

A photograph of an offshore oil rig at sunset. The rig is silhouetted against a sky with orange and yellow clouds. The rig's reflection is visible in the calm water in the foreground. The background shows distant landmasses under a darkening sky.

***COS-3-07 Guidance on the
Development of an Effective
Crane Maintenance Tracker***

No discussion or agreements, either explicit or implicit, regarding prices of particular products, services, or commodities nor of individual company scenarios, business plans, purchasing plans, or pricing.

ANTITRUST

Special Thanks to the Webinar Contributors

**Members of the COS Lifting Subcommittee
and COS-3-07 Work Group**



Agenda



Welcome/Anti-trust

Russell Holmes, COS



Why this document?

Russell Holmes, COS



Scope and Application

Mark Alexander, Shell – COS Lifting Subcommittee Co-Chair



Key Elements – Identifying Info and Types of Maintenance

Travis Dupre, Gulf Crane



Key Elements – Schedule, Accountability, Notes, Records & Documents

John Martines, Shell Midstream Partners – COS Lifting Subcommittee Co-Chair



Q & A

Brandon Bollinger, Gulf Crane

www.centerforoffshoresafety.org



SEMS GOOD PRACTICES

The Center for Offshore Safety's commitment to learn and continually improve SEMS include resources related to leadership engagement, SEMS maturity self-assessment, safety culture, and others.

One of the most important roles COS plays is in the development of a strong safety culture based on six safety characteristics from the Bureau of Safety and Environmental Enforcement's Safety Culture Policy Statement: Leadership; Respect and Trust; Environment for Raising Concerns; Open Communication; Personal Accountability; and an Inquiring Attitude.

Crane Maintenance Tracker

This guidance provides companies engaged in offshore operations with a framework for the establishment, implementation, and maintenance of a Crane Maintenance Tracker (CMT) to manage and reduce risks associated with inspecting and maintaining offshore crane equipment. .

COS-3-07 [Guidance for the Development of an Effective Crane Maintenance Tracker \(CMT\)](#)

Developing and Managing Procedures

This guidance will address operating procedures and safe work practices. Companies can use this document to implement a systematic procedure to involve the right personnel in operations, incorporate appropriate risk controls, and focus on end users of all stages.

COS-3-06 [Guidance for Developing and Managing Procedures](#)



COS Overview

The Center for Offshore Safety is designed to promote the highest level of safety for offshore drilling, completions, and operations through leadership and effective management systems addressing communication, teamwork, and independent third-party auditing and certification.

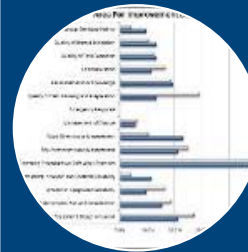
COS will achieve operational excellence by:

- Enhancing and continuously improving industry's safety and environmental performance,
- Ensuring public confidence and trust in the oil and gas industry,
- Increasing public awareness of the industry's safety and environmental performance,
- Stimulating cooperation within industry to share best practices and learn from each other, and

Providing a platform for collaboration between industry, the government, and other stakeholders.



SEMS Audit
and
Certificates



Data
Collection,
Analysis, and
Reporting



Good
Practice
Development



Sharing
Industry
Knowledge

**Why this
document?**



BSEE Safe Lifting PBRI

- Recommendation:
- *Further, Operators should develop and maintain a crane maintenance tracker that clearly assigns an individual (or individuals) responsibility for correcting the deficiencies.*
- Look to add to API 2D 8th Ed. Industry group to develop form and submit to 2D work group for possible inclusion
- Form interim industry group to develop standardized crane maintenance tracker for industry use.

Performance Based
Risk Inspection
(PBRI)
Lifting Safety
April 18, 2018



COS-3-07

Guidance for the Development of an Effective Crane Maintenance Tracker (CMT)

- Scope/Application
- Informative References
- Introduction
- Key Elements of a Crane Maintenance Tracker (CMT)
 - Identifying Information
 - Types of Maintenance
 - Timeline / Due Dates / Schedule
 - Accountability
 - Notes
 - Records and Documents





Scope/Application/Intro



Scope/Application

This guidance provides companies engaged in offshore operations with a framework for the establishment, implementation, and maintenance of a Crane Maintenance Tracker (CMT) to manage and reduce risks associated with inspecting and maintaining offshore crane equipment.

ESTABLISHMENT

IMPLEMENTATION

MAINTENANCE

“...written for offshore crane maintenance tracking operations, its principles can be applied to other offshore maintenance operations...”



What is CMT guidance vs. What is it NOT?

- CMT Guidance is:



FLEXIBLE

- CMT Guidance is NOT:



ONE-SIZE-FITS-ALL

Identifying Information





“This information should be detailed enough so that a crane professional new to the operation should be able to correctly locate and identify the crane.”

LOCATION

- Geographic location
- Facility / vessel name
- Location on facility / vessel

SERIAL NUMBERS

- Each crane
- Component parts – as appropriate
- Allow for tracking of specific equipment over the life of the crane

COMPONENT LIST

- Condition & expected lifespan
- Maintenance and replacement schedules
- Other necessary parts / equipment - lubricants, filters, belts, etc.

CRANE USAGE CATEGORY*

- Infrequent
- Moderate
- Heavy

**See API Spec 2D Operation and Maintenance of Offshore Cranes for additional information on Crane Usage Categories*

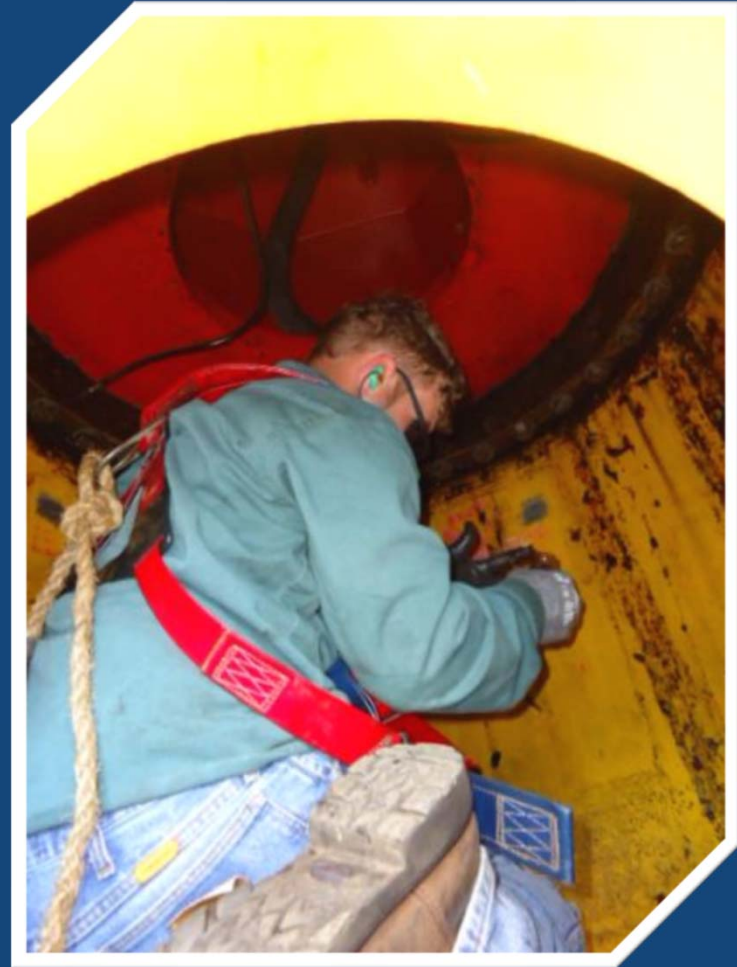


Types of Maintenance



Preventive Maintenance

- Established by the Crane Owner
- Should take into consideration
 - Crane type
 - Frequency of Usage
 - Maintenance history
 - Manufacturer recommendations
- See *API RP 2D Operation and Maintenance of Offshore Cranes* for additional information on preventive maintenance.



Corrective Maintenance

“Corrective maintenance should be centered on the testing and inspections performed as part of the PM program. The CMT should track the results of inspections along with any identified deficiencies.”

Minor Deficiency:

- Should be addressed before advances to Medium or Major.
- Poses no safety or environmental risk.
- Crane can still be operated at full duty.

Medium Deficiency:

- Should be addressed before advances to Major.
- Poses *potential* safety or environmental risk.
- Crane can still be operated at restricted duty.

Major Deficiency:

- Crane should be removed from duty and locked/tagged out until deficiency is mitigated.

“CMT should also track that the repairs/replacements have been inspected or otherwise verified, as applicable, before crane is placed back in service.”

Timeline / Due Dates / Schedule



“The timeline information should allow a viewer at-a-glance to ascertain the status of repair.”

- Date maintenance ordered
- Anticipated date for receipt of replacement parts or components
- Anticipated downtime to complete required maintenance or repairs
- Date maintenance completed
- Preventive maintenance frequency schedule
- Record of completions for routine/preventive maintenance and inspections



Accountability



Accountability

From BSEE PBRI:

“Further, Operators should develop and maintain a crane maintenance tracker that clearly assigns an individual (or individuals) responsibility for correcting the deficiencies.”

Accountability

CMT should track who is responsible for:

- *Ordering maintenance tasks to be completed*
- *Ordering/supplying necessary parts/equipment*
- *Executing repairs or preventive maintenance*
- *Verifying repairs or preventive maintenance have been completed and equipment is again fit-for-purpose.*

Notes / Records and Documents



Notes

“An effective CMT can be seen as a record of the life-cycle of a Crane allowing the viewer to understand its history. The CMT should include any notes or commentary necessary to allow a crane professional new to the location or equipment to understand its history, status, and condition of the Crane.”

Records and Documents

- Procedures and/or processes for implementing, maintaining, and managing an effective Crane Maintenance program.
- Procedures and/or processes for executing specific crane maintenance tasks – installation or replacement of equipment, testing requirements, etc.
- Inspection and Testing results.
- Replacement component and parts lists.

QUESTIONS?

Upcoming Events!

COS Annual Performance Report Webinar

September 9

Registration information:

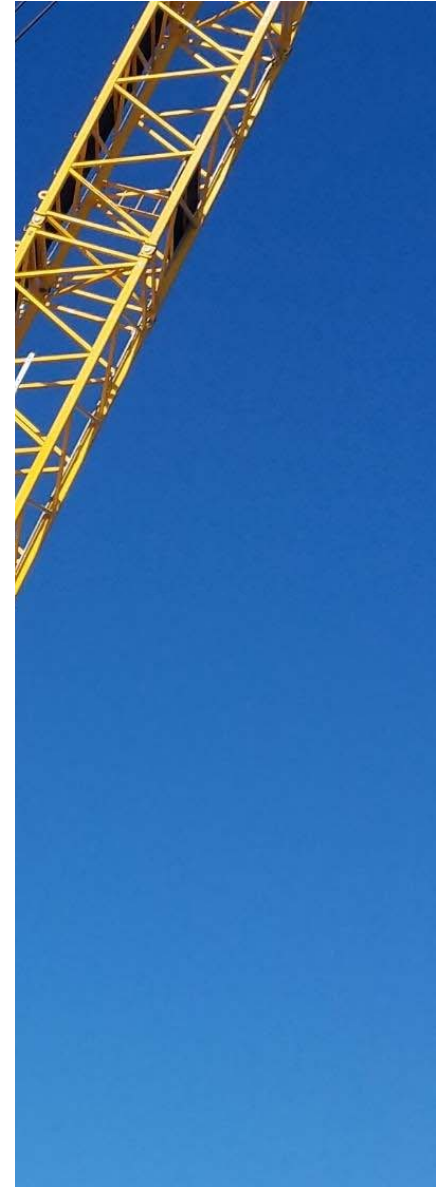
https://www.centerforoffshoresafety.org/announcements_page/Events-and-webinars

9th Annual COS Forum

October 27

Registration information:

https://www.centerforoffshoresafety.org/announcements_page/Events-and-webinars



COS - Become a Member!

- Annual Membership Fee
 - API Members - \$0 additional annual fee to join COS
 - Non-API Members - \$5000 annual membership fee
- For Additional Information:
 - Russ Holmes – holmesr@centerforoffshoresafety.org
 - Julia FitzGerald – fitzgeraldj@centerforoffshoresafety.org



Thank you!