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# IMPROVING HUMAN PERFORMANCE IN OPERATIONS

## Human Centered Solutions Seminar Series

- LEARN ABOUT FOUNDATIONAL PRINCIPLES OF GOOD HMI DESIGN
- DISCOVER TECHNIQUES TO IMPROVE TEAM SITUATION AWARENESS
- UNDERSTAND INDUSTRY EFFECTIVE OPERATIONS PRACTICES



Attend one or more of the two seminar sessions presented by Human Centered Solutions, LLC (HCS) industry leading human factors experts on operations practices, operator HMI design and operator situation awareness training.

Held on the following dates and locations:

September 16-17, 2010  
Ft. McMurray, AB

November 11-12, 2010  
New Orleans, LA

### **Session 1: Designing Effective Operator HMIs (1 day)**

This seminar will provide the participant with a basic understanding of human factors principles, industry guidelines, and their application to the design of the console operator's HMI. In addition, the participant will learn how to incorporate human-centered development techniques into all phases of their HMI project to ensure a successful outcome.

### **Session 2: Establishing Effective Operations Practices (1 day)**

This seminar will provide the participant with a basic understanding of effective operations practices drawn from our consulting experience and investigative studies in the ASM Consortium. The session will cover a range of topics including abnormal situation management, situation awareness, staffing levels, alertness and fatigue countermeasures, control building design, procedure design, alarm management, operator interface design, operations training, and performance metrics.

**Special offer available for individuals attending all sessions!**

**Human Centered Solutions**

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[www.applyhcs.com](http://www.applyhcs.com)

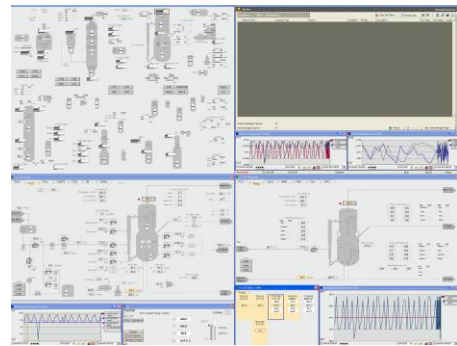
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# DESIGNING EFFECTIVE OPERATOR HMIs

## Human Centered Solutions Seminar Series: Session 1

### Designing Effective Operator HMIs Topics

- The Elements of Human-Centered HMI Development
- The psychology of human attention, perception and cognition that influences HMI effectiveness
- Determining Information and Display Requirements
- Human factors design principles and their application to the HMI
- Advanced visualization concepts
- ASM business case study on High Situation Awareness HMIs
- Important Interactions between the HMI, Console, and Control Room Design
- Evaluating the effectiveness of the HMI design



### Comments from Previous Seminar Participants:

*“Very good information that will be valuable on our upcoming projects”*  
*“Highly valuable for the time and expense”*

### Who should attend:

Technology and Project Managers, Automation/Application Engineers, and DCS/HMI Specialists

### Session 1 Dates and Locations:

September 16, 2010  
Ft. McMurray, AB  
Sawridge Inn

November 11, 2010  
New Orleans, LA  
Hampton Inn-LaPlace

The seminar will start at 8:30 am and end at 4:30 pm. HCS will provide a continental breakfast and lunch. HCS reserves the right to limit attendance or cancel any session.

Session 1 Cost: \$400 All Sessions Cost: \$600  To Register contact Ric Barreth: rbarreth@applyhcs.com; 303-570-2823	<b>REGISTER 10 Days before your workshop</b> and receive a <b>FREE COPY</b> of the <b>ASM Consortium® Guidelines</b> <b>Effective Operator Display Design</b>
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# ESTABLISHING EFFECTIVE OPERATIONS PRACTICES

## Human Centered Solutions Seminar Series: Session 2

### Establishing Effective Operations Practices Topics

- Factors Influencing Human Performance
- Abnormal Situation Management and Operator Situation Awareness
- Operations Team Staffing
- Operator HMI, Alarm Management and Control Building Design
- Procedural Management System
- Operator Knowledge and Skill Development
- Metrics to Improve Operation Practices as well as Process Safety



***“Human performance that can lead to plant upsets and incidents is not changed by the mere exposure to data and technology”***

Many companies in the process industries seek to improve operations reliability through improvement in operator performance. A key aspect of improving operation reliability is to reduce the costs associated with abnormal situation management. Human Centered Solutions offers this seminar to help understand how to design effective operations practices that enable the operations shift team to effectively prevent and respond to abnormal situations.

#### Who should attend:

Plant and Operations Managers, Technology and Project Managers, and HSE Specialists

#### Session 2 Dates and Locations:

September 17, 2010  
Ft. McMurray, AB  
Sawridge Inn

November 12, 2010  
New Orleans, LA  
Hampton Inn-LaPlace

The seminar session will start at 8:30 am and end at 4:30 pm. HCS will provide a continental breakfast and lunch. HCS reserves the right to limit attendance or cancel any session.

To Register contact Ric Barreth for details  
rbarreth@applyhcs.com; 303-570-2823

Session 2 Cost: \$400  
All Sessions Cost: \$600

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