

International Association of Drilling Contractors



Workforce Development Committee Meeting
 24 July 2019
 IADC Office
 3657 Briarpark Drive, Suite 200
 Houston, TX. 77042

Agenda

8:00 – 8:05	Welcome, Introductions, IADC Antitrust Policy <i>Eliot Doyle, Workforce Development Co-Chair, EnscoRowan</i>
8:05 – 8:15	Safety Moment <ul style="list-style-type: none"> • Mark Denkowski: “Do not use your phone at gas stations, or near places where sparks can ignite and cause an explosion.”
8:15 – 8:45	Rapid Assessment Tools and Their Application <i>Garry Davis, BOP Risk Mitigation Services, LLC</i> <ul style="list-style-type: none"> • Presented using a Simulator of a BOP Stack. The simulation is built to look exactly like what a person would see out on the rig. This simulation is built for training on Loss Mitigation and has web base access. The system is not programmed to accept the code of a “Generic” Failure. Each failure has a specific coding so that the failure can be tracked. Failures are listed in Chronological order on the summary sheet. • This can be used for any stack type. It was modeled after the spaceship Challenger and can be used for Drilling Operations, Ballast Control, etc. • In 4 years of testing, no errors were found in reporting. There were two Operators, a Drilling Contractor, and U.S. Regulators that tested and vetted the system. • Were able to determine that Drilling Contractors and Operators had pulled stacks unnecessarily 25% of the time and 100% of the time this system was correct. • System alarms and lack of understanding those alarms cause stack pulls. The system was analyzed to know what fault alarms are tied to so can better understand what is going on. • If people are not understanding, they take the path of less risk. People need to understand what causes the alarms.
8:45-9:45	HR Challenges and Solutions in Today’s Industry Panel: <ul style="list-style-type: none"> • <i>Heather Dulin, Director-Talent Acquisition & Organizational Development, NOV</i> • <i>Linda Head, Senior Associate Vice Chancellor-External and Employer Partnerships, Lone Star College</i>

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Question: The drilling market has remained flat longer than originally projected. How has that effected the new generation of workers' perception of the opportunities available in the upstream sector?

- Heather Dulin (HD): We are not unfamiliar with the cyclical nature of the industry. Low numbers of roles don't mean that people don't want to apply. Candidates are getting creative on how to get involved in the industry and we need to find creative ways to meet them where they are.
- Linda Head (LH): We have worked with industry to develop new courses and training centers. We are building a training rig in Tomball, Texas and have alternative means of paying for student tuition for oil and gas training. Students just are not coming for training right now. The college does not know that the industry is hiring. Students don't know what good jobs are out there in oil and gas. They don't know the pay, benefits, etc. Students need details and information straight from the industry.
- HD: We need to use power of marketing together to get the word out. These are possibly new roles we need in the industry.
- LH: The awareness of the industry just isn't there. People don't know what's out there.

Question: How can drilling and oilfield service companies improve communications to attract top talent from the new generation who is aware of the new, innovative technologies in our industry, and how the business is changing?

- HD: We need to invest in marketing and PR people. Employer branding is huge. Print is dying off and social media and advertising is cheap and untapped by the industry. Even interns can be brought in to help and reduce cost.
- LH: There are usually internships at the end of programs but in working with different industries, we learned they do internships throughout the program. We need more of that in oil and gas. Colleges have veteran's affair offices and are working to get people placed. We are now teaching on the base of Fort Bliss with IADC certification programs. We need better marketing to promote what the industry is about and market the technology aspect of the industry.

Question: How will the changes in offshore drilling technology (real-time BOP monitoring, for example) impact hiring requirements? What new skills are anticipated to be required as some parts of the field operations rely more heavily on big data?

- HD: We need to make marketing authentic and get the message from real employees. Learning agility is also important because the industry is always changing. We need more innovative problem solvers. We have candidates work a real problem in interviews. We want to know how they will handle it. This helps get diverse thought into the company.

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	<ul style="list-style-type: none"> • Industry can use our center at Lone Star to introduce potential employees to the rig. <p>Question: Do you see this as an international hiring challenge?</p> <ul style="list-style-type: none"> • LH: Yes. Often times there is not much education in areas and there are economic challenges, so it takes longer to educate people. They are typically far behind when it comes to technology. Colleges work with students in high school but it is easier to start after high school because students are more mature and hungrier versus educating parents on the benefits of the industry and of technical careers while individuals are still in high school. <p>Audience Question: Potential candidates for the oil and gas industry hear marketing against our industry. How do we counter act that?</p> <ul style="list-style-type: none"> • HD: Companies must invest in ads, but we don't see companies sharing about how they give back to communities and how they are making positive impacts. • Audience Comment: The Department of Labor is not helping because they do not talk about our industry. Government does not know about the industry. <p>Question: The industry is different now then when people were let go in the downturn, how do we transition them back?</p> <ul style="list-style-type: none"> • HD: We rotate jobs and job shadow to learn multiple roles, so people stay hungry for more knowledge. • LH: Companies are bringing people in to get a new way of thinking and to learn new processes. We are seeing a lot of short-term intensive training.
9:45 – 10:00	BREAK
10:00 – 11:00	<p>Using Augmented Reality and Virtual Reality in Training</p> <ul style="list-style-type: none"> • <i>Claudio Pineda, eCubed</i> <ul style="list-style-type: none"> • Need training that is meaningful to the Trainee. • We offer four different types of Technology. <ul style="list-style-type: none"> • eLearning <ul style="list-style-type: none"> • Good: Reduces need to travel • Bad: Death by PowerPoint • Ugly: Adobe announced end of Flash • Virtual Reality (VR) <ul style="list-style-type: none"> • Good: Great for simulations • Bad: Smaller user based • Ugly: Longer development time • Augmented Reality (AR) <ul style="list-style-type: none"> • Good: Uses smart phones, tablets, or wearables • Bad: Rapidly changing technology • Ugly: Closed Systems vs. Open Systems • Mixed Reality (MR) <ul style="list-style-type: none"> • Good: Remote assistance • Bad: Rapidly changing technology • Ugly: Closed Systems vs. Open Systems

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	<ul style="list-style-type: none"> • Benefits <ul style="list-style-type: none"> • Training Benefits • End User Benefits • On the Job Benefits • <i>Richard Coates, 3T Energy Group</i> <ul style="list-style-type: none"> • Presented on virtual reality, gamification, and experiential learning. He demonstrated the concept and value of gamification through the eLearning he developed for McDonalds, which was a huge success. The McDonalds training included both human factors and technical content. Coates also showed examples of “digital twin” worksites, in which an almost-exact replica of a worksite is created digitally and used for training.
<p>11:00 – 11:20</p>	<p>IADC Updates and Future Topics <i>Brooke Polk, Director-Program Development & Technology</i></p> <ul style="list-style-type: none"> • Brooke Polk provided an IADC ACD update comprising changes to RigPass, WellSharp Plus (formerly WellCAP Plus), and new programs KREW and Subsea Technician Competency. • The Subsea Technician program will involve an exam database hosted by but separate from the WellSharp Exam Database. The program will allow customization based on position. • SafeLand and SafeGulf are both revising curriculum, and IADC is pushing for these efforts to be completed soon. IADC has asked the chairs of both of those groups to provide a gap analysis showing these curriculum changes. • Polk mentioned the upcoming HSE&T Conference and deadline for abstract submissions. • Polk encouraged all attendees to bring their HR supervisors to the next WDC meeting, which will be in October. She requested drilling contractor co-chair nominations and plans to conduct a vote at the next meeting. • Please contact Brooke Polk with topic ideas for the next meeting.
<p>11:20</p>	<p>LUNCH WILL BE SERVED</p> <p>ADJOURNMENT</p>

Attendance:

First Name	Last Name	Company Name
Dan	Abramovich	
Nolan	Habegger	BAKER HUGHES, A GE COMPANY
Ross	Witty	BOP RISK MITIGATION SERVICES
Garry	Davis	BOP RISK MITIGATION SERVICES
Euan Angus	Kennedy	DRILLING SYSTEMS (UK) LTD

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Jim	Krupa	DRILLING SYSTEMS (UK) LTD
Claudio	Pineda	ECUBED
Eliot	Doyle	ENSCO ROWAN PLC
Brooke	Polk	IADC
Cynthia	Montero	IADC
Kristin	Ward	IADC
Olaf	Martinez	IADC
Patty	Tydings	IADC
Mark	Denkowski	IADC
Bill A	Waldroop	INTERACTIVE TRAINING SOLUTIONS
Linda	Head	LONE STAR COLLEGE
Herbert Aaron	Garcia	LONE STAR COLLEGE
Heather	Dulin	NATIONAL OILWELL VARCO
Cristal	Benoit	NOBLE DRILLING
Fritz	Golding	NOBLE DRILLING
Michelle	Burns	PRECISION DRILLING COMPANY LP
Natalie	Ivey	RESULTS PERFORMANCE CONSULTING
Larry	Schmermund	SMITH MASON & COMPANY
William	Villalobos	TEXAS A&M UNIVERSITY
James H	Penny	TRANSOCEAN
Vicki Teakell	Watkins	WEST TEXAS SAFETY TRAINING CENTER

All meetings must have a written agenda that is circulated prior to the meeting. Attendees must strictly follow the agenda. Topics not on the agenda must be deferred until a later meeting. Meeting minutes will be posted on the Committee's website following endorsement by Committee leadership and meeting attendees. Attendees should be aware that: 1. There may be audio recordings of meetings, for purposes of facilitating capture of meeting minutes; and 2. The final published minutes will include a record of who attended the meeting. The audio recordings shall be destroyed immediately following endorsement of the minutes. IADC Committee activities are governed by IADC's Antitrust Policy and Guidelines. [Click here for information on the policy and guidelines.](#)