

ASSET MANAGEMENT: DESIGNING FOR RELIABILITY

Institution of
**MECHANICAL
ENGINEERS**

26 March 2019

One Birdcage Walk, London

Safety and Reliability Group
Seminar

More details available at
www.imeche.org/assetmanagement

KEY SPEAKERS INCLUDE:

Andy Parsley, Robust Design Specialist,
Rolls-Royce Defence

Kevin Rayment, Reliability Process Manager,
Network Rail

John Morrison, Remote Handling Centre of Expertise
Leader, Engineering Design Capability,
Sellafield Ltd

Tim Ingram, Chair of ISO55000,
BSI Mirror Committee, MMI Thornton Tomasetti

Scott Mitchell, Design Team Leader,
Caterpillar Defense

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Railway Industry Association

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Book your place at www.imeche.org/assetmanagement

ASSET MANAGEMENT: DESIGNING FOR RELIABILITY

26 March 2019, One Birdcage Walk, London

WITH A HUGE AMOUNT OF RESOURCE AND COSTS REQUIRED AT THE DESIGN STAGE, IT IS VITAL THAT COMPANIES ARE ENSURING THE DESIGN PROCESS IS FIT FOR PURPOSE. CONSIDERATIONS AT THE EARLY STAGES OF DESIGN CONTRIBUTE MOST SIGNIFICANTLY TO THE SUCCESS OR FAILURE OF THE FINAL PRODUCT. ESPECIALLY AS THE RELIABILITY OF EQUIPMENT CANNOT BE ENHANCED BY MAINTENANCE, ONLY PRESERVED.

This seminar will shift focus towards designing for reliability, and how it can be used to reduce maintenance and ensure reliability throughout the life cycle of an asset. Understand the significance of design considerations for cost-saving and maintenance reduction.

Attendees will leave with an understanding of how reliability may be inputted into design, and how it is managed and demonstrated in various production and use activities. Learn how to effectively and efficiently manage your systems, products and equipment in order to maintain reliability throughout the full life-cycle, and how design can impact this. Utilise opportunities for networking with other industry practitioners and share experiences.

KEY PROGRAMME HIGHLIGHTS:

- **Rolls-Royce** address how alignment through the levels of detail within a large company making complex systems can improve the reliability of assets
- **Caterpillar Defense** discuss how to build upon and improve existing asset design including environmentally sustainable practices
- **Dyson** share best practice strategies for capturing data in context for feedback into design
- **Network Rail** discuss why and how designing for reliability is being implemented into their processes
- **Sellafield Ltd** share design insights into safety, engineering and the law

ATTEND THIS SEMINAR TO:

- Hear from asset management, design and reliability specialists from organisations across engineering sectors including **Sellafield Ltd, Caterpillar Defense, Dyson, Rolls-Royce and Network Rail**
- Learn how achieving clear definitions of life-cycle conditions, loads and costs, can assist in saving costs and man-hours, reduce maintenance needs and guarantee safety
- Address challenges in capturing data in context, and using trending data to measure design robustness
- Build upon and improve existing design and strategies for whole life cycle costs
- Take part in interactive discussions during our roundtable sessions focusing in on key challenges relating to designing for reliability

MEMBER CREDITS:

Bob Wilson, Member,
Safety and Reliability Group,
Institution of Mechanical Engineers

Mark Norris, Technical Director,
Asset Management,
Black & Veatch

FEEDBACK FROM PREVIOUS EVENTS:

“”

A really informative day with quality speakers and a wide range of experience represented. I would certainly recommend attendance in the future.

Principal ILS Engineer, BAE Systems

“”

The event was well planned and had speakers who were knowledgeable on the subjects that we were interested in.

Field Technical Advisor, Total UK Ltd

BOOK YOUR PLACE TODAY

WWW.IMECHE.ORG/ASSETMANAGEMENT

TERMS AND
CONDITIONS
APPLY

PROGRAMME

TUESDAY, 26 MARCH 2019

08:30 REGISTRATION AND REFRESHMENTS

09:00 **CHAIR'S OPENING REMARKS**

09:10 **DELIVERING FROM RIGHT TO LEFT, AND ASKING WHY?**
Keynote Tim Ingram, Chair of ISO55000 BSI Mirror Committee, MMI Thornton Tomasetti

DESIGN CONSIDERATIONS

09:35 **SAFETY, ENGINEERING AND THE LAW**
John Morrison, Remote Handling Centre of Expertise Leader, Engineering Design Capability, Sellafield Ltd

10:05 **CAN REDUNDANCY DESIGN IMPROVE RELIABILITY?**
Mahmood Shafiee, Programme Director and Senior Lecturer Professor, Department of Energy and Power, Cranfield University

10:35 **IMPROVING EXISTING PRODUCT RELIABILITY THROUGH THE USE OF ANALYSIS**
Scott Mitchell, Design Team Leader, Caterpillar Defense

11:05 NETWORKING REFRESHMENT BREAK

DATA FOR RELIABILITY

11:35 **CAPTURING DATA IN CONTEXT FOR FEEDBACK INTO DESIGN**
James Pugh, Senior Quality Engineer, Dyson

12:05 **USING ADVANCED DATA ANALYTICS SOLUTIONS TO MANAGE ASSETS AND IMPROVE RELIABILITY**
Alexandra Knight, Technical Director, Amey Strategic Consulting

12:35 NETWORKING LUNCH

LIFE CYCLE: FROM CRADLE TO GRAVE

13:35 **LIFE CYCLE COSTING: EASIER SAID THAN DONE**
Gary Knight, Principal Engineer, ROSEN Group

14:05 **ENSURING ROBUSTNESS BY MANAGING DATA BETWEEN SYSTEM LEVELS**
Andy Parsley, Robust Design Specialist, Rolls-Royce Defence

14:35 **INTRODUCING DESIGN FOR RELIABILITY (DFR) AT NETWORK RAIL**
Kevin Rayment, Reliability Process Manager, Network Rail

15:05 NETWORKING REFRESHMENT BREAK

15:35 **ROUNDTABLE DISCUSSIONS**

Delegates can choose to join one of four roundtable discussions. This will give them the chance to share their views and thoughts around the roundtable topic of choice.

- How can reliability risks be reduced?

Gordon Bailey, Chief Mechanical Design Engineer, Airbus Helicopters

- Design benefits vs cost: how to balance the two?

Jon Wiggins, RA Engineering Manager, Rotork Controls

- Who holds accountability for unreliable assets?

Gary Knight, Principal Engineer, ROSEN Group

- How can reliability be tested in design and development?

Mark Norris, Technical Director, Asset Management, Black & Veatch

16:35 **ROUNDTABLE SUMMARY DISCUSSION**

Facilitators summarise the outcomes of their roundtable discussion for all the audience. This provides a perfect opportunity to share valuable expertise and insights.

16:55 **CHAIR'S CLOSING REMARKS**

17:00 END OF SEMINAR

For the most up-to-date and detailed programme for the event, please visit:
www.imeche.org/assetmanagement

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.

HOW TO BOOK YOUR PLACE

FEES AND CHARGES

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

Delegate Type	EARLY BIRD RATE Until 15 February 2019	STANDARD RATE
Member, Institution of Mechanical Engineers / Supporting Organisation	£340 + VAT = £408	£375 + VAT = £450
Non-member	£420 + VAT = £504	£470 + VAT = £564
Student/Retired	£115 + VAT = £138	£130 + VAT = £156

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

THREE WAYS TO BOOK

- 1 online:
www.imeche.org/assetmanagement
- 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, e.g. dietary or access, on the relevant section of the booking form or email eventenquiries@imeche.org

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

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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

Institution of Mechanical Engineers
One Birdcage Walk
Westminster
London
SW1H 9JJ

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OTHER EVENTS TO LOOK FOR

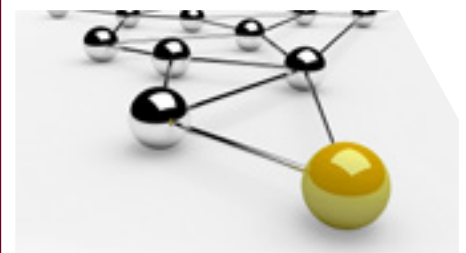


NON DESTRUCTIVE TESTING 2019

14 March 2019, Manchester

Gain a clear overview of the current techniques and technologies available for safe and compliant non destructive testing. The seminar bridges the gap between current best practice, findings from research and future applications to achieve faster, more accurate and cost-effective testing.

www.imeche.org/ndt



ESSENTIAL MANAGEMENT SKILLS 2019

3-5 April 2019, Coventry

Improve your ability to manage people, projects and teams, as well as motivate you to take control of your own development. This hugely popular annual programme focuses on developing leadership, communication and project management skills for engineers.

www.imeche.org/ems

The Institution of Mechanical Engineers organises over 120 events a year, including free-to-attend lectures as well as conferences, seminars, annual luncheons and dinners. Please visit www.imeche.org/events for the complete list of events.

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