



COURSE OVERVIEW OE0065
Tugs/Boats Handling and Maneuvering Simulation
Various Types/Sizes

Course Title

Tugs/Boats Handling and Maneuvering Simulation - Various Types/Sizes

Course Date/Venue

Session 1: August 18-22, 2024/Boardroom 1,
Elite Byblos Hotel Al Barsha, Sheikh
Zayed Road, Dubai, UAE

Session 2: November 03-07, 2024/Horus
Meeting Room, Holiday Inn
& Suites Maadi, Cairo, Egypt



Course Reference

OE0065

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description



This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.



This course is designed to provide participants with a detailed and up-to-date overview of tugs/boats handling and maneuvering simulation in various types/sizes. It covers the basic principles, factors involved in tugs/boats handling, types of tugs/boats (AZ, conventional and twin screw) and tug capabilities and limitations; how to handle different types of tugs; the new tug designs, additional or new assisted ship designs or new operating areas; and how to handle and utilize the best practice in different types of boats at various circumstances.



Further, the course will also discuss the girding, girding tripping (GGT), use of Gob/Gog eye for tailing/towing, escort tugs technique and tug safety and interaction effects; the boat safety and interaction between ships; the tug stability, pivot point, forces effects during towing in a vertical/horizontal plain and stability of the towed unit; and towing types, arrangements, equipment and limitations.



During this interactive course, participants will learn the bollard pull (BP) knowledge of the tug and calculation if more than 10 years, standard maneuvers, different maneuvers tug/boat, and squat effect and under keel clearance; the length of towing line, wind and current effects and emergency procedures; the communication skills and combating oil spills; and the seamanship techniques, boat skipper best practice and thorough debriefing and analysis.

The course includes practical exercises through simulator experience of handling highly maneuverable tugs and enhancing awareness about the effects of: fenders “towline”-propellers wash interaction” radio communication-controllable/uncontrollable forces and varying visibility.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on tugs/boats handling and maneuvering simulation in various types/sizes
- Develop skills to handle different types of tugs
- Provide simulator experience of handling highly maneuverable tugs and enhancing awareness about the effects of: fenders “towline”-propellers wash interaction” radio communication-controllable/uncontrollable forces and varying visibility
- Efficiently implement new tug designs, additional or new assisted ship designs or new operating areas
- Develop skills to handle and utilize the best practice in different types of boats at various circumstances
- Enhance the participants’ knowledge about towing operations and towing limitations
- Discuss the basic principles, factors involved in tugs/boats handling, types of tugs/boats including AZ, conventional, twin screw and tug capabilities and limitations
- Carryout girting, girding tripping (GGT), use of Gob/Gog eye for tailing/towing and escort tugs technique
- Recognize tug safety and interaction effects as well as boat safety and interaction between ships
- Identify tug stability, pivot point, forces effects during towing in a vertical/horizontal plain and stability of the towed unit as well as towing types, arrangements, equipment and limitations
- Gain bollard pull (BP) knowledge of the tug and calculation if more than 10 years
- Recognize standard maneuvers, different maneuvers tug/boat, squat effect and under keel clearance, length of towing line, wind and current effects

- Implement emergency procedures and develop communication skills
- Identify combating oil spills and carryout seamanship techniques and boat skipper best practice and thorough debriefing and analysis

Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials, sample video clips of the instructor’s actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.

Who Should Attend

This course covers systematic techniques and methodologies on tugs/boats handling and maneuvering simulation in various types/sizes for marine engineers and other technical staff.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee

Dubai	US\$ 8,000 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Cairo	US\$ 8,000 per Delegate + VAT . This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation


Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -


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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology’s courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant’s involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant’s CEU and PDH Transcript of Records upon request.

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Captain Sergey Kole is an **International Expert** in **Port Operations & Management** with over **30 years** of **onshore** and **offshore** experience within the **Oil & Gas, Petroleum** and **Refinery** industry. His expertise widely covers in the areas of **Tugs/Boats Handling & Maneuvering, Ballast Water Management Convention, Ship Surveys, Ship Surveying Planning, Ship Survey Preparation, Marine Incident Investigation & Root Cause Analysis, Oil Spill Management & Response, Oil Spill IMO Level I-III, Oil Spill Pollution Control, Oil Spill Contingency & Emergency Response Plan, Tanker Vetting & Inspection, Marine Vetting & Audit Criteria Manual for Tank Ships, Marine & Ship Vetting, Vetting Process & Marine Safety Criteria, Tanker Vetting for Terminals, Ship Vetting, Marine Terminal Operations & Management, Marine Hazards Prevention & Control, Marine Communication Systems, Marine Safety, Ship Management, Oil Terminal Planning, Vessels Operations, Terminal Management & Support Operations, Oil Spill Contingency & Emergency Response Plan, Qualitative & Quantitative Risk Assessments, Terminal Planning, Oil Tanker Storage Planning, Cargo Transfer Handling, Loading & Discharging, Ballasting, Tank Cleaning, Crude Oil Washing, Ship Handling, Radar Navigation, Navigational Aids, Meteorological Data Review, Sea & Weather Condition Monitoring, ERT Vessel Coordination and Transport & Distribution Carrier**. Further, he is well-versed in **Sea-going Personnel Human Resource Management, Survival Craft & Rescue Boats, Dynamic Positioning, Anti-Piracy Preparedness & Response, Shipping Maintenance System, Oil & Chemical Tanker, Liquefied Gas Tanker, Inert Gas System, Crude Oil Tanker & Gas Carrier, Offshore Logistics & Supply Management, Marine Fleet Management & Operations, International Maritime Conventions & Codes, Marine Radar, Port Traffic Control Systems & Instrumentation, H²S Hazard Awareness, Firefighting, Medical Care Onboard, Carriage of Dangerous & Hazardous Substances and Ballast Water & Sediment Management**.

During his career life, Captain Sergey has gained his technical and marine expertise through various challenging key positions such as being the **Captain, Operations Director, Project Manager, Port Supervisor, Master** of General Cargo Ship, **Master** of Container Ship, **Chief Officer, Marine Operations Specialist, Marine Coordinator, On-call Duty Officer, Crewing Consultant, 2nd Officer, Ship Chandler** and **Senior Instructor/Trainer** for several international companies such as **ZADCO, AMEC Foster Wheeler, Fircroft Engineering Services, Ltd., Rusalina Yacht Company, Van Oord Offshore, Exxon Neftegaz Ltd (ENL), Jr Shipping, Carisbrooke Shipping, Unicorn Petrol ve Kimya, Q Shipping BV, m/v Tradeport, Miedema Shipping CV, Rah Management BV, Petrobulk Maritime Inc., Empross Lines Ship Management, Melcard Ltd., Aquarian Shell Marine Inc., Mercy Baaba and Square Ltd.**

Captain Sergey has a **Bachelor** degree in **Navigation** in **Nautical Studies** from the **Kiev State Academy of Water Transport, Ukraine** and holds a **Master Mariner** (Unlimited Certificates of Equivalent Competency from the MCA, UK and NSI, Netherlands). Further he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** at the **Institute of Leadership & Management (ILM)** and has delivered various training courses, seminars, workshops and conferences internationally.



Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1:

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	PRE-TEST
0830 – 0930	Review of Basic Principles
0930 – 0945	Break
0945 - 1130	Factors Involved in Tugs & Boats Handling
1130 – 1230	Types of Boats & Tugs (AZ, Conventional, Twin Screw)
1230 – 1245	Break
1245 – 1330	Tug Capabilities & Limitations
1330 – 1420	How to Handle Different Types of Tugs
1420 -1430	Recap
1430	Lunch & End of Day One

Day 2

0730 -0930	New Tug Designs, Additional or New Assisted Ship Designs or New Operating Areas
0930 – 0945	Break
0945 – 1045	How to Handle & Utilize the Best Practice in Different Types of Boats at Various Circumstances
1045 – 1130	Girting, Girding Tripping (GGT)
1130 – 1230	Use of Gob/Gog Eye for Tailing/Towing
1230 - 1245	Break
1245 - 1330	Escort Tugs Technique
1330 - 1420	Tug Safety & Interaction Effects
1420 – 1430	Recap
1430	Lunch & End of Day Two

Day 3

0730 – 0930	Boat Safety & Interaction Between Ships
0930 – 0945	Break
0930 – 1045	Tug Stability, Pivot Point, Forces Effects During Towing in a Vertical/Horizontal Plain & Stability of the Towed Unit
1045 – 1145	Towing Types, Arrangements, Equipment & Limitations
1145 - 1230	Bollard Pull (BP) Knowledge of the Tug & Calculation if More than 10 Years
1230 - 1245	Break
1245 - 1420	Standard Maneuvers
1420 – 1430	Recap
1430	Lunch & End of Day Three





Day 4

0730 – 0930	<i>Different Maneuvers Tug/Boat</i>
0930 – 0945	<i>Break</i>
0945 – 1130	<i>Squat Effect & Under Keel Clearance</i>
1130 – 1200	<i>Length of Towing Line</i>
1200 – 1230	<i>Wind & Current Effects</i>
1230 – 1245	<i>Break</i>
1245 – 1330	<i>Emergency Procedures</i>
1330 – 1420	<i>Communication Skills</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day Three</i>

Day 5

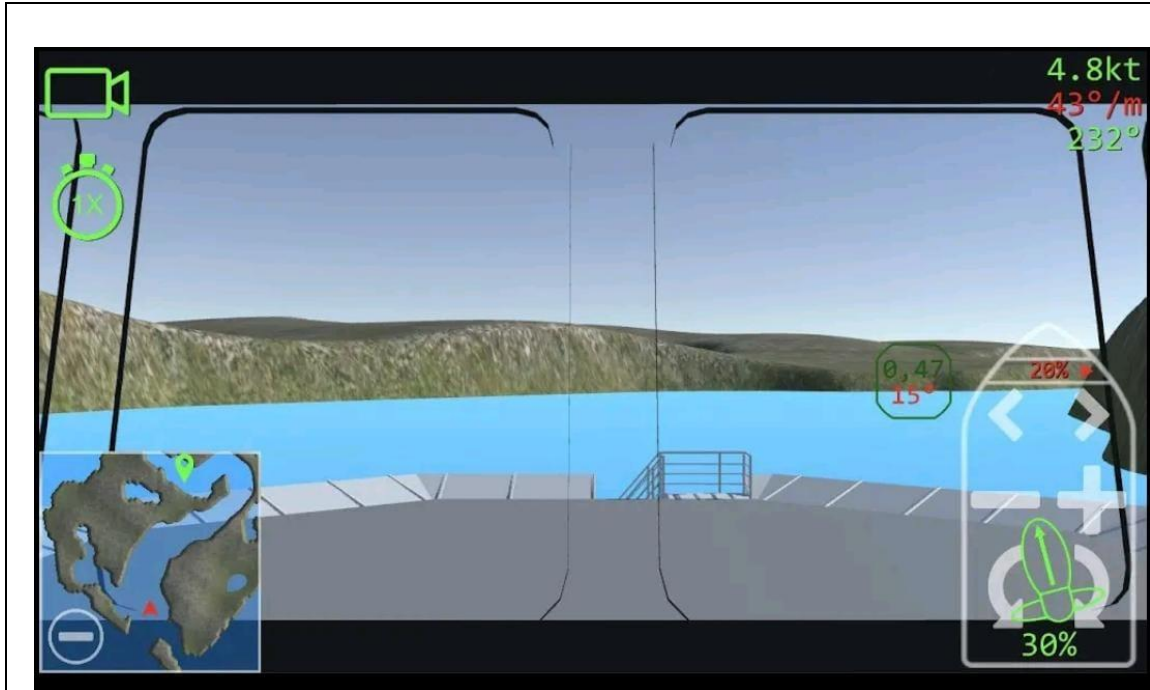
0730 - 0830	<i>Combating Oil Spills</i>
0830 – 0930	<i>Seamanship Techniques & Boat Skipper Best Practice</i>
0930 – 0945	<i>Break</i>
0945 - 1030	<i>Practical Exercises</i>
1030 – 1130	<i>Thorough Debriefing & Analysis</i>
1130 – 1230	<i>Simulator Experience of Handling Highly Maneuverable Tugs & Enhancing Awareness About the Effects of: Fenders “Towline”-Propellers Wash Interaction” Radio Communication-Controllable/Uncontrollable Forces & Varying Visibility</i>
1230 – 1245	<i>Break</i>
1245 – 1345	<i>Simulator Experience of Handling Highly Maneuverable Tugs & Enhancing Awareness About the Effects of: Fenders “Towline”-Propellers Wash Interaction” Radio Communication-Controllable/Uncontrollable Forces & Varying Visibility (cont’d)</i>
1345 – 1400	<i>Course Conclusion</i>
1400 – 1415	<i>Presentation of Course Certificates</i>
1415 – 1430	POST-TEST
1400	<i>Lunch & End of Course</i>





Simulators (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using one of our state-of-the-art simulators “Tugboat Simulator” and “Cruise Ship Handling Simulator”.



Tugboat Simulator



Cruise Ship Handling Simulator

Course Coordinator

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