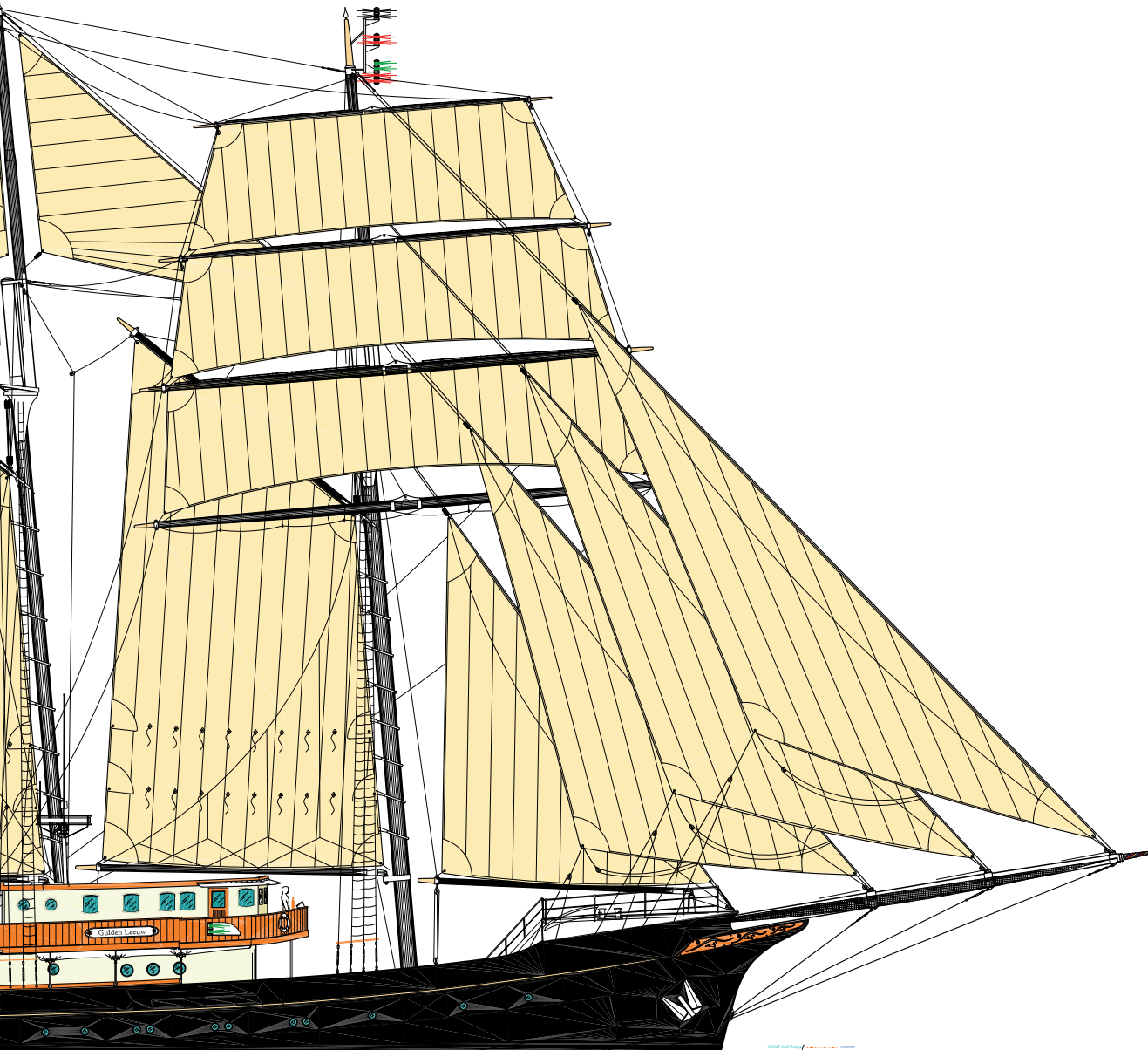




# Gulden Leeuw

SAIL TRAINING VESSEL

## SAIL TRAINING BOOKLET



Sail Training Vessel Gulden Leeuw

# **SUMMARY**

## **SAILING** **3**

1. Sail Theory
- 2 . Sail Handling and Deck maintenance
- 3 . Notes

## **NAVIGATION** **6**

1. Passage Planning
2. Navigator's duties
3. Officer of the watch
4. Notes

## **STEERING CERTIFICATE** **12**

## **TECHNICAL** **13**

## **SAFETY** **14**

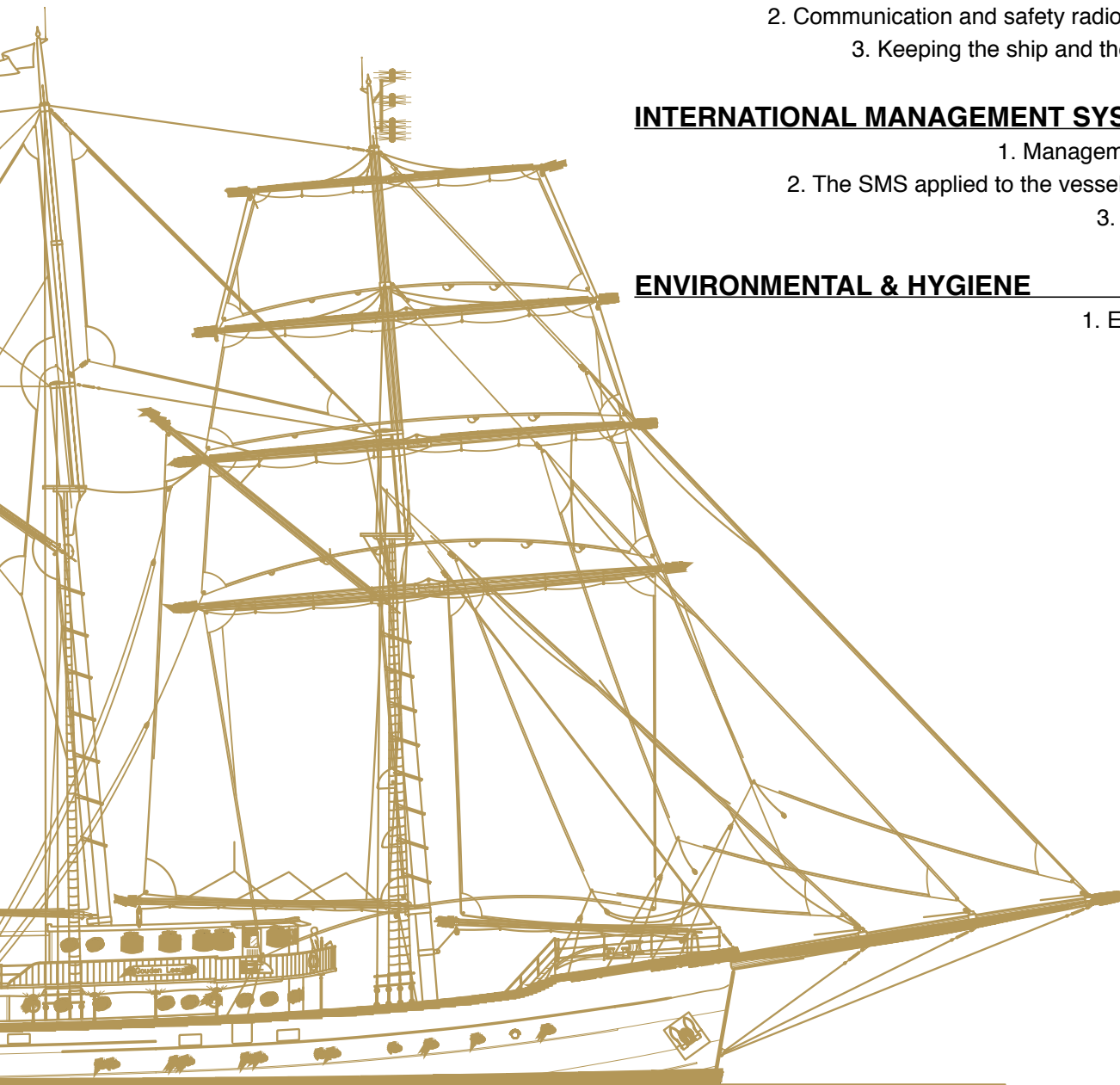
1. Basic safety procedures
2. Communication and safety radio operations
3. Keeping the ship and the crew safe
4. Notes

## **INTERNATIONAL MANAGEMENT SYSTEM** **18**

1. Management system
2. The SMS applied to the vessel: checklists
3. Leadership
4. Notes

## **ENVIRONMENTAL & HYGIENE** **22**

1. Environment
2. Hygiene
3. Notes



# SAILING

## 1. Sail Theory

<b>SAIL1 - A</b>	<b>Theory and practice</b>	<b>Trainee understands perfectly the theory of the effects of the wind on fore and aft sails. Trainee understands the influence of the wind in the sails for the balance for the ship and shows full practice on sail trimming.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Trimming sails			
.2 AB	Various sails onboard			
.3 AB	Sail plan			
.4 AB	Lateral centre			
.5 AB	Centre of effort of sails			
.6 AB	Sheet: trimming and attachment positions			
<b>SAIL1 - B</b>	<b>Fore and aft sails</b>	<b>Trainee knows and is able to understand the characteristics concerning fore and aft sails.</b>		
.1 OF	Appelations			
.2 BS	Knowledge of materials constructions and shapes			
.3 BS	Sail fixing methods			
.4 BS	Reef methods			
.5 AB	Running Rigging			
.6 AB	Ropes handling and belaying pins			
<b>SAIL 1 - C</b>	<b>Square sails</b>	<b>Trainee knows and is able to understand the characteristics concerning square sails.</b>		
.1 AB	Spars			
.2 AB	Sails			
.3 BS	Standing rigging			
.4 BS	Different ways of reefing			
.5 AB	Reef methods			
.6 AB	Running rigging			
.7 BS	Names of ships parts			
<b>SAIL 1 - D</b>	<b>Theory and practice</b>	<b>Trainee understands perfectly the theory of the effects of the wind on square sails. Trainee understands the influence of the wind in the sails for the balance for the ship and shows full practice on sail trimming.</b>		
.1 AB	Trimming sails			
.2 BS	Various sails onboard and their names			
.3 OOW	Rigging types			
.4 AB	Sail plan			
.5 AB	Centre of lateral resistance			

.6 AB	Centre of effort of sails			
.7 AB	Definition of weather helm and lee helm. Understanding of how the trimming influences the steering (balance of the ship)			
.8 AB	Understand where the wind comes from and know the different sail positions (sharp, square...)			
.9 AB	Point out the following parts of a sail: leach, luff, foot, tack, clew			

## 2. Sail Handling and Deck maintenance

<b>SAIL2 - A</b>	<b>Wind</b>	<b>Trainee understands perfectly the effects of the wind and its influence on the ship.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Effect on sails and rudder			
.2 AB	Disturbance			
.3 AB	Venturi effect			
.4 AB	Aerodynamica			
.5 AB	Propulsion forces			
.6 Bs	Turbulence			
.7 AB	Points of Sail: describe the following points of sail: close hauled, close reach, beam reach, broad reach, running, reaching, in irons, pinching, luffing			
.8 Bs	How to read the sail geometry indication matrix			
.9 Bs	Understand how the sail geometry indication matrix is used			
<b>SAIL2 - B</b>	<b>Setting and Lowering sails</b>	<b>Trainee has a thorough understanding of the sail handling and carries out the leading of sail handling; under supervision</b>		
.1 AB	I know how to set sail and to take away: - Head sails			
.2 AB	- Square sails			
.3 AB	- Gaff sails			
.4 Bs	I know how to set sail and to take away: - On different courses			
.5 Bs	- On different wind forces			
<b>SAIL2 - C</b>	<b>Manoeuvring under sails</b>	<b>Trainee has a thorough understanding of the sail handling and carries out the leading of sail maneuvering in a safe way for the ship and the crew; under supervision.</b>		
.1 AB	Safety Emergency procedures			
.2 BS	The theory of: - Tacking			
.3 Bs	- Jibing			
.4 Bs	- Wearing			

.5 Bs	- Heaving to			
.6 Bs	the practice and leading of: - Tacking			
.7 Bs	- Jibing			
.8 Bs	- Wearing			
.9 Bs	- Heaving to			
<b>SAIL2 - D</b>	<b>Equipment and running rigging checks</b>	<b>Trainee uses the following equipment. Trainee knows the operating instructions and dangers. Trainee is also able to inspect them, look for damage and maintain them using the specified checklists according to the ISM of the ship.</b>		
.1 Bs	Bend on a head sail			
.2 Bs	Bend on a square sail			
.3 Bs	Bend on a gaff topsail			
.4 Bs	Bend on a gaff sail			
.5 Bs	Blocks			
.6 Bs	Tackles			
.7 Bs	Winches			
.8 Bs	Pennants			
.9 AB	Running Backstays			
.10 AB	Line chaffing			

### 3 . Notes

## NAVIGATION

### 1. Passage Planning

<b>NAV1 - A</b>	<b>Consult navigational publications</b>	<b>Trainee knows his way through the publications in the bridge and knows where to find the information when needed. Trainee knows how the purpose of a passage planning and has shown proper use of any relevant nautical publication.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 OOW	Demonstrate an understanding of the chart folio system and assist in correcting charts and other publications with the latest information available			
.2 OOW	Assist deck officer in preparing navigational passages and in voyage planning			
.3 OOW	Demonstrate understanding of the contents and use of: notices to Mariners			
.4 OOW	Sailing Directions and ship's routing information			
.5 OOW	List of lights and fog signals			
.6 OOW	Tide Tables, Tidal Streams and Current Atlases			
.7 OOW	Pilot Books			
.8. BS	Radio Navigational Warnings			
<b>NAV1 - B</b>	<b>ETA, VTD and Courses</b>	<b>Trainee knows ahead of departure and micromanages the courses while sailing. Trainee takes into account the ship's size, draft and maneuverability, the distance off shallow waters, banks and other dangers to navigation. Due consideration is taken of currents, ice and prevailing weather conditions; uses biggest scale chart, depth and lookout.</b>		
.1 BS	Demonstrate the use of the compass error book			
.2 OOW	Practice tidal calculations			
.3 BS	Practice calculations for distance, average speed, course made good (VTD) set and drift, ETA			
.4 BS	Navigation is always done on the the biggest scale available; Courses, reports, and dangers... are set in the chart by pencil.			
<b>NAV1 - C</b>	<b>Voyage preparation applied to Sailing Vessels</b>	<b>Trainee shows a thorough understanding and carrying out of voyage preparation for sailing vessels. Trainee understands the advantages and disadvantages the weather provides the itinerary established.</b>		
.1 OOW	Choose and describe a route, using different navigation-Environmental-and safety standards			
.2 OOW	Using ocean passages for the world			
.3 OOW *	Climatological charts			
.4 OOW *	Most important routes for sailing ships on the main oceans			

.5 OOW	Most important wind- and sea currents			
.6 OOW*	Dangers of different routes			
.7 OOW*	Choosing of the correct longitude upon crossing the equator			
<b>NAV1 - D</b>	<b>Voyage preparation</b>	<b>Trainee has a deeper understanding and carries out of a long voyage preparation using</b>		
.1 OOW	Choose and describe a route, using different Navigation-Environmental and safety standards			
.2 OOW	Using ocean passages for the world			
.3 OOW *	Climatological charts			
.4 OOW *	Most important routes for sailing ships on the main oceans			
.5 OOW	Most important wind-and sea currents			
.6 OOW	Understand the importance of vessel traffic services and where to find reporting requirements			
.7 BS	Know how to use the voyage planning checklist out of the ISM			

## 2. Navigator's duties

<b>NAV2 - A</b>	<b>Navigation</b>	<b>Trainee is at ease in the bridge and with the different calculations needed for navigational duties. Errors in magnetic and gyro compasses are determined and correctly applied to courses and bearings. Calculations are correctly carried out and adequate judgement demonstrated when applying the effects of wind, tides, currents and the ship's estimated speed</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Apply magnetic variation and deviation			
.2 OOW	Practice use of azimuth mirror			
.3 OOW	Practice: Azimuths and deviation bearings			
.4 BS	Understand the use of and make entries in the compass error book			
.5 AB	Dead reckoning calculations			
.6 OOW	Practice tidal calculations			
<b>NAV2 - B</b>	<b>Lookout</b>	<b>Trainee knows the importance of lookout and when visibility allows, he identifies sufficient objects or aids to determine the position of the ship safely.</b>		
.1 AB	Perform look-out duties and report objects in degrees or points on the bow			
.2 AB	Identify aids to navigation including lighthouses, beacons and buoys			
.3 BS	Practice compass bearing and visual fixes			
.4 BS	Demonstrate a knowledge of the IALA A and B system of buoyage			
.5 BS	You know the different type of buoys			

.6 AB	You know the danger buoys: cardinal marks			
<b>NAV2 - C</b>	<b>Navigational equipment</b>	<b>Trainee knows how to do checks and testings on the navigational equipment. Trainee is familiar with the radar. He knows how to use the most reliable equipment to obtain a fix.</b>		
.1 OOW	Practice: radar switch on the set up procedure			
.2 AB	Radar Plotting			
.3 OOW	Fixes by radar (theory)			
.4 OOW	Practice using ARPA			
.5 OOW	Demonstrate and understanding of the limitations of radar			
.6 OOW	Under supervision demonstrate set up of AIS and input ship's data.			
<b>NAV2 - D</b>	<b>Use the equipment to fix the ship's position</b>	<b>Trainee interprets correctly the information taken from the various equipment. The fix is correct and properly set out on the chart. The course and speed of other ships, as well as time and distance of assumed closest approach to other ships, are accurate to take appropriate action and maintain safe navigation.</b>		
.1 Bs	Practice fixes by radar			
.2 Bs	Cross-check fixes by radar with visual fixes			
.3 OOW	Demonstrate an understanding of factors affecting performance and accuracy			
.4 AB	Practice determining CPA and TCPA			
.5 OOW	Demonstrate knowledge and understanding of the differences between ground and sea stabilisation for ARPA			
.6 OOW	Practice plotting of radar targets			
.7 OOW	Recommend appropriate avoiding action (true motion and relative motion display)			
<b>NAV2 - E</b>	<b>COLREGS</b>	<b>Trainee is able to identify various types of sail and motor vessels. Trainee has a good knowledge of the COLREG rules and take good precaution to apply them at all times.</b>		
.1 Bs	You understand the basic of college rules			
.2 AB	You know how to define a risk of collision when on lookout			
.3 Bs	You know the rules of priority			
.4 Bs	Rules 13 through 17: head-on situation, crossing situation, action by give-way vessel and action by stand-on vessel (meeting, crossing and overtaking situations)			
.5 OOW	You know the rules about traffic separation schemes			
.6 OOW	you know the number of rules standing in the COLREGs and how to find them			
<b>NAV2 - F</b>	<b>Navigating</b>	<b>Trainee complies with the basic principles to be observed in keeping a navigational watch and any potentially dangerous situation is not allowed to become critical.</b>		
.1 OOW	Demonstrate an understanding of the principles of safe watch keeping as detailed in the ICS Bridge Procedures Guide			



.2 AB	Perform lookout duties and report objects in degrees or points			
.3 AB	Understand the need to maintain a visual look-out for small ships and other floating objects that may not be visible by radar.			
.4 Bs	Recognise the limitations of AIS as an aid to identification and understand that it is not a collision avoidance system			
.5 Bs	Understand the need to engage hand steering at an early stage when encountering traffic or hazards to navigation			
.6	Understand the need for taking early action to avoid close quarter situations			
.7	Understand the need to analyse and consider « what if? » scenarios before taking collision avoidance action			
.8	Show an ability to supervise ratings in watch keeping duties			
.9	Assist an officer of the watch in anchor watch duties			
.10	Read and understand the purpose and contents of the Night Orders book			
<b>NAV 2 - G</b>	<b>Monitor Navigational Equipment</b>	<b>Trainee knows how to monitor the other equipment in the bridge: compass errors and other instruments errors are regularly checked and correctly applied.</b>		
.1 AB	Complete watch entries in the log book			
.2 OOW	Operation echo sounder and analyse information obtained			
.3 Bs	Operate passive radio equipment where fitted, including: - Navtex			
.4 OOW	- Weather report on Inmarsat C			

### 3. Officer of the watch

<b>NAV3 - A</b>	<b>Manoeuvring</b>	<b>Trainee knows the procedures for dropping anchor and for mooring: anchors are lowered and moorings and manpower are ready.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Assist in preparing for mooring: heaving lines, ropes, communications, lights, fenders etc.			
.2 Bs	Under supervision: start/operate winches and windlass			
.3 Bs	Under supervision: run, heave, stopper and turn up mooring lines			
.4 AB	Demonstrate safe handling of moorings			
.5 OOW	Understudy an officer during mooring operations: on the bridge			
.6 Bs	Understudy the bosun during mooring operations: at mooring stations			

.7 Bs	Understudy the bosun during mooring operations: anchoring			
.8 Bs	Explain shackles markings on anchor cables			
.9 Bs	As a team member assist with: preparation of anchors prior to letting go			
.10 AB	Under supervision: Inspect chain locker, peak tanks and forward compartments			
.11 Bs	Under supervision: prepare and anchor and let go			
.12 AB	Supervise the stowage of chains used in mooring operations			
<b>NAV3 - B</b>	<b>Weather</b>	<b>Trainee knows the basic meteorological information.</b>		
.1 AB	Know and understand how to read a grib file			
.2 Bs	Know and understand how to read isobars			
.3 AB	Know that more than one system can always be used to make decisions and to determine a safe sailing			
.4 Bs	Read the barometer and derive a corrected barometric pressure			
.5 AB	Know why the barometric pressure is important and describe expected weather looking at the rise and fall of pressure			
.6 AB	Obtain the air temperature			
.7 AB	Estimate the wind force, direction and sea state			
.8 AB	Demonstrate a thorough knowledge of the Beaufort scale and how to use it with the sail geometry index matrix			
.9 Bs	Identify the main cloud types			
.10 OOW	Recognize the need to adjust course and/or speed in heavy seas			
.11 OOW	Know the difference between a low and high weather system			
.12 OOW	Knows about cyclonic and anticyclonic systems and can describe their characteristics			
.13 OOW	Knows about warm and cold fronts and can describe their characteristics			
<b>NAV3 - C</b>	<b>Safe Sailing</b>	<b>Trainee knows the proper actions to be taken in different situations, adequately.</b>		
.1 Bs	Know that more than one system can always be used to make decisions and to determine a safe sailing			
.2 AB	Understand and apply the « Speed - Depth- Lookout » (« LLL »)			
.3 Bs	Know and understand the importance of having the positions and tracks in charts			
.4 Bs	Know and understand the importance of sailing on the biggest scale charts			

.5 Bs	Know the right sail configuration based on weather forecast and actual wind			
.6 OOW	Anticipate in sail handling manoeuvres accordingly to the number of persons on watch to keep the ship safe			

#### **4. Notes**

## STEERING CERTIFICATE

*It is important that the trainee learns to steer the ship at sea and understands how to execute helm orders correctly. The trainee should take turns at the wheel by day, by night and when entering and leaving port. After the trainee has completed properly all duties on the helm and has acquired enough helm experience, he is entitled to ask the Captain for a steering certificate.*

Steering	Voyage		Steered			Remarks	Signature of OOW
	From	To	Date	Duration			
				From	to		
By Compass: - By day AB							
- By night AB							
By sight: (without aid of compass) AB							
Entering or leaving port OOW							

STE	Steering the ship	Criteria for Evaluation	Competence demonstrated	
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Execute helm orders correctly			
.2 AB	Demonstrate procedure for handing over the wheel			
.3 Bs	Understand operation of the main steering system and auto pilot			
.4 OOW	Demonstrated correct procedure for changing over from manual steering to helm and vice-versa			
.5 AB	Steer by magnetic compass			
.6 Bs	Steer by GPS compass (joystick)			
.7 AB	Take turns at the wheel in steering the ship for periods totaling at least 4 hours, excluding periods of instruction			
.8 OOW	Take the wheel: Entering/ leaving port			
.9 Bs	Take the wheel: In canal/ river transits			

## TECHNICAL

<b>TECH1</b>	<b>Engine Room familiarization</b>	<b>Trainee has been familiarized with the ship's Engine Room; Trainee has shown good understanding of the different daily tasks to perform and has been practicing them under supervision before being able to take action independently when required.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Address an ER alarm			
.2 OOW	Change water filling/ drawing tanks without checklist			
.3 OOW	Pump grey/ black water			
.4 OOW	Start ME with the adequate checklists			
.5 OOW	Start generators with checklist			
.6 BS	Change generators and use the switchboard			
.7 AB	Use the Fire Fighting pump with the different ejectors			
.8 AB	Emergency escapes			
.9 AB	Shut down the ventilations			
.10 Bs	Close remotely and locally the water tight doors			
.11 AB	First aid kit location			
.12 Bs	Start and Operate the Emergency Fire and Bilge pumps			
.13 OOW	Operate the Water Maker			
.14 OOW	Operate the Sprinkler Pump with use of the checklists			
<b>TECH2</b>	<b>Pollution prevention before bunkering</b>	<b>Trainee understands and follows the ship's ISM checklist for bunkering and assists the engineer in bunkering procedures in all technical and safe operations.</b>		
.1 OOW	Demonstrate knowledge of ship's bunkering procedures from our ISM checklist			
.2 Bs	Participate in bunkering operations			
.3 OOW	Demonstrate the emergency shut-down procedure			
<b>TECH3</b>	<b>Steering gear</b>	<b>Trainee understands the technical effects concerning the steering gear while sailing . Trainee uses the information adequately used during normal situations while taking due regard to draft, trim, wind and current.</b>		
.1 OOW	Demonstrate understanding of the operation of the main steering gear, emergency steering and auto pilot and their associated alarms.			
.2 OOW	Demonstrate understanding of squat, shallow water and similar effects.			

## **SAFETY**

*Did you read the book survival at sea? (SOLAS TRAINING MANUAL from BRINDLE)*

*Before any kind of practice, the trainees need to know the procedure onboard with the ISM checklists.*

*Before any kind of practice, the trainees need to know the theory.*

### **1. Basic safety procedures**

<b>SAF1 - A</b>	<b>Act correctly when emergencies arise in port</b>	<b>Trainee knows where to find the information for assistance from shore facilities. Trainee manages to establish a good communication with the proper authorities if needed.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 OOW	Prepare a list of shore side emergency organisations such as: port control, fire department, police, ambulance, Taxi services... (ISM-GL7.7.2 Harbour)			
.2 Bs	Act in case of an emergency in harbour and the procedures for alerting port emergency services			
<b>SAF1 - B</b>	<b>Safety Plan</b>	<b>During debriefing after an exercise or a real fire extinguishing incident, the reasons for each action taken, including the priority in which they were taken, are explained and accepted as the most appropriate. Trainee instructs the use of portable or other fire extinguishers and demonstrates an ability to raise the alarm</b>		
.1 AB!	Demonstrate the use and location of safety appliances and escape routes			
.2 OOW	Carry out a full inspection of firefighting equipment and report to the chief officer			
.3 AB!	Demonstrate how to raise the alarm			
<b>SAF1 - C</b>	<b>Drills</b>	<b>Trainee's statements of assigned duties are correct and include actions while participating in exercises for emergency responses at sea.</b>		
.1 Bs	- Collision / Grounding			
.2 Bs	- Fire Fighting			
.3 Bs	- Man Over Board			
.4 Bs	- Abandon ship			
<b>SAF1 - D</b>	<b>Fire drillThe Fire Drill</b>	<b>Trainee knows where to locate different stations and can select the most suitable equipment and extinguishing agents during events.</b>		
.1 OOW	Assist with the testing of the following systems, where fitted: - Fire detection and alarm systems			
.2 OOW	- Fixed automatic sprinklers			
.3 OOW	- Fixed FM 200 and CO <sub>2</sub>			
.4 Bs	- Fire flaps and dampers			
.5 AB	- Automatic and manual fire doors			
.6 OOW	Describe the operation of the fixed fire extinguishing system			

.7 OOW	State the safety precautions required prior to operating the system			
.8 OOW	Locate and don properly, quickly and safely the fire fighting outfit			
.9 OOW	Demonstrate the procedures and precautions required for entry into an enclosed space			
.10 OOW	Recognise the difference between a Self Contained Breathing Apparatus (SCBA) set and an Emergency Escape Breathing Device			
<b>SAF1 - E</b>	<b>The Abandon Ship Drill</b>	<b>Trainee knows where to muster on sounding the alarm and meets at the designated lifeboat station wearing safety belts or immersion suits and carry out his duties on request</b>		
.1 OOW	Understand the hazards to seafarers of manning lifeboats for drills and exercises			
.2 AB !	Number of life saving appliances and what type of floatation devices are carried on vessel. Where to find them			
.3 AB !	Describe the use of an EPIRB and SART; know the difference			
.4 OOW	Locate and test the operation of radio devices including EPIRBs and SARTs			
.5 AB !	Locate pyrotechnic distress signals			
<b>SAF1 - F</b>	<b>The Man Over Board Drill</b>	<b>Trainee is familiar with the equipment onboard and practices retrieving persons from the water.</b>		
.1 AB !	Know how many life rings are carried onboard the vessel, the different types and their location			
.2 AB !	Knows the duties on deck, in case of a MOB			
.3 OOW	Knows the duties in the bridge at all times, in case of a MOB			

## **2. Communication and safety radio operations**

<b>SAF2 - A</b>	<b>IMO English</b>	<b>Trainee can demonstrate the use of IMO Standard Marine Communication Phrases. During navigation and safety communications, trainee is clear and understood with:</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 Bs	- Other ships			
.2 OOW	- Coast stations (i.e.: harbours)			
.3 OOW	- Shore stations by making a report to comply with ship reporting requirements (VTS procedures)			
.4 AB	Practice the use of VHF and MF radio telephone equipment using the standard marine communication phrases			
<b>SAF2 - B</b>	<b>Communicate with members of the watch in safety related duties</b>	<b>Trainee can communicate all orders and information related to operations and watch keeping duties correctly and act upon other crew members concerned</b>		
.1 Bs	Demonstrate an ability to communicate instruction to a multilingual crew			

.2 AB	Use hand held transceivers (walkie talkies)			
<b>SAF2 - C</b>	<b>Receiving a distress and operating radio equipment</b>	<b>Trainee shows the competences required to manipulate GMDSS equipment and acts accordingly to the procedure to follow.</b>		
.1 OOW	Preliminary assessment of the situation: Understanding the type of emergency and type of action to be taken			
.2 Bs	Recognize distress or emergency signals			
.3. OOW	Record distress signal sighted or received in log book			
.4 OOW	Consult vessel's contingency plans and instructions in standing orders			
.5 OOW	Assist in preparing a response or contingency plan			
.6 OOW*	Plan an action in compliance to the IAMSAR manual and based on the possibilities for rendering the assistance needed (other ships in the area? meteorological situation? distance?)			
.7 OOW	Understand the duties and responsibilities of the designated radio Officer in times of distress			
.8 OOW*	Operate GMDSS equipment on test			
.9 OOW	Plot the position given from a vessel in distress and calculate course, distance and ETA			
<b>SAF 2 - D</b>	<b>Recording all incidents and actions</b>	<b>All vital information is properly recorded to support any subsequent debriefing</b>		
.1 OOW	Record other information (all incidents and actions) in the log book			
.2 OOW	Maintain record of communications and actions taken			

### **3. Keeping the ship and the crew safe**

<b>SAF3 - A</b>	<b>Ship clean, tidy and seafastened</b>	<b>Trainee - when on watch- makes inspections in areas at risk from possible fires. Trainee ensures that combustible materials and dangerous objects are stored safely and demonstrates a good seamanship.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Perform safety round duties in accordance to our checklist			
.2 AB	Re-stow gear after maintenance duties			
.3 AB	Ensure that all gear, tools, spares etc are properly stowed and secured			
.4 Bs	Management of the rigging of safety lines			
<b>SAF3 - B</b>	<b>PPE</b>	<b>Trainee understands the dangers of the areas he is working in and knows the Personal Protective Equipment required for his jobs. Trainee inspects properly the equipment onboard and defects are immediately recorded and reported and the suggested or executed action adequate for the situation</b>		



.1 AB	Demonstrate an understanding of: - The precautions required for entry into enclosed spaces			
.2 AB!	- Working aloft			
.3 AB	- Working over the side			
.4 Bs	- Using power tools			
.5 Bs	Where applicable, assist with the opening, closing and securing of hatches			
.6 Bs	Assist with the maintenance of watertight doors, ports and hatches			
.7 Bs	Assist with the maintenance of fairleads, tumblers, goose-necks etc.			
.8 Bs	Prepare steel plates and other surfaces for protective coating			
.9 Bs	Apply protective coats to appropriate surfaces			
.10 Bs	Discuss routine daily maintenance procedures onboard and state why these procedures are important			
.11 Bs	Awareness of the daily and weekly job lists regarding safety and maintenance; implemented in the ISM			

#### **4. Notes**

# INTERNATIONAL MANAGEMENT SYSTEM

## 1. Management system

SMS1 - A	Familiarization to the ship's ISM	Trainee has read the SMS of the ship and demonstrates responsibility in regards to systems, procedures and needs of the vessel in compliance to the SMS and other regulations		
	Task/Duty	Advice on Areas for improvement	Task completed Supervising officer/Instructor (Initial/date)	
.1 OOW	Make entries in the bridge movement book, and understand the importance of it. Synchronize bridge and engine room clocks.			
.2 OOW	Use internal communications and test alarm systems			
.3 AB	Read and understand the Safety Management System			
.4 Bs	Knows and understands the job descriptions from all the different crew members			
.5 AB	Familiarized with the procedures for monitoring SMS systems onboard the vessel			
.6 OOW	Familiarized with the procedures for monitoring SMS documents onboard the vessel			
.7 Bs	Familiarized with responsibilities concerning maintenance, bunkering, garbage disposal,...			
.8 AB	Familiarized with responsibilities concerning emergency situations and drills			
.9 AB	Knows and understands the importance of following a same system for preparation, arrivals and departures for trips			
.10	Know the ISM checklists, and their usage at the beginning of the journey, daily, weekly, monthly, quarterly, yearly and in general			
SMS1 - B	Ship's particulars	Trainee shows competency in being an apprentice officer. Trainee understands and can anticipate actions to be taken underway sailing and in harbour regarding the different departments onboard the vessel.		
.1 Bs	Know the management system onboard the vessel and know how to use it			
.2 AB	Familiarized with the vessel and know the basics of the crew familiarizations from different departments			
.3 OOW	Know the ship's particulars by heart			
.4 AB	Know the ships policy			
.5 OOW	Know how the bridge resource management system works			
.6 AB	Demonstrate the ability to perform duties under supervision to the satisfaction of the OOW and AB.			

.7 AB	Discuss routines for arrival and departure before trips			
.8 OOW	Demonstrate the ability to plan ahead harbour schedules, gangway watches in regards to the ships needs			
<b>SMS1 - C</b>	<b>Marad</b>	<b>Trainee is familiar with the maintenance program of the vessel and uses it on a periodic basis</b>		
.1 Bs	Knows and Understands the purpose of the ship's maintenance system and knows how to operate it			
.2 OOW	Knows where to find the weekly marad jobs and how to execute the basic safety checks and to include them in the daily job lists			
.3 OOW	Demonstrates the use of Marad software and administration of periodic drills, work lists and maintenance			

## 2. The SMS applied to the vessel: checklists

<b>SMS2 - A</b>	<b>Trip preparations: Departures and arrivals</b>	<b>Trainee show ability in preparing the correct lights, flags, shapes and sound signals. Ship's safety is constantly monitored and the candidate shown to be particularly vigilant and alert in confined waters.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 OOW	Assist in checking bridge steering control equipment, communication systems and all other navigational aids before leaving port			
.2 Bs	Inspect the ship prior to sailing to ensure the ship is all secure to proceed to sea			
.3 OOW	Operate bridge controls, e.g. telephones			
.4 OOW*	Understand flag etiquette			
.5 OOW	Understudy an officer on the bridge when vessel is entering and leaving port			
.6 OOW	Spend at least two periods in the engine room when vessel is entering and leaving port			
.7 OOW	Know and can do, under supervision of an OOW, the ISM departure checklist			
.8 OOW	Know and can do, under supervision of an OOW, the ISM arrival checklist			
.9 OOW	Gets a pilot safely on and off from board			
<b>SMS2 - B</b>	<b>Safe Navigation ISM Checklists</b>	<b>Trainee can promptly and correctly carried out any checklists from the SMS of the vessel. A clear statement is given that the situation is under full control when the watch is formally taken over.</b>		
.1 Bs	Know what constitutes the safe keeping of a navigational watch			
.2 Bs	Demonstrate the correct procedure for handing over a bridge watch accordingly to the ISM checklist			

.3 AB	Accompany officer on rounds: - At sea			
.4 AB	- At anchor			
.5 AB	- In port			
.6 Bs	Know at what times the captain shall be warned/ called. Apply the procedure accordingly to the ISM checklists.			
.7 Bs	Know and can do, under supervision of an OOW, the ISM anchoring checklist; Prepare the anchoring log.			
.8 Bs	Know and can do, under supervision of an OOW, the ISM Daily Harbour Stay Checklist			
<b>SMS2 - C</b>	<b>Maintenance and prevention</b>	<b>Trainee shows ability to perform seriously various checklists from the maintenance of the ship. Trainee reports the results immediately reported to the master or officer in charge of the concerned equipment.</b>		
.1 AB	Perform soundings of bilges, peak tanks, double bottom and other tanks and record information			
.2 OOW	Perform regular inspections from the deck department: running rig and standing rig inspections			
.3 OOW	Perform regular inspection from the safety equipment: life vests, immersion suits, MOB boat, LSA, ...			
.4 Bs	Perform regular inspections from the critical equipment and greasing points ( i.e. freeing ports)...			
<b>SMS2 - D</b>	<b>Table drills</b>	<b>Trainee participates and acts as a crew member in various drills.</b>		
.1 Bs	As a team member participate in a table drill for different exercises: - MOB			
.2 Bs	- Fire drill			
.3 Bs	- Collision			
.4 Bs	- Abandon Ship			
.5 OOW	- Enclosed space entry and rescue			
.6 OOW	- Helicopter drill			
.7 Bs	- Location and use of some equipment from the medical outfit of the vessel			

### 3. Leadership

<b>SMS3 - A</b>	<b>Leadership</b>	<b>Trainee is aware of various works undertaken. The instructions are clear and concise. Questionable decisions are challenged in a seaman like manner, trainee listens to his crew and colleagues.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed</b> Supervising officer/Instructor (Initial/date)	
.1 AB	Understand that as a team member everyone has different experience and strength and has a role to play in any task			

.2 OOW	Participate actively in task planning meetings involving different tasks			
.3 AB	Understand that communication is a two-way exchange and demonstrate this in practice both on bridge and deck			
.4 AB	Maintain awareness of changing situations			
.5 AB	Accept authority while questioning instructions if in doubt			
.6 AB	Check own understanding of situation is shared by other team members			
.7 AB	Participate actively in task review and evaluation meetings involving different tasks			
<b>SMS3 - B</b>	<b>Demonstrate leadership ability</b>	<b>Trainee shows great initiative and others are co-ordinated alongside to ensure that what needs to be done is carried out in a timely way.</b>		
.1 AB	Think ahead and plan tasks that will follow the immediate task or manoeuvre			
.2 Bs	Set priorities correctly when observing conflict between immediate needs and tasks that may be held back			
.3 AB	Allocate resources effectively to achieve desired outcomes			
.4 AB	Check results and take corrective actions as needed/instructed			
.5 Bs	Demonstrate a good use of the equipment and tools in the bridge for the decision making at all times during the navigational watch			
.6 AB	Demonstrate the confidence and maturity to refer to senior officer in doubt			

#### 4. Notes

# **ENVIRONMENTAL & HYGIENE**

## **1. Environment**

<b>ENV1      Pollution prevention</b>		<b>Trainee knows that all operations onboard are properly planned and comply with international regulation in spirit as well as in word.</b>		
	<b>Task/Duty</b>	<b>Advice on Areas for improvement</b>	<b>Task completed Supervising officer/Instructor (Initial/date)</b>	
.1 AB	Understand that environmental protection includes both sea and air which are protected by detailed MARPOL regulations			
.2 OOW	Name at least two Particularly Sensitive Sea Areas (PSSAs)			
.3 OOW	Demonstrate by example preparedness to take personal responsibility for actions to protect the marine environment			
.4 OOW	Understand that marine pollutants must be landed ashore for safe disposal in compliance with MARPOL			
.5 OOW	Understand that there are strict rules covering disposal at sea of oily water mixtures applicable to all ships			
.6 OOW	Understand that there are strict rules covering disposal of noxious liquid substances applicable to all ships			
.7 OOW	Understand that there are strict rules covering disposal of harmful substances carried in packages form applicable to ships			
.8 OOW	Understand that there are strict rules covering pollution prevention by sewage applicable to all ships			
.9 OOW	Understand that there are strict rules for prevention of pollution by garbage from ships, applicable to all ships			
.10 OOW	Understand that there are strict rules covering air pollution from ships which will progressively apply to all ships			
.11 OOW	Understand the requirements under the ISM code regarding the environmental protection			
<b>ENV2      Garbage Management</b>		<b>Trainee knows and complies with the rules concerning the garbage management onboard. Trainee knows the different special areas for disposal of garbage at sea and in harbour.</b>		
.1 Bs	Participate in bilge pumping in compliance with MARPOL			
.2 Bs	Understand and applies the garbage management plan			
.3 AB	Dispose of garbage at sea/on shore in compliance with MARPOL and ship's garbage Management Plan			

## 2. Hygiene

HYG1	Hygiene on the ship	Trainee shows good responsibility in keeping the environment where he lives and works clean, tidy and safe.		
	Task/Duty	Advice on Areas for improvement	Task completed Supervising officer/Instructor (Initial/date)	
.1 AB	Knows and understand the importance of food safety onboard a vessel (contaminations and temperature abuse, personal hygiene, thorough cleaning)			
.2 AB	Familiar with hygiene protocols in the Galley and crew accommodations needed for inspections			
.3 AB	Familiar with hygiene protocols for daily cleaning of equipment in the galley			
.4 AB	Familiar with hygiene protocols for daily cleaning in wet areas onboard the vessel such as bathrooms, toilets, bar...			
.5 Bs	Familiar with Ship's daily and weekly cleaning schedules and protocols			
.6 OOW	Familiar with the Ship's deep clean necessities			
.7 Bs	Demonstrates good leadership in thorough cleaning of « wet » areas onboard the vessel			
.8 Bs	Demonstrates good leadership in thorough cleaning of personal accommodation areas			
.9 Bs	Demonstrates good leadership in thorough cleaning of common spaces onboard the vessel			
.10 Bs	Demonstrates good understanding in the importance of saving energy: energy efficiency onboard the vessel			
.11 Bs	Demonstrates understanding and needs to prevent Legionella onboard the vessel			
.12 AB	Demonstrates understanding of keep a ship safe, clean and tidy for safety reasons as a sailing vessel			
.13 OOW	Demonstrates leadership in keeping the ship safe, clean and tidy for safety reasons as a sailing vessel			

## 3. Notes