COS Outlook for 2024

February 1, 2024

CENTER FOR OFFSHORE SAFETY

Special Thanks to the Webinar Contributors

- Russ Holmes, COS
- Christy Lafferty, Oceaneering
- Lon Langlois, Hess
- Kim Forgie, OXY
- Travis Harrington, Chevron
- Tricia Grant, Hess
- Mark Alexander, Shell

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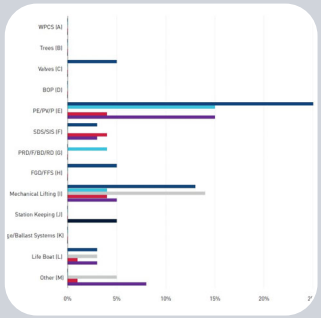
COS Overview



SEMS AUDITS & CERTIFICATES

Evaluate & Improvement of SEMS

Audit Data Analysis

DATA COLLECTION, ANALYSIS & REPORTING

Annual Performance Report

Safety Shares

GOOD PRACTICE DEVELOPMENT

Learning from Normal Work

Safety Culture

SHARING INDUSTRY KNOWLEDGE

Committees

Webinars

COS Forum

OTC

ACCREDITATION BODY (AB)

Audit Service Providers

Recognized AB for BSEE SEMS Certificates

2024 COS Members

Operators

Apache Corporation
Arena Offshore
bp America, Inc
Chevron Corporation
Equinor US
Exxon Mobil Corporation
Hess Corporation
Murphy Oil Corporation
Occidental Petroleum Corporation
Quarter North Energy
Shell USA, Inc
Talos Energy
TotalEnergies
Woodside Energy

Drilling Contractors

Helmerich & Payne
Valaris plc

Service/Equipment Contractors

Baker Hughes
Halliburton
Oceaneering International, Inc
SEMPCheck
Subsea 7

Board Affiliates

IADC – Int'l Assoc of Drilling Contractors
NOIA – National Ocean Industries Assoc
OOC – Offshore Operators Committee

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SEMS Audit Guidance & Good Practices

Guidance for Auditing SEMS

- COS-1-01 SEMS II Audit Protocol (Gap Analysis)
- COS-1-06 Audit Planning*
- COS-1-07 Corrective Action Plan*
- COS-1-08 Audit Report Format*
- COS-1-09 Auditor Guidance*
- COS-1-10 Remote Audits
- COS-2-03 SEMS Auditing Requirements, 3rd edition
- COS-2-05 Requirements for COS SEMS Certificates with International Adde

Guidance for SEMS Implementation

- COS-3-01 Leadership Site Engagement, 2nd edition
- COS-3-02 Skills & Knowledge Management*
- COS-3-03 SEMS Maturity Self-Assessment
- COS-3-04 Robust Safety Culture
- COS-3-05 SEMS Interface Agreements
- COS-3-06 Developing & Managing Procedures
- COS-3-07 Crane Maintenance Tracker
- COS-3-08 Verifying Existing Barriers
- COS-3-09 Work Planning and Work Management Flowchart

* Indicates versions available for both 3rd and 4th editions of API RP 75

Safety Share 2024-006

Solenoid Ricochets from Crow's Nest

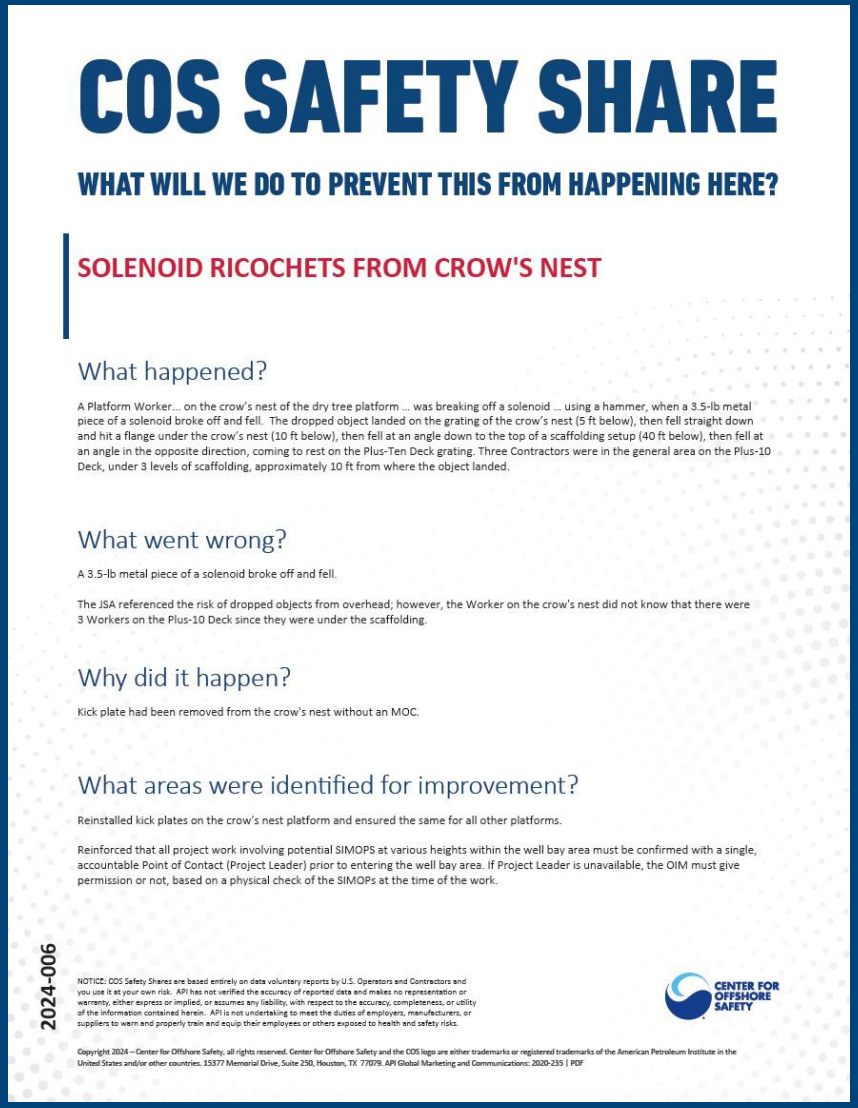
What happened?

A Platform Worker... on the crow's nest of the dry tree platform … was breaking off a solenoid … using a hammer, when a 3.5-lb metal piece of a solenoid broke off and fell. The dropped object landed on the grating of the crow's nest (5 ft below), then fell straight down and hit a flange under the crow's nest (10 ft below), then fell at an angle down to the top of a scaffolding setup (40 ft below), then fell at an angle in the opposite direction, coming to rest on the Plus-Ten Deck grating. Three Contractors were in the general area on the Plus-10 Deck, under 3 levels of scaffolding, approximately 10 ft from where the object landed.

What went wrong?

A 3.5-lb metal piece of a solenoid broke off and fell.

The JSA referenced the risk of dropped objects from overhead; however, the Worker on the crow's nest did not know that there were 3 Workers on the Plus-10 Deck since they were under the scaffolding.



COS SAFETY SHARE

WHAT WILL WE DO TO PREVENT THIS FROM HAPPENING HERE?

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Why did it happen?

Kick plate had been removed from the crow's nest without an MOC.

What areas were identified for improvement?

Reinstalled kick plates on the crow's nest platform and ensured the same for all other platforms.

Reinforced that all project work involving potential SIMOPS at various heights within the well bay area must be confirmed with a single, accountable Point of Contact (Project Leader) prior to entering the well bay area. If Project Leader is unavailable, the OIM must give permission or not, based on a physical check of the SIMOPs at the time of the work.

2024-006

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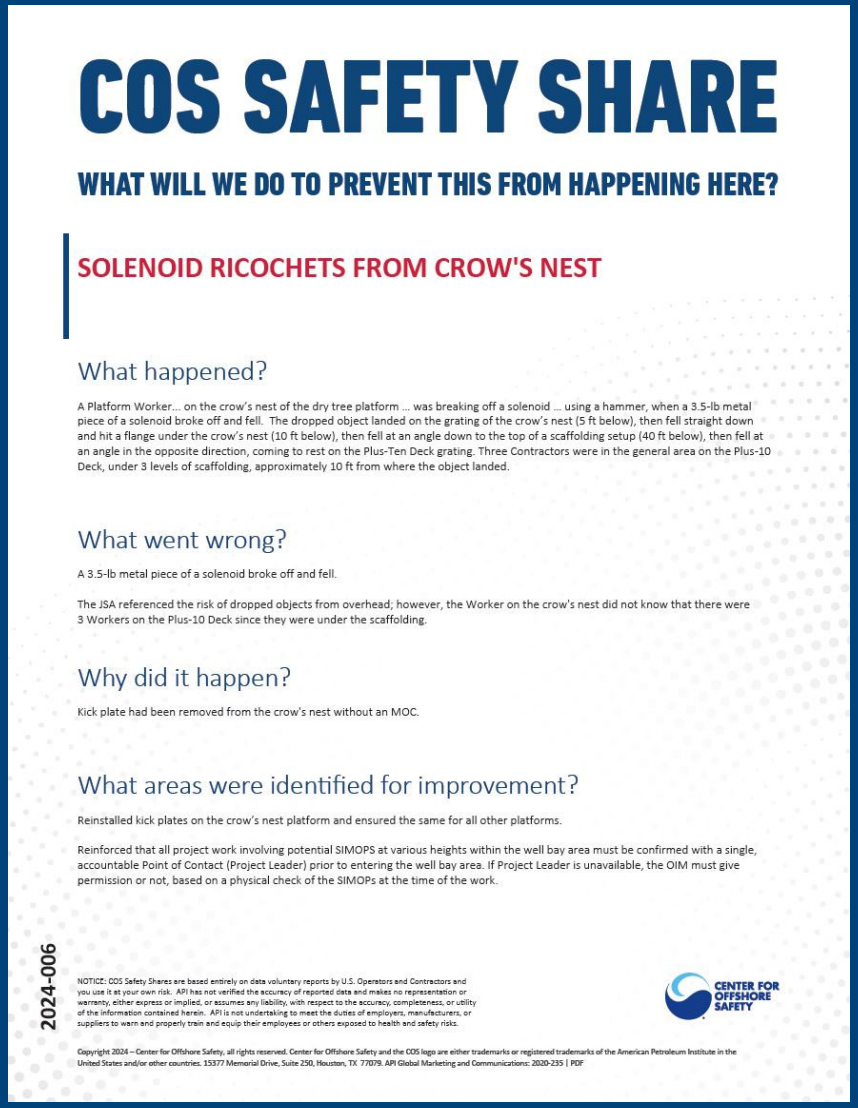

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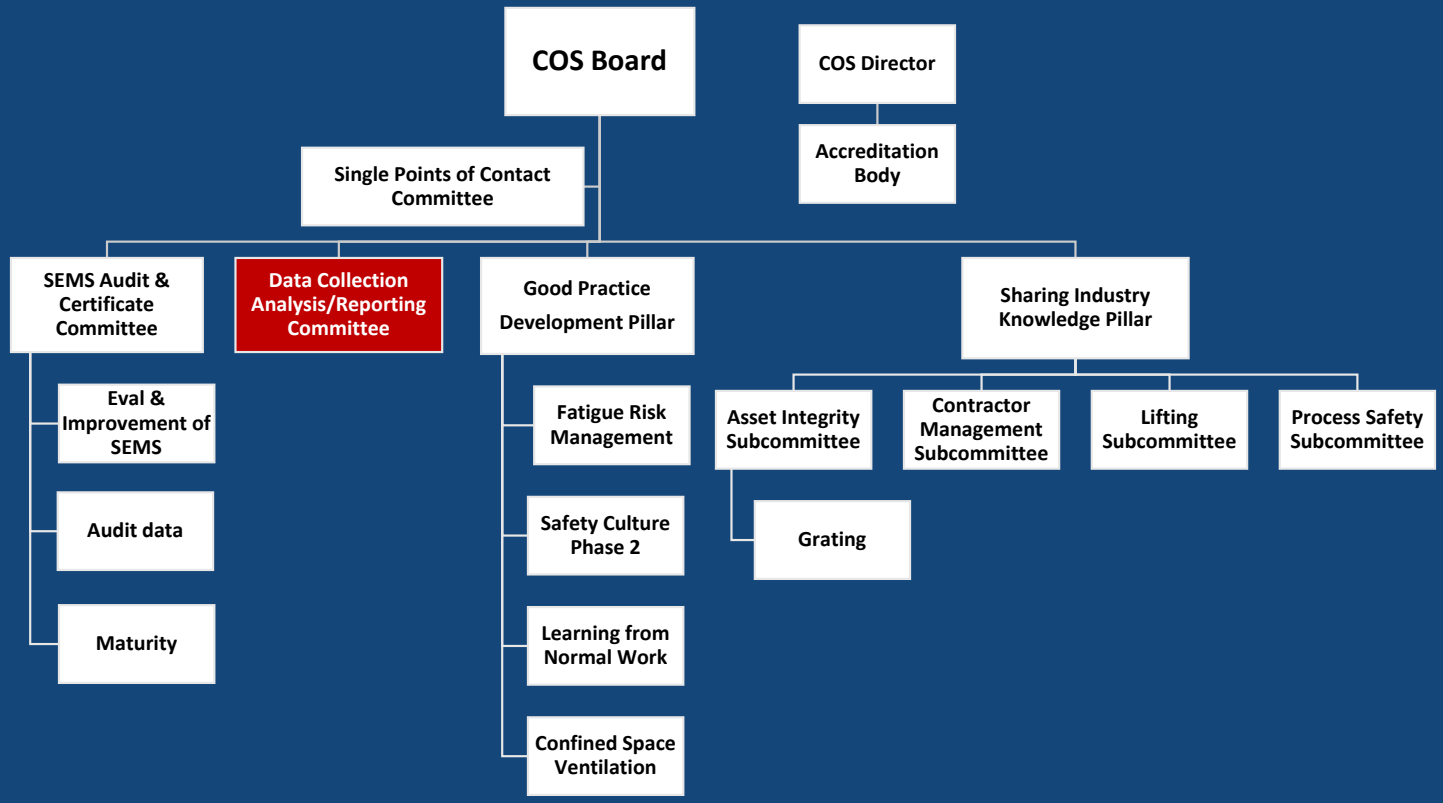
2024-006

Data Collection, Analysis, & Reporting (DCAR) – Chair: Christy Lafferty, Oceaneering



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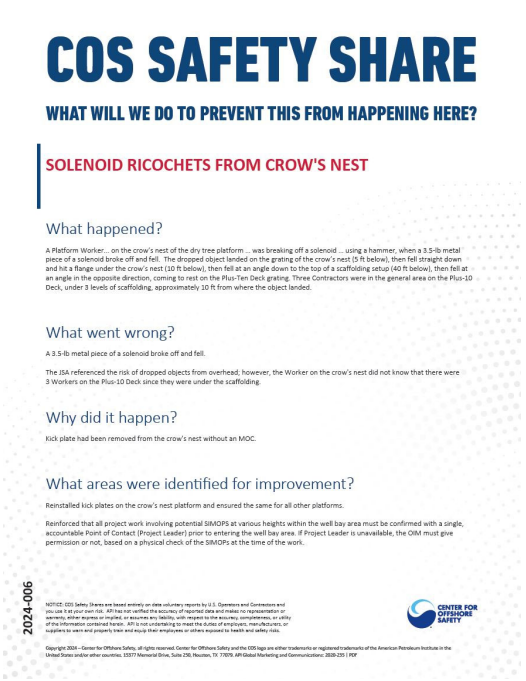

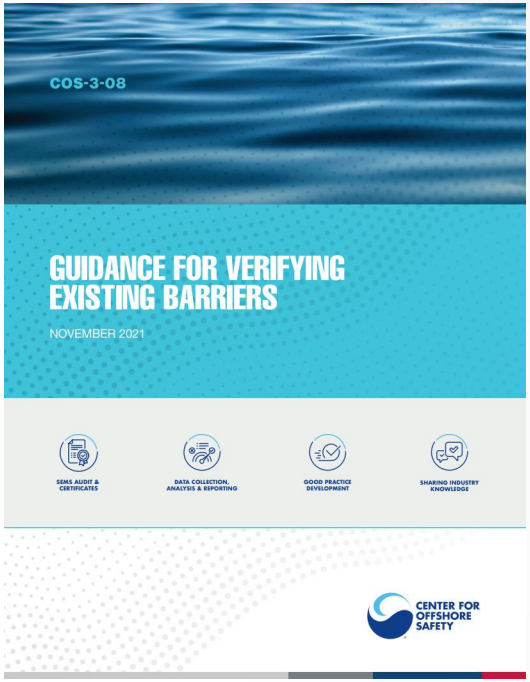

How is COS data used?

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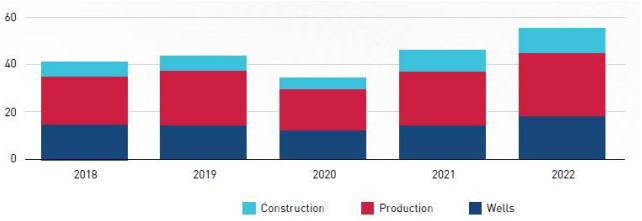
Combined Tier 1 and Tier 2 Process Safety Events down 80% over last two reporting years



YEAR	2018	2019	2020	2021	2022
COS U.S. OCS Work Hours (Millions)	41.7	44.2	34.5	45.9	54.7

COS Member work hours represented 76% of all US OCS activity for 2022.

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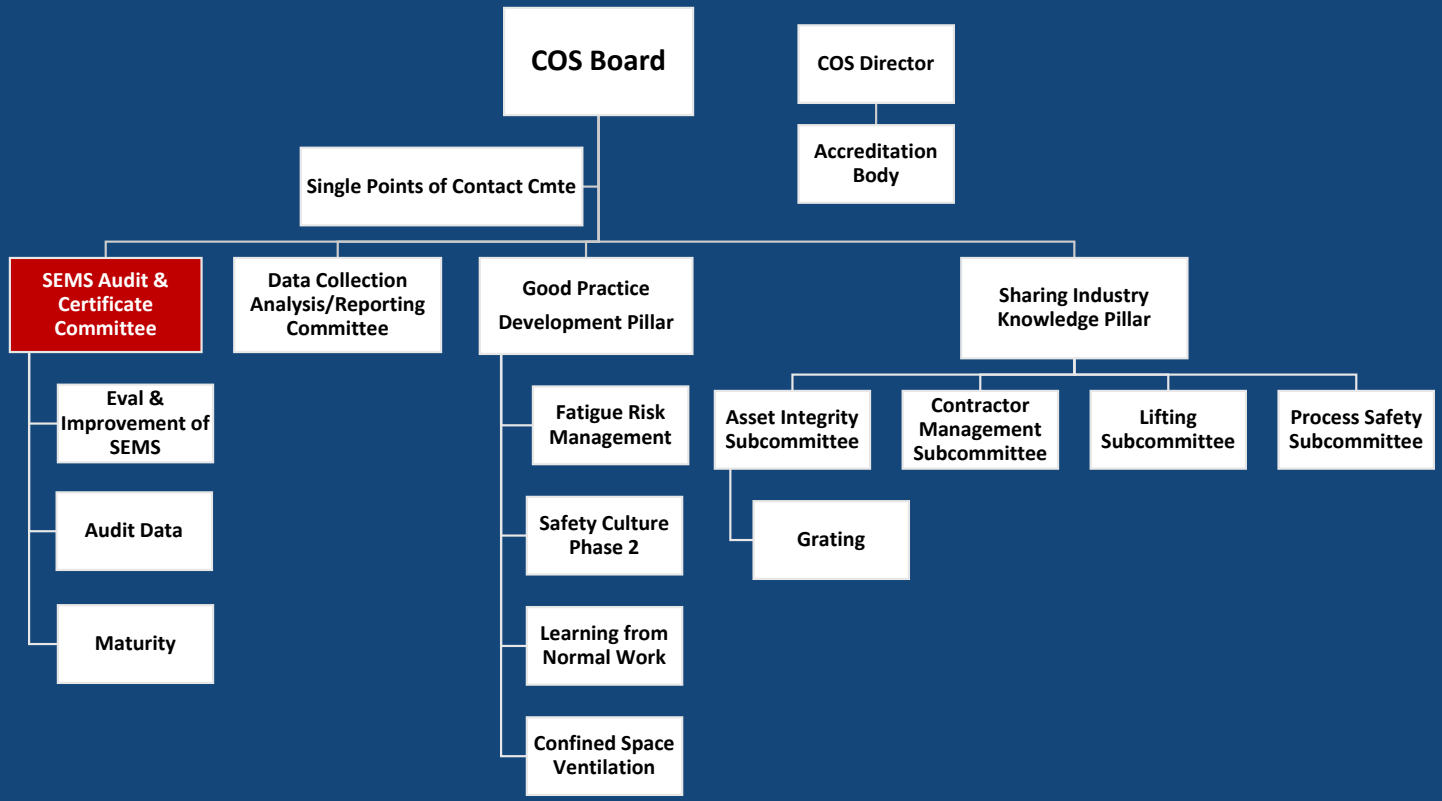
SEMS Audit & Certificate Committee (SACC) – Chair: Lon Langlois, Hess



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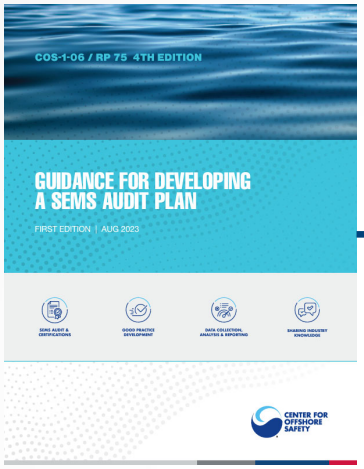
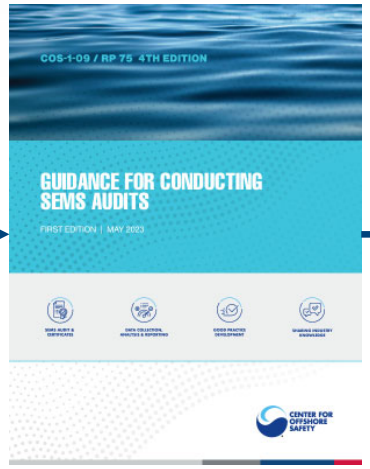
Published in 2023

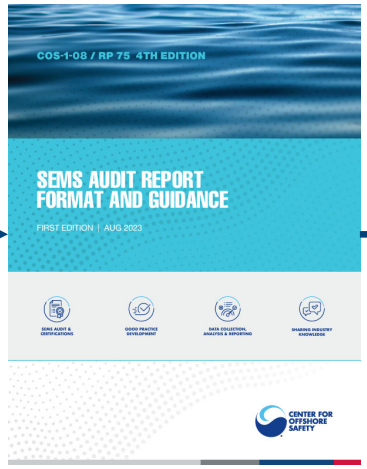
PLAN



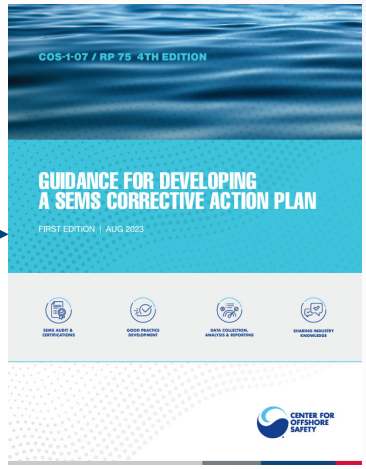
AUDIT

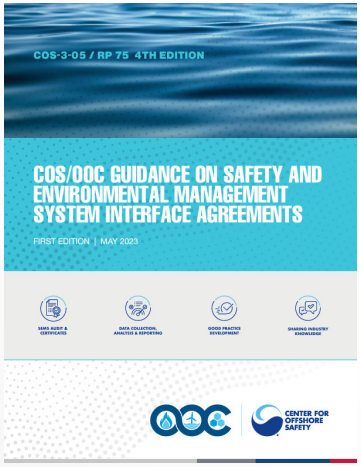


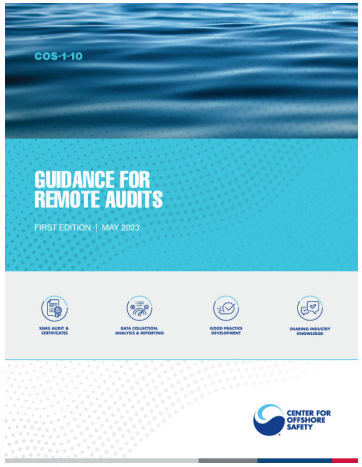
REPORT



C.A.P.







Download these and more – *FREE* – at www.centerforoffshoresafety.org

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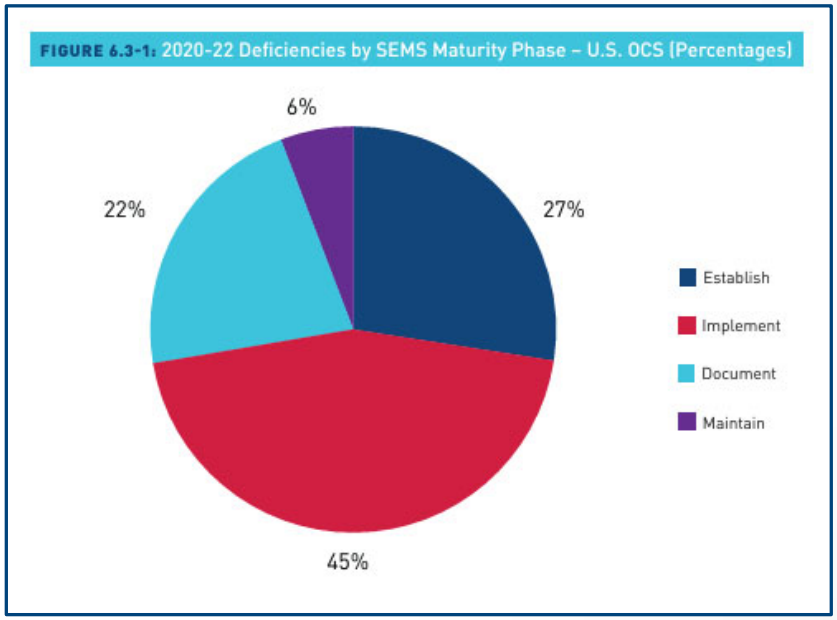
COS-3-03 *Guidelines for SEMS Maturity Self-Assessments*

Maturity Matrix:

SEMS Element	Issue	E	D	C	B	A
Specific Element Name Here	**Established?**	No component(s) in place	Component(s) informally in place, but not consistent with requirements	Component(s) informally in place that is consistent with requirements	Component(s) formally in place, but not fully consistent with requirements	Component(s) formally in place that is fully consistent with requirements
	Implemented?	No component(s) in place	Component(s) is not communicated	Component(s) is communicated to applicable personnel	Personnel have the skills and knowledge to perform their assigned tasks for the component(s)	Personnel with the appropriate skills and knowledge are performing their assigned tasks for the component(s)
	Maintained?	No component(s) in place	Component(s) has not been reviewed to determine whether it works as designed	Component(s) is informally reviewed to determine if it works as designed	Component(s) is formally reviewed to determine if it works as designed	Component(s) has been through multiple formal review cycles per an established schedule to determine if it works as designed
	Continual Improvement?	No component(s) in place	Informal feedback on component(s) is available	Formal feedback on component(s) is available	Formal feedback on component(s) is being reviewed	Feedback is driving appropriate improvements in component(s)

Audit Data Deep Dive Work Group



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Evaluation & Improvement of SEMS WG

Objective

- Develop guidance on the implementation of API RP 75, 4th edition, element 13 – Evaluation and Improvement of SEMS.

5.13 Evaluation and Improvement of SEMS

5.13.1 Context

The scope of this element includes activities that evaluate the SEMS. Evaluation activities can vary widely and can range from formal evaluations to use of performance indicators to observations. Evaluation activities provide an understanding of the effectiveness of the SEMS and identify deficiencies and improvement opportunities.

Typical SEMS evaluation activities (internal or external) can include, but are not limited to:

a) audits,

b) assessments (including self-assessment),

c) performance indicators,

d) observations, and

e) formal reviews.

For additional information contact Brandy Harrington – harringtonb@centerforoffshoresafety.org

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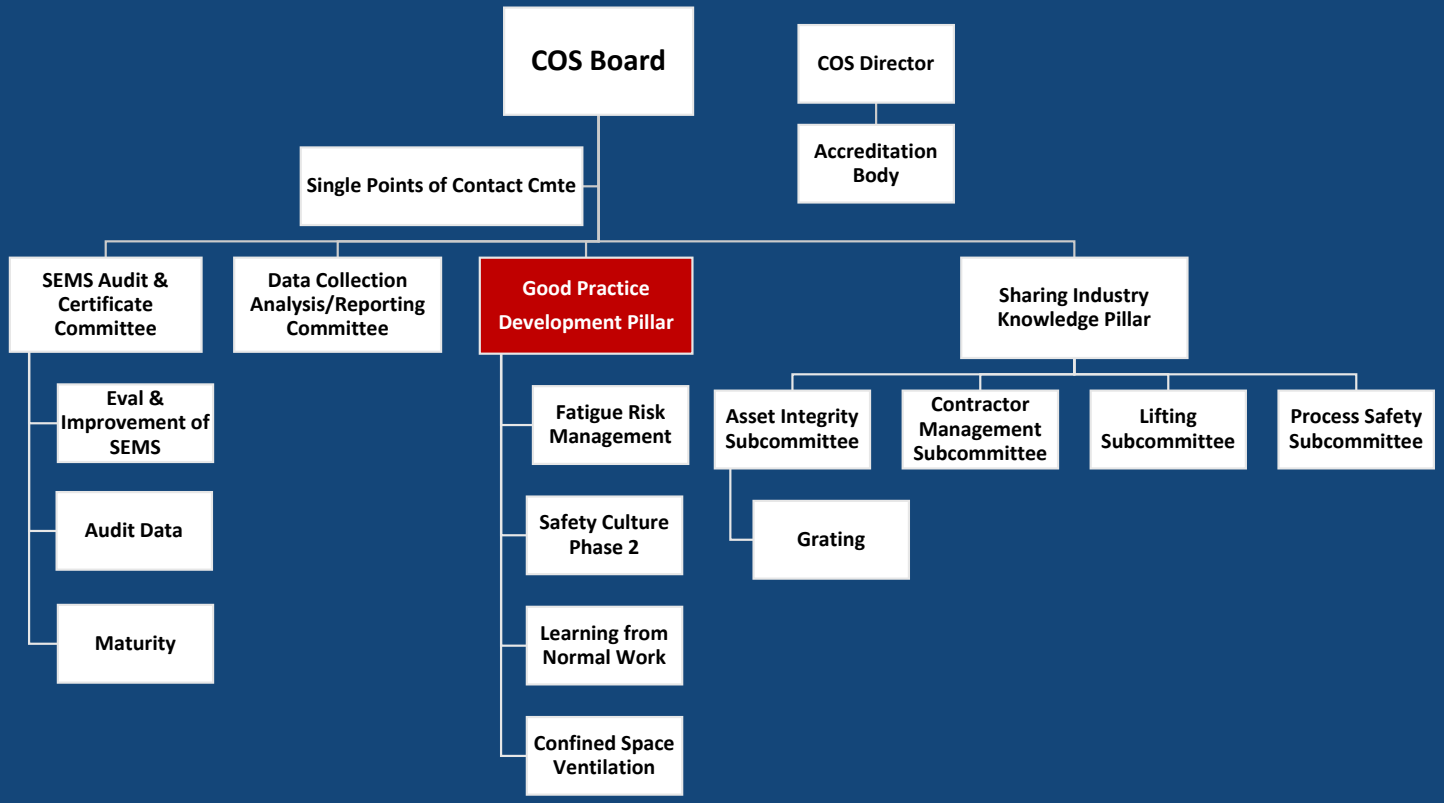
Good Practice Development (GPD) Pillar – Chair: Kim Forgie, Occidental Petroleum



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Fatigue Risk Management
Leads: Karen Jenkins, Chevron, and Eileen Hoff, Shell

Objective

- Develop one document around assessing fatigue management practices and tools and including recommended guidelines or best practices

Elements of a FRM Program

- Education, Knowledge, and Skills
- Environmental Considerations
- Work Readiness & Fatigue Reporting
- Data Collection for and Performance Measurement of the FRM Program
- Implementation & Continuous Improvement
- Health & Wellness Programs
- Travel
- Duty Hours
- Sleep Strategies & Hygiene

For additional information contact Brandy Harrington – harringtonb@centerforoffshoresafety.org

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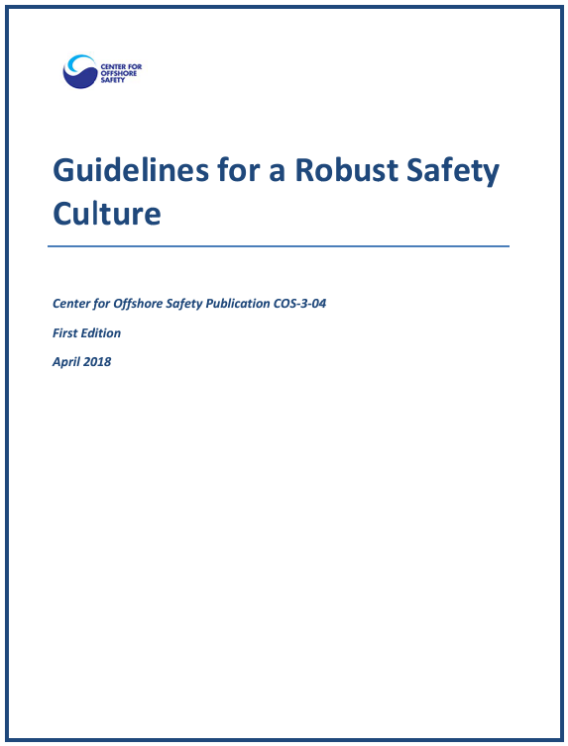
Safety Culture Phase 2
Lead: Ryan Taylor, Murphy

Objective: Create a document that describes

- Various methodologies to assess safety culture and how these methodologies may interact with each other
- A tool(s) to assess safety culture within an organization
- How to “implement” a safety culture such that it can improve
- Features of a weak culture through to a robust culture



For additional information contact Brandy Harrington – harringtonb@centerforoffshoresafety.org

Learning from Normal Work
Lead: Lamberto Nonno, Baker Hughes

Scope:	Objectives:
• Identify and review current documentation and industry practices, methods, and tools to Learn from Normal Work.	• Canvass industry for existing methods and tools to Learn from Normal Work (complete) • Develop recommended guidelines for establishing and maintaining a Learning from Normal Work capability • Identify tools that enable Learning from Normal Work • Identify performance indicator(s) that may be leveraged to measure the effectiveness of these tools

For additional information contact Brandy Harrington – harringtonb@centerforoffshoresafety.org

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Confined Space Ventilation
Lead: TBD

Description:	Objectives:
• identify existing practices and standards, review for gaps and pursue updates or development of recommended confined space ventilation good practices	• Research previous and ongoing work covering confined space ventilation • Determine need for additional work on either developing or researching confined space ventilation • If needed, provide recommendations for existing standards or develop good practice for confined space ventilation

For additional information contact Brandy Harrington – harringtonb@centerforoffshoresafety.org

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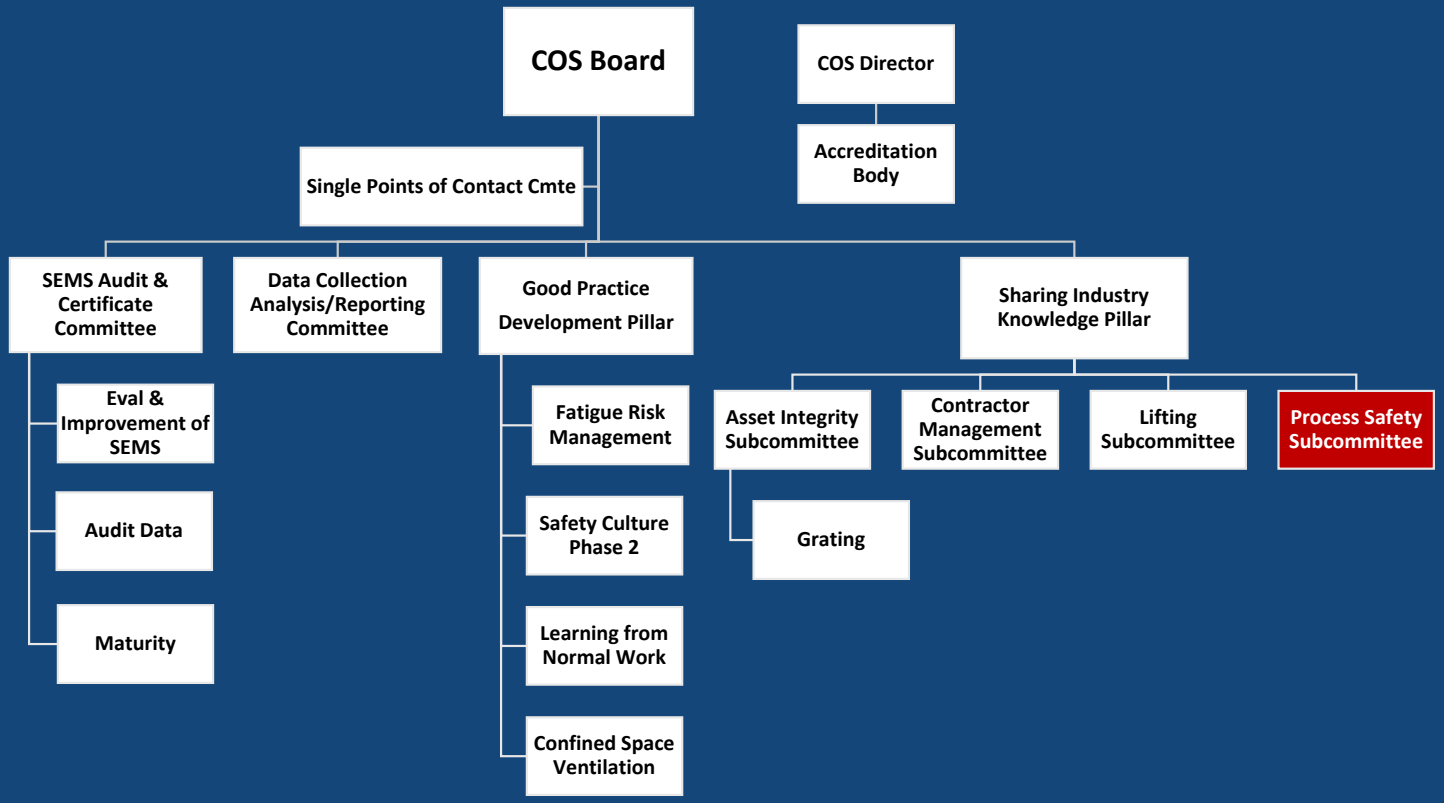
Process Safety Subcommittee (PSSC) – Chair: Tricia Grant, Hess



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Process Safety Subcommittee (PSSC) 2024 Plan

Q1 Mtg - March 21, 1:00pm-3:00pm:

- *Process Safety Data Deep-Dive – Kick-off*
  - *10 years of Process Safety Event (PSE) LFI Reports*
  - *Analysis of LFI Reports vs Process Safety Fundamentals*

Additional 2024 Meeting Topics

- *Human Organizational Performance and Process Safety*
- *API's Process Safety Site Assessment Program*
- *Updating COS PSE data collection process*
  - *Align with IOGP*

For additional information contact Julia FitzGerald – fitzgeraldj@centerforoffshoresafety.org

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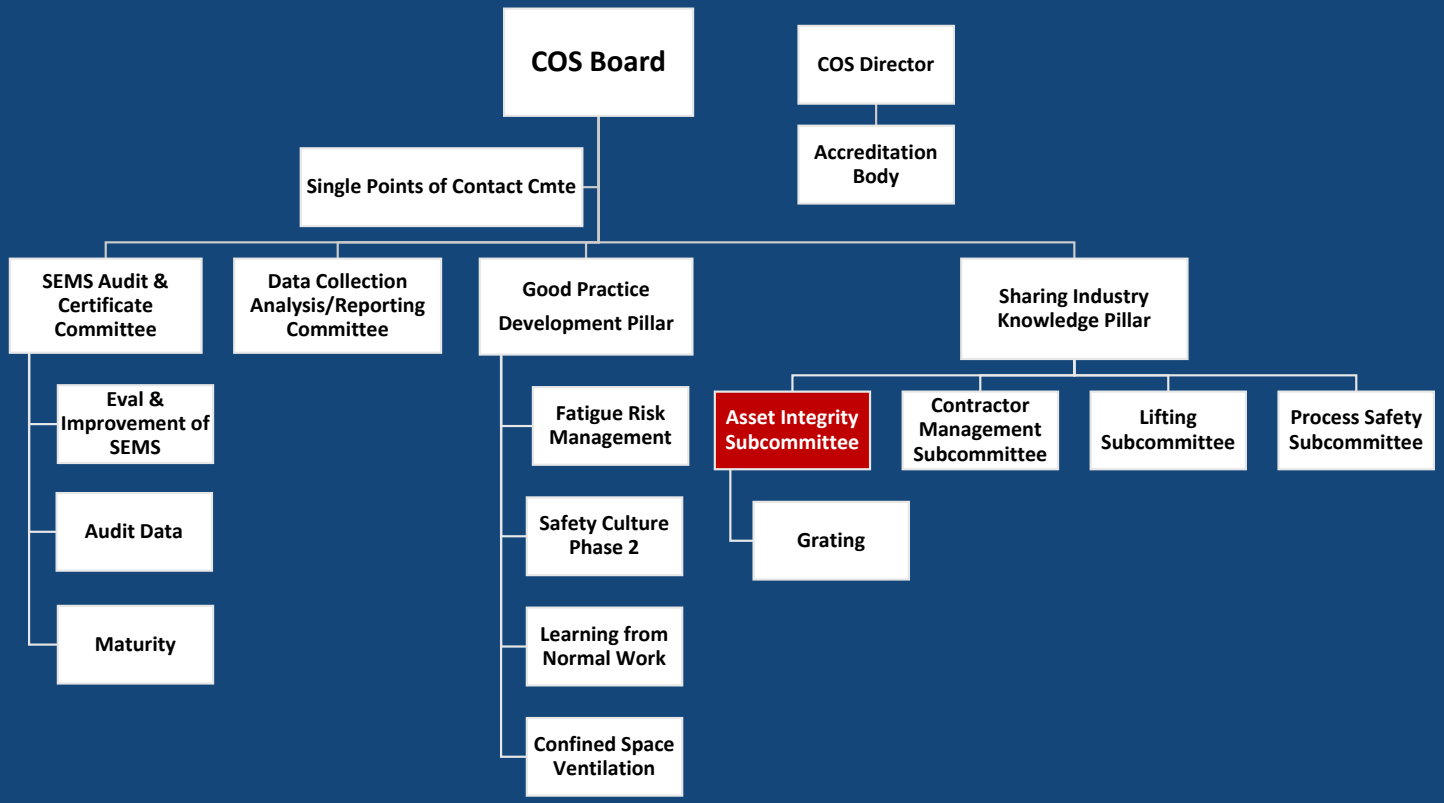
Asset Integrity Subcommittee (AISC) – Chair: Travis Harrington, Chevron



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Asset Integrity Subcommittee (AISC) 2024 Plan

Q1 Mtg - March 28, 9:00am-12:00pm:

- *API Inspection and Mechanical Integrity Summit Highlights*
- *BSEE SEMS Mechanical Integrity Data Deep-Dive – Initial Thoughts*

Additional 2024 Meeting Topics

- *Structural Integrity Management*
- *Digitization and Artificial Intelligence Applications and Limitations*

AISC at COS Forum:

- *Present results of BSEE SEMS Mechanical Integrity Data Deep-Dive at COS Forum Breakout Session*

For additional information contact Julia FitzGerald – fitzgeraldj@centerforoffshoresafety.org

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Grating Work Group
Lead: JT Eckstrum, Talos Energy

Description:
• The scope of this work is to develop a guidance document around accurately assessing grating and working surface integrity, develop tools and practices to provide an effective approach by industry for inspection, identification, maintenance, and repair/replacement of offshore grating and work surfaces.

Objectives:

• Develop guidance for Grating Inspectors
  • Descriptions and photos of Good, Bad, and Ugly
• Develop guidance for facility Owner/Operators
  • Guidance on what should be included in an overall Asset Integrity Program related to Grating
• If appropriate, submit proposal to API Standards making the case for a technical standard related to offshore corrosion of grating, decking, and support structures

For additional information contact Julia FitzGerald – fitzgeraldj@centerforoffshoresafety.org

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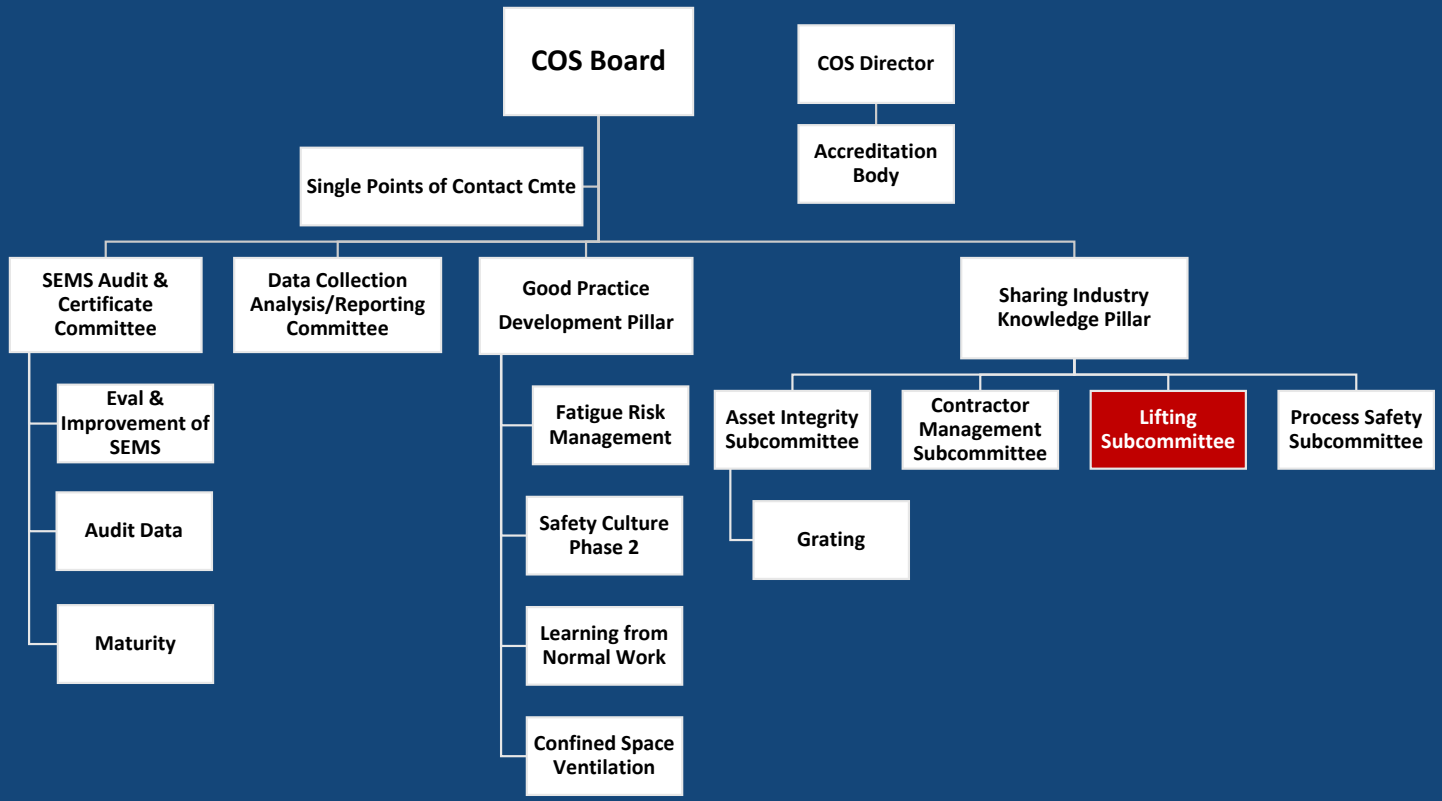
Lifting Subcommittee (LSC) – Chair: Mark Alexander, Shell



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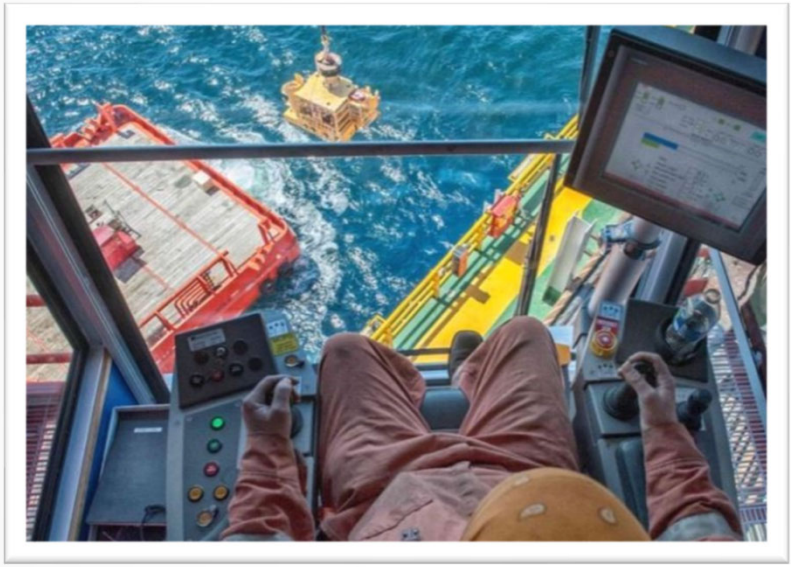
Lifting Subcommittee (LSC) 2024 Plan



Q1 Mtg - March 19, 9:00am-12:00pm:

- *Panel - How do YOU asses competency for Lifting Operations: Knowledge / Skills / Experience*

Additional 2024 Meeting Topics

- *Pre-Use Inspection Checklists – Best Practices*
- *API Safe Lifting Conference Highlights*
- *BSEE and COS Crane Incident Data Review*

For additional information contact Julia FitzGerald – fitzgeraldj@centerforoffshoresafety.org

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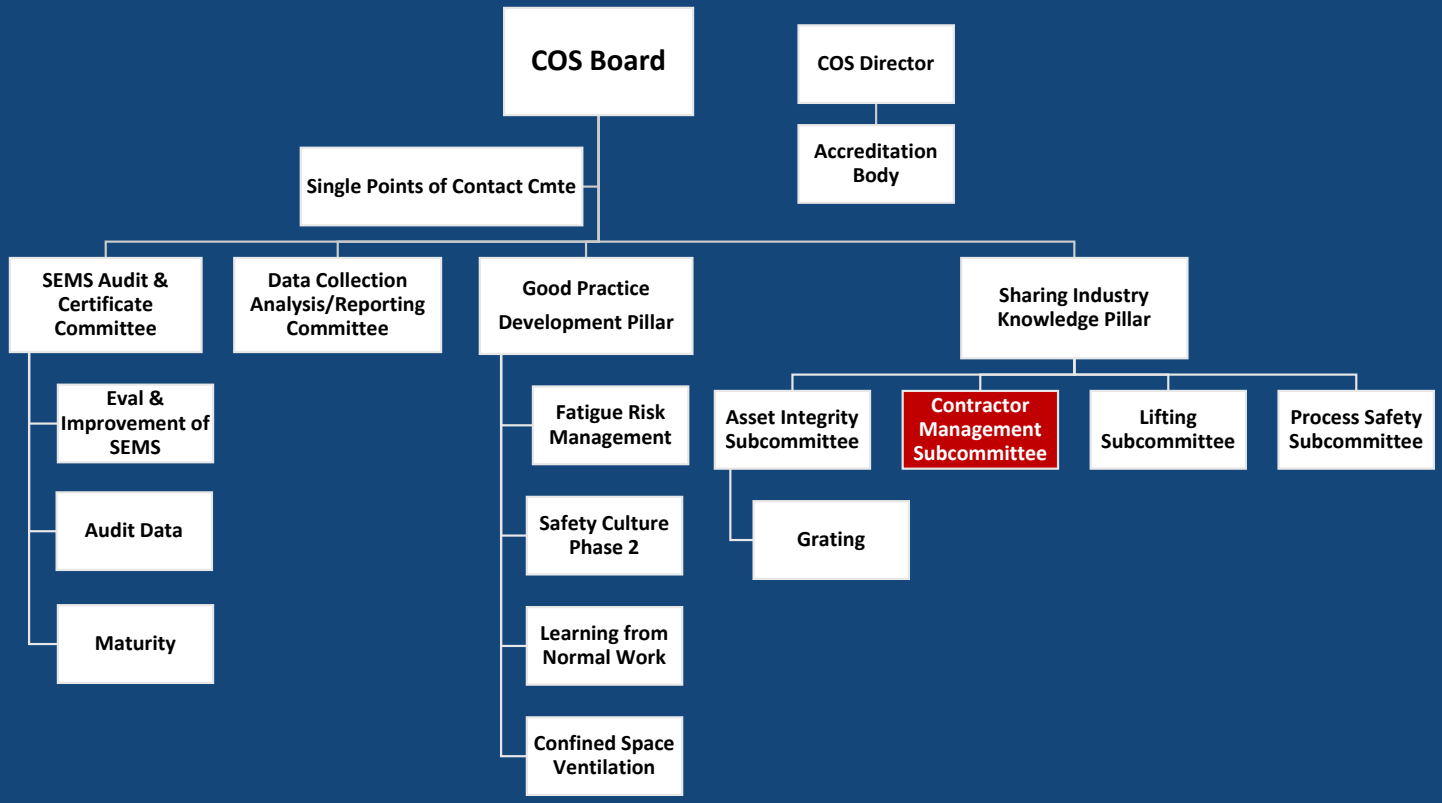
PROPOSED – Contractor Management Subcommittee
Chair: *TBD*



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Membership in COS

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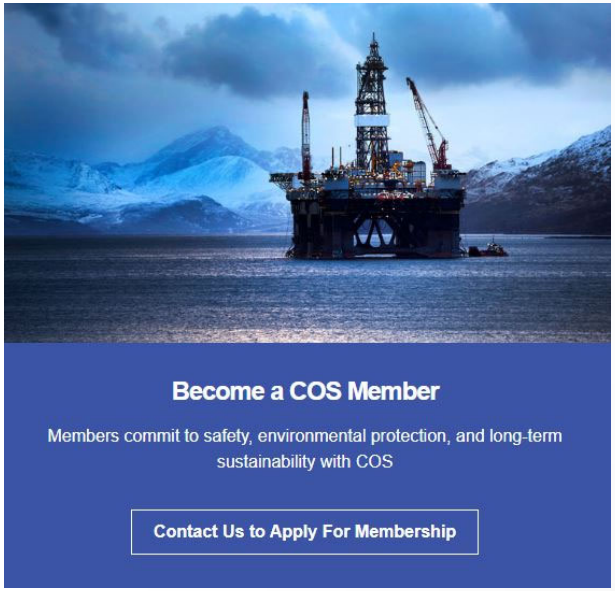
COS Membership

- Applicant must be:
  - Owner, operator, or lease holder of record,
  - A drilling contractor,
  - A primary services or equipment provider, or
  - A support services provider
- Applicant must have a fully operational safety and environmental management system (SEMS) or equivalent
- Applicant must have conducted, or plan to conduct, an audit of its SEMS or equivalent for its operations in the US OCS
- Applicant must agree to:
  - Participate in the COS Data programs
  - Actively participate/attend meetings of COS committees and subordinate groups
  - Seek/maintain a COS SEMS Certificate (required for Producer/Operator members)

Annual Membership Fee

- API Members: $0 additional annual fee to join COS
- Non-API Members: $5000 annual membership fee



For additional information contact Russell Holmes – holmesr@centerforoffshoresafety.org

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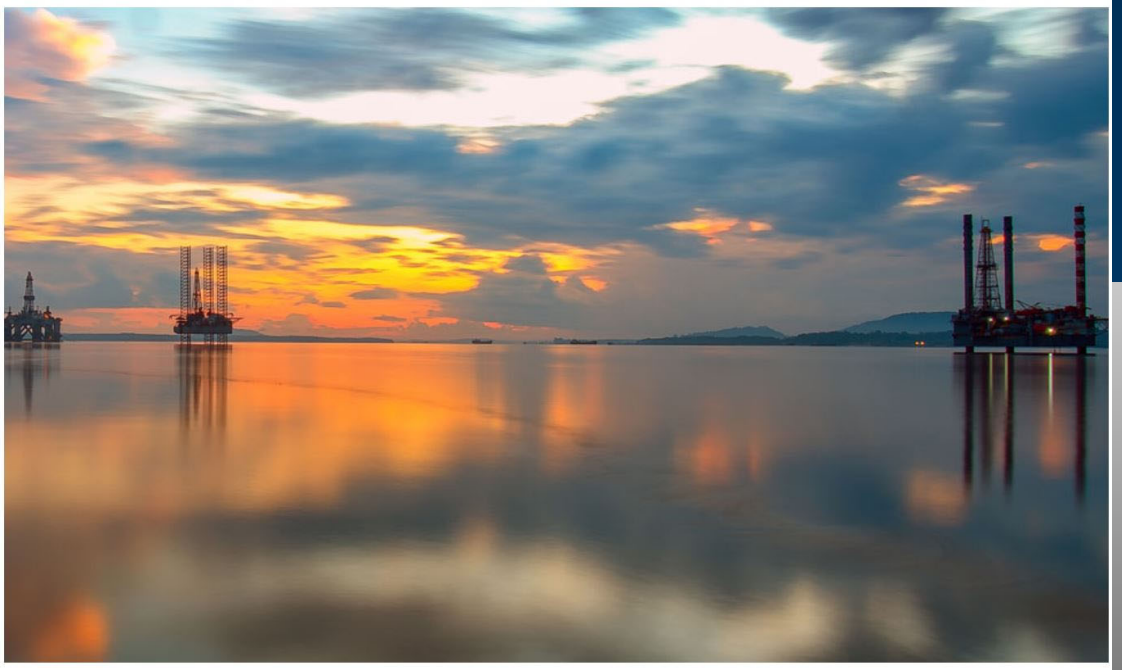
SAFETY LEADERSHIP AWARDS

The Center for Offshore Safety celebrates offshore workers who strive to improve operational safety and puts a Spotlight on Excellence of those personnel.



Award Criteria

Preference will be given to those nominations:

- Focused on major accident risk – covering both personal and process safety.
- That demonstrate evidence of risk reduction or elimination and/or HSSE performance improvement.
- Where risk and HSSE performance improvement was delivered in a systematic way through a HSSE management system.
- That were effectively shared with industry.

Scan QR code to receive information re: 2024 SLA Nominations

Mark Your Calendars!

COS at the 2024 Offshore Technology Conference

May 9
NRG, Houston

API Safe Lifting Conference

Sept 24-25
TBD, Houston

COS Annual Forum

Sept 26
TBD, Houston

Thank you!

Russ Holmes	holmesr@centerforoffshoresafety.org
Brandy Harrington	harringtonb@centerforoffshoresafety.org
Julia FitzGerald	fitzgeraldj@centerforoffshoresafety.org
Curt Johnson	johnsonc@centerforoffshoresafety.org

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