

## Bob Stone leads team to Chairman's Silver Award

Posted on Thursday 1st December 2011

A team of researchers led by Robert Stone has won the BAE Systems Chairman's Silver Award. The award relates to research and development excellence in the field of "Gaming for Frontline Safety".

The award went to the team of researchers from the Human Factors Integration Defence Technology Centre, an initiative in which Electrical, Electronic & Computer Engineering has participated extensively for the past eight years, led by Robert Stone and which also includes Robert Guest lead simulation developer, Antoinette Caird-Daley from Cranfield University, Danny Rigby from a collaborating company called Modux and Kevin Bessell from BAE Systems.



The award relates to the teams efforts carried out in support of two recent games-based simulation and training projects. With the Serious Games for Submarine Safety Training the Researchers, have concluded a major "serious games" project to exploit "serious games" technologies in safety training courses for the UK's future submariners. The latest version of the SubSafe simulation is the result of nearly four years of research, development and evaluation with the Royal Navy and has taken the team from Plymouth to Faslane, from Australia to Canada, and even onboard a nuclear submarine in the English Channel and a rescue submersible off the coast of Scotland.

Experiments at HM Naval Base Devonport show conclusively that SubSafe significantly improves the "walk-round" performance of students (onboard an actual submarine) when compared to that of a control group, given legacy forms of media, such as PowerPoint. A version of SubSafe was also used in 2009 during the Coroner's Court of Inquiry into the tragic explosion onboard HMS Tireless during an under-ice mission in the Arctic in March of 2007. The Birmingham team is now working on new projects looking at concept designs for the UK's future submarine, Successor.

The second project which simulates bomb disposal scenarios, provides new ways to train Explosive Ordnance Disposal (EOD) teams using virtual environments. Running on a typical gaming laptop and using low-cost, freely distributed software, it is based around a typical small town in the UK and features a petrol station, shops, office blocks, a multi-story car park, a railway station, industrial area and a school. The scenario can be used to guide the trainee through processes such as interacting with witnesses and members of the police, setting up safety cordons and deploying specialised remotely controlled vehicles to deal with the bomb threat.

A more recent development has extended the research to develop a highly realistic Afghan village scenario to help prepare patrols and improve their awareness of the potential locations of IEDs and roadside bombs.

For more information on the Human Factors Integration Defence Technology Centre visit [www.hfidtc.com](http://www.hfidtc.com)