

Talk on Overview of Ship Shaped Floating Structure Design

(Organised by Marine Engineering and Naval Architecture Technical Division, IEM)

Date : 3rd May 2017 (Wednesday)
Time : 5.30 pm to 7.30 pm (*Refreshments will be served at 5.00pm*)
Venue : TUS and C&S Lecture Room, 2nd Floor Wisma IEM, PJ
Speaker : Ir. Nik Mohd Hasmizie Nik Mohd Kamil and
 Ms. Maziah Suraya Abd Majid

BEM Approved CPD/PDP Hours : 2
Ref No. : IEM17/HQ/155/T

SYNOPSIS

The design of hull for Ship Shaped Floating Structure is based on hull form modelling, hydrostatics and hydrodynamics. There are a few software used for the analysis purpose such as *Seasafe*, *Hydrostar*, *Ariane* and *Orcaflex*. Every software has its unique capabilities due to the different kind of analysis and desired output. The first part of vessel analysis is to do the hull form modelling and hydrostatics followed by stability and offloading. Besides analysis, there are certain regulations from IMO, SOLAS and MARPOL that need to be fulfilled for stability requirement. Hydrodynamics analysis is the second part of designing process. The main purpose of the analysis is to get the hydrodynamic coefficient and to perform mooring analysis for both quasi static and dynamics. Finally, the focus output for the analysis is to show positive metacentric height (GM) at main loading conditions and maximum tension at mooring lines for intact cases. This talk also covers the commercial aspect for the FPSO projects in terms of comparative study and challenges faced by the industry players that may be beneficial to all parties involved not only in the oil and gas sector but in the marine industry as well.



BIODATA OF SPEAKER

Ir. Nik Mohd Hasmizie, *B.Eng (Mechanical), P.Eng, MIEM, CEng, CMarEng, MIMarEST*, has 15 years of experience in the Marine & Oil and Gas industry as a Professional Engineer, Chartered Engineer and Chartered Marine Engineer. He is experienced in marine & oil and gas construction projects of different sizes and complexities. He had previously worked with EPCIC Company, Classification Body and Client as a Project Manager, Project Engineer, Surveyor, Mechanical Engineer, Owner representative for marine and offshore projects. Ir. Nik Mohd Hasmizie serves as the current Vice Chairman of the Marine Engineering & Naval Architecture Technical Division of the Institution of Engineers Malaysia (IEM). He is a certified Welding Inspector (CSWIP 3.1) and Radiographic Interpreter (CSWIP 3.4) of the CSWIP, United Kingdom

Maziah Suraya Abd Majid is a Naval Architect by training. Currently, she is attached as a Contract Lecturer with Malaysian Maritime Academy (ALAM), a subsidiary of MISC Berhad. Maziah Suraya has over 10 years' experience in the naval architecture field. Her work experience included working on numerous oil and gas projects through West Africa, Offshore Brazil, Middle East, South East Asia and Australasia. She has worked for a few main engineering contractors in Engineering, Procurement, Construction, Installation and Commissioning (EPCIC) projects for engineering scope. Most of her work in the last 10 years has been on major conversion of Floating Production Storage Offloading (FPSO) as well as Transportation and Installation (T&I). Her responsibilities included providing engineering output on conceptual and basic engineering for conversions and modifications of FPSOs. She is also familiar with the stability, hydrodynamics, mooring lines and structural aspects of the floating offshore structures. Maziah Suraya has a Bachelor of Engineering (Mechanical – Marine Technology) from Malaysia University of Technology, Skudai Johor, Malaysia graduated in 2006 and previously completing a Diploma in Mechanical Engineering from MARA University of Technology, Shah Alam, Selangor, Malaysia in 2002. She is also an alumni of Sekolah Tun Fatimah, Johor Bahru, Malaysia.

Rear Admiral Dato' Pahlawan Ir. Hj. Jasan Ahpandi bin Sulaiman (Rtd)
 Chairman
 Marine Engineering and Naval Architecture Technical Division

ANNOUNCEMENTS TO NOTE:

- **Non-members** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- Limited seats are available on a "first come first served" basis (maximum 100 participants). **To secure your seat, kindly register online at www.myiem.org.my.**

ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- Student Members are however exempted.

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