Drilling Control Systems Subcommittee Meeting
IADC Advanced Rig Technology Committee
9:30 am, Wednesday, 22\textsuperscript{nd} of May, 2013
IADC Offices – Houston, TX

Attendees:

Mark Derouen, 5D Oilfield Magnetics
Ed Gaude, Cameron
Kurt Pedersen, Canrig Drilling Technology Ltd.
Richard Duff, Chevron
Gary Landrum, Consolidated Pressure Control, LLC
Tim Mournian, GE Oil & Gas
Sylvia Gonzales, GE Oil & Gas
Scott Maddox, IADC
Mark Gravouia, McCoy Drilling & Completions
Thomas Geihan, M-I Swaco
Cesar Pena, Schlumberger
Terry Loftis, Transocean
Trent Martin, Transocean

Summary:

1. Subcommittee Chairman opened the meeting and welcomed the participants.

2. Attendees were requested to familiarize themselves, if they had not already done so, with the IADC Antitrust Policy available on the IADC website (http://www.iadc.org/about-iadc/iadc-antitrust-policy-and-guidelines/).


4. Subcommittee Chairman provided a review of 25th of March meeting and its agenda. During the course of this particular meeting it was determined that the Drilling Controls Subcommittee would foster a new subcommittee focused on BOP Control Systems. Specific concerns were:
   - Focus on multiplex control systems.
   - Need to define some goals and objectives,

   Definition of a Mission Statement, Goals, and Objectives for this new subcommittee, were to be the primary agenda for today’s (May 22\textsuperscript{nd}) meeting.

Specific to possible tasks for the ART BOP controls effort, there were some discussions about the standard communication protocol used with these systems. Reference to SPE-DSATS committee’s leveraging of OPC-UA was brought up, but the discussion was not germane to the target agenda.

There were two communications concepts for BOP control systems that were discussed:
IADC MEETING NOTES – MAY 22\textsuperscript{ND}

a. Electronic Data Communications from the MUX system to the surface control system
b. Communication or reporting of status of the BOP (i.e. is it open or closed)
   
   • Format for the data could be an IADC report?
c. Following the ‘report’ there would also be a Dynamic data exchange.
   
   • The data presentation - read only

NOTE: The word ‘communication’ was used in two different contexts, both of which were just as important. The first was communication protocols (serial, Ethernet… from the surface control system to the stack) and the second context was related to reporting (e.g. daily reports, IADC reports etc.).

5. Group correction/modification to Mission Statement, Goals, and Objectives resulted in the following proposal:

   \textbf{Mission Statement}

   Provide information and guidance to improve safety and reliability of the Subsea BOP Control and interfaces, installed on offshore drilling facilities.

   \textbf{Goals}

   Define the functional requirements of the system.

   Provide recommendation for improving the performance and reliability of the Subsea BOP Controls from the aspect of being a “Safety System”.

   Define Hardware-In-The-Loop testing/practices as pertains to Subsea BOP Controls.

   \textbf{Objectives}

   To provide a preferred method for control of Subsea BOPs from an offshore drilling facility with (a) minimal interruption of operations and (b) a focused approach toward safety and environmental impact in order to mitigate the risk associated with application of safety critical subsea controls.

6. Other business topics discussed.

   a. Drilling Controls - New DCS objectives/ideas proposed by John Hoeflich to be addressed in the next DCS subcommittee meeting.

7. The next meeting was scheduled for July 11\textsuperscript{th}, 9:00 am, at the Houston IADC office; 10370 Richmond Ave., Suite 760 Houston, TX 77042. This will be a joint meeting of the IADC ART Committee, ART Future Technology Subcommittee & ART Drilling Control Systems Subcommittee.
Register at http://www.iadc.org/iadc-committees/iadc-advanced-rig-technology-committee/meeting-schedules-minutes.

8. With no further issues presented for discussion, the meeting was adjourned.

9. Last Item