NEWS FROM THE AUSTRALIAN MARITIME COLLEGE

Media Release

Chiefs of Staff, News Directors

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$1.4 million upgrade including high-tech projection system help drives Sim Centre into the future

Students and commercial clients now have access to the latest in state-of-the-art simulation training technology thanks to a $1.4 million upgrade at the Australian Maritime College, a specialist institute of the University of Tasmania.

The upgrade includes the world's first installation of Panasonic's ultra-high resolution 4K Full Mission Bridge Simulation Projection System, providing users with unparalleled realism.

"This upgrade provides a higher level of immersion in the simulator," AMC Centre for Maritime Simulations Manager Damien Freeman said.

"The image is clearer, brighter and more colourful with less visible pixels, so the user experiences a more realistic perception of the simulated environment."

AMC National Centre for Ports and Shipping Director, Professor Thanasis Karlis, said the $660,000 projection system was part of a multi-stage upgrade including the installation of two 360-degree tug simulators plus new desktop simulator software specialising in liquid cargo handling and engine room operations.

"These significant upgrades have allowed us to reconfigure the Centre for Maritime Simulations to meet the changing needs of our clients and students, and we're pleased to be able to offer them the most advanced simulation training experience in the world," Professor Karlis said.

"Our facilities are used for maritime human factors research and investigation into port development, ship manoeuvring, and improving ship and port safety. They also help bridge the gap between theory and practice in the training of ship masters and deck officers. The upgraded Panasonic projector system enhances that capability and ensures AMC continues to be a leader in maritime simulation."

An interactive, 60-inch electronic chart table has also been developed in-house to record training sessions in the ship simulator and provide clients with debriefing capabilities. The final stage of the upgrade will be the installation of a standalone, touchscreen engine room simulator expected to come online mid-2016.

Mr Freeman said that touchscreen technology was a recent advancement for training simulators and would allow for a more tailored experience.

“The advantages of having touchscreen and computer displays are that you can load a variety of different engines and bring them up to do type-specific training. So the students will be virtually trained using the engines they encounter in the real world,” he said.

“The major benefit of using simulators is they allow you to do high-risk and contingency training. If you get something wrong and the engine seizes, we can just reset the exercise. You can’t do that in real life.”

TECH FACTS

- The Panasonic projectors are the world’s lightest 3-chip DLP laser projectors with 4K resolution available today, offering unprecedented image quality.
- AMC’s set-up uses five projectors that each produce 10,000lm brightness and a 20,000:1 contrast ratio.
- Images are sent from a computer in a remote server room via HDMI to a Lightware HDBaseT Transmitter. The signal is then converted and transmitted 30 metres via CAT6 cable directly to each projector.
- The images are projected on to a 240-degree, 7.2 metre radius by 4.5 metre tall cylindrical screen and viewed from the cabin of the main bridge ship simulator.

ABOUT THE CENTRE FOR MARITIME SIMULATIONS

The Australian Maritime College’s Centre for Maritime Simulations features some of the world’s most advanced simulation equipment, including:

- Full-mission ship’s bridge simulator
- Two, 360-degree tug simulators
- Advanced dynamic positioning bridge simulator
- Six basic dynamic positioning simulators
- Six ship operations cubicles and an 18-seat electronic chart display lab.

The simulator database includes most Australian and New Zealand ports, as well as areas of Europe, Malaysia, and Indonesia. AMC also provides regular pilot simulation training to maritime organisations such as TasPorts, Newcastle Ports Corporation, Rio Tinto, Port Kembla, Southport (NZ), TT Line, Woodside Energy and Port Nelson.

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