



MARITIME INSTITUTE OF MALAYSIA

SEA WORKHORSES : OSV DEPLOYMENT IN ASIAN WATERS



NAZERY KHALID

Shipbuilding, Repair & Conversion World Conference
Beijing, 26-27 July 2007

PRESENTATION OUTLINE

- ➔ Oil market scenario.
- ➔ Search for oil in deepwater.
- ➔ Overview of Offshore Support Vessels (OSV).
- ➔ OSV deployment and market in Asia.
- ➔ Offshore activities in Asian waters.
- ➔ Features of OSV.
- ➔ Prospects.

OIL'S NOT WELL? OIL MARKET SCENARIO

- ▶ World's oil need : 82 mil. barrels/day.
- ▶ IEA projected this to double by 2030.
- ▶ Current reserves : 1.93 tril. barrels.
- ▶ Production depletion rate : 1 mil./day.
- ▶ Peak oil : no longer a myth?
- ▶ Imbalance in production / consumption and instability in oil-producing nations causing jitters.

DEVELOPING DEEPWATER

- New mantra : Diversify supply. This has led to exploring new frontiers.
- Quest for O&G goes further, deeper.
- Deepwater definition will change as deeper frontiers are explored.
- Cost to drill a well : US\$30-50m.
- Cost to develop a single field : US\$1b.

FACTORS DRIVING DEEPWATER DEVELOPMENT

- ▶ Traditional fields fast exhausting.
- ▶ Rising world energy demand, propelled by developing countries.
- ▶ Bullish forecast of deepwater reserves.
- ▶ Availability of E&P technologies and strong support services.
- ▶ Jitters over oil supply.

OSV IN ASIA

- ➡ OSV play critical role in supporting the offshore oil & gas (O&G) industry.
- ➡ Needed in exploration & production (E&P), transportation of crew and supplies, maintenance activities.
- ➡ Boom in Asian offshore O&G activities has increased demand for OSV.
- ➡ OSV deployment most prominent in deepwater.

OVERVIEW OF ASIAN OSV MARKET

- ➡ Leading yards like Keppel (Singapore), Bharati (India) & Yantai Raffles (China) booming with OSV orders.
- ➡ Some yards like Sealink (Malaysia) not only build OSV for clients but own and operate own OSV fleet.
- ➡ Market is bullish - most OSV easily leased out on long-term or spot charter.

OVERVIEW OF ASIAN OSV MARKET

- ➡ More orders built to specs of clients than secondhand orders.
- ➡ Boom in newbuilding orders is in favor of OSV suppliers to win long-term contracts from oil majors.
- ➡ Chartering of OSV a lucrative business – can fetch margins up to 40%.

OSV USED IN ASIAN WATERS

- ➡ Conventional offshore supply / support vessels (OSV).
- ➡ Platform supply vessels (PSV).
- ➡ Anchor handling tug supply (AHTS) vessels.
- ➡ Tugboats.

CONVENTIONAL OSV



CONVENTIONAL OSV

- ➡ Used to support operations of offshore O&G industry.
- ➡ Typically carries supplies and crew to offshore sites / platforms.
- ➡ Usually not exceeding 6,000 GRT in capacity.
- ➡ Produced in many yards across Asia.
- ➡ Increasingly fitted with state-of-the-art components, systems and technology.

PSV



PSV

- ➡ Ship specially designed to support offshore oil platforms.
- ➡ Services provided : supply of drilling muds, fuel, chemicals, water, pulverized cement, tools used in drilling process; crew transportation.
- ➡ Range from 65-350 feet in length.
- ➡ Can handle special tasks like laying, monitoring and retrieving seismic cables.

AHTS



mmc-shipdesign.com

AHTS

- Provide supply to oil platforms.
- Tow platforms to location.
- Anchor platforms to seabed.
- Act as Emergency Rescue and Recovery Vessels (ERRV).

TUGBOAT



TUGBOATS

- ▶ Pull and push ships into and out of harbors and through rivers and canals.
- ▶ ‘Tow’ ships in distress / out of accident areas.
- ▶ ‘Tow’ barges and equipment.
- ▶ Carry construction materials to and from offshore development sites.
- ▶

TREND IN ASIAN OSV ORDERS

- ➡ Growing orders for multipurpose anchor handling tug supply (AHTS) vessels and platform supply vessels (PSV).
- ➡ More conversion activities at yards i.e. converting seismic vessels into OSV.
- ➡ Growing emphasis on hi-tech equipment, ruggedness, functionality and comfort features.

ISSUES AND CHALLENGES

- ➡ Boom in offshore activities in Asian waters demand yards to increase production.
- ➡ Rising costs of production i.e. raw materials, equipment and labor.
- ➡ Many yards still labor-intensive, lack capacity, lack of hi-tech focus.
- ➡ Ageing fleet of OSV i.e. average age in Malaysia is 20 years.

ISSUES AND CHALLENGES

- ➡ More OSV deployed beyond useful life with upgrading and refurbishment.
- ➡ O&G prospects in SEA mainly stranded fields hence the need for more robust and unconventional OSV.
- ➡ Case of OSV being regulated under specific rules for better regulation.

PROSPECTS

- ➡ High demand set to continue as deepwater projects kick off and more discoveries are made.
- ➡ More focus on compliance with regulations i.e. MARPOL and IBC Code on carriage of chemicals.
- ➡ Greater emphasis on safety and comfort features.

PROSPECTS

- ➡ High demand set to continue as deepwater projects kick off and more discoveries are made.
- ➡ More focus on compliance with regulations i.e. MARPOL and IBC Code on carriage of chemicals.
- ➡ Greater emphasis on safety and comfort features.

謝



MARITIME INSTITUTE OF MALAYSIA

XIE XIE!

謝謝



nazery@mima.gov.my

www.mima.gov.my