CSMART, THE MOST ADVANCED MARITIME SIMULATION AND TRAINING CENTRE

Powered by Transas technology

It has been announced that the Carnival Corporation Center for Simulator and Maritime Training (CSMART) in Almere, The Netherlands, was commissioned on 14 July. The CSMART is said to be the largest facility in terms of training capacity and utilises the most innovative technology provided by Transas.

The Transas Integrated Full Mission Simulation Academy equipment implemented at the CSMART is a significant innovation that moves the capability of the most complex challenge to maritime safety, it is understood. This is the result of almost two years’ intensive R&D investment.

Carnival recognised that a step-change was required in the way seafarers are trained to improve safety at sea. The interaction of human factors on board cruise vessels are some of the most complex in the maritime industry.

At Almere this facility houses navigational and engine room simulators in various configurations from classroom stations up to part-task and full mission presentations, interlinked to provide training and assessment for the entire ship’s company.

Through cooperation with Dell, Transas reduced the number of physical machines from 650 to 150 and cut energy consumption by 30%.

Full interswitching capabilities, where any task can be available on any screen within the simulator, allow for zero percent downtime, one of the key requirements due to the high volume throughput of seafarers with defined limited training windows.

CCTV camera technology, similar to the one used at the ESA Space Centre, observes and records everything on the simulated bridges and in the engine rooms to allow full-picture team training. Access is available to any task on any screen within the simulator while the CCTV provides a professional broadcast, AV control, recording and archiving system with full synchronisation of all workstations, cameras and audio.

To ensure realistic team situational training for engine room and machinery functions, Transas has implemented high tech ‘gamification’ technology with
3D engine compartments enabling a walk-through facility with large touchscreens or a gaming controller. The trainee moves through the machinery compartments and can act as part of a team with other trainees in the event of the need to adopt simulated emergency procedures.

Transas CEO Frank Coles commented: ‘The CSMART project is an important milestone in the Transas history. We are proud of what has been achieved in such a short time through our close work with the Carnival Corporation, the CSMART team and our project partners. By applying technological advancements never before utilised within the maritime industry, Transas have created a multi-simulator integrated training that delivers an immersive real world situational environment in which multiple crew members can operate and interact simultaneously, as if on a real vessel.’

Picture caption

Captain Hans Hederström, Managing Director of the CSMART and Frank Coles, Transas CEO at the CMART / Arison Maritime Center opening.