



09.00 - 10.00

Topic Number:

1

Title:

**Encountering Heavy seas. Following and quartering seas.
Best practices. Vessel's sensitivity and behavior in high seas.
Emergency preparedness**

Lecturer:

HELMEPA

10.00 - 10.15

Break

10.15 - 11.15

Topic Number:

2

Title:

Synchronous and Parametric Rolling. Causes and ways to avoid them

Lecturer:

HELMEPA

11.15 - 11.30

Break

11.30 - 13.00

Topic Number:

3

Title:

Demonstration of all the above in Bridge Simulator

Lecturer:

HELMEPA

13.00 - 13.30

Break

13.30 - 15.00

Topic Number:

4

Title:

Presentation – analysis of real marine incidents

Lecturer:

Costamare Shipping Company S.A.

1. Encountering Heavy seas. Following and quartering seas. Best practices. Vessel's sensitivity and behavior in high seas. Emergency preparedness

- Vessel's sensitivity and behavior in extreme weather and high seas
- Emergency preparedness
- Preparing ship and crew to cope with expected severe weather
- Ship's behavior in waves. Ship's natural roll and pitch period in relation to waves encounter period

2. Synchronous and Parametric Rolling. Causes and ways to avoid them

- Causes of rolling and ways to avoid it
- Sailing in heavy seas
- Best practices to cope with following, quartering, head and beam seas.
- Surf riding and broaching

3. Demonstration of all the above in Bridge Simulator

- Get the image and feeling of encountering with heavy weather – high waves situations
- Maneuvering the vessel in these situations
- Watching vessel's behavior in acting rightly or wrongly in such situations

4. Presentation – analysis of real marine incidents

- Presentations of a number of real marine incidents
- Watching incident description by means of narration, ship's log book and records and real recordings of AIS, ARPA, VDR
- Discussion - brain storming