

## COURSE OUTLINE

Course Framework Course Framework

### **1. Aims**

The course is essentially practical and consists of a series of exercises performed on a radar simulator with two or more own-ships and a number of others controlled by the instructor. Each exercise will involve observing the movements of ships seen on the radar, recognizing those presenting a threat of collision and taking action to avoid collisions. Trainees will act either as master or as an observing officer for the exercises, and will change roles to allow each a turn in command of an own-ship.

As the course progresses, exercises of increasing complexity are set to provide realistic practice in the use of radar for navigation and collision avoidance in confined waters with heavy traffic.

Each exercise will be followed by class discussion, giving participants the opportunity to analyze the actions taken and discuss possible alternatives.

This model course aims to meet the mandatory minimum requirements for knowledge, understanding and proficiency in table A-II/2 of STCW.

### **2. Objective**

Those successfully completing this course will be able to make efficient use of radar as a navigational aid in congested, confined waters, recognize potential threats and make valid navigational and collision avoidance decisions based on sound radar observation and plotting in compliance with the international regulations for preventing collisions at sea (COLREG). They will be aware of the time needed to appreciate that a dangerous situation is developing, to decide upon and take appropriate action, and to ascertain that such action is adequate and does not give rise to further conflicts with other vessels. They will also realize that excessive speed in poor visibility reduces the time available to assess a threat and to take appropriate action. Ability to plan, organize and manage a bridge team, making use of all navigational data, will also be achieved. Successful completion of this course will also provide ability to respond to, co-ordinate and execute a search and rescue operation.

### 3. Entry standards

The course is principally intended for candidates for certification as master or chief mate on seagoing ships. Those wishing to enter this course should be the holders of certificates satisfying the requirements of regulation II/1 or II/3 of the STCW convention as officer in charge of a navigational watch. They should therefore have completed a course of training which meets or exceeds the standard set out in table A-II/1 of the STCW code, and completed the sea service needed for certification as master or chief mate while qualified as an officer in charge of a navigational watch.

### 4. Course certificate Course certificate

On successful completion of the course and assessments, a document may be issued certifying that the holder has successfully completed a course of training which meets or exceeds the level of knowledge and competence specified in table A-II/2 of STCW. A certificate may be issued only by centres approved by the administration.

**Function: Navigation at the Management Level**

**Competence: Maintain safe navigation through the use of radar and ARPA and modern navigation systems to assist command decision making.**

**Co-ordinate search and rescue operations**

<b>Course Outline</b>		
<b>Knowledge, understanding and proficiency</b>	<b>Lecture Hours</b>	<b>Simulator Hours</b>
<b>1. Operator ARPA and Navigation Controls</b> 1.1 Demonstrate familiarity with own-ship characteristics and operate ARPA and navigation controls	<b>1.0</b>	<b>1.0</b>
<b>Total</b>	<b>1.0</b>	<b>1.0</b>
<b>2. Perform Radar Plotting</b> 2.1 Factors affecting radar plotting are identified correctly 2.2 Carry out radar plotting	<b>2.0</b>	<b>4.0</b>
<b>Total</b>	<b>2.0</b>	<b>4.0</b>
<b>3. Use ARPA and Navigation Information to Control Safe Navigation and Collision Avoidance</b> 3.1 Apply COLREGS in open waters in restricted visibility 3.2 Plan and control navigation in confined waters 3.3 Control navigation in/near traffic separation schemes 3.4 Manage a bridge team	<b>-</b> <b>2.0</b> <b>1.0</b> <b>2.0</b>	<b>6.0</b> <b>8.0</b> <b>5.0</b>
<b>Total</b>	<b>5.0</b>	<b>19.0</b>
<b>4. Plan and Co-ordinate Search and Rescue</b> 4.1 Respond to distress message 4.2 Co-ordinate search and rescue operation 4.3 Execute a search and rescue operation	<b>1.0</b> <b>1.0</b> <b>-</b> <b>2.0</b>	<b>4.0</b> <b>4.0</b>
<b>Totals</b>	<b>10.0</b>	<b>28/0</b>
<b>Totals</b>	<b>38.0</b>	