



Aker Arctic Ice Simulator

is a realistic solution for training navigation and ship handling in polar waters

Features:

- Validated ship and ice breaking behavior
- Dynamic calculation of the ice and its interactions with the vessel
- Planned to comply with Polar Code
- Enables connection to multi-bridge scenarios and special arctic missions
- Helps the student to assess the risks in arctic ice-navigation
- Also suitable for ship design and ice management studies

Full Mission Bridge Simulator for Arctic Operations offers a safe environment for abnormal situation training in arctic conditions. Full Mission Bridge Simulator for Arctic Operations is a comprehensive environment for training navigating in icy waters and fairways, designed to comply with IMO's POLAR CODE training standard.

Highly Realistic Training Environment

The simulator imitates the ship handling in different ice thicknesses and textures thanks to the dynamic calculation of the ice and its interaction with the vessel. The genuine control levers and steering equipment together with sophisticated electronic chart, conning and Radar displays provide

a true to life ship handling experience. Arctic simulator training enables the Student to understand extreme and unsafe operation modes.

IMO Compliance

The design of Aker Arctic Ice Simulator is based on requirements in the STCW Convention, and meets the requirements of DNV GL Class A standard. It is designed to comply with IMO arctic navigation training standard.

Ease of Use

Simulator has been designed with ease of use in mind. It is intuitive and easy to use for the Instructor and highly realistic for the Students. The Instructor plans the training scenarios in advance with Simulation Manager, which stores the scenarios for later recall.



The Instructor can define questions into the scenario, which are prompted to Trainees at predefined moments or triggered by preset incidents. The responses are displayed to the Instructor in real-time and taken into account in Student evaluation. The Instructor can also control the exercise by e.g. creating instrument failures or drastic weather changes.

Simulator for Arctic Operations is scalable with open HLA protocol, which enables coupling to multi-bridge scenarios and special arctic missions. It is customizable to new ship types and control systems as well as different port layouts in and out the Arctic. It has also proved to be suitable for ship design and ice management studies, often necessary in planning entry to virtually unknown arctic territories.

Aker Arctic Full Mission Bridge Simulator offers a safe environment for abnormal situation training.

Arctic ship handling experience in High Fidelity Simulator.

Co-developed with Image Soft Oy and Simulco Oy.