

AUSTRALIA

New Australian agent - AAL Australia Pty Ltd.



Situated in Sydney, the company will be representing Kongsberg Maritime - Simulation in sales, marketing as well as service and support of our maritime simulators to the Australian market.

AAL Australia is the Australian subsidiary of Air Affairs Ltd (AAL) (New Zealand). The company's expertise and competence includes simulation and computer based training (CBT). AAL supplies, installs and supports simulation and training devices and has supported Kongsberg Maritime in the NZ territory for the past 10 years, and now brings that experience and knowledge to Australia.

AAL Australia's Managing Director is Paul Gilkison, a former Royal New Zealand Navy officer, and navigation specialist. He has 26 years' experience at sea, and has commanded several ships, including the Leander class frigates HMNZS Canterbury and HMNZS

Wellington. Mr. Gilkison has first hand experience instructing with maritime simulators, and was instrumental in developing the user requirement for the NZ Navy's bridge simulator. Together with his Australian staff, Mr. Gilkison brings knowledge from training and operational environments to provide an all round understanding of customer requirements and expectations.

Kongsberg Maritime takes this opportunity to thank our previous agent, Owen International Pty Ltd., for the business and work that they have carried out with commitment and enthusiasm throughout the past years. Owen International will continue their relationship with Kongsberg Maritime in a different capacity as local project management for the Australian Navy upgrade project.

We look forward with pleasure to collaborating with AAL Pty Aus-

Contact details for Australia Pty Ltd:

Paul Gilkison
Managing Director
AAL Australia Pty Ltd.
Tel: +61 1300 364 397
Mobile: +61 (411) 726 303
Email: paul.gilkison@aal.net.nz

Physical address
AAL Australia Pty Ltd.
108-110/243 Pyrmont St.
Darling Harbour
Sydney
NSW 2009
AUSTRALIA

Postal address
PO Box 449,
Haberfield
Sydney
NSW 2045
AUSTRALIA

tralia Ltd in the future. We trust that our customers will find them dedicated and service minded through their continuous communication, service & support and up-dates on Kongsberg Maritime latest technology and future product roadmaps.

SWEDEN

KMA experiences DP Growth

Kalmar Maritime Academy (KMA) enrolled its first student in 1842, and today over 600 students participate in education programs combining simulation, lab exercises and onboard the schools training vessel.

In addition to its general program education KMA offers extensive courses including Dynamic Positioning (DP). Since the first DP course in 2003 KMA has increased the number of DP courses in line with the markets increased need. To facilitate the DP train-

ing KMA utilises a Kongsberg Maritime SDP 21 simulator with a visual channel and two generic trainers.

Two types of courses are delivered at KMA, the DP induction/basic and DP advanced. The induction/basic course introduces the student, through theoretical and practical means, to DP familiarisation, DP functions, positioning system and bridge service with DP. The DP advanced training course initially repeats some of the key issues learnt previously and then exposes the student

to case studies whereby they must plan and execute DP operations in the DP simulators.

Well trained DP officers within the offshore and general maritime industries are in increasing demand which reflects the increased number of courses and students passing through KMA. The Academy though is well positioned for this growth and with its future investments in both facilities and instructors looks forward to meeting the growing DP industry demands.

BY BENGT KARLSSON, KALMAR MARITIME ACADEMY



KONGSBERG

03/07

The Maritime SIMULATOR newsletter

Publisher: Kongsberg Maritime
Editor: Simulator Division
Tel.: +47 33032000
Fax: +47 85028028
e-mail:
km.simulation.sales@kongsberg.com

content

PAGE 1-2
Successful European User
Conference 2007!
User Conference in The Americas

PAGE 3
A new role for simulation
Why Web-enabled?

PAGE 4


New contracts for Simulator
Systems
Contract with Norwegian Navy

PAGE 5
New Neptune ERS SP Simulator
Need for steam engineers in the
future

PAGE 6-7


Product News:
- New visual databases
- New SW panel
- New Hydrodynamic ownship
models

PAGE 8
New Australian agent
- AAL Australia Pty. Ltd
KMA experiences DP Growth

Successful European User Conference 2007!

BY ANNE VOITH



Participants at the Kongsberg Maritime European User Conference 2007

The Kongsberg Maritime's European Simulation User Conference 2007 (UC2007) took place 24th - 27th September in the beautiful township of Kalmar, Sweden. Approx 100 delegates attended from every corner of Europe with the purpose of sharing experiences and news in the spirit of "Optimizing the Maritime Educational Experience". The feedback from the conference itself was overwhelm-

ingly positive. Ove Germundsson of Chalmers Lindholmen University College, Sweden's statement reflected the feedback of the rest of the delegates: "I always look forward to meeting everyone at the conference, as we get to discuss ideas about the learning processes. Kongsberg Maritime conferences are already on a very high level so it will be difficult to raise the quality any further!" continues on page 2

User Conference in The Americas'

This year, the first segment will be our invitation to join us at the prestigious I/ITSEC 2007 Conference at the Orange County Convention Center, Orlando, Florida, from November 26th - 29th. As we have for the past 5 years, Kongsberg Maritime will be exhibiting at I/ITSEC. Complimentary Exhibit Visitor Passes will be provided. We will be holding our fourth Armed Services Technical Program on Tuesday, Nov. 27th, 09:00 - 13:00 at the Orange County Convention Center. The Americas' UC2007 will be Co-hosted by the University of Trinidad and Tobago (UTT) Maritime Centre at Chaguaramas, Trinidad. The theme for this year's conference is "Advanced Simulation and Instructional Design". The program commences on Sunday, Dec. 2nd, and wraps up on Wednesday, Dec. 5th, at the UTT Campus. Contact henry.tremblay@kongsberg.com for details.

continues from page 1. . .

Users sharing tips & tricks

The UC2007 was excellently co-hosted by the Kalmar Maritime Academy, which is a modern institute possessing a wide spectrum of Kongsberg Maritime simulators.



The three day conference included Kongsberg Maritime presenting the latest simulation development road map, ensuring that the delegates are aware of forthcoming products.

Kalmar Academy's head, Jan Snoberg and his lecturers presented how they optimise their simulator training by sharing their training experiences together with tips and tricks. Other customers, like Rene Imming, Nova College, Holland, presented experiences from the new Neptune Instructor System, while Poul Vibsig Pedersen, from SIMAC, Denmark, presented interconnected training between Bridge and Engine Room Simulators.

"Being in the same boat"



One of the conference's highlights was the presentation held by the Whitbread/Volvo Ocean Race skipper- & Olympic sailor Knut Frostad, who focused on teambuilding - "being in the same boat!". Delegates learnt from him that humour is a very important factor in a group - and

this seemed to follow the delegates the rest of the conference!

Flexible e-learning/web-enable

Several of the presentations also covered the interesting development of simulator training by e-learning/web-enabled methods. One of those sharing e-learning experiences and future opportunities was Allastair Creelman from Kalmar University. He also took the delegates with him into the "Second Life" which is a virtual world on internet where people can meet, negotiate and in the future; even study!



In addition to this Christina Nielsen and Fredrik Hjorth, lecturers at the Kalmar Maritime Academy, ran a practical demonstration showing how they run e-learning exercises and how the lecturer and the student can communicate.

Sandy Sweet from the Holland College in Canada closed this session by presenting the institute's experience with implementing e-learning in their training courses.

Conference offer

In fitting with the conference theme, Kongsberg Maritime announced a special promotion - a free three month trial of Web Enabled navigation and engine room simulators - which will enable its customers to optimize the educational experience for their students by taking advantage of the latest simulation technology.

'Web Enabled Simulation is a growing area in the world of maritime simulation and Kongsberg Maritime is spearheading its development,' comments Mark

Stuart Treen, Sales & Marketing Manager, Kongsberg Maritime Simulation.

The conference highlighted several new developments in this field. Although several customers already utilise our Web Enabled solutions, several used the opportunity and signed up for their three month trial at the conference.

Important customer feedback

The conference also featured workshops where the simulator users were given the chance to discuss the requirement for future simulator products. The input from the workshops serves as an important steering tool for the future simulator development in Kongsberg Maritime.



Mark Treen rounded off the conference with a sum up from the days and concluded that maritime training had different objectives to those a few years ago, can be delivered in new ways and must therefore be optimized to the needs of student. He added that this conference had, through presentations and discussions, provided a sharing of experiences and an excellent platform for customer feedback to ensure that Kongsberg Maritime stay at the forefront of simulator technology and deliver systems that truly optimize the maritime educational experience.

Next year's User Conference

Kongsberg Maritime - Simulation's next European User Conference, will take place in southern Europe in 2008!

Product News

BY ODD ARNE REBERG

New Visual databases (Exercise areas)

Kongsberg Maritime continuously develops new visual databases with exercise areas from all over the world. Below you'll find some visual examples from our latest databases.



Bodø (Norway)

Very high details inside Bodø harbour and medium to low level outside.

- Bodø harbour
- Sailing route outside Bodø in level 2.
- Implemented some important mountains



Grøtøyleia (Norway)

Other new databases in Norway :

- Svolvær
- Sandesjøen harbour
- Skrova
- Skutvik harbour
- Stokkvågen
- Onøy



Algiers (Algeria)

Other new databases:

- Salalah (Oman)
- Zimen (China)
- Nigbo (China)



Zeebrugge (Belgium)

High detail database of Zeebrugge harbour

New requirement

for those that are sailing through Bosphorus and Dardanelles :

Database package according to "Operations Bulletin 005/07 - Turkish Straits Policy"



Databases included are:

- Bosphorus
- Dardanelles

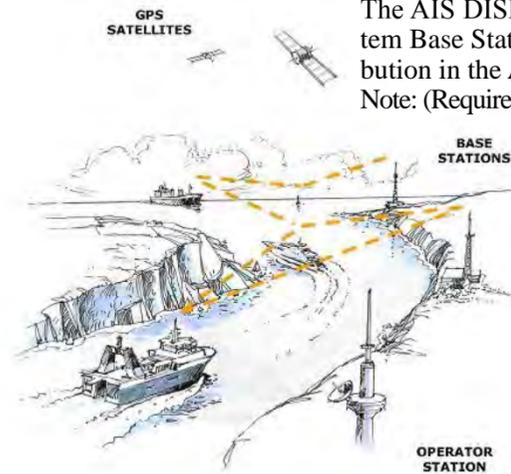
Note: All panels, models and databases identified in this Product News Section are available now. Please contact Odd Arne Reberg, email: odd.arne.reberg@kongsberg.com

Product News

BY ODD ARNE REBERG

New SW panel

The AIS DISPLAY is part of the core of an Automatic Identification System Base Station (BS) used for information collection and message distribution in the AIS VHF network.
Note: (Requires Polaris Release 5.4)



New hydrodynamic Ownship models



Container (CNTNR33)
Ship name: Humber
Bridge
Descript: Container ship
Displacement: 134900
Length: 318
Beam:46
Draught:14
Speed:25,8

Ferry (FERRY28)
Ship name: Ofoten
Description: Catamaran
Displacement:118
Length:33
Beam:10
Draught:1,5
Speed:30,5



Ferry (FERRY29)
Ship name: M/S Bodø
Description: Car ferry
Displacement:2357
Length:72
Beam:18
Draught:3.6
Speed:21

Ferry (FERRY30)
Ship name: Hålogoland
Description: Car ferry
Displacement:1561
Length:80
Beam:14
Draught:3.6
Speed:16



QMAX (Gas05L/B)
Ship name: QMAX
Descript: LNG Carrier
Displacement: 173300/141000
Length: 333
Beam: 55
Draught: 12/10
Speed: 19,5

QFLEX (Gas06L)
Ship name: QFLEX
Description: LNG Carrier
Displacement: 142700
Length:303
Beam:50
Draught: 12
Speed: 19,5



Product Carrier Tanker (PRODC07)
Ship name: Gotland Carolina
Description:Oil/Chem.
Displacement: 64330
Length: 175
Beam: 32
Draught: 13,5
Speed: 15,9

Tanker (Tank15)
Ship name: Sten Idun
Description: Oil/Chem.
Displacement: 21218
Length: 144
Beam: 23
Speed: 15,2



A New Role for Simulation in Distance Learning

BY SERGE CÔTE/ ULRICA RISBERG



'Kongsberg Maritime Web-enabled simulators enable distance delivery of the same high fidelity simulation training that our customers are used to with our traditional simulators. This will allow them to open up new market segments and to attract younger generations of maritime students that are expecting flexible and dynamic learning over the Internet', Product Manager Serge Côte explains.

With Kongsberg Maritime unique web-enabled simulation products, maritime training centres can now deploy simulation training exercises to students, regardless of when or where the training need arises. Students' PCs are pre-loaded with the web-enabled simulator software. The simulation exercises are downloaded from a Learning Management Server (LMS) via the Internet. The LMS will keep a record of the student's score and performance in the exercises.

E-learning evolving
E-learning continues to evolve and web-enabled simulation fits

into this change. It meets the requirements and expectations of the under-40 generation of seafarer, which has grown up with the computer, video games and other digital media. The shift from instructor centric curricula towards learning-centric searches for relevant learning resources in an interactive environment is already taking place.

Early Adoption in Alaska
The Alaska Vocational Technical Center (AVTEC) is the leading maritime training center in Alaska. It provides maritime training and education to Alaskan mariners at all levels. AVTEC owns a comprehensive set of bridge simulators: three full mission bridges, one bridge in the classroom, 12 desktop student stations and one GMDSS simulator. It was decided in 2006 that web-enabled simulation would be the best solution to provide distance delivery of training in support of existing courses and also to lower student/instructor ratios during full mission bridge exercises.

The first course selected was the Radar Observer Unlimited Recertification Preparation. It stemmed from the US Coast Guard (USCG)

requirement that every radar observer is recertified every five years.

In order to prepare candidates for the recertification testing, AVTEC offered a three-day refresher course at the school which was immediately followed by the test. This refresher course is now available online and is hosted on AVTEC's LMS.

Web-enabled simulation exercises are at the core of the course. The benefits for the students are that they are no longer required to spend more than half a day at AVTEC to stand the recertification test, therefore avoiding accommodation expenses. Moreover, since the on-line refresher course is available year round, it is easier for AVTEC to schedule the testing more often.

Read more about the product and/or download the brochure at <http://www.km.kongsberg.com/simulation>

Why Web Enabled?

Distant learning combined with simulators makes a new and flexible training approach possible, with the main benefits of web-enabled simulation being:

- Students can run simulation exercises on their own in a self-study training mode. This provides flexibility with scheduling of training and the possibility to conduct training 24/7.
- Compared to CBT, web-enabled simulation offers high fidelity interactive simulator training. Students are engaged in an immersive environment.
- Built-in assessment and evaluation systems provide feedback and guidance to students. The assessment score is also available to instructors.
- When connected to a Learning Management System (LMS), web-enabled simulation is presented in a managed learning environment where students and instructors can interact.
- Kongsberg Maritime web-enabled simulators are SCORM 1.2 compliant, which means that they can be connected to the majority of LMS currently in use by maritime training centres.

AMSTERDAM, HOLLAND

New Contracts for Simulator Systems

BY SVEIN HOLMØY

A Thermal Power Plant (TPP200) and Gas Turbine (GE LM2500) contract has been signed in The Netherlands.

The delivery comprises software licenses for a Thermal Power Plant (TPP200) and Gas Turbine. The contract also includes the new BigView visual system.



The simulator system will be used in a combined training program between two training academies in The Netherlands: STC in Rotterdam and NOVA College outside Amsterdam.

The purpose of this extension for the Dutch industry, is to recruit new personnel for local indus-

try, such as Power Plants (both coal, garbage and nuclear), steel factories and other industries. To achieve this, seven partners have joined in this project. The earlier mentioned two schools have been given the task to host up to 24 students each year. This is a major breakthrough for simulator training to the local industrial "sector" and therefore not only for the maritime sector.

The TPP200 was originally delivered to Swedish and Danish training academies some years ago. The project will also include further enhancements and updates towards the BigView concept.

A Polaris Extensions with SeaView Visual system

A contract for a major extension of the Polaris at Nova College, location Ijmuiden, a coastal town outside Amsterdam, has also been signed. It consists of one additional own ship and 26 visu-

al channels on flat screens. The Dutch South and Dutch North locations will be updated from radar to also include visuals.



L.H.M van Eggelen from the O&O with Svein Holmøy, Kongsberg Maritime

Nova College has in the last few years, expanded to become a major player in Holland, for maritime education and simulator operations. Last year, they upgraded their Engine Room simulator to the Neptune "class" and with this Bridge Simulator extension, it will be interesting to follow them in the years to come.

Contract Signed with Norwegian Navy

BY SVEIN HOLMØY

Kongsberg Maritime has signed a contract with the Norwegian Defense of training equipment for the new Skjold Class Fast Patrol Boat.

The simulator will be integrated with the existing simulator equipment earlier delivered from KM to the Norwegian Navy. The delivery consists of a Skjold-class bridge housing with equivalent equipment and a comprehensive visual system and advanced hydrodynamics of the vessel. New exercise areas for parts of the Norwegian Coast are also included in the delivery.



The Kongsberg Group is also the main supplier of bridge equipment to the Skjold-class vessels.

The contract's delivery time is within the 1st September 2009.

The new Neptune Steam Propulsion Simulator ERS SP Dual Fuel

BY TALLAK AAS



"Model performance and dynamic response are very close to those of real LNG ships!"

The Neptune ERS SP Dual Fuel Simulator is designed to be a valuable tool in the basic and advanced training of marine steam engineers.

Close to real LNG tankers

The ERS SP Dual Fuel simulates the steam propulsion plant of a modern, large LNG tanker. The simulated steam plant model is based on an actual LNG tanker. Both the model performance and the dynamic response are very close to the real LNG ships.

The Simulator's key features

The Simulator primarily focuses on systems that are unique to dual fuel steam plants such as: boilers, turbine, condensers, condensate system, fuel oil system and fuel gas system. In addition, necessary auxiliary systems such as secondary steam system, back pressure system, main and auxiliary SW cooling systems are included.

Boil-off gas system

The LNG tanks and boil-off gas system is modelled in sufficient detail to fulfill the requirements of demonstrating the principle operation and control of all major components in the gas supply to the boilers, including gas compressor, gas heater, forced vaporiser, tank protection system etc.

It is a recognised fact that control of large marine boilers is a challenge to process engineers.

The simulated boiler system is also an excellent basis for studying process control in general.

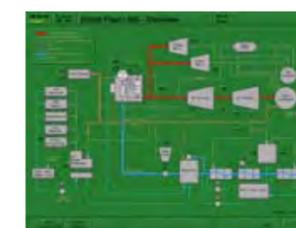
Can be interconnected with Cargo Handling Simulators

The simulator can also be interconnected to our well known LNG Cargo Handling Simulator, allowing for even more realistic and detailed training, comprising all aspects of LNG cargo handling.

Need for seagoing steam engineers in the future

Since the emergence of the liquefied natural gas (LNG) trade in the early 1970's, steam turbines have kept a dominating grip on LNG tanker propulsion machinery. Steam plants have proven reliability, low maintenance cost and most importantly, the ability to burn cargo boil-off gas in addition to low grade heavy fuel oil. This explains why the majority of LNG tankers are still steam driven ships and that they are expected to be in the market for a long time to come. Despite this, the population of competent seagoing steam engineers is declining rapidly and poses a problem for LNG ship management who requires skilled steam engineers for today's and the future's LNG seatraffic.

Some screen shots:



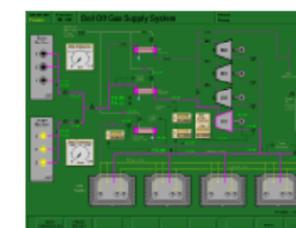
Steam plant overview



Dual Fuel Boiler 1



Turbo Generator no.1



Boil-off gas Supply System