

INCOSE TGCC

OTC Update



August 16th –19th at NRG PARK



Offshore Technology Conference

- Premier World-Wide Oil and Gas* Conference
- 50,000+ attendees each year
- 4 Day event, 350+ technical publications
- 2300+ exhibitors
- Held in Houston at NRG Stadium for 50 years
- OTC is sponsored by 13 industry organizations
- **INCOSE will be the Invited Organization this year!**
- **2021 will be hybrid event with virtual and in person options**

*Not just Oil and Gas, includes all Offshore Technology (offshore wind, aqua culture, shipping, floating solar, marine renewables, subsea mining)



OTC SE Activities Overview

Date: Tuesday, August 17th 2021

- 9:00 – 10:00: **Free CSEP Exam**
- 10:14 – 12:04: **SE Technical Session**
 - Integration of Systems Engineering and Project Management to Deploy Effective Offshore Systems
- 14:00 – 16:30: **SE Panel Session**
 - Systems Engineering in Practice: Stories from Experts in the Field
- 6:00 – 9:00: **INCOSE Social**
 - Location TBD



SE Technical Session

- **Integration of Systems Engineering and Project Management to Deploy Effective Offshore Systems**
 - Effective integration of Project Management (PM) and Systems Engineering (SE) is essential to deploy successful offshore systems in the rapidly advancing space of digitalization and automation systems.
 - Both SE and PM have formal methods to help guide projects and products through the life cycle. Where these two philosophies converge to deliver value is an intricate balancing act between overburdening processes that slow progress and deficient processes which allow flaws to propagate throughout the system and ultimately result in poor performance or failures.
 - This session highlights some recent advancements and success stories and how to overcome challenges with implementing PM and SE in an immersive data rich ecosystem.
 - Each author discusses practical applications in the current environment and demonstrates how they leveraged digitized information to create value and enable successful digital transformation initiatives.



SE Technical Session Speakers and Published Papers

- 10:14-10:36 : **Facing The Challenges Of Implementing Systems Engineering**
 - J.A. Bullion, Booz Allen Hamilton
- 10:36-10:58 **Transformation Of Digital Requirements: An Enabler For Successful Complex Projects**
 - J. Marsh, IBM USA; A. Hudson, Barrios Technology
- 10:58-11:20 : **Standardization of Procurement Equipment Specifications: Establishing A Strong Foundation For Oil & Gas Capital Project Development And Delivery**
 - A. Postema, International Association of Oil & Gas Producers
- 11:20-11:42 : **Benefits Of Using Requirements Management Tools On A Digitized API 170 Document**
 - R. Climacosa, S. Matlock, J.A. Ollero, Barrios Technology; D.L. Miller, American Petroleum Institute
- 11:42-12:04 : **Data Centric Verification To Streamline Project Planning And Execution**
 - M. Reed, Shell Oil



SE Panel Session

Invited Organization: Systems Engineering in Practice: Stories from Experts in the Field

- This panel session will bring together four recognized expert practitioners in the field of systems engineering. Each panelist will present a personal story of their experience working in systems engineering. The audience will learn how the complexity of missions between NASA and OTC is fundamentally the same, as are the failure risk and classifications.
- The audience will learn that many people in oil and gas may be practicing systems engineering to some degree already, possibly without recognizing it as such. The audience will learn how a “fixer” used Model-Based Systems Engineering to rescue a series of failing projects and deliver the systems on time and within budget.
- The audience will learn how systems engineering techniques can help us to better understand the warming Arctic region as it expands with increased tourism, fishing, exploration, and related traffic along with the promise of vast undersea oil, gas, and other mineral assets. Finally, the audience will be given the opportunity to ask questions and engage in conversations with the panelists.



SE Panel Session Speakers

Moderator

- Don Gelosh - Worcester Polytechnic Institute

Speakers

- Jon Holladay, Systems Engineering Technical Fellow - NASA
- Robert Perry, CEO and President - Reach Production Solutions
- Barclay Brown, Engineering Fellow - Raytheon Technologies
- Tom McDermott, Deputy Director and Chief Technology Officer, Systems Engineering Research Center - Stevens Institute of Technology



Actions

- For more info on OTC please see below link:
 - <https://2021.otcnet.org/technical-program-2021>
- Actions:
 - Volunteers needed to help staff the INCOSE Booth
 - Reserve your free/reduced price OTC ticket today! (limited slots)
 - Reserve your free CSEP Exam spot today! (limited slots)
 - Email: TGCC.INCOSE@outlook.com
 - Please indicate in the email subject line: «OTC 2021»

