

MAINTENANCE COMMITTEE MEETING MINUTES

13 July 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).

Introductions:

Each attendee provided an introduction of them self and their company affiliation.

IADC Antitrust Policy and Guidelines and Committee Mission Statement:

The Chairman read the committee Mission Statement for the group.

Mr. Pertgen provided a review of the IADC Antitrust Policy and Guidelines and stated that the full policy is available on IADC's webpage.

Regulatory Review / Update:

Holly Hopkins (API), via teleconference, provided a review of the highlights of the regulatory changes by the National Agencies and API Activities. A handout from API was provided to the attendees. A list of those highlights is included at the end of these minutes.

John Pertgen (IADC) provided the Committee with information about key issues listed in the IADC-published semi-annual regulatory report on the Federal Regulations.

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: Available at: <http://www.iadc.org/offshore-operating-division/reports/>)

Main Presentation: DROPS Industry Standards presentation by Ryan Spillane (OES Oilfield Services)

The main topics of the presentation included the following areas:

- Reliable Securing
- Newbuild observations
- Root causes and challenges
- Possible Solutions
- Related to personnel behaviors and training
- Mitigate dropped objects

Please contact Ryan Spillane (OES) [ryanspillane@oesgroup.com] if you have any questions regarding their respective presentation or wish to obtain a copy of it from them.

Class Society Issues

DNV GL: Well Control Rule by Garnett Davis

The main topics of the presentation included the following areas:

- New 30 CFR 250 regulations- Purpose & Highlighted requirements
- Implementation Time frames

Please contact Davis Garnett (DNVGL) [Garnett.davis@dnvgl.com] if you have any questions regarding his presentation or wish to obtain a copy of it.

ABS: Layups and Reactivation by John Preston

The main topics of the presentation included the following areas:

- Laid up status general info
- Laid up Cold Stacked
- Laid up Warm Stacked
- Lay up of Computer Based Systems
- Enhanced Laid up status
- Reactivation overview (including software and hardware)

Please contact John Preston (ABS) [jpreston@eagle.org] if you have any questions regarding his presentation or wish to obtain a copy of it.

Lunch & Learn Presentation: Technical Presentation by Atlas Copco

The main topics covered in the presentation were as follows:

- Bolted Connections / Methods
- Reliable Securing of Bolted Connections
- Installation of Wire Clamps
- Light Fittings
- Torque Tensioning
- Advanced Fastening Technology
- Full Process Security
- Quality Containment
- Continuous Improvements

Please contact Don Tiskevics [don.tiskevics@us.atlascopco.com] if you have any questions regarding his presentation or wish to obtain a copy of it.

AFTERNOON SESSION*****

Asset Integrity Conference 2016

Leesa Teel asked about the continuance of the Asset Integrity Conference by obtaining the drilling contractors' views toward future conferences (e.g., issues and concerns regarding this type of conference continuing). All agreed that the conference should continue annually.

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 you 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]

National Oilwell Varco

Ian McWilliam provided an update for the issues that NOV is working on for our industry. (Fingerboards, drag chains, TDX1250 maintenance issues, Tracker info)

Ely Freese (NOV) covered the Product Bulletin Initiative and discussed the following topics:

- Scope and previous process
- Recent update to the process
- Economic impact vs technical scope
- Cost of Bulletin Standard options
- New PIB template
- Safety Alert type bulletin vs PIB
- Product Improvement Notification (PIN) vs PIB
- Product Obsolescence Bulletin (POB) vs PIB
- How/why Bulletins are created
- New Equipment
- Project and I&C Process
- Repair and Recertification
- Ongoing Initiatives
- Ongoing Goals

Please contact the NOV representative via email address if you want a copy of the presentation, have any questions or want to get clarification on any issues. [Ian.McWilliam@nov.com]

Future Topics for Main Presentation or Lunch & Learns:

NOV topic for next Maintenance Committee session: 5-Year SPS

Power Slip 495 (bent cylinders)

Info Sharing:

One member indicated that his company had a crack on the drawworks shaft that cannot be detected by conventional UT past 25 inches (will try phased array).

Another member indicated that his company's TDX 1250 lost a pinion gear on a motor.

Adjourned: 1445hrs

ACTION ITEMS: None identified

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

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

API REGULATORY UPDATE

API ACTIVITIES

API S53 Blowout Prevention Equipment Systems for Drilling Wells

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:

- responses with interpretations of API 53;
- comments from previous ballots of API 53;
- comments from other task groups, e.g. 16A, 16C, 16D;
- technical input from industry (operators, drilling contractors, manufacturers, service companies, etc.)

The addendum was balloted, comments resolved, and a recirculation for final comments prior to publication. The addendum was published on July 8, 2016. The last meeting has held June 27, 2016.

After publication of the Addendum, the task group will: review all design requirements in API 53 for retention or move into relevant API Specification Documents; complete Section 6 & 7 comparison for consistency; review all informative statements throughout the document for retention; and begin revision work for 5th Edition including revising proposed Assessment Tool.

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 next meeting is August 8, 2016.

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) The 1st edition is expected to publish in 2016.

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

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

- APIQR has 71 active, certified facilities for API Spec Q2 in 18 different countries (29 out of the 71 certificates have been issued to E&P service companies in the US).
- We have 35 current applications in 15 different countries
- APIQR, along with API SC18, TG5 members, are planning follow-up sessions to the March 2016 sessions later in the summer for drilling contractors and E&P service providers. The drilling contractor sessions will provide additional information on the APIQR certification programs, and operator perspectives on implementation and the application of the API Spec Q2 requirements in

drilling operations. The service provider session will focus on the APIQR audit program and feedback relating to the audits and adding value to the audit process. If you are interested in attending please contact Aaron Duke at dukea@api.org / 1-202-682-8524.

- 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. It is expected that the work of TG5 will be complete by end 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).
- Addendum 1 to API Spec Q2 was published June 2016. The addendum replaced the normative reference to ISO 9000 with the dated reference to ISO 9001:2005, *Quality management systems- Fundamentals and vocabulary*. In the fall of 2015 a new version of ISO 9000 was published that added and changed some of the QMS definitions. The terminology used in API Spec Q2 was based on the 2005 version of ISO 9000 thus the need for the addendum and change to the dated reference.
- For information about the Q2 certification program, program requirements, auditing requirements, etc. visit the API website at <http://www.api.org/products-and-services/api-monogram-and-apiqr> or 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/products-and-services/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 currently in comment resolution after the second ballot. (Contact Mike Briggs Michael.Briggs@c-a-m.com)

USCG ACTIVITIES

USCG Industry Day

- On March 29, 2016, the USCG hosted an industry day at the OMNI Riverfront Hotel in New Orleans to coincide with the NOSAC meeting. The next Industry Day will likely be held at USCG Sector Houston Galveston on November 1, from 8:00 am – 11:00 am, also to coincide with the NOSAC meeting.

Well Intervention (WI) Vessel Policy

- 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 December 17, 2015 and that work continues. NOSAC has also established a Subcommittee to address the task statement on this topic for the USCG.

National Offshore Safety Advisory Committee meeting (NOSAC)

- The last meeting was held March 30 in New Orleans. The Cybersecurity Subcommittee issued a final report. The Subcommittee formed to respond to the USCG task statement on WI gave an interim report and the MODU Towing Subcommittee gave a final report. The next meeting will be held in Houston on November 1 & 2, 2016.

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.

BSEE ACTIVITIES

BSEE Offshore Well Control Rule

- The final rule was announced on April 14 and published on April 29, 2016. Most of the rule becomes effective on July 28, 2016. API, IADC, OOC, NOIA, IPAA, PESA and USOGA sent BSEE a letter on May 27, 2016 asking for clarification and/or interpretation from BSEE. BSEE has been providing that information on their website at: <http://www.bsee.gov/Regulations-and-Guidance/Well-Control-Rule/>

BSEE 2015 Annual Report

- During a press conference at OTC BSEE released their 2015 Annual Report, the Annual Report includes descriptions of the bureau's mission and its regulatory activities. Summarized statistics and industry safety performance results are also included in the report as well as BSEE's new initiatives and plans for the future. The BSEE Annual Report 2015 can be found here: [click here](#).

BSEE Bolt Report, Safety Alert & API Response

- August 11, 2014 BSEE released a technical Review of Connector and Bolt Failures following the failure of connectors and bolts used in critical equipment. The technical review, entitled Evaluation of Connector and Bolt Failures, was completed by the bureau's Quality Control-Failure Incident Team (QC-FIT) and submitted to BSEE Director Brian Salerno. API held a Technical Session during the API Exploration and Production Winter Standards Meeting in New Orleans on January 27, 2015. After the Technical Session, a multi-segment task group was formed to review the detailed recommendations in the report and determine next steps. The final report was shared with BSEE and is now being implemented. In addition to the work of this task group, API met with BSEE on March 31 and June 22, 2016, to discuss the Safety Alert. Work is ongoing with BSEE on subsea BOP bolting.

BOEM/BSEE Final Rule on Arctic specific operations

- The final rule was announced on July 7, 2016, publication in the Federal Register is expected in the coming days. The rules will become effective 60 days after publication in the Federal Register.

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
- BSEE Final Rule on Offshore Pedestal-mounted cranes

OTHER ACTIVITIES

CSB Investigation into Macondo Volumes 3 & 4 Release

- On April 13, 2016 CSB posted the Macondo volumes 3 and 4 and an Executive Summary on its website. <http://www.csb.gov/the-us-chemical-safety-boards-investigation-into-the-macondo-disaster-finds-offshore-risk-management-and-regulatory-oversight-still-inadequate-in-gulf-of-mexico>

OESI

- OESI has opened registration for a Forum "Focusing on Alarm Management for Safer Offshore Operations" to be held on August 24, 2016. Registration is available here: https://secure.touchnet.com/C21490_ustores/web/product_detail.jsp?PRODUCTID=7561

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 held meetings and workshops in December 2014, April and August 2015, a final report was released on May 2, 2016 and is available at this website: <http://www.trb.org/Main/Blurbs/174214.aspx> A workshop is planned for September 22, 2016 in Houston to review the report.

Attendance:

Name		Company Name
Robert	Conachey	ABS
John	Preston	ABS
Robin	Thomas	ALATAS AMERICAS INC
Adrian	Price	ATLAS COPCO TOOLS & ASSEMBLY
Don	Tiskevics	ATLAS COPCO TOOLS & ASSEMBLY
William	Waldroop	BILL WALDROOP & ASSOCIATES
Ryan	Hendrix	CAMERON
Robert	Froebel	CATERPILLAR OIL & GAS
Bob	Sliva	CONSOLIDATED PRESSURE CONTROLS
Maxine	Aitkenhead	DATA GUMBO
Frank	Breland	DIAMOND OFFSHORE
Garnett	Davis	DNV GL
Greggor	Madden	DNV GL
Mike	Faulkner	ENSCO PLC
Valerie	Robb	ESCO PRODUCTS
John	Pertgen	IADC
Charles	Smith	INQUEST

Ryan	Wirth	KLUBER HOUSTON
Covey	Hall	LLOYD'S REGISTER ENERGY - DRILLING
Shaun	Hanton	LOADMASTER INDUSTRIES
Shawn	Firenza	NATIONAL OILWELL VARCO
Ian	McWilliam	NATIONAL OILWELL VARCO
Phillip	Biggerstaff	NOBLE DRILLING (U.S.) LLC
Jason	McMullen	NOBLE DRILLING (U.S.) LLC
Steven	Ronan	NORTHWEST TECHNICAL SOLUTIONS
Rob	Walls	OES OILFIELD SERVICES
James	King	OES OILFIELD SERVICES
Denis	Adams	OFFSHORE COMMISSIONING SOLUTIONS
David	Morgan	OFFSHORE COMMISSIONING SOLUTIONS
Mike	Anatra	PARKER DRILLING
Daryl	Sullivan	PRECISION DRILLING COMPANY
Jeff	Townlin	ROWAN COMPANIES PLC
Kevin	Warren	SEADRILL AMERICAS INC
Bobby	Warren	SEADRILL AMERICAS INC
Philippe	Herve	SPARKCOGNITION
Michael	Pawlowski	THE TIMKEN CORPORATION
Jeff	Marshall	TRANSOCEAN
Alan	Quintero	TRENEGY INCORPORATED
Jeff	Thomson	VANTAGE DRILLING
Matts	Andersson	WARTSILA
Ronnie	Tooker	WORLDWIDE OILFIELD MACHINE
Duane	Ahlquist	WORLDWIDE OILFIELD MACHINE
Michael	Yoakum	YOAKUM TECHNICAL CONSULTING LLC