



# Maritime cyber security and resilience symposium

Programme 2023



**Cyber-SHIP Lab**  
SECURING MARITIME



INTERNATIONAL  
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# MARITIME CYBER SECURITY AND RESILIENCE SYMPOSIUM – PROGRAMME

## DAY ONE Wednesday 1 November

TIME	EVENT
08:30	REGISTRATION
<b>Opening session</b>	
08:55	<b>EVENT HOUSEKEEPING</b> Chloe Rowland, Maritime Cyber Projects and Key Partner Relationships Manager, University of Plymouth
09:00	<b>WELCOME AND OBJECTIVES</b> Professor Judith Petts CBE, Vice-Chancellor, University of Plymouth
09:10	<b>OPENING REMARKS</b> Jack Westwood-Booth, Senior Deputy Director, Maritime Safety Division, IMO
09:20	<b>WAS THAT REALLY THE WORST THAT COULD HAPPEN?</b> Professor Kevin Jones, Principal Investigator, Cyber-SHIP Lab; Executive Dean, Faculty of Science and Engineering, University of Plymouth
10:00	DISCUSSION
10:30	<b>MORNING TEA</b> Includes Holistic Maritime Cyber Security Training showcase
<b>Session 2: Incident reporting and future research</b> Chair: Stephen McCombie, Professor of Maritime IT Security, NHL Stenden University of Applied Sciences	
11:00	<b>THE METRIC SYSTEM: CYBER INCIDENT REPORTING METRICS, THEIR VALUE, AND HOW WE MOVE FORWARD</b> Captain Adam B. Morrison, Detachment Chief from Coast Guard Cyber Command, U.S. Coast Guard
11:30	<b>PANEL + AUDIENCE DISCUSSION</b> Current and future directions in Maritime Cyber Security <ul style="list-style-type: none"><li>• Professor Adam Sobey, Professor of Data-Centric Engineering, University of Southampton; and Programme Director for Data-Centric Engineering, The Alan Turing Institute</li><li>• Dr Gary Kessler, independent academic, consultant, and maritime cyber security practitioner, Professor of Cyber Security (retired)</li><li>• Dr Kimberly Tam, Cyber-SHIP Lab Academic Lead and Associate Professor in Cyber Security, University of Plymouth; Marine and Maritime Group Lead, The Alan Turing Institute</li></ul>
12:30	LUNCH

# MARITIME CYBER SECURITY AND RESILIENCE SYMPOSIUM – PROGRAMME

## DAY ONE Wednesday 1 November

TIME	EVENT
<b>Session 3: Roadmaps and models</b> Chair: Dr Gary C Kessler, Gary Kessler Associates	
13:45	<b>DEVELOPMENT OF A COMPREHENSIVE CYBER SECURITY ROADMAP THROUGH A CONCEPT OF OPERATIONS (CONOPS), INCLUDING A REVIEW OF INITIATIVES TO MEET IACS NEWBUILD SHIPS' CYBER RESILIENCE REQUIREMENTS</b> <b>Jungo Shibata</b> , Manager, Maritime and Logistics IoT Team, Maritime Technology Group, Monohakobi Technology Institute, a Research & Development subsidiary company of NYK Line, Japan
14:25	<b>THREAT MODELLING OF THE AUTONOMOUS SHIP'S OT SYSTEMS</b> <b>Muhammed Erbas</b> , Maritime Transportation, Management Engineering and Cybersecurity Researcher, Tallinn University of Technology
15:05	<b>THE COMPLEX RELATIONSHIP BETWEEN THE MARINE INSURANCE MARKET AND CYBER RISKS – FURTHER TESTED BY THE EMERGENCE OF CYBER-ENABLED SHIPS</b> <b>Eva Szewczyk</b> , Senior Policy Advisor, Maritime Capability Campaign Office, UK Department for Business and Trade; PhD researcher: Legal and insurance implications of autonomous shipping, Northumbria University
15:45	<b>AFTERNOON TEA</b> Includes Holistic Maritime Cyber Security Training showcase
<b>Session 4: Platforms and capabilities</b> Chair: Prof Kevin Jones	
16:15	<b>OUR NEXT GENERATION MARITIME CYBER SECURITY / CYBER-PHYSICAL RESEARCH PLATFORM</b> <b>Dr Kimberly Tam</b> , Cyber-SHIP Lab Academic Lead and Associate Professor in Cyber Security, University of Plymouth <b>Avanthika Vineetha Harish</b> , Industrial Researcher, Pentesting, Cyber-SHIP Lab, University of Plymouth
16:50	<b>WHEN YOUR ASSET DOESN'T STAY STILL – THE STATE OF PLAY IN MARITIME SECURITY OPERATION CENTERS</b> <b>Allan Nganga</b> , PhD candidate in Maritime Cybersecurity, Western Norway University of Applied Sciences
17:20	<b>DAY 1 WRAP-UP</b>
17:30 – 18:30	<b>NETWORKING RECEPTION</b>

# MARITIME CYBER SECURITY AND RESILIENCE SYMPOSIUM – PROGRAMME

## DAY TWO Thursday 2 November Industry-focused knowledge sharing

TIME	EVENT
08:30	REGISTRATION
<b>Session 5: Opening session</b>	
09:00	<b>WELCOME TO DAY-TWO</b> Professor Kevin Jones, Principal Investigator, Cyber-SHIP Lab; Executive Dean, Faculty of Science and Engineering, University of Plymouth
09:05	Baroness Vere, Minister for Aviation, Maritime and Security, UK Department for Transport Video address
09:10	<b>OPENING KEYNOTE REMARKS</b> Rear Admiral James Parkin, Director Develop - Navy Command Headquarters, Royal Navy
09:20	<b>A REAL-WORLD MARITIME CYBER THREAT: THE SOFTWARE SUPPLY CHAIN</b> Andy Howell, Principal Cyber Security Consultant, BMT Thomas Scriven, Principal Consultant, Mandiant
09:45	<b>THE UK'S STRATEGIC APPROACH – A CYBER SECURITY FRAMEWORK TO SUPPORT THE GLOBAL MARITIME COMMUNITY</b> Matthew Parker, Head of Maritime Security Strategy, Threat & Risk, UK Department for Transport
10:05	<b>ANALYSIS OF PUBLICLY REPORTED CYBER INCIDENTS IN THE MARITIME SECTOR 2002-2023</b> Professor Stephen McCombie, Professor of Maritime IT Security, NHL Stenden University of Applied Sciences Jeroen Pijpker, Senior Lecturer/Researcher in Cyber Security, NHL Stenden University of Applied Sciences
10:30	<b>MORNING TEA</b> Includes Holistic Maritime Cyber Security Training showcase
<b>Session 6: Increasing cyber resilience</b>	
Chair: Prof Kevin Jones, Principal Investigator, Cyber-SHIP Lab; Executive Dean, Faculty of Science and Engineering, University of Plymouth	
11:00	<b>PATHWAY TOWARDS CYBER RESILIENT SHIPPING THROUGH DESIGNING AND BUILDING SHORE-BASED SUPPORT CAPABILITIES IN INCIDENT RESPONSE (MARITIME SOCS)</b> Makiko Tani, Deputy Head, Cybersecurity Team, ClassNK
11:35	<b>THE MARITIME CYBER PRIORITY: FINDINGS FROM DNV'S 2023 MARITIME CYBER SECURITY RESEARCH REPORT</b> Svante Einarsson, Head of Cyber Security Maritime, DNV
12:10	<b>PANEL + AUDIENCE DISCUSSION</b> Maritime's most pressing cyber security concerns <ul style="list-style-type: none"><li>• Rear Admiral James Parkin, Director Develop - Navy Command Headquarters, Royal Navy</li><li>• Matthew Parker, Head of Maritime Security Strategy, Threat &amp; Risk, Maritime Security Division, Department for Transport</li><li>• Tim Acland, Chief Technology Officer, HENSOLDT UK</li><li>• Svante Einarsson, Head of Cyber Security Maritime, DNV</li></ul>
12:50	<b>LUNCH</b> Includes Holistic Maritime Cyber Security Training showcase

# MARITIME CYBER SECURITY AND RESILIENCE SYMPOSIUM – PROGRAMME

## DAY TWO Thursday 2 November Industry-focused knowledge sharing

TIME	EVENT
<b>Session 7: Governance and regulation</b> Chair: Malcolm Warr, MSM	
14:00	<b>MARITIME INDUSTRY GUIDELINES FOR CYBERSECURITY ON BOARD SHIPS, A COMPREHENSIVE REVIEW</b> Jakob Larsen, Head of Maritime Safety & Security, BIMCO
14:25	<b>CYBER SECURITY CONSIDERATIONS FOR THE MARITIME SINGLE WINDOW (MSW) – MANDATORY FROM 2024</b> Frans van Zoelen (Mintco), representing the International Association of Ports and Harbors (IAPH)
14:50	<b>MTS-ISAC'S LATEST MARITIME CYBER ATTACK ACTIVITY AND TRENDS REPORT, INCLUDING PUBLIC/PRIVATE SECTOR EFFORTS TOWARDS INFORMATION SHARING</b> Scott Dickerson, Executive Director, MTS-ISAC; Founder and Principal, CISO
15:15	<b>AFTERNOON TEA</b> Includes Holistic Maritime Cyber Security Training showcase
<b>Session 8: Cyber consequences</b> Chair: Tim Acland, Chief Technology Officer, HENSOLDT	
15:45	<b>CYBER BATTLE DAMAGE REPAIR. TOWARDS AN IMPROVEMENT OF CYBER RESILIENCE OF NAVY SHIPS</b> Commander William van der Geest, Royal Netherlands Navy
16:10	<b>OUR VESSEL BREACH: WHAT'S TECHNICALLY PLAUSIBLE IN REAL-WORLD MULTI-SYSTEM VESSEL TESTING?</b> Kelly Malynn, Product Lead and Underwriter for Cyber Physical Damage, Beazley
16:35	<b>CLOSING REMARKS</b> Jack Westwood-Booth, Senior Deputy Director, Maritime Safety Division, IMO
16:45	<b>SYMPOSIUM WRAP-UP</b> Professor Kevin Jones, Principal Investigator, Cyber-SHIP Lab; Executive Dean, Faculty of Science and Engineering, University of Plymouth
17:00	<b>SYMPOSIUM AT IMO ENDS</b> See Day-3 below for optional Cyber-SHIP Lab tour tomorrow at University of Plymouth

## DAY THREE Thursday 3 November Optional Cyber-SHIP Lab tour at University of Plymouth

11:00	<b>INFORMAL CYBER-SHIP LAB AND MARINE BUILDING FACILITIES TOURS</b> We invite delegates to <a href="#">register</a> to visit the Cyber-SHIP Lab in Plymouth during the day following the Symposium. The tours will take place at regular intervals during the day to accommodate different delegate arrival times. They will include an opportunity to see the University of Plymouth's Maritime Cyber Threats Research Group facilities and research platforms, including the Cyber-SHIP Lab and associated marine research facilities. There will be opportunities to speak with members of the research team.  Delegates will need to make their own way from London to Plymouth. If you wish to stay overnight in Plymouth, please <a href="#">email our Events Team</a> for details of Plymouth hotels with a special University of Plymouth rate.
14:00	<b>CLOSE</b>

# SPEAKERS



**Tim Acland**  
Chief Technology Officer,  
HENSOLDT UK

I studied Electronics with Telecoms in Southampton, Karlsruhe and Paris, culminating in a six-month placement at Motorola Labs in Paris. On graduating in 2002, I jumped career from Telecoms to Radar, to find employment, spending 13 years at Northrop Grumman in New Malden working on radar sensors and Integrated Naval Systems, before joining Kelvin Hughes in Enfield as Chief Engineer, later Design Authority for SharpEye™ radars. I supported the sale of Kelvin Hughes to Hensoldt in 2017 and became CTO in 2020, challenged with charting the technological path for UK product lines. I drive collaborations with academia and defence partners, and support the offering of Hensoldt Group products and solutions into the UK market. I had three years of Army Officer Training at University, am interested in the evolution of Science and Technology in the past and present and love an adventure - for example sailing on a yacht to Antarctica in 2013.



**Scott Dickerson**  
Executive Director for the nonprofit  
Maritime Transportation System  
Information Sharing and Analysis Center  
(MTS-ISAC)

The MTS-ISAC community represents stakeholders involved in shipping, cruise, energy, and logistics supply chain operations spanning across 6 continents and over 160 countries. It is focused on international maritime information sharing to promote cyber information exchange throughout the MTS community. The MTS-ISAC provides actionable, relevant, and contextualized cyber threat information analyzed from trusted MTS private and public sector stakeholder shares to help provide the early warning needed for organizations to protect themselves against cyber threats.

Mr. Dickerson brings over 25 years of combined government, private sector, and consulting experience to the cybersecurity, intelligence, and information sharing disciplines. He has led international intelligence and cybersecurity program efforts for both government agencies and corporations. As a result, Mr. Dickerson has firsthand experience aligning international policies, procedures, and technical efforts across multiple national and corporate efforts. He has served in cybersecurity leadership positions in the public and private sectors and has developed cybersecurity strategies and risk management



**Svante Einarsson**  
Head of Cyber Security Maritime, DNV

programs focused on safe and secure maritime critical infrastructure operations. This includes developing and implementing a wide range of enterprise cybersecurity controls, spanning enterprise environments as well as onboard vessels and for shoreside facilities related to IT, OT, and IoT systems.

Mr. Dickerson established and continues to help organize the annual Maritime Cybersecurity Summit to help further build the maritime cybersecurity community. In addition, he is the principal and founder of CISO LLC, a consultancy focused on supporting maritime community stakeholders. He serves as the Director of the Global Maritime Cybersecurity Consortium, which addresses the maritime cybersecurity support needs of public and private sector organizations.

Mr. Dickerson holds Master's degrees in Cybersecurity, Business Administration, and International Policy and Practice and received the following certifications: C|CISO, CISSP, PMP, Network Forensics Analysis, PCI Professional, C|EH, TOGAF 9.1 Certified. His multi-disciplinary approach blends people, process, and technology cybersecurity controls with threat analysis, business administration, program management, and information sharing best practices to help organizations address cybersecurity challenges through effective risk management practices.

Svante is heading Maritime Cyber Security in DNV and is located in Hamburg, Germany at DNV's maritime headquarters. Svante has extensive experience in the maritime cyber security domain starting even before guidance and rules had been released to the industry. Over the years he has worked with assessing the cyber security of vessels and ship managers as well as advising clients on IT/OT security, cyber security management systems, cyber risk management, training of staff and compliance against international regulations and standards. Before joining DNV, he worked as a safety and security risk management engineer in the nuclear industry. Svante is an active contributor to national and international forums and initiatives on maritime cyber security, partnering with vendors, shipyards, owners/operators/managers, charterers, insurance companies and regulators.

# SPEAKERS



**Muhammed Erbas**  
Tallinn University of Technology  
MSc in Cybersecurity

Muhammed Erbas is a multidisciplinary researcher with an academic background in Maritime Transportation and Management Engineering and Cybersecurity. Muhammed's interest in cybersecurity was sparked when he participated in an Ideathon competition organized by the Ministry of Transport and Infrastructure of Türkiye. His innovative project on maritime cybersecurity earned him second place and further fueled his passion for the field. He graduated from Istanbul Technical University, where he obtained his bachelor's degree in Maritime and then an Oceangoing Watchkeeping Officer license. Currently, Muhammed is pursuing a Master's degree with a full scholarship in a dual diploma program from Tallinn University of Technology and the University of Tartu in Estonia. His research interests are at the intersection of cybersecurity, machine learning, artificial intelligence, and autonomous ships.



**William van der Geest**  
Royal Netherlands Navy

William is a Navy Officer within the Royal Netherlands Navy for almost 25 years. During his career, he has worked in a large variety of Operational jobs, including Officer of the Watch, Principal Warfare Officer and Head of Operations. Besides these sea-tours, he has worked, for example, as an Exchange Officer for the United States Navy and at a NATO Headquarters. His current job transferred him to the Caribbean where is now the Head of Operations of the Dutch Caribbean Coast Guard.

Back in 2020 he was given the chance by the Royal Netherlands Navy, to tailor his career more towards the Cyber domain. For a two year period, he participated in the Executive Masters programme in Cyber Security of the Technical University Delft and Leiden University in the Netherlands. His operational knowledge and drive allowed him to explore this diverse domain and enhanced his insight that the challenges of Cyber threats in our everyday life and operations are enormous.

From the start of his Thesis explorations, he determined that his research was to be focused on enhancing the Cyber Resilience within the Maritime Domain. From his experience on board of naval ships, he realized that the ship's crew required assistance in handling cyber incidents: merchant and navy ships alike will have only have,

at best limited resources and knowledge on board. At the same time, limitations, for instance in bandwidth and access to shore based SOC's, will not allow for external support. To create the appropriate support for the crew became a focal point in his cooperation with Thales, the Netherlands, and the development of a model that he called Cyber Battle Damage Repair.

William is eager to promote this concept within the stakeholders in the Maritime industry, and to explore the wider range of applications of the model. This ties in with his mentality of problem solving and capitalizing the knowledge and strengths available in a team, despite the apparent differences between the military and civilian world. Thanks to his multi-disciplinary background, William has a unique perspective in the relationship between business processes and operational procedures, associated IT components and how Cyber threats impact all of these.

William holds a Bachelor's degree in Human Resources at the Royal Netherlands Naval College, a Master's degree in Leadership at the University of Oklahoma and a Master's degree in Cyber Security at the Leiden University.



**Avanthika Vineetha Harish**  
Industrial Researcher, Pentesting, Cyber-SHIP Lab, University of Plymouth

Avanthika is an Industrial Researcher at Cyber SHIP lab and a PhD candidate at the University of Plymouth. She is focused on vulnerability assessment and security testing for maritime systems. Avanthika has a Masters in Cyber Security from Lancaster University, UK, with full scholarship from the British Council. Her Bachelor's degree was in Computer Science and Engineering from Mahatma Gandhi University, India. Avanthika's research interests include cyber security for maritime, industrial control systems, vulnerability assessment and reporting, and security testing. She is expert in developing cyber security challenges for training purposes.



# SPEAKERS



**Dr Rory Hopcraft**  
Lecturer in Cyber Security,  
Plymouth University

Rory divides his time between cyber security research and teaching. Completing his PhD within the nationally funded Centre of Doctoral Training in Cyber Security based at Royal Holloway University, he focused on the regulatory aspects of maritime cyber security. His current focus is on the cyber-related skills and training needed by today's seafarers, including the utility of immersive training techniques. Rory enjoys adopting an interdisciplinary approach to his work, exploring new topics and themes, including amongst others: maritime security, piracy, environmental protection, sustainability, and critical infrastructure protection.



**Andy Howell**  
Andy Howell, Principal Cyber Security  
Consultant, BMT

Andy is a Principal Cyber Security Consultant at BMT and a Certified Information Systems Security Professional (CISSP), Cyber Certified Professional (CCP) Senior Practitioner in the Security and Information Risk Advisor (SIRA) role and Chartered Engineer with 24 years' experience in the Royal Navy and Industry. He has a broad portfolio of skills and qualifications in Cyber Security, Engineering, Project Management and Leadership. Since joining BMT in 2019, Andy has worked on a variety of projects in support of the Royal Navy and Royal Fleet Auxiliary, focussing on improving the cyber resilience of legacy systems and the secure design of future systems.



**Professor Kevin Jones**  
Executive Dean, University of Plymouth

Professor Kevin Jones is currently Professor of Computing Science and Executive Dean of the Faculty of Science and Engineering at the University of Plymouth, responsible for the Schools of Engineering, Computing & Mathematics, Biological & Marine Sciences and Geography, Earth & Environmental Sciences.

Prior to joining Plymouth, he was Head of Computer Science at City University London. Previously, he had spent a number of years in the Silicon Valley in CA, holding executive, managerial, technical and research positions, in both successful start-up companies and major corporations.

His research and teaching interests cover the Trustworthiness of Complex Systems, including Cyber Security, with a focus on the Maritime domain, and he is the founder member of the Maritime Cyber Threats Research Group. Kevin is a Fellow of the IMarEST, IET and the BCS, a Senior Member of the IEEE and the ACM, and a Liveryman of the WCIT.



**Dr Gary C Kessler**  
Gary Kessler Associates

Gary is a retired professor of cybersecurity, co-author of "Maritime Cybersecurity: A Guide for Leaders and Managers" (2022), and president of Gary Kessler Associates. He is the Chief of the Cybersecurity Prevention Operations Division of the U.S. Coast Guard Auxiliary (AUXCYBER), guest faculty at the US Coast Guard Academy, on the advisory board of Cydome, a principal consultant at Fathom5, and a Non-Resident Senior Fellow at the Atlantic Council. Gary has been in the information security field since the late-1970s; his current research efforts are related to maritime cybersecurity, with an emphasis on AIS and maritime communication protocol vulnerabilities. Gary is a Master SCUBA Diver Trainer and holds a 50 GT merchant mariner credential.

More information can be found at [www.garykessler.net](http://www.garykessler.net).

# SPEAKERS



**Jakob Larsen**  
Head of Maritime Safety & Security,  
BIMCO

Jakob is Head of Maritime Safety & Security at BIMCO, including cyber security. His career began in the Danish Navy as a navigator and surface warfare officer, and later ashore in the Ministry of Defence, rising to the Commander rank. In 2010, he joined BIMCO as Maritime Security Officer. After three successful years in BIMCO, he moved to Nordic Tankers to become Head of HSSEQ. In 2015, he moved to Maersk Line as Global Security & Marine QA Manager. In parallel, he served as Chairman of the Security Working Group of the European Community Shipowners' Associations. In 2018, Jakob returned to BIMCO, to lead the Maritime Safety & Security department. His qualifications include: Master Mariner, Principal Warfare Officer, Joint Command & Staff Course graduate, Company Security Officer/Ship Security Officer, and ISO 9001 lead auditor.



**Kelly Malynn**  
Cyber Product lead M.A.P Division  
Beazley PLC

Kelly has a specialist focus on the identification, quantification of complex risks. In 2019 she developed Beazley affirmative physical damage marine hull product and now heads cyber physical damage underwriting across the maritime classes.

She has previously been responsible for providing risk assurance to the board on systemic aggregation, emerging risks, exposure management and capital provisions, with specific focus on cyber and climate risk.

She is Chair of the Lloyd's Market Association's Cyber Strategy Group, and Chair of the LMA Climate risk working group, has been at Beazley since 2009, has over 22 years of Lloyd's London market experience.



**Stephen McCombie**  
Professor of Maritime IT Security  
NHL Stenden University  
of Applied Science

Stephen's current research interests are in maritime cyber threats, cyber crime, digital forensics, cyber threat intelligence and cyber conflict. His research draws on a diverse background in policing, security and information technology. His PhD thesis examined the impact of Eastern European cybercrime groups on Australian banks. Over the last 20 years he has held management roles with a number of organisations including IBM, National Australia Bank, and RSA Security and he has also been an active researcher and academic over that period. Prior to his current role he has lectured on cyber security and digital forensics over a number of years at Macquarie University, Charles Sturt University and National University of Singapore and published a large number of research articles on those topics.



**Captain Adam B. Morrison**  
Detachment Chief from Coast Guard  
Cyber Command, U.S. Coast Guard

Captain Morrison is the Director for infrastructure, resources, and capabilities at U.S. Cyber Command's Cyber National Mission Force. He is responsible for supporting and enabling cyber activities that defend the United States.

Captain Morrison most recently served as the Deputy, Coast Guard Cyber Command in Washington D.C until July 2023. He was responsible for supporting the Commander's ability to conduct operations and deliver effects in and through the cyberspace domain.

Prior to Coast Guard Cyber Command, he served as the first Commanding Officer of Coast Guard Cutter STONE, and served as the first Coast Guard Attaché to the Tokyo Embassy. He had previously served in six cutters; assignments ashore included: Academy Instructor; Congressional Fellow to the Senate Appropriations Committee, and Budget Reviewer at Headquarters.

Captain Morrison is a 1995 Coast Guard Academy graduate and holds a master's degree from Princeton University.

# SPEAKERS



## Allan Nganga

Western Norway University of Applied Sciences (HVL)

Allan is a PhD candidate in Maritime Cybersecurity at Western Norway University of Applied Sciences (HVL). He is a member of the HVL Maritime Safety Research Group (MarSafe). Presently, his research focuses on the operational efficiency of cyber security operation centers within the maritime domain.



## Matthew Wm. Parker

Head of Maritime Security Strategy, Threat and Risk, UK Department for Transport

Matthew is an experienced security professional and risk manager. At the beginning of his government career Matthew delivered cyber security training to information risk owners and senior officials across the UK government, helping develop more consistent, comprehensive approaches to information risk assessment and management. This included development of training and guidance.

As a diplomat working for the Department for Transport, he supported aviation security within the Middle East. Working with partner states to collaboratively develop operational responses to emerging physical and cyber threats.

In his current role, he led a programme to develop the UK's National Strategy for Maritime Security. The strategy clearly sets out the UK's ambitions and principles for the next 5 years, demonstrating the range of activity taking place across; operational, policy and strategy, stakeholders. Since publishing the strategy, his team have been working with domestic and international partners to understand and manage complex security risks affecting the global maritime security community.



## Rear Admiral James Parkin

Director Develop - Navy Command Headquarters, Royal Navy

James Parkin joined the Royal Navy after university, and graduated from BRNC Dartmouth in 1999. In almost 25 years of service, he has served on operations at sea and ashore across the globe, including an operational tour in Baghdad, and spent time afloat in every ocean on the planet. He is a graduate of both the Advanced Command and Staff Course and the Higher Command and Staff Course at the Defence Academy of the UK, and holds degrees from the University of Oxford and Kings College London.

Parkin has commanded at sea in every rank, including the inshore patrol vessel HMS RANGER, the Type 23 frigate HMS MONTROSE, the Fleet Amphibious Flagship HMS BULWARK, the Joint Expeditionary Force Maritime Task Group, and NATO's Initial Follow-on Forces Group. In his most recent seagoing role, he was Commander of the Littoral Strike Group (COMLSG) from 2018 to 2020, in which capacity he deployed worldwide, and commanded several notable joint operations overseas, including the multinational BALTIC PROTECTOR deployment to Northern Europe in 2019, and the International Maritime Security Construct in the Middle East in 2020. After a year in PJHQ as Assistant Chief of Staff for Joint Plans (ACOS J5), he was promoted to Rear Admiral and assumed the role of Director Develop in summer 2021.



## Professor Judith Petts CBE

Vice-Chancellor, University of Plymouth

After graduating with a BA (Hons) Geography from Exeter University in 1975, Professor Judith Petts, CBE, went out into the commercial world, including international banking (Barclays International) and a retail planning consultancy company, returning to research posts at Nottingham University and then Loughborough University from 1980. She completed her PhD by publications (Loughborough University) in 1996: "Risk Management at the Local Authority Level: Managing the Technical Institutional-Public Interface". She was a lecturer/senior lecturer in Centre for Hazard and Risk Management, Loughborough from 1987, becoming Centre Director in 1997.

In 1999, Professor Petts was appointed to the Chair in Environmental Risk Management at University of Birmingham and became Head of the School of Geography, Earth and Environmental Sciences in 2001/2. In 2007 she was appointed Pro-Vice-Chancellor, taking the Research and Knowledge Transfer portfolio. In 2010 Judith moved to the University of Southampton to become the inaugural Dean of the new Faculty of Social and Human Sciences and then in January 2014 was appointed Pro-Vice-Chancellor Research and Enterprise.

Professor Petts moved to take up her appointment as Vice-Chancellor of Plymouth University in February 2016.

# SPEAKERS



**Jeroen Pijpker CEH**  
Senior Lecturer/Researcher in Cyber Security, Maritime IT Security Research Group, NHL Stenden University of Applied Sciences

Over 15 years experience in cyber security. Since 2008 lecturing on different programs within ICT Academy of NHL Stenden University of Applied Sciences. Experienced instructor in teaching Certified Ethical Hacker (CEH) and secure programming within the university program.

**Teaching subjects including:**

- Ethical Hacking (CEH)
- Secure Programming
- IoT
- IoT Pentesting
- Embedded Systems
- Field-programmable gate arrays (FPGA)
- Operating Systems concepts

**Active research projects**

- Maritime Honeynet
- AIS Spoofing
- Maritime Cyber Security Drills

**Education**

- Technische Informatica/Computer Science / Hogeschool Drenthe (Bachelor)
- Business Process Management and IT / Open Universiteit (Master of Sciences)



**Chloe Rowland,**  
Maritime Cyber Projects and Key Partner Relationships Manager, University of Plymouth

With 15 years' higher education sector experience, Chloe is focused on delivery, industry engagement, relationship management, and secure economic growth activities in the maritime sector, with particular emphasis on cyber security in vessels, ports and offshore energy developments.

She manages the University of Plymouth's flagship Maritime Cyber Security research project, Cyber-SHIP Lab, a multi-million-pound facility funded by Research England and the University in partnership with key industry and defence stakeholders.

Cyber-SHIP Lab offers a unique opportunity to address global maritime cyber security challenges and Chloe works to engage the maritime sector with the research by creating and managing relationships with regional, national, and international stakeholders to build cyber resilience. She also manages the new Cyber Resilience for Offshore Wind Networks (CROWN) research project, funded by the HotSW Local Enterprise Partnership. This broadens our research focus into the offshore wind energy sector.



**Thomas Scriven**  
Principal Consultant, Mandiant

Chloe is the Marine and Maritime Solutions Consultant for the Southwest Centre of Excellence for Satellite Applications with links to the Satellite Applications Catapult network. She is a member of the Steering Committee for the Southwest Regional Defence and Security Cluster and chairs its Cyber Security Special Interest Group.

Principal Strategic Consultant, Tom, is a consultant based in the UK, specializing in security operations and threat intelligence advisory services. He has significant experience as a trusted advisor to sensitive government departments, and has consulted for major corporate entities, including in critical national Infrastructure sectors to undertake major cyber security assessments and implement complex cyber security transformation programmes. Tom functions as the Mandiant Maritime initiative lead and regional OT/ICS security consulting representative.

Tom has worked with large multinational companies to assess their security programmes, providing prioritised recommendations and roadmaps to enhance security posture and effectiveness.

# SPEAKERS



## Jungo Shibata

Manager, Maritime and Logistics IoT Team, Maritime Technology Group, MTI (Monohakobi Technology Institute) Co. Ltd., a Research & Development subsidiary company of NYK Line, Tokyo, Japan.

In charge of development and improvement of the ship cyber security and ship IoT data collection system in order to secure safety performance and efficiency of ships operated by NYK Line. Currently, Leader of ship cyber security Working group in the Smart Ship Application Platform (SSAP) Project which is a joint Industry project supported by Japan Ship Machinery and Equipment Association (JSMEA) and ClassNK.

(\* I will be posted to a different department in NYK London after June 2023. Information will be updated as soon as the official affiliation is finalised.)



## Adam Sobey

Professor of Data-Centric Engineering, University of Southampton; and Programme Director for Data-Centric Engineering, The Alan Turing Institute

Adam Sobey is Chair of Data-Centric Engineering the Maritime Engineering Group. He completed his MEng in Aerospace Engineering with Astronautics in 2006 before moving to the Maritime Engineering group to do a PhD in Concurrent Engineering in the Context of the Composite Leisure Boatbuilding Industry in 2010. He joined the group as a Research Fellow in 2009 to lead the LR/MoD Centre of Excellence in Marine Structures before moving to LRET funding to explore the use of Multi-Level Selection mechanisms within Evolutionary Computation. Between 2014-2017 he was a visiting Scientist at the Institute of High Performance Computing before returning to take up a lectureship at the University of Southampton 2018, Associate Professor 2020 and Professorship 2022. He received the Royal Institute of Naval Architects Jeom Paik award for best Paper on Structures under 30 in 2015 for work related to improving Structural Safety of Composite Ships. He is currently an Editor of Data-Centric Engineering and Associate Editor of Ship and Offshore Structures. He is also the Director of the Centre of Excellence of Data-centric Engineering for Clean Oceans at the University of Southampton, bringing together experts from across the University to provide a real world difference in decarbonisation.



## Eva Szewczyk

Senior Policy Advisor, Maritime Capability Campaign Office, UK Department for Business and Trade; PhD researcher: Legal and insurance implications of autonomous shipping, Northumbria University

I am a final-year PhD candidate at Northumbria University, researching legal and insurance implications of autonomous shipping. I hold LLB in Law from Hull University, MSc from Newcastle University School of Engineering along with postgraduate insurance qualifications from the Chartered Insurance Institute. I regularly present my research at industry events such as the Autonomous Ship Expo in Amsterdam or Smartship Exchange.

I am also a civil servant, heading the policy team within the Maritime Capability office at the Department for Business and Trade. I have drafted white papers on maritime policy and published articles on autonomous shipping and regulating activities within the UK marine area.



## Dr Kimberly Tam

Cyber-SHIP Lab Academic Lead and Associate Professor in Cyber Security, University of Plymouth

Dr Kimberly Tam gained a B.S in Computer and System Engineering at Rensselaer Polytechnic Institute in the USA and a PhD in Information Security from Royal Holloway University of London in the UK. She is currently an Associate Professor at the University of Plymouth and researches the area of cyber-security in all things maritime. She is the academic lead for the Cyber-SHIP project, PI of a Maritime Autonomous System AI security project, and co-I in a number of other maritime cybersecurity projects across a number of topics including security of vessels, ports, and offshore platforms. Kimberly is the Theme Lead for Marine and Maritime at the Turing Institute's Data Centric Engineering 2.0 Project.

# SPEAKERS



**Makiko Tani**  
Deputy Manager of Cyber Security Team,  
ClassNK

Maki has held several positions in ClassNK, the world's leading classification society, engaged in activities related to class rules and international conventions in various departments of the Society. Throughout her career, she has been committed to handling IACS/IMO matters and has gained extensive knowledge in strategy and policy development. Backed by her experience in collaborating and building relationships with maritime stakeholders, Makiko was assigned as a member of the ClassNK Cyber Security project team when it was first formed in 2018 and contributed to the development of the ClassNK Cyber Security Approach and a set of Guidelines. She has also represented ClassNK in IACS' joint working group on cyber security. In 2020, the ClassNK Cyber Security Team, a dedicated division, was organized where she is in charge of providing audits and certification services as well as further elaborating ClassNK cyber security guidelines and approaches.



**Frans van Zoelen**  
Legal specialist with demonstrated  
presence in the port and  
the maritime industry.

As Head Legal Emeritus of Port of Rotterdam Authority and as Honorary Member of the International Association of Ports and Harbors (IAPH) he is active in the Legal Committee and the Data Collaboration Committee of IAPH. In this capacity he is able to follow the output (treaties, conventions, legislation, guidelines) of instrument making bodies relevant for the port and maritime industry (IMO, UNCITRAL, UNECE, UN/CEFACT, UNCTAD et cetera), and to comment on these outputs.

As independent legal specialist Frans van Zoelen is available for legal advice and consultancy (Mintco). His focus is on cybersecurity and maritime legislation, corporatization, special projects, and how to govern port and maritime physical and digital infrastructure.

With expertise and strong interest in how public and private sector interface, Frans van Zoelen developed a focus essential for navigating complex port and industrial environments.



**Baroness Vere of Norbiton**  
UK Minister for Aviation, Maritime and  
Security

Baroness Vere has been a Transport Minister for four years and been in government for six years. She was reappointed to the Aviation brief in September 2022 and added the Maritime brief in October of that year. She has previously worked in education, mental health and recruitment, and started her career as an investment banker. She has an MBA from Northwestern and a degree in Engineering.



**Malcolm Warr OBE**  
Chair, Maritime Services Management Ltd

At school I was inspired by a lecture on security and intelligence given by Admiral John Godfrey: the model for James Bond's "M". This led to a maritime and security career, firstly in the Royal Navy, and subsequently in industry.

I have worked for Governments, within corporate teams, as Managing Director of SME security and maritime enterprises worldwide, and in aerospace, defence, security and R&D.

As an inquisitive team player, I work to place people together with the best information and experience to make the right decisions for long term benefit.

I am now involved in supply chain challenges at sea and the upskilling of work forces in the shipbuilding and offshore infrastructure industries and cyber security sectors.

Training and mentoring has featured strongly throughout my career. And I am particularly taken and practise, the Royal Navy Work procedure which has strong application throughout the Maritime industry: afloat and ashore.

# SPEAKERS



## Jack Westwood-Booth

Senior Deputy Director, Maritime Safety  
Division, International Maritime  
Organization

Mr. Westwood-Booth is a Senior Deputy Director in the Maritime Safety Division at the International Maritime Organization (IMO), a specialized agency of the United Nations. He is responsible for the Subdivision on Marine Technology and Cargoes, which manages three technical Sub-Committees tasked with the development of international maritime standards related to marine engineering, naval architecture and the carriage of hazardous cargoes.





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**Cyber-SHIP Lab**  
SECURING MARITIME



INTERNATIONAL  
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