



Training & Certification Offshore Drilling Workforce

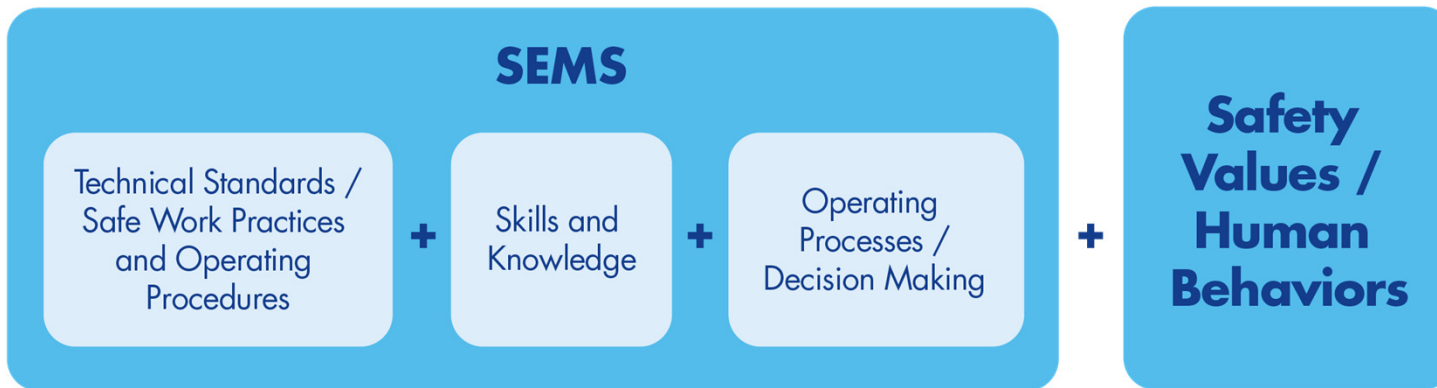


Current State

- Training is historically Company Based
- Training Provided by Company or Industry Training Providers
- Few accredited/certified positions
- Extensive investment in Training & Training Record Keeping
- Position definitions vary slightly – particularly Production Operations
- No industry standard for Production Operations skills IADC has and is re-developing for Drilling
- Some groups establishing standard curriculum for some training as well as some accreditation

- **What are we trying to achieve with certification / accreditation?**
- **What is the problem?/ What is the data?**
 - **Assure Staff work the way they are trained**
 - **Assure Staff understand the risk/hazards of their decisions**
 - **Assure Staff know the “system” and how their work effects the system**
 - **Assure Staff understands their personal responsibility for barriers**
 - **Develop an enhanced culture of safety**

Safety and Environmental Management Systems (SEMS)



- **Goal: Safe & Reliable Operations / Operational Integrity**
- **SEMS is a key mechanism to reduce the likelihood of major incidents**

Bow Tie Approach



LFI Category

- **People**
 - **Personnel Skills or Knowledge**
 - **Quality of Task Planning and Preparation**
 - **Individual or Group Decision-Making**
 - **Quality of Task Execution**
 - **Quality of Hazard Mitigation**
 - **Communication**

Competency Systems

- Defining skills and skill level of all jobs
- Describe what competency looks like in executing work
- Establish Competency Coaches / Operations Advisors
- Actively assess competency on the job
- Remediate competency on site

Key Concepts / Tools

- “Apprentice System”
- Watching the work – Coaching / Mentoring / Intervening
- Simulation, Scenarios, Practice Drills – Staff fall back to experience
- Technology Based Behavior Change – RTOC
- Decision Support Systems
- Felt Leadership

***Elements of an effective
Skills & Knowledge Management System
(SKMS):***

- 1. Commitment & Objectives**
- 2. Overview & Scope**
- 3. Accountability & Responsibility**
- 4. Roles &/or Tasks**
- 5. Assessment & Remediation**
- 6. Auditing & Quality Assurance**
- 7. Records & Documentation**