NAVANTIS
Training Integrated System

Learning Room Features

Modular: Applicable to any vessel size.

Configurable: Same hardware can be used to simulate a variety of ships.

Real ship fidelity: It recreates with high precision the physical interfaces of any specific vessel.

Multidisciplinary: It integrates training for local and remote IPMS ship platform operations, Navigation system, Communications system, and more.

Inter-connectable: several NAVANTIS learning rooms sharing the same scenarios in a coordinated manner.

"NAVANTIS is the training system for vessels designed by Navantia."

Navantia Training Systems

NAVANtia **T**raining **I**ntegrated **S**ystem optimizes and takes one step further full crew integrated training. By the use of NAVANTIS, the whole crew is able to go straight on board directly from the training school and sail safely away.

NAVANTIS training is in two stages: an e-learning based stage for operation and maintenance, and a second hands-on exercise stage based on platform simulators for operational training.

Simulation models are developed in accordance with data produced during ship design. production and test stages. Latest generation graphic engines achieve a highly realistic visualization of the natural environment.

NAVANTIS
Steering the Future

NAVANTIS Simulation Levels

NAVANTIS is structured in 4 different training levels within a single product.

LEVEL 1: Platform. NAVANTIS teaches the crew how to operate the ship platform equipment and systems, combining the remote operation from the Integrated Platform Management System (IPMS), with the local operation at dedicated operation panels.

LEVEL 2: Platform + Navigation. NAVANTIS has the capability to train the ship machinery operators and the bridge operators within the same training session in a coordinated and collaborative manner.

LEVEL 3: Ship-to-Ship. NAVANTIS allows to carry out joint operations among several trainee-driven ships, for example RAS and Amphibious operations between two or more vessels. Other vessels defined by the instructor are introduced to create realistic sea traffic training.

LEVEL 4: Combat System. On top of NAVANTIS level 3, other training systems can be incorporated, either from the own ship (e.g. communications, weapons) or other external systems (e.g. aircraft). DIS and HLA standards are supported.

NAVANTIS Hardware

NAVANTIS Learning Room makes extensive use of hardware virtualization through the "Glass Console" concept. Operator familiarization with real ship hardware elements is achieved by the use of highly realistic virtual touch interactive elements based on the real ship ones. Since the operator interface is software-based, a single NAVANTIS training room hardware is easily re-configurable by interchanging ship software to faithfully represent various ships. Videowalls and Virtual Reality goggles provide natural environment immersion.

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