

Focus on Sub 24m Vessels  
Relevant for 25m to 100m / Ports & Harbours

# NEXTGEN Marine BATTERY

WORKSHOP • 22 OCTOBER 2024

International Experts via TEAMS

Via TEAMS – 13.00 to 17.00 (UK)

14.00 to 18.00 (EU)

08.00 to 12.00 (US EST)

Supported By



 ENERGY SOLUTIONS



## Relevant to Professional – Commercial – Military

End-user Organisations • Operators • Boat Builders • Refit Yards  
OEM Manufacturers • Engineers • Naval Architects • Designers  
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## Next Generation Energy – Power – Propulsion

Ferries • Work Boats • Pilot Boats • Offshore • Wind Farm Support  
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## NEXT GEN Marine BATTERY Workshop: Standard Rate £120

Military / Government / Academia / SAR / Ports  
UKHMA / British Marine / YBDSA / RINA / IMarEST  
Discount Rate £95

### For further information:

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[www.nextgen-marine.com](http://www.nextgen-marine.com)

**THEME: How Can We Make Battery Electric Vessels Safer?**

13:00 to 14:20 **Session 1 – Safety Standards and Lessons From Other Sectors**

**John Haynes – Workshop Lead, NEXT GEN Marine**

What are the Real Risks versus Perceived Risks in Marine Battery-Electric Systems?

**Ben Gully – Chief Technologist, SPOC Grid Inverter Technologies**

A Safety Led Approach to Power System Design for Marine Applications

**Manuel Spitzlay – Director Sales North America, American Battery Solutions (ABS)**

Different Applications Need Different Batteries – Lessons from Automotive and Transport Sectors

**Panel Discussion - Q & A Session**

Are Battery-Electric vessels getting ahead of safety?

Battery-Electric is evolving on land – but where does it really fit for marine?

14:20 to 14:30 **Break**

14:30 to 15:30 **Session 2 – Industry Solution Providers and Viable Technology**

**Paul Holland – Managing Director, ENERGY SOLUTIONS**

Designing and Installing Energy Storage Systems for Vessels and Onshore Applications

**Tania Berry – Electrical Capability Lead, BMT**

Design, Construction & Lifecycle Support of Battery-Electric Vessels & Energy Systems.

**Amy-Jane Furlong – Future Propulsion and Fuel Safety Policy Lead, MCA**

MGN 550: Guidance for Safe Design, Installation and Operation of Lithium-ion Batteries

**Q&A Session**

What are the benefits of a safety system versus individual technologies?

How can we improve processes for Battery-Electric installations and maintenance?

15:30 to 15:40 **Break**

15:40 to 17:00 **Session 3 – Preventing Thermal Runaway and Managing Fire Risks**

**Peter Mansi – Partner & Forensic Investigator, FIRE INVESTIGATIONS UK**

Identifying the Origin, Cause and Development of Battery & Electrical Fires on Vessels

**Kurt Vollmacher – Owner ENERGY SAFETY**

Mitigation of Battery Fires and the Benefits of Standardisation for First Responders

**Panel Discussion – Q & A Session**

How can lessons from onshore energy storage systems be applied to marine?

Managing battery fire risks – what is working now and what is coming next?

**END: 17:00 (UK)**



John Haynes



Ben Gully



Manuel Spitzlay



Amy-Jane Furlong



Paul Holland



Tania Berry



Peter Mansi



Kurt Vollmacher

# NEXTGEN Marine BATTERY

## John Haynes

John is an Associate Fellow of The Nautical Institute, Fellow of RINA, Yachtmaster Ocean, Advanced Powerboat Instructor. Subject matter expertise includes 30 years maritime training, consultancy and strategic product development. Experience includes working in UK / EU / US / Canada with over 100 organisations including military, coast guard, SAR, commercial operators, boat builders, equipment manufacturers, technology developers, designers and regulators. Main focus now is on improving safety and efficiency for sub 24m sectors. His next generation energy knowledge is increasingly relevant for 25m to 100m vessels, plus the ports and harbours they operate from.

## Ben Gully

Ben is a subject matter expert in Lithium-ion battery systems who focusses on new, smarter ways to use energy. He has been working with Lithium-ion batteries in maritime, stationary, automotive and industrial applications for over 15 years. Including research of lifetime safety, system design, product development and development of advanced chemistries. He holds a PhD in dynamic systems and controls from The University of Texas in Austin. He was Lithium-ion battery subject matter expert at DNV GL for 6 years. Ben pioneered thought leadership as the manager and technical lead for the international Maritime Battery Safety Joint Development Project.

## Manuel Spitzlay

Manuel Spitzlay is the Director Sales North America at American Battery Solutions Inc, where he is leading and overseeing sales, business development and strategic growth relationships with both new and existing stakeholders to supply cutting edge lithium-ion battery systems mainly used in electrified delivery and transportation applications. He brings 15 years of global experience in the battery industry and electrification segment, with a background in technical sales and international business development at technology companies such as A123 Systems and Valeo. Manuel holds an international Bachelor of Engineering Degree in Automotive Engineering and Customer Service from the University of Applied Sciences in Esslingen, Germany and the Kettering University in Flint, Michigan, USA.

## Paul Holland

Paul set up Energy Solutions in 1994 with the intention to supply innovative products, designs and technical solutions to the marine market. Power conversion from low voltage DC to AC and vice versa was always a key part of these systems. This has moved over the years from an onboard convenience to being an integral part of the modern integrated battery-electric or hybrid marine power system. As passion grew wings, so did the team. Today Paul leads a team of over 90 engineers, production technicians, logistics, sales and service staff.

## Tania Berry

Tania is an electrotechnical expert in her field, with over 25 years' experience in the maritime industry. With operator, Class and design experience, she provides robust electrical engineering solutions that enhance the safety and operability of maritime operations. As BMTs Electrical Capability Lead, Tania collaborates closely with cross-functional teams, working towards aligning the electrical capabilities with strategic objectives, thus fostering innovation and excellence. Tania holds an MSc in Systems Engineering Management from the University of Strathclyde. Tania has previously delivered the guidance for the use of batteries in ships during her time at Lloyd's Register.

## Peter Mansi

Peter has a PhD in forensic fire investigation, developing a unique and comprehensive methodology by designing a series of 23 Fire Investigation Road Maps (FIRMs) and associated guidance. He served over 30 years as an operational fire officer. Towards the latter part of his career, was Group Manager for the Fire Investigation Team in the London Fire Brigade and Borough Commander for the City of London. Peter has been involved with many of the most high profile fire investigations within the UK and Ireland over the last decade. He has extensive experience of marine incident investigation, including Lithium-ion batteries.

## Kurt Vollmacher

Kurt has a long history of safety. He graduated as vehicle technician and fire officer/prevention engineer. Has been the architect/project leader of the ISO 17840 worldwide standard for responder safety information. He has done several incident investigations and worked together with various international manufacturers. Kurt works with Dr Judy Jeevarajan, vice president and executive director of the Electrochemical Safety Research Institute, on a project that aims to promote the existing ISO 17840 standard for road vehicles and extend use of the standard for other applications/systems that use batteries or other power sources not covered by ISO 17840 such as maritime vehicles.

# NEXTGEN Marine BATTERY

## NEXT GEN Workshop Lead – John Haynes

*From running Energy Transition training for significant maritime organisations it is clear there is an urgent need to have a better understanding of safety for energy storage systems.*

*The focus for Lithium-ion batteries has been on the various chemistries, especially improved energy density and reduced costs. It is now essential to establish a consistent approach to identify safe battery-electric systems.*

*'Safety' for battery-electric vessels is not only about high-performance batteries. A systems approach includes design, installation, awareness of the risk of running out of energy at sea - along with the ability to prevent and fight fire.*

*We are proud to be supported by:*



**BMT** is a maritime-orientated high-end design house and technical consulting firm driven by a passion for solving complex, real-world problems. BMT supports customers at every stage of the project lifecycle - from initial concept through to design, construction, operation and eventual decommissioning. BMT has 27 offices in the Americas, Asia, Australia and Europe. Over 1300 professionals with outstanding technical knowledge deliver cost-effective solutions to business problems that require technical excellence, independent thinking and innovation. [www.bmt.org](http://www.bmt.org)



**Energy Solutions** have over 20 years experience designing marine electrical systems utilising products from the world's leading manufacturers. Energy Solutions offer fully designed systems from panels and switchboards manufactured in their UK production facility to batteries and charging. Extensive experience of commercial and industrial projects includes the capability to undertake programming and commissioning for clients. The company have been working with leading OEM boatbuilders, superyacht owners and boat yards since 1996. [www.energy-solutions.co.uk](http://www.energy-solutions.co.uk)



**American Battery Solutions Inc (ABS)** is a US manufacturer of advanced batteries for commercial and industrial applications. ABS has assembled an experienced world-class team with a deep understanding of high-voltage, automotive-grade battery systems. In-house capabilities range from concept development and prototyping, to testing and validation, to high-volume production. Markets include transit bus, eLCV, medium and heavy-duty trucking vehicles, material handling, construction, mining, agriculture, maintenance, industrial, outdoor power, recreational, marine, shoreside energy and port operations.

[www.americanbatterysolutions.com](http://www.americanbatterysolutions.com)

[www.nextgen-marine.com](http://www.nextgen-marine.com)