



Type 45 Flight Deck Controller (FDC) and Flight Deck Officer (FDO) Trainer

SEA was awarded an MTS IPT contract to produce a simulator for the Royal Navy's School of Flight Deck Operations (RNSFDO) at RNAS Culdrose. RNSFDO conducts training for Flight Deck Officers (FDO) and Flight Deck Controllers (FDC) via a course that includes classroom work, drills with live helicopters, and use of the SEA simulator. This means that an SEA simulation product will be responsible for part of the training for any military personnel who have the task of marshalling aircraft in RN ships or shore establishments

Until now, the FDO has directed landing operations from the flight deck but in the new T45 Destroyer this role will be conducted from within an aft-facing compartment next to the hangar. His view of the flight deck will be through a 'bubble' window and this has resulted in some changes to normal FDO procedures, as well as the provision of new instrumentation and controls (eg foam monitors, pilot information lights). SEA's simulation incorporates all of these functionalities and allows procedural training in a full range of standard operating procedures and emergency procedures, many of which are difficult and expensive to train using a live aircraft.

In brief, SEA together with our partners, XPI Simulation, has provided a simulation and visualisation of:

- Helicopter approach, landing, departure and circuits including both manual and automated flying.
- Deck operations on the flight deck, including animations of the deck crew and associated deck equipment, such as the telebrief cable and refuelling hose.
- Airfield operations – allowing training of ground marshalling skills.

The students are immersed in the training environment via three projector screens (see below) and for FDC training, the student is situated in a separate room and the visualisation is presented on the projector screens, viewed via a window. The FDC student is also be presented with simulated CCTV images of the deck area, and emulations of his controls (see below).

This system is now in full use, enabling the users to realise cost savings in real aircraft flying hours and to conduct training independent of weather and aircraft availability.

