



ပြည်ထောင်စုသမ္မတ မြန်မာနိုင်ငံတော်အစိုးရ
ပို့ဆောင်ရေးနှင့် ဆက်သွယ်ရေးဝန်ကြီးဌာန
ရေကြောင်းပို့ဆောင်ရေးညွှန်ကြားမှုဦးစီးဌာန

အမိန့်ကြော်ငြာစာအမှတ် ၂/၂၀၁၈

၁၃၇၉ ခုနှစ်၊ တပို့တွဲလဆန်း ၉ ရက်

(၂၀၁၈ ခုနှစ်၊ ဇန်နဝါရီလ ၂၅ ရက်)

ရေယာဉ်မှူးများ၊ ရေကြောင်းအရာရှိများနှင့် ရေကြောင်းအင်ဂျင်နီယာ အရာရှိများ၏
ကျွမ်းကျင်မှုလက်မှတ်များအတွက် စာမေးပွဲသင်ရိုးညွှန်းတမ်းများကို ဖြည့်စွက်သတ်မှတ်ခြင်း

၁။ ရေကြောင်းပို့ဆောင်ရေးညွှန်ကြားမှုဦးစီးဌာနသည် မြန်မာနိုင်ငံကုန်သည်သင်္ဘောအက်ဥပဒေ ပုဒ်မ ၂၉၄၊ ပုဒ်မခွဲ (ခ) နှင့် ရေယာဉ်မှူး၊ အရာရှိများနှင့် သင်္ဘောသားများ၏ ကျွမ်းကျင်မှုနှင့် တတ်ကျွမ်းမှုလက်မှတ်များ ထုတ်ပေးခြင်းဆိုင်ရာ နည်းဥပဒေများ၏ အခန်း(၄)ပါ ပြဋ္ဌာန်းချက်များ အရ အပ်နှင်းထားသော လုပ်ပိုင်ခွင့်ကိုကျင့်သုံး၍ ဤအမိန့်ကြော်ငြာစာကို ထုတ်ပြန်လိုက်သည်။

၂။ ရေယာဉ်မှူးများ၊ ရေကြောင်းအရာရှိများနှင့် ရေကြောင်းအင်ဂျင်နီယာ အရာရှိများ၏ အောက်ပါ ကျွမ်းကျင်မှုလက်မှတ်များအတွက် စာမေးပွဲ သင်ရိုးညွှန်းတမ်းများကို (International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 as amended including 2010 Manila Amendments) နှင့်အညီ ထုတ်ပြန်ထားသည့် အမိန့်ကြော်ငြာစာအမှတ် (၆/၂၀၁၄) ၏ နောက်ဆက်တွဲများတွင် ဖော်ပြထားသည့် နောက်ဆက်တွဲများအား ဖြည့်စွက်သတ်မှတ်လိုက်သည်-

- (က) ကုန်းပတ်အရာရှိ အဆင့် ၂ နှင့် ၃ (အပြည်ပြည်ဆိုင်ရာသွား - ANNEX (N) တန်ချိန် ၅၀၀ သို့မဟုတ် ၅၀၀ အထက်) (Deck Officer Class II & III Certificate of Competency, 500 gross tonnage or more) ကိုင်ဆောင်သူများအား ရေယာဉ်မှူး (အပြည်ပြည်ဆိုင်ရာသွား တန်ချိန် ၃၀၀၀ အောက်) ကျွမ်းကျင်မှု လက်မှတ် အတွက် စာမေးပွဲသင်ရိုး ညွှန်းတမ်း (Syllabus for Examination of Master, Under 3000 gross tonnage, Unlimited Voyage)

သောင်းကြိုင်
ညွှန်ကြားရေးမှူးချုပ်

စာအမှတ်၊ ရညန/ရက/အမိန့်ကြော်ငြာစာ/၀၆၅(က)
ရက်စွဲ ၂၀၁၈ ခုနှစ်၊ ဇန်နဝါရီလ ၂၅ ရက်။

ဖြန့်ဝေခြင်း -

မြန်မာနိုင်ငံရေကြောင်းပညာတက္ကသိုလ်

မြန်မာနိုင်ငံကုန်သွယ်ရေးကြောင်းကောလိပ်

ရေကြောင်းဘက်ဆိုင်ရာသင်တန်းဌာနများ

ညွှန်ကြားရေးမှူးချုပ်

မြန်မာနိုင်ငံပြန်တမ်းအပိုင်း(၁) တွင် ထည့်သွင်း
ပုံနှိပ်ရေးနှင့်စာအုပ်ထုတ်ဝေရေးဦးစီးဌာန ပေးပါရန် မေတ္တာရပ်ခံချက်ဖြင့် ပေးပို့ပါသည်။

မိတ္တူကို -

ပို့ဆောင်ရေးနှင့် ဆက်သွယ်ရေးဝန်ကြီးဌာန

**SYLLABUS FOR WRITTEN ASSESSMENT & ORAL EXAMINATION OF
DECK OFFICER CLASS II & III MASTER ON A SEAGOING SHIPS OF
BETWEEN 500 AND 3,000 GROSS TONNAGE, UNLIMITED VOYAGE
(Under STCW Convention, Regulation II/2)**

Function 1 - NAVIGATION

1.1 Plan a voyage and conduct navigation

1.1.1 Voyage planning and navigation for all conditions

- .1 Voyage planning for all conditions by acceptable methods of plotting ocean tracks
- .2 Navigation and monitoring of the voyage
- .3 Logbooks and voyage records

1.1.2 Routeing in accordance with the general provisions on ship's routeing

- .1 Routing

1.1.3 Reporting in accordance with the general principles for ship reporting systems and with VTS procedures

1.2 Ship Reporting System

1.2.1 Determine Position and The Accuracy of Resultant Position Fix by any means

1.2.2 Position Determination in all Conditions

- .1 Celestial navigation
- .2 Terrestrial observations, including the ability to use appropriate charts, notices and publications to assess the accuracy of the resulting fix
- .3 Modern electronic navigational aids with specific knowledge of their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing
- .4 Integrated Navigation System (INS) and Integrated Bridge System (IBS)
- .5 Introduction to e-navigation
- .6 Introduction to Polar navigation

1.3 Determine and allow for compass errors

1.3.1 Principles of the magnetic compass

- .1 Parts of the magnetic compass and their function
- .2 Errors of the magnetic compass and their correction

1.3.2 Principles and errors of gyrocompasses

- .1 Principles of gyrocompasses
- .2 Gyrocompass errors and corrections

1.3.3 Systems under the control of the master gyro and the operation and care of the main types of gyrocompass

- .1 Systems under the control of the master gyro and the operation and care of the main types of gyrocompass

1.4 Coordinate search and rescue operations

- .1 communicates effectively with rescue co-ordination centres
- .2 co-ordinates surface search
- .3 extracts relevant information from publications, charts, IAMSAR manual
- .4 records in log book particulars of ships involved
- .5 responds to meteorological conditions
- .6 controls inter-ship communications

Use of Simulators (STCW Regulation I/12)

The performance standards and other provisions set forth in section A-I/12 and such other requirements as are prescribed in part A of the STCW Code for any certificate concerned shall be complied with in respect of:

- 1. all mandatory simulator-based training;
- 2. any assessment of competency required by part A of the STCW Code which is carried out by means of a simulator; and
- 3. any demonstration, by means of a simulator, of continued proficiency required by part A of the STCW Code.

1.5 Establish watchkeeping arrangements and procedures

1.5.1 International regulations for preventing collisions at sea

- .1 Thorough knowledge of content, application and intent of the international regulations for preventing collisions at sea, 1972, as amended

1.5.2 Principles to be observed in keeping a navigational watch

- .1 Thorough knowledge of the content, application and intent of the principles to be observed in keeping a navigational watch at a management level

1.5.3 Bridge watchkeeping equipment and systems

- .1 Knowledge of Voyage Data Recorders (VDR) and Bridge Navigational Watchkeeping Alarm Systems (BNWAS)

1.6 Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision making

- .1 An appreciation of system errors and thorough understanding of the operational aspects of modern navigational systems, including radar and ARPA
- .2 Blind pilotage techniques
- .3 Evaluation of navigational information derived from all sources, including radar and ARPA, in order to make and implement command decisions for collision avoidance and for directing the safe navigation of the ship
- .4 The inter-relationship and optimum use of all navigational data available for conducting navigation
- .5 assess the quality of information- verify its relevance and accuracy using simulator.
- .6 search for missing information that might influence the decision using simulator
- .7 involve bridge team members in the process (if time permits) by using simulator

- .8 be aware of elements of hidden pressure and respond appropriately to hidden pressure keeping safety the number one priority by using simulator
- .9 Use of AIS at sea:
 - Bridge procedures
 - Data input and checking
 - UN/LOCODES
 - Use of safety and security related messages
 - Use of AIS Binary Messages
 - Use of AIS in areas with security or piracy implications
 - Use of AIS in oil terminals
 - AIS alarms
 - Cautions of use of AIS
 - Use of AIS to increase situational awareness in for both MKD only and radar/ECDIS installations
 - Implications of COLREGS
 - Use of AIS A to N data
 - Manual setting of regional operating settings

Use of Simulators (STCW Regulation I/12)

The performance standards and other provisions set forth in section A-I/12 and such other requirements as are prescribed in part A of the STCW Code for any certificate concerned shall be complied with in respect of:

1. all mandatory simulator-based training;
2. any assessment of competency required by part A of the STCW Code which is carried out by means of a simulator; and
3. any demonstration, by means of a simulator, of continued proficiency required by part A of the STCW Code.

1.7 Maintain safe navigation through the use of ECDIS and associated navigation systems to assist command decision making

- .1 Operate all specific functions and obtain all relevant information for route planning from ECDIS
 - Sea area selection
 - Route planning information
 - Construction of a route
 - Adjustment of a planned route
 - Curved track planning
 - Planning notes
 - Safety values
 - Check for navigational safety
 - Ultimate route

- .2 Operate all specific functions for route monitoring and obtain all relevant information for navigation and for the ship's safety
 - Monitored area
 - Required route
 - Vector-time
 - Check measurements
 - Look-ahead function
 - Alarms
 - Current and wind

1.8 Forecast weather and oceanographic conditions

- 1.8.1 Synoptic charts and weather forecasting
 - .1 Synoptic and prognostic charts and forecasts from any source
 - .2 Range of information available through fax transmission, internet and email
 - .3 Weather forecasting
- 1.8.2 Characteristics of various weather systems
 - .1 Tropical revolving storms (TRS)
 - .2 Main types of floating ice, their origins and movements
 - .3 Guiding principles relating to the safety of navigation in the vicinity of ice
- 1.8.3 Ocean current systems
 - .1 Surface water circulation of the ocean and principal adjoining seas
 - .2 Principle of voyage planning with respect to weather conditions and wave height
 - .3 Formation of sea waves and swell waves
- 1.8.4 Calculation of tidal conditions
 - .1 Ability to calculate tidal conditions
- 1.8.5 Appropriate nautical publications on tides and currents
 - .1 Nautical publications on tides and currents and information which can be obtained via internet and email

1.9 Respond to navigational emergencies

- 1.9.1 Precautions when beaching a ship
- 1.9.2 Action to be taken if grounding is imminent and after grounding
- 1.9.3 Refloating a grounded ship with and without assistance
- 1.9.4 Action to be taken if collision is imminent and following a collision or impairment of the watertight integrity of the hull by any cause
- 1.9.5 Assessment of damage control
- 1.9.6 Emergency steering
- 1.9.7 Emergency towing arrangements and towing procedures

1.10 Manoeuvre and handle a ship in all conditions

By simulators,

- .1 carry out a turning-circle trial with given initial speed and rudder angle in loaded condition
- .2 describe how to carry out zig-zag manoeuvres
- .3 carry out a crash stop in loaded condition
- .4 carry out a coasting stop in loaded condition
- .5 repeat one manoeuvre from 1.10.1 to 1.10.4 for the same ship in the ballast condition
- .6 record times, positions, headings, speed and other relevant data
- .7 plot the manoeuvres from the recorded data
- .8 compare plots for loaded and ballast conditions
- .9 describe how trim affects the pivot point during turns
- .10 demonstrate how to make a pilot card and a wheelhouse poster
- .11 explain how the information in the manoeuvring information booklet can be used when planning a manoeuvre
- .12 repeat a standard manoeuvre with wind and current present for the loaded condition
- .13 repeat the manoeuvre in objective 1.10.12 for the ballast condition
- .14 record times, positions, headings, speed and other relevant data
- .15 plot the manoeuvres from the recorded data
- .16 compare the result with that of the same manoeuvre without wind and current
- .17 compare the results for loaded and ballast conditions
- .18 compare the difference in ship behaviour under the influence of wind, of current and of both wind and current
- .19 for various conditions of loading, investigate the effect of wind in slow speed situations

Manoeuvring and handling a ship in all conditions

- .1 Approaching pilot stations and embarking or disembarking pilots, with due regard to weather, tide, head reach and stopping distances
- .2 Handling ship in rivers, estuaries and restricted waters, having regard to the effects of current, wind and restricted water on helm response
- .3 Application of constant rate of turn techniques
- .4 Manoeuvring in shallow water including the reduction in under-keel clearance caused by squat, rolling and pitching
- .5 Interaction between passing ships and between own ship and nearby banks (canal effect)
- .6 Berthing and unberthing under various conditions of wind, tide and current with and without tugs
- .7 Ship and tug interaction

- .8 Use of propulsion and manoeuvring systems including different types of rudder
- .9 Types of anchor; choice of anchorage; anchoring with one or two anchors in limited anchorages and factors involved in determining the length of anchor cable to be used
- .10 Procedures for anchoring in deep water and in shallow water
- .11 Dragging anchor; clearing fouled anchors
- .12 Dry-docking, both with and without damage
- .13 Management and handling ships in heavy weather including assisting a ship or aircraft in distress; towing operations; means of keeping an unmanageable ship out of a sea trough, lessening lee drift and use of oil
- .14 Precautions in manoeuvring to launch rescue boats and survival craft in bad weather
- .15 Methods of taking on board survivors from rescue boats and survival craft
- .16 Ability to determine the manoeuvring and propulsion characteristics of common types of ships, with special reference to stopping distances and turning circles at various draughts and speeds
- .17 Importance of navigating at reduced speed to avoid damage caused due to own ship's bow and stern waves
- .18 Practical measures to be taken when navigation in or near ice or in conditions of ice accumulation on board
- .19 Use of , and manoeuvring in and near traffic separation schemes and in vessel traffic service (VTS) areas

1.11 General knowledge of remote controls of propulsion plant and engineering systems and services

1.11.1 Operating principles of marine power plants

1.11.2 Ship's auxiliary machinery

1.11.3 General knowledge of marine engineering systems

- .1 Marine engineering terms and fuel consumption
- .2 Arrangements necessary for appropriate and effective engineering watches to be maintained for the purpose of safety under normal circumstances and UMS operations
- .3 Arrangements necessary to ensure a safe engineering watch is maintained when carrying dangerous cargo.

Function 2 – Cargo handling and stowage

2.1 Plan and ensure safe loading, stowage, securing, care during voyage and unloading of cargoes

2.1.1 Application of international regulations, codes and standards concerning the safe handling, stowage, securing and transport of cargoes

- .1 Plans and actions conform with international regulations

- 2.1.2 Effect on trim and stability of cargoes and cargo operations
 - .1 Draft, trim and stability
- 2.1.3 Stability and trim diagrams and stress-calculating equipment
 - .1 Shear forces, bending moments and torsional moments
 - .2 Compliance with minimum freeboard requirements of the load line regulations
 - .3 Use of automatic data-based (ADB) equipment
 - .4 Knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits
- 2.1.4 Stowage and securing of cargoes on board ship, cargo handling gear and securing and lashing equipment
 - .1 Timber deck cargoes
 - .2 Procedures for receiving and delivering cargo
 - .3 Care of cargo during carriage
 - .4 Requirements applicable to cargo handling gear
 - .5 Maintenance of cargo gear
 - .6 Maintenance of hatch covers
- 2.1.5 Loading and unloading operations, with special regard to the transport of cargoes identified in the code of safe practice for cargo stowage and securing
 - .1 Loading, stowage and discharge of heavy weights
 - .2 Methods and safeguards when fumigating holds
- 2.1.6 General knowledge of tankers and tanker operations
 - .1 Terms and definitions
 - .2 Contents and application of ISGOTT
 - .3 Oil tanker operations and related pollution prevention regulations
 - .4 Chemical tankers
 - .5 Tank cleaning and control of pollution in chemical tankers
 - .6 Gas tankers
 - .7 Cargo operations in gas tankers
- 2.1.7 Knowledge of the operational and design limitations of bulk carriers
 - .1 Operational and design limitations of bulk carriers
 - .2 SOLAS chapter XII Additional safety measures for bulk carriers
 - .3 CSR Bulk
- 2.1.8 Loading, care and unloading of bulk cargoes
 - .1 Application of all available shipboard data related to loading, care and unloading of bulk cargoes
 - .2 Code of practice for the safe loading and unloading of bulk carriers (BLU Code)
- 2.1.9 Safe cargo handling in accordance with the provisions of the relevant instruments
 - .1 Establish procedures for safe cargo handling in accordance with the provisions of the relevant instruments such as:

- IMDG Code
- IMSBC Code
- MARPOL 73/78, Annexes III and V

2.1.10 Effective communications and improving working relationships

- .1 Basic principles for establishing effective communications and improving working relationships between ship and terminal personnel

2.2 Assess reported defects and damage to cargo spaces, hatch covers and ballast tanks and take appropriate action

- 2.2.1 Limitations on strength of the vital constructional parts of a standard bulk carrier and interpretive figures for bending moments and shear forces
- 2.2.2 Methods to avoid the detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling

2.3 Carriage of Dangerous Goods

- 2.3.1 International regulations, standards, codes and recommendations on carriage of dangerous cargoes
 - .1 International regulations and codes including the International Maritime Dangerous Goods (IMDG) Code and the International Maritime Solid Bulk Cargoes (IMSBC) Code
- 2.3.2 Carriage of dangerous, hazardous and harmful cargoes; precautions during loading and unloading and care during the voyage of dangerous, hazardous and harmful cargoes
 - .1 Dangerous goods in packages
 - .2 Solid bulk cargoes
 - .3 International Code for the Safe Carriage of Grain in Bulk (International Grain Code)

2.4 Maritime Legislative Requirements

- 2.4.1 Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea and protection of the marine environment.
 - 1.1 National maritime law
 - 1.2 Merchant Shipping Act
 - 1.3 Engagement and discharge of seamen
 - 1.4 Master's responsibility in respect of the hygiene of the ship and welfare of the crew
 - 1.5 Official log book
 - 1.6 Wreck and salvage
- 2.4.2 International Convention on Salvage 1989
- 2.4.3 Lloyd's Standard form of Salvage Agreement (LOF)
- 2.4.4 Crew Agreement

2.5 Survey And Certificate

2.6 Maritime Commercial

Function 3 - Controlling The operation of ship and care for persons onboard

3.1 Control Trim, Stability and Stress

3.1.1 Fundamental Principles of Ship Construction, Trim and Stability

- .1 Shipbuilding materials
- .2 Welding
- .3 Bulkheads
- .4 Watertight and weather tight doors
- .5 Corrosion and its prevention
- .6 Surveys and dry-docking
- .7 Stability

3.1.2 Effect on trim and stability in the event of damage and stability

- .1 Effect on trim and stability of a ship in the event of damage to and consequent flooding of a compartment and countermeasures to be taken
- .2 Theories affecting trim and stability

3.1.3 Knowledge of IMO Recommendations concerning ship stability

- .1 Responsibilities under the relevant requirements of the international conventions and codes

3.2 Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea and the protection of the marine environment

3.2.1 International maritime law embodied in international

- .1 Certificates and other documents required to be carried on board ships by international conventions
- .2 Responsibilities under the relevant requirements of the International Convention on Load Lines
- .3 Responsibilities under the relevant requirements of the International Convention for the Safety of Life at Sea
- .4 Responsibilities under the International Convention for the Prevention of Pollution from Ships
- .5 Maritime declarations of health and the requirements of the International Health Regulations
- .6 Responsibilities under other international maritime Law embodied in international agreements and conventions that impact on the role of management level deck officers
- .7 Responsibilities under international instruments affecting the safety of the ship, passengers, crew and cargo
- .8 Methods and aids to prevent pollution of the marine environment by ships

.9 National legislation for implementing international agreements and conventions

3.3 Maintain safety and security of the ship's crew and passengers and the operational condition of Life - Saving, Firefighting and other Safety Systems

3.3.1 Knowledge of Life-Saving Appliance Regulations

3.3.2 Organization of Fire Drills and Abandon Ship Drills

.1 states that drills shall, as far as practicable, be conducted as if there were an actual emergency

.2 states that every crew member shall participate at least one abandon ship drill and one fire drill every month

.3 fire drills:

- states that fire drill should be planned in such a way that

due consideration is given to regular practice in the various emergencies that may occur depending on the type of ship and the cargo

- states that while conducting fire drills the following procedures should be followed:

- reporting to stations and preparing for the duties described in muster list

- starting of a fire pump, using at least the two required jets of water

- operation and use of fire-extinguishing appliances

- checking and using firefighter's outfit and other personal rescue equipment

- testing of relevant communication equipment

- operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area

- checking the necessary arrangements for abandoning the ship

.4 states that the equipment used during drills shall immediately be brought back to its fully operational condition

.5 states that any faults and defects discovered during the drills shall be remedied as soon as possible

.6 abandon ship drills:

- states that while conducting abandon ship drills the following procedures must be followed: .

- abandon ship drill is called by raising particular alarm followed by announcement on the public address or other communication systems. All passengers and crew shall be familiar with this alarm and announcement

- on hearing alarm, crew shall report to stations and prepare for the duties described in muster list

- passengers and crew are suitably dressed

- life jackets are correctly donned

- preparation and lowering of at least one lifeboat

- starting and operating the lifeboat engine

- launching method of life raft is explained
- a mock search and rescue of a crew member trapped in cabin is carried out
- instruction in the use of radio life-saving appliances states that different lifeboats shall be lowered at successive drills
- states that rescue boat other than life boats shall be launched each month with their assigned crew aboard and manoeuvred in the water
- states that emergency lighting for mustering and abandonment is tested at each abandon ship drill

3.3.3 Maintenance of Operational Condition of Life-Saving, Firefighting and Other Safety Systems

- .1 the requirements for regular training and drills
- .2 the requirements for abandon ship drills
- .3 states the requirements for on-board training and instruction in the use of the ship's life-saving appliances
- .4 states that there is need to be familiar with all of the ship's life-saving appliances
- .5 states the provision and contents of a training manual and on-board training aids
- .6 states the requirement for operational readiness, maintenance and inspection
- .7 inspect and service fire detection and extinguishing systems and equipment
 - fire alarms
 - fire detection equipment
 - fixed fire-extinguishing equipment
 - fire main, hydrants, hoses, nozzles and pumps
 - portable and mobile fire extinguishing equipment including appliances
 - firefighter's outfits and other personal protective equipment
 - rescue and life support equipment
 - salvage equipment
 - communication equipment
 - requirements for statutory and classification surveys

3.3.4 Actions to be taken to protect and safeguard all persons on board in emergencies

3.3.5 Actions to limit damage and save the ship following a Fire, Explosion, Collision or Grounding

3.4 Develop emergency and damage control plans and handle emergency situations

- 3.4.1 Preparation of contingency plans for response to emergencies
- 3.4.2 Ship construction including damage control
- 3.4.3 Methods and aids for fire prevention, detection and extinction
 - Introduction, safety and principles
 - Areas of fire hazard
 - Fire precautions
 - Dry distillation

Chemical reactions

Boiler uptake fires and exhaust fires in prime movers and auxiliary exhausts

Fires in water-tube boilers

Tactics and procedure of fire control while ship is in port

Tactics and procedure of fire control while ship is carrying dangerous goods

Tactics and procedure of fire control for oil, chemical and gas tankers

Use of water for fire extinguishing, the effect on stability, precautions and corrective procedures

Communication and co-ordination during fire-fighting operations

Ventilation control including smoke extractor

Control of fuel and electrical systems

Fire precautions and hazards associated with the storage and handling of materials(paints etc)

Management and control of injured persons

Procedures for co-ordination with shore-based fire fighters

3.4.4 Functions and Use of Life Saving Appliances

Lifeboats

Life rafts

Rescue boats

Boat davits

Life raft davits

Rescue boat davits

Free-fall

Float-free arrangements

Marine evacuation systems

Lifeboat engine and accessories

3.5 Use of leadership and managerial skills

3.5.1 Shipboard personnel management and training

.1 Shipboard personnel management

.2 Training on board ships

3.5.2 Related international maritime conventions, recommendations and national Legislation

.1 Related international maritime conventions, recommendations and national legislation

3.5.3 Application of task and work load management

.1 Task and workload management

3.5.4 Effective resource management

.1 Application of effective resource management at a management Level

3.5.5 Decision-making techniques

- .1 Situation and risk assessment
- .2 Identify and generate options
- .3 Selecting course of action
- .4 Evaluation of outcome effectiveness

3.5.6 Development, implementation and oversight of standard operating procedures

3.6 Organize and manage the provision of medical care on board

3.6.1 Medical Publications

- .1 International medical suide for ships
- .2 International code of Signals (medical section)
- .3 Medical first aid guide for use in accidents involving dangerous good