

<b>Name of organization</b> University of Strathclyde	<b>Year of information updating</b> 2022
<b>Year established</b> 1796	<b>Year of joining the ITTC</b> 2022
<b>Address</b> Henry Dyer Building University of Strathclyde 100 Montrose Stree, Glasgow G4 0LZ	<b>Status in the ITTC</b> Member
<b>Contact details</b> (phone, fax, e-mail) <a href="mailto:Naome-mhfc@strath.ac.uk">Naome-mhfc@strath.ac.uk</a> 0141 548 32 11	<b>Website</b> <a href="https://www.strath.ac.uk/engineering/navalarchitectureoceanmarineengineering/">https://www.strath.ac.uk/engineering/navalarchitectureoceanmarineengineering/</a>
<b>Type of facility</b> Ship simulator	<b>Year constructed/upgraded</b> 2020
<b>Name of facility</b> <b>Full mission bridge simulator</b>	<b>Location</b> (if different from the above address)
<b>Main characteristics</b> (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top) Full Mission  120 degree visuals Radar, ECDIS simulators, AIS, GPS, VHF, GMDSS Simulator. Manual/joystick/ track autopilot control  Desk top simulators	

## Drawings of facility

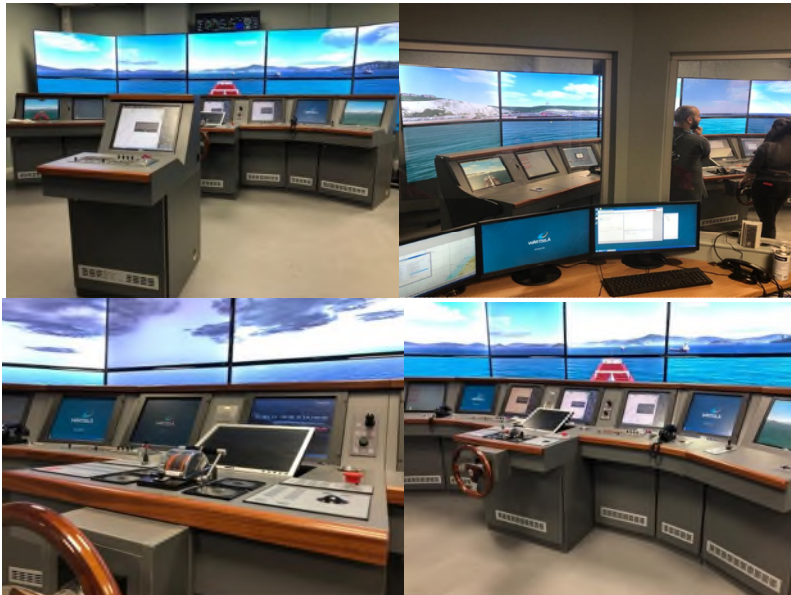


Figure 1: Full mission ship bridge simulator installed at NAOME



Figure 2: Pictures from current experiments carried out with the support of industry for SAFEMODE project.

**Detailed characteristics** (carriages, wave/current/wind generators, instrumentations, etc.)

More than 50 ship models of

- Cargo ship
- Passenger and Roro ferries
- Fast patrol boats
- Cruise ships
- Double ended ferries
- Tankers
- Icebreakers
- Naval ships
- OSV
- Semisubmersible
- Jack up rig
- Fish boat
- Submarine

And Virtual shipyard plugin for importing/customising vessels

40 sea areas with digital model building capabilities

**Applications** (Tests performed)

- human error,
- human system interaction,
- human/team performance,
- Risk Assessment,
- Risk-based design,
- Team performance and communication,
- and accident investigations.

Using the wearable technologies such as EEG and eye-tracking glasses, unique insights are obtained with regards to human-system integration, workload, human/team performance etc

**Published description** (Publications on this facility)

As part of the Maritime Human Factors activities, the department acquired NTPRO-5000 Full Mission Bridge Simulator and installed at Henry Dyer Building, which is dedicated to research to enhance maritime safety and efficient ship operations. Simulator, which has been functional since March 2020, has the capability to develop different types of ship models, ports and sailing areas while currently has more than 50 different types of ships in 40 different locations and weather conditions around the world, including ice navigation.