

The
Ergonomics
Society



Human & organisational factors in the oil, gas & chemical industries

Conference theme: Sharing Good Practice

This conference with the theme "Sharing Good Practice", offers a unique opportunity to be part of a major international event in the oil, gas & chemical industries in 2008. The event focuses on presentations from industry, sharing and learning lessons from each other. You will hear how several companies have addressed a variety of key human factors topics - not just what they have achieved, but how they have successfully achieved demonstrable improvements.

Speakers are from a variety of organisations including GlaxoSmithKline, TOTAL Lindsey Oil Refinery, BP Exploration, National Grid Gas and BP LPG.

You will have the opportunity to learn from human factors specialists from the UK and US, including:

- ◆ **Linda Gioja** - co-author of the "Telos Study", a comprehensive assessment of behaviour, attitudes, culture, and systems at BP Texas City. The report of findings was presented to the site's leadership in early 2005, just weeks before the explosion that killed 15 people and injured 170 others.
- ◆ **Ed Frederick** - a member of the Control Room crew at the onset of the Three Mile Island nuclear accident on March 28, 1979.
- ◆ **Cheryl MacKenzie** - human factors investigator, US Chemical Safety and Hazard Investigation Board (CSB). Cheryl has been involved in several incident investigations, including the BP Texas City refinery.



Make a note now of the date of next year's conference on 17-18 November 2009, to be held once again in Manchester.

Manchester

7-8 October 2008

Manchester Conference Centre, Weston Building

Programme

With thanks to our sponsors



THE KEIL CENTRE
CHARTERED PSYCHOLOGISTS



Day One

09.00 Registration

10.15 Welcome Address **Martin Anderson**



Martin Anderson has specialised in the area of human factors and safety management, particularly in relation to major hazards and complex systems for over 15 years. He is currently leading HSE's response to the safety management, human factors and culture aspects of lessons from the Texas City incident, and is also involved in the follow-up to the Buncefield incident.

10.20 Opening Address **Linda Gioja, Partner, The Telos Group**



Linda Gioja has worked for over 20 years in the research and application of consulting approaches that develop leadership and cultural change. Her current focus is on protection (safety) culture and leadership. Before and since the founding of The Telos Group in 2003, Linda has been collaborating with

Geoffrey Gioja and others to create ways to strengthen protection culture and leadership. She is co-author of the "Telos Study", a comprehensive assessment of behaviour, attitudes, culture, and systems at BP Texas City. This study encompassed cultural factors affecting integrity management, process safety, environmental performance, and reliability, in addition to individual safety. The report of findings was presented to the site's leadership in early 2005, just weeks before the explosion that killed fifteen people and injured 170 others. Since that time, Linda and others associated with the Telos Group have deepened their commitment to designing a practical bridge between emerging research and corporate practice in this arena through new education and consulting for all levels of the corporation.

11.00 **John Hunter, Risk Manager, GlaxoSmithKline: "Our Safety Culture at GSK Irvine - our behaviour is the key"**

John Hunter is the Site Business Risk & Compliance Manager at GSK Pharmaceutical's manufacturing plant in Irvine Ayrshire. Having studied Chemical Engineering at Loughborough University he is now in his 21st year at the factory where he has held roles as a Process Engineer, Shift Supervisor, Technical Team leader, Assistant Plant Manager, Operations Commercial Leader and the Environment, Health & Safety Leader. During his time in employment John has picked up an MBA from Strathclyde University and a NEBOSH Diploma and is currently studying a course in Risk Management.

11.45 **Kevin Lancaster, Competence Assurance Manager, TOTAL Lindsey Oil Refinery, Immingham: "Lessons from implementing a refinery-wide competence assurance system"**



Kevin is responsible for a major ongoing initiative at the Lindsey Oil Refinery and has worked at this top tier COMAH site for more than 20 years. He served 18 years within the Operations department responsible for various process units and has held the Refinery Shift Managers position. Over the last six years has been

responsible for introducing improvements to the refinery operations safe systems of work. A high profile focus for the Refinery over the last three years has been the introduction of a Competence Management System that covers new and existing staff including contractor personnel. He previously studied Marine Engineering and held position of Second Engineer on various type of merchant vessel. Further studies including Applications Engineering, Business Management and Safety has assisted in applying best practice and practical solutions to a major international refinery.

12.30 Lunch

13.30 **Cheryl MacKenzie, Human factors investigator, US Chemical Safety and Hazard Investigation Board (CSB): "Investigating beyond human error - Why asking "Why?" is so important for accident prevention"**



Cheryl MacKenzie joined the CSB in September 2004. She has been involved in several CSB incident investigations, including the BP Texas City refinery explosion, Marcus Oil and Chemical tank explosion, Valero McKee refinery propane fire, and MFG Chemical toxic gas release. Prior to her CSB work, Ms

MacKenzie completed extensive study and research in the fields of anthropometrics, biomechanics, human information processing, and design. Through critical application of human factors and ergonomic methodologies, she has conducted numerous usability assessments for clients in office, industrial, and virtual-world work settings. Ms MacKenzie is a graduate of Cornell University with a Master's degree specialising in Human Factors and Ergonomics.

14.20 **Peter Ackroyd, Technical Head, Greenstreet Berman Associates & Bob Watson, SHE Manager, National Grid Gas: "It's about people - not just enhanced procedures"**



Peter (pictured left) has had a wide variety of work experiences over the last 25 years ending up specialising in safety culture, human performance and safety

management as a consultant. He started life as a trainee

metallurgist with the Ministry of Defence obtaining a 1st class honours degree at Sheffield University. With the MoD he got involved in reliability assessment then entered the world of safety and reliability on joining NNC as part of the design team for the Sizewell B nuclear power station. He first started working on human reliability and human factors in the nuclear industry over 17 years ago. The Chernobyl nuclear accident became a key influence with the advent of concept of safety culture. Peter was one of those involved in understanding and promoting safety culture in the nuclear industry with CEGB then Nuclear Electric and British Energy. For the last 10 years Peter has been a senior consultant with Greenstreet Berman, involved in a wide range of human performance issues with many clients particularly in the high hazard industries. This has included providing training on human performance, behavioural safety and safety culture for the HSE and many other blue chip companies.

15.10 Q&A session

15.30 Break

16.00 Emily Hutchinson, EJH Consulting: "Organisational influences on behaviour"



Emily Hutchinson is a Chartered Occupational Psychologist and Associate Fellow of the British Psychological Society. In January 2004 she was featured in the Independent on Sunday as one of Britain's leading Occupational Psychologists. In her career as a psychologist, she has a track record of providing advice on safety across a range of industries, including aviation, defence and nuclear. She was employed as the Human Performance Advisor for British Nuclear Group (Magnox power stations) for over 4 years where she conducted event investigations, provided internal consultancy on human factors and also developed and implemented a safety culture assessment and improvement process. The nuclear industry also sponsored her to conduct a three-year research project to explore the causes and prevention of attention failures. She set up her own business in 2006, and now provides consultancy on improving individual and organisational performance. She is also an associate lecturer with the University of Gloucestershire.

16.30 John Wilkinson, Principal Specialist Inspector (Human Factors), HSE & Richard Rudd, Operations Coordinator, ConocoPhillips Humber Refinery: "Managing working hours, fatigue and human performance"



John has worked in HSE for 18 years, joining from industry, and has a psychology background. He has worked as a regulatory inspector in general manufacturing, construction, and in the steel and foundry industries before joining the Chemicals and Hazardous Installations Division (CHID) in 1997. He joined the new Hazardous Installations Directorate's

(HID's) human & organisational factors team in September 1999 and became Team Leader in 2003. John inspects widely across the UK on COMAH sites, manages the HF team and strategy, provides advice to other HSE directorates and to industry, coordinates and produces guidance, manages research, and provides training for HID inspectors on human factors.

17.15 Closing remarks

17.30 Drinks Reception sponsored by The Keil Centre

Day Two

09.00 Rob Miles, Human Factors Specialist, HSE Offshore Division: "The view from offshore"



Rob Miles is currently managing a team of Offshore Safety Inspectors involved in inspection, enforcement and advice to the UK offshore industry on the topics of human and organisational behaviour and human factors. His particular interests include safety management systems, shiftwork, competence, behaviour modification, and drug abuse in the workplace. His primary discipline is Occupational Psychology however began career with an Engine/Airframe apprenticeship. Continued via a Degree in Mechanical Engineering and period as Chartered Engineer working on the design of equipment for use offshore. Rob decided to take a change of direction and become a Psychologist by returning to full time student life for degrees in Experimental Psychology and Occupational Psychology. His other roles include being Human Factors adviser to the UK railway industry confidential reporting system and member of the DTI National Advisory Committee on Human Factors.

09.30 Andrew Sutherland, Human Engineering Ltd & Phil Watts, BP LPG: "Case study: Practical application of a human factors risk assessment tool"



Andrew Sutherland (pictured left) holds degrees in Psychology and Human Factors and is a Senior Consultant with Human Engineering. He has eight years

experience in the application of human factors within hazardous industries, and has supported the design and safe operation of offshore platforms, large refineries and other processing facilities. Andrew's main interest is in supporting the integration of human factors within the functions of engineering design, operations and HSSE, in order to control major accident risk associated with human error. His expertise includes safety critical task

analysis, human error prediction and analysis, control room design, and workload analysis.

10.30 Break

**11.00 Bill Gall, Kingsley Management Ltd:
“Accident investigation tool”**



Bill Gall is a Registered Member of the Ergonomics Society and works as an independent human factors consultant. He specialises in human reliability and how to reduce human failure. Over the last 6 years Bill has developed a number of human factors guidance documents concerned with ‘live’ issues in major

hazard industries. This has ranged from short ‘briefing notes’ on topics including maintenance, alarm handling, fatigue, safety culture and competence, to larger documents on fatigue, road tanker loading and unloading. More recently, he has developed a guide to incident investigation methods useful for identifying human and organisational factors.

11.30 Ronny Lardner, Director, The Keil Centre, & Jim Maitland, Offshore Installation Manager, BP Miller Platform: “Reducing error during isolations on an offshore oil and gas platform - a case study”



Ronny Lardner is a Chartered Occupational Psychologist and Director of The Keil Centre Ltd. With 17 years process industry experience, Ronny specialises in the human and organisational factors which affect health and safety. He was a lead contractor for safety culture in the European PRISM

human factors project, and is retained as a human factors expert by several process industry clients to advise on safety and work-related stress. Ronny is an Associate Fellow of the British Psychological Society, and regular contributor to the UK Institute of Chemical Engineers’ safety symposia.



Jim Maitland is an Offshore Installation Manager with BP in the North Sea. He has 27 years experience in the Oil and Gas Industry, and has performed many offshore site roles from Technician through to Offshore Installation Manager, and onshore roles such as Business Performance Coach and Quality

Management consultant. He is active in raising awareness of human factors issues in BPs North Sea assets, and of driving change in work control processes

Further information

For further information about this and other events, contact Sue Hull, Conference Manager, The Ergonomics Society, Elms Court, Elms Grove, Loughborough LE11 1RG, telephone 01509 234904, email s.hull@ergonomics.org.uk. Visit www.ergonomics.org.uk > Events

to address human factors issues. Jim has an MSc in Project Management from Aberdeen University, and is currently involved in a project to decommission the Miller asset.

12.30 Lunch

13.30 Ed Frederick, Human Performance Manager, Exelon Nuclear, Pennsylvania, USA: “The Accident at Three Mile Island: An Insider's Perspective”



Ed Frederick was a member of the Control Room crew at the onset of the Three Mile Island accident on March 28, 1979. He has described the accident at conferences and symposiums across the US, Canada and Europe providing insights into the causes and the impact of the accident to the local community

and to the nuclear power industry. He has provided articles and commentary to many industry publications. His most recent project is the INPO video, “The Special Characteristics of Nuclear Power “ (January 2008) which describes lessons learned from the Three Mile Island and Chernobyl accidents.

14.30 Andrew Brazier, consultant: “Getting the numbers right: Staffing assessments and supervision”



Andy is an independent risk consultant specialising in human factors, ergonomics and safety. He has a degree in Chemical Engineering, and has worked in human factors for 14 years, with the last 11 being in consultancy.

Andy has extensive experience of the oil and gas industry, including gas terminals, oil refineries and offshore platforms. His expertise covers task analysis, error prediction, managing the risks of change, procedure development, addressing training and competency issues, emergency response, permit-to-work systems, control room operations and culture change.

15.15 Panel session: Questions & Answers from the panel of presenters from the two days

16.00 Closing remarks

Notes