



The Maritime SIMULATOR newsletter

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Meet us at the Exhibitions:

Posidonia, Greece:
2nd - 6th June
Stand No. 360

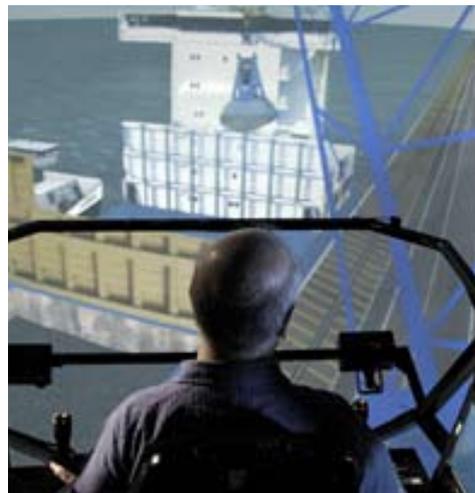


ONS2008, Norway:
26 - 29 August
Stand No. C 340



Acquisition of Global-Sim extends the portfolio to include crane simulation

Kongsberg Maritime has acquired the Draper, Utah, U.S. based technology enterprise Global Sim for approx. MNOK 100.



Global Sim delivers products and services in the field of crane simulation for the training of crane operators around the world, and holds a market leader position in maritime crane simulation.

The acquisition extends Kongsberg Maritime's portfolio and will further strengthen our position as a leader within the field of Maritime Simulation and Training.

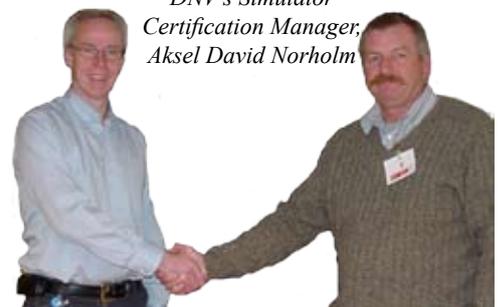
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KM Simulators lead the way with 26 new DNV approvals

A total of 26 Kongsberg Maritime Neptune Engine Room Simulators (ERS) and Cargo Handling Simulators (CHS) have received new Det Norske Veritas (DNV) Statement of Compliance in January 2008, according to the latest standards.

*KM's Product Advisor,
Harald Klucken and
DNV's Simulator
Certification Manager,
Aksel David Norholm*



read more at page 4

Acquisition of GlobalSim extends the portfolio to include crane simulation

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“The need for advanced training tools and solutions is increasing within both traditional maritime education and within the training and operation of offshore applications. With crane simulation as part of our product offering we can now provide an even better service to the maritime training industry” remarks Lars Erik Hilsen, Managing Director in Kongsberg Maritime - Simulation & Training.

In addition to Global Sim’s leading position in crane simulation, the company has a core competence in delivering immersive training simulators, currently being delivered to the US Navy. The technology and competence developed for the immersive training simulators offer interesting opportunities for applications in simulating crews in handling critical situations in a highly realistic setting where instructors

monitor and assess each team member and the team.

Global Sim’s product line has been offered to the market for 15 years, and since the establishment of the company Global Sim in May 2002, it has experienced strong growth. The two players combined offer several interesting opportunities for potential new application areas”, says Scott Huntsman, President and CEO of Global Sim.

United Kingdom

New software provides full ship Simulation for Cruise Industry

Kongsberg Maritime is now developing new software, in conjunction with South Tyneside College, which will allow a live connection between the engine room and the bridge in a simulated cruise vessel.

This will enable engineers and bridge staff from cruise ships to be trained together in live realistic exercises so that they can experience the implications of their actions in a safe environment.

The maritime and port industries already benefit from integrated ship simulation training for a range of crew resource management courses.

As well as offering tangible financial benefits from insurance savings, the integrated courses can vastly improve communication and understanding between the bridge and engine room and allow ship personnel to operate more effectively as one team.

Chris Thompson, Head of Marine Simulation at South Tyneside College, said: “This new software will revolutionise operational training for the cruise industry. Although training programmes already exist for bridge and engine room cruise vessels separately, there really is no substitute for training exercises which simulate a real-life situation in real-time with the entire



ship’s staff working together.

“This training will ensure that engine room and bridge personnel from cruise vessels learn to function more effectively as a cohesive team and gain a much greater understanding of the challenges and demands facing each other’s working areas.

“Hopefully this will have a tangible financial impact for the sector, as well as reducing the number of accidents and incidents at sea.”

South Tyneside College is today one of only a handful of training organisations across the world to offer a live link-up between the bridge and the engine room.

ST. Petersburg, RUSSIA

First LNG Cargo Handling Simulator in Russia; Opening at Makarov Academy

Makarov State Maritime Academy, St. Petersburg, Russia officially opened its new Kongsberg Maritime supplied Neptune LNG Simulator on 13th March 2008.

The Simulator is reported to be the first and only one of its kind in the Russian Federation, and has attracted the attention of many international crewing and ship management companies, several of whom attended the opening.

The new Neptune LNG Simulator provides training facilities for cargo mates and marine engineers on both Spherical and Membrane LNG tankers and has been developed to provide focused training benefits for students and seafarers at all levels of experience. "The Simulator is going to be used for training of personnel for LNG tankers, both cadets' education and seafarers re-training," stated the Deputy Rector of the Academy, Professor Nikolay Alekseyev during the opening ceremony.

Makarov Academy's LNG Training Program Instructor Capt. Victor Shlyakhtinyuk said that he is very impressed by the simulator training abilities, which include routine cargo operations as well as auxiliary systems and emergency operations. Individual training, group training and team training can be conducted both under instructor supervision, and without.

The advanced Neptune instructor software utilises a user friendly interface to ensure that the instructor has full control of the exercises and the information that is pre-



Makarov State Maritime Academy, St. Petersburg, Russia recently opened its KM supplied Neptune LNG Simulator.

sented to trainees. It provides pre-programmed training scenarios, E-coach automatic messaging for trainees and automatic performance assessment. Additionally, all training sessions are recorded and can be replayed for debriefing afterwards. "It is critical that LNG shipping companies employ crew and engineers with the right training to ensure the safe handling of a very dangerous cargo and with the LNG transport market continuing to expand in Russia the first LNG simulator has definitely come at the right time. It was great to see so many international shipping companies attending the opening and we are confident that our solution will help the Makarov Academy to serve the Russian shipping community even better," comments Dr. Andrey Kozhevnikov, Product Consultant for Kongsberg Maritime in Russia.



Professor Nikolay Alekseyev (to the left) and Lawrie G. Campbell (to the right)



Instructor Victor Shlyakhtinyuk

New Certifications

KM Simulators lead the way with 26 new DNV approvals



A total of 26 Kongsberg Maritime Neptune Engine Room Simulators (ERS) and Cargo Handling Simulators (CHS) have received new Det Norske Veritas (DNV) Statement of Compliance in January 2008, according to new standards laid out in DNV Class A – Standard for Certification of Maritime Simulators No. 2.14 October 2007, which is based on the requirements of STCW Convention, Regulation I/12.

The purpose of the approval is to ensure that the simulations provided by the simulators include an appropriate level of physical and behavioural realism in accordance with recognised training and assessment objectives. Kongsberg Maritime is the first maritime simulation supplier to be certified to this level, which we believe reflects our position as a technology leader in the field of ERS and CHS.

The new Approvals, which are valid through 21/01/2013, were awarded to Kongsberg Maritime's Neptune Simulators, with 18 ERS and 8 CHS achieving the stringent new Performance standards that were introduced in October 2007.

"Kongsberg Maritime continuously develops and improves its simulator products to meet and exceed certification requirements and market demands. Our development program and close links with DNV ensure we maintain our leadership in supplying the best in maritime simulation products and being first and foremost to receive these Approvals," comments Harald Kluken, Product Adviser, Engine Room Simulators.

Kongsberg Maritime has been supplying the Neptune ERS and CHS to training organisations around the world for 30 years. We pride ourselves on our ability to exceed the required standards and boasts a wealth of Approvals across its entire simulator product family. Neptune has become an extremely popular ERS and CHS solution, thanks to its high fidelity simulation and flexibility derived from the sheer number of models available and the various

ways in which it can be deployed, such as desktop, web-enabled or full mission configurations.

"This latest Approval is vital as it ensures that our products offer only the highest levels of performance, which is something that the maritime training institutes that use Neptune ERS and CHS have to offer their customers and students to ensure the best possible training experience," concludes Harald Kluken.

The new DNV Type Approvals are for the following simulators:

Engine Room Simulator

Neptune ERS MAN B&W 5L90MC VLCC-L11-III
 Neptune ERS MAN B&W 5L90MC VLCC-L11-IV
 Neptune ERS MAN B&W 5L90MC VLCC-L11-V
 Neptune ERS Sulzer 12RTA84-Container-L11-II
 Neptune ERS Sulzer 12RTA84-Container-L11-III
 Neptune ERS MaK-8M453C-Corvette-M11
 Neptune ERS MaK-8M32C-Trawler
 Neptune ERS MaK-6M453-M22-River
 Neptune ERS Pielstick-10PC4 M22-Ferry
 Neptune ERS Pielstick-10PC4 M22-Container Vessel
 Neptune ERS Pielstick-PC4-M22-IV-Auxillary Oil Tanker
 Neptune ERS Pielstick-6PC20-M21-Multi Purpose Vessel
 Neptune ERS Diesel Electric-AC-AC-Cruise Vessel- DE22-III
 Neptune ERS ASP25-VLCC-SP11
 Neptune ERS Steam Propulsion Dual Fuel
 Neptune ERS MTU-V12-Waterjet-H22
 Neptune ERS GE-LM2500-30-Gas Turbine
 Neptune ERS CODOG-MTU-LM2500-CO2"-Frigate

Cargo Handling Simulator

Neptune CHS CC Chemical Carrier
 Neptune CHS PrC Product Carrier
 Neptune CHS VLCC Very Large Crude Carrier-DH
 Neptune CHS VLCC Very Large Crude Carrier-II
 Neptune CHS LNG Liquefied Natural Gas Carrier-S
 Neptune CHS LNG Liquefied Natural Gas Carrier-M
 Neptune CHS LPG Liquefied Petroleum Gas Carrier
 Neptune CHS VLCC Load Calculator (Class S-Standard)

DENMARK/NORWAY

Anchor Handling Simulator contract with Maersk Supply Service



Kongsberg Maritime Simulation & Training and Maersk Supply Service, the leading player in the support vessel industry have entered into an agreement to further develop the existing cooperation in simulator development between the two companies.

The focus of the agreement will be the development of a unique anchor handling simulator, which will utilise the technology and experience the two companies have gained over ten years of collaboration in the field of marine simulation.



The KM Anchor Handling Simulator delivered to Maersk 10 years ago.

“The anchor handling simulator software must be developed to meet some very specific needs so by extending our co-operation

agreement, we can be sure that our requirements for a flexible and scalable solution are met, in what is a very technical advanced simulation product and which will encompass the application knowledge we possess,” comments Albertus Zwiers, Director Technical Vessel Operations, Maersk Supply Service.



The anchor handling simulator development contract is worth NOK 12-15 mill and the first installation is expected Q4 2008. Once in place, it will provide Maersk Supply Service with a unique tool to develop its anchor handling training program and will strengthen the company’s position as the world leading supplier of anchor handling training and vessel operations.

“For Kongsberg Maritime this represents an important step to broaden our product portfolio within offshore applications. Complexity is increasing which requires applications that reduce ship and crew downtime to a minimum whilst improving safety at the same time,” says Lars Erik Hilsen General Manager of Kongsberg Simulation and Training.

Founded in 1967, Maersk Supply Service is recognised as the leader in the offshore support vessels sector and its 50+ strong fleet includes combined anchor handling tug/supply, large platform supply, cable laying and multi-scope vessels. The company’s stated focus on high performance, innovation, reliability, quality and safety reflects its choice of Kongsberg Maritime as its preferred partner for the development of new anchor handling simulation tools.

“Do you want to learn more about our Anchor Handling Simulator and other Maritime Offshore simulators?”

**- Please visit our web-site:
www.km.kongsberg.com**

“At Ship’s Simulation’s site you can find datasheets for Anchor Handling as well as for Dynamic Positioning Simulation.

*You may also contact:
Søren E. Veierland at e-mail:
soren.einar.veierland@kongsberg.com for further information”*

Xiamen, CHINA

Successful User Conference in China!

Approx. 80 delegates from China and other Asian countries attended the Kongsberg Maritime (KM) Simulation User Conference 2008 in Asia. The event took place 11th – 13th March at the Sofitel Plaza, Xiamen in China.

Theme for the conference this year was ‘Maximizing the use of simulators’, and included presentations of how the customers extend the use of simulators e.g. for assessment, in integration and even for R&D when expanding the Panama Canal!

Kongsberg Maritime’s agent, Hoi Tung Communication & Navigation co-hosted the Asia UC2008 together with Jimei University, which is a modern institute, possessing among other a huge Kongsberg Maritime 360° Full Mission Ship’s Bridge Simulator. Mark Treen, KM Simulation’s Sales and Marketing Manager, opened the conference and was followed by the Chairman of Hoi Tung, Jiao Tianyue and the President of Jimei University, Gu JianDe, who both expressed the honour of co-hosting the KM’s User Conference 2008.



Participants at the Kongsberg Maritime Simulation’s Asia User Conference 2008

During the three day conference customers and partners shared experiences of how they maximize their use of simulators. Technical Manager, Eldred Apolar, presented experiences from Mastech, a KM Service Center, while Capt. Krishnan Gopala, Manager at Singapore Maritime Academy, shared experiences with targeted training towards specific market segments and focused on the Simulators as a powerful tool, when used correctly. Capt. Reynold Sabay, CEO at the New Simulator Center of the Philippines, took the simulators

beyond training limits by showing how they can be used for objective assessment of competence without human invention. Also Dandy Galang from MAAP held an interesting speech about integrated ship simulators for full crew training while Capt. Rogelio Altafulla, from the SIDMAR Centre, Panama Canal Authority presented how they used the KM Simulator technology when they expanded the canal to find the best possible flow directions and velocity.

Kongsberg Maritime gave an overview of how KM is meeting the challenge to support the company’s increasing number of users in Asia/Oceania by offering a broader range of products and improvement of the sales and support channels through network partners and KM offices.

KM Simulation has recently extended its product portfolio with both Crane Simulators and Off-shore Simulators such as Anchor Handling and Dynamic Positioning. Also, key recent product innovations were presented to the delegates by the different Product Advisors.

Jimei University



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Petter Buskland, Manager of Customer Support, gave an update on service innovation and experiences from cost-effective on-line trouble shooting. As E-learning has more and more become an actual educational tool for training institutes, KM Product Advisor, Serge Côte presented web-enabled simulator training.

The conference also featured a one-day visit to the impressive Ji-meí University. The President Gu JianDe gave the delegates a warm welcome before they all went for a guided tour at the University's premises. This tour included of course a visit to the new simulation centre, possessing the 360° Full Mission Ship's Bridge Simulator delivered by Kongsberg Maritime earlier this year. Garland Hardy, President and Simulator Expert from Lantec, Canada demonstrated for the delegates how to use the simulator and took the attendees on a simulator-trip to the Xiamen-har-

bour before they left for different workshops.

Mark Treen rounded off the conference with a summing up of the fascinating days where the delegates had shared how they maximize the use of simulators. KM had presented new training opportunities with offshore, crane and web-enabled simulation and given an update on new features and development as well as an update on the KM Customer Support concept. He told how Kongsberg Maritime will continue to maximize the company's synergies between the real on-board equipment and the simulated and further maximize the company's depth of knowledge with people and experience and added that the company is committed to delivering cutting edge technology and enabling continuous innovation to allow users to the educational usage of Kongsberg Maritime simulators!



The European UC2008 will be in Szczecin, Poland!

The next User Conference in Europe will be held in Szczecin, Poland in cooperation with the Maritime University in Szczecin, *Academia Morska*. The event will take place 23rd to 25th September. Our customers will soon receive an invitation by mail.



The Netherlands



New contract allows integration between SBS and ERS

New Polaris SBS contract allows Maritiem Instituut De Ruyter to Integrate between SBS and ERS, which opens new training possibilities!

The contract for delivery of a Polaris Ship's Bridge Simulator was signed 18th March and included the possibility of inte-

gration between the new Polaris Ship's Bridge Simulator and the Institute's existing Engine Room Simulator, also delivered by Kongsberg Maritime.

In addition to independent use of the simulators, connecting the two will give an even more realistic and comprehensive training tool. Maritiem Instituut De Ruyter will thus be able to deliver a larger variety of internal and external courses.

By integrating the simulators, the bridge simulator will send commands and signals, such as notch, rudder, speed, course, el-demands as bow thruster order and start/stop to the ERS that will respond to the given commands from the bridge, and send the pro-

peller trust calculation results as responses up to the bridge. The ERS will also send signals to the bridge concerning the status of the propulsion plant.

Kongsberg Maritime, Simulation has today about 250 Hydrodynamic Models for the Polaris Ships Bridge and a number of them are ready for the above integration with the sophisticated and most used KM Engine Room Models such as VLCC with Man B&W, Container with RTA, Ferry with Pielstick and WaterJet/MTU.



Multiflex panels –a flexible and cost effective panel solution!

Utilising the latest in touch sensitive technology, Kongsberg Maritime has developed the Multiflex Panel, a flexible touch screen panel that can be configured with up to 5 panel functions.

During an exercise, students can easily switch between different functions e.g. Doppler log and Echo sounder on the same panel. The instructors can easily choose between a wide range of panel functions to be selected from the Instructor-PC into the Multiflex Panels or they can use pre-configured training scenarios for a specific ship class with the panels required.

In addition any combination with real hardware such as rudder, throttle and azimuth is possible and the Multiflex Panel can easily



be integrated with existing Polaris installations. In total, more than 70 different panel functions will be available from 1st July this year, representing a major step forward in new cost-effective simulation training solutions from Kongsberg Maritime. “Our Multiflex

Panels will provide our customers with enhanced flexibility and enable them to re-configure their bridge instrument set-up to meet their own customer training requirements” says Terje Heierstad, Product and Technology Manager of Kongsberg Maritime

Kongsberg gets closer to reality with enhanced visual systems

Kongsberg Maritime, through its long experience in delivering integrated projection visual systems launches now its new Image Calibration Tool.



The next technology step towards providing a seamless display is now launched in the form of a new Image Calibration Tool. The tool includes features such as digital keystone and edge algorithms, pixel positioning and re-positioning and colour correction.

All provide a physically accurate image to the projectors, compensating for any off-angle projection, with perfect linearity. The geometry correction tool also includes network access to all Image Generator (IG) computers, full overview interface to all channels in a multi-channel bridge simulator as well as file storage and back-up.

“With the latest version of SeaView R5 including this Image Calibration Tool, blending, edge matching and so called warping of the image, gives us almost unlimited possibilities. Now Kongsberg

Maritime customers requiring theatre style visuals, can utilise the latest in image calibration with a majority of the low, medium and high end commercial of the shelf (COTS) projectors available without impacting image quality” says Terje Heierstad, Product and Technology Manager of KM.

