

# Simulators – next best to real thing

LNG carrier cargo-handling simulators have proliferated and offer valuable tuition for both junior and senior ranks in career development

When it comes to the provision of LNG tuition, the most important development of the past 12 months at the Anglo Eastern Maritime Training Centre in Mumbai has been the commissioning of a new liquid cargo handling simulator. Integral to the simulations of main deck/cargo tank piping flows, the cargo control room activities and the digital control system on the establishment's full mission simulator are eight student workstations, the instructor console and a debriefing table and projector.

"By simulating every step in all the cargo-handling operations carried out on an LNG carrier, the package provides a virtual reality effect and enables us to track precisely the progress being made by each individual student," says Capt KN Deboo, director and principal at the Anglo Eastern Maritime Training Centre.

"It has been observed that simulator training increases a student's understanding and assimilation of cargo-handling procedures 10 times faster than a conventional 'chalk and talk' classroom lecture and from our experience to date we concur fully with that view."

The Anglo Eastern Maritime Training Centre is catering for the growing opportunities available for Indian officers on LNG carriers and is also responding to developments taking place in the industry, as evidenced by the new courses aimed at crews for offshore LNG vessels.

The LNG shipping industry has done a good job in setting prescribed training requirements for shipboard personnel, both as regards shore-based and shipboard training, through the provision of the Society of Gas Tanker and Terminal Operators' (SIGTTO) competency standards and the IMO model course for LNG cargo and ballast handling simulator," continues Capt Deboo. "Our LNG simulator course is approved by both DNV SeaSkill under the SIGTTO competence requirements and the Indian administration under the IMO model course."

Another training establishment that has been bedding in its LNG cargo handling simulator capabilities over the past year is the STAR Center in



*The LNG cargo tank/piping panel on the Anglo Eastern simulator provides an exact replica of the ship*



*Kongsberg LPG carrier manifold simulation, showing frosted loading arms*

the US. The Center has been successful in getting its MPRI LNG simulator course approved by the US Coast Guard (USCG) for the credit of one load and one discharge towards the USCG's experiential requirements leading to a Tankerman Person in Charge (Liquefied Gas) endorsement.

"This arrangement allows American Maritime Officers (AMO) members sailing on internationally flagged LNG vessels greater flexibility in meeting domestic tankerman requirements," states Capt Jerry Pannell, director, member training & officer development at the STAR Center. "Domestic licensure and endorsement is the driving factor in obtaining