

OESI Advisory Committee Minutes
Tuesday, 18 October 2016, 10AM-2PM
NASA, Neutral Buoyancy Lab
13000 Space Center Blvd, Houston, TX

In Attendance

Name	Representing		Name	Representing
Jim Rocco	IADC		Yogesh Koirala	TAMU
Nilesh Ade	TAMU		Evan Zimmerman	OOO
Roland Moreau	SPE		Greg Kusinski	Chevron/DeepStar
Will Pecue	Taylor Energy		Tim Thornton	FMC Technologies
John Baird	Aramco		Sam Mannan	TAMU/MKOPSC
Bill Nelson	DNV GL		Garth Pulkkinen	Noble Drilling
Tom Williams	RPSEA		Michael Morgan	FBI
Lee Stockwell	Shell		Brad Smolen	BP
Jarvis Outlaw	BSEE		Paul Robinson	OESI
Ajay Shah	Chevron		Kevin Renfro	Anadarko
Andre King	BSEE		Peter Moles	Oceaneering
Ranjana Mehta	TAMU		Elena Melchert	U.S. DOE
Camille Peres	TAMU		Peter Velez	Peter Velez Eng.
Jim Pettigrew	OESI		Kevin McSweeney	ABS

Welcome

Mr. Peter Moles (Oceaneering) welcomed everyone to the meeting. Emergency information, safety protocols and regulations pertaining to the Neutral Buoyancy Laboratory were provided.

Safety moment – Mr. Jim Pettigrew (Director of Operations, OESI)

A safety moment was presented by Mr. Jim Pettigrew. This safety moment was a tribute to honoring the contribution of a founding member of the Advisory Committee, Mr. Mike Payne (1959-2016).

Review of Action Items and Approval of Minutes - Mr. Jim Pettigrew

Action Items were reviewed and closed. Advisory Committee Meeting Minutes for 19 July were reviewed and approved.

Recognition of New Representatives - Mr. Jim Pettigrew

New representatives serving for the advisory committee of OESI were recognized. These new representatives include: Mr. Lee Stockwell from Shell, Mr. Eric Englehardt from Schlumberger, Mr. Tom Williams from RPSEA, Mr. Lynne Donald from Maersk Drilling, Mr. Garth Pullkinen from Noble Drilling, and Mr. Brad Smolen from BP.

OESI forum update - Mr. Jim Pettigrew

The August 24th Forum ‘Focusing on Alarm Management for Safer Offshore Operations’, was conducted successfully with excellent dialogue and idea exchange. The next OESI Forum, ‘Focusing on Managing Drilling Margin and Well Control Risk’, will be held on November 29th at Schlumberger’s Richmond Campus in Houston.

OESI update - Mr. Jim Pettigrew

An update on OESI’s continuing efforts was provided. The OESI collaborative research projects continue to progress with White Papers expected by the end of 2016. Human Factors Engineering (TAMU/UT-Austin) will deliver their research by the end of November. Zonal Isolation (UT-Austin/UH) will also deliver their research by the end of November. New Materials (UH/TAMU) will deliver their White Paper in the first quarter of 2017. OESI has developed training opportunities for BSEE; these include: Computational Fluid Dynamics (CFD), Real-time Monitoring, Fracture Gradient, and Drilling Margin. OESI is continuing to work with Maersk Drilling to study fatigue issues; with U.S. CSB and others on studying ‘Riser Gas Unloading’; with BSEE on Bolt and Fastener initiatives; and are conducting a Training Plan Review for BSEE.

Research update by Dr. Camille Peres & Dr. Ranjana Mehta

Dr. Camille Peres & Dr. Ranjana Mehta from Texas A&M University presented their research on “Offshore Worker Cognitive Fatigue”. Fatigue measurement was identified as a crucial element towards fatigue management and identifying the value of existing fatigue measurement methods. The study was based on sensor data collected from workers in the offshore industry (drillship) with varying shift schedules. Various challenges associated with the study were identified; such as sensor attrition, variability in job demands, absence of monitoring of work output from workers amongst others was discussed. Various self-reporting measures & survey techniques for fatigue measurement were reviewed and discussed for further study. A weak correlation between measured values and existing methods to evaluate fatigue paved the path for development of FRAME - Fatigue Risk Assessment and Management in Energy survey. The salient features of FRAME will be that it would be developed and operationalized based on industry input; it will

be grounded in scientific rigor; and it would be tested for reliability, sensitivity and validity using sensor data.

BSEE Update – Mr. Andre King (BSEE)

Mr. Andre King highlighted the fifth successful year of existence for BSEE. BSEE will continue to work towards their mission; to promote safety, protect the environment, and conserve resources offshore through vigorous regulatory oversight and enforcement.

Strengthening Offshore Oil and Gas Industry Safety Culture– Mr. Peter Velez (NASEM)

Mr. Peter Valdez provided an overview of the National Academy of Science, Engineering and Medicine (NASEM) Offshore Safety Culture report. The study focuses on aiding industry, government and other stakeholders to strengthen offshore industry safety culture. The barriers relating to safety culture were explained along-with recommendations to industry, company leadership and regulators. The key recommendation towards industry was to adopt the BSEE definition of safety culture and the identified essential elements. The report also addresses key points towards enhancement of safety culture such as; core competence required by companies, assessment methods, sustaining progress while avoiding complacency, best ways to develop industry level data on near misses, incidents and safety culture measures, best methods for sharing lessons, best ways to encourage decision making and effective strategies. The report is available online at: <http://www.nap.edu/download/23524>

Offshore Cyber-Threat and Vulnerabilities – Mr. Michael Morgan (FBI)

Mr. Michael Morgan from FBI talked about economic espionage prevalent in the oil and gas industry. He also put forth the impacts of economic espionage on oil & gas industry which includes; lost revenue, lost jobs, lost investments for research, change in cash flow considerations, delays or interruption in production amongst others. Different cyber vulnerabilities to oil & gas industry were also explained along-with different tactics, techniques and methods used by hackers. Also, best practices to protect against cyber-attacks were discussed.

Future topics and Summary - Mr. Jim Pettigrew

Mr. Pettigrew briefly discussed future event dates. He also encouraged the AC members to spread the message about the upcoming Forum on October 29th. Future AC meeting dates were discussed and ABS volunteered to host the July 2017 meeting.

Future OESI AC Meeting dates

January 24 th 2016	April 25 th 2017	July 25 th 2017
Hosted by Schlumberger	Hosted by Weatherford	Hosted by ABS