CONTENTS

Marine Systems Development - A New Opportunity  
Mark Tooth, Matt Bolton, and Graham Ford, Ministry of Defence, UK  

Evolution from Periscopes to Optronic Mast Systems  
Alan Stevenson, Thales Optronics Ltd, UK  

ZEBRA Battery – The Solution to Submarine Energy Storage  
Dave Williamson, Rolls-Royce plc, UK  
Neil Benstead, Ministry of Defence, UK  

The United States Navy’s Submarine Safety (SUBSAFE) Program  
Stephen E Iwanowicz and Matthew S McBride, Naval Sea Systems Command, USA  
Christopher A Lilly, Perot Systems Government Services, USA  

Advances in Submarine Escape  
Joseph T Arcano, Michael Holmes, Russell Hrabe, John Leadmon, and Brandan Shea, Naval Sea Systems Command, USA  

Risks and Hazards in Recovering the Nuclear Submarine Kursk  
John Large, Large & Associates, Consulting Engineers, UK  

NATO Submarine Rescue System – An Integrated Approach  
Neville Yard, Rolls-Royce plc, UK  

Shock Qualification of Electron Beam Welded Submarine Hull Valves using Numerical Methods  
Phillip Thompson, Nicolas Misselbrook and Alan Ferguson, Weidlinger Associates Ltd, UK  
Greg Alexander, Sea Technology Group, MOD, UK  

Collapse Pressure of Watertight Bulkheads  
Jack Reijmers, Iv-Nevesbu, The Netherlands  

The Development of an Onboard Submarine Stability Tool  
Darren Haynes, Sea Technology Group, MoD, UK  
Ian Carter, Graphics Research Corporation Ltd, UK  

Astute Class Submarine Movement Control - An Integrated Approach  
Simon Purvis and Neil Philip, BAE SYSTEMS Submarines Ltd, UK  

Industrial Challenges Within Royal Naval Submarine in Service Support  
Mike Whalley, DML Group, UK  

MARPOL Compliant Solid Waste Management on Astute Class  
Kevin Young, BAE Systems Submarines, UK  

Classification of Submarines  
Lorenz Petersen, Germanischer Lloyd, Germany
Astute Propulsor Technical Innovation Summary
Peter Vinton and Simon Banks, Rolls-Royce plc, UK
Martin West, Frazer-Nash Consultancy, UK

Submarine Towing Trials
James Anderson and Sarah Watts, QinetiQ Haslar, UK
Nigel Hills and Emmanuel Ofosu-Apeasah, MoD S&MO IPT, UK

Submarine Trials and Experimentation – Dealing with Real-Life Data
Jon Bayliss, Nick Kimber and Philip Marchant, QinetiQ Sea, UK
Jason Bryars, Ministry of Defence, UK

An Evaluation of the Merits of Non-Body of Revolution Submarine Hullforms
David Nagy, Naval Sea Systems Command, USA
Jeffrey Pfister, Northrop Grumman Corporation, USA

Pressure System Life Prediction and Management
Hamish Fowler, Julian Austin, Mike Anderson and Alasdair Wylie, Frazer-Nash Consultancy Limited, UK

Development of a Portable Atmosphere Control Unit for Military Applications by Integration of Submarine and Diving technology.
Mike Clarke and Amanda J Crudace, Molecular Products Ltd, UK

Authors’ Contact Details

* Paper Unavailable at Time of Publishing