

MAINTENANCE COMMITTEE MEETING MINUTES

ROWAN Companies, Inc
08 April 2009



Call to Order / Introductions

The Chairman, Mr. Ken Gardner, thanked Rowan for hosting the meeting and welcomed all members and thanked them for their attendance. A building security and comfort brief was given by Phillip Manuel followed by a review of the agenda. A short personal introduction was then given by each attendee.

IADC Antitrust Policy and Guidelines - The committee reviewed the newly-adopted IADC Antitrust Policy and Guidelines, copies of which were provided for each attendee.

Review of action items

Action Item 1: Robert Urbanowski reviewed the progress of the ART Committee in developing an online system for anonymously reporting topdrive reliability and collect information on unplanned downtime. Under the data-collection system being developed, the OEM will be able to access data for his equipment without identification of the submitter, similarly, the inputting company will be able to review all data input for the company.

RU also reported that the ART was looking at pipe handling systems and multiplex (MUX) systems.

New Action Item 1: Frank Breland will notify the Committee when the online reporting system rolls out. The Committee will need to review the data and ultimately decide how to deal with it.

Alan Spackman will ask that the ART's kick-off letter be sent to the Maintenance Committee membership.

Action Item 2: (Environmentally Friendly Lubricants)

Ken Gardner reviewed the issue, noting the lack of progress that has been made. Alan Spackman noted that the newly-issued EPA Vessel General Permit (VGP) contains a Best Management Practice (BMP) on selection of environmentally preferred lubricants (EPLs). It was questioned whether the OEMs were feeling pressure to produce equipment suitable for use with EPLs.

Ken Gardner will try to find a volunteer to discuss this matter with the lubricant suppliers for further discussion at the next meeting.

Alan Spackman indicated that he would direct John Pertgen to contact EPA and US Navy for any available information regarding EPL selection criteria.

Regulatory Review:

Alan Spackman reviewed:

- TWICs (Transportation Worker Identification Credentials): Implementation date is 15 April 2009. IADC is still getting queries regarding applicability.
- EPA VGP (Vessel General Permit): An IADC Working Group under the HSE Committee is working on BMPs and associated guidance. The current draft does recommend that companies adopt procurement practices to assess EPLs for certain equipment.
- MARPOL Annex V: Discussed US/Canada proposal submitted to IMO for establishment of a North America Emissions Control Area (ECA) and potential for impact on drilling rigs. Noted difficulties already seen with respect to US implementation of Annex VI (e.g., USCG promulgating inspection guidance that would have inspectors asking for Bunker Delivery Notes (BDNs) when

the US has no regulations requiring fuel suppliers to provide BDNs. It was also noted that there was an apparent lack of communication between EPA and MMS regarding OCS facilities, despite the mandate for such communication in the U.S. implementing legislation (Pub. L. 110-280).

Main Presentation- (Caterpillar)

The presentation by Caterpillar addressed:

- Efforts to improve communication.
- Corporate organization and structure
- Technical issue resolution process
 - Start at local CAT dealer (Parts and Service Sales Managers or Service Manager)
 - Dealer will turn to Dealer Solution Network (DSN) and/or the Territory Manager.
 - Continuous Product Improvement process. Both DSN and CPI are data driven. (Failures should be reported to local dealer even if dealer is not involved in the repair. Contractors should ask for DSN number when reporting failures so that tracking takes place.)
 - May have interim corrective action prior to Permanent Corrective Action
 - Population tracking based on (engine serial number and rig location) data provided by the drilling contractor (has template for reporting) feeds internal database (SIS Web)
- Equipment Management (discussed at earlier Committee Meeting) will not be provided this year due to resource restrictions, still and aspiration.
- Cat offered PSIP (Parts Store Integrated Procurement) as an easier way to purchase parts from Cat Dealers. This solution uses XML to link the customer's procurement system to Cat's Parts Store.
- Customer Website
 - SIS web with both public and private access
 - Private side provides SIS Web access (access to updates for product support (ops and maintenance manuals), Engine News periodical and PartStore link for parts identification.
 - There is a second level of access within SIS Web that provides additional information, but requires training and execution of a non-disclosure agreement.

Caterpillar was thanked for their presentation and their continued efforts.

Lunch & Learn- Presentation was given by Hiller Offshore with a demonstration of Novec™ 1230. Hiller was thanked for their presentation.

New Business / Open Discussion

There were brief discussions on the following topics:

- Regulatory reviews: Do companies routinely review differences in regulatory requirements when rigs move between countries. Some companies volunteered that they routinely do so..
- One company reported difficulties in commissioning Siemens drive units and asked if others were also experiencing difficulty. None reported doing so.
- Question from member regarding problems with Siemens' drives.
- SWOT analysis and supply chain. Ken Gardner indicated interest in pursuing benchmarking opportunities and asked others to contact him if they were interested.
- Engine emissions monitoring: One company asked if anyone was pursuing engine emissions monitoring. Another company indicated it was doing so on one class of their rigs.
- Code updates on Programmable Logic Controllers (PLCs): Several companies voiced concern regarding maintaining and updating code on PLCs. One company reported it was working with one major equipment supplier to update "on-the-fly" to avoid downtime. It was questioned whether this supplier, or other suppliers, had a long-term strategy for equipment support in this regard. It was agreed that this was an issue of interest to the Committee and Ken Gardner would begin discussions with suppliers with a view to their participating in a future committee meeting.

Adjourned - 1305 hrs

Action Item Summary:

Action Item 1: Frank Breland will notify the Committee when the online reporting system, which the ART Committee is developing for anonymously reporting topdrive reliability and collect information on unplanned downtime, rolls out.

Next meeting

Date: 08 July 2009
Sponsor: Transocean
Location: Houston

2009 scheduled meetings:

14 January 2009 Diamond
8 April 2009 Rowan
08 July 2009 Transocean
14 October 2009 Pride

Attendance List

Jose	Sanchez	Canrig Drilling Technologies
Jason	Nelson	Caterpillar
Austin	Cunningham	Caterpillar
Bob	Gonzalez	Caterpillar
Mike	Birkinshaw	Caterpillar
Diego	Gutierrez	Caterpillar
Frank B.	Breland	Diamond Offshore
S.L. (Sindee)	Gillespie	G.O.A. Enterprises, LLC
Alan	Spackman	IADC
John	Mabry Sr.	Nabors Drilling International Ltd.
Robert	McGrath	Noble Drilling Services Inc.
Bill	McCarthy	Noble Drilling Services Inc.
Tim	Hayes	Noble Drilling Services Inc.
Leon	White	Noble Drilling Services Inc.
Darrell	Janssen	Noble Drilling Services Inc.
Richard	Sporn	Noble Drilling Services Inc.
George	Casellas	Oil Center Research
Mark	Andrews	Parker Drilling Company
Robert	Urbanowski	Precision Drilling Oilfield Services Corporation
Phillip N.	Manuel	Rowan Companies, Inc.
Jacques	Bessiere	SpecTec, Inc.
Geoff	Evans	Transocean
Ken	Gardner	Transocean
Douglas	Robertson	Transocean