



VIRTUAL REALITY

TRAININGS



LIST OF VIRTUAL REALITY TRAININGS

NEW TITLES ADDED

PROFICIENCY IN SURVIVAL CRAFT

This module is to provide necessary theoretical and practical knowledge to crew for successful demonstration competency to launch enclosed lifeboat in heavy weather, abandon ship drill procedures and scenarios.

AVAILABLE
FOR



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LEGISLATION & REFERENCES:

- STCW Table VI-2.1
- IMO Model Course: 1.23

LEARNING OBJECTIVES:

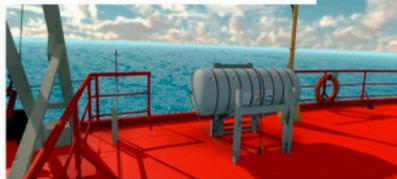
- Introduction and safety
- Abandon ship
- Survival craft
- Launching arrangements
- Evacuation and recovery of survival craft
- Lifeboat engine and accessories
- Actions to take when aboard a survival craft
- Radio equipment
- First aid
- Drills in launching and recovering boats

Life Raft:

- Auto release with Hydrostatic Release Unit (HRU)
- Manually launching

Free-Fall Lifeboat:

- Emergency Launching
- EPIRB and SART



LIST OF VIRTUAL REALITY TRAININGS

MID-SHIP CRANE OPERATION

This Module is to provide necessary theoretical and practical knowledge to crew involved with Hose Handling & Crew Transfer Operation to perform tasks in a safely manner onboard of vessel.

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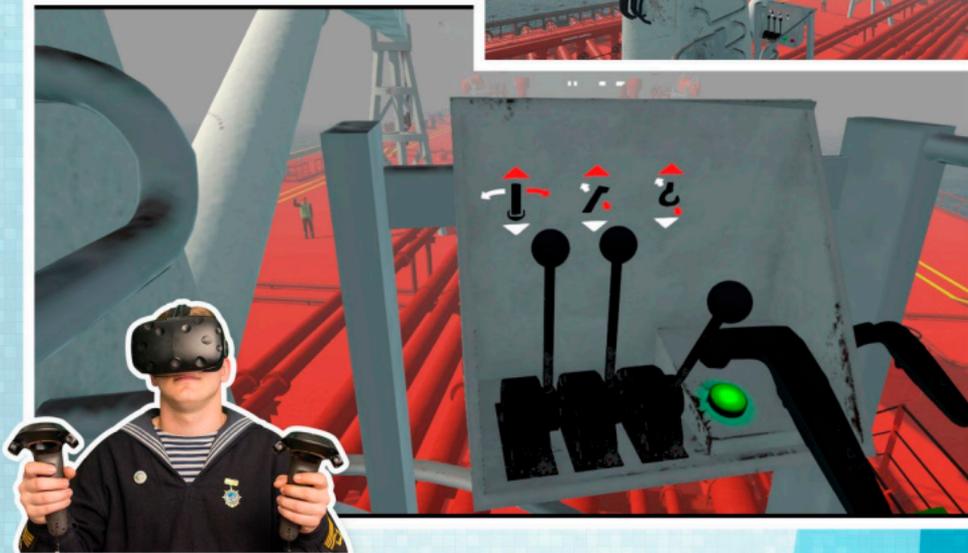
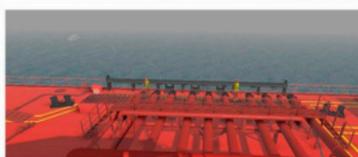


LEGISLATION & REFERENCES:

— LIFTING PLANT AND OPERATIONS (COSWP),
MSA

LEARNING OBJECTIVES:

- Give examples of the result of incorrect use of lifting components and how this can be avoided.
- Show knowledge of the regulations regarding marking, documentation, use, maintenance, daily inspection and discard criteria of lifting gear.
- Choose correct lifting equipment and show correct methods of use.
- Direct crane operations safely using radio & hand signals.
- Develop and follow a lifting plan and risk assessment.



LIST OF VIRTUAL REALITY TRAININGS

TANKER OPERATION

This Module put focus on the relation between human attitude and a safe and efficient operation of tankers as per ISGOTT with regards to Ship Shore Safety Check List. The Module allowed a real deck round required before, during and after completion of cargo operation.

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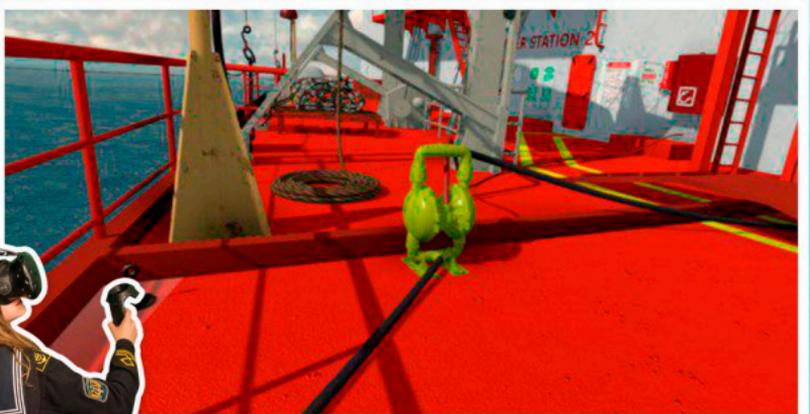


LEGISLATION & REFERENCES

- ISGOTT 5th Edt.
- IMO model course 1.01

LEARNING OBJECTIVES

- Oil Tanker Familiarization
- Tanker Operation
- SSSCL
- Safety Culture on board of Tanker



LIST OF VIRTUAL REALITY TRAINING PRACTICAL EXAMINATION OF LIFE SAVING APPLIANCES (LSA)

NEW TITLES ADDED

This Module put focus on efficient Examination of Life Saving Appliances (LSA). The Module based on most repeated deficiencies recorded by PSC.

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FOR

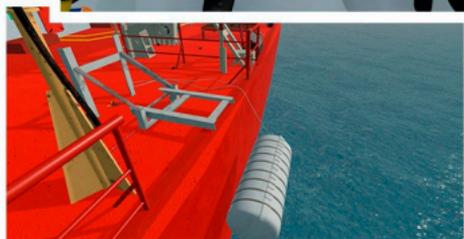


LEGISLATION & REFERENCES:

— PSC deficiency database

LEARNING OBJECTIVES:

- Examination of Lifeboats
- Examination of on-load release gear
- Examination of off-load release gear
- Examination of Liferaft
- Examination of Lifebouy
- Examination of launching appliances for survival craft
- Operational Readiness of LSA
- Examination of Ship Pyrotechnics (Bridge)



LIST OF VIRTUAL REALITY TRAINING PRACTICAL EXAMINATION OF FIRE FIGHTING EQUIPMENT (FFE)

NEW TITLES ADDED

This Module put focus on efficient Examination of Fire Fighting Equipment (FFE). The Module based on most repeated deficiencies recorded by PSC.

AVAILABLE
FOR



LEGISLATION & REFERENCES:

— PSC deficiency database

LEARNING OBJECTIVES:

- Examination of Fire doors
- Examination of fire detection system
- Examination of Main Fire Extinguishing System
- Examination of Fire Extinguishers



LIST OF VIRTUAL REALITY TRAININGS

PRACTICAL EXAMINATION OF LOAD LINE RELATED ITEMS

This Module put focus on efficient Examination of Load Line related Items. The Module based on most repeated deficiencies recorded by PSC.

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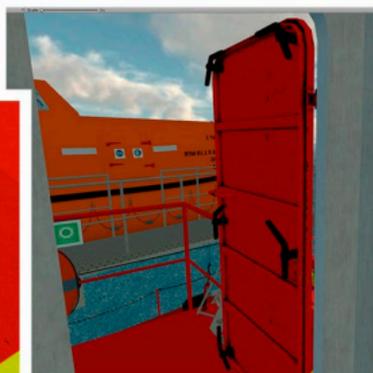
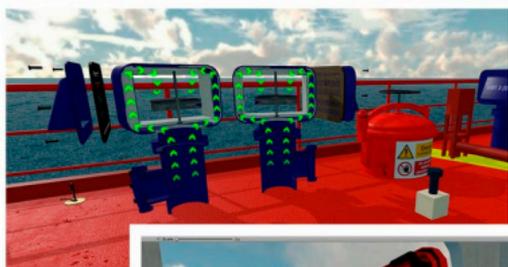


LEGISLATION & REFERENCES:

— PSC deficiency database

LEARNING OBJECTIVES:

- Examination of Weathertight Doors
- Examination of Ventheads, air pipes
- Examination of Cargo Tank Hatches



LIST OF VIRTUAL REALITY TRAININGS

EMERGENCY GENERATOR

This Module put focus on SOLAS requirements regarding emergency power supply of cargo ship and practical Maintenance routine. The Module based on most repeated deficiencies recorded by PSC.

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REFERENCES:

- SOLAS Convention, as amended
- STCW Convention, as amended
- PSC deficiency data base

LEARNING OBJECTIVES:

- Rules and Regulations of Classification Society, SOLAS
- Introduction to Emergency Generator
- Emergency generator routine maintenance
- Familiarization with equipment which get supply from emergency generator



LIST OF VIRTUAL REALITY TRAININGS

STEERING GEAR

This Module put focus on SOLAS requirements regarding Steering Gear and practical Maintenance routine. The Module based on most repeated deficiencies recorded by PSC

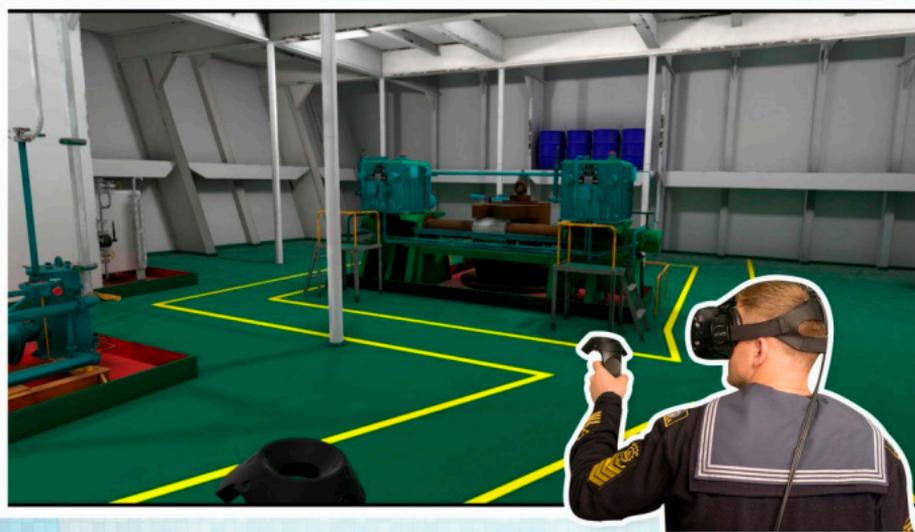
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LEGISLATION & REFERENCES:

- IACS Rules and SOLAS Convention, as amended
- STCW Convention, as amended
- PSC deficiency data base
- IMO Module Course 7.01, 7.03, 7.04

LEARNING OBJECTIVES:

- Rules and Regulations of Classification Society, SOLAS
- Location of The main components of the steering gear
- Operational tests
- Emergency Steering



LIST OF VIRTUAL REALITY TRAININGS

FIXED DECK FOAM FIRE FIGHTING SYSTEM

This Module put focus on simulation of operation with Fixed Deck Foam Fire Fighting System . The Module includes most repeated deficiencies recorded by PSC.

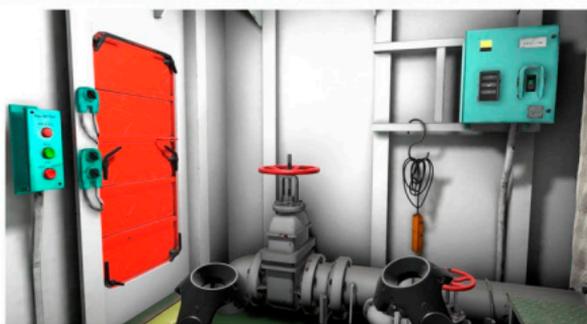
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LEGISLATION & REFERENCES:

- STCW Convention, as amended
- PSC deficiency data base
- IMO Module Course 1.01 and 1.02

LEARNING OBJECTIVES:

- Rules and Regulations of Classification Society, SOLAS
- Fixed Deck Foam Fire Fighting System routine maintenance



LIST OF VIRTUAL REALITY TRAININGS

EMERGENCY FIRE PUMP

This Module put focus on SOLAS requirements regarding emergency Fire Pump. The Module based on most repeated deficiencies recorded by PSC

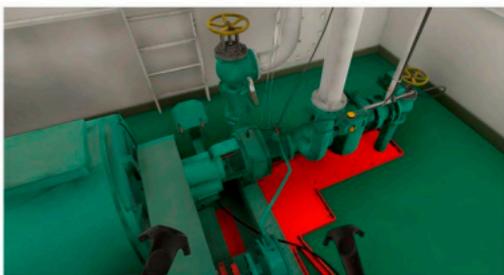
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LEGISLATION & REFERENCES:

- SOLAS Convention, as amended
- STCW Convention, as amended
- PSC deficiency data base
- IMO Module Course 7.01 and 7.03, 7.04

LEARNING OBJECTIVES:

- Rules and Regulations of Classification Society, SOLAS
- Location of the main components of the Emergency Fire Pump
- Operational tests



LIST OF VIRTUAL REALITY TRAININGS

HELICOPTER OPERATION

This Module is to provide necessary theoretical and practical knowledge to crew involved in Helicopter Operation on merchant vessel. The officers and crew members associated on scene for these operations should show high level of situational awareness and good seamanship.

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LEGISLATION & REFERENCES:

- ICS Guide to Ship Helicopter Operations
- SOLAS Convention, as amended
- SIRE VIQ

LEARNING OBJECTIVES:

- Be familiar with Procedures
- Be familiar with best Safety precautions
- Choose correct Equipment
- Communication
- Know Roles and Responsibilities
- Follow Contingency planning



LIST OF VIRTUAL REALITY TRAININGS

CRANE DRIVER

This Module is to provide necessary theoretical and practical knowledge to crew involved with Cargo Crane Operation to perform tasks in a safely manner onboard of bulk carrier.

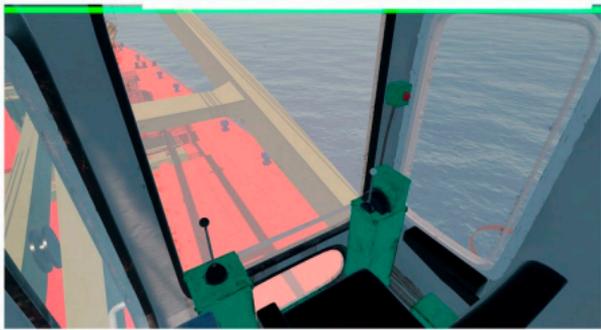
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LEGISLATION & REFERENCES:

- LIFTING PLANT AND OPERATIONS (COSWP), MSA
- CSS

LEARNING OBJECTIVES:

- Show knowledge in discard criteria for Crane wires.
- Know weak points of Crane wires
- Know Crane Grab Maintenance Plan
- Demonstrate basic crane operation



LIST OF VIRTUAL REALITY TRAININGS

WALL WASH TEST

This module is to provide necessary theoretical and practical knowledge to crew for successful demonstration competency of wall wash test (WWT) requirements and procedures.

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LEGISLATION & REFERENCES:

- IMO Model Course: 1.03
- STCW Table A-V/1-1-3

LEARNING OBJECTIVES:

- Introduction and safety
- Be familiar with Wall Wash Test equipment
- Choose correct chemicals for WWT
- Be familiar Sample Collection Procedure
- Demonstrate Test for Presence of Hydrocarbon
- Demonstrate Test for Presence of Chlorides
- Demonstrate Permanganate Fade Time Test
- Demonstrate Acid Wash colour of Aromatic Hydrocarbons



LIST OF VIRTUAL REALITY TRAININGS

MARITIME DISTRESS FLARES & SIGNALS (PYROTECHNICS)

This module provides practical instructions how to use and where to locate Hand Flares, Rocket Parachute Flares, Buoyant smoke signal, Line throwing appliance.

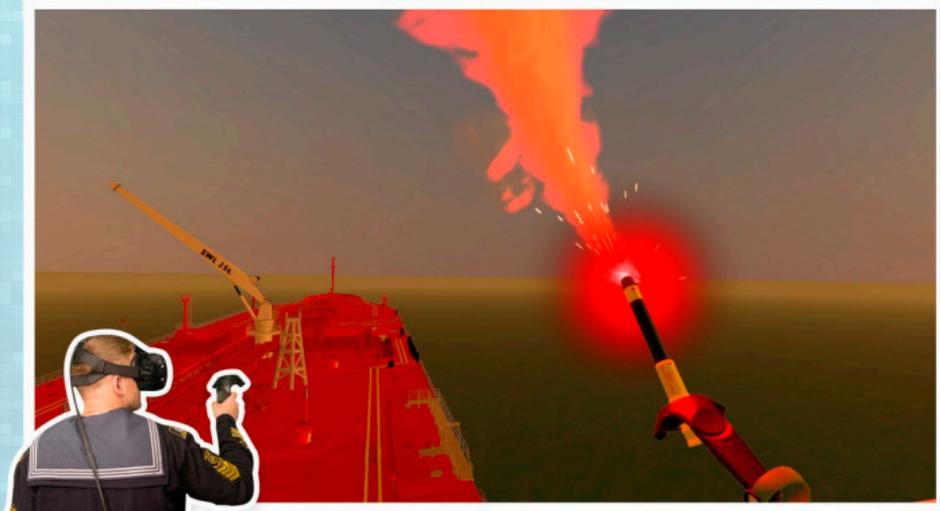
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LEGISLATION & REFERENCES

- SOLAS
- SAR
- COLREG

LEARNING OBJECTIVES

- Maintenance and disposal criteria
- Signals
- Demonstrate PyroTechnics Practice



LIST OF VIRTUAL REALITY TRAININGS

PROFICIENCY IN FAST RESCUE BOATS

This module is to provide necessary theoretical and practical knowledge to crew for successful demonstration competency to launch Fast Rescue Boat (FRB) from AHTS (Anchor Handling Tug / Supply).

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LEGISLATION & REFERENCES:

- STCW Table VI-2.2
- IMO Model Course: 1.24

LEARNING OBJECTIVES

- Introduction and safety
- Launching arrangements
- Actions to take when aboard FRB
- MOB Drills in launching and recovering boats



LIST OF VIRTUAL REALITY TRAININGS

VESSEL STRUCTURAL INSPECTION

This module provides practical instructions that will guide officers on how to prepare for inspections, recognize structural and paint coating defects and know where they might be found.

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LEGISLATION & REFERENCES

- IACS Recommendation 87 Guidelines for Coating Maintenance and Repairs for Ballast Tanks and Combined Cargo/Ballast Tanks on Oil Tankers

LEARNING OBJECTIVES

- Recognise Anatomy and critical areas of WBT
- Demonstrate how to Inspect Structural element of WBT
- Outline how to assess the condition of a WBT during an inspection
- Outline how to record findings during a WBT inspection



LIST OF VIRTUAL REALITY TRAININGS FIXED CO2 FIRE-FIGHTING SYSTEM

NEW MODULE

This Module put focus on simulation of operation with FIXED CO2 FIRE-FIGHTING SYSTEM. The Module includes most repeated deficiencies recorded by PSC

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LEGISLATION & REFERENCES:

- SOLAS Convention, as amended
- STCW Convention, as amended
- PSC deficiency database
- IMO Module Course 7.01 and 7.03

LEARNING OBJECTIVES:

- Requirements / regulations for FIXED CO2 FIRE-FIGHTING SYSTEM
- FIXED CO2 FIRE-FIGHTING SYSTEM routine maintenance troubleshooting
- Practice in Flooding operation



LIST OF VIRTUAL REALITY TRAININGS

SAFETY MOORING

NEW MODULE

This module provides practical instructions on good seamanship practice for securing mooring lines, snap back zones, identification of the hazards and associated risks.

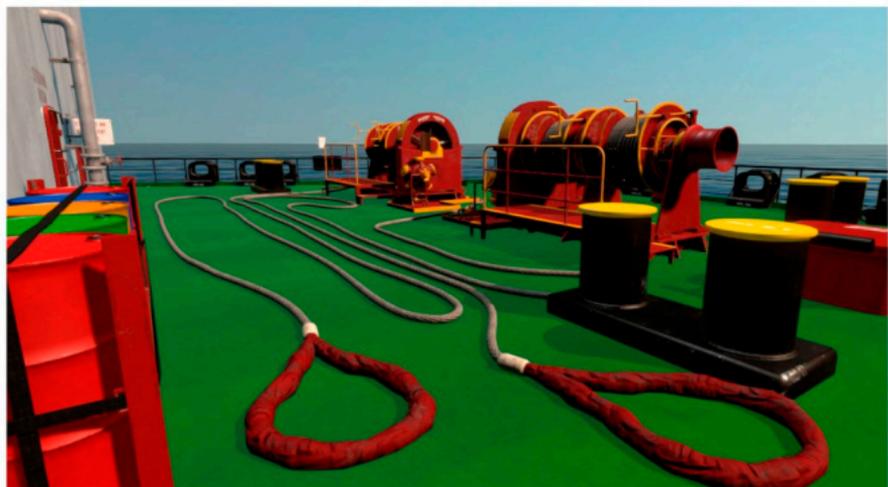
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LEGISLATION & REFERENCES

- STCW AVI/1-4
- OCIMF MEG4
- COSWP various parts
- ILO Code of Practice on "Accident Prevention on Board Ship at Sea and in Port

LEARNING OBJECTIVES

- Identify good seamanship practice for securing a mooring line
- Identify the hazards and associated risks that can be present during mooring operations
- Show knowledge in discard criteria for Mooring Lines.
- Understand Snap Back Zones
- Know Key elements of Mooring Winches Maintenance Plan



LIST OF VIRTUAL REALITY TRAININGS **NEW MODULE**

GAS MEASUREMENT / GAS INSTRUMENTS

This module covers the use and maintenance of portable and personal Gas Measurement Instruments

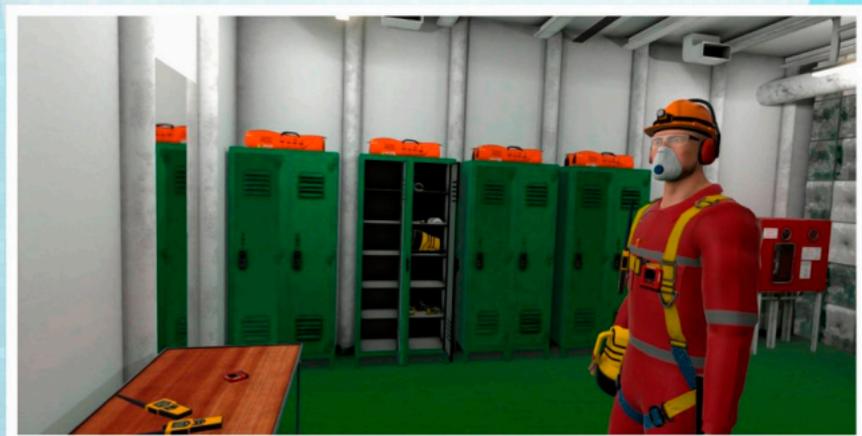
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LEGISLATION & REFERENCES

- SOLAS
- ISGOTT

LEARNING OBJECTIVES

- Identify the handling and storage arrangements required for portable gas measuring instruments
- Recognise the requirements for obtaining a representative atmosphere sample
- Identify how to use and calibrate portable gas measuring instruments on board ship
- Recognise the principle of operation of common oxygen, hydrocarbon gas and toxic gas measuring instruments
- Recognise the limitations of some gas measuring instruments, and that some instrument types are unsuitable for certain situations



LIST OF VIRTUAL REALITY TRAININGS **NEW MODULE**

ENCLOSED SPACE ENTRY

VR Training which cover entry into an enclosed space, precautions whilst in an enclosed space, and procedures for an emergency in an enclosed space. We identify the procedures which need to be followed while working in an enclosed space, identify the hazards and the procedures for entering an enclosed space

LEGISLATION & REFERENCES

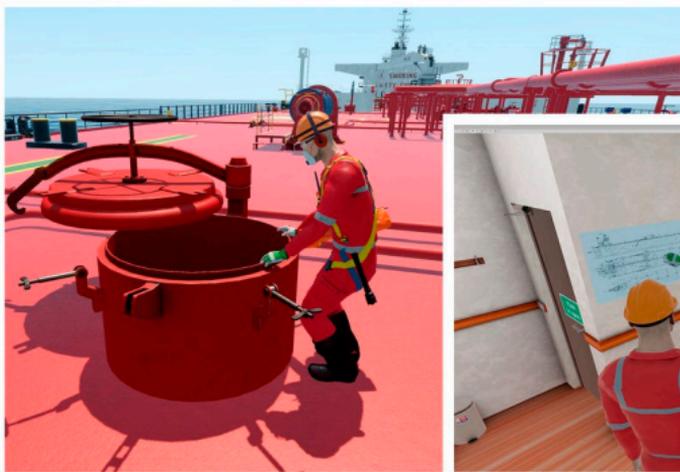
- STCW A-VI/1-4 + relevant parts of A-II/5, A-III/5 and A-III/7 + A-II/1, A-II/2, A-II/3, A-III/1, A-III/2, A-III/4 and A-III/6
- COSWP Ch15
- ILO Code of Practice on "Accident Prevention on Board Ship at Sea and in Port".
- IMO Resolution A.1050(27).
- ISGOTT CH10 + refs in chapters 2, 7 and 14

LEARNING OBJECTIVES

The learner will be able to:

- describe the procedures to be followed while personnel are working in an enclosed space
- identify the role of personnel at the entrance to an enclosed space
- describe typical communication arrangements while personnel are working in an enclosed space
- identify other possible problems when working in an enclosed space and the procedures necessary to manage them
- identify the limitations of an Enclosed Space Entry permit Identify the hazards associated with enclosed spaces
- List the preparations to be made, and procedures to be followed, before entry to an enclosed space
- List the personal protective equipment required for entry into an enclosed space
- Identify the entries to be made on an Enclosed Space Entry permit some instrument types are unsuitable for certain situations.

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LIST OF VIRTUAL REALITY TRAININGS **NEW MODULE**

HIGH VOLTAGE

STCW 2010 recognises the increasing use of high voltage (HV) electricity on ships with new requirements for all engineer and electrical officers to be familiar with HV. Part B of the STCW Code makes recommendations for the training of personnel having management responsibilities for the operation and safety of HV electrical equipment, as this needs tighter control than for LV. This e-learning module covers the topics in STCW B-III/2.

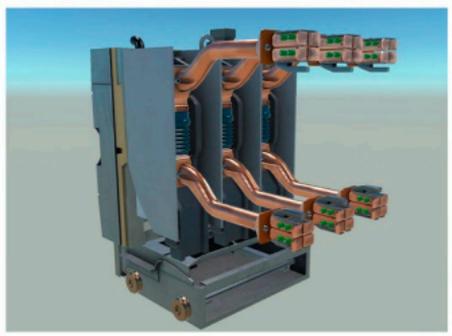
LEGISLATION & REFERENCES

- STCW 2010 A-III/1, III/2, III/6 and B-III/2

LEARNING OBJECTIVES

- High Voltage systems and equipment
- Safe operation of High Voltage
- Fault finding on a High Voltage system

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LIST OF VIRTUAL REALITY TRAININGS **NEW MODULE**

FAMILIARIZATION WITH FRESH WATER GENERATOR

VR Training delivers the working principles of a typical fresh water generator, this course identifies the most important parts, starting and stopping procedures and the basic operating problems that often need troubleshooting.

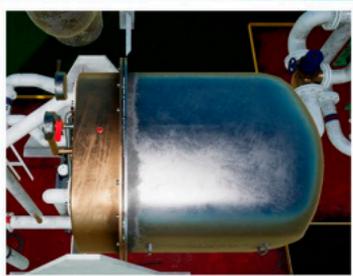
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LEGISLATION & REFERENCES

- STCW as amended
- Marine Engineering

LEARNING OBJECTIVES

- General introduction to the working principles and parts
- Starting procedure
- Stopping procedure
- Simulations



LIST OF VIRTUAL REALITY TRAININGS **NEW MODULE**

FAMILIARIZATION WITH HFO PURIFIER

Essential components in main and auxiliary machineries can be damaged. The most common reason for such breakdowns is poor purification and absence of correct treatment of the fuel and lubricating oils. VR Training Programme is designed to increase the awareness as to how to maintain a purifier in good working order.

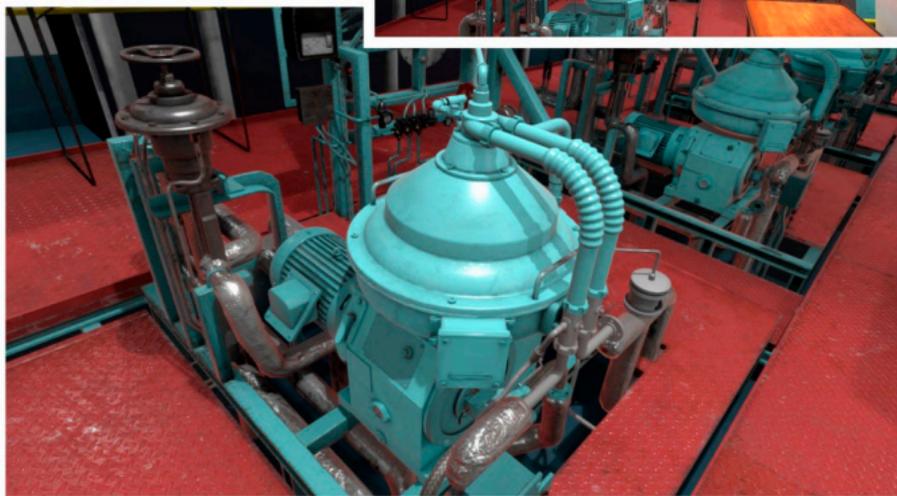
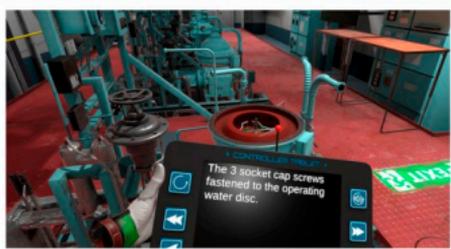
LEGISLATION & REFERENCES

- STCW as amended
- Maintenance & Repair

LEARNING OBJECTIVES

- Sedimentation and basic separation principles
- The interface
- Purifier, bowls and paring discs
- Conventional separation systems
- Simulations

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LIST OF AVAILABLE 3D-BASED TRAININGS

- Ballast Water Treatment Simulator
- Container Loading Simulator
- Oil Record Book, Part I Simulator
- Oil Record Book, Part II Simulator
- Radar Simulator



3D-based maritime training utilizes immersive, interactive simulations that resemble video games. Trainees use virtual environments to practice real-world scenarios, interact with ship systems, and perform operations in a way that mimics the actual tasks they will encounter on board.

Ballast Water Treatment Simulator

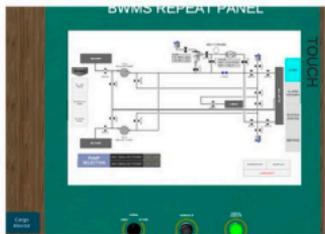
This simulator replicates the complex processes involved in ballast water management, providing a realistic and engaging environment for users to learn and practice essential skills. The simulator features detailed 3D models of ballast water treatment systems, including components such as pumps, filters, and UV reactors. Seamen can navigate through it from routine operations to emergency situations, enhancing their understanding and proficiency in managing ballast water according to international regulations.

Legislation & references

- International convention for the control and management of ship's ballast water and sediments.
- The course complies with DNVGL-ST-0008 Learning Programmess

Learning objectives

- Identify and Operate Ballast Water Treatment System Components
- Execute standard operating procedures for ballast water treatment
- Respond to different scenarios, ensuring compliance with safety protocols
- Make informed decisions based on real-time data and system feedback



Container Loading Simulator

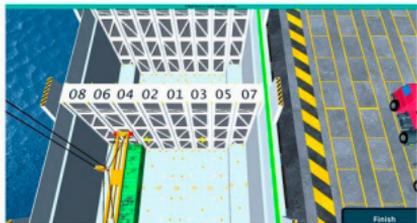
This interactive training solution is engineered to equip maritime professionals with the expertise to efficiently manage and execute container loading operations. The core objective of the module is to empower seamen to proficiently load all containers from the queue into the Cargo Hold, strictly adhering to the Bay plan. This approach ensures optimal space utilization, vessel stability, work with different types and conditions of containers, and compliance with maritime safety regulations.

Legislation & references

- SOLAS (VI & VII)
- CSC
- CSS
- IMDG Code
- IMO - Safe transport of containers

Learning objectives

- maintaining balance by distributing containers in the Cargo Hold
- understanding of reefer placement
- understanding of grouping and combining 20ft & 40ft containers
- work and assessment of OOG and damaged containers
- knowledge of dimensions and obstacles during the load



LIST OF AVAILABLE 3D-BASED TRAININGS

Oil Record Book (Part I) Simulator

During Port State Control inspections, about a quarter of MARPOL violations are related to oil record book entries. Most often these are made in Part I of the oil record book – used to record machinery space operations. In accordance with IMO guidelines, this course explains how to record a wide range of operations, such as handling bilge water and sludge, bunkering, and fuel tank ballast operations. The IMO recommended method of making corrections is highlighted along with a number of typical sources of errors in oil record books.

Legislation & references

- MARPOL An. I Reg. 17
- MEPC.1/Circ.736/Rev.2

Learning objectives:

- Understand the general requirements for completing the Oil Record Book, Part 1.
- Understanding when and how to enter information in the Oil Record Book, Part 1.
- Be aware of common mistakes to avoid and the possible consequences of making them when entering records.

Oil Record Book (Part II) Simulator

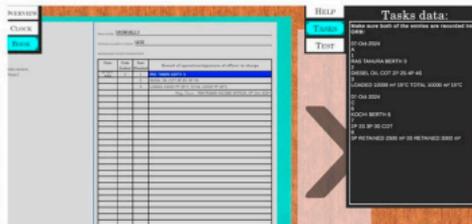
An Oil Record Book Part II (Cargo/Ballast Operations) is required for every oil tanker with a gross tonnage of 150 or more. The MARPOL requirements for the Oil Record Book Part II will be covered in this module's instructions on how to make sure they are met. The module will go over every operation carried out on oil cargo and ballast for which the ORB Part II has codes in order to show how each operation should be recorded and how legitimate corrections can be made.

Legislation & references

- MARPOL Annex I, Reg. 36

Learning objectives

- Understand the general requirements for completing the Oil Record Book, Part 2.
- Understanding when and how to enter information in the Oil Record Book, Part 2.
- Be aware of common mistakes to avoid and the possible consequences when entering records.



Radar Simulator

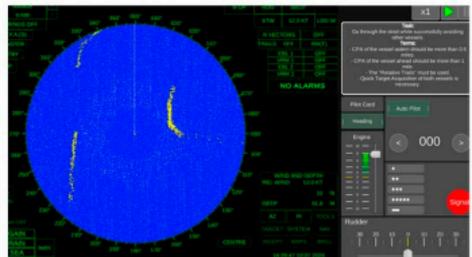
The 3D Simulator for Maritime Radar is a training tool designed to enhance the skills of maritime professionals in radar operation and navigation. This simulator provides a realistic and immersive environment where users can interact with radar systems, practice navigation techniques, and respond to various maritime scenarios. The game features detailed 3D models of radar equipment and vessels, allowing users to experience real-time radar operations, including target tracking, collision avoidance, and navigation in different weather conditions and sea states.

Legislation & references:

- International Regulations for Preventing Collisions at Sea (COLREGS)
- STCW as amended A-II/2, A-II/3
- IMO Model Course 1.07
- IMO, Radar Observers Handbook

Learning objectives

- Operate radar controls effectively, including adjusting gain, clutter, and range settings
- Use radar for accurate navigation and positioning
- Identify and track vessels, landmasses, and navigational hazards
- Apply radar information to make informed decisions for collision avoidance
- Execute maneuvers based on radar data to maintain safe distances from other vessels



LIST OF AVAILABLE COMPUTER-BASED TRAININGS

- Radar observation and plotting
- ARPA theory
- Ballast Water Management Awareness
- Navigation in Ice
- Navigation in Baltic Ice
- Operations in Cold weather
- Cyber Security
- Oily (Bilge) Water Separator
- Marine Fuel Handling
- Hydrogene Sulphide Awareness
- Risk Assessment and Management
- Accident Investigation & Root Cause Analysis
- Steering Gear
- Human Relations, Social Responsibilities
- Conflict Management
- Intraduction to MARPOL
- OPA 90
- Piracy and Armed robbery
- Oily (Bilge) Water Separator
- Ship Safety Officer
- Ship Security Officer
- Ship Security Awareness
- Personal Safety
- Ballast Handling
- Volatile Organic Compounds
- Deck Crane Operator
- Tanker Operation (Basic)
- Tanker Operation (Advanced)
- Enclosed space entry, The entry operation
- Enclosed space entry, Hazard awareness and preparations for entry
- HAZMAT — IMDG Code
- HAZMAT — IMDG Code Advanced
- Fresh Water Generator
- Personal Survival Craft
- Transfer of Personnel by Crane: Officer in Charge
- Transfer of Personnel by Crane: Person to be Transferred
- Transfer of Personnel by Crane: Crane Operator
- Transfer of Personnel by Crane: Signaller
- Galley Operations: Hygiene



Computer-Based Training (CBT) programs offers theoretical training, accompanied by multimedia such as text, images, videos, and quizzes, to teach seamen various maritime procedures, safety practices, and technical knowledge. It involves the use of a personal or networked computers, laptops, tablets or smartphones. It is synchronized with web-server.



LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Radar observation and plotting

This module covers the minimum required theoretical knowledge for radar operators and is made in accordance with IMO Model Course 1.07.

Legislation & references

STCW as amended A-II/2, A-II/3

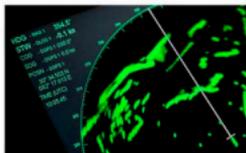
IMO Model Course 1.07

IMO, Radar Observers Handbook

Learning objectives

Be able to set up and maintain a radar picture

Be able to utilize radar information for navigation purposes



ARPA theory

This learning module will provide the basic theory of ARPA including a review of manual plotting principles.

It will refresh your ARPA knowledge or prepare you for the required simulator course complying with the IMO requirements for ARPA training and certification.

Legislation & references

STCW as amended, A-II/1, A-II/2 and B-I/12

IMO model course 1.07 and 1.08

COLREG

Learning objectives

Upon completion of this module the student should be able to:

- demonstrate basic knowledge in manual radar plotting
- understand the principals of ARPA systems
- understand some of the basic theory of ARPA tracking systems
- identify the different display modes available on an ARPA radar
- understand the risks involved in over-reliance on ARPA
- identify the different navigational symbols used on navigational displays
- recognise the importance of always following COLREG



Ballast Water Management Awareness

The background of developing this course is the implementation of the Ballast Water Management convention. The convention affects more than 99% of the world fleet and will require a Ballast Water Management Plan with a suitable staff training scheme. The main aim is to familiarize the crew onboard with the International Convention of Control and Management of Ship's Ballast Water and Sediments so that they can contribute to compliance with the training requirements in the convention.

Legislation & references

International convention for the control and management of ship's ballast water and sediments.

The course complies with DNVGL-ST-0008 Learning Programmes - April 2015.

Learning objectives

The learning objective of this course is to enable officers and crew onboard ships to become familiar with the ballast water management methods commonly used to meet the requirements of the International Convention for the Control and Management of ships' Ballast Water and sediments and thus minimise environmental damage caused by the transfer of ballast water.



LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Navigation in Ice or Polar Water

This module is relevant to any vessel that trades above latitude 60 degrees (from Polar Code definition of polar areas), and particularly those that trade in ice areas, which include the Baltic and Great Lakes.

Legislation & references

IMO Resolution A1024(26) Guidelines for ships operating in Polar waters
STCW (Manila) Chapter V Section B-V/g Guidance regarding training of masters and officers for ships operating in Polar waters
The International Code for Ships Operating in Polar Waters, (the 'Polar Code'),
MCS Circular 1056, Guidelines for Ships Operating in Arctic Ice-Covered Waters
IMO Assembly in November 2007 adopted resolution A.999(25) Guidelines

Learning objectives

On completion of the module learners will be able to:

- State how ice forms on land and recognise the environmental conditions that cause sea ice to form
- Identify ice types found in open water and on coastal strips and state how wind and current move sea ice and changes its characteristics
- Know about ice class vessels and prepare own-ship for entering ice infested waters
- Recognise the basic rules of ship handling when working in different types of ice and know which types of ice should not be entered
- Set a safe speed in ice infested waters and be able to safely sail in a convoy along a broken channel in ice
- State the variations in towage assistance available whilst in ice in different parts of the world
- Recognise how an ice breaker works to support vessels and how to communicate effectively with various ice breakers around the world



Cyber Security

Cyber security is widely recognised as a problem throughout many industries, OMS offers an immediate solution to help you train your staff to be cyber secure. This easy-to-understand course is intended for a wider audience; the material also leverages key safety management practices and shows how they can be applied to cyber security within the maritime and offshore industries. The module explain in simple steps how and where cyber-attacks may target not only your direct IT infrastructure, but also the embedded software in assorted operational technology (OT) systems on board.

Legislation & references

IMO MSC.1/Circ.1526 Guidelines on Maritime Cyber Risk Management
"The guidelines on cyber security onboard ships" (BIMCO)
OCIMF VIQ, TMSA

Learning objectives

Explain how important you are for cyber security and how to protect yourself and your organization against cyber security threats
Describe common cyber threats and recognize such cyber-attacks and react properly to them
Teach how to safely use devices that can be abused by cyber attackers – such as your smart phone, personal computer and USB sticks. We also cover password and remote connection requests



Piracy and Armed robbery

This title will increase the learners awareness of the worldwide hot spots for piracy and armed robbery. It will also increase the learner's knowledge of how vessels are targeted, how to 'harden' a vessel, and physical measures that can be taken to ward off a pirate attack, as well as providing further information on organisations that are there to help with security. Lastly, the title will outline the consequences of being boarded if vessel defenses are breached and pirates take over.

Legislation & references

Guidelines for Owners, Operators and Masters for protection against piracy and armed robbery in the Gulf of Guinea region (Version 3, June 2018)
Global Counter Piracy Guidance for Companies, Masters and Seafarers
BMP5 - Industry Best Management Practices to deter Piracy in the Red Sea, Gulf of Aden, Indian Ocean and Arabian sea - version 5.

Learning objectives

This training program is designed to assist the seafarer in:

- preventing a piracy or armed robbery attack
- managing a situation where pirates or armed robbers gain access to the vessel; and
- understanding how to react if pirates do actually seize control of the ship.



LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Steering Gear

In case of emergency situations it is very important to know how to operate the steering gear. It is also important to know about safety rules and regulations regarding steering gears.

Legislation & references

STCW as amended A-II / A-III

Learning objectives

To educate the user and provide an understanding of how a Steering Gear unit is operated and how to maintain the steering gear

Learning to maintain safe operation of the steering gear

How to handle emergency situations

General comprehension of parts and possible problems, and to be able to communicate with expertise

Marine Fuel Handling

Legislation & references

STCW as amended - Marine Engineering

Controlling the operation of the ship and care for persons on board

The objectives

After completing this module the learner will:

- know the procedures and requirements for bunkering fuel;
- know the procedures and requirements for storage and handling of fuel;
- have a working knowledge of some of the treatments available for preparing the fuel for use.



Risk assessment and management

The purpose of this title is to provide the users with knowledge and understanding of Risk Assessment and Risk Management. The idea is to heighten awareness of safety issues and get people to think about job hazards and how they can be controlled. The title has focused on what you can do in your daily work, identify the risks involved, and work around them.

Legislation & references

STCW as amended

Learning objectives

Identify potentially hazardous situations,

Apply appropriate methods to estimate the likelihood

that a hazard occurs, and the uncertainty in that estimate,

Provide alternative solutions to reduce the risk doing one or more of the following:

Eliminating any possibility of the hazard occurring,

Reducing the likelihood that the hazard occurs,

Limiting any negative consequences of the hazard



Ship Security Awareness

Security Awareness is intended for seamen and crew who do not have designated security duties. It will give the required knowledge to enhance maritime security awareness by recognising security threats, and understanding the need for and methods of maintaining security awareness and vigilance. Due to the International Ship and Port Facility Security (ISPS) Code and SOLAS chapter XI-1 and XI-2.

Legislation & references

SOLAS

ISPS Code

IMO Model Course 3.19, 3.26 and 3.27

Learning objectives

To provide a general introduction to maritime security and raise awareness of security issues when in port, at anchor and at sea



LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Human Relations, Social Responsibilities

Module on Human Relations highlights the importance of good relations for safe and effective teamwork. Featuring engaging case studies and high quality animations, the module identifies positive steps to take to prevent seafarers from feeling isolated and to help everyone on board cope with the challenges of life at sea.

Legislation & references

STCW as amended A-VI/1-4 Specification of minimum standard of competence in personal Safety and social responsibilities.

Learning objectives

The main learning objectives of this module are that the learner will be able to:

- Identify what has become known as 'The Human Element' and recognise that it is responsible for most accidents.
- Identify what is meant by the phrase 'safety culture'.
- Recognise the importance of teamwork and good communications in avoiding accidents.
- Recognise the methods for, and barriers to, good communication
- Recognise individual rights and responsibilities and respect the rights of others
- Recognise the factors affecting human relationships at sea



Personal Safety

Despite adherence to the ISM Code, accidents and injuries continue to occur. Recent high-profile incidents show that even with good procedures, the safety culture on board and the personal choices of people can mean the difference between staying safe or causing an accident.

Legislation & references

STCW as amended

Learning objectives

The learner will be able to:

- Identify what is meant by the phrase 'safety culture' and what they can do to be part of this;
- Recognise the importance of shipboard familiarisation;
- Recognise the benefits of reporting accidents, incidents and near misses;
- Recognise that the ISM Code requires that procedures for safe work must be available onboard and that they must be followed;
- Recognise the main sources of rules that are in place to protect the seaman, but know that personal safety is their own responsibility.



Conflict Management

Conflict management is the process of limiting the negative aspects of conflict while increasing the positive aspects of conflict. The aim of conflict management is to enhance learning and group outcomes, including effectiveness or performance in an organizational setting. Properly managed conflict can improve group outcomes.

The goals are to enhance the competence requirements of STCW and to improve best industry practice when it comes to leadership and management training.

The focus is on the development of organizational, personal and social competences among junior and senior officers.



LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Oily (Bilge) Water Separator

The aim of this course is to enhance seamen understanding of the basic principles of separation of oil from bilge water, along with the procedures for operation and maintenance of an Oily Water Separator.

Legislation & References:

MARPOL MEPC.1-Circ.642
MARPOL MEPC.1-Circ.736-Rev.2
MARPOL MEPC.1-Circ.778-Rev.2
MARPOL MEPC.107(49)

Learning objectives:

General description.
Application, Working principle.
Main components.
Control panel.
Operating instructions.
Preparation for starting the OWS – Starting the OWS.
Automatic control functioning or Manual control.
Oil Record Book Entries.



Ship Security Officer

This training module aims to provide knowledge to those who may be designated to perform the duties and responsibilities of a Ship Security Officer (SSO), as defined in part A.2.1.6 (and part A.1.2.2 and part B.13.2) of the ISPS Code, and in particular the duties and responsibilities with respect to the security of a ship, for implementing and maintaining a ship security plan and for liaising with the Company Security Officer (CSO) and with Port Facility Security Officers (PFSOs).

Legislation & references

STCW as amended
ISPS code
SOLAS
IMO Model course 3.19



Accident Investigation & Root Cause Analysis

This module provides an overview of accident, incident and near-miss investigation on board ship at various levels and forms training for those from ship's staff and office management who are required to carry out or monitor such investigations. It is therefore particularly relevant for Safety Officers, Heads of Department, Masters and officebased Safety Managers.

Legislation & references

IMO Resolution A.849(20) Code for the Investigation of Marine Casualties and Incidents.
IMO MSC-MEPC.3 Circ.2 Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident.
ILO MLC 2006 Guideline B4.3.6. – Investigations; Regulation 5.1.6 – Marine casualties.

Learning objectives

Recognise the importance of investigating accidents, incidents and near-misses
Identify the relationship between cause and effect
Identify the types of controls which can be put in place to prevent accidents

LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Introduction to MARPOL

Pollution from ships at sea has very serious environmental consequences. In response to the concerns about the environment the IMO, adopted MARPOL 73/78, which outlines pollution control measures in six Technical Annexes. Focussing on the origins of the MARPOL 73/78 Convention and identifying each of the six annexes or sections of the Marpol convention, this module describes pollution control measures in each Marpol Annex.

Legislation & references

MARPOL 73/78

Chapters

Oil Pollution- Annex I

Liquid Noxious Substances in Bulk- Annex II

Harmful Substances in Packages- Annex III

Sewage Pollution- Annex IV

Garbage Pollution- Annex V

Air Pollution- Annex VI



OPA 90

OPA 90 is an act to establish limitations on liability for damages resulting from oil pollution, and to establish a fund for the payment of compensation for such damages, and for other purposes.

Legislation & references

STCW as amended

OPA 90

Crane Operator

Increasing knowledge of how crane and lifting equipment are effectively maintained, this module stresses the importance of planning and preparing for heavy lift operations and identifies the safety requirements of different types of operations, ensuring that the vessel has adequate stability and that the crew ensure cargo and equipment is well secured at all times. The module covers topics like crane maintenance requirements, effective communications, content of a heavy lift cargo plan and risks associated with a heavy lift and how they are controlled.

The main learning objectives of this CBT module are:

- to overview the various crane types discussed in this module and their routine uses on board
- to understand the preparations and procedures necessary for the safe operation of cranes
- to examine the operational safety devices and safety limits of cranes
- to understand the importance and purpose of inspections and continuing maintenance on cranes and associated gear

Hydrogene Sulphide Awareness

This module will familiarize you with where H₂S can be found onboard a vessel and explore the properties and specific health and safety risks H₂S poses. The module will also introduce the methods used to measure H₂S levels and identify safe and unsafe levels of exposure. You will learn how to recognize symptoms of harmful exposure, protect yourself while you work and take the correct action in the event of a first aid emergency.

Legislation & references

STCW as amended

ISM Code

Objectives:

- to identify where H₂S can be found on-board a vessel
- to explore properties and specific health and safety risks H₂S poses.
- to look at the methods used to measure H₂S levels and identify safe and unsafe levels of exposure.
- to recognize symptoms of harmful exposure, protect yourself while you work and take the correct action in the event of a first aid emergency.

LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Enclosed space entry, Hazard awareness and preparations for entry

The IMO defines an enclosed space as 'an area on board which has limited openings for entry and exit, inadequate ventilation, or is not designed for continuous worker occupancy', but any space can be dangerous, not just those that are defined as 'enclosed'.

Legislation & references

STCW A-VI/1-4 + relevant parts of A-II/5, A-III/5 and A-III/7 + A-II/1, A-II/2, A-II/3, A-III/1, A-III/2, A-III/4 and A-III/6
COSWP Ch15

ILO Code of Practice on "Accident Prevention on Board Ship at Sea and in Port" ch10.

IMO Resolution A.1050(27).

ISGOTT CH10 + refs in chs 2, 7 and 14

Learning objectives

- Identify the hazards associated with enclosed spaces
- Describe the testing equipment used prior to enclosed space entry
- Identify the preparations to be made, and procedures to be followed, before entry into an enclosed space
- Describe the additional precautions required when the atmosphere in an enclosed space is known or suspected to be unsafe
- List the personal protective equipment required for entry into an enclosed space
- Identify the entries to be made on an Enclosed Space Entry permit
- Indicate the importance of comprehensive team briefing before enclosed space entry



Enclosed space entry, The entry operation

Enclosed Space Entry is one of the leading causes of casualties within the Shipping Industry. This keeps happening due to poor training and poor knowledge or disregard of the Procedures that should be followed. Every crew member should be knowledgeable, able and willing to carry out an Enclosed Space Entry in a safe manner. Various documentations onboard assist the crew to follow the correct procedures and ensure that all steps are covered, and nothing is missed prior to entry.

Legislation & references

STCW A-VI/1-4 + relevant parts of A-II/5, A-III/5 and A-III/7 + A-II/1, A-II/2, A-II/3, A-III/1, A-III/2, A-III/4 and A-III/6
COSWP Ch15

ILO Code of Practice on "Accident Prevention on Board Ship at Sea and in Port" ch10.

IMO Resolution A.1050(27).

ISGOTT CH10 + refs in chs 2, 7 and 14

Learning objectives

- Describe the procedures to be followed while personnel are working in an enclosed space
- Describe the monitoring equipment used whilst in an enclosed space
- Identify the role of personnel at the entrance to an enclosed space
- Describe typical communication arrangements while personnel are working in an enclosed space
- Identify other possible problems when working in an enclosed space and the procedures necessary to manage them
- Identify the limitations of an Enclosed Space Entry permit

Fresh Water Generator

Stating the working principles of a typical fresh water generator, this module identifies the most important parts, starting and stopping procedures and the basic operating problems that often need troubleshooting.

Legislation & references

STCW as amended - Marine Engineering

Objectives

General introduction to the working principles and parts of Water Generator

Starting procedure

Stopping procedure

LIST OF AVAILABLE COMPUTER-BASED TRAININGS

HAZMAT – IMDG Code

This module provides the essential knowledge required by those operating at support level and involved in handling and transporting dangerous goods in packaged form. The content includes general dangerous goods safety awareness and covers emergency response to incidents involving packaged dangerous goods. The module meets the requirements of US title 49 Code of Federal Regulations 172.704 HAZMAT training required by those ratings involved in dangerous cargo/HAZMAT related functions.

Legislation & references

IMDG Code 2018

United States Title 49 Code of Federal Regulations 172.704 HAZMAT training requirements

Section B-V/b Guidance regarding training of officers and ratings responsible for cargo handling on ships carrying dangerous and hazardous substances in solid form in bulk

Learning objectives

- Recognise the hazards dangerous goods present based upon their classification.
- Recognise the markings that need to be carried on cargo transport units and packagings to be in compliance with the IMDG Code.
- List the dangerous documents required to be carried onboard and identify the essential information they contain.
- List the actions and protection measures to take in the event of spillage, escape or fire.

HAZMAT - IMDG code - Advanced

This module provides the essential knowledge required by those operating at management and operational and involved in planning stowage, handling and transporting dangerous goods in packaged form. The content includes general dangerous goods safety awareness and covers emergency response to incidents involving packaged dangerous goods. The module meets the requirements of US title 49 Code of Federal Regulations 172.704 HAZMAT training required by those officers involved in dangerous cargo/HAZMAT related functions. On successful completion of the module, the learner will be able to print out a diploma, as evidence of the required IMDG/HAZMAT training.

Legislation & references

IMDG Code 2018

United States Title 49 Code of Federal Regulations 172.704 HAZMAT training requirements

Section B-V/b Guidance regarding training of officers and ratings responsible for cargo handling on ships carrying dangerous and hazardous substances in solid form in bulk

Learning objectives

- Recognise the importance of ensuring dangerous goods are transported under the requirements of the IMDG Code.
- Apply the IMDG Code when conducting activities associated with handling, stowage and segregation of dangerous goods cargo.
- Outline the procedures, under the IMDG Code, for dealing with incidents involving dangerous goods.
- Identify the safety protection requirements needed to prevent exposure to the hazards presented by dangerous goods.

Personal survival Craft

All crew need to be trained in personal survival techniques. This learning module intended to accompany initial training or to refresh personal survival training onboard ship. We look at the different types of lifeboats and liferafts, the equipment they contain, and how to launch them.

Legislation & references

STCW as amended A-VI/1-1 Competence in personal survival techniques.

Learning objectives

The learner will be able to:

- Recognise the different types of lifeboats and liferafts and the equipment they contain.
- List the launch sequence required for common types of lifeboats and liferafts.



LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Tanker Operations Basic

The module will help Junior Officers and Ratings on crude oil tankers understand the necessary operating procedures and documentation. Arrival at a loading port, loading cargo, departure from the loading port, and cargo care on the laden voyage are covered in this module. Safety, security, and the environment are emphasized. The operational procedures and principles covered in the module are based on The International Chamber of Shipping's (ICS) International Safety Guide for Oil Tankers and Terminals (ISGOTT), which is issued in cooperation with The Oil Companies International Marine Forum (OCIMF) and the International Association of Ports and Harbours (IAPH).

Legislation & references

- STCW as amended
- OPA90
- ISPS Code
- MARPOL 73/78 as amended
- ISGOTT
- SOLAS

Learning objectives:

- Loading operations
- Arrival at loading port
- Loading and de-ballasting
- Pre-departure checks and departure from loading port
- Laden voyage
- Environmental and safety/security aspects

Tanker Operations Advanced

The module will help Junior Officers and Ratings on crude oil tankers understand the necessary operating procedures and documentation. This module covers arrival at a discharge port, cargo discharge, departure from the port, and ballast voyage completion. Safety, security, and the environment are emphasized.

Learning objectives

- Initiating a discharge operation
- Arrival at a discharge port
- Discharging operations
- Ship/shore formalities following discharge
- Tank cleaning and disposal of slops
- Environmental and safety/security aspects

Transfer of Personnel by Crane:

1. Officer in Charge

2. Crane Operator

3. Signaller

4. Person to be Transferred

STS cargo operations are increasing tanker Personnel Transfer Basket use. Minor errors can be fatal. In addition, vessels often undertake basket transfers in poor weather conditions, making the operation even more risky. These 4 modules provide the foundational knowledge needed to implement effective safeguards for crane-and-basket personnel transfer operations between two sites. It instructs on transfer basket inspection and safety. These 4 modules also identify key risks and how to control them, providing guidance on personnel, preparation, and basket transfer procedures.

Legislation & references:

- OCIMF publication – 'Transfer of Personnel by Crane between Vessels'
- Code of Safe Working Practices for Merchant Seamen (CoSWP), Consolidated Edition, 2009
- HSE offshore information sheet no/2007 – Guidance on procedures for the transfer of personnel by carriers
- Marine Transfer Forum publication – 'Offshore Personnel Transfer by Crane'
- Guidance on the Transfer of Personnel to and from Offshore Vessels, IMCA

Operations in cold weather

This module provides criteria for the winterization of vessels to be suitable for continuous operation in arctic and polar conditions. Operating a ship in temperatures well below the freezing point is very demanding. Sub-zero temperatures affect everyone, bringing new risks, slowing down work, and restricting the time people can stay outside. This needs to be allowed for in planning.

Legislation & references:

- Polar Code – International Code for Ships Operating in Polar Waters
- STCW Code
- IMO Resolution A1024(26) Guidelines for ships operating in Polar waters

LIST OF AVAILABLE COMPUTER-BASED TRAININGS

Ship Safety Officer

The shipboard safety officer is responsible for providing seafarers and the shipping company with the necessary guidance and assistance to maintain a safe and healthy living and working environment onboard ship. These modules provide the training required for those newly appointed or about to be appointed to the role of safety officer aboard vessels with five or more crew members.

Legislation & references

- Chapter 13 of The Code of Safe Working Practices for Merchant Seafarers
- The relevant parts of IMO Model Course 3.11

Volatile Organic Compound

The module covers all aspects of VOC emissions during cargo operations and examines the many techniques available to limit VOC emissions, including VECs. MARPOL appendix VI requires all crude oil tankers to have a VOC management plan and a designated person to control VOC emissions. This module was designed to train the designated person and provide VOC management and control information for all Operational and Management personnel involved in cargo operations on crude oil carriers.

Legislation & references

- MARPOL annex VI
- Kyoto Protocol
- Gothenburg Protocol

Learning objectives

- Planning for VOC emission control
- Principles of VOC emissions
- Control procedure during the loaded voyage
- Control procedure during cargo discharging and COW



Ship to Ship

The purpose of this CBT module is to fulfill the requirement for training personnel in ship-to-ship transfer operations for gas and oil tankers.

For Deck Officers working at the Management and Operational levels on board ships involved in ship-to-ship transfer operations for oil and gas tankers, the module can be regarded as a vital source of information about safety and security, communication, operational preparations before manoeuvring, and mooring/unmooring procedures. All of the personnel on board such vessels who might be involved in such transfer procedures directly or indirectly will undoubtedly find it to be of immense use.

Legislation & references:

- MARPOL Annex I, Chapter 8
- Ship-to-Ship Transfer Guide
- ISGOTT



Galley Operations: Hygiene

Ensuring that seamen have access to good-quality food and drinking water supplied under controlled hygienic circumstances is the goal of the food and catering regulation. Food handlers have an ethical obligation to protect food to prevent illness or harm. The safety and flavor of the food provided on board is directly under the control of the galley crew. Completing this module, you will:

- understand the importance of personal hygiene when working with food;
- know the importance of keeping a clean environment in which food is prepared and stored;
- understand the principal regulations and basic procedures associated with garbage handling on board the ship.

Legislation & references:

- The module supports the MLC2006

VR GENERAL INFORMATION



OMS-VR provides powerful **VR-box** solution which allows to connect dozens of VR-boxes on server simultaneously and also work in multiplayer.

All training modules and titles are launching only from web-server.

All assessment data collects on a data server allowing students to achieve certificates.

VR-box includes:



PORTABLE VR GENERAL INFORMATION

OMS-VR provides a **portable VR** solution with zero installation and no PC required.

All training modules and titles are pre-installed to the headset.

All assessment data collected on the headset can be stored on a server when the headset is online which allows students to achieve student's certificates.



- ✓ PORTABLE
- ✓ NO INSTALLATION
- ✓ NO WIRES REQUIRED
- ✓ PLUG & PLAY
- ✓ MULTIPLATFORM
- ✓ WITHOUT PC

PORTABLE VR GENERAL INFORMATION

Recognizing the challenges in times of **COVID-19** with its **restrictive distancing measures**, we at OMS-VR, understanding the increased demand for uninterrupted learning, provide seafarers of all qualification levels with a **unique opportunity to remotely continue preparatory training** without the need to physically gather into groups of trainees.

OMS offers a highly attractive subscription to a **multi-platform, plug-and-play, no-wires-required virtual reality solution**.

The solution can be delivered to each seafarer **individually** for at-home installation which will result in **significant reduction of costs related to crew traveling to the training facility**.



Sync via email
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records



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