Operations Outreach Seminar

A one-day seminar for plant and operations managers of ASM member companies who wish to deploy ASM Operating Practices in the operation of their plant to mitigate the risk of abnormal situations.

14 October 2011
TOTAL Tour Coupole, 
La Défense, Paris, France
Seminar Objectives

The objectives of this seminar are to provide ASM User Member company plant and operations staff with an understanding of the Abnormal Situation Management problem, and examples of how to mitigate abnormal situations through the deployment of Effective ASM Operations Practices.

Seminar Description

This is an intensive one-day effective ASM operating practices seminar presented by the ASM Consortium. The seminar is for plant and operations managers who want to minimize the risk of abnormal situations in the operation of their plant.

This seminar provides participants with some key ASM Consortium learning on effective ASM operating practices.

Throughout the seminar you will be able to evaluate the operations integrity of your plant and identify factors that may be contributing to near misses and/or abnormal situations. Using this information, you can establish a baseline of current plant conditions, identify ASM deployment problems and identify immediate opportunities.

Seminar Materials

Each Seminar attendee will receive a USB flash drive with the presentations and related ASM effective practice guidelines.

Hotel Accommodations

Friday, 14 October 2011

Refer ‘Useful Links’ in the invite for the list of hotels.

Seminar Registration

This seminar is for ASM Consortium members only, and there is no charge. Space will be limited, so please register early to reserve a place.

Please register via the following link:
http://www.123interview.com/IOD/Itw_Total_DIRCOM.nsf/h?OpenAgent&C=1LQP6874

In case of problems with registration or hotel booking, please contact Christel Van Der Wielen at +32 2 288 30 84 or email Christel.van-der-wielen@total.com

Seminar Speakers

A highly experienced ASM member company representative will present each Seminar topic. Speaker biographies are at the end of this leaflet.

Venue

The seminar will take place at Total offices:

Tour Coupole, Salle de congrès A and B
Place Jean Millier 2, La Défense 6, 92400 Courbevoie, France

Refer ‘Useful Links’ in the invite for the access plan. Due to construction works in the building, there is an alternative entrance: please follow signs.
Seminar Outline

Friday October 14th

9:00 – 9:15 **Introduction and Expectations**  
*Fabien Allemand (Total)*  
We will give an introduction to the purpose of the seminar.

9:15 – 9:45 **ASM Consortium Introduction**  
*Jason Laberge (Honeywell)*  
We will provide a historical background of the ASM Consortium; how it began and an overview of each program period.

9:45 – 10:15 **The ASM Consortium Guidelines**  
*Peter Bullemer (Human Centered Solutions)*  
We will provide an overview of the four ASM guidelines documents (Operations Practices, Alarming Management, Display Design, Procedural Operations) to illustrate content and potential uses. There will be brief question and answer sessions following the overview of each guideline document.

10:15 – 10:45 **Break**

10:45 – 11:30 **ASM Research: Safety Culture and Operations Failures**  
*Jason Laberge (Honeywell)*  
We will provide a summary of ASM research investigating techniques for measuring and changing plant safety culture. In addition, we will review findings on common operations practice failures from the root cause investigation of 32 major industry incident reports.

11:30 – 12:00 **Human Factors – Not by Technology Alone**  
*Peter Bullemer (Human Centered Solutions)*  
We will provide an overview of human factors considerations and a key ASM Consortium theme – Not by Technology Alone. This session will highlight several factors that influence operator performance.

12:00 – 13:00 **Lunch**

13:00 – 13:30 **ASM Research: Situation Awareness & Operator Performance**  
*Anand Tharanathan (Honeywell)*  
We will provide a summary of several simulator-based studies comparing traditional operator interfaces to advanced interface design techniques. The advanced display and object design techniques were developed to improve console operator situation awareness and their ability to proactively manage abnormal situations.

13:30 – 14:00 **ASM Research: Use of Procedures during Abnormal Situations**  
*Peter Bullemer (Human Centered Solutions)*  
We will summarize the findings on procedure execution failures during abnormal situations and the implications for improving your procedure management system.

14:00 – 14:30 **ASM Research: Competency Models for Operations Training**  
*Anand Tharanathan (Honeywell)*  
We will summarize the development of competency models for operator knowledge and skill requirements for abnormal situation management. Initial research and development on training methods for developing ASM competencies will also be presented.
Friday October 14th Continued

14:30 – 15:00 Break

15:00 – 15:30 Alarm Management Continuous Improvement in BP
Zaid Rawi (BP)
We will provide a description of the continuous improvement program established in BP to ensure effective alarm system performance. The presentation will highlight key elements of the BP effective operations practice that defined a feasible work process for sustaining high quality in alarm system performance.

15:30 – 16:00 Deployment of ASM Solutions in Sasol
Mischa Tolsma (Sasol)
We will provide an overview of the effective ASM solution concepts established at the Sasol Secunda site after they joined the ASM Consortium in 2006. The presentation will highlight key challenges as well as successes in deploying ASM solutions concepts such as effective operator interface design, alarm management practices and control building design.

16:00 Closing Discussion
Luc De Wilde (Total)
We will ask seminar participants to share their thoughts on how the ASM Consortium programs can support user members in the future; including project ideas for the next couple years. We will seek feedback on how we might improve future outreach seminars. We will also thank participants for attending and address questions.

The Abnormal Situation Management (ASM) Consortium is a long-running and active industry-lead research and development consortium of 11 companies and universities that are concerned about the negative effects of industrial plant incidents. It aims to identify problems facing industrial plant operations during abnormal conditions, and to develop solution concepts. Deliverables include products and services, guideline and other documents, and information sharing workshops; all incorporating ASM knowledge.

Abnormal situations are managed by Prevention, Early Detection, and Mitigation, in order to reduce unplanned outages and process variability that are reducing profits and increasing the risk to plant employees and local communities.
Peter Bullemer
Dr. Bullemer is a senior partner with Human Centered Solutions, LLP (HCS). Specifically, Peter specializes in the applications of human factors principles and human-centered design methodologies to optimize the influence of culture, organizational structures, management systems and use of technology on operator and plant performance. Dr. Bullemer has a Ph.D. in Cognitive Science from the University of Minnesota. Peter is a co-founder and former leader of the Abnormal Situation Management® (ASM®) Consortium as the Principal Investigator from 1992 to 1998 and the Director from 1999 to 2002.

Jason Laberge
Mr. Laberge is the Program Manager for the ASM Consortium and is a Senior Research Scientist at Honeywell Advanced Technology Labs. Jason has over ten years of experience performing basic and applied human factors research in multiple domains. Specific contributions to ASM include developing requirements for effective team communication and coordination, root cause analyses of abnormal situations, effective practices and requirements for electronic shift logging, co-author of the Abnormal Situation Management Consortium “Effective Operations Practices Guidelines”, numerous effective operations practices site audits, and evaluations of console operator displays for handling alarm floods. Jason has a Masters degree in Engineering Psychology from the University of Calgary in Canada.

Zaid Rawi
Dr. Rawi is the team leader for Instrumentation, Control & Electrical in the BP Upstream Engineering Centre which provides support for BP projects and operations in addition to work on e.g. company standards and improvement projects, etc. Prior to this Zaid worked as a Remote Plant Monitoring team leader in the BP Refinery of the Future programme and before that was an Advanced Manufacturing Technology Engineer (Control & Automation) at BP Chemicals in Hull, UK. Zaid represents BP on the Abnormal Situation Management Consortium along with the Institution of Chemical Engineers - Process Management and Control Subject Group. Zaid has a PhD and a BSc in Chemical Physics from the University of Sussex, an MSc in Process Automation from Newcastle University and is a Chartered Engineer with the Institute of Measurement and Control.

Anand Tharanathan
Dr. Tharanathan is the Principal Investigator for the ASM Consorttium and is a Senior Research Scientist at Honeywell Advanced Technology Labs. Anand has a Ph.D. in Experimental Psychology from Texas Tech University with specialization in visual performance and cognition in complex, dynamic domains. He has extensive research experience in measuring and evaluating situation awareness and human performance in complex domains, with implications for training, improved cognitive models, development of enhanced displays and designing effective human-automation systems. Within the ASM Consortium, he has either led or significantly contributed toward projects like Visual Thesaurus, Operator Training and Competencies, Procedure Execution and Management, Information Integration Methods and site-audit.

Mischa Tolsma
Dr. Tolsma is the Engineering Manager Instrumentation and Control for Sasol Synfuels Ltd. and head of the instrumentation and control engineering department. Mischa’s responsibilities include, amongst others, the management of control systems renewal projects and roadmaps, control optimization including advanced process control, and critical information infrastructure. His interests are with abnormal situation management and alarm management in specific, as well as remote monitoring solutions. Dr. Ir. Tolsma has an MSc and PhD in Applied Physics from the Delft University of Technology with a specialization in model based measurement and control.

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