

Helicopter Control Officer (HCOT) and Landing Signal Enlisted (LSE) Trainer

NAVAL AIR WARFARE CENTER
TRAINING SYSTEMS DIVISION
ORLANDO FLORIDA



EXHIBIT FACT SHEET

Helicopter Control Officer (HCOT) and Landing Signal Enlisted (LSE) Trainer

The HCOT-LSE Trainer employs highly advanced Virtual Communications Technology previously matured by the Naval Air Warfare Center Training Systems Division's (NAWCTSD) Concept Development Integration Lab (CDIL) and implemented for the first time in a modern virtual environment trainer with direct, intuitive, user interface. The single HCOT machine consists of six cores providing virtual machines hosting five student panels to accommodate effective teamwork training. The state-of-the-art simulator supports simultaneous trainees with 3-D, photo-realistic, articulated models for natural, user-friendly, multi-touch interaction with the virtual panels, virtual instruments, and virtual controls. The virtual environment architecture supports reconfigurability, allowing the flexibility for expansion of the device to train for different panels and ship configurations.

This new training system also hosts the first known simulation of the Fleet's Moriah Wind Systems (MWS). The successful addition of an innovative Moriah display to the new trainer is now providing previously unavailable simulation for a key component of the Fleet's new state-of-the-art helicopter control towers. The new MWS simulations provide trainees with wind information, along with other ship data, on a virtual display. These new MWS simulators developed by the NAWCTSD team have already drawn interest from the Marine Corps' V-22 Osprey and F-35B Joint Strike Fighter communities as a resource for training launch and recovery operations of these aircraft.

The combined HCO/LSE device represents a significant step forward in simulation design. Based upon a new "virtual machines" system design, this trainer met an objective endorsed by Department of the Navy's Chief of Information (CIO) to "achieve operational cost reductions and improve flexibility in its existing Information Technology (IT) infrastructure... to operate in virtualized environments." HCOT is a dual purpose instructor/operator station for the fleet's updated LSE trainers, displaying imagery developed under ONR's TechSolution's program. Thus, the new HCOT/LSE trainer has met the CIO's objectives to reduce the hardware, licensing fees, and related maintenance with training systems.



For further information on this exhibit, or on business opportunities with NAWCTSD, please contact our Business Support Team by telephone at (407) 380-4903, by e-mail at orlo_businesssupportteam@navy.mil, by fax at (407) 381-8744, or by mail at Business Support Team, NAWCTSD, 12350 Research Parkway, Orlando, FL 32826.