

# INTEGRATED SHIP BRIDGE SIMULATOR

---

Redefine Combat Readiness for Ship





## LEADING-EDGE SIMULATION TRAINING

---

From basic ship handling to complex mission rehearsals, the Integrated Ship Bridge Simulator offers a highly realistic and effective training environment for instructors and crew members to hone their technical and combat skills.

Designed as an Integrated Command Centre, the Ship's bridge, Combat Information Centre (CIC) and Machinery Control stations are centralised to promote collaborative training between various operational roles. Equipped with actual shipboard equipment and high fidelity 360-degree projection, it delivers an immersive out-the-window (OTW) view of the ship's surroundings for navigation training and conducting of combat procedures.



# KEY FEATURES

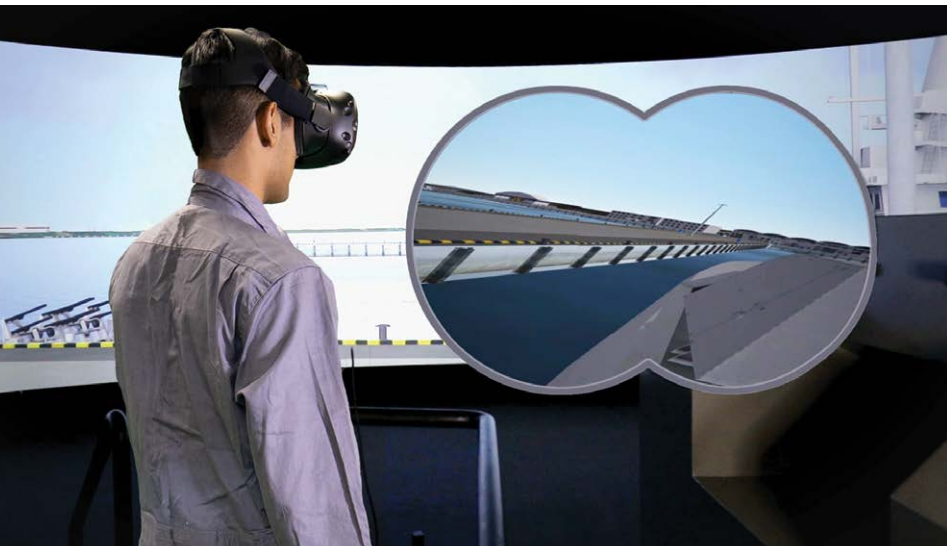


**IOS (Instructor Operating Station) Planned View with CGF**

\* Supported with VT MÅK's VR-Forces simulation software

## Automated Computer Generated Forces (CGF)

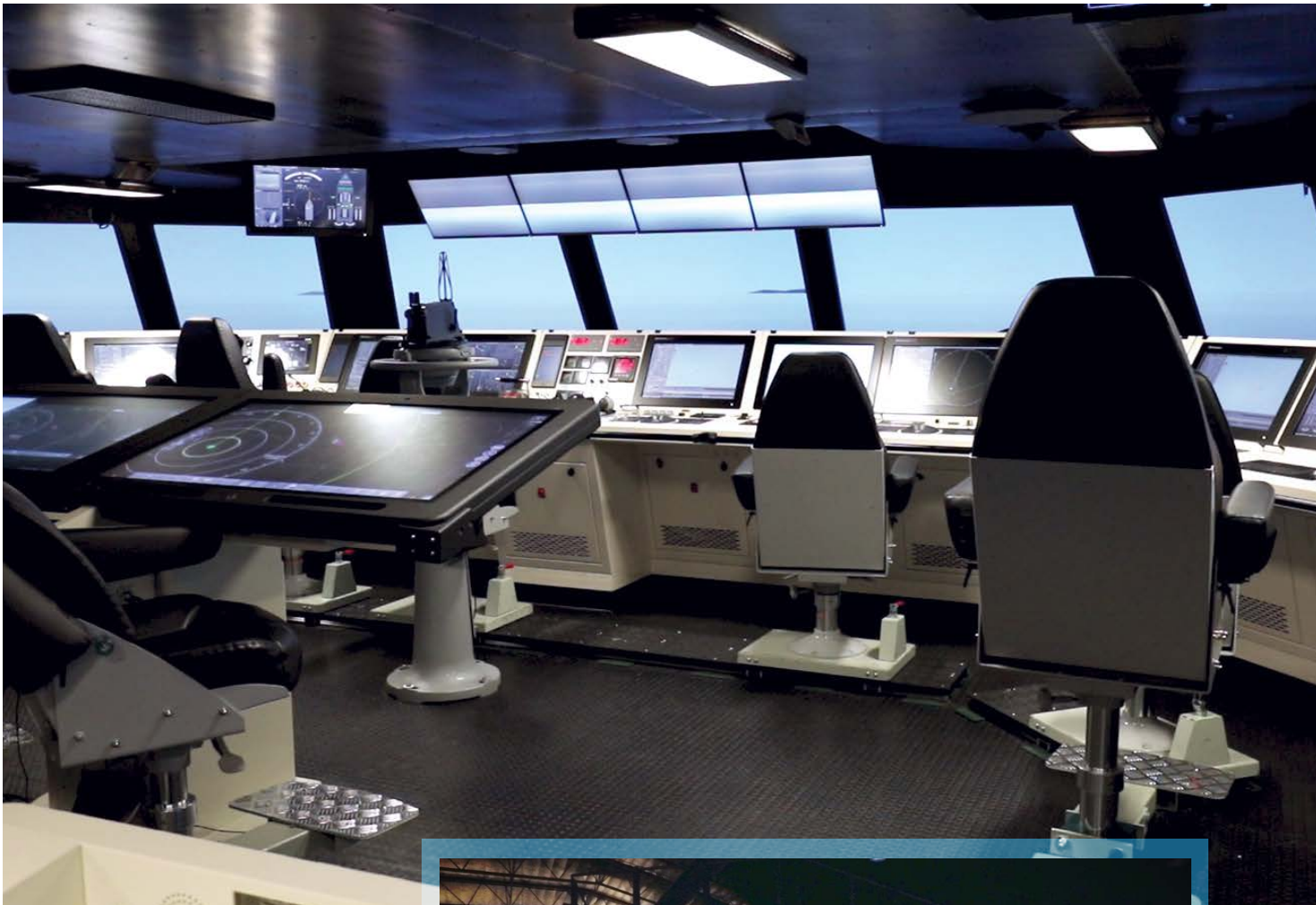
CGF simulation enables the creation of a simulated maritime environment for training. It serves as a platform for generating enemy, neutral and allied forces while providing high-fidelity, autonomous entities' behaviour to support mission rehearsal exercises.



**Berthing Training** - Crew member practises gauging the distance between the ship and the berth. The **VR goggles** mimics the binoculars used on-board the ship.

## Virtual Reality (VR) Watch Stations

Our VR watch stations immerse operators into the training environment by offering an increased depth perspective for challenging scenarios such as bringing the ship alongside a berth and dealing with small vessels.



Ship Bridge with  
**High-fidelity**  
**360-degree** Wrap  
Around Projection



## High Fidelity Visuals with 360° Projection

A fully immersive, out-the-window (OTW) view provides a realistic environment for training crew to manoeuvre vessels of various types and sizes at sea. The seamless high resolution display system is achieved by creating a unified image across multiple projectors with edge blending technology.



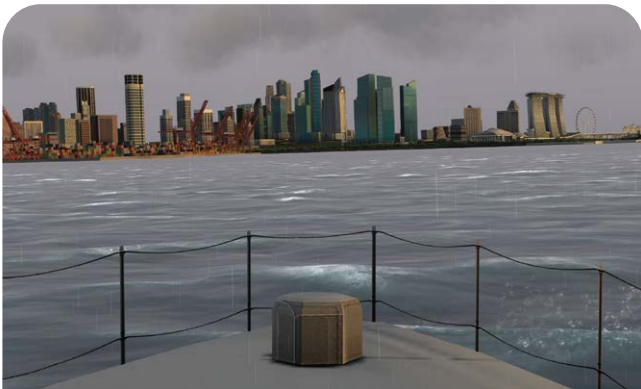
# KEY FEATURES

## Integrated IOS with Debriefing Facilities

The IOS provides real-time monitoring and control capabilities for instructors to develop customised training exercises, simulated scenarios and operational conditions. Its debriefing system facilitates the playback of training scenarios and generates statistical reports for analysis.



## SCENARIO-BASED TRAINING



**Harsh weather conditions**



**System malfunctions**  
(E.g. power, propulsion, steering and machinery failures)



**Enemy entities**



**High traffic density in congested waters**

# Training Flexibility

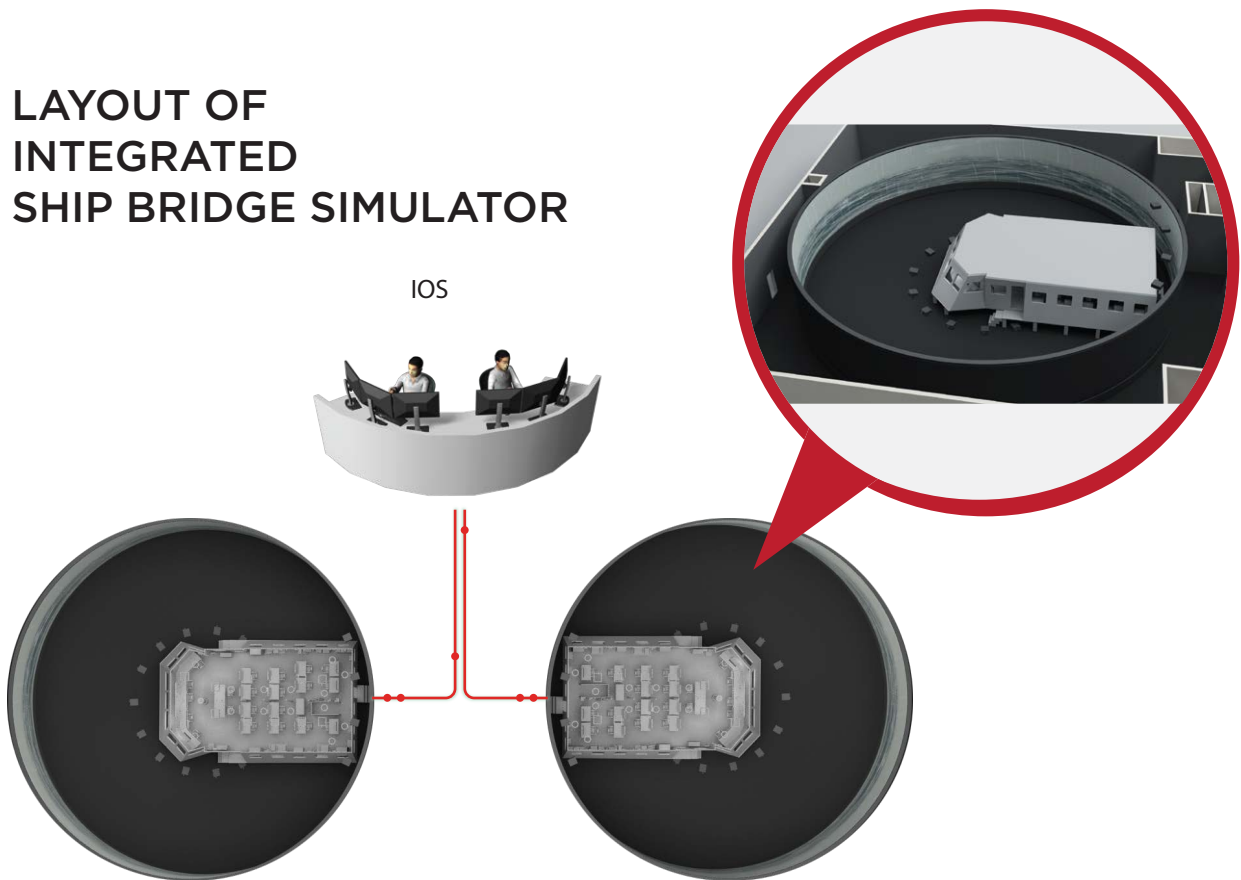
## Multiple Training Options

Supports a full range of training from single operator component training to mission-based training. E.g. Marine Radar, Combat Management System, Communication System, Gunnery System.

## Networked Training

Two or more ship bridge simulators may be networked together, offering the flexibility for fleet training.

## LAYOUT OF INTEGRATED SHIP BRIDGE SIMULATOR



### Training Applications:

- Berthing
- Bridge Watch Keeping
- Navigation
- Weapon Operation
- Machinery Operation
- Naval Tactical Training

### Benefits:

- Overcomes the traditional constraints of training space and resources
- Time and cost-efficient complete training solution for large-scale exercises
- Enhanced training effectiveness in a safe and controlled environment

[www.stengg.com](http://www.stengg.com)  
[trainingsimulation@stengg.com](mailto:trainingsimulation@stengg.com)

© 2021 ST Engineering Training & Simulation Systems Pte Ltd. All rights reserved.

DOP 0121



[www.stengg.com/training-and-simulation](http://www.stengg.com/training-and-simulation)