

Dutch training specialist expands on all fronts

Rotterdam-based VSTEP has grown considerably in the past few years with the result that the company now describes itself as a leading European developer of simulators and virtual training software.

Using interactive 3D technology, VSTEP creates training applications that are claimed to allow trainees to build up their skills in a practical and cost effective way.

Since its founding in 2002, VSTEP has delivered a number of simulator solutions for various industry clients and governmental organisations worldwide. The company is a strong advocate for more effective training through enhanced virtual reality.

Chief technical officer Pjotr van Schothorst explained; "Right now the company is focusing on the development of Nautis, a generic shiphandling and manoeuvring simulator, which will be certified by DNV for general IMO STCW training."

Another training product, RescueSim, focuses on firefighting and emergency management training. In addition, an on-board firefighting (AFF) variant of this product will soon be unveiled, van Schothorst said.

Both Nautis and RescueSim have been specifically designed to allow clients to customise the systems to their own needs. He

explained: "We may well see specific tanker and gas carrier versions of both Nautis and RescueSim in 2011."

With the upcoming IMO mandate for ECDIS systems and ECDIS training, van Schothorst said that there is a lot of interest in this area. He claimed that Nautis can interface to any commercial ECDIS system based on the International NMEA 0183 standard.

"Adding Nautis to an ECDIS training certainly has benefits: people will learn to interpret the marks on the chart as buoys in the outside view window offered by Nautis, and they will match the vessels they see sailing around them as AIS icons on the ECDIS," he said.

VSTEP said that the Nautis range of maritime training simulators offers an affordable and effective alternative for training maritime professionals, officers and crew. With a full range of simulators, from desktop trainer to full mission bridge simulator, the company offers a cost-effective training solution for nautical colleges, naval academies, maritime training centres and

individual shipowners.

Turning to the subject of CBT-based training, today this usually consists of text, images, videoclips, with educational material, followed by questions and answers to test if the learning points have been taken in by the trainee.

van Schothorst said that it this training method is a cost-effective way for a mass of information to be made available to students. They can learn anywhere, anytime, at their own pace and their progress can be tracked.

By adding a desktop simulator to a CBT system will ensure that the lessons learned are immediately practised in realistic life-like scenarios. The students apply the knowledge they obtained from the CBT.

"That's a much more challenging and compelling way to learn and the retention value is much higher. The beauty of our Nautis simulation product is that it can run on a laptop and also scale up to a full mission bridge simulator (FMBS). So you could prepare for a big FMBS exercise on a laptop, possibly on board during an

internship," van Schothorst said.

"The learning value you get out of the expensive FMBS exercise becomes much higher this way. So you will see mixes of CBT, laptop simulation training, and FMBS training throughout the career of a modern sailor," he concluded.

The first maritime and riverine research and training centre to construct a full mission bridge simulator running Nautis software is Buenos Aires-based Servicio Integral de Prácticos S.A. (SIPSA).

SIPSA has built a realistic bridge with 270 deg field of view using nine LCD TV screens. The centre will apply for DNV Class A certification of the simulator.

The simulator integrates Nautis and was built to train maritime students and professionals in shiphandling and navigation in any scenario. It also carries out maritime and consulting tasks, such as new ports and terminals' operating conditions. This is taken into account not only the installations and structures, but also the operation of new ships, safety conditions and IMO rulings.

Having used traditional simulation technology for about 10 years SIPSA selected Nautis software for its new simulation centre,

because of the cost effectiveness of the solution and the ease with which the software can be integrated into the centre's custom-built bridge.

Another important advantage claimed is that SIPSA staff can build their own vessels and 3D exercise environments and add them to the simulator.

SIPSA project manager, Alberto Secchi explained "Nautis was our first choice for maritime simulation training. It allows for realistic simulation of sailing manoeuvres, docking, mooring to buoys, use of ropes and tugs, all sorts of failures and events, and different hydro meteorological and visibility conditions, daytime with good and bad visibility and night time. It allows for recording of manoeuvres that are carried out so we can extract the respective technical conclusions through a very detailed analysis."

SIPSA started its activities in 1994, offering its pilot services to shipping agencies and/or shipowners. At the same time, it added new tools for modern pilot training and for maritime and riverine investigation, including bridge and manoeuvring simulators. The centre has since advised international companies on training and simulation.

It has also held advanced training courses for Argentine and international shipping's higher ranking personnel.

US presence

Only a few months following the opening of its UK office, VSTEP has opened its first US office in New York.

The past year has seen a rapid growth for VSTEP's maritime and emergency response simulator products, resulting in a need to build a network of own offices and dedicated agents in different parts of the world to serve customers.

VSTEP's North American office is headed by Capt Mark Woolley, US Navy (Ret). Capt Woolley joins VSTEP following over 30 years' service in the US Navy, most recently as commanding officer of largest Naval Reserve Officers Training Corps (NROTC) in San Diego.

Here he was responsible for training future naval officers in navigation, operations, engineering and leadership, making extensive use of simulation programs. San Diego was the first NROTC unit to incorporate VSTEP ship simulation products in the curriculum.



RescueSim - a firefighting and emergency management tool.

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