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## **SHIP SIMULATOR AND BRIDGE TEAM WORK & THE TRAINING COURSE FOR MASTER AND CHIEF OFFICER OF LARGE SHIPS AND WITH UNUSUAL MANOUEVERING CHARACTERISTICS SH**

### **Scope of the Course:**

The course is a practical and consists of a series of exercises performed on a ship handling simulator.

The participants are expected:

- to carry out effective bridge procedures,
- to comply with International Regulations for Preventing Collision at Sea, 1972 (COLREG 1972),
- to affirm the ship's manouvering principles and factors effecting the ship handling.

### **Course Content:**

- **Familiarization with the simulator**
- **Pivot point**
  - Ship stopped
  - Making headway
  - Making sternway
  - Turning levers
- **Pilot cards**
- **Slow speed control**
  - Safe and effective speed of approach
  - Rudder effectiveness (different type of rudder)
  - Loss of slow speed control
  - Maintaining slow speed control
- **Effect of wind**
  - Calculation of wind forces
  - Wind strength and dirrection of wind
  - Wind impact point
  - Effect of the wind on ship making headway
  - Effect of the wind on ship making sternway
- **Effect of trim**
  - Making headway and sternway with excess trim
  - The ship trimmed by the stern – turning lever
  - Interaction of wind impact point and pivot point
- **Squat**
  - Bank effect
  - Bank configuration
  - Ship to ship interaction
- **Tugs and ship-handling**
  - Types of tugs
  - Bollard pull forces
  - Tug and ship interactions
  - Number and positioning of tugs
  - Effective in emergency
- **Simulator exercises**

In conformance with an agent or/and a company, exercises can be arranged due to the navigation area and a ship characteristics. Course duration:  
5 days (35 hours)

### **Course Certificate:**

A course certificate specifying the training will be issued to each participant upon successful competion of the course in accordance with relevant regulations of the STCW 78/95 Convention, as amended.

**Teaching aid:** Transas NTPro 5000, ver. 5.35

# **Navigational simulator – Navi-Trainer Professional 5000 (NTPRO 5000)**

Navigational simulators Navi-Trainer Professional enable simulator training and certification of watch officers, chief officers, captains and pilots serving on commercial and fishing ships with the gross tonnage of 500 tons and more. This complies with requirements of IMO STCW 78/95 Convention and Model Courses 7.01, 7.03 as well as number of specific tasks beyond the Convention. Simulator incorporated also the Transas GMDSS Simulator, VTS simulator, and possibility of joint venture with ERS 4000 simulator.

## **Conventional training**

- Ship handling training in accordance with STCW'95 requirements, Bridge Team Management, Bridge Resource Management, ARPA/Radar, ECDIS, AIS, ...

## **Special training**

- Ship handling training in ice conditions;
- Training for naval applications;

Vessel traffic management training in accordance with IALA V 103 standard for the certification and training of VTS personnel.

