Maximize Naval Training Effectiveness with Kratos' Naval Warfare Training System



Kratos' Naval Warfare Training System (NWTS) enables realistic team training for Combat Information Center (CIC) watchstanders in all major warfare areas as well as maritime security operations. The system supports a generic mode of operations for basic training as well as a ship-specific mode of operation for intermediate and advanced training objectives.

Define Desired Operational Conditions

NWTS' tactical scenario generation application gives customers the flexibility to fully define their desired area of operations, environmental conditions, order of battle and master scenario event lists. These scenarios form a library of resources that are initiated as individual games/simulation events to support specific training needs. To further promote training flexibility each CIC is configurable – down to the number and type of watchstations supported. Individual consoles may assume any watchstation role available in the library giving the training center complete control of the configuration of their training devices to achieve the desired training environment.

Communicate Across Multiple Network Configurations

To further ensure compatibility with existing or future advanced simulation environments, NWTS utilizes Kratos' Common Communications Architecture (CCA), a scalable, platform agnostic, data centric architecture using open standards to enable delivery of low latency, ultrareliable secure communications

Key NWTS Capabilities include:

- Generic and ship-specific modes of operations
- Support for single- or multi-ship team training
- Advanced scenario development & management of regional constructive forces / order of battle
- Kratos Common Communication Architecture enabling communications across public, private, 5G or Satellite networks
- DIS/HLA compliance able to participate within Live, Virtual, Constructive simulation environments
- Watchstation simulations designed using Microsoft Windows conventions to ensure user interfaces are both intuitive and user friendly

across multiple networks. CCA is ideal for multi-domain and joint force training operations as it can transcend disparate communication and information networks, protocols and media enabling communications critical to the success of the training mission.

Scenario Development & Instructor Capabilities

Kratos' scenario development application includes all the tools necessary to support design, implementation and game/event management. The design tools essentially build a library of resources available to be used in any training event. Specific events are initiated from the resources defined in the scenario database as "games" and are managed in the NWTS library to meet specific needs. Even these specific events can



be cloned and customized to meet training requirements. The system also includes the capability to generate both Student and Instructor briefing packages detailing all supporting information necessary to execute an effective training event.

Advanced Applications

As a market leader in providing immersive training solutions, customers can expand their NWTS implementations to include other areas of the ship that are involved in combat operations, such as navigation/seamanship and employment of crew served weapons. In both these cases, Kratos can immerse both navigation and gunnery watchstanders in the same operating virtual environment as the Combat Information Center – all driven by the NWTS. Kratos' Mixed-Reality training systems allow watchstanders to interact with the physical equipment located at their watchstation while being immersed in the virtual world that exists within the scenario.





Left: NWTS Integration with a Full Mission Bridge (image from Wartsila). Right: Gunner trainee in Kratos Mixed Reality Holodeck.