

# ORAL EXAMINATION QUESTIONNAIRE FOR CERTIFICATE OF COMPETENCY

## FOR OFFICERS IN CHARGE OF A NAVIGATIONAL WATCH

Notes to Candidates:

- It should be noted that the following is not a fully detailed list of orals questions, but a list of topics about which candidates are expected to have adequate knowledge, and is provided for the guidance of candidates only
- The Examiner may ask any questions relevant to the following topic areas, and/or ask the candidate to provide answers in diagrammatic form, or to complete simple calculations, to the extent necessary to test the candidates competency in the managerial, operational and safety aspects related to the duties of the grade of certificate applied for.
- Candidates for officers in charge of a navigational watch grade of certificate can be asked questions from all sections listed, however the focus of the questions and the assessment, will be related to the main management responsibilities and shipboard duties involved in the certificate being applied for.
- As this syllabus also incorporates the questionnaire for lower grade certificates, the Examiner may ask questions related to those lower grade certificates as it effects the overall safe operation of the vessel.
- Candidates should note that they may be required to demonstrate their proficiency in RADAR plotting and chart-work.
- During the examination, candidates will be required to demonstrate that they possess an adequate knowledge and understanding in the use of the English language.

### Section 1 - Operation

- a) Knowledge of ship inspection and survey programs and the roll of Port State control and Flag State Control Officers
- b) Knowledge of a ships certification, documentation and records.
- c) Knowledge of classification societies, classification and surveys of ships and equipment.
- d) Knowledge of appropriate Georgian legislation, statutory requirements, including the ISM Code and the application thereof.
- e) Knowledge of relevant International Codes and Conventions and the application thereof.
- f) Ship administration duties, shipmasters business and carriage of goods by sea
- g) Joining a vessel and the responsibilities and duties of shipboard personnel

### Section 2 - Standards of Watch-keeping

- a) A detailed understanding of the principals to be observed in keeping a bridge watch at sea and at anchor, under pilotage as well as keeping a cargo watch.
- b) Bridge teamwork principles
- c) a thorough knowledge of the principles of navigational watch keeping at sea, including under

- pilotage, and watchkeeping at anchor and in port;
- d) a thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea;
  - e) radar and ARPA - practical use of, modes of operation, limitations, sources of error, plotting and parallel indexing;
  - f) understand the use of bridge equipment, including rate of turn indicators, course recorders, echo sounders and NAVTEX;
  - g) knowledge of steering control systems, including automatic pilot, operational procedures and change-over from manual to automatic control and vice-versa - adjustment of controls for optimum performance;
  - h) knowledge and application of the ICS Bridge Procedures Guide.

### **Section 3 - Plan and Conduct a Passage Including Position Determination**

- a) passage planning with respect to the use of navigational publications including navigational charts (including ECDIS and RCDS), sailing directions, light lists, tide tables, radio navigational warnings and ships' routing information;
- b) the requirements of ship routing and mandatory reporting systems;
- c) IALA systems of maritime buoyage;
- d) Electronic navigational systems - limitations and sources of error, methods of correction;
- e) imitations of electronic chart systems including ECDIS and RCDS navigational chart systems;
- f) Radar and ARPA - practical use of, modes of operation, limitations, sources of error and parallel indexing;
- g) to use an azimuth mirror for taking bearings, including the determination of compass errors;
- h) to use a sextant, identify and correct errors (in open sea)
- i) sources of meteorological information, ability to use and interpret information obtained from ship borne meteorological instruments (the instruments supplied by the Meteorological Office will be taken as standard), knowledge of characteristics of various weather systems, reporting and recording systems.

### **Section 4 – Compasses and Other navigational equipments**

- a) use, care and limitations of the magnetic and gyro compasses, and associated equipment, including automatic pilot.
- b) Knowledge of automatic pilot systems and procedures;

### **Section 5 - Loading and Unloading of Cargoes**

- a) use and care of synthetic fibre and wire ropes, ascertaining of safe-working loads;
- b) basic knowledge of the regulations and recommendations affecting cargo handling, stowage,

securing and carriage, including the IMDG Code;

c) use of the hydrometer.

### **Section 6 - Response to Navigational Emergencies**

a) Initial action following: man overboard, collision, grounding, flooding or major mechanical damage, and receipt of a distress message; initial damage assessment and control, protection of the marine environment;

b) Precautions for the protection and safety of passengers in emergency situations;

c) Use of the International Aeronautical and Marine Search and Rescue (IAMSAR) Manual (Volume III), distress and emergency signals; Search And Rescue along Georgian coast and worldwide.

d) Use of International Code of Signals;

e) Emergency communications within the GMDSS regulations

### **Section 7 - Response to Other Emergencies**

a) understanding of the organizational procedures for emergency parties and drills;

b) knowledge of fire prevention, use and care of fire-fighting appliances, the shut-down and isolation of plant and equipment, escape and breathing apparatus, fire and safety plans;

c) knowledge of classes and chemistry of fire;

d) understanding of action to be taken in the event of fire including fires involving oil;

e) use and care of life-saving appliances and equipment including hand held radios, EPIRBs, SARTs, immersion suits and thermal protective aids, and rocket line throwing apparatus;

f) meaning of markings on survival craft and associated equipment;

g) correct use of distress signals and awareness of penalties for misuse;

h) launch and manage survival craft, recover rescue boats at sea;

i) precautions for the protection and safety of passengers in emergencies;

j) knowledge of the contents of SOLAS training manuals and maintenance logs;

k) basic principles of survival;

l) appreciation of action to be taken when emergencies arise in port;

m) sources of medical information available.

### **Section 8 - Emergency Communications**

a) Use of distress and emergency signals, International Code of Signals and the IMO Standard Marine Communication Phrases;

b) Emergency communications within the GMDSS regulations.

### **Section 9 - Search and rescue**

a) knowledge of and ability to apply the procedures contained in the (IAMSAR) Manual

b) Knowledge of search and rescue publications, procedures, communications and equipment

c) Knowledge of survival techniques

### **Section 10 - Maneuver the Ship**

- a) preparation for getting under way, duties prior to proceeding to sea, making harbor, entering a dock, berthing alongside quays, jetties, or other ships, and securing to buoys;
- b) Use and care of mooring lines and associated equipment;
- c) helm orders, conning the ship, effects of propellers on the steering of a ship, effects of wind and current, stopping, going astern, turning short round, interaction and squat, maneuvering in the vicinity of pilot vessels and other craft, embarking and disembarking a pilot;
- d) Action in event of failure of:- bridge control, telegraph or steering; emergency steering arrangements.
- e) Proper procedures for anchoring.

### **Section 11 - Seaworthiness of the Ship**

- a) understand fundamentals of watertight integrity, and the closing of all openings including hatch covers, access hatches and watertight doors;
- b) preparations for heavy weather.
- c) Working knowledge of the use of stability and trim information on board.

### **Section 12 Collision Avoidance**

- a) The application and content of the International Regulations for Preventing Collisions at Sea Collision avoidance
- b) Knowledge of the internationally adopted system of buoyage.

### **Section 13 - Pollution Prevention Requirements**

- a) precautions to be taken to prevent pollution of the marine environment as required by the MARPOL conventions, including Restricted Areas and the disposal of pollutants;
- b) basic understanding of the SOPEP manual, Garbage Management Plan and anti-pollution equipment.

### **Section 14 - Legislative Requirements**

- a) contents and use Marine Information Notes and Annual Summary of Admiralty Notices to Mariners;
- b) knowledge and application of the Code of Safe Working Practices for Merchant Seamen;
- c) basic knowledge of relevant IMO conventions concerning safety of life at sea, and protection of the marine environment.
- d) purpose and application of the International Safety Management (ISM )Code;
- e) purpose of Flag State and Port State Control.