ALARP: RISK MANAGEMENT FOR ENGINEERING



Safety and Reliability Group Seminar

27-28 March 2017 Hilton Birmingham Metropole

KEY SPEAKERS INCLUDE:

Mike Nicholas, Senior Advisor: COMAH **Environment Agency**

Rear Admiral Richard Thompson, Technical Director, **Military Aviation Authority** and Chief Technology Officer **Defence Safety Authority**

Ben Shirley, Health and Safety Risk Specialist and Safety Inspector

Office of Rail and Road

Sam Ellis, Head of Statistics and Modelling, Defence Ordnance Safety Group

Defence Equipment and Support, **Ministry of Defence**

Geoff Grint, Principal Inspector Nuclear Safety Office for Nuclear Regulation

Chi Wong, Lead System Safety Manager (Crossrail Central Section)

Crossrail



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SUPPORTING ORGANISATION:

EVENT PARTNERS:









ALARP:

RISK MANAGEMENT FOR ENGINEERING

27–28 March 2017 Birmingham

KEEPING RISK 'AS LOW AS REASONABLY PRACTICABLE' (ALARP) IS AN ESSENTIAL PART OF MECHANICAL ENGINEERING ACROSS ALL MAJOR INDUSTRIES. THE APPLICATION OF THE ALARP FRAMEWORK VARIES **DEPENDING ON THE TECHNICAL** AND ECONOMIC CONTEXT. JOIN **US AT ALARP: RISK MANAGEMENT** FOR ENGINEERING TO HEAR FROM THOUGHT-LEADERS FROM MAJOR **ENGINEERING COMPANIES AND** INFRASTRUCTURE PROJECTS SPEAK ABOUT BEST PRACTICE, REGULATION, COMPLIANCE AND NOVEL ALARP APPLICATIONS.

Hear directly from regulators about how to ensure that you can prove ALARP has been properly implemented as part of delivering effective risk management. Sessions include insights into how ALARP is implemented in the design, development and operation of engineering systems. Engage in specialist interactive masterclasses in our pre-seminar workshop, and take advantage of our professional drop-in clinics with core members of the Safety and Reliability Group.

KEY PROGRAMME HIGHLIGHTS:

- Receive guidance on regulation and compliance from key regulating bodies across the various engineering industries
- Understand how ALARP is increasingly being applied at the development and construction stage of key projects including Crossrail and EDF New Build
- Learn engagement strategies with stakeholders and senior management in the application of ALARP
- Join panel discussions on learning from the ALARP framework across industries and environments
- Engage in masterclass workshops on core aspects of implementing the ALARP framework including cost benefit analysis, human factors and the legal aspects of proving ALARP has been implemented

REASONS TO ATTEND:

- Be part of the only ALARP event with technical engineering-specific content across industry sectors
- Hear directly from regulators and COMAH competent authorities including the Office of Nuclear Regulation (ONR), the Environment Agency and the Office of Rail and Road (ORR)
- Engage in specialised masterclass workshops to hone your knowledge and skills in implementing the ALARP framework including the legal aspects, human factors and cost benefit analysis
- Benefit from career drop-in sessions with senior members of our Safety and Reliability Group during our networking breaks
- Network with thought-leaders and budget holders across various industries including Rail, Oil and Gas, Power and Defence

ORGANISING COMMITTEE:

Safety and Reliability Group

Institution of Mechanical Engineers

MEMBERS CREDITS:

Pete Stewart, Technical Director **Hydrock NMCL**

Rhys David, Partner
Safety Assurance Services Ltd

Emma Taylor, System Safety Engineer ${f RSSB}$

IN MEMORIAM



Jeremy Lewis FIMechE MIAM

For all his contributions to the Safety and Reliability Group, Institution of Mechanical Engineers, and his support in developing this event, who sadly passed away in December 2016.

PROGRAMME

DAY 1	OPTIONAL PRE-SEMINAR WORKSHOP			
13:30	REGISTRATION AND REFRESHMENTS			
14:00	COST BENEFIT ANALYSIS: SOME PRACTICAL ASPECTS BY EXAMPLE Sam Ellis, Head of Statistics and Modelling, Defence Ordnance Safety Group, Defence Equipment and Support, Ministry of Defence			
14:25	A LEGAL PERSPECTIVE: PROVING ALARP HAS BEEN APPLIED AFTER AN INCIDENT Anne Davies, Partner, Gunnercooke LLP			
14:50	NETWORKING REFRESHMENT BREAK			
15:20	MASTERCLASS ONE: IN-DEPTH EXERCISE IN COST BENEFIT ANALYSIS Rhys David, Partner, Safety Assurance Services Ltd	MASTERCLASS TWO: ALARP AND DEALING WITH IMPERFECT ENGINEERING David Forsythe, Head of Nuclear Safety Decommissioning, Sellafield Ltd		
16:20	MASTERCLASS THREE: PROVING ALARP HAS BEEN IMPLEMENTED CORRECTLY FROM A LEGAL PERSPECTIVE Anne Davies, Partner, Gunnercooke LLP	MASTERCLASS FOUR: INTEGRATING HUMAN FACTORS INTO THE APPLICATION OF ALARP John Mount, Technical Specialist - Human Factors, Rolls Royce Submarines		
17:20	CHAIR'S CLOSING REMARKS			
17:30	END OF WORKSHOP			

DAY 2	SEMINAR		
08:30	REGISTRATION AND REFRESHMENTS		
09:00	CHAIR'S OPENING REMARKS		
	REGULATION COMPLIANCE ACROSS INDUSTRIES		
09:10	PANEL DISCUSSION: BALANCING SAFETY WITH COST AND FEASIBILITY Ben Shirley, HM Inspector of Railways Health and Safety Risk Specialist, Office of Rail and Road Marcus Dacre, Head of Risk, RSSB Mark Boult, Director, DNV GL		
09:40	ALARP FROM THE PERSPECTIVE OF THE OFFICE OF NUCLEAR REGULATION (ONR) Geoff Grint, Principal Inspector, Office of Nuclear Regulation		
10:05	ALARP AND RISK MANAGEMENT PRINCIPLES ON GREAT BRITAIN'S RAILWAYS Ben Shirley, HM Inspector of Railways Health and Safety Risk Specialist, Office of Rail and Road (ORR)		
10:30	QUESTION AND ANSWER SESSION		
10.40	NETWORKING REFRESHMENT BREAK		
	ALARP IN DEVELOPMENT AND CONSTRUCTION		
11:10	IMPLEMENTATION OF ALARP IN MAJOR INFRASTRUCTURE PROJECTS Chi Wong, Lead System Safety Manager (Crossrail Central Section), Crossrail		
11:35	APPLICATION OF ALARP IN NUCLEAR NEW BUILDS Paul Marks, Safety Case Team Leader – Design Authority, Nuclear New Build, EDF Energy		
	ALARP IN MANAGEMENT CULTURE		
12:00	GETTING THE ALARP MESSAGE ACROSS – MANAGEMENT PROCEDURES AND STAKEHOLDER MANAGEMENT Tom Jackson-Burton, Senior Safety Assessment Specialist, AWE		
12:25	QUESTION AND ANSWER SESSION		
12:40	NETWORKING LUNCH		
	ALARP IN AN OPERATIONAL ENVIRONMENT		
13:40	INSIGHT FROM GE POWER Tharsilla Laier, Operational Excellence Leader, GE Power		
14:05	ALARP IN AN OPERATIONAL OFFSHORE ENVIRONMENT Mark Boult, Director, DNV GL		
14:30	QUESTION AND ANSWER SESSION		
14:40	NETWORKING REFRESHMENT BREAK		
	TECHNICAL CASE STUDIES AND NOVEL APPLICATIONS		
15:10	ALARP IN A TECHNICAL ENVIRONMENT Rear Admiral Richard Thompson, Technical Director, Military Aviation Authority		
15:40	ENVIRONMENTAL RISK TOLERABILITY AND ALARP Mike Nicholas, Senior Advisor: COMAH, Environment Agency		
16:10	PANEL DISCUSSION: LEARNING FROM THE ALARP FRAMEWORK Robert McMillan, Head of Engineering WP UK, Product Safety Officer Offshore Market, Siemens Mike Nicholas, Senior Advisor: COMAH, Environment Agency Rear Admiral Richard Thompson, Technical Director, Military Aviation Authority		
16:50	CHAIR'S CLOSING REMARKS		
17:00	END OF SEMINAR		

HOW TO BOOK YOUR PLACE

FEES AND CHARGES

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Seminar and Workshop	Early Bird Rate Until 24 February 2017	Standard Rate
Member, Institution of Mechanical Engineers / Supporting Organisation	£413.00 + VAT = £495.60	£459.00 + VAT = £550.80
Non-member	£476.00 + VAT = £571.20	£529.00 + VAT = £634.80
Student/Retired	£179.00 + VAT = £214.80	£199.00 + VAT = £238.80

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Seminar only	Early Bird Rate Until 24 February 2017	Standard Rate
Member, Institution of Mechanical Engineers / Supporting Organisation	£323.00 + VAT = £387.60	£359.00 + VAT = £430.80
Non-member	£386.00 + VAT = £463.20	£429.00 + VAT = £514.80
Student/Retired	£89.00 + VAT = £106.80	£99.00 + VAT = £118.80

Group booking discounts are available. Contact us for more information.

THREE WAYS TO BOOK

1 Online:

www.imeche.org/alarp

2 Email:

eventenquiries@imeche.org

3 Phone

+44 (0)20 7973 1251

Please read the information listed below as each booking is subject to the Institution's standard terms and conditions.

CONDITIONS OF BOOKING

Completed application forms should be returned to the address above, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

SPECIAL REQUIREMENTS

Please inform us of any special requirements, ie dietary or access, on the relevant section of this form.

CANCELLATION

For a refund (minus £25+VAT admin charge), cancellations must be received at least 30 days prior to the event. Replacement delegates are welcome at any time. The Institution reserves the right to cancel any event. In this case, the full fee will be refunded unless a mutually convenient transfer can be arranged. In the event that the Institution postpones an event for any reason

and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full refund of the fee paid. The Institution is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. The Institution shall assume no liability whatsoever if this event is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable, illegal or impossible. For the purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. The Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event's webpage as soon as possible.

LIABILITY

The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor for loss or damage to their luggage and/or personal belongings.

CONFERENCE VENUE

Hilton Birmingham Metropole

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www.imeche.org/ems



THE STEPHENSON CONFERENCE: RESEARCH FOR RAILWAYS

25–27 April 2017, Institution of Mechanical Engineers, London

The pioneering Stephenson Conference returns to bring together international leaders of railway R&D to demonstrate how their work is being implemented with industry professionals.

www.imeche.org/stephenson

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