

## MARINE ARCHITECTURE

# Combing specialist knowledge for vessel designs

SPECIALIST marine consultancy Commercial Marine Solutions (CMS) started operating in 2004 to provide cost-effective solutions to the marine, oil and gas industries.

The company's staff are experienced and qualified marine professionals. They combine their skills and technical know-how with a practical approach, and use the latest software tools to create practical solutions for clients.

Since its inception, CMS has successfully completed a number of projects to its clients' satisfaction including Floating Production and Storage Offloading stability, major structural modifications and other projects.

The company provides marine design and consulting services to a number of industries within multiple market segments including the oil and gas sector.



A 45-metre Crew Supply Vessel

CMS has experience across numerous vessel and material types including steel and aluminium, and provides consulting

advice on ships of all sizes as well as the design of various vessel types that range from 6.5 to 45 metres in length.

The company, and in particular its principal Sean Johnston, has been recognised by clients as a professional, provider of engineering solutions to the marine, and oil and gas industries. Legal professionals also seek out advice from CMS.

Sean Johnston has had an extensive career in the marine industry, where he started as a boat builder and later graduated from the University of NSW with a Bachelor's degree in Naval Architecture. Mr Johnston's experience in boat and ship building spans more than 30 years, and has equipped him with skills and specialist knowledge across a range of industries and vessel types.

CMS is passionate about creating innovative, practical and cost-effective design and consulting solutions for the marine industry.

## New approach in demand for offshore terminal tugs

A NEW approach to tugboat design may be in demand for offshore floating liquefied natural gas (FLNG) terminals currently being planned for Australian waters.

Lightning Naval Architecture (LNA) views this as a very interesting challenge and has initiated research, design and calculation work to develop a draft offshore tug proposal that analyses the many operational aspects.

These offshore terminal tugs will operate independent of shore facilities for five-week periods. According to LNA, as most terminal tugs are seldom more than a few hours away from their shore base, the new design would set new demands for seaworthiness, stability, operational safety, redundancy and crew comfort. Minimum ship motion is the key parameter towards providing a stable and safe work platform.

The SAFETUG joint industry project has investigated various aspects of terminal tug design, with particular focus on bollard pull, stability and ship motions during escort operations.

LNA design director Hans Stevelt believed the design of the new fleet of tugs must also focus on redundancy and delivering maximum bollard pull within size and cost constraints. These constraints were related to the peculiarity of an offshore FLNG facility aimed at unlocking relatively small and otherwise stranded gas reserves where annual production capacity may only match the carrying capacity of 50 large LNG and condensate tankers.

LNA prepares the *Pilbara Titan*, a 30.6-metre coastal service terminal tug, for a lightship survey



## The best deal for commercial ships sourced worldwide

ESTABLISHED in 1976, Oakley Shipping is an international commercial ship brokering company based in the city of Geelong, Victoria. It caters to the Asia-Pacific and Australian markets, and specialises as a commercial sale and purchase broker for fishing boats and licences, ferries, supply vessels, tugs and barges.

Oakley Shipping has an extensive national and international market

presence, and through its associates in many countries it provides the best opportunity for both buyers and sellers of all types of vessels.

"Through our links with other international brokers, we are able to assist in offering and procuring available vessels for clients throughout the world," Oakley Shipping broker principal Richard Oakley stated.

The company's aim is to provide clients with accurate information about vessels for sale and to supply them with adequate offers without delay. Oakley Shipping also assists in the arrangement of ship inspections and the negotiation of contract terms.

The company markets vessels for sale among worldwide connections to obtain acceptable offers of purchase. Marketing

is done through the internet and marine publications or by direct mail to operators, owners and other industry-related companies.

Oakley Shipping believes that whether clients are buying, selling, chartering or leasing a commercial vessel or licence, business dealings with the company will be handled in a highly skilled and efficient manner.



A twin screw, 30-metre, 2 x 1200 horse power Cummins NKK class



A 42-metre AHT under construction in a Southeast Asian shipyard