

# Technical Visit to Faculty of Engineering, USM and Boustead Penang Shipyard (Pulau Jerejak) Malaysia



by En. Muhammad Hilmi bin Raja A. Aziz

## MARINE ENGINEERING AND NAVAL ARCHITECTURE TECHNICAL DIVISION

**THE** Marine Engineering and Naval Architecture Technical Division organised a technical visit to Faculty of Engineering, Universiti Sains Malaysia (USM) and to Boustead Penang Shipyard Sdn. Bhd. (BPS) on 19 and 20 October 2012. A total of 20 participants took part in this technical visit.

USM, Engineering Campus is located in Nibong Tebal, Seberang Perai Selatan, Pulau Pinang, Malaysia. There are 6 Engineering Schools in USM and all Schools are well equipped with state-of-the-art infrastructure. The Engineering Schools in the Engineering Campus of USM are:

- School of Civil Engineering
- School of Chemical Engineering
- School of Aerospace Engineering
- School of Mechanical Engineering
- School of Electrical & Electronic Engineering
- School of Materials and Mineral Resources Engineering.

The purpose of the visit is to understand and explore the facilities and capabilities readily available in USM Engineering Campus. The visit will enable IEM members to get proper exposure to USM Engineering facilities and expertise, so that potential cooperation and collaboration can be forged.

During this visit, Engr. Assoc. Prof. Dr Mohd. Rizal Arshad, Deputy Dean from School of Electrical & Electronic Engineering, gave a talk about the development of a Remotely Underwater Vehicle (ROV) for ocean explorations. The talk revolved on the efforts in developing a ROV for shallow water, i.e. coastal applications, which were kick-started in USM in year 2000. The research and development efforts have strived to capitalise on the available local engineering talent and seeks to optimise or produce a robust and reliable ROV system for the industry.

The technical visit to BPS was scheduled on the second day of this programme. BPS's principal activities presently include shipbuilding, oil & gas fabrication and marine engineering construction. BPS shipyard is strategically located at Pulau Jerejak, off Penang Island. It is accessible from Bayan Lepas Free Trade Zone, Penang International Airport and Penang Port. The journey from BPS's Jetty, Batu Maung (8km from Penang Airport) to the shipyard takes approximately 15 minutes.

BPS is fully equipped with necessary infrastructure and facilities to cater for the shipbuilding activities for vessels of up to 120 metres in length and 10,000 DWT. Total yard space is about 40 acres which accommodates major facilities including slipway of 110 metres, bulkhead construction area of 200 metres, hangers, covered workshops, warehouse and various lifting capacities.



An explanation on the current construction by Head of Commercial Division of BPS



Delegates who boarded the 111m Accommodation Barge (H132)

BPS has achieved excellent safety record in the oil & gas projects and received HSE awards from PCSB, SSB, and EMEPMI & MSOSH. Emphasis has been placed on the implementation of safety procedures as stipulated in the company's Health, Safety & Environment (HSE) manual.

BPS constantly strives to achieve total commitment in terms of quality and has established a well-maintained documented QA System. This system meets the International Standard of ISO 9000 quality system. BPS was awarded the international BS EN ISO 9002 certification by BVQI on 28 December 1996 as an Engineering, Project Management, Procurement and Fabrication contractor. This award has been upgraded to ISO 9001-2000 in 2003. This Quality Management System was changed to BSI Certification on 22 November 2006.

The objective of the visit was to obtain an in-depth view of the shipbuilding activities in BPS. This would provide better exposure and understanding of shipbuilding activities at BPS. During the trip, Rear Admiral Dato' Pahlawan Ir. Jasan Ahpandi bin Sulaiman, Head of Commercial Division of BPS, shared his experiences in project management and information about BPS. The shipyard is dependent on knowledgeable and highly skilled workers to deliver better vessels. There was active participation from the delegates during the presentation and Q&A session.

The presentation was followed by a tour around the dockyard. All participants had the opportunity to see some of the vessels that were still under construction. In addition, BPS also allowed the participants to go on board the 111m Accommodation Barge (H132) which was built for one of its clients. ■

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