

STCW Reg - II/3  
DECK - H

## SYLLABUS

**Master – Domestic Vessels Only Within Specified Area**

Candidates should demonstrate the ability to apply the knowledge outlined in this oral examination syllabus and oral examination **Deck – D**, by the appropriate responses, anticipations and reactions to a range of routine, non-routine and contingency scenarios as presented by the examiner, from the perspective of **MASTER – Domestic Vessels Within a Specified Area – Less than 3000gt (STCW II/3)**.

**Topic 1 NAVIGATION****.1 Plan and Conduct Safe Navigation**

- a) demonstrate an ability to undertake voyage planning within the specified area, taking into consideration;
  - i) the specified area and restrictions;
  - ii) local signals and traffic regulations;
  - iii) local marks including buoyage, lights, leading lights and marks;
  - iv) local dangers to navigation – minimum and maximum depths over banks etc;
  - v) general knowledge of tidal conditions, currents and heights;
  - vi) locality of and means of communication with local rescue centres
  - vii) operations in restricted visibility;
  - viii) sources of meteorological information, ability to use and interpret information from shipborne meteorological instruments, local conditions and effects, and to forecast local area weather;
  - ix) the requirements of ship routeing and mandatory reporting systems (if applicable to specified area);
- b) use of navigational publications, including charts (including ECDIS and RCDS), sailing directions, light lists, tide tables and radio navigational warnings;
- c) knowledge of services available to aid vessels entering ports, berthing, VTIS and VTS services as indicated in The Admiralty List of Radio Signals – Vessel Traffic Services, Port Operations and Pilot Stations;
- d) maritime buoyage system – IALA region 'A';
- e) radar and ARPA – practical use of, modes of operation, limitations, sources of error and parallel indexing;
- f) electronic navigation systems including echo sounder, position finding equipment – limitations and sources of error.

**.2 Establish & Maintain safe Watchkeeping Arrangements and Procedures**

- a) a thorough knowledge of the principles of navigational watchkeeping at sea, including under pilotage and watchkeeping at anchor and in port;
- b) a thorough knowledge of the content, application and intent of the International regulations for Preventing Collisions at Sea;

- c) understand the use of bridge equipment, including rate of turn indicators, course recorders, echo sounder, navtex etc;
- d) knowledge of steering control systems, including automatic pilot, operational procedures and change-over from manual to automatic control and vice-versa, and adjustment of controls for optimum performance;
- e) conduct in or near traffic separations schemes (if applicable);
- f) a knowledge of principles of establishing a safe engineering watch at sea, anchor and in port.

### **.3 Compasses**

- a) compasses commonly fitted on board the ships concerned – variation, deviation, causes and effects, siting of other equipment with reference to the magnetic compass;
- b) knowledge of the purpose of correctors/corrections.

### **.4 Manoeuvre the Ship and Operate Small Ship Power Plants**

- a) conning the ship and knowledge of factors affecting safe manoeuvring and handling including the effects of wind and currents, effects of deadweight, draft, trim speed and underkeel clearance on turning circles and stopping distances, interaction and squat;
- b) proper procedures for berthing and unberthing with/without tugs, with/without wind and with/without tidal stream;
- c) anchoring and working anchors and cables in all circumstances;
- d) knowledge of the operation of small ship power plant and auxiliaries, including bilge pumping systems, fire pumps, steering gear, generators, batteries and power supplies;
- e) manoeuvres to launch and recover rescue boats and/or survival craft.

## **TOPIC 2 CARGO HANDLING AND STOWAGE**

### **.1 Cargo Handling, Stowage, Securing and Care**

- a) knowledge of use, maintenance and testing of cargo handling equipment;
- b) knowledge of the effect on trim and stability of cargoes and cargo operations onboard the type of vessel concerned;
- c) knowledge of the regulations and recommendations affecting cargo handling, stowage and securing;
- d) use of IMDG Code;
- e) use of stability and trim information, use of stress calculating equipment, knowledge of loading cargoes and ballasting with respect to stability and stress.

## **TOPIC 3 RESPONSE TO EMERGENCIES**

### **.1 Response to Navigational Emergencies**

- a) action to be taken when disabled and in distress, abandoning ship, survival procedures and use of rockets and rocket apparatus;
- b) measures to be taken following collision, grounding, heavy weather damage and leaks including the possibility of beaching a ship;
- c) knowledge of the effect on trim and stability, and subsequent actions in event of damage to and consequent flooding of a compartment;
- d) towing and being towed;
- e) knowledge of search and rescue procedures, assisting a ship[ or aircraft in distress, rescuing the passengers and crew from a disabled ship or aircraft;
- f) use of the International Aeronautical and Marine Search and Rescue (IAMSAR) Manual, distress and emergency signals;
- g) search and rescue (SAR) plans for passenger ships;
- h) knowledge of emergency steering systems;
- i) emergency communications within the GMDSS regulations.

## **.2 Respond to Other Emergencies**

- a) methods of dealing with fire onboard ship, prevention of fire at sea and in port;
- b) organisation and direction of fire-fighting and abandon ship parties;
- c) launch and management of survival craft, recover rescue boats at sea;
- d) use and maintenance of fire-fighting equipment, fire dampers, doors and screens, and detection equipment;
- e) the organisation and direction of lifeboat and life raft training drills;
- f) operation, maintenance and testing of watertight doors, sidescuttles and scuppers;
- g) understand the fundamental actions to be taken in event of partial loss of intact buoyancy;
- h) precautions for the protection and safety of passengers in emergency including:
  - i) knowledge of methods of orderly evacuation following emergency;
  - ii) instruction of lifesaving device operation;
  - iii) lifejacket donning instructions;
  - iv) safety announcements;
  - v) passenger number and reporting systems;
- j) sources of medical information available;
- k) knowledge of the contents of the SOLAS training manual
- l) safety during helicopter operations.

## **TOPIC 4 ON BOARD SHIP OPERATIONS**

### **.1 Pollution Prevention Requirements**

- a) measures to be taken to prevent pollution at sea;
- b) take appropriate action in response to pollution incidents on board and when found at sea;
- c) knowledge of the contents of the SOPEP manual, Garbage Management Plan and use of provided anti-pollution equipment;

- d) Practical knowledge of the requirements of MARPOL conventions, including restricted areas (if applicable);
- e) master's duties, obligations and liabilities, including the keeping of records, including oil record book.

## **.2 Seaworthiness of the Ship**

- a) precautions to be taken before the onset of heavy weather, management of small ships in heavy weather;
- b) understand the fundamentals of water tight integrity and knowledge of the particular loadline items affecting seaworthiness;
- c) preparation for dry-docking and undocking;
- d) working knowledge of trim and stability information.

## **.3 Crew Management**

- a) knowledge of personnel management, organisation and training including disciplinary procedures;
- b) application of hours of work and rest legislation.

## **.4 Safety of Ships Crew and Passengers**

- a) requirements for safe access;
- b) working knowledge of Code of Safe working Practices;
- c) passenger certificate and the law regarding it;

## **.5 Legislative Requirements**

- a) knowledge of the application of current Merchant Shipping Health and Safety legislation, including Code of Safe Working practice and main elements of Risk Assessment;
- b) contents and use of Merchant Shipping Notices, Marine Guidance Notes, Marine Information Notes and Annual Summary of Admiralty Notices to Mariners;
- c) safe manning, crew agreements, conditions of employment, official logbook and the law relating to entries and complaints procedures;
- d) reports required by the MAIB;
- e) load line marks, entries and reports with respect of freeboard, draft and allowance;
- f) the requirements of the regulations concerning life-saving and fire-fighting appliances;
- g) requirements for statutory and classification surveys;
- h) purpose and application of the International Safety Management (ISM) Code;
- i) requirements for drills and training

