

FPSO Conference: August 29 – 31, 2017

Conference Theme: *Gearing Up for the Future*

Day #1 Workshop: *Planning for the Digital FPSO*

Updated: Aug 10

Workshop Committee: David Cobb, Bruce Crager, Blake Moore, Eric Van Dijk, Arjan Voogt, Dick Westney

Learning Objectives

To provide the participant with an increased awareness and understanding of the technology and trends for “digital” applications to floating offshore developments including:

- What it is
- The proven and potential benefits
- The risks that must be managed

Promising areas for the application of digital technology include:

- Unmanned facilities
- Use of Big Data
- IoT applications
- Improved predictive/preventive maintenance; increased reliability
- Increased efficiency of work processes
- Improved quality
- Improved predictability
- Reduced project costs
- Increased operating efficiency

Workshop Themes

- Physical/Technical Scope
 - Automation
 - Communication
- Operator’s Philosophy
 - Project Design & Fabrication
 - Maintenance / Interventions
 - Operations
- Risk Management
 - Loss prevention
 - Explosion etc.
 - Security (piracy)
 - Cybersecurity
- Regulatory
 - First of a Kind considerations

Planned speakers/panelists

- Speakers
 - Rice – Prof. Randy Batsell speaking on concepts of “Big Data” as applied to oil & gas drilling & production.
 - USCG – Capt. Josh Reynolds, speaking on the regulatory requirements for FPSO in GOM.
 - SBM – Eric VanDijk, speaking on SBM’s approach to the application of technology to the next generation of FPSOs
 - OSIsoft – Cindy Crow speaking on how technology enables remote monitoring & control of offshore facilities
- Panel members (six total)
 - Four speakers shown above
 - Andy Wolford - Risknology
 - David Petruska - BP

Agenda

- 1:00 – 1: 15 Introduction
 - Workshop objectives and agenda, speakers (Dick Westney)
 - Framing of the session (Bruce Crager)
- 1:15 – 2:45 Overview presentations (time includes Q&A)
 - 1:15 – 1:40: Using Big Data to Improve Profitability (Prof. Randy Batsell)
 - 1:40 – 2:00: The Regulatory Perspective (Capt. Josh Reynolds)
 - 2:00 – 2:20: The Digital FPSO – overview (Eric VanDijk)
 - 2:20 – 2:40: The Digital FPSO – technology (Cindy Crow)
- 2:45 – 3:00 Break
- 3:00 – 4:00 Case study: **Considering the Unmanned FPSO**
 - Case description: “Boss has heard about the Digital Unmanned FPSO. Meeting with management committee in 2 hours. Wants to have a presentation on the scope of a feasibility study, considering the 4 key themes shown above.”
 - Teams have 60 minutes to prepare a presentation scoping the study. Each team will have a particular focus on one of the themes.
- 4:00 – 4:45 Presentations of workshop results
 - Teams present to panel who use questions and discussion to provide learning
- 4:45 – 5:00 Wrapup

Course Materials

Participants will receive a workbook including presentation materials, the case study, useful references (e.g., article reprints, links).