



IADC MEETING NOTES – FEBRUARY 13TH

**Drilling Control Systems Subcommittee Meeting
IADC Advanced Rig Technology Committee
9:30 am, Wednesday, 13th of February, 2013
IADC Offices – Houston, TX**

Attendees:

Jim Rogers, Apache Corp
David Wagner, AWC Inc
Brad Rosenhagen, AWC Inc
Nathan Moralez, BP
Adam Drufke, GE Oil & Gas
Scott Maddox, IADC
Brad Applewhite, National Oilwell Varco
Morten Welmer, National Oilwell Varco
Reed Watson, Noble Drilling Services Inc
Stan Stephen, Odfjell Drilling AS
Paul Guirlet, Pacific Drilling
Paula deWitte, Synergy Fluid Services
Thomas Freeman, Synergy Fluid Services
Terry Loftis, Transocean
Trenton 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/>).
3. Review of agenda and anti-trust.

SPE DSATS EFFORTS UPDATE

Terry discussed some of the background on how the IADC ART DCS teamed up with SPE-DSATS for similar efforts so as combine forces.

Recapped the short list of clarifications needed for Drilling clarifications
DCS came away with a short list of clarifications - work groups.

SUBSEA CONTROL SYSTEM WORK GROUP DISCUSSION

Only in discussion but remains undecided if it should be an entity within the DCS as it is a safety system. For our initial purposes we will see if it can be moved along initially under the auspices of the DCS until it can be spun off at a later date as its own subcommittee, if it seems logical

As a group we want to define the objectives of this particular group. (I have attempted to capture some of the conversations and ideas, suggestions generated during discussions):

Suggest we use the Drilling Control Subcommittee Mission as a starting point. This mission statement could be applied to the MUX BOP control system. Under the goals section for the DCS version we could consider re-using Phase II goals as they appear applicable



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Could take a drill ship and compare to an FPSO. There are many systems, and suppliers. Traditionally you will have 3 diff types of controls: F&G, ESD, Process control system. Traditionally these are standalone. Because of Suppliers, Insurance (Lloyds)... keep the networks segregated. In the last decade, we have seen more progressive towards using the same hardware for ESD, F&G, however using a logical rather than physical segregation. Looking at land rigs, you have similar segmentation (Drilling Instrumentation, BOP...). They are separate systems and they don't share data. For the most part the driller's don't look at the BOP panel unless necessary. It would be nice to get some of the BOP data into the driller's panel.

Offshore there are a lot of rigs that have that capability to 'mimic' the status already, just currently cannot control the BOP.

One suggestion as a goal for this group: A standardized interface to get the data in front of the driller. On Land rigs the BOP and control system will change from one location to another. We can start studying the variations in the BOP control systems. Could look at a land rig and how it is used, pros' and con's? Build it up from a general knowledge standpoint and drill down further. The driller needs a better way to understand what is going on with the rig. See what is going on with the other packages on the pad. This would align with the proposed Mission Statement. A recommendation would be to provide a standardized interface to bring this information into the driller's panel.

With land, what does the driller really want to see? Have we done a questionnaire to see what a driller really wants to see for the land side? We could look at what H&P has done as a business case/motivator to propose this standardization effort for the control system interface.

ACTION: DCS committee to send feedback to Terry for what they would consider worthwhile goals and objectives for the BOP controls workgroup. Terry will then forward to Stan, Trent and Steve to formalize the feedback

We need to look at improving the performance and reliability of the BOP from the aspect of as safety system. Then we can expound on it and look at how can we make it better? Also need to feed our lessons throughout the industry and ensure it is not focused just on 'Offshore'.

Look at prepare to have a 'straw dog' missions statement for the next meeting March 25th, 0900 am.

Note: The following clarification/comment was submitted by Paul Guirlet and Tony Hogg of Pacific Drilling:

"API Specification 16D, BOP and Divertor Control Systems, is currently being rewritten. Within this rewrite there are two task groups already in place, one for accumulator calculations and the second, under Danny Fugate, detailing the electrical and software specifications. This task sub-group will also consider the MUX cables."

I agree with three bullet points below, but I would think that API to be a better vehicle than IADC for such specification."

- *Gather equipment/data currently used in the business*
- *Have a standard communication protocol*
- *How to improve reliability*

LAST DISCUSSION ITEM

4. The next meeting is scheduled for March 25th, 9:00 am, at the Houston IADC office; 10370 Richmond Ave., Suite 760 Houston, TX 77042.



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Register at <http://www.iadc.org/iadc-committees/iadc-advanced-rig-technology-committee/meeting-schedules-minutes>.

5. With no further issued presented for discussion, the meeting was adjourned.
6. Last Item