"ENGINE ROOM RESOURCE MANAGEMENT ENGINE ROOM SIMULATOR"

5-DAY TRAINING COURSE

- **OVERALL AIM**

The overall aim of the Training Course is to assist the participating Engineer Officers acquire knowledge and develop skills relating to the effective operation, supervision and monitoring of ship's propulsion plant and machinery, acting as a Team. It has been designed according to the IMO Model Course 2.07 "*Engine Room Simulator*" 2017" to address the following competence requirements:

1. STCW Code Part A, Chapter III, Table III/2 "Controlling the Operation of the Ship and Care for Persons onboard" – Use Leadership and Managerial Skills.

2. STCW Code Part A, Chapter III, Table III/1 "Marine Engineering at the Operational Level" – Maintain a Safe Engineering Watch – Engine Room Resource Management.

3. STCW Code, Part A, Chapter VIII, Part 4-2 "Principles to be observed in keeping an engineering watch".

- **LEARNING OBJECTIVES**

The Trainees, on completing the course, will be able to:

- Understand the value of cooperation and coordination of tasks, of good interaction between team members, of situation awareness and decision-making, trained in a fully simulated working environment.

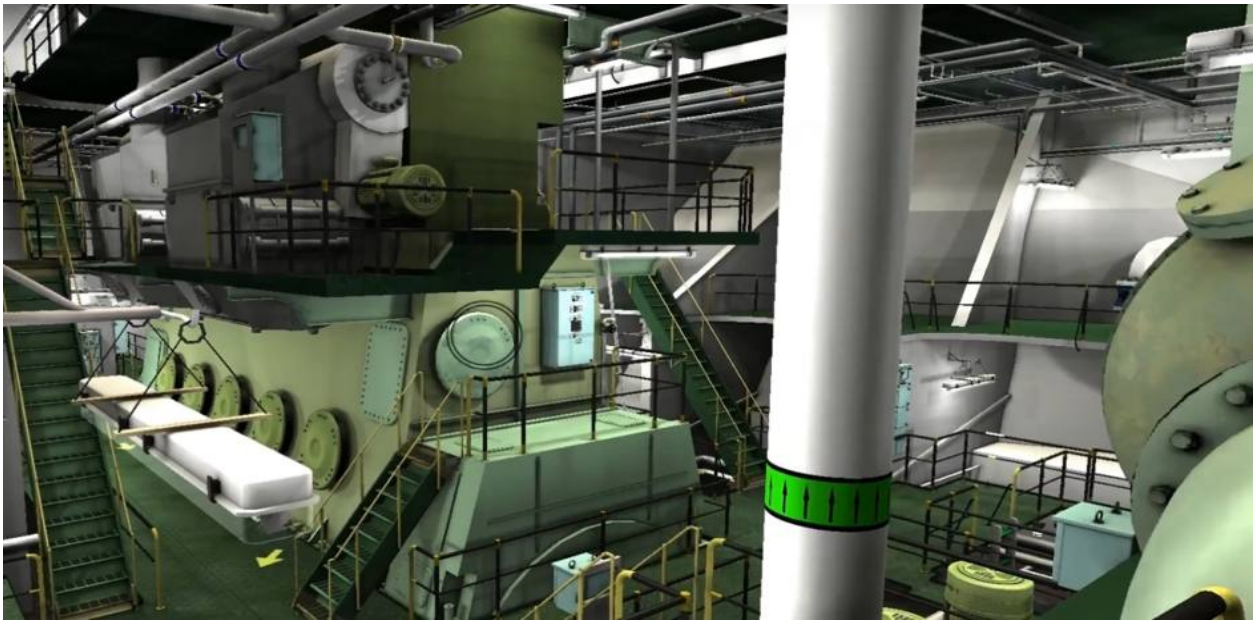
- Identify operational problems and carry out troubleshooting to promote operational safety.

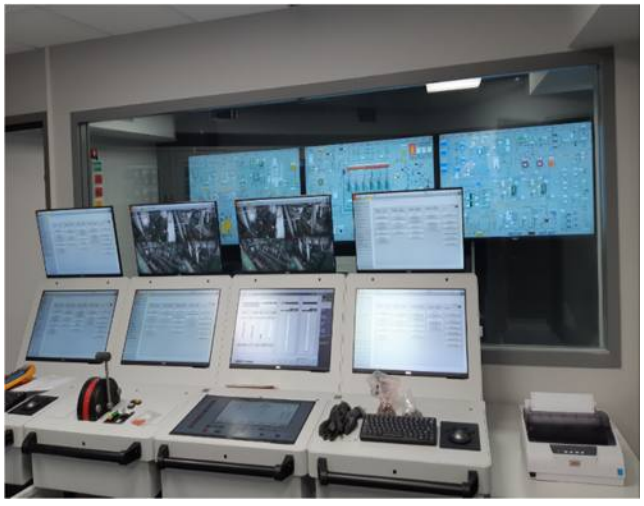
- Understand the value and make use of pre-planning, checklists and time-scale involved in starting the main engine.

- **FACILITIES**

The Training Courses will take place at the ATHINA Maritime Learning and Development Center's K-Sim Full-Mission Engine Room Simulator, using a modelled engine MAN B&W MC90-V (VLCC), certified according to the DNV/GL Standard on Marine Simulators.

The Full-Mission Engine Room Simulator is capable of simulating all machinery operations in the engine control room and machinery spaces by the use of operational panels in the machinery spaces and a realistic environment for all applicable STCW competence requirements relating to engine room resource management, engine room watch keeping, operation of main engine and auxiliary systems.





- **DAILY SCHEDULE**

DAY 1	09:30 – 10:00	**Learning Objectives**
	10:00 – 11:00	**Principles of Engine Room Resource Management**
	11:00 – 11:15	Coffee Break
	11:15 – 12:30	**Principles of Engine Room Resource Management** *(continued)*
	12:30 – 13:00	**Introduction to the Engine Room Simulator** (Modelled Engine MAN B&W MC90-V and ME-C)
	13:00 – 14:00	Lunch Break
	14:00 – 15:30	**Familiarization with the Engine Room Simulator – Process Mimics (E/R Local Control)**
	15:30 – 15.45	Coffee Break
	15:45 – 16:30	**Familiarization with the Panel Display Functions (ECR)**
DAY 2	09:30 – 10:00	**Simulation Exercise 1** **Cold Ship to Main Engine Full Ahead (MC-90V)** Briefing – Explanation of Initial Condition - Actions
	10:00 – 13:00	Simulation Exercise
	13:00 – 14:00	Lunch Break
	14:00 – 16:00	Simulation Exercise (*continued)*
	16:00 – 16:30	Debriefing
DAY 3	09:30 – 10:00	**Simulation Exercise 2** **Cold Ship to Main Engine Full Ahead (ME-C)** Briefing – Explanation of Initial Condition - Actions
	10:00 – 13:00	Simulation Exercise
	13:00 – 14:00	Lunch Break
	14:00 – 16:00	Simulation Exercise (*continued)*
	16:00 – 16:30	Debriefing
DAY 4	09:30 – 10:00	**Simulation Exercises 3 and 4** Briefing – Explanation of Initial Conditions - Actions
	10:00 – 13:00	**Simulation Exercise 3** **Preparation of Main Engine for Standby (MC-90V)**
	13:00 – 14:00	Lunch Break
	14:00 – 16:00	**Simulation Exercise 4** **Preparation of Main Engine from Standby to Full Away (MC-90V)**
	16:00 – 16:30	Debriefing

DAY 5	09:30 – 10:00	**Simulation Exercises 5 and 6** Briefing – Explanation of Initial Conditions - Actions
	10:00 – 13:00	**Simulation Exercise 5** **Preparation & Operation of COPT's & Inert Gas Plant (MC90-V)**
	13:00 – 14:00	Lunch Break
	14:00 – 16:00	**Simulation Exercise 6** **Main Engine Performance / Diagnostics (MC90-V)**
	16:00 – 17:00	Debriefing – Seminar Closing – Evaluation/Questinnaire

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