

MAINTENANCE COMMITTEE MEETING MINUTES

26 January 2016

Location: IADC - Crown Center 1 & 2 Conference Rooms

Call to Order / Agenda:

The committee was called to order and the attendees were welcomed by the IADC Maintenance Committee Chairman, Frank Breland (Diamond Offshore). The Chairman provided an overview of the proposed agenda for this meeting

A building security and safety briefing was given by Mr. John Pertgen (IADC).

IADC Antitrust Policy and Guidelines and Committee Mission Statement:

Mr. Pertgen provided a review of the IADC Antitrust Policy and Guidelines and stated that the full policy is available on IADC's webpage. The Chairman read the committee Mission Statement for the group.

Introductions:

Each attendee provided an introduction of themselves and their company affiliation.

Regulatory Review / Update:

John Pertgen (IADC) provided the Committee with information about the two IADC-published semi-annual regulatory reports on the revised IADC website:

1. International Standards Activities affecting the Offshore Oil and Gas Industries --
This report provides a handy reference to the standards development activities of various organizations (e.g., the International Maritime Organization, International Labor Organization, the International Organization for Standardization, and various international trade associations).
2. Federal Regulatory Actions Impacting the Offshore Industry –
This report provides a reference summary that reflects the regulatory actions, announced in the Federal Register by U.S. governmental agencies, which may affect operations in the oil and gas industries.

(Note: Both reports are available at: <http://www.iadc.org/offshore-operating-division/reports/>)

A review of the highlights of the regulatory changes by the National Agencies and API Activities was presented by Mr. Pertgen and included a handout from API (provided by Holly Hopkins). A list of those highlights is included at the end of these minutes.

Main Presentation: Phased Array Ultrasonic Testing Review (Rowan)

The main topics covered in the presentation were:

- Brief History of the technique from 1930's
- Advantages of this system and the potential challenges
- DOT 2006 report issued on phased array
- Company use of phased array
- Testing and lesson learned
- Keys to setting up a successful Program

Please contact Eddy Garcia [edwgar@rowancompanies.com] if you have any questions regarding the presentation or wish to obtain a copy of the presentation.

Rig Stacking Lessons Learned - (Diamond Offshore)

The main topics covered in the presentation were:

- Layup Planning
- Layup activities for Unmanned/Manned rigs
- Reactivation Planning
- Reactivation Duties
- Summary

Please contact Frank Breland [fbreland@dodi.com] if you have any questions regarding the presentation or wish to obtain a copy of the presentation.

Asset Integrity Conference (2016)

Mr. Pertgen reviewed the Asset Integrity Conference event that is planned for 2016; including soliciting any additional members that may be interested in joining the planning committee and covering the listed topics on the Call for Abstracts.

Lunch & Learn Presentation: Class Society Perspectives from ABS & DNV by American Bureau of Shipping – Dave Forsyth, Chief Surveyor/Offshore and Det Norske Veritas GL – Crain Koehne, Offshore Class Business Development Manager Maritime

The main topics covered in these presentations were:

ABS:

- USCG proposed changes to the MODU Code based on Macondo Incident
- Jacking Gear inspection guidelines
- Alternative Inspection Techniques

DNV GL:

- Using Big Data in Class Surveys
- Benchmarking
- Damaged Surveys and Maintenance rating
- Survey findings overall

- Evolution of Maintenance practices
- Basic concept of condition monitoring
- Data from sensors on equipment
- Enabling technologies towards Smart Maintenance

Please contact Dave Forsyth (ABS) [jjforsyth@eagle.org] (DNVGL) or Craig Koehne (DNVGL) (craig.koehner@dnvgl.com) if you have any questions regarding their respective presentation or wish to obtain a copy of it from them.

AFTERNOON SESSION*****

Caterpillar

Robert Froebel (CAT) provided an update for all the issues that CAT is working on for our industry.

Please contact the CAT representative via email address if want a copy of his presentation, have any questions or want to get clarification on any issues regarding your CAT equipment. [froebel_robert@cat.com] 713-448-2212

CAT also introduced other members of their group that can be contacted for further assistance. They are:

Brad Devorak- Land Drilling Product Support Account Mgr [Devorak_Brad_C@cat.com] 765-448-5046
Diana Hopkins- Product Line Manager for Land Drilling [Hopkins_Diana@cat.com] 713-895-1421
Darin Bohlman- Land Drilling Account Manager [Bohlmann_Darin@cat.com] 713-329-2235

National Oilwell Varco

RGC (Riser Gantry Crane) Performance presentation was given by Albert Pangilinan (NOV), product line manager for Offshore Pipe Handling Systems. The main topics covered in the presentation were:

- RGC product performance
- Riser Handling
- RGC Control System
- Synchronous Operation performance
- Machine Control Diagnostic tool upgrade
- Cooling System
- Temperature performance
- HPU overheat measure

Please contact the presenter via email if you have any questions or want to request a copy of his presentation. [Alberto.pangilinan@nov.com]

A Spare parts issue discussion was presented by Tim Robinson, VP Rig Aftermarket Spares [tim.robinson@nov.com], who discussed NOV's spare part organization breakdown and availability throughout the globe. He fielded questions regarding spare parts from the committee (including members of the IADC Supply Chain committee).

Future Topics:

NOV topics for future discussion: Overall knowledge of issues regarding bulletins (PIBs).

Static discharges on HPUs (hydraulic power units)

Asset Reliability

Crane wire inspecting

Info Sharing: None

Adjourned: 1446hrs

ACTION ITEMS: None at this time

Lunch sponsors for 2016 committee meetings held at IADC will be:

13 January 2015	-	Diamond
13 April	-	ROWAN
13 July	-	Atlas Copco
12 October	-	Precision Drilling

API ACTIVITIES

API S53 Blowout Prevention Equipment Systems for Drilling Operations

The API 53 task group met on June 9, 2014, to begin work on an addendum to the 4th edition and possible work on the 5th edition of the standard. The following will be sources of proposed changes/additions:

- Compliance assessment spreadsheet;
 - responses with interpretations of API 53;
 - comments from previous ballots of API 53;
 - comments from other task groups, e.g. 16C, 16A, 16D;
 - recommendations from industry (operators, drilling contractors, manufacturers, service companies, etc.)
 - review informative statements in the document for applicability in the 5th edition
- The last meeting has held January 18, 2016.

API RP 75 Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities

- Sandi Fury, Chevron, and Charlie Duhon, Arena are the co-chairs of the RP 75 revision workgroup. The last meeting was December 10, 2015.

API Specification 16AR Drill Through Equipment Repair and Remanufacturing

- A task group has been formed to create a new document on the repair and remanufacture of BOPs, similar to Annex B of 16A. Annex B is being removed from 16A. (Contact Jan van Wijk jan.vanwijk@shell.com or Chris Johnson chris.johnson@nov.com)

API Spec Q2 Specification for Quality Management System Requirements for Service Supply Organizations for the Petroleum and Natural Gas Industries (1st Edition)

- API-APIQR has 54 active, certified facilities for API Spec Q2 in 12 different countries (22 out of the 54 certificates have been issued to E&P service companies in the US).
- We have 55 current applications. Most in the USA and China (10 each) but we have applications in 16 different countries.
- We are receiving more inquiries and interest from drilling contractors and we are working with our stakeholders to ensure our audit program is adapted, within the boundaries allowed by our accredited scheme, to meet their needs.
- The SC18, TG5 (the SC18 quality committee's task group on API Spec Q2) work groups working on editorial revisions to API Spec Q2 and development of the guidance document for the application the requirements of API Spec Q2 continue to work on these items. The output from the group is being used for API auditor training as well. It is expected that the work of TG5 will be complete later in the summer of 2016. Based on the publication date of 2011; API Spec Q2 is due for revision but any changes will be limited to editorial changes to correct ambiguities and improve alignment with the language of API Spec Q1 (for more information on the work of SC18, TG5 contact the chair of the TG, Stacey Hagen of ExxonMobil at stacey.w.hagen@exxonmobil.com).
- With the publication of ISO 9001:2015 APIQR has established a transition plan for auditing ISO 9001 certified companies to the requirements of ISO 9001:2015. APIQR is working on a gap analysis between Q2 and ISO 9001. The transition plan includes auditing to the requirements of ISO 9001:2015 starting in September 2016. This will have an impact on those service organizations that are currently applying for and certified to API Spec Q2 and ISO 9001; currently 47 out of the 54 active clients are certified to both Q2 and ISO 9001.
- There has been discussions within the COS membership relating to substituting Q2 certification as an option to SEMS certification. However, the standards and basis of the certifications are significantly different. API Spec Q2 is a quality standard with the expected outcome being delivering conforming services to customers based on customer and industry requirements; an RP75 SEMS expected outcome relates to minimizing safety risks and environmental impacts based on processes and the regulatory environment. A service company may integrate the systems but the requirements and basis for the standards are quite different.
- For information about the Q2 certification program, program requirements, auditing requirements, etc. (Contact Aaron Duke at dukea@api.org 1-202-682-8524). For more information on API-U Q2 training courses please visit the API-U training calendar on the API website at <http://www.api.org/events-and-training/api-u-training/api-u-calendar>.

New API document on Life Cycle Management

- A task group has been formed to create a life-cycle management system document for use in conjunction with products and/or standards used in the oil and gas industry. The document should provide the means of identifying the continued compliance of a product to its original and/or current manufacturing and design requirements and the ability to demonstrate product compliance to original and/or current product standards and industry/product-specific technical and regulatory requirements throughout the product lifecycle. The document is under development. (Contact Mike Briggs Michael.Briggs@c-a-m.com)

USCG ACTIVITIES

The next Industry Day will be in February 2016

Well Intervention (WI) Vessel Policy

- USCG response to API on our comments on the draft policy, they concur that:
 - 1) USCG and BSEE should delineate their roles and responsibilities with USCG focus on intervention vessel safety systems and BSEE focus on well intervention operations and equipment.
 - 2) Well intervention operations have long been recognized by BSEE and USCG but advancements have outpaced our respective regulations. We should recognize differences between surface and subsurface intervention operations.
 - 3) BSEE and USCG should engage industry on well intervention operations before trying to address any issues with the safety systems on the intervention vessels.

BSEE and USCG have engaged industry through OOC to gain a better understanding of Well intervention operations. OOC has offered a path forward to develop a common understanding and ultimately an industry best practice framework. The OOC Well Intervention Risk Framework Kick-Off meeting was held on December 17.

National Offshore Safety Advisory Committee meeting (NOSAC)

- The last meeting was held November 19 in Houston. The Cybersecurity Subcommittee issued an interim report and agreed to work on phase 2. NOSAC formed a Subcommittee to respond to the USCG task statement on WI. Chad Fuhrmann (cfuhrmann@mac-l.com), Jerry Dardar (jdardar@ckor.com) and Kris Kallaway (kris.kallaway@conocophillips.com) are co-chairing the Subcommittee. Please contact them if you would like to participate. The next meeting will be April 2016 in New Orleans.
- The Cybersecurity Subcommittee established definitions for unclear reasons; participation on this Subcommittee is encouraged. Discussion was held on whether a standard for software updates (quality control) exists or should be created.

USCG Pending Rules

- Final Rule - Revision of Crane Regulation Standards for MODUs, OSVs, and Floating (OCS) Facilities
- NPRM USCG Safety Management Systems
- Final Rule - Marine Casualty Reporting on the OCS
- Final Rule - Harmonization of Standards for Fire Protection, Detection, and Extinguishing Equipment
- NPRM on Training of Personnel and Manning on MOUs and Offshore Supply Vessels Engaged in US OCS Activities
- Final Interim Rule regarding Offshore Supply Vessels of at Least 6,000 GT ITC
- Final Rule - MODUs and Other Vessels Conducting Outer Continental Shelf Activities With Dynamic Positioning Systems
- Final Rule - Commercial Diving

A final national policy on lifeboats and survival craft is expected and it's been rumored that the long awaited revisions to Subchapter N could be coming out soon.

BSEE ACTIVITIES

BSEE Offshore Well Control Rule

- API, IADC, OOC, NOIA, IPAA, PESA and USOGA filed technical comments on the BSEE Proposed Well Control Rule on July 16, 2015. Meetings with DOI, BSEE and the Industry were held July 13, September 14, and December 7, 2015. Industry has pushed for engagement with DOI and BSEE as interest on Capitol Hill progresses and possible solutions are discussed. A final rule is expected this year.

BSEE Pending Rulemaking

- BSEE Final Rule on Production Safety Systems - Subpart H
- BSEE Proposed Rule on Helideck and Aviation Fuel Safety for Fixed Offshore Facilities
- BOEM/BSEE Final Rule on Arctic specific operations
- BSEE Final Rule on Well Control
- BSEE Final Rule on Offshore Pedestal-mounted cranes

OTHER ACTIVITIES

National Academies (NA) Transportation Research Board (TRB) Committee on Real-Time Monitoring of Offshore Oil and Gas Operations

The TRB of the NA formed an ad hoc committee to conduct a study to advise BSEE on the use of real-time monitoring systems (RTM) by industry and government to reduce the safety and environmental risks of offshore oil and gas operations. The Committee has held meetings and workshops in December 2014, April and August 2015, a final report is expected this year. More information can be found here: <http://www8.nationalacademies.org/cp/projectview.aspx?key=49661>

Attendance:

Name		Company Name
Robert	Conachey	ABS CONSULTING
Dave	Forsyth	ABS CONSULTING
Cindy	Escamilla	ALATAS
Sandy	Mottram	ALATAS
Robin	Thomas	ALATAS
Brian	Duffy	ATEC TRAINING & CERTIFICATION
Don	Tiskevics	ATLAS COPCO TOOLS & ASSEMBLY, LLC
James	Ness	BP
Ryan	Hendrix	CAMERON
Timothy	Williams	CAMERON
Timothy	Saker	CAMERON
George	Pritchard	CAMERON
Bill	Wallace	CANADIAN GLOBAL
Darin	Bohlmann	CATERPILLAR OIL & GAS
Robert	Froebel	CATERPILLAR OIL & GAS
Diana	Hopkins	CATERPILLAR OIL & GAS
James	Cue	CATERPILLAR OIL & GAS
Bob	Sliva	CONSOLIDATED
Frank	Breland	DIAMOND OFFSHORE
Craig	Koehne	DNV GL
Gregor	Madden	DNV GL
Javier	Ostos	DNV GL
Graeme	Ripley	DNV GL
Mike	Faulkner	ENSCO PLC
David	Balsiger	ENSCO PLC
Ryan	Berger	ENSCO PLC
Charles	Nielsen	ENSCO PLC
Jorge	Lebrija	ENSCO PLC
Coy	Christoffel	ENSCO PRODUCTS
Mark	Kelley	HELMERICH & PAYNE INTERNATIONAL
Kurt	Baldwin	HELMERICH & PAYNE INTERNATIONAL

Harry	McCaskill	HYDRATECH
Per	Hansen	HYDRATECH
John	Pertgen	IADC
Ryan	Wirth	KLUBER LUBRICANTS
Covey	Hall	LLOYD'S REGISTER
Tim	Robinson	NATIONAL OILWELL VARCO
Jennifer	Fox	NATIONAL OILWELL VARCO
Ian	McWilliam	NATIONAL OILWELL VARCO
Alberto	Pangilinan	NATIONAL OILWELL VARCO
Tim	Robinson	NATIONAL OILWELL VARCO
Clay	Cockerham	NATIONAL OILWELL VARCO
Tim	Hayes	NOBLE DRILLING SERVICES INC.
Josh	Westling	PACIFIC DRILLING
Sara	Castro	PACIFIC DRILLING
Robert	McGrath	PARAGON OFFSHORE
Richard	Sporn	PARAGON OFFSHORE
Robert	Urbanowski	PRECISION DRILLING COMPANY
George	Byers	REEL GROUP, INC
Edwin	Garcia	ROWAN COMPANIES PLC
Guy	Honeycutt	ROWAN COMPANIES PLC
Jeff	Townlin	ROWAN COMPANIES PLC
Kevin	Warren	SEADRILL
Don	Henderson	TESCO CORPORATION
Mike	Pawlowski	THE TIMKEN CORPORATION
Matt	Zellers	THE TIMKEN CORPORATION
Andy	Poosuthasee	VANTAGE DRILLING
Gary	Aucoin	WARTSILA, N.A. INC. - SHIP POWER
Matts	Andersson	WARTSILA, N.A. INC. - SHIP POWER
Duane	Ahlqist	WORLDWIDE OILFIELD MACHINE, INC
Michael	Yoakum	YOAKUM TECHNICAL CONSULTING