

MAINTENANCE COMMITTEE MEETING MINUTES

8 July 2015

Location: IADC - Crown Center 1 & 2 Conference Rooms

Call to Order:

The committee was called to order and the attendees were welcomed by the IADC Maintenance Committee Vice-Chairman, Mr. Michael Anatra (Parker Drilling).

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

Stephanie Carling (IADC) provided an overview of the upcoming Asset Integrity Conference.

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 Vice-Chairman read the committee Mission Statement for the group.

Introductions / Agenda:

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

The Vice-Chairman provided an overview of the proposed agenda for this meeting.

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).

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 a 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 April 14, 2015, next meeting is July 21, 2015.

API 2015 API Offshore Safe Lifting Conference & Expo

API will hold a safe lifting conference on July 14-15, 2015 at the Westin Houston Memorial City, more information can be found at: <http://www.api.org/offshore>

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

- Sandi Fury, Chevron, is the chair of the RP 75 revision workgroup. The next meeting is August 11, 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)

- The 1st edition of Spec Q2 was published December 15, 2011. This is a specification for Quality Management System Requirements for Service Supply Organizations, to identify the expectations for execution of upstream services including well construction, intervention, production and abandonment. (Contact Stacey Hagen stacey.w.hagen@exxonmobil.com)
- API-APIQR has 42 active, certified facilities for API Spec Q2. Halliburton has most of these as they have their GOM and SE Asian operations certified. We just added our first drilling contractor, Akita Drilling Ltd in Nisku, AB, Canada.
- We have 56 current applications. Most in the USA and South America has been increasing, but we have applications in 15 other countries.
- We continue to add and expand the base of competent auditors through training and auditor observation.
- API-U continues to offer Q2 training courses in a variety of locations worldwide. These can be found on the training calendar on the API website (<http://www.api.org/events-and-training/api-u-training/api-u-calendar>).
- SC18, TG5 (the SC18 quality committee's task group on API Spec Q2) has been having regular meetings. They have established separate 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. The output from the group is being used for API auditor training as well.
- For information about the Q2 certification program, program requirements, auditing requirements, etc. (Contact Aaron Duke at dukea@api.org 1-202-682-8524)

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

National Offshore Safety Advisory Committee meeting (NOSAC)

- The National Offshore Safety Advisory Committee (NOSAC) met April 7-8, 2015 in New Orleans. A final report was provided by the Commercial Diving Safety on the OCS Subcommittee. The following 3 task statements were approved and Subcommittees formed:
 1. Cyber Security on the US OCS (Co-chairs Kelly McClelland & Patrice Delatte pdelatte@tdw.com)
 2. Lifeboat Fall Testing (Co-chairs Phil Miller phil.miller@subsea7.com & Warren Weaver Warren.Weaver@deepwater.com)
 3. Towing of MODUs, MOUs and FOIs on the US OCS (Co-chairs Richard Simpson richard.simpson@icands.net & Marshall Perez mperez@enscoplc.com)
- NOSAC is also soliciting nominations for 2016 members, Nominations due July 10, 2015.

NPRM Requirements for MODUs and Other Vessels Conducting Outer Continental Shelf Activities With Dynamic Positioning Systems

- On Friday, November 28, the USCG published a NPRM in the FR “Requirements for MODUs and Other Vessels Conducting Outer Continental Shelf Activities with Dynamic Positioning Systems.” The notice of proposed rulemaking (NPRM) establishing minimum design, operation, training, and manning standards for mobile offshore drilling units (MODUs) and other vessels using DP systems to engage in Outer Continental Shelf (OCS) activities. A public meeting was held in New Orleans on March 31, 2015. API filed comments on May 26, 2015.

USCG NPRM Commercial Diving

- On February 19, 2015, the USCG published proposed rulemaking to amend its regulations for commercial diving that is conducted from deepwater ports or deepwater port safety zones, or in connection with Outer Continental Shelf (OCS) activities, or from vessels that are required to have a Coast Guard certificate of inspection. The regulations would be revised and updated to improve safety and to reflect current industry best practices. The proposed regulations would also allow the Coast Guard to approve independent third party organizations to assist with ensuring regulatory compliance of commercial diving regulations. API filed comments on May 20, 2015.

USCG CVC Policy Letter 14-03 Evaluating Sea Service Liftboats

- On Tuesday, April 21, 2015, the USCG published a FRN announcing the availability of Office of Commercial Vessel Compliance (CVC) Policy Letter 14–03, Evaluating Sea Service Aboard Liftboats. This policy letter will provide guidance to mariners concerning endorsements to Merchant Mariner Credentials (MMC) for service on liftboats. The policy letter was effective on April 6, 2015.

USCG Final Rule Consolidation of Officer in Charge, Marine Inspection for Outer Continental Shelf Activities; Eighth Coast Guard District

- On April 15, 2015, the USCG published a final rule establishing a consolidated Officer in Charge, Marine Inspection (OCMI) for the purposes of inspecting mobile offshore drilling units, and fixed

and floating facilities, engaged in OCS activities in the Eighth Coast Guard District. The rule was effective May 1, 2015 and established the Eight District Outer Continental Shelf Officer in Charge, Marine Inspection (D8 OCS OCMI) as a staff element within the Eighth Coast Guard District. The Chief, Outer Continental Shelf Division D8 serves as the D8 OCS OCMI. This position will be responsible for execution of the OCS inspection and marine casualty investigation missions and the development of OCS inspections and investigations policy in the Eight District. Captain Josh Reynolds is the new Chief, Outer Continental Shelf Division D8. Please see the website <http://www.uscg.mil/D8/ocsocmi.asp> for more information.

USCG Cyber Strategy

- On June 17, 2015, the Commandant of the Coast Guard published the "Cyber Strategy", the Coast Guard's Vision for Operating in the Cyber Domain. The streamed presentation can be accessed here: <http://csis.org/event/us-coast-guard-cyber-strategy>

USCG Pending Rulemaking

- 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

BSEE ACTIVITIES

BSEE Technical Review of Bolting Failure

- On August 11, 2014, BSEE released a technical review 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. BSEE will continue to monitor information related to the performance of connectors and bolts, and will update this technical review as new information becomes available. API reviewed the report and sent a letter to BSEE on December 1, 2014. A technical session on this topic "QC-FIT Evaluation of Connector and Bolt Failures Summary of Findings – BSEE 2014-01 Report" was held at the API E&P Winter Standards Conference on Tuesday, January 27, 9:00 AM – 12:00 PM. API has formed a multi-segment workgroup to determine next steps.

BSEE Technical Review of Seal Assembly and Cement Failures

- On January 26, 2015 BSEE released a technical review following an underground loss of well control that resulted in gas flow into a shallow sand reservoir. The technical review, entitled Evaluation of Seal Assembly & Cement Failures, was completed by the bureau's Quality Control-Failure Incident Team (QC-FIT) and submitted to BSEE Director Brian Salerno. API sent a letter to BSEE on May 1, 2015 inviting BSEE to present at a technical session at the API Summer Standards Conference. The technical session was held Tuesday, June 23m 2015.

BSEE Offshore Well Control Rule

- API, IADC, OOC, NOIA, IPAA, PESA and US O&G continue to develop technical comments on the BSEE Proposed Well Control Rule. Comments are due July 16, 2015. A meeting with DOI and the Industry is scheduled for July 13, 2015.

BOEM/BSEE Proposed joint rulemaking on Arctic specific operations

- On February 20, 2015, The Bureau of Safety and Environmental Enforcement (BSEE) and the Bureau of Ocean Energy Management (BOEM) released proposed regulations to ensure that future exploratory drilling activities on the U.S. Arctic Outer Continental Shelf (OCS) are done safely and responsibly, subject to strong and proven operational standards. API filed comments on May 25, 2015.

BSEE Crane Standards

On June 15, 2015, BSEE published a proposed rule proposing to incorporate by reference the Seventh Edition of API Specification 2C, "Offshore Pedestal-mounted Cranes" (2012), into its regulations. Comments are due July 15, 2015.

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

OTHER ACTIVITIES

Ocean Energy Safety Institute (OESI)

The next OESI Forum will be "Taking SEMS to the Next Level" scheduled for 29 July 2015, at the University of Houston.

Bureau of Transportation Statistics (BTS) Confidential Near Miss Reporting Program (SafeOCS)

- On May 5, 2015, Director Salerno announced the launch of the SafeOCS program, an initiative aimed at collecting and analyzing "near miss" data. BSEE is working to identify all available methods to learn more about the causes of all serious offshore incidents. BSEE's SafeOCS, an Outer Continental Shelf (OCS) near-miss reporting system, was formally launched with the activation of the program's reporting line, 1-888-SAFEPCS. The program's official website will be available in June. SafeOCS is a voluntary and completely confidential system, in which the Bureau of Transportation Statistics (BTS) will collect and analyze near-miss reports submitted by individual OCS workers, companies, and others. The aggregated data will be shared with the general public through the BTS website, and used to identify safety trends and increase understanding of offshore risk.

Main Presentation: Appropriate Condition Monitoring Solutions for Drilling Industry Applications by Patrick Vicars (J.A.M.Distributing)

- Equipment Loss of Usefulness
- Clearance size particles & equipment life
- Reliability and maintenance goals
- Fluid Solution
- Seal Solution
- Venting / Breathers
- Filtration
- Equipment Feedback

Please contact Patrick Vicars (pvicars@jamdistributing.com) if you have any questions regarding his presentation or merely wish to obtain a copy of his presentation.

AFTERNOON SESSION*****

Caterpillar

Brad Devorak (CAT), via teleconference, provided an update for all the issues that CAT is working on for our industry and what his group is anticipating for the rest of the year.

Please contact Brad 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. [devorak_brad_c@cat.com]

National Oilwell Varco (NOV)

Shawn Firenza (NOV) introduced Ian McWilliam, who will replace Shawn at our regular committee meetings. Mr. McWilliam reviewed the current status of his organizational structure that will deal with what NOV is working on for our industry. Please contact him via email if you have any questions or want to request a copy of his presentation. (Ian.McWilliam@nov.com)

Andy McKenzie (NOV) talked about Management of Change and Software, including the changes of managing software that is employed in the field.

Future Topics:

One member requested that we have the two main Class Societies (ABS & DNV) attend the meetings on a regular schedule and provide an update from their perspective on the most recent proposed changes and/or lessons learned.

[Epilogue: Both ABS and DNV Class Societies have agreed to attend and present at our next meeting in October]

Info Sharing:

One of our members had drawworks (both AHD and SSGD types) shaft issues with rotating motor mounts where the shaft snapped in half. They are in the process of inspecting and reviewing their drawworks for similar problems and helping to develop a design modification for them.

One member had a discussion based on a PIB (product information bulletin) for the disconnection and removal of the crown-mounted compensator (with active heave compensation). This member indicated that there was no actual removal information provided by the OEM, which resulted in potential problem areas when attempting to remove the cylinder.

Another member asked about the new certification for lifting appliances and rules issued by a Class Society concerning maintenance for cranes. It was indicated that these new rules appeared intrusive.

Adjourned: 1515hrs

ACTION ITEMS:

-NOV to address drawworks issues and gantry cranes with their SMEs at our next meeting in October.

Lunch sponsors for 2015 committee meetings held at IADC are:

14 January 2015 - Seadrill Americas

08 April - Diamond Offshore
 08 July - Transocean
 14 October - Precision Drilling

Meeting Attendance:

Name		Company Name
Robert	Conachey	ABS
Leonard	Hale	GULF COPPER
Kurt	Baldwin	HELMERICH & PAYNE
Mark	Kelley	HELMERICH & PAYNE
John	Pertgen	IADC
Covey	Hall	LLOYD'S REGISTER ENERGY
David	Kibler	NATIONAL OILWELL VARCO
Andy	McKenzie	NATIONAL OILWELL VARCO
Shawn	Firenza	NATIONAL OILWELL VARCO
Ian	McWilliam	NATIONAL OILWELL VARCO
Gil	Weaver	NATIONAL OILWELL VARCO
Josh	Westling	PACIFIC DRILLING
Clifford	Smith	PACIFIC DRILLING
Richard	Sporn	PARAGON
Mike	Anatra	PARKER
Jamie	Vargas	PRECISION DRILLING
Robert	Urbanowski	PRECISION DRILLING
Mike	Pawlowski	THE TIMKEN CORPORATION
Jeff	Marshall	TRANSOCEAN
Robert	Niles	TRANSOCEAN
Duane	Ahlquist	WORLDWIDE OILFIELD MACHINE
Marc	Marcantel	WORLDWIDE OILFIELD MACHINE