

Simulator training research delivers results

Research carried out at *ITS 2014* in Hamburg has formed the basis of a new paper on the neuroscience of simulator training. The practical experiment conducted by K+S Projects, based in Berlin and Koblenz, offered academics at the University of Applied Science, Bremen and the Technical University, Berlin, the opportunity to demonstrate their research into safety in shipping.

The focal point of the study was on how psycho-physiological signals can be used to support and optimise simulator training. During the experiments at *ITS 2014*, test subjects were asked to execute complex manoeuvres as the responsible tug master of a harbour tug, during which their mental wellbeing was continuously monitored. A brain-computer interface (BCI) was used to assess the user's mental workload state in real-time by cataloguing the electrical activity of the brain.

The outcome of the research now forms the basis for a paper, *Opportunities in the Use of*

► *Capt Ron Burchett of Burchett Marine Inc takes the helm while wired up to the brain-computer interface at ITS 2014 in Hamburg.*

BCI to Optimise Simulator Training. The study explains the outcomes and findings of the measurements taken at *ITS 2014* and also outlines future directions for the research.

The paper formed part of the line-up for the 18th International Navigation Simulator Lecturers' Conference, which was due to take place on 12th-15th September at the Massachusetts Marine Academy. The joint authors include Prof Thomas Jung from the University of Applied Sciences, Bremen,



and Jonas Broenstrup of the Technical University, Berlin.

Naval architect and paper co-author Kerstin Klinkenberg, a founder member of K+S Projects along with Kurt Scholz, said: "This is a further step in developing our idea to link the shipping world to the fundamentals of research work."

Christening in Gdansk for latest in 'antelope' series

A christening ceremony for Remontowa Shipbuilding's latest PSV took place at the company's shipyard in Gdansk, Poland, on 8th August. As with previous vessels in the series, all of which were named after different species of antelope, the new vessel was christened *Wildebeest*.

The PSV is the eighth vessel of a series built for a US owner, where its tasks will

include servicing, building and maintaining underwater installations and ensuring the continuous operation of oil and drilling rigs.

Construction of the PSV series started in July 2011, with all vessels built to designs from the Polish office of MMC Ship Design & Marine, under the supervision of classification society ABS. All vessels utilise diesel-electric propulsion, enabling reduction

of both fuel consumption and harmful emissions. The PSVs are equipped with advanced control and dynamic positioning (DP2) systems, as well as fire-fighting (class FiFi-1) and oil recovery installations.

The PSV's work deck allows the transport of containers, pipes and other materials needed in drilling operations. *Wildebeest* will be the world's largest vessel in the up-to-90m length class, with a load-carrying capacity of 4,990 tonnes, and will be capable of shipping not only liquids, fuels, water and loose cargo, but also dangerous loads (in under-deck containers).

Towage finalised for carrier's final journey

Marine transportation company Signet Maritime has been awarded the contract to tow the aircraft carrier *USS Saratoga* on its final journey. The carrier will be taken to Esco Marine recycling, where its 53,500 tonnes of steel will be recycled.

The vessel employed for the offshore tow, *Signet Warhorse III*, measures 43.7m x 15m with a 5.5m draft. The ABS fully-classed tug is capable of 10,000bhp and 135 tonnes bollard pull. The tow will originate in Newport, Rhode Island, and end at Esco Marine's facility in Brownsville, Texas. The voyage will take an estimated 15 days, maintaining a speed of six knots and covering a total of 2,120nm.

USS Saratoga has served for more than 38 years in the US Navy. The carrier's aircraft flew sorties in the Vietnam War, in Operation Desert Shield and over the states of the former Yugoslavia in 1992.

Harbour tugs battle Tilbury blaze



▲ Fire crews from RT Leader and RT Champion battle the grain terminal fire in Tilbury Docks.

Rotortugs *RT Leader* and *RT Champion*, together with land-based fire crews, battled flames at Tilbury Docks, UK after a grain conveyor belt caught fire.

Six fire engines arrived at the Port of Tilbury at about 1450hrs on Tuesday 1st July as clouds of smoke billowed from the docks. They were joined by firefighters

on the two tugboats, which doused the flames from the Thames estuary.

At one stage the incident commander reported that around 20 per cent of the grain terminal was alight. By 1630hrs the blaze had been contained, and by 1715hrs the fire was out, though crews monitored the scene overnight.