



Macaé, June 09th 2015

**MINUTES OF IADC-BRAZIL OPERATIONAL TECHNICAL COMMITTEE MEETING
HELD ON JUNE 09th 2015 10:00 a.m. TO 12:00 p.m. AT TRANSOCEAN'S OFFICE IN MACAE
AND VIDEO CONFERENCE WITH SEADRILL'S OFFICE IN RIO DE JANEIRO.**

Present at this meeting were the following:

- Bruno Manfredini - Transocean (Macaé) - Mauricio Aguiar - Seadrill (Rio)
- Barrie Lloyd-Jones-SSE do Brasil(Macaé) - Geovanny Soares – GE (Macaé)
- Thaísa Aleixo – IADC-BRAZIL (Macaé)

The agenda for this meeting was displayed on the screen. The focus was to review the Operational Technical Committee Goals set for 2015. The topics of discussion were as follows:

- Review Goals set for 2015
 1. Managed Pressure Drilling
 2. Standard Equipment List for ANP
 3. Well Control Equipment
- Discuss Technical Presentations for the upcoming IADC meetings – July
- Define new Tech/Ops Committee Leader
- Corporate Committees - Status
- Schedule the Committees' next meeting
- Open Forum
- Close out

The following items were agreed upon

- Mauricio is to attend the next Corporate MPD committee meeting and align the best procedures. Furthermore, Petrobras will close up and distribute the best procedures once they have a position from their internal committee. Although, Petrobras procedures seems to not conflict with what IADC has been doing as they are also part of IADC committees. Therefore, the result of Petrobras procedures aligned with IADC recommendations will be the final guideline for the committee being a standard to be used in Brazil.
- The procedures will be reviewed either during the Tech/Ops meetings or in a separate meeting to align the divergences between Drilling Contractors and Operator ideas of what should be the final standard procedures considering what Petrobras will send out.



- Include Rudimar Lorenzato report on the DC magazine (“There is no turning back on MPD”) on future discussions and presentations, including Petrobras point of view about this new technology.
- Petrobras is working on Well Control and Lane is responsible to make a template about it. However, Lane is focusing on the partnership with Embraer. This partnership is to share information without breaking the privacy of the companies. It is necessary to analyze with Petrobras which information about equipment failure during operations with them could be shared.
- It was agreed for the next meeting a member of each company to bring 3 of the major problems they had this year. The idea is to share experience. The action should include:
 1. What happened;
 2. Interim solution;
 3. Permanent solution.
- The next two Technical presentations for the General meeting in July were chosen as follow:
 1. Sustaining Continuous Improvement with and Evolving Workforce – Check 6;
 2. BOP uptime strategy - Lloyd’s Register (The abstract was received and the content is good – awaiting the final presentation to be include at the GM in July).
- Another presentation the was considered for the GM was Motorolas’ presentation, however, the presentation was not focusing on the Oil and Gas industry and Motorola will need to review the content for a future GM.
- Geovanny is the new Tech/Ops leader as a trial to see if he would be able to dedicate the necessary time for the committee. Geovanny is going to Rio and will meet up with Mauricio to be up to date with the Tech/Ops committee

The following items were discussed yet they remain open

- Bruno will focus on the standard equipment list for ANP. Bruno has already had discussion with IADC Houston on the 2015 Goal of a Standard Equipment List for ANP although he did not get any reply. Due to this, it was suggested to use Transocean equipment list as it is an IADC list and is already updated with new equipment. This topic remains open, as Bruno needs Transocean’s approval from the department to be using this list. If approved, the committee will have the Transocean document as base and get input from Seadrill and other companies to modify and present to ANP.
- Most of the time that clients ask about the equipment they cannot find it on the IADC equipment list. The problem is that the list of equipment would become very complex and we would not have enough time to focus on this for this year.



- HSE committee will propose the 3rd presentation for the GM in July. The suggestion is to include another presentation about dropped objects but focusing on the HSE point of view. Bruno to speak with Marcio for a follow up.

Next Meeting

The next meeting for the Operational/Technical committee was agreed to be held on July 07th at 10:00am. The meeting will be at Transocean's office with video link to Seadrill's Rio office.