR	AUTONOMOUS AND UNCREWED VESSEL CONTROL	CLIMATE AND EMISSIONS	Interactive Sessions	
				SMART MAINTENANCE	SMART MAINTENANCE
<i>Room</i>	<i>Pentland</i>	<i>Prestonfield</i>	<i>Holyrood</i>	<i>Salisbury</i>	
Chair	Olly Simmonds, MIMarEST. Principal Engineer Manager, BAE	Dr Yogang Sing. Assistant Prof in Maritime Technology, <i>University of Plymouth</i>	Commodore (Dr) R K Rana. <i>Indian Navy Veteran</i>	Dr Angelo Odetti. Researcher, <i>CNR-INM</i>	
1430	Energy System Design for a Nuclear-Powered Refuelling Vessel Supporting Unmanned Maritime Vehicles. Speaker: Ismar Klomp. <i>TU Delft</i>	Control strategies for multi-vessel formation control; escorting a vessel in fixed, flexible, or changing formations. Speaker: Bas de Kruif. <i>Marin</i>	Beyond Decarbonisation: An Active Rudder Retrofit Solution for Enhanced Manoeuvrability and Redundancy. Speaker: Dr Carsten Hermann. <i>ANDRITZ HYDRO GmbH</i>	Unlocking Autonomy Through Tribological Condition Monitoring. Speaker: Matthew Knight. <i>BMT</i>	A Generalizable Unsupervised Health-Monitoring Framework across Heterogeneous Time-Series Data. Speakers: Nicolò Faggioni, Alessandro Caviglia, Marco Antonelli and Giovanni Orrù. <i>Fincantieri NexTech</i>
1455	The Consideration of Working Fluids for Naval Micro Nuclear Reactors. Speaker: John Buckingham. <i>BMT</i>	Traceable Virtual Sea Trials in the Marine Robotics Unity Simulator for Manoeuvring Assessment of Unmanned Surface Vehicles. Speaker: Paria Rezayan. <i>Sheffield Hallam University</i>	An integrated analysis on energy, economic and environmental performances for an ammonia-fuelled large passenger vessel. Speaker: Simone Piccardo. <i>University of Genova - Thermochemical Power Group</i>	Strategic autonomy for naval structures: Approach to and economic feasibility of the remanufacturing of reclaimed stiffened panels. Speaker: Massimo Coppola. <i>TNO</i>	Exhaust-Gas Fault Detection in a Multi-Cylinder Natural Gas Engine Using Gas-Wise Autoencoder Residuals. Speaker: Youri Linden. <i>Delft University of Technology</i>
1520	Considerations for commercial nuclear reactor types on medium sized ships. Speaker: Gert-Jan Meijn. <i>Damen Naval</i>	Data-driven decision support for maritime operations. Speaker: Fenneke Sterlini. <i>Marin</i>	Lifecycle Assessment to Minimise Emissions in Ships. Speaker: Stewart Downie. <i>Babcock International</i>	Towards Net-Zero Shipbuilding: A Mathematical Model for Emissions from Construction and Maintenance Phases. Speaker: Ahmed Balata. <i>Royal University of Liverpool</i>	
1545	Session discussions				

TUESDAY 10 NOVEMBER - CONTINUED

1600	Coffee Break					
SESSION	MODERN NAVAL POWER AND PROPULSION	AUTONOMOUS NAVIGATION	SYSTEM INTEGRATION AND ASSESSMENT	Interactive Sessions		
				METHANOL ON WARSHIPS	ENVIRONMENTAL IMPACT REDUCTION	ENVIRONMENTAL IMPACT REDUCTION
Room	Pentland	Prestonfield	Holyrood	Salisbury		
Chair	Cdre (Rtd) John Voyce OBE FIMarEST. Halo Programme Director, GE Vernova	Dr Michele Martelli, FIMarEST. Associate Professor, University of Genova	Capt, Sean Feenan, FIMarEST. Exec Director, Fleet Support Royal Australian Navy,	John Buckingham, FIMarEST. Chief Mechanical Engineer, BMT.		
1630	Novel Naval Power Generation: Utilising Modern Technology to Challenge Conventional Concept Design. Speakers: Josiah Carron, Elliot Brown and Romana Majid. Babcock International Group	Learning to Approach: Whole-Body Diffusion Policies for Underwater Vehicle-Manipulator Intervention. Speaker: Sara Aldhaheri. University College London	Very Light Reading: The Next Phase of Ship-LDEW Integration. Speakers: Hayden Cole and Fred Ogilvie. BAE Systems	Methanol on Warships: Quantifying the Risk of Vapour Cloud Explosions and Toxic Exposure. Speakers: Marnix Rhijnsburger, Dorien Stroeve, Chris de Ron and Farah Bzikier. TNO	Passive Air Lubrication through Salvinia-Inspired Surfaces for Vessel Drag Reduction and Decarbonization: A Review of Coating Mechanisms, Biofouling Interactions, and Operational Performance. Speaker: Mansi Chawla. National Centre of Excellence in Green Ports and Shipping, The Energy and Resources Institute	The Digitalization of Asset Integrity: Corrosion and Biofouling Control with Intelligent Digital Skin (CIDS). Speaker: Michael Maguire. Copsy Technologies Inc.
1655	Transform Shipboard Power and Propulsion Plant operational data at-the-edge to gain smart, optimized, and sustainable performance. Speakers: Warren Johnson and Johnny Walker. Rockwell Automation	An Explainable Symbolic COLREG Classifier for Autonomous Ships. Speaker: Nicola Sabatino. University of Genoa	Next-generation technology integration in naval vessel platforms through Product Line Engineering. Speakers: Job Perdon, Micha Stam, Koen Droste and Austin Kana. Delft University of Technology	Benefits of two-stage turbocharging in static and dynamic operation for conventional diesel fueled and high-pressure direct injection methanol fueled medium speed generator sets. Speaker: Jasper Kole. Dutch Ministry of Defence - COMMIT	Long-term environmental and economic assessment of cruise ships under Maritime regulations. Speaker: Simone Piccardo. University of Genova - Thermochemical Power Group	Revisiting cathodic protection due to extensive electrification - The Aegis project. Speaker: John Prousalidis. National Technical University of Athens
1720	Sustainable power plant for modern defence assets. Speaker: Panagiotis Karvounis. University of Strathclyde	High Resolution Flash Lidar for Short Range Underwater 3D Perception. Speaker: Eleonoor Bosch. CSEM	The Importance of Radar Cross Section Prediction to the Survivability of Modern Surface Combatants in the Future Operating Environment. Speakers: Kirrie Wallace, Malcolm Robb and Jill Savva. BAE Systems			Improving hull corrosion protection and reducing related threat signatures for naval platforms. Speaker: Paul Rawlins. ESCO Maritime Solutions
1745	Session discussions					
1800	Welcome reception					

WEDNESDAY 11 NOVEMBER

0800	Registration and coffee
0900	Plenary – Industry collaboration Opening remarks – Conference chairs
0915	Keynote: Sir Simon Lister KCB, OBE. Managing Director, Naval Ships, BAE Systems
0930	Keynote: Roberto Chiti. Product Manager Automation & Control, Fincantieri NexTech
0945	Keynote: Claudia Hessen. Manager Regulatory & Integrity Energy & Control, Kongsberg
1000	Keynote Discussion
1030	Coffee Break
1100	Two-minute silence observed for Armistice Day

Morning Parallel Sessions

SESSION	CYBER SECURITY	RESILIENT NAVAL SHIP DESIGN	OPERATIONS AND RESILIENCE	Interactive Sessions	
				ENERGY OPTIMISATION	POWER SYSTEMS HARDWARE THE LOOP
Room	Pentland	Prestonfield	Holyrood	Salisbury	
Chair	Capt. David Goldsmith, DI CA Mar DH. MOD	Capt Derek Powles, FIMarEST. Littoral Lift Programme Director, Royal Navy	Lt Scott Chapman, MIMarEST. Engineering Support Officer, Royal Navy	Capt. Rinze Geertsma, FIMarEST. Associate Professor, Netherlands Defence Academy	
1100	Improving Maritime Situational Awareness: A Spectral Filtering Method for Weak Target Detection. Speaker: Giovanni Ludeno. Institute of Electromagnetic Sensing of the Environment, National Research Council of Italy	Assessing the Functional Vulnerability of Naval Combatants in early Ship Design. Speaker: Tom Philipson. Hamburg University of Technology	Admiralty Salvage at a Crossroads – Evolving Maritime Recovery for Next-Generation Naval Platforms. Speaker: Jake Guest, MIMarEST. DE&S – Salvage & Marine Operations	Time-Indexed Mixed-Integer Optimisation of Electric Harbour-Fleet Assignment, Routing and Shore-Power Charging. Speaker: Sankarshan Durgaprasad. Delft University of Technology	Developing a suite of Hull, Mechanical, and Electrical (HM&E) Control Systems. Speakers: Vincent Piesetzkie, Graig Jolley and Peter Grech. NAVSEA Philadelphia
1125	The Combat Network as the Weapon. Speaker: Morgan Colbeck. Royal Navy	An early concept-stage resilience network tool for identification of vulnerable connectivity in distributed engineering systems. Speakers: Giota Paparistodimou, Philip Knight and Malcolm Robb. BAE	Enhancing Operational Availability of Surfaced Submarines in Waves using a Reinforcement Learning Controller. Speaker: Mathieu Courdier. MARIN	A Short-Term, AI-based Electric Load Forecaster for a High Responsive Shipboard Energy Management. Speaker: Massimo Figari. Italian Navy	Modelling Extra-Propulsive Loads in Shipboard Power Systems. Speaker: Federico Graffione. University of Genoa
1150	Electronic Warfare: The Invisible Enemy of Maritime Autonomy. Speaker: Peter Macaulay. Royal Navy	Battle Barges and Mega Modules – possible applications for multi-part vessels. Speaker: Dr Rachel Pawling. UCL	Enhancing maritime Search and Rescue operations through LiDAR and thermal imaging fusion. Speaker: Filippo Ponzini. University of Genoa	Physics-based Multidomain Energy Model for a Cruise Vessel: Development, Validation & Operational Application. Speaker: Dr Giovanni Vaccarini. Fincantieri Spa	Closed-loop back-to-back testing for replacing obsolete naval gas-turbine control systems. Speaker: George Tucker. Rolls Royce Plc
1215	Session discussions				

WEDNESDAY 11 NOVEMBER - CONTINUED

1230 Lunch Break

Afternoon Parallel Sessions

SESSION	INCREASING AUTONOMY AND REDUCED CREWS	DIGITAL TWINS	RESILIENT NAVAL SHIP DESIGN	Special Interactive Sessions	
				DECISION SUPPORT SYSTEM TOWARDS AUTONOMOUS NAVIGATION: THE PROJECT MOST	
Room	Pentland	Prestonfield	Holyrood	Salisbury	
Chair	Capt Jules Lowe, MIMarEST. Royal Navy (Rtd)	Kirsty Mills. Chief Project Engineer, Rolls Royce	Jeff Cohen. Chief Engineer, US Navy	Dr Michele Martelli, FIMarEST. Associate Professor, University of Genova	
1330	Temporal Assurance in Autonomous Systems: The Problem of Justifying Decision-Making Under Uncertainty in Open-Environments. Speaker: Liam Talbot, MIMarEST. Price Waterhouse Coopers	Digital Twins for Naval Gearboxes. Speaker: Nikolas Albrecht. RENK GmbH	Time-domain simulation tool for propulsion performance assessment of a nuclear-powered naval vessel. Speaker: Eleonora Zanaboni. University of Genoa	Improving Maritime Situational Awareness: A Spectral Filtering Method for Weak Target Detection. Speaker: Giovanni Ludeno. Institute of Electromagnetic Sensing of the Environment, National Research Council of Italy	A Framework for the development of a decision support system for ship underwater radiated noise. Speakers: Fabio Colotto. University of Genoa
1355	Use of a Commercial Crew for Sea Trials. Speaker: John Newell, FIMarEST. Babcock International	From Siloed Systems to Connected Decisions: Systems Elements Analysis in Early-Stage Naval Ship Design. Speaker: Zacharias Oikonomou. TU Delft	Real Time Simulation Validation of a Decentralized Economic Dispatch for Marine Power Systems. Speaker: Brendan McCoy. Naval Surface Warfare Center	A Real-Time GNC Architecture for Marine Autonomous Surface Ships. Speakers: Raphael Zaccone and Dr Michele Martelli. Università degli Studi di Genova	
1420	Aligning Naval Electrical Systems and Minimum Crewing: Challenges, Implications, and Design Principles for Future Platforms. Speaker: Bill Moseley. BMT	Digital Twins: Foundation of connected naval autonomous operations. Speaker: Ivan Pena. Navantia	Design and automation of an ROV docking system for an XLUUV. Speaker: Martin Gülland. University of Rostock, Institute of Automation	Quantitative Evaluation of Marine Vehicle Cooperative Control in Harbour-Like Experiments. Speaker: Dr Angelo Odetti. CNR-INM	
1445	Session discussions				
1500	Coffee Break				

WEDNESDAY 11 NOVEMBER - CONTINUED

SESSION	MISSION MODULARITY	TECHNOLOGY DEVELOPMENT AND SAFETY	THE INTERNAL BATTLE	Interactive Sessions	
				DECISION SUPPORT AND AUTONOMY	AUTONOMY AND CYBER SECURITY
Room	Pentland	Prestonfield	Holyrood	Salisbury	
Chair	Capt Neil McCallum, MIMarEST. Royal Navy (Rtd)	Dr Rose Norman. Reader in Marine Electrical Systems. Newcastle University	John Buckingham, FIMarEST. Chief Mechanical Engineer, BMT	Prof Alistair Greig, FIMarEST. UCL	
1530	Evaluation and validation of the added value of modularity for specialized ships during concept exploration: A critical systematic review. Speaker: Micha Stam. Delft University of Technology	Let's Not Tie Ourselves in Knots: Adapting Safety Case Regimes for Spiral Development Programmes. Speakers: Alexander Barker and Jessica Morris. Safeguard Engineering Ltd	Structural Damage Detection in Ships Using a TCN Autoencoder and Motion Response Anomaly Scoring. Speaker: Ieza Souza Ramos. NHL Stenden	Modern Technology and the Redistribution of Human Autonomy. Speaker: Dr Peter Spayne. Cranfield University	A Preliminary Study of Cyber Attacks on Maritime LiDAR Situational Awareness. Speaker: Giacomo Longo. Università degli Studi di Genova
1555	Thinking inside the box. Deployable capability for the future navy. Speakers: Steven Howick and Jessica Scott. BAE Systems	Towards the Certification of Naval Systems Employing Artificial Intelligence. Speakers: Thomas Howe and Stephen Perry. BMT	Optimising Agent-Based Fault Diagnosis for Naval Machinery Breakdown Drills: Closing the Cognitive Gap in Decision Support Architecture. Speaker: Youri Linden. Dutch Navy	Port Vessel Traffic Control for Multi-Type Ships: A Proposed Methodology for Decision Support System Considering Marine Conditions. Speaker: Silvia Donnarumma. University of Genoa	Securing Shared Accounts in Naval Operational Technology: IAM and Zero Trust Implementation Aligned with ISA/IEC 62443, NIST SP 800-82, and the EU Cyber Resilience Act. Speaker: Patric Dove. Siemens Government Technologies
1620	Beyond the Blueprint: Mission Modularity's Impact on Modern Naval Design, Assurance, and Operations. Speaker: Kaya Nightingale. Lloyd's Register EMEA	When Looking to Win the Race of Technological Advantage, Do Royal Navy Leaders Need to Change? Speaker: Alexandra Ward. Royal Navy	Supporting Naval Damage Control Cognition with AI. Speaker: Igor Lapin. L3 Harris	Allocation of Function (AoF) for Human Autonomy Teaming (HAT). Speakers: Luca Gallo and Eshan Rajabally. BMT	
1645	Session discussions				
1900	Industry Dinner Edinburgh Suite Sheraton Grand, Hotel & Spa, Edinburgh				

THURSDAY 12 NOVEMBER

0800	Registration and coffee					
0900	Introduction from the Chairs					
0915	Keynote: Capt Mo Magzoub, FIMarEST. Head of Force Development, <i>Royal Navy</i>					
0930	Keynote: Dr Bas Buchner. Program Director of Maritime Uncrewed, <i>Royal Netherlands Navy</i>					
0945	Keynote Discussion					
1000	Coffee Break					
Morning Parallel Sessions						
SESSION	AUTONOMOUS SHIPS AND SYSTEMS	DIESEL ENGINE MAINTENANCE	POWER AND PROPULSION	Interactive Sessions		BMT/RN WORKSHOP
				SHIP DESIGN AND BUILD		
Room	Pentland	Prestonfield	Holyrood	Salisbury		Duddingston
Chair	Lt Cdr Guy Dimmock, MIMarEST. Marine Engineer Officer, <i>Royal Australian Navy</i>	Commodore (Dr) R K Rana. <i>Indian Navy Veteran</i>	Pete Deverill.	Prof Yuanchang Liu. <i>UCL</i>		BMT/RN Workshop One Hybrid Navy: What Could Stop Us Getting There?
1030	Synthesis of an Architecture for the Integration of Controllable Autonomous Behaviour in Naval Ship Design. Speaker: Moritz Luckey. <i>Helmut Schmidt University</i>	Reducing Maintenance Burden and building resilience for naval engineering systems. Speakers: Tamsyn Hills and James Fawcett. <i>BMT</i>	Techno-Economic Framework for Hybrid-Electric Propulsion Retrofitting in Harbor Tugboat Fleets: A Pathway for Sustainable Port Operations in Developing Maritime Infrastructure. Speaker: Iddi Sungura. <i>Tanzania Ports Authority</i>	Design and Development of an Advanced Robotic Fish. Speaker: Dr Angelo Odetti <i>CNR-INM</i>	Beyond the Business Case: Structured Evaluation of Digital Transformation Projects in a Naval Shipyard. Speaker: Jeroen Pruyn. <i>Delft University of Technology</i>	
1055	Conceptual Architecture and operational design considerations for a large unmanned surface vessel in anti-submarine warfare escort roles. Speaker: Wytse Hogeveen. <i>Ministry of Defence (NL)</i>	Memory-safe physics-based modelling of marine diesel engines using Rust. Speaker: Mieszko Kaminski. <i>University of Strathclyde</i>	Fuel cells operating on methanol as power supply for naval ships. Speaker: Carsten Cremers. <i>Fraunhofer Institute for Chemical Technology (ICT)</i>	Progressing the understanding of Engineering Maturity for left shifting risk in complex programmes. Speakers: Matthew Cook, Martin Douglass. <i>BAE Systems</i>	Integrating Risk-Based Design into Model-Based Systems Engineering for Naval Ship Design. Speaker: Niek Verhoeven. <i>Delft University of Technology</i>	
1120	Designing the Future Fleet: An Immersive Mixed Methods Approach to Evaluating Operational Management Concepts. Speaker: Nikki Okkels. <i>Marin</i>	Exploring the Added Value of In-cylinder Pressure for Anomaly-Based Fault Detection in Marine Diesel Engines. Speaker: Youri Linden. <i>Delft University of Technology</i>	Autonomous Vessels – Don't forget to bring the brainpower. Thoughts on how to feed the 'crew' on an unmanned warship. Speaker: Nick Smith. <i>GE Vernova</i>			
1145	Session discussions					

THURSDAY 12 NOVEMBER - CONTINUED

1200 Lunch Break

Afternoon Parallel Sessions

SESSION	AUTONOMOUS SHIPS AND SYSTEMS	DC POWER SYSTEMS	HUMAN MACHINE INTERFACE	BMT/RN WORKSHOP
Room	Pentland	Prestonfield	Holyrood	Duddingston
Chair	Lt Cdr Rob Manson, MIMarEST. SURFLOT Carriers and Destroyers Deputy Chief Engineer, Royal Navy	Dr David Wetz. Professor, UT Arlington	Toby Drywood, FIMarEST. Business Development Manager for Ships Support. BMT	BMT/RN Workshop Two Hybrid Navy: What Could Stop Us Getting There?
1300	Naval Engineering Collaboration to deliver Capability in a world of ever-growing Competition. Speaker: Simon McCowan . FIMarEST. Royal Australian Navy	Investigation of harmonic distortion in electric propulsion ships with On-shore Power Supply and high integration of power electronic converters. Speaker: Panos Kotsampopoulos . National Technical University of Athens	From Theory to Practice: Implementing CRM Principles in Safety-Critical Systems (2011-2026). Speakers: Daniel Kelly and Robert Sgroi . Naval Surface Warfare Center, Philadelphia Division	
1325	The Challenge of Crewing Future Surface Combatants. Speakers: Malcolm Robb, Ewan MacIntyre, Matthew Ashley and Simon Saunders . BAE Systems Maritime	Hybrid Shipboard Thermal Pulse Management: Passive Thermal Energy Storage Burst Cooling with Chiller Recharge. Speakers: Isaac Mahderekal and Rasik Patel . Honeywell Aerospace and NAVSEA	Human-in-the-Loop AI for Safe and Intelligent Ship Control Systems. Speaker: Dr Sajid Hussain FIMarEST. Bangladesh Marine Academy	
1350	How Fast Can a Warship Absorb New Capability? Speaker: Jan Hedeman . Managing Director, SSI.	Added value of supercapacitors in the dynamics of a variable speed genset in a maritime DC architecture; an experimental study. Speaker: Menno Merts . Marin	The Critical Role of the Graphical User Interface in Modern Shipboard Control Systems. Speaker: Chetan Vajapey . KAI Solutions Inc	
1415	Session discussions			
1435	Closing Plenary Session			
1440	Closing Keynote: Sarah Kenny OBE . CEO, BMT			
1500	Presentation of the Sir Donald Gosling Award Presentation of the Patron Awards			
1515	Closing remarks			
1530	Close of conference			