

IFAD develops and markets training solutions for mission-critical defense applications.



# INTS

NAVAL TACTICAL SIMULATOR



In a modern navy, the crew of a ship must be capable of responding quickly and appropriately in complex and rapidly changing situations, and must be ready to take part in national and international operations at short notice.

This requires a rigorous and comprehensive education and training program.

The IFAD Naval Tactical Simulator (NTS) is based on well-proven training and simulation concepts that have been developed and applied over more than two decades to meet naval officers' training needs in naval warfare and the various complex weapon systems on board modern navy ships. The NTS covers a wide range of training areas from operator training through part task training to command team training.



## ***Simulated Naval Battle Space***

The Naval Tactical Simulator (NTS) is a powerful, flexible and scalable system dedicated to generation and execution of realistic naval battle space scenarios, including surface, subsurface, air and land entities, as well as naval sensors and tactical weapon systems, tactical data link, communications and environmental conditions.

The NTS even enables integration and filtering of live tracks into the synthetic environment through multiple live or recorded data feeds such as e.g. AIS and ARPA. The NTS is designed for naval warfares and naval operations, and is based on 20+ years instructor experience at the Royal Danish Navy Warfare School.

## ***Live, Virtual & Constructive (LVC)***

The NTS supports a wide range of protocols and standards for integration of live equipment, virtual and constructive simulations as well as C2, C4I and Combat Management Systems.

The LVC capability makes the NTS ideal for naval training, concept development and experimentation as well as distributed simulation exercises.

## ***Naval Tactical Training***

The NTS is a cornerstone in the IFAD Naval Tactical Trainer and the C-Sim Training and Simulation solution. However, the LVC capabilities enables a wide range of opportunities to tailor training simulators through integration and stimulation of existing systems. The IFAD Naval Tactical Trainer is based on well-proven training and simulation concepts that have been developed and applied over more than two decades to meet naval officers' training needs in naval warfare and the various complex weapon systems on board modern navy ships. The tactical trainer covers a wide range of training areas from operator training through part task training to command team training.

C-Sim is an integrated naval tactical trainer environment based on the NTS and the C-Flex Command & Control System. C-Sim is designed for naval training centers, integrated onboard training and simulation as well as distributed ship to ship and ship to shore training exercises.

## ***Distributed Simulation***

The NTS supports the industrial standards Distributed Interactive Simulation (DIS) and High Level Architecture (HLA) for distributed simulation.

## ***Concept Development and Experimentation (CD&E)***

The NTS is an ideal tool for integrated test beds and battle labs where rapid integration of LVC components enables CD&E for developing and evaluating new concepts and identify the best solution, before committing extensive resources.

Using CD&E is not limited to a technical perspective, but also for possible solutions for challenges involving doctrine, organization, training, and material to achieve significant advances in future operations.

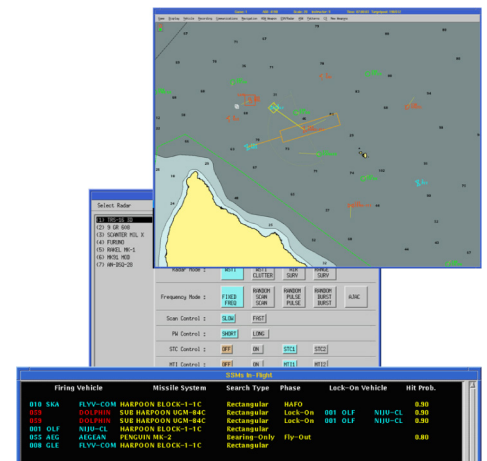


## Instructor Functions

The NTS is controlled from dedicated Instructor Operator Stations (IOS) or existing consoles in the CIC. The IOS is used for simulation preparation, execution, control and monitoring as well as briefing and debriefing purposes.

### The overall instructor functions are:

- Simulation management
- Vehicle management
- Recording and playback management
- Library management
- Patterns management
- Monitor functions
- Navigational management
- Vectors
- Radar/emitter management
- Weapon management

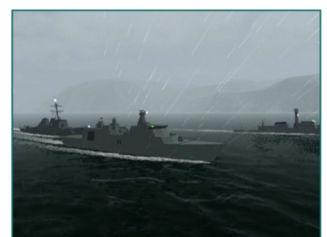
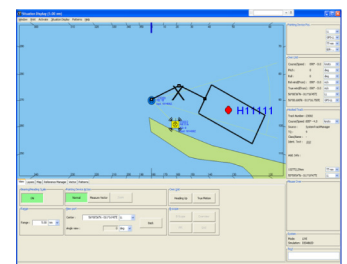


## Features and Configurations

- 12 independent simulated worlds (games)
- 12 simulated own ships + (8 external own ships)
- 10 instructor stations
- 5000 vehicles
- 60 voice communication channels per game

## Simulation

- Vehicles (own ships and targets)
- Sensors (Radar, IFF, ESM, Sonar Active/Passive)
- Weapons (SSM, SAM, GUN, CHAFF, TOR and Depth Charges)
- Communication (UHF, VHF, HF, Intercom and Instructor Intercom)
- Tactical Data Link
- 3D Visual bridge view and ambient noise





## ***About us***

IFAD is a professional provider of

- Simulation & training solutions
- Networked simulation solutions
- Customer specific training solutions

to Defence and Homeland Security markets.

## ***Our values***

### **Knowledge**

IFAD is an 24 years old knowledge-based company located in Odense, Denmark. The company is 100 % Danish owned.

### **Leadership**

IFAD was founded on quality, technical excellence, and leadership. Building on 20+ years of innovation, IFAD assists companies and organizations world-wide in getting the best out of their mission critical software applications and human training programs.

### **Motivation**

IFAD is recognized as a very loyal, motivated and competent partner supplying quality solutions and products that meet or exceed our customers' expectations.

**IFAD TS A/S**



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