

# International Association of Drilling Contractors



**IADC Advanced Rig Technology Committee Meeting**  
**9:00 am, Wednesday, 11 May 2016**  
**IADC Offices – 10370 Richmond Ave, Suite 760**  
**Houston, TX 77042**

## Minutes

Chairman Terry Loftis opened the conference, welcomed the attendees and reviewed IADC's antitrust policy <http://www.iadc.org/iadc-antitrust-policy-guidelines/>

Mike Killalea informed the group about recent recommendations from the National Academy of Sciences that BSEE should work with API, IADC, and other relevant stakeholders to form an API standing technical committee to establish minimum requirements for which critical operations (and parameters) are monitored and which data are collected and monitored in real time. In addition, BSEE, along with this technical committee, should propose standards for communication protocols between onshore and offshore facilities when RRTM is used.

The committee agreed to take on development of minimum requirements from the drilling contractor's perspective. Further, the committee agreed to construct a response to API on the topic. Trenton Martin, chair of the Drilling Controls Subcommittee, and Mr Loftis had participated in a series of BSEE workshops on RTM over the past year.

Then the group heard committee report outs.

## **Future Technology SC**

Mr Loftis reported that Bob Judge, GE Oil & Gas, had volunteered to serve as the Vice Chair for the Future Technology Subcommittee. He added that the FT SC planned to organize presentations by service firms and OEMs at which contractors and operators could assess and offer feedback on new ideas, services and equipment. This will be particularly useful at early stages of development.

## **BOP Controls SC**

At the March meeting of the Drilling Services Advisory Panel, the BOP SC was asked to provide a mission statement, objectives and goals. The SC produced the following:

-- Mission statement: Provide information and guidance to improve safety, reliability and performance of BOP controls installed on drilling facilities

-- Objectives:

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- Present recommendations for uniform BOP control systems;
  - Detail a focused approach toward safety and mitigating the risk of environmental impact;
  - Identify advanced rig technology that improves the drilling process.
- Goals
- Create a guideline for a recommended level of reliability analysis in BOP controls using widely accepted methods, such as fault-tree analysis;
  - Create a guideline for developing the human-machine interface in BOP controls using basic formatting principles to aid standard user training;
  - Host periodic technology forums or workshops to promote BOP controls and generate interest in subcommittee participation.

## Drilling Control Systems SC

Mr Martin said that the DCS SC's main emphasis is development of alarm management guidelines. The Alarm Management Work Group has divided into three teams. Team leaders are Christopher Goetz, the overall work group leader; Erlend Engum, NOV; and Mike Lyssy.

The group is working toward a workshop, now scheduled for the afternoon of 15 September at IADC HQ. The workshop's role is to vet the nascent guidelines.

Publication of the final guidelines is slated for year end.

## Cybersecurity SC

Siv Houmb, SC chair, noted that IADC has published its cybersecurity guidelines. Ms Houmb has organized panel discussions at both IADC World Drilling 2016 and at the 2016 IADC ART Conference.

Pending goals include developing guidelines for network segmentation, cybersecurity training, guidelines for hardening of control systems (both to be completed by year end), and guidelines on security monitoring and audit (envisioned for completion in June 2017 and December 2017, respectively).

The committee reviewed three posters developed for IADC World Drilling – one a general piece on the ART Committee, one on cybersecurity and one on alarm management.

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Finally, the committee reviewed the status of the program for the ART Committee. Several holes were noted and committee members volunteered to follow up.

The group decided to use the automated response system to generate ideas for future ART Committee work program.

There being no further business, Mr Loftis adjourned the meeting.

Attendance:

<b>Name</b>		<b>Company Name</b>
Brian	Ellis	<b>CANRIG DRILLING TECHNOLOGY LTD.</b>
Maxine	Aitkenhead	<b>DATA GUMBO LLC</b>
Andrew	Bruce	<b>DATA GUMBO LLC</b>
David	Haas	<b>DELOITTE</b>
Mike	Killalea	<b>IADC</b>
Robin	Macmillan	<b>NATIONAL OILWELL VARCO</b>
Eldon	Thomas	<b>PARKER HANNIFIN</b>
Karl	Hay	<b>PARKER HANNIFIN</b>
Robert	Humphries	<b>PARKER HANNIFIN</b>
Siv Hilde	Houmb	<b>SECURE-NOK</b>
Terry	Loftis	<b>TRANSOCEAN</b>
Trenton	Martin	<b>TRANSOCEAN</b>
Jim	Nowotny	<b>VOLANT PRODUCTS, INC</b>
Arne	Becker	<b>WEATHERFORD INTERNATIONAL</b>
Robert	Ziegler	<b>WEATHERFORD TECHNOLOGY &amp; TRAINING CENTER</b>