COURSE OVERVIEW OE0042
Marine Hazards Prevention & Control
Collision, Grounding & Flooding

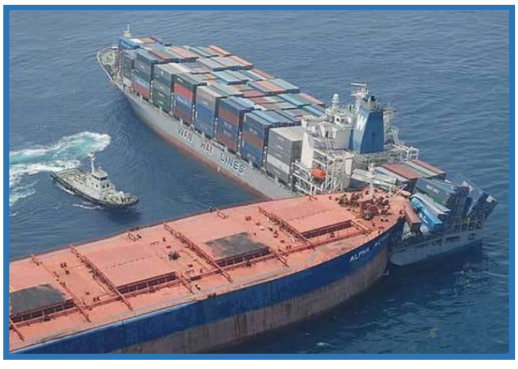
Course Title
Marine Hazards Prevention & Control: *Colision, Grounding & Flooding*

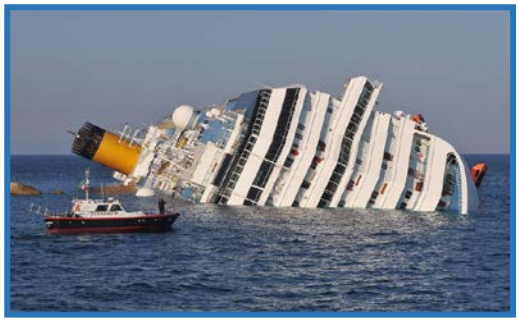
Course Date/Venue
December 09-12, 2024/Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference
OE0042

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description





This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

Any vessel that experiences flooding of one or more of its compartments is exposed to the risk of losing its stability and thus the risk of sinking. Collision and grounding are considered to be the most relevant accident scenarios that may cause flooding of ships, and will thus be the topic of this course.

Even though a lot of effort is constantly being made to keep vessels safe and measures are always taken to avoid serious accidents, one can never completely eliminate the probability of a serious accident to occur on board a ship. If an incident takes place, one can try to prevent it from evolving into a serious accident by for example intentionally beaching a ship that is taking in water and thus keep it from sinking. If such measures fail however, an evacuation provides a last opportunity to minimize the consequences of the accident by reducing the number of fatalities. In such situations, the evacuation performance will be very important and an orderly and timely evacuation can save the lives of many people on board.

This course is designed to provide delegates with an up-to-date knowledge and skills on marine hazards prevention and control in general and collision, grounding and flooding in particular. It covers the marine hazards; distress and salvage; fire-fighting; static electricity and security; shipboard systems and ship's equipment; ship damage control and salvage; management of safety and emergencies; enclosed spaces; shipboard operations; carriage and storage of hazardous materials; human element considerations; special ship types; safety and fire protection; emergency preparedness and evacuation; communications and mooring; precautions on ship and terminal during cargo handling; and safety management.

The course presents probabilities of collision and grounding and investigates possible events subsequent to an incident, e.g. possibilities of flooding, sinking and capsizing, expected time to sink, etc. Evacuations in case of collision and grounding are also covered and the consequences are estimated in terms of expected loss of lives.

Course Objectives

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

- Apply and gain a comprehensive knowledge on marine hazards prevention and control including collision, grounding and flooding
- Be fully prepared during collision, grounding and flooding
- Learn the on-board lifesaving appliances, salvage and damage control equipment and techniques
- Describe marine emergency procedures, communication and protocols as well as distress alert and operations, lifesaving and rescue operations
- Discuss the marine hazards, boat lifesaving appliances, salvage and damage control
- Identify the various types of marine hazards and various scenarios
- Carryout preventive measures for collision, grounding, flooding, fire or other emergencies
- Recognize shipboard systems and ship's equipment
- Employ ship damage control, salvage as well as management of safety and emergencies
- Carryout shipboard operations, emergency preparedness and emergency evacuation
- Implement proper communications and mooring

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 marine hazards prevention and control in general and collision, grounding and flooding in particular. It is suitable for tug masters, controllers (PO), skippers and senior marine staff.

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 accreditation by the following international accreditation organizations:

- 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.

- 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 Abdel Monem Hosny, PhD, MSc, MFG, PGDip, BSc, is an **International Expert** in **Marine** & **Port Operations** with over **40 years** of **marine** and **industrial** experience. His expertise lies on **Marine Terminal Operations** & **Management**, **International Ship and Port Facility Security Code** (**ISPS**) **Code**, **Marine Survey**, **Marine Services and Control**, **Navigational Safety**, **Maritime Security**, **Port Facility Security**, Oil Spill, Environmental Management & Technology (ISO14001), Hazardous Waste Management & Pollution Prevention, Accident Investigation and Reporting, and Emergency Response Planning. Currently, he is the **General Director** of **Environmental Development Commission** with the **Egyptian Environmental Affairs Agency** (**EEAA**). Further, he oversees the **environmental planning** and the identification of environmental conditions for ideal land use for **developing projects** in **urban**, **industrial** and **tourist areas**, supervises the planning, organizing and coordinating the creation of pilot projects for the **conservation** & **protection** of the **environment**, offers technical support for urban, industrial and tourist projects in the environmental and development field.

Previously, Captain Hosny was the **Senior Specialist** for the **Integrated Coastal Zone Management Department** with the **EEAA**. Herein, he was responsible for the **design, supervision** and **implementation** of **National Oil Spill Contingency Plan**, and the **Monitoring & Pollution Sources Inspection Program** for the whole country. He also served as a **focal point** for **competent authorities** and **sectors** which **deal** with **marine pollution** and with the **Regional Organization** for the **Conservation** of the **Environment** of the **Red Sea** and **Gulf of Adan** (**PERSGA**) and further represented the agency in **international meetings** and **conferences**.

Earlier in his career life, he worked with **Damietta Port Authority** and the **Port Control Tower** as the **Maritime Services General Manager**, **Captain, Container Ships** & **Handling Cargo Manager**, **Port Areas Manager**, **Lieutenant Commander**, **Operating Researcher** & **Computer Analyst**, **Navy Officer** and **Ensign** wherein he managed the control for **all marine units**, the preparation, planning and control of **all marine service activities**, the prevention and control of **marine pollution accidents**, the implementation of channel sedimentation cleanup work, the scheduling of operational work on **ships** and the manoeuvring and in-out channel scheduling of **pilot boats** and **ships**.

Captain Hosny has a **PhD** in **Environmental Sciences**, a **Master** degree in **Environmental Management** and in **Foreign Going**, a **Post-Graduate Diploma** in **Operation Researches** and a **Bachelor** degree in **Naval Military Science** as well as in **Maritime Studies**. Further, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership of Management (ILM**) and a recognized member of the Operation Researches Society, Maritime Transport Sector in Pollution & Prevention of Pollution from Ships in international ports and Chartered Institute of Logistics and Transport (**CILT**). He has delivered numerous courses, workshops, trainings and conferences worldwide.

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

US$ 6,750 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), 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 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: ***Monday, 08th of December 2024***

0730 – 0745	*Registration & Coffee*
0745 – 0800	*Welcome & Introduction*
0800 – 0815	***PRE-TEST***
0815 – 0900	***Introduction to Marine Hazards*** *Hazard Types & Category ● Ignition Sources ● Portable Electrical Equipment ● Management of Electrical Equipment and Installations in Dangerous Areas ● Use of Tools ● Equipment Made of Aluminium ● Cathodic Protection Anodes in Cargo Tanks ● Communications Equipment ● Spontaneous Combustion ● Auto-Ignition ● Asbestos*
0915 – 0930	*Break*
0930 - 1100	***Distress & Salvage*** *Types of Marine Hazards & Various Scenarios ● Procedures for Own/Other Vessel in Cases of Collision, Grounding, Flooding, Fire or Other Emergencies – Preventive Measures • Lifesaving Appliance & FiFi Equipment on Board • Disabled Vessels, Distress Scenarios & Radio Communications Procedures*
1100 – 1215	***Shipboard Systems*** *Fixed Inert Gas Systems ● Venting Systems ● Cargo and Ballast Systems ● Power and Propulsion Systems*
1215 – 1230	*Break*
1230– 1415	***Shipboard Systems (cont'd)*** *Vapour Emission Control (VEC) Systems ● Stern Loading and Discharging Arrangements*
1415 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2: Tuesday, 10th of December 2024

0730 – 0915	***Ship's Equipment*** *Shipboard Fire-Fighting Equipment ● Gas Testing Equipment ● Lifting Equipment*
0915 – 0930	*Break*
0930 – 1100	***Ship Damage Control & Salvage*** *Boat Watertight Integrity & Damage Control ● Salvage System & Equipment • Post Flooding Procedures ● Stability, List & Trim Enhancement*
1100 - 1215	***Ship Damage Control & Salvage (cont'd)*** *Small Vessels Stability & Flooding Calculations • Emergency Towage Operation*
1215 – 1230	*Break*
1230– 1415	***Ship Damage Control & Salvage (cont'd)*** *Salvage Convention & Agreements • Liabilities of Master, Crew, Owners/Charterers & Underwriters*
1415 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3: Wednesday, 11th of December 2024

0730 – 0915	***Management of Safety & Emergencies*** *The International Safety Management (ISM) Code ● Safety Management Systems ● Permit to Work Systems ● Hot Work ● Welding and Burning Equipment*
0915 – 0930	*Break*
0930 – 1100	***Management of Safety & Emergencies (cont'd)*** *Other Hazardous Tasks ● Management of Contractors ● Repairs at a Facility Other Than a Shipyard ● Shipboard Emergency Management*
1100 – 1215	***Shipboard Operations*** *Cargo Operations ● Stability, Stress, Trim and Sloshing Considerations Tank Cleaning ● Gas Freeing ● Crude Oil Washing*
1215 – 1230	*Break*
1230 – 1415	***Shipboard Operations (cont'd)*** *Ballast Operations ● Cargo Leakage into Double Hull Tanks ● Cargo Measurement, Ullaging, Dipping and Sampling ● Transfers Between Vessels*
1415 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

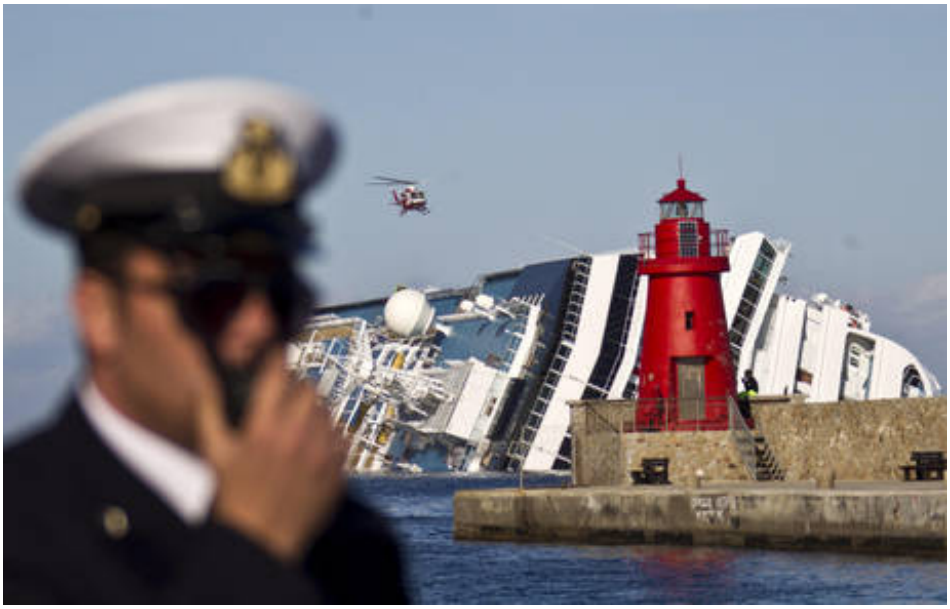
Day 4: Thursday, 12th of December 2024

0730 – 0840	***Emergency Preparedness*** *Terminal Emergency Planning – Plan Components and Procedures ● Definition and Hierarchy of Emergencies ● Terminal Emergency Plan ● Emergency Removal of tanker from Berth*
0840 – 0915	***Emergency Evacuation*** *Evacuation and Personnel Escape Routes ● Survival Craft ● Training and Drills*
0915 – 0930	*Break*

0930 – 1215	***Communications*** *Procedures and Precautions ● Pre-Arrival Exchange of Information ● Pre-Berthing Exchange of Information ● Pre-Transfer Exchange of Information ● Agreed Loading Plan ● Agreed Discharge Plan ● Agreement to Carry Out Repairs*
1215 – 1230	*Break*
1230 – 1345	***Mooring*** *Personnel Safety ● Security of Moorings ● Preparations for Arrival ● Mooring at Jetty Berths ● Berthing at Buoy Moorings*
1345 - 1400	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises: -



Course Coordinator

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