IADC DEC Q4 Tech Forum, "Remote Operations Centers and Future Potential"

November 18, 2020, 8:30am-12pm
Online-only event via Zoom

The aspirations of remote operating centers in upstream oil and gas operations include an enhanced safety record, improved efficiency, operational consistency and the ability to deliver lessons learned across a broad spectrum of geographical locations and a variety of operations. Have these aspirations been achieved? What have we learned? Further, as we develop new remote operating centers, what other processes can be monitored, advised and controlled? Is there potential for an increase in centralized data availability to result in real advances in data analytics and machine learning? As our industry strives to achieve improved productivity, safety and environmental stewardship, this forum will ask these questions from a diverse selection of upstream stakeholders.

Agenda:

08.30-08.40 Welcome – Dennis Moore, Chairman, and introduction to event – Robin Macmillan, DEC Board member

08.40-09.05 **Rethinking the Status Quo in Real-Time Monitoring,** Robello Samuel, Halliburton
We have to rethink the status quo and provide new options for the real-time monitoring space due to increased pressure to reduce operating cost. With enhanced cloud solutions and digital frameworks with sensor fusion, physical location-based remote center models with multiple screens and video walls are getting outdated for making complex decisions. Fast underpinning engineering analysis and optimization techniques with enhanced layer of AI and AEI can be run to take instantaneous decisions at the edge, leading to depth-to-depth and slip-to-slip user experience. We need more of a virtual and modular Unified Command and Operation Cyber Center (UCOC) in the third dimension for end-to-end visibility with interconnected disciplines through a single glass pane window – an integrated but dynamic and distributed control shared across the enterprise and accessed by anyone at anytime, anywhere.

09.05-09.30 **Remote Well Construction Operations: Implementation and Outlook**, Shady AlNofaily, Baker Hughes
Remote delivery of upstream well construction services began over two decades ago but has accelerated due to COVID-19 travel restrictions. Automated and autonomous well delivery in the future requires collaboration between the drilling contractors, service companies and the operator to develop interoperable open interfaces (such as OSDU/DWIS) to link downhole tools to rig controls in one system. This presentation describes the required high-level service model, operational planning, and necessary organizational workflows, in addition to the domain-specific capabilities relevant to each onshore and offshore case study.

09.30-09.55 **Remote Operators vs Remote Operations: An Inclusive Approach**, Hunter Simmons, Gordon Technologies
Our focus is highlighting the differences between remote operators and remote operations. The differentiation is important to the scalability and viability of remote work. As per the IADC subject matter regarding ROCs, the aspiration of remote operations is an enhanced safety record, improved efficiency, operational consistency and delivering lessons learned. We contend that simply creating remote operators and putting them in a remote center does not achieve the desired outcome. More effort needs to be made to

truly achieve the aspirations of remote operations. The case study covers a recent deployment of new technology with a major Permian Basin operator. We will demonstrate how our approach to remote operations and data distribution achieves not only the target aspirations but also drives innovation and collaboration.

9.55-10.20 **Ensuring Remote Connectivity to Enable the "Rig of the Future" Today,** TJ Gallagher, Oceaneering
Reliable and resilient connectivity is an imperative when conducting drilling operations in remote offshore environments. Oceaneering partnered with Oracle to help Pacific Drilling meet its goal of developing the world's most technologically advanced fleet of connected drillships that boost output and lower operational costs. The Satellite Agnostic Intelligent Link (SAIL) system, coupled with the SD-Wan solution, supports high throughput bandwidth globally. This failsafe connectivity saves Pacific Drilling thousands of manhours and millions in costs by automating and communicating photo and video footage from remotely operated vehicles (ROVs), robots, satellites, drones, and voice and OEM data used to manage daily business operations.

10.20-10.30 Break

10.30-12.00 Panel session & interactive audience Q&A session. Each panelist will get 9 minutes to make a brief presentation, followed by a group discussion to be moderated by Robin Macmillan and Matt Isbell, DEC Board members. Panelists are:

- **Elia Abdo, Drillmec, R&D Engineer and Technical Trainer:** The Implementation of a Remote Assistance Center for Rig Site Support, FAT and Personnel Training **View the PDF presentation here.**
- **Guandong Jiao, Schlumberger, Remote Operations Manager, Wireline:** Wireline Remote Operations Have Agility and Reliability for Drilling Contingencies
- **Malini Manocha, Nabors, Senior Manager – Operations Excellence:** Digitalization Drives a Workforce Change to Enhance Remote Operating Centers
- **Trey Adams, H&P, Vice President:** A Comprehensive Look at Global Fleet Efficiencies Achieved by the Utilization of Remote Support Centers **View the PDF presentation here.**
- **Jeremy Brown, Hess, Supervisor Onshore Real Time Center:** Onshore Real-Time Center Operations Plan

12.00 Adjournment