Naval Training Systems

Tactical Training
Naval Training Center (NTC)

The Elbit Systems Naval Training Center (NTC) is a full-scale turnkey training solution, offering operational and tactical simulation facilitate a comprehensive and realistic naval training experience. The NTC is comprised of a naval tactical trainer (NTT), a navigation simulator and a close-range weapons trainer (CRWT). These modules can each be utilized in standalone mode or combined and integrated with additional systems for large-scale exercises.

The NTC employs Elbit Systems’ high-fidelity simulation software which features extensive use of advanced autonomous computer generated forces (CGF), physics-based motion sensors, and weapon simulation models and algorithms - all operated through the use of an intuitive graphic user-interface (GUI). Based on commercial off-the-shelf (COTS) PC hardware, the NTC is both cost effective and simple to maintain.

Elbit Systems’ NTC is fully field-proven, with thousands of operation hours logged by thousands of trainees at all levels. The NTC is currently operational with the world’s leading naval forces.

Naval Tactical Trainer (NTT)

The NTT provides trainees with a realistic naval operations environment, enabling simulation support for both tactical command and specific combat systems. The NTT covers diversified scenarios from sub-unit level up to multi-force levels, including: anti-surface warfare, anti-submarine warfare, anti-air warfare, asymmetric warfare, littoral warfare, electronic warfare and more.

The NTT provides trainees with a realistic, up-to-date naval operations environment, supporting both at the console level simulation and the command tactical training level.

Key features

- High fidelity, physics-based simulation of sensor, weapon and motion behavior
- Advanced system display options for real-life combat systems information over dedicated displays or stimulation/mockup of actual system screens
- High-end skill assessment algorithms
- Damage simulation and assessment
- Fully modular and scalable design
- Choice of thousands of simulation scenarios
Navigation Simulator

The navigation simulator boasts high-end display solutions over dome projections and screens, as well as high-fidelity maneuvering sensors and physics-based weather simulation models. The navigation simulator is ideal for:

- Training for challenging ship-handling situations and complex coordination with other vessel posts
- Simulating different vessel types, at all times of day, and in any exercise arena

Close Range Weapons Trainer (CRWT)

A unique solution designed to train seamen in the use of close range weapons, the trainer is comprised of multiple weapon posts, a high-end projection system, and an instructor operating station.

Key features

- Support for various weapon types, ship types and sizes
- Easily configurable via roll-in/roll-out weapon mock-ups installed over motion platforms
- Physics-based simulation of weapon ballistics and trajectory performed for every round. Support for various weapon types, ship types and sizes
Major advantages

- Knowledge-base driven simulation enabling easy adoption of new threat sensors or platforms
- Advanced CGF with built-in artificial intelligence capabilities serve as the exercise virtual platforms for enemy, neutral and allied forces
- Low cost and low maintenance COTS PC hardware
- Support for multiple simultaneous exercises
- 3D mission rehearsal and debrief capabilities enable reproduction of complete exercise data, total time-axis control, automatic scoring mechanisms and what-if hypothesizer tool
- Interoperable with naval on-board training system and additional live training systems through high level architecture gateway
- Simulation of data links and voice communication including high-end radio communication simulation using VoIP technology
- Instructor and trainee consoles equipped with a user-friendly man-machine interface