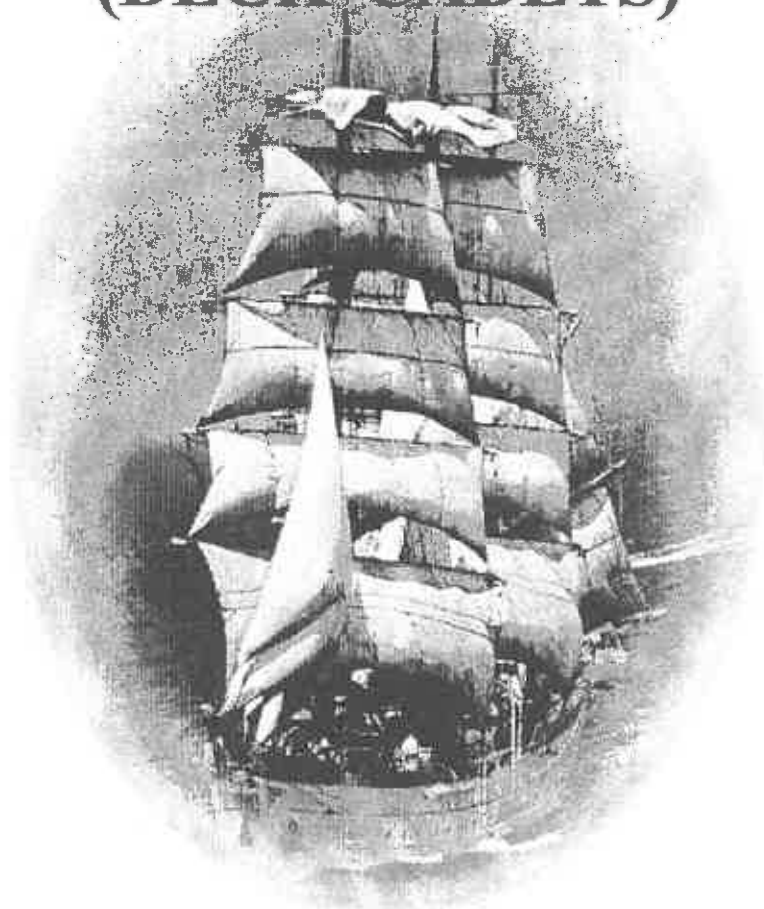


ACADEMIA NAVALĂ „MIRCEA CEL BĂTRÂN”



**ON-BOARD TRAINING
RECORD BOOK FOR
OFFICERS IN CHARGE OF A
NAVIGATIONAL WATCH
(DECK CADETS)**



ON BOARD TRAINING RECORD BOOK

FOR

OFFICERS IN CHARGE OF A NAVIGATIONAL WATCH (DECK CADETS)

Name.....

Home Address.....

.....

.....

.....

Date Training Started.....

The STCW Convention requires that any person conducting on board training shall do so only when it will not adversely affect the normal operation of the ship and time can be dedicated to the training and any evaluation of competence.

SECTION 1 SUMMARY RECORD OF PROGRESS

PARTICULARS OF CADET to be completed by the trainee in **BLOCK CAPITALS**

Name in Full

Seafarer's Book No Date of Birth

Home Address

..... PHOTO

Change of Address (if applicable)
.....
.....

The acquired knowledge into practice was assessed by the:

Name of institution:.....
.....

Date.....

Signature and stamp.....
.....

TRAINING PROGRAMME as applicable

UNIVERSITY/COLLEGE		PHASES:	
	From:	To:	
	From:	To:	
	From:	To:	
	From:	To:	
SEA PHASES:			
	From:	To:	
	From:	To:	
	From:	To:	
	From:	To:	

TRAINING PROGRAMME as required by the STCW Code

As part of your pre-sea training you should have completed Program Training or instruction as listed. Enter details of this training or instruction below.

	Reference STCW Code	Document date	Document number
Basic maritime safety program: - Personal Survival Techniques - Fire Prevention and Fire Fighting - Elementary First Aid - Personal Safety and Social Responsibilities	Section A-VI/1, paragraph 1-2		
Safety familiarization	Section A-VI/6 paragraph 1-4		

RECORD OF OTHER TRAINING

[illegible]

SHIPBOARD RECORD OF SERVICE

Ship	IMO Number	Period of service on board		Time spent on navigational - watch keeping duties		Master's name and signature/ First deck officer's name and signature	Ship's stamp
		Sign on/Sign off		Months	Days		

Ship	IMO Number	Period of service on board		Time spent on navigational - watch keeping duties		Master's name and signature/ First deck officer's name and signature	Ship's stamp
		Sign on/Sign off		Months	Days		

DESIGNATED TRAINING OFFICER'S REVIEW OF TRAINING PROGRESS

This table should be completed at least once a week or at such intervals as the trading of the vessel allows. Comments should only relate to the cadet's practical progress and competence and should NOT refer to character.

[illegible]

DESIGNATED TRAINING OFFICER'S REVIEW OF TRAINING PROGRESS (CONTINUED)

Ship	Comments	Officer's name in BLOCK CAPITALS	Officer's initials	Date

DESIGNATED TRAINING OFFICER'S REVIEW OF TRAINING PROGRESS (CONTINUED)

Ship	Comments	Officer's name in BLOCK CAPITALS	Officer's Initials	Date

DESIGNATED TRAINING OFFICER'S REVIEW OF TRAINING PROGRESS (CONTINUED)

Ship	Comments	Officer's name in BLOCK CAPITALS	Officer's initials	Date

DESIGNATED TRAINING OFFICER'S REVIEW OF TRAINING PROGRESS (CONTINUED)

Ship	Comments	Officer's name in BLOCK CAPITALS	Officer's initials	Date

MASTER'S MONTHLY INSPECTION OF RECORD BOOK

Comments should only relate to the cadet's practical progress and competence and should NOT refer to character.

[illegible]

MASTER'S MONTHLY INSPECTION OF RECORD BOOK (CONTINUED)

Comments should only relate to the cadet's practical progress and competence and should NOT refer to character.

Ship	Comments	Master's Name in BLOCK CAPITALS	Master's Initials	Date	Ship's Official Stamp

COMPANY'S INSPECTION OF RECORD BOOK

Comments should only relate to the cadet's practical progress and competence and should NOT refer to character.

Comments	Name in BLOCK CAPITALS	Initials	Date

SECTION 2 MANDATORY SAFETY AND SHIPBOARD FAMILIARIZATION

SAFETY FAMILIARISATION as required by Section A-VI/1 paragraph 1 of the STCW Code

Before being assigned to shipboard duties all seafarers must receive basic safety familiarization to know what to do in an emergency. The master or responsible officer on each ship should sign and date below to signify that you have received training or instruction to be able to carry out the following tasks or duties.

Ship's name		Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date
Task/Duty							
Be able to: Communicate with other persons on board on elementary safety matters							
Understand safety information symbols, signs and alarm signals							
Know what to do if: A person falls overboard Fire or smoke is detected The fire or abandon ship alarm is sounded							
Be able to: Identify muster and embarkation stations and emergency escape routes							
Locate and don life jackets and survival suits							
Raise the alarm and have a basic knowledge of the use of portable fire extinguishers							
Take immediate action upon encountering an accident or other medical emergency before seeking further medical assistance on board							
Close and open the fire, weather tight and watertight doors fitted in the particular ship, other than those for hull openings							

SHIPBOARD FAMILIARIZATION as required by Regulation 1/14 of the STCW Convention (continued overleaf)

You will be given a period of time during which you will have an opportunity to become acquainted with the equipment you will be using, and specific watch keeping, safety, environmental and emergency procedures and arrangements required to perform your duties. The location of safety and emergency equipment varies from ship to ship. To be sure that you are familiar with your duties and all ship arrangements, installations, equipment procedures and ship characteristics that are relevant to your routine or emergency duties, you must complete the following tasks or duties as soon as possible on joining your ship.

Ship's name	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date
Task/Duty					
Watch keeping procedures and arrangements:					
Visit bridge, look-out post, forecastle, poopdeck, main deck and other work areas					
Get acquainted with steering controls, telephones, telegraphs and other bridge equipment and displays:					
Activate, under supervision, equipment to be used in routine duties					
Safety and emergency procedures:					
Read and demonstrate an understanding of your Company's Fire and Safety Regulations					
Demonstrate recognition of the alarm signals for:					
FIRE					
EMERGENCY					
ABANDON SHIP					
Locate medical and first aid equipment					
Locate firefighting equipment: alarm activation points, alarm bells, extinguishers, hydrants, fire axes and hoses					
Locate rocket line throwing apparatus					
Locate distress rockets, flares and other pyrotechnics					
Locate breathing apparatus and firefighter's outfits etc					
Locate EPIRB, SART and walkie-talkie radios					
Locate Emergency Escape Breathing Devices (EEBDs)					
Locate CO ₂ bottle room, and control valves for smothering apparatus in pump rooms, cargo tanks and holds					
Locate and understand the operation of the emergency pump					

SHIPBOARD FAMILIARISATION as required by Regulation I/14 of the STCW Convention (continued)

Ship's name							
Task/Duty	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date	Officer's Initials/Date
Environmental protection:							
Get acquainted with:							
The procedure for handling garbage, rubbish and other wastes							
The use of garbage compactor or other equipment as appropriate							

BOAT AND MUSTER STATIONS

Insert Boat and Fire Muster Stations and other details in the appropriate space. Ask the master to sign in the space provided

Ship's name						
Boat Muster Station						
Fire Muster Station						
Master's Name BLOCK CAPITALS						
Master's Signature						
Date						

SECTION 3 PARTICULARS OF SHIPS

It is an essential feature of your training that you obtain knowledge of the ships on which you serve. To assist you in meeting this important requirement the following particulars are to be recorded during the time spent on each ship. Questions on this subject, with particular reference to your last ship, are likely to be put to you during an oral examination and assessment for your certificate of competency.

FIRST SHIP

MV/SS	IMO Number	Call Sign.....
Dimensions and Capacities	Lifesaving Equipment	Cargo Handling Gear
Length Over all.....m	Lifeboats (No.).....	Derricks/cranes (no. and SWL).....tonnes
Breadth.....m	Life-rafts (No.).....	Winches (types).....tonnes
Depth.....m	Capacity per boat.....(persons)	Other cargo equipment.....
Summer draught.....m	Capacity per life-raft.....(persons)	
Summer freeboard.....m	Lifebuoys (No.).....	Ballast tanks (No.).....
Gross tonnage.....t	Survival Suits (No. /type).....	Cargo tanks(No.).....
Deadweight.....t	Fire Fighting Equipment	Cargo pumps(No.).....
Light displacement.....t	Fire extinguishers (Number and capacity)	Pipelines (sizes).....
Fresh water allowance.....mm	Types: Water.....liters	Type and rating.....tonnes/hour
Immersion at load draught.....TPC	Foam.....liters	Anchors
Trimming moment.....MCTC	Dry powder.....kg	Port.....tonnes
Grain/Liquid capacity.....m ³	CO ₂kg	Starboard.....tonnes
Mooring Ropes (Number/diameter)	Fire hoses (No. and size).....mm	Spare.....tonnes
Synthetic fiber.....mm	Breathing apparatus (make).....	Cable (diameter).....mm
Wires.....mm	Fire-fighter's outfit (no.).....	Length.....shackles
Towing spring.....mm		
Fire wire.....mm		

Navigational and Communications Equipment	List here other navigational and communications equipment fitted on the ship	
Log (make/type)		
EPIRB (no.)		
Magnetic compass (no./type)		
Gyro compass (no./type)		
Autopilot (type)		
Radar (no./type)		
ECDIS (no./type)		
Echo sounder (no./type)		
GPS (no./type)		
If applicable:		
Integrated navigation system (type)		
DP system (type)		
SATCOM (no./type)		
GMDSS (type)		
SART (type)		
LRIT (type)		
AIS (type)		
SASS (type)		
GPS (no./type)		
NAVTEX (type)		

SECOND SHIP

MV/SS	IMO Number	Call Sign
Dimensions and Capacities	Lifesaving Equipment	Cargo Handling Gear
Length Over All.....m	Lifeboats (No.)	Derricks/cranes (no. and SWL)tones
Breadth.....m	Life-rafts (No.)	Winches (types)tones
Depth.....m	Capacity per boat	Other cargo equipment
Summer draught.....m	Capacity per life-raft	
Summer freeboard	Lifebuoys (No.)	Ballast tanks (No.)
Gross tonnage.....t	Survival Suits (No. /type)	Cargo tanks(No.)
Deadweight	Fire Fighting Equipment	Cargo pumps(No.)
Light displacement.....t	Fire extinguishers (Number and capacity)	Pipelines (sizes)
Fresh water allowance	Types: Water	Type and rating
Immersion at load draught	Foam	Anchors
Trimming moment.....MCTC	Dry powder.....kg	Port
Grain/Liquid capacity.....m ³	CO ₂	Starboard
Mooring Ropes (Number/diameter)	Fire hoses (No. and size).....mm	Spare
Synthetic fiber.....mm	Breathing apparatus (no./make).....	Cable (diam.).....mm
Wires.....mm	Fire-fighter's outfit (no.)	Length
Towing spring		shackles
Fire wire		

Navigation and Communications Equipment	List here other navigational and communications equipment fitted on the ship	
Log (make/type) (no.)		
EPIRB (no./type)		
Magnetic compass (no./type)		
Gyro compass (no./type)		
Autopilot (type)		
Radar (no./type)		
ECDIS (no./type)		
Echo sounder (no./type)		
GPS (no./type)		
If applicable:		
Integrated navigation system (type)		
DP system (type)		
SATCOM (no./type)		
GMDSS (type)		
SART (type)		
LRIT (type)		
AIS (type)		
SASS (type)		
GPS (no./type)		
NAVTEX (type)		

THIRD SHIP

MV/SS	IMO Number	Call Sign.....
Dimensions and Capacities	Lifesaving Equipment	Cargo Handling Gear
Length Over all.....m	Lifeboats (No.).....	Derricks/cranes (no. and SWL)..... tones
Breadth.....m	Life-rafts (No.)..... (persons)	Winches (types)..... tones
Depth.....m	Capacity per boat..... (persons)	Other cargo equipment.....
Summer draught.....m	Capacity per life-raft..... (persons)	
Summer freeboard.....m	Lifebuoys (No.).....	Ballast tanks (No.).....
Gross tonnage.....t	Survival Suits (No. /type).....	Cargo tanks(No.).....
Deadweight.....t	Fire Fighting Equipment	Cargo pumps(No.).....
Light displacement.....t	Fire extinguishers (Number and capacity)	Pipelines (sizes).....
Fresh water allowance.....mm	Types: Water.....liters	Type and rating..... tones/hour
Immersion at load draught.....TPC	Foam.....liters	Anchors
Trimming moment.....MCTC	Dry powder.....kg	Port..... tones
Grain/Liquid capacity.....m ³	CQ.....kg	Starboard..... tones
Mooring Ropes (Number/diameter)	Fire hoses (No. and size).....mm	Spare..... tones
Synthetic fiber.....mm	Breathing apparatus (no./make).....	Cable (diam.)..... mm
Wires.....mm	Fire-fighter's outfit (no.).....	Length..... shackles
Towing spring.....mm		
Fire wire.....mm		

Navigational and Communications Equipment	List here other navigational and communications equipment fitted on the ship	
Log (make/type)		
EPIRB (no.)		
Magnetic compass (no./type)		
Gyro compass (no./type)		
Autopilot (type)		
Radar (no./type)		
ECDIS (no./type)		
Echo sounder (no./type)		
GPS (no./type)		
If applicable:		
Integrated navigation system (type)		
DP system (type)		
SATCOM (no./type)		
GMDSS (type)		
SART (type)		
LRIT (type)		
AIS (type)		
SASS (type)		
GPS (no./type)		
NAVTEX (type)		

FOURTH SHIP

MV/SS	IMO Number.....	Call Sign.....
Dimensions and Capacities	Lifesaving Equipment	Cargo Handling Gear
Length Over allm	Lifeboats (No.).....	Derricks/cranes (no. and SWL)..... tones
Breadth.....m	Life-rafts (No.).....	Winches (types)..... tones
Depth.....m	Capacity per boat..... (persons)	Other cargo equipment.....
Summer draught.....m	Capacity per life-raft..... (persons)	
Summer freeboardm	Lifebuoys (No.).....	Ballast tanks (No.)
Gross tonnage.....t	Survival Suits (No. /type).....	Cargo tanks(No.)
Deadweightt	Fire Fighting Equipment	Cargo pumps(No.)
Light displacementt	Fire extinguishers (Number and capacity)	Pipelines (sizes).....
Fresh water allowance.....mm	Types: Water.....liters	Type and rating..... tones/hour
Immersion at load draught.....TPC	Foam.....liters	Anchors
Trimming moment.....MCTC	Dry powder.....kg	Port..... tones
Grain/Liquid capacity.....m ³	CO ₂kg	Starboard..... tones
Mooring Ropes (Number/diameter)	Fire hoses (No. and size).....mm	Spare..... tones
Synthetic fiber.....mm	Breathing apparatus (no./make).....	Cable (diam.)..... mm
Wires.....mm	Fire-fighter's outfit (no.).....	Length..... shackles
Towing spring.....mm		
Fire wire.....mm		

Navigation and Communications Equipment	List here other navigational and communications equipment fitted on the ship	
Log (make/type)		
EPIRB (no.)		
Magnetic compass (no./type)		
Gyro compass (no./type)		
Autopilot (type)		
Radar (no./type)		
ECDIS (no./type)		
Echo sounder (no./type)		
GPS (no./type)		
If applicable:		
Integrated navigation system (type)		
DP system (type)		
SATCOM (no./type)		
GMDSS (type)		
SART (type)		
LRIT (type)		
AIS (type)		
SASS (type)		
GPS (no./type)		
NAVTEX (type)		

FIFTH SHIP

MV/SS	IMO Number	Call Sign
Dimensions and Capacities	Lifesaving Equipment	Cargo Handling Gear
Length Over all m	Lifeboats (No.)	Derricks/cranes (no. and SWL) tones
Breadth m	Life-rafts (No.)	Winches (types) tones
Depth m	Capacity per boat (persons)	Other cargo equipment
Summer draught m	Capacity per life-raft (persons)	
Summer freeboard m	Lifebuoys (No.)	Ballast tanks (No.)
Gross tonnage t	Survival Suits (No. /type)	Cargo tanks(No.)
Deadweight t	Fire Fighting Equipment	Cargo pumps(No.)
Light displacement t	Fire extinguishers (Number and capacity)	Pipelines (sizes)
Fresh water allowance mm	Types: Water liters	Type and rating tones/hour
Immersion at load draught TPC	Foam liters	Anchors
Trimming moment MCTC	Dry powder kg	Port tones
Grain/Liquid capacity m ³	CO ₂ kg	Starboard tones
Mooring Ropes (Number/diameter)	Fire hoses (No. and size) mm	Spare tones
Synthetic fiber mm	Breathing apparatus (no./make)	Cable (diam.) mm
Wires mm	Fire-fighter's outfit (no.)	Length shackles
Towing spring mm		
Fire wire mm		

Navigational and Communications Equipment	List here other navigational and communications equipment fitted on the ship	
Log (make/type) (no.)		
EPRB (no.)		
Magnetic compass (no./type)		
Gyro compass (no./type)		
Autopilot (type)		
Radar (no./type)		
ECDIS (no./type)		
Echo sounder (no./type)		
GPS (no./type)		
If applicable:		
Integrated navigation system (type)		
DP system (type)		
SATCOM (no./type)		
GMDSS (type)		
SART (type)		
LRIT (type)		
AIS (type)		
SASS (type)		
GPS (no./type)		
NAVTEX (type)		

SIXTH SHIP

MV/ISS	IMO Number	Call Sign
Dimensions and Capacities	Lifesaving Equipment	Cargo Handling Gear
Length Over allm	Lifeboats (No.)	Derricks/cranes (no. and SWL) tones
Breadth.....m	Life-rafts (No.)	Winches (types) tones
Depth.....m	Capacity per boat	Other cargo equipment
Summer draught.....m	Capacity per life-raft	
Summer freeboardm	Lifebuoys (No.)	Ballast tanks (No.)
Gross tonnage.....t	Survival Suits (No. /type)	Cargo tanks(No.)
Deadweightt	Fire Fighting Equipment	Cargo pumps(No.)
Light displacementt	Fire extinguishers (Number and capacity)	Pipelines (sizes)
Fresh water allowance.....mm	Types: Water.....liters	Type and rating tones/hour
Immersion at load draughtTPC	Foamliters	Anchors
Trimming moment.....MCTC	Dry powder.....kg	Port tones
Grain/Liquid capacity.....m³	CO₂.....kg	Starboard tones
Mooring Ropes (Number/diameter)	Fire hoses (No. and size)mm	Spare..... tones
Synthetic fiber.....mm	Breathing apparatus (no./make)	Cable (diam.) mm
Wires.....mm	Fire-fighter's outfit (no.)	Length..... shackles
Towing spring.....mm		
Fire wire mm		

Navigational and Communications Equipment	List here other navigational and communications equipment fitted on the ship	
Log (make/type)		
EPIRB (no.)		
Magnetic compass (no./type)		
Gyro compass (no./type)		
Autopilot (type)		
Radar (no./type)		
ECDS (no./type)		
Echo sounder (no./type)		
GPS (no./type)		
If applicable:		
Integrated navigation system (type)		
DP system (type)		
SATCOM (no./type)		
GMDSS (type)		
SART (type)		
LRIT (type)		
AIS (type)		
SASS (type)		
GPS (no./type)		
NAVTEX (type)		

SECTION 4 INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA

PART A General Rules				PART B Steering and Sailing Rules					
Section 1				Section 2			Section 3		
Rule	Officer's initials	Date	Rule	Officer's initials	Date	Rule	Officer's initials	Rule	Date
1			4			11		19	
2			5			12			
3			6			13			
			7			14			
			8			15			
			9			16			
			10			17			
						18			

PART C Lights and Shapes						PART D Sound and Light Signals			PART E Exemptions		
Rule	Officer's initials	Date	Rule	Officer's initials	Date	Rule	Officer's initials	Date	Rule	Officer's initials	Date
20			26			32			38		
21			27			33					
22			28			34					
23			29			35					
24			30			36					
25			31			37					

ANNEX I Positioning and Technical Details of Lights and Shapes						ANNEX II Additional Signals for Fishing Vessels Fishing in Close Proximity			
Section	Officer's initials	Date	Section	Officer's initials	Date	Section	Officer's initials	Date	
1				9a		All			
2				9b		ANNEX III Technical Details of Sound Signal Appliances			
3				10		ANNEX IV Distress Signals			
4				11					
5				12					
6				13		ANNEX V Distress Signals			
7				14					
8						Section	Officer's initials	Date	
						All			

SECTION 5 TASKS FOR OFFICERS IN CHARGE OF A NAVIGATIONAL WATCH

FUNCTION: NAVIGATION AT THE OPERATIONAL LEVEL

Ref No	Training	Criteria for Evaluation		Competence Demonstrated Designated Training Officer/In Service Assessor (Initials/Date)
1.	Competence: Plan and conduct a passage and determine position			
1.1	Consult navigational publications	The planned voyage is in compliance with guidance in relevant nautical publications		
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement	Task Completed Supervising Officer/ Instructor (Initials/Date)
.1	Demonstrate an understanding of the chart folio system and assist in correcting charts and other publications			
.2	Demonstrate an understanding of contents and the use of: Notices to mariners			
.3	Sailing directions and ship's routing information			
.4	List of lights and fog signals			
.5	Tide tables, tidal stream and current atlases			
.6	Pilot books			
.7	Radio navigational warnings			
1.2	Select charts of adequate scale	The charts selected are the largest scale suitable for the area of navigation and are corrected in accordance with the latest information available		
.1	Assist deck officer in preparing navigational passages and in voyage planning			
.2	Select appropriate scale chart from paper chart portfolio, Electronic Chart System (ECS) or Electronic Chart Display and Information Systems (ECDIS)			

1.3	Set courses				<i>The courses are suitably set in respect of the ship's size, draught and maneuverability, and set with sufficient distance off shallow waters, banks and other dangers to navigation. Due consideration is taken of currents, ice and prevailing weather conditions</i>		
.1	Demonstrate the use of the compass when setting course						
.2	Set up: Course recorder						
.3	Off course alarm						
.4	Estimate and make allowance for leeway and tidal currents						
.5	Practice tidal calculations						
1.4	Calculate Estimated Time of Arrival (ETA)				<i>The total distance is correctly stated and ETA given within acceptable time limits</i>		
.1	Practice calculations for distance, average speed, course made good, set and drift, ETA				<i>Errors in magnetic and gyro compasses are determined and correctly applied to courses and bearings</i>		
1.5	Determine and apply compass error for courses and compass bearings						
.1	Apply magnetic variation and deviation						
.2	Practice use of the azimuth mirror						
.3	Practice: Azimuths						
.4	Amplitudes						
.5	Understand the use of and make entries in the compass error book and interpret information recorded						

1.6	Recognize conspicuous objects and other terrestrial/celestial aids to navigation in daylight and at night			When visibility allows, sufficient objects or aids are identified to determine the position of the ship safely		
.1	Perform look-out duties and report objects in degrees or points					
.2	Identify aids to navigation including lighthouses, beacons and buoys					
.3	Identify star constellations and stars of first magnitude and learn to use star chart and star finder					
.4	Practice compass bearings and visual fixes					
.5	Demonstrate a knowledge of the IALA system of buoyage					
1.7	Use azimuth mirror and sextant to fix ship's position by celestial and terrestrial observations			The instruments are properly checked and applied and the fix given is the most probable position		
.1	Use azimuth mirror to fix ship's position					
.2	Use a sextant and demonstrate how to identify and remove errors					
.3	Practice vertical and horizontal sextant angles					
.4	Make noon calculations e.g. distance, average speed, course made good, set and drift and ETA					
1.8	State ship's position by dead reckoning			Calculations are correctly carried out and adequate judgment demonstrated when applying the effect of winds, tides, currents and the ship's estimated speed		
.1	Estimate and make allowance for leeway and tidal currents					
.2	Practice tidal calculations					

1.9	Operate all electronic navigational equipment required to be carried on the ship and apply the information obtained to ascertain the ship's position	Performance checks and testing of the equipment are satisfactorily executed. The most relevant equipment is used to obtain a reliable fix. The position is stated with the due precaution and the accuracy of the fix is within the limits given by the manufacturers			
1	Practice: Radar switch on and set up procedure				
2	Radar plotting				
3	Position fixes by radar				
4	Parallel indexing				
5	Practice using ARPA				
6	Demonstrate an understanding of the limitations of radar				
7	Under supervision demonstrate set up of AIS and input ship's data. Read static (ship type, dimensions etc.) and dynamic data (course, speed etc.) of other vessels				
8	Understand other uses and capabilities of AIS				
9	Operate distance/speed recorders				
10	Practice: Satellite navigation set up procedure				
11	Use of any correction tables				
12	Fixes by satellite navigation (GPS) applying applicable corrections				
13	Compare a manually developed passage plan with a plan generated by use of electronic systems				
14	Set up and use ECDIS or ECS as an aid to navigation				

1.10	Determine the most probable position of the ship by observing the sun, stars or planets			The fix is within acceptable accuracy and due regard is taken of possible errors of the position lines and meteorological conditions		
.1	Identify stars of first magnitude					
.2	Demonstrate use of the chronometer					
.3	Understand use of chronometer rate book					
.4	Practice sun sights					
.5	Practice noon calculations e.g. distance, average speed, course made good, set and drift and ETA					

Ref No	Training	Criteria for Evaluation		Competence Demonstrated	
2.	Competence: Maintain a safe navigational watch			Designated Training Officer/In Service Assessor (Initials/Date)	
2.1	On preparing for sea, check ship's draught, and that necessary bridge equipment is operational and that proper sailing information is available	All navigational and communication equipment is operational and all appropriate charts, tidal and weather information are available			
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)		Advice on Areas for Improvement	
.1	Make entries in the bridge movement book, and understand the importance of it. Synchronize bridge and engine-room clocks				
.2	Use internal communications and test alarm systems				
.3	Read the draught and check freeboard on arrival and departure				
.4	Check and calibrate draught gauges, when fitted				
.5	Take dock water density and calculate dock water allowance				
.6	Assist in checking bridge steering control equipment, communication systems and all other navigational aids before departure				
.7	Inspect the ship prior to sailing to ensure that the ship is all secure to proceed to sea				

2.2	On leaving or entering port notify the master/engine-room as appropriate and assist in carrying out the master's/pilot's orders/directions while monitoring the course, speed and position.			Correct lights, flags, shapes and sounds signals are displayed/sounded. The pilot's safety is ensured when boarding and disembarking. Pilot's instructions are verified and essential information recorded and relevant information given to those concerned. Ship's safety is constantly monitored and the cadet shown to be particularly vigilant and alert in confined waters. The crew is available for handling moorings/anchors when required			
.1	Under the supervision of an officer rig pilot ladders, including pilot hoists or similar (if fitted)						
.2	Operate bridge controls, e.g. telegraph, whistles, telephones						
.3	Understand flag etiquette						
.4	Understudy an officer on the bridge when vessel is entering and leaving port						
.5	Spend at least two periods in the engine-room (observing/assisting) when vessel is entering and leaving port						
2.3	At the commencement of the watch ascertain ship's position, course and speed and appraise the traffic situation and any hazards to navigation			All checks are promptly and correctly carried out. A clear statement is given that the situation is under full control when the watch is formally taken over			
.1	Know what constitutes the safe keeping of a navigational watch						
.2	Demonstrate the correct procedure for handing over a bridge watch						
.3	Understudy an officer on rounds: At sea						
.4	At anchor						
.5	In port						

2.4	At sea priorities the look-out, fix the ship's position regularly, assess risks of collision and/or grounding and take appropriate action	All actions are in compliance with the basic principles to be observed in keeping a navigational watch and any potentially dangerous situation is not allowed to become critical. At an early stage the engine is prepared for use, assistance is called from master, look-out or helmsman. Suitable teamwork is exercised and the ship is never put into a situation of uncontrollable risk			
1	Demonstrate an understanding of the principles of safe watchkeeping as detailed in the ICS Bridge Procedures Guide				
2	Perform look-out duties and report objects in degrees or points				
3	Understand the need to maintain a visual look-out for small ships and other floating objects that may not be visible by radar				
4	Recognize the limitations of AIS as an aid to identification and understand that it is not a collision avoidance system				
5	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 quarters situations				
7	Understand the need to analyze and consider 'what if?' scenarios before taking collision avoidance action				
8	Show an ability to supervise ratings in watchkeeping duties				
9	Assist officer of the watch in anchor watch duties				
10	Read and understand the purpose and contents of the Night Orders book				

2.5	Adjust the ship's course and speed to the traffic, the waters and the meteorological conditions			Meteorological information is acquired, correctly interpreted and proper actions taken. The speed and mode of steering is suitable for the prevailing conditions		
A	Read barometer and derive corrected barometric pressure					
.2	Read barograph and obtain the barometric tendency					
.3	Read hygrometer and calculate dew point					
.4	Obtain sea and air temperature					
.5	Estimate wind force, direction and sea state					
.6	Identify main cloud types					
.7	Recognize the need to adjust course and/or speed in heavy seas					
2.6	Monitor and control navigational instruments and record relevant activities and incidents			Compass errors and other instrument errors are regularly checked and correctly applied. All movements and activities related to the navigation of the ship are properly recorded		
.1	Complete watch entries in the deck log book					
.2	Operate echo sounder and analyze information obtained					
.3	Set echo sounder alarm appropriate to passage					
.4	Operate passive radio equipment where fitted, including: Navtex					
.5	Weather fax					

Ref No	Training	Criteria for Evaluation		Competence Demonstrated	
3.	Competence: Use of radar and ARPA to maintain safety of navigation			Designated Training Officer/in Service Assessor (Initials/Date)	
3.1	Carry out operational checks and adjust the equipment to proper performance	The equipment is functioning properly and in accordance with the manufacturer's specifications			
	Task/Duty	Task Completed	Supervising Officer/ Instructor (Initials/Date)	Task Completed	Supervising Officer/ Instructor (Initials/Date)
.1	Practice radar set-up procedure and system tests				
.2	Practice set-up procedures for true motion display				
.3	Understand the limitations of radar				
.4	Demonstrate an understanding of the information provided from: Relative motion display				
.5	True motion display				
3.2	Use the equipment to fix the ship's position	The information obtained from the equipment is correctly interpreted and applied with due regard to the limitations of the equipment. The fix is correct and properly set out on the chart			
.1	Practice fixes by radar				
.2	Cross-check fixes by radar with visual fixes				
.3	Demonstrate an understanding of factors affecting performance and accuracy				

3.3	Operate radar and ARPA to detect any hazards for groundings, close quarters situations or collision with other ships or objects and determine appropriate avoiding action				The course and speed of other ships, as well as time and distance of assumed closest approach to otherships, are ascertained with sufficient accuracy to take appropriate action		
.1	Practice determining CPA and TCPA						
.2	Practice parallel index techniques						
.3	Demonstrate knowledge and understanding of the differences between ground and sea stabilization for ARPA						
.4	Under supervision, demonstrate blind pilotage techniques						
3.4	Take appropriate action to avoid accidents				All maneuvers carried out to maintain safe navigation are properly announced by signals, timely and decisively executed and in accordance with the International Regulations for Preventing Collisions at Sea		
.1	Practice plotting of radar targets						
.2	Recommend appropriate avoiding action (using true motion and relative motion displays)						
.3	Understand rate of turn information						

Ref No	Training	Criteria for Evaluation		Competence Demonstrated Designated Training Officer/In Service Assessor (Initials/Date)	
4.	Competence: Use of ECDIS to maintain safety of navigation				
4.1	Knowledge of the capability and limitations of ECDIS operations including: A thorough understanding of Electronic Navigational Chart (ENC) data, data accuracy, presentation rules, display options and other chart data formats	Monitors information on ECDIS in a manner that contributes to safe navigation			
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement	Task Completed Supervising Officer/ Instructor (Initials/Date)	
1.	Explain the difference between a raster chart and a vector chart				
2.	Demonstrate how to use ECDIS to interrogate the chart display and obtain chart details e.g. Information on originator, edition number and update status				
3.	Explain the difference between official ENCs and unofficial ENCs				
4.	Explain how ENCs and RNCs are kept up to date				
5.	Understand that an electronic chart system is another tool or aid to navigation				
6.	Explain the factors in determining a safety contour and demonstrate how it is set				
7.	Explain the factors in determining a safe passing distance of charted hazards and demonstrate how it is set				
8.	Explain factors affecting the quality of chart and survey data				
4.2	Knowledge of the capability and limitations of ECDIS operations including: The dangers of over-reliance	Information obtained from ECDIS (including radar overlay and/or radar tracking functions, when fitted) is correctly interpreted and analyzed, taking into account the limitations of the equipment, all connected sensors (including radar and AIS where interfaced), and prevailing circumstances and conditions			
1.	Demonstrate an understanding that in comparison to the errors that may affect paper charts ECDIS may be subject to a different range of errors and anomalies requiring remedial measures				

Ref No	Training			Competence Demonstrated Designated Training Officer/In Service Assessor (Initials/Date)	
5.	Competence: Respond to emergencies				
5.1	Describe assigned duties laid down in the ship's contingency plans for emergencies	Statements of assigned duties are correct and include actions in the event of fire, heavy weather damage, collision, stranding, rescue of survivors, shipboard oil pollution and abandon ship			
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement	Task Completed Supervising Officer/ Instructor (Initials/Date)	
.1	Participate in a fire drill at sea				
.2	Participate in an emergency response exercise for: Heavy weather damage				
.3	Collision				
.4	Rescue or recovery of in water survivors/casualties				
.5	Person over board				
.6	Shipboard oil pollution incident				
.7	Steering failure				
.8	Main engine failure				
.9	Power failure				
.10	Security alert				
.11	Participate in a lifeboat drill for abandon ship				

5.2	Demonstrate ability to take initial actions in the event of an emergency			The type and scale of the simulated emergency is promptly identified. Actions taken are in accordance with contingency plans		
.1	Participate in a response exercise for an unspecified emergency situation					
.2	Change over the normal steering control on the bridge to the emergency steering position					
.3	Assist with the changeover from the bridge emergency steering position to the emergency system in the steering flat and steer from this position					
5.3	Demonstrate ability to act correctly when emergencies arise in port			The need for information and assistance from shore facilities is adequately assessed and communication established with the proper authorities		
.1	Prepare a contact list of shore side emergency organizations such as: Port control, fire, police, ambulance and tugs					
.2	Participate in an emergency response exercise in port for: Fire					
.3	Pollution incident					
.4	Demonstrate the procedure for alerting port emergency services					
.5	Demonstrate a knowledge of vessel's shipboard oil pollution emergency plan and shipboard marine pollution emergency plan					

Ref No	Training			Competence Demonstrated
				Designated Training Officer/in Service Assessor (Initials/Date)
6.	Competence: Respond to a distress signal at sea			
6.1	Establish position of own ship and unit in distress	The positions are correctly plotted on suitable charts		
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement	Task Completed Supervising Officer/ Instructor (Initials/Date)
1.	Meet the requirements of Competence 1.9 (see page 43)			
2.	Plot the position given for a vessel in distress and calculate course distance and ETA			
3.	Understand the duties and responsibilities of the designated radio operator in times of distress			
4.	Operate GMDSS equipment on test			
5.	Practice the use of VHF and MF radio telephone equipment using the Standard Marine Communication Phrases			
6.2	Make a preliminary assessment of the situation, suggest actions and inform the master	Actions planned are in compliance with the IAMSAR Manual, and based on an assessment of the total situation including the type of emergency, distance to the unit in distress, other ships in the area, meteorological conditions and the possibilities for rendering the assistance needed		
1.	Recognize distress and urgency signals			
2.	Record distress signal sighted or received in log book			
3.	Consult vessel's contingency plans and instructions			
4.	Assist in preparing a response or contingency plan			

6.3	Record all incidents and actions taken and the master's decision				<i>All vital information is properly recorded to support any subsequent debriefing</i>		
.1	Record information in the deck log book						
.2	Maintain records of communications and actions taken						

Ref No	Training			Competence Demonstrated
7.	Competence: Use the IMO Standard Marine Communication Phrases and use English in written and oral form			Designated Training Officer/in Service Assessor (Initials/Date)
7.1	Use the IMO Standard Marine Communication Phrases	Navigation and safety communications are clear and understood		
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement	Task Completed Supervising Officer/ Instructor (Initials/Date)
.1	Use the IMO Standard Marine Communication Phrases with: Other ships			
.2	Coast stations			
7.2	Use English nautical publication and manuals	The English language nautical publications and manuals relevant to the navigation, watch keeping and safety of the ship are correctly interpreted		
.1	Demonstrate understanding of contents and use of: Notices to mariners			
.2	Sailing directions and pilot books			
.3	List of lights and fog signals			
.4	Tide tables, tidal stream and current atlases			
.5	Meteorological and marine safety messages			
.6	Ships' routing information			
7.3	Fill in standard English nautical reports and forms	All reports and forms relevant to the duties of an officer in charge of a navigational watch are correctly completed		
.1	Keep a port log in English			
.2	Complete watch entries in English and understand purpose of the deck log book			

7.4	Communicate with members of the watch in safety related duties			All orders and information related to operations are correctly understood and acted upon by those concerned		
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)		Advice on Areas for Improvement	Task Completed Supervising Officer/ Instructor (Initials/Date)	
.1	Demonstrate an ability to communicate instructions to a multinational crew					
.2	Show an ability to supervise ratings during mooring operations					
.3	Spend one week keeping engine-room watches with each of the engineering watch keeping officers, i.e. two days on each of the three watches					
.4	Use hand held transceivers (portable radios)					
.5	Observe a Master-Pilot information exchange concerning pilot's intentions, ship's characteristics and operational parameters					
7.5	Communicate with shore stations			Reporting is in accordance with the general principles for Ship Routing Systems and with VTS procedures		
.1	Understand the purpose of IMO ships routing measures and separation schemes					
.2	Under supervision, make reports to comply with ship reporting requirements					
.3	Understand purpose of vessel traffic services and where to find reporting requirements					

Ref No	Training	Competence Demonstrated	
8.	Competence: Transmit and receive information by visual signalling	Designated Training Officer/in Service Assessor (Initials/Date)	
8.1	Transmit and receive Morse signals	Single letter signals are correctly transmitted and received	
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Task Completed Supervising Officer/ Instructor (Initials/Date)
.1	Send and receive Morse code for letters, numbers and group 'SOS'		
.2	Understand, maintain and use Aldis lamp and battery		
8.2	Use the International Code of Signals to interpret messages given by flags and pennants	A message given by maximum three flags and/or pennants is correctly interpreted	
.1	Identify International Code of Signals flags and principal national flags		
.2	Learn the meaning of single letter flag hoists: A, B, G, H, O, P, Q		
.3	Practice coding and decoding using the International Code of Signals		

Ref No	Training	Competence Demonstrated Designated Training Officer/In Service Assessor (Initials/Date)	
9.	Competence: Maneuver the ship		
9.1	Use available information as to the ship's turning circles and stopping distances when maneuvering	The information is adequately used during normal situations while taking due regard to draught, trim, wind and current. All maneuvers are safely carried out and any recommendation for tug assistance is backed by valid arguments	
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Task Completed Supervising Officer/ Instructor (Initials/Date)
.1	Demonstrate an understanding of the operation of the steering gear and associated alarms		
.2	Observe any steering or other system limitations during normal maneuvers		
.3	Demonstrate where to find maneuvering information		
.4	Demonstrate understanding of squat, shallow water and similar effects		
.5	Under supervision, using the maneuvering board information, practice maneuvering the vessel		
.6	Observe rate of turn at different speeds and water depths		
9.2	Demonstrate proper berthing and anchoring procedures	Anchors are lowered and moorings and manpower ready. Anchor, head ropes, stem ropes, breast ropes and springs are made fast or taken on board as ordered. Ship is safely berthed and unberthed without undue delay	
.1	As a team member assist in preparing for mooring: Heaving lines, ropes, wires, stoppers, communications, lights, fenders etc.		
.2	Run off ropes stowed on reels and flake out for use		
.3	Understand cold weather precautions		
.4	Under supervision: Start/operate winches and windlass		
.5	Run, heave, stopper and turn up mooring lines		

.6	Demonstrate safe handling of moorings, with particular reference to synthetic fiber ropes and self-tensioning winches				
.7	Under the supervision of an officer, rig accommodation ladders and gangways				
.8	Check and calibrate draught gauges, when fitted				
.9	Understudy an officer during mooring operations: On the bridge				
.10	At mooring stations				
.11	Anchoring				
.12	Securing tugs				
.13	Explain the shackle markings on anchor cables				
.14	As a team member assist with: Preparation of anchors prior to letting go				
.15	Weighing and securing anchors for sea				
.16	Under supervision: Inspect chain locker, peak tanks and other forward compartments				
.17	Prepare an anchor and let go				
.18	Weigh an anchor, inspect for damage and fouling and secure				
.19	Supervise the stowage of ropes used in mooring operations				
.20	Secure rat guards				
9.3	Maneuver to rescue a person overboard	<i>The actions taken are as generally recommended and themaneuver brings the ship into its wake</i>			
.1	As a team member participate in a person overboard exercise				
.2	Demonstrate an understanding of the ship maneuver turns in the [AMSAR Manual, Vol.III for positioning the vessel to recover a person overboard				

FUNCTION: CARGO HANDLING AND STOWAGE AT THE OPERATIONAL LEVEL

Ref No	Training	Competence Demonstrated	
		Designated Training Officer/In Service Assessor (Initials/Date)	Task Completed Supervising Officer/ Instructor (Initials/Date)
10.	Competence: Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes		
10.1	Supervise the preparation of holds and deep tanks for loading	Precautions are taken before entering holds or confined spaces to ensure safe atmosphere. The holds and deep tanks are in good order and condition, sufficiently cleaned, and adequately dunnaged for the new cargo. Any heating arrangements are functioning. The bilges are dry and there is free drainage to the suction	
	Task/Duty	Advice on Areas for Improvement	
.1	Demonstrate an understanding of the safe handling of hatch covers, including mechanical hatch covers		
.2	Assist in general preparation of holds, including the laying of dunnage for cargo		
.3	Calculate the capacity of spaces available for cargo		
.4	Clean and prepare bilges, wells and strum boxes		
.5	Test hold scuppers		
.6	Test bilge suction		
.7	Assist with opening up, overhaul and testing a non-return valve		
.8	Understudy the deck officer in supervising a tank cleaning operation		
.9	Use a check list for entry into an enclosed space		
.10	Inspect fresh water tanks		
10.2	Supervise the operation of the ship's cargo gear	The gear is safely operated and the safe working load never exceeded. Damaged or worn out ropes, wire or parts of the gear are detected and replaced	
.1	Practice knots, bends, hitches and whippings		
.2	Practice splices in ropes and wire		
.3	Identify types of ropes and wire and know their uses		
.4	Break out new coils of rope and wire		

5.	Stow wire and ropes with due regard to their preservation						
6.	As a team member assist with the rigging of heavy lift derricks						
7.	Inspect holds for safety, with special regard to hatch boards, ladders, guard wires and stanchions, permanent dunnage, beams and beam bolts, lighting and accesses						
8.	Assist with rigging clusters and portable lights						
9.	With due regard to safety, start, operate and assist with routine inspection and maintenance of: Winches						
10.	Derricks/cranes						
11.	Assist with topping and lowering cranes and derricks						
10.3	Supervise the loading	The cargo is loaded in accordance with the cargo plan while maintaining proper trim and stability at all times. Dangerous goods are detected and treated in accordance with international rules and available guidance. Any incidents or accidents during loading are reported immediately and proper actions taken					
1.	Assist in the supervision of loading of cargo						
2.	Assist in cargo documentation						
3.	Check that dangerous goods are being stowed in accordance with the IMDG Code						
4.	Assist the chief officer with testing and verification of bulk cargo moisture content and report findings to the master						
5.	Inspect cargo gear during operation						
6.	Assist with separation of cargo						
7.	Prepare and interpret cargo plans						
8.	Locate and consult Cargo Securing Manual						

10.5			Ensure separation between bulk cargoes or packaged goods if required			<i>The cargoes are not mixed or contaminated and all cargoes are delivered at the due port</i>		
.1	Assist with separation of cargo							
.2	Understand reasons for separation of cargo parcels							
10.6			Supervise to ensure that adequate precautions are taken to ensure ventilation and facilitate inspections during the voyage			<i>The ventilation is sufficient to avoid sweat from cargo and ship and harmful gases are let out</i>		
.1	Assist in the control of cargo ventilation and temperature							
.2	Trim ventilators							
.3	Operate ventilator fans							
10.7			Use the International Maritime Dangerous Goods (IMDG) Code			<i>The handling of dangerous, hazardous and harmful cargoes complies with international regulations and recognized standards and codes of safe practice</i>		
.1	Recognize markings and labels that indicate stores or cargoes are classified as dangerous goods							
.2	Compile a list of all dangerous goods containers with their IMO classification and storage position							
.3	Demonstrate how to identify a product and handling procedures from the IMDG Code							
.4	Describe procedure to follow in event of leakage of dangerous, hazardous or harmful stores or cargoes							
.5	Understand the reasons and need for separation of dangerous, hazardous and harmful stores or cargoes							
.6	Understand need to secure dangerous goods and to secure adjacent cargoes							
.7	Check container security seals are intact and not tampered with							
10.8			Inspect the cargo at regular intervals			<i>The inspections are carried out in accordance with company's standing orders and procedures</i>		
.1	Check connection of refrigerated containers to ship's support systems and make a record of daily readings							
.2	Understudy an officer of the watch on rounds							

10.9	Record all inspections and the conditions found			The results of the inspections are properly recorded and any requirement for action promptly reported		
.1	Take ullages and temperatures, where applicable, of liquid cargo					
.2	Take and record hold air temperatures					
.3	Identify the dew point temperature from data collected					
10.10	Take actions to avoid damage to the ship or cargo			Correct actions are taken to adjust ventilation or temperature or to carry out any other operation to avoid damage to ship or cargo		
.1	Tend mooring lines, wires and gangway while vessel is alongside					
.2	As a team member assist with battening down and securing hatches and/or cargo tank lids					
.3	Keep a security deck watch					
10.11	Inspect hatch covers, gear and cargoes before and during discharging			Any damage is immediately reported and properly recorded. Appropriate actions are taken to avoid accidents or further damage		
.1	Under supervision: Rig and use stages and boatswainchair					
.2	Overhaul running rigging					
.3	Overhaul blocks and shackles (have knowledge of markings to be found on them)					
.4	Make a survey with the chief officer of all cargo handling gear and demonstrate an understanding of the test certificates and other documents involved					
.5	Where applicable, assist with the opening, closing and securing hatch covers, insulated plugs and slabs					
.6	As a team member assist with handling and securing hatch beams					
.7	Assist with the inspection of cargo hooks, chains, swivels and other gear					
.8	Assist in checking the safety of walkways, ladders, handrails, container stools and other container fittings					

.9	Demonstrate an understanding of precautions to be taken when opening and closing hydraulic and mechanical hatch covers				
10.12	Ensure that all cargoes are discharged in good condition and at the right destination	<i>Improper handling of gear or cargo is immediately stopped or reported. All cargoes are discharged in the port of destination and nothing is left on board when leaving port</i>			
.1	As a team member, assist in the supervision of loading and discharging of cargo				
.2	Document and report cargo damage caused by stevedores				
.3	Assist in the preparation of cargo documentation				
.4	Inspect holds for completion of cargo discharge prior to sailing				
10.13	Ensure satisfactory trim, stability, hogging and sagging at all times	<i>Factors influencing the safety of the ship are constantly monitored and kept within stated acceptable limits</i>			
.1	Practice the use of: Stability computer				
.2	Computers/calculators for trim and stress				
.3	Understudy the deck officer in supervising a ballasting operation				
.4	Under supervision, use heeling tanks to maintain the vessel in an upright condition during loading/discharging				
.5	Take readings of draught and calculate hog or sag				
.6	Use draughts to calculate quantity of cargo loaded				
10.14	Identify any damage to ship or cargo after discharging and establish possible causes	<i>Any damage is detected, immediately reported and causes established or suggested depending on the circumstances</i>			
.1	Conduct an inspection of cargo spaces on completion of discharge and report defects or damages				

FUNCTION: CARGO HANDLING AND STOWAGE - ADDITIONAL TASKS FOR TANKERS

Ref No	Training	Competence Demonstrated	
11.	Competence: Monitor loading of cargoes (tankers)	Designated Training Officer/In Service Assessor (Initials/Date)	
11.1	Supervise the preparation of cargo tanks for loading	Precautions are taken before entering tanks or confined spaces to ensure safe atmosphere. The cargo tanks are in good order and condition and are sufficiently cleaned. Any heating arrangements are functioning	
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	
.1	Read and understand ship's safety manual		
.2	Read and understand the <i>International Safety Guide for Oil Tankers and Terminals</i> (ISGOTT)		
.3	Complete a Safety Check List prior to loading		
.4	Understudy a deck officer in supervising the following tanker operations: De ballasting		
.5	Purging		
.6	Inerting		
.7	Positioning of pollution control equipment in accordance with company and terminal regulations		
.8	Testing of documented emergency shut-down procedures		
.9	Demonstrate a knowledge of pump room/cargo control room, pipeline systems, cargo pump operations and layout/operation of deck valves		

12.2 Assist in tank cleaning		<i>MARPOL, appropriate industry codes of practice and guidelines, company's documented requirements and those of terminals are followed. Appropriate records are maintained</i>			
Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement		Task Completed Supervising Officer/ Instructor (Initials/Date)	
.1 Complete a Safety Check List prior to tank cleaning					
.2 Understand a deck officer in supervising the following operations: Tank cleaning					
.3 Gas freeing					
.4 Tank entry					
.5 Assist with the operation of the following equipment: Oily water separator and monitoring system					
.6 Thermometers, hydrometers, sounding rods					
.7 Interface detectors					
.8 Portable tank washing machines					
.9 Fixed tank washing machines					
.10 Programmable washing units					
.11 Gas freeing fans					
.12 Ullage gauges (fixed and portable)					
.13 Oxygen analyzer					
.14 Explosimeter					

.15	Multi-gas detector								
.16	Chemical reagent tubes								
.17	Keep a record of tank cleaning operations								
.18	Test portable winches, portable pumps and eductors								

Ref No	Training			Competence Demonstrated
13.	Competence: Maintain and overhaul cargo systems and associated equipment (tankers)			Designated Training Officer/in Service Assessor (Initials/Date)
13.1	Inspect cargo pumps and equipment and assist with maintenance work			Valves, pumps, gauges etc. are maintained in accordance with manufacturers' recommendations. Any defects are reported and appropriate actions taken
Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement		Task Completed Supervising Officer/ Instructor (Initials/Date)
.1	Test emergency shutdown of cargo pumps and associated valves			
.2	Take inventory of pollution control equipment at designated location(s) and assess condition			
.3	Assist with the overhaul of: Tank washing machines			
.4	Gas freeing fans			
.5	Ullage gauges			
.6	Assist with the overhaul of: Pressure Vacuum valve			
.7	Valve gland			
.8	Mud box			
.9	Tank lids			
.10	Air hoist			
.11	Eductor			
.12	Cleaning of manifold save-alls			
.13	Assist with maintenance of: Inert gas plant and pipelines			

14.5	Sound all tanks and compartments if any damage is suspected				<i>The soundings are readily available and the results immediately reported to the master</i>		
.1	Participate in an emergency response exercise for stranding						
.2	Perform soundings of bilges, peak tanks, double bottom and other tanks and record information						
14.6	Carry out bilge, ballast and bunkering operations				<i>All operations are carried out in accordance with MARPOL and due regard paid to the Shipboard Oil Pollution Emergency Plan (SOPEP)</i>		
.1	Locate the ship's ballast water management plan and demonstrate an understanding of its content						
.2	Understudy the deck officer in supervising: A ballasting operation						
.3	A tank cleaning operation						

Ref No	Training		Competence Demonstrated Designated Training Officer/In Service Assessor (Initials/Date)
15.	Competence: Maintain seaworthiness of the ship		
15.1	Inspect hull and hull openings, compartments, hatch covers and equipment, and take action where defects are detected		The inspection is properly carried out, due regard paid to the prevailing circumstances and areas where defects are most likely to occur. Any defect is immediately reported and recorded and the suggested or executed action adequate for the situation
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Task Completed Supervising Officer/ Instructor (Initials/Date)
.1	Demonstrate an understanding of: The precautions required for entry into enclosed spaces		
.2	Working aloft		
.3	Working over side		
.4	Using power tools		
.5	Manual lifting and carrying		
.6	Where applicable, assist with the opening, closing and securing of hatches: Steel and single pull types		
.7	Hydraulic hatches		
.8	Assist with the maintenance of watertight doors, ports and hatches		
.9	Assist with the maintenance of fairleads, tumblers, goosenecks etc.		
.10	Inspect and lubricate roller beams		
.11	Carry out a full inventory check of the deck stores		

.12	Prepare steel plates and other surfaces for protective coating					
.13	Apply protective coats to appropriate surfaces					
15.2	Ensure that all loose objects are securely fastened to avoid damage				Inspection is carried out at regular intervals and more frequently in heavy weather or if other incidents occur. Heavy or otherwise dangerous objects are given the highest priority and good seamanship exercised	
.1	Ensure that all gear, tools, spares etc. are properly stowed and secured					
.2	Assist with the rigging of safety lines and guard rails					
.3	Participate in lashing deck cargo					
15.3	Arrange for regular control measures to ensure watertight integrity				Peaks, bilges, tanks and other compartments are sounded regularly, the results recorded and any irregularities reported and examined further	
.1	Take and record the daily soundings of tanks, bilges, and other spaces: By manual means					
.2	By use of gauges					
.3	Check and report watertight doors, ports and hatches for weather tightness					

Ref No	Training	Competence Demonstrated Designated Training Officer/In Service Assessor (Initials/Date)	
16.	Competence: Prevent, control and fight fires on board		
16.1	Operate fire and smoke detecting equipment	The equipment is tested and operated at regular intervals and in accordance with manufacturers' manuals and ship specific instructions	
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	
.1	Understand the use and assist in the maintenance of: Portable foam extinguisher		
.2	Portable CO ₂ extinguisher		
.3	Portable dry powder extinguisher		
.4	Portable water extinguisher		
.5	Maintain hoses, nozzles and couplings		
16.2	Ensure that all persons on watch are able to detect and correct hazardous situations and actions and keep the ship clean and tidy	Personnel on watch making inspections in areas at risk from possible fires are supervised. It is ensured that readily combustible materials are stored safely and an attitude of alertness to fire prevention is demonstrated by the watch	
.1	Perform fire patrol duties		
.2	Re-stow gear and secure after maintenance work		
16.3	Locate fire fighting appliances, emergency escape routes and sound alarm	Personnel on watch making inspections in areas at risk from possible fires are supervised. Ensure readily combustible materials are stored safely and the watch demonstrate an attitude of alertness to fire prevention	
.1	Carry out a full inspection of fire fighting equipment and report to the chief officer		
.2	Participate in an emergency response exercise for fire at sea and fire in port		
.3	Demonstrate how to raise the alarm		

16.4	Locate fire stations and demonstrate proper use of fixed installations and other fire fighting appliances and agents	<i>All stations are located and the most suitable one selected in the event of a fire. Proper equipment and extinguishing agents for the various materials on fire are selected</i>			
.1	Assist with the testing of the following systems, where fitted: Fire detection and alarm systems				
.2	Fire alarms				
.3	Fixed automatic sprinklers				
.4	Fixed steam systems				
.5	Fixed foam extinguishers				
.6	Fixed CO ₂ systems				
.7	Fire flaps and dampers				
.8	Automatic and manual fire doors				
.9	Emergency shut off valves, pump stops and main engine stops				
.10	Describe the operation of the fixed fire extinguishing system				
.11	State the safety precautions required prior to operating the system				
16.5	Locate and use fire protective equipment (fire-fighter's outfit, including breathing apparatus)	<i>The equipment is quickly donned and used in such a way that no accidents are likely to occur</i>			
.1	Demonstrate the procedures and precautions required for entry into an enclosed space				
.2	Recognize the difference between a Self Contained Breathing Apparatus (SCBA) set and an Emergency Escape Breathing Device				
.3	Demonstrate donning and use of SCBA sets				
.4	Demonstrate donning and use of a fire-fighter's outfit				

.5	Demonstrate donning and use of a fire-fighter's outfit with a SCBA set					
.6	Demonstrate the use of a SCBA record/control board					
16.6	Demonstrate ability to act in accordance with the fire fighting plan during fire drills					
.1	Take charge of a fire party during an exercise					
.2	Demonstrate the use and location of all engine-room safety appliances and escape routes					

During debriefing after an exercise or a real fire extinguishing incident, the reasons for each action taken, including the priority they were given, are explained and accepted as the most appropriate

Ref No	Training			Competence Demonstrated
17.	Competence: Operate life-saving appliances			Designated Training Officer/In Service Assessor (Initials/Date)
17.1	Organize abandon ship drills			On sounding the alarm all persons meet at the designated lifeboat station wearing safety belts or immersion suits and carry out their duties on request
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement	
1	Understand the hazards to seafarers of manning lifeboats for drills and exercises			
2	Understand the need to be familiar with the operation of on-load release mechanisms			
3	Recognize that fall prevention devices (FPDs) where fitted, should be used in drills (to prevent premature detachment)			
4	Recognize the need for meticulous inspection and maintenance of on-load release mechanisms			
5	Understand the maintenance requirements by shipboard personnel and by the manufacturer or manufacturer approved			
6	Under supervision demonstrate familiarity with the lifeboat manufacturers operating instructions for the use and operation of the davits, winches, brakes, lifeboats, release and operating mechanisms (including FPD where fitted) and the correct resetting and testing of such devices and controls			
7	Identify the permanent markings on survival craft with regard to the number of occupants			
8	Locate and test the operation of radio devices including EPIRBs and SARTs			
9	Locate and inspect pyrotechnic distress signals			
10	State precautions for disposal of out of date pyrotechnics			
11	Prepare a boat and fire muster list			
12	Understudy an officer in charge of an abandon ship drill			

Launch, handle and recover a lifeboat			Correct orders for embarkation, launching and immediately clearing the ship's side are given. The boat is safely handled under motor, oars or sail as appropriate. The boat is safely recovered and ready		
17.2	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Advice on Areas for Improvement	Task Completed Supervising Officer/ Instructor (Initials/Date)	
.1	Assist with preparation and swinging out of lifeboats and be aware of attendant dangers				
.2	Assist with preparation and boarding of free fall lifeboat and be aware of attendant dangers				
.3	Assist with lowering a lifeboat to clear the ship and ride to a sea anchor				
.4	Start and operate a lifeboat engine				
.5	Understand principles of lifeboat sailing				
.6	Crew a boat under: Oars [] Power []				
.7	Cox a boat under: Oars [] Power []				
.8	Assist with recovery and securing of a lifeboat				
.9	Assist with recovery and securing of a free fall lifeboat				
17.3	Launch or throw overboard a life raft, and maneuver it clear of ship's side		The duties for the person designated for the raft are clearly allocated, orders efficiently executed, the raft is quickly righted if inverted, and all persons boarded before the raft moves away from the ship		
.1	Demonstrate an understanding of the procedure for launching and inflating life rafts, if the opportunity arises				
17.4	Operate radio life-saving appliances		Radio contact is established without alerting anybody by transmitting false signals		
.1	Rig and operate the portable lifeboat radio under supervision				

17.5 Ensure that all required equipment on board a rescue craft is functioning and maintained as specified in the SOLAS Training Manual				Proper use of pyrotechnics, food, water and signaling equipment is satisfactorily demonstrated			
.1	Demonstrate an understanding of statutory equipment required in survival craft and its correct use						
.2	State minimum food and water requirements for occupants of survival craft						
.3	Locate, explain and understand the operation of distress rockets, flares and other pyrotechnics including precautions for their disposal						
.4	Explain the operation of rocket line throwing apparatus						
.5	Assist with the maintenance of: Lifeboats and rescue boats						
.6	Lifeboat equipment and provisions						
.7	Launching davits and gear						
.8	Buoyant apparatus, e.g. lifebuoys, lifejackets and attachments						
.9	Immersion suits and TPAs						
.10	Other survival craft, specify type						
.11	Assist with the routine maintenance of a lifeboat engine						

Ref No	Training		Competence Demonstrated
			Designated Training Officer/In Service Assessor (Initials/Date)
18.	Competence: Apply medical first aid on board ship		
18.1	Stop excessive bleeding, ensure breathing and put casualties in proper recovery position		The actions demonstrated are in compliance with accepted recommendations given in international medical first aid guidance
	Task/Duty	Task Completed Supervising Officer/Instructor (Initials/Date)	Task Completed Supervising Officer/Instructor (Initials/Date)
.1	Participate in an emergency first aid drill at sea		
.2	Demonstrate a basic understanding of first aid principles: Stopping bleeding		
.3	Treatment of suffocation/drowning		
.4	Placing casualty in the recovery position		
18.2	Detect signs of shock and heat stroke and act accordingly		The treatment recommended or given is adequate. Ability to request Radio Medico for advice is demonstrated
.1	Demonstrate how to handle a casualty in shock		
.2	Demonstrate procedure for dealing with heat stroke		
18.3	Treat burns, scolds, fractures and hypothermia		The treatment recommended or given is adequate. Ability to request Radio Medico for advice is demonstrated
.1	State procedure for dealing with a casualty of electric shock		
.2	Demonstrate procedure for treating burns		
.3	Demonstrate procedure for treating minor fractures		
.4	State procedure for avoiding hypothermia		
.5	Demonstrate procedure for treating casualty with hypothermia		

Ref No	Training		Competence Demonstrated
19.	Competence: Monitor compliance with legislative requirements		Designated Training Officer/In Service Assessor (Initials/Date)
19.1	State where laws, rules and regulations concerning ship operation and pollution-prevention are available	<i>The statement given is correct and includes relevant bodies or organizations which may be contacted to obtain special information or guidance which is not easily accessible</i>	
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Task Completed Supervising Officer/ Instructor (Initials/Date)
1	1. Locate on board copies of: SOLAS		
2	2. MARPOL		
3	3. Garbage Record Book		
4	4. Locate copies of certificates issued under SOLAS, MARPOL, Load Line, STCW and ILO Conventions, and other regulations		
19.2	Use legislation to ascertain due approach to solve questions encountered during on board operations	<i>A correct response is established with an acceptable period of time and consequential actions executed</i>	
1	1. Participate in bilge pumping in compliance with MARPOL		
2	2. Dispose of garbage at sea/on shore in compliance with MARPOL and ship's Garbage Management Plan		
3	3. Assist in checking life-saving equipment prior to Safety Equipment		
4	4. Participate in shipboard inspection prior to survey for Load Line Certificate		
19.3	Searching for stowaways	<i>A comprehensive and thorough search is conducted and findings reported to the responsible officer</i>	
1	1. Carry out a stowaway search		

Ref No	Training	Competence Demonstrated Designated Training Officer/In Service Assessor (Initials/Date)	
20.	Competence: Application of leadership and team working skills		
20.1	Play a team role	Awareness is shown of others working nearby and in common goals. Instructions are clear and concise using unambiguous language. Questionable decisions are challenged in a seamanlike manner. Information concerning the maneuver or task in hand is freely shared concerning the maneuver or task in ha	
	Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)	Task Completed Supervising Officer/ Instructor (Initials/Date)
.1	Understand that as a team member everyone has different experience and has a role to play in any task		
.2	Participate actively in task planning meetings involving different ranks		
.3	Understand that communication is a two-way exchange and demonstrate this in practice both on the bridge and on deck		
.4	Maintain awareness of changing situations		
.5	Accept authority while questioning instructions if in doubt		
.6	Check own understanding of situation is shared by other team members		
.7	Participate actively in task review and evaluation meetings involving different ranks		
20.2	Demonstrate leadership ability	Initiative is taken and others are co-ordinated alongside to ensure that what needs to be done is carried out in a timely way	
.1	Think ahead and plan tasks that will follow the immediate task or maneuver		
.2	Set priorities correctly when observing conflict between immediate needs and tasks that may be held back		
.3	Allocate resources effectively to achieve desired outcomes		
.4	Check results and take corrective actions as needed/instructed		
.5	Demonstrate the confidence and maturity to refer to senior officer if in doubt		

SECTION 6 STEERING THE SHIP

It is important that you learn to steer the ship at sea and understand how to execute helm orders correctly. You should take turns at the wheel by day, by night and when entering and leaving port. Ensure that you keep a proper record of your steering experience by asking the officer in charge to complete the steering record

Training		Criteria for Evaluation	Competence Demonstrated
Competence: Steering the ship		Steering is efficient in narrow and coastal waters and under pilotage. All orders are acknowledged and complied with in a seamanlike manner. Changeover to manual steering and vice-versa is executed unaided	Designated Training Officer/in Service Assessor (Initials/Date)
Task/Duty	Task Completed Supervising Officer/ Instructor (Initials/Date)		Task Completed Supervising Officer/ Instructor (Initials/Date)
Execute helm orders correctly		Advice on Areas for Improvement	
Demonstrate procedure for handing over the wheel			
Understand operation of the main steering system and auto pilot			
Demonstrate correct procedure for changing over from manual steering to auto helm and vice-versa			
Steer by magnetic compass			
Steer by gyro compass			
Take turns at the wheel in steering the ship for periods totaling at least 10 hours, excluding periods of instruction			
Take the wheel: Entering/leaving port			
In canal/river transits			

CADET'S STEERING RECORD

Steering	Voyage		Steered		Remarks	Signature of Officer in Charge of the Watch	
	From	To	Date	Duration			
				From	To		
By compass - By day							

- By night									
Steering	Voyage		Date	Steered		Remarks	Signature of Officer in Charge of the Watch		
	From	To		Duration					
					From			To	
By sight (without aid of compass)									

