

Littoral Combat Ship (LCS) Readiness Control Officer (RCO)

NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION ORLANDO FLORIDA

EXHIBIT FACT SHEET



Littoral Combat Ship (LCS) Readiness Control Officer (RCO)

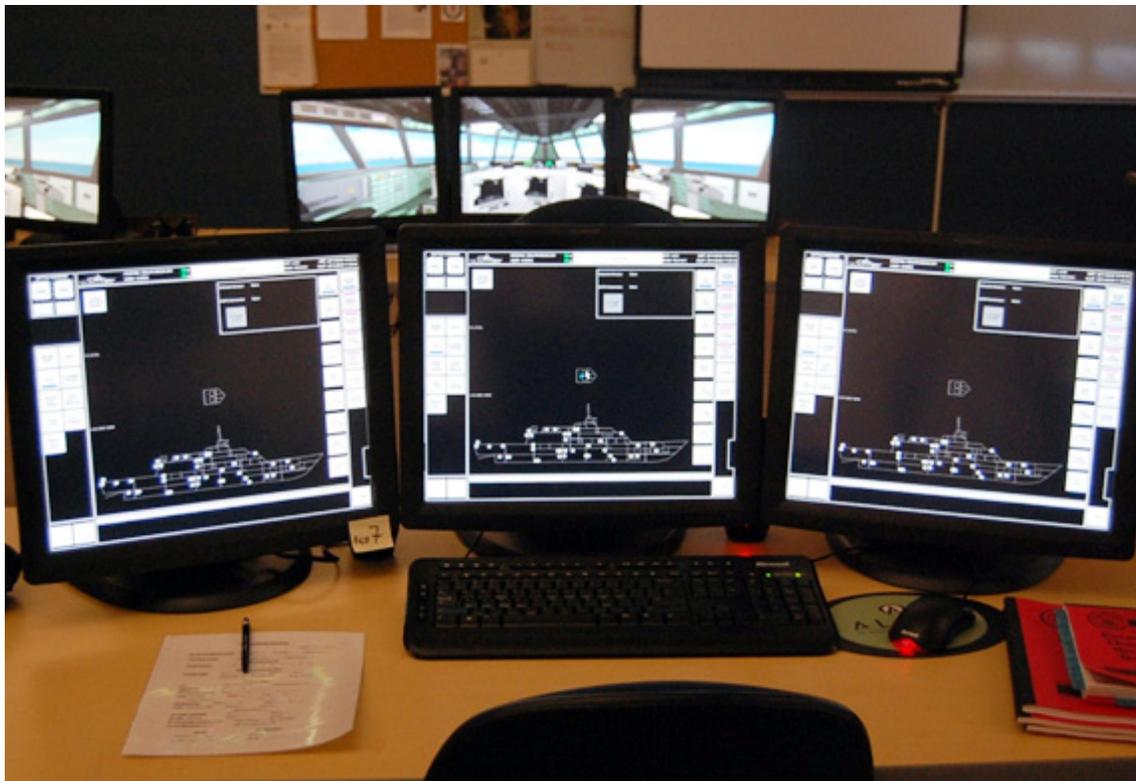
The Readiness Control Officer (RCO) simulator provides a realistic training environment for prospective RCO Students learning the Littoral Combat Ship (LCS) engineering plant.

The trainer is designed to closely resemble the LCS RCO console located on the bridge of the LCS. Its primary purpose is to teach the LCS-1 engineering solution, a Combined Diesel and Gas Turbine (CODAG) plant with many automated

features not available on current Navy ships. The trainee is able to interact with a virtual Littoral Combat Ship (LCS) (specifically LCS-1) capable of providing an environment to practice routine maintenance functions within a virtual maintenance performance aid (VMPPA). The maintenance capability was dependent on a Machinery Plant Control and Monitoring System (MPCMS), along with Full Authority Digital Control (FADC), and Local Engine Control Panel (LECP) interaction as well as virtual equipment interaction.

The 19G5 extends the capability to represent LCS-1 Electrical Plant, Propulsion Plant, Auxiliary Plant, and Damage Control Plant data—to include operation, utilization, and cascading effects.

Benefits of this application not directly associated with RCO watchstander activities include: (1) recognition of ship spaces; (2) equipment locations, and (3) shipboard familiarization. Trainees, through this immersive environment, should be able to recall the exact shipboard layout of depicted spaces before they report to the LCS.



19G5 RCO Trainer

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The PC-based nature of this training device also provides flexibility for trainer upgrades to accurately reflect new systems and configurations installed in the Fleet. Additionally, the system now in use at SWOS, running on COTS software, can be easily extended to support training at Fleet concentration centers or schoolhouse environments.

The 19G5 is implemented as a Multiple-Trainer Simulator Environment. The LCS 1 RCO Simulator can be utilized either as a stand-alone watch station trainer for individual instruction, a watch-team trainer with two or more consoles being operated in an integrated mode, instructor-led training, or as an integrated extension to the LCS Navigation trainer.



19G5 RCO Trainer integrated with the LCS Navigation Trainer

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