



ON BOARD TRAINING WORKBOOK



FOR DECK CADET ON BOARD SHIPS 500 GROSS TONNAGE OR MORE

In Compliance of the required output of the Training Record Book & Task and Sea Projects

CADET PERSONAL INFORMATION	CADET SCHOOL INFORMATON			
Name:	MHEI: UNIVERSITY OF CEBU - Maritime Education and Training Center			
Home:	Address: Alumnus Mambaling, Cebu City 600, Philippines			
	ON BOARD TRB CN: TRBJ CN: SIRB No.:			
Birth (date): (Place):	School ID No.:Passport Number:SRC Number:			
Email: Mobile:	Date Recognized:Batch (Year): (Name)			

CADET ON BOARD TRAINING INFORMATION							
VSL	VESSEL NAME	FLAG	GRT	COMPANY/AGENCY	SIGN ON	SIGN OFF	NAME OF MASTER
1 st							
2 nd							
3 rd							
4 th							
5 th							
6 th							

ON BOARD TRAINING WORKBOOK

FOR DECK CADET ON BOARD SHIPS 500 GROSS TONNAGE OR MORE

INTRODUCTION

PURPOSE

The purpose of this On Board Training Workbook for Engine Cadets is to ensure that cadets On Board Training Record Books data, are properly documented by means of outputs on this Workbook, in conjunction with the records written on Training Record Book Journal, as outputs completed this workbook shall also be reflected on the journal.

Given that this Workbook should be subject to close scrutiny by the Masters/Chief engineers of the ships on which the cadet serves, by the cadet's designated on board training officers and the shipping company.

This WORKBOOK WILL evaluated by the UNIVERSITY OF CEBU, Maritime Education and Training Center as one of the documentary evidence in accomplishing the requirements of the On Board Training Record Book, issued by the School.

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ON BOARD TRAINING WOZKBOOK

FOR OFFICERS INCHARGE OF A NAVIGATIONAL WATCH (DECK CADETS)
On ships 500 gross tonnage or more

FUNCTION: N A V I G A T I O N

AT THE OPERATIONAL LEVEL



OUTPUTS

UNIVERSITY OF CEBU, MARITIME EDUCATION & TRAINING CENTER

1ST EDITION 2015

THE VOYAGE INSTRUCTION

Instruction:

- 1. Paste a COPY of the actual Voyage Instruction below (Picture or, photocopy) if it is available;
- 2. If item 1 (above) is NOT, accessible. Fill up the Information below:

SHIP'S DETAILS (FOR PASSAGE PLANNING PURPOSES ONY)

1.	Name of Vessel:	
	Type of Vessel:	
	Port of Registry:	
	Gross Tonnage :	
	Deadweight :	
6.		
	FWD MAX (summer):	
	AFT MAX (summer):	
	FWD MAX (Winter):	
	AFT MAX (winter) :	
	Sailing Draft: FWD : AFT:	
7.	Sea Speed :	
8.	Service Speed :	
VOYA	GE DETAILS	
1.	Departure Port :	
2.	Destination Port:	
3.	CARGO :	
4	TYPF ·	

COMPETENCY	1 – PLAN AND CONDUCT PASSAGE AND DETERMINE POSITION				
ACTIVITY, TRB RE	FERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS				
ACTIVITY	1 – Passage Planning				
TRB Reference	1.1, 1.2, and 1.3				

Output Objectives

After the completion of this activity, YOU WILL be able to:

- 1. Transfer at least two (2) Passage Plan Data (Information) from your ship's actual Voyages, using the student/cadet passage planning forms included on this TRB Training Workbook.
 - 1.1 Use form 01-00 Passage Planning Publication;
 - 1.2 Use form 02-00 Passage Planning Sheet;
 - 1.3 Use form 03-00 Passage Planning Notes;
 - 1.4 Use form 04-00 Passage Planning Risk Assessment Management (Read instruction below the table).
- 2. Calculate Distances and ETA's on each waypoint and arrival port; (show your solutions)
- 3. Accomplish the Passage Planning forms with solutions, diagram, illustration and pictures (Use the blank portion of pages of your TRB workbook).
- 4. Compare and Contrast the workbook forms and actual ship's passage planning forms;
- 5. Write your reflection on the activity

Instructions:

- 1. Read Passage Planning Task Form;
- 2. Transfer at least 2 Passage Planning Information from your ship's actual voyage;
- 3. Use the forms (3 Sets) included on this workbook; NOTE: If any data is missing in the forms, fill-it up as appropriate.

Outputs Standards:

- 1. Transfer at least two (2) Passage Plan Data (Information) from your ship's actual Voyages, using the student/cadet passage planning forms included on this TRB Training Workbook
 - 1.1 Fill up Form PP 01-00 Passage Publications
 - 1.2 Using an average speed of 12 knots: Fill up form 02-00 Passage planning sheet;
 - 1.3 Fill up form 03-00 Passage Planning Notes;
 - 1.4 Use form PP 04-00 Passage Plan Risk Assessment Management form;
- 2. Calculated Distances and ETA's on each waypoint and arrival Port with solution;
 - 2.1 At the back pages of the planning forms, solution are shown
- 3. Accomplished Passage planning forms with solutions, diagram, illustration and pictures.
 - 3.1 Filled-up form 01-00 Passage Planning Publication;
 - 3.2 Filled-up form 02-00 Passage Planning Sheet;
 - 3.3 Filled-up form 03-00 Passage Planning Notes;
 - 3.4 Filled-up form 04-00 Passage Planning Risk Assessment Management
- 4. Output for Objectives 4 shall have the following requirements:

COMPETENCY	1 – PLAN AND CONDUCT PASSAGE AND DETERMINE POSITION				
ACTIVITY, TRB RE	ACTIVITY, TRB REFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS				
ACTIVITY	1 – Passage Planning				
TRB Reference	1.1, 1.2, and 1.3				

- 4.1 NOT less than Five Hundred words HANDWRITTEN at the space provided at back of the TRB Workbook;
- 4.2 Signed by the On-Board Training Officer/In-charge/Master.
- 5. Output for Objectives 4 shall have the following requirements:
 - 5.1 NOT less than Five Hundred words HANDWRITTEN at the space provided at back of the TRB Workbook;
 - 5.2 Signed by the On-Board Training Officer/In-charge/Master.

PASSAGE PLANNING TASK FORM

NOTE : During completion of each task, fill in the relevant section of the Passage Planning Checklist

NO.	TASK	WHAT NEEDS TO BE DONE
1	Destination	Confirmed the name of the destination port along with Latitude and Longitude coordinates.
2	Route	As given in the task, lay-off the course on a small scale charts.
3	Distances	This can be done and extracted from the courses drawn on small scale charts.
4	Company, Masters and Charterers instructions	Refer to manual, voyage instruction.
5	General information	Refer to publications and take notes at least for the items identified in "Bridge Passage Planning Notebook".
6	Cargo Ship information	See UKC (Under-Keel-Clearance) for the entire passage.
7	Largest scale charts for the voyage	Select appropriate large scale chart. Once chart are selected, fill in the relevant part of the ridge Passage Planning Notebook.
8	Predicted areas of danger	Determine and marked NO-GO areas (Danger areas).
9	Courses	Lay down the course line. Use standard symbols and abbreviations. (Chartwork Legends).
10	Hazard and additional information	Write information on the chart. Additional information, such as notice to the engine room, can be included on the chart, don't forget to write the reasons for the notice to engine room.
11	Risk Assessment	Fill in risk assessment forms.
12	Bridge Team Management	Identify areas where watches need to be update (additional watchkeeper needed), or Hand Steering is required and additional lookouts are needed. Mark on the chart and in "Bridge Notebook".
13	Monitor the Ship's progress	Once the ship start to follow the plan, ensure every OOW follows it.

		"Bridge Notebook".
13	Monitor the Ship's progress	Once the ship start to follow the plan, ensure every OOW follows it.
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	:			Date	:						ATT :							Draft FWD	
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FUNCT	ON: Navigation at the Operational Level REF. TRB C	1 Plan and Conduct a Passage and Determine Position
٧	PASSAGE PLAN APPRAISAL FAMIL	IARIZATION CHECKLIST
Have	navigation charts been selected from chart catalogue	e, including:
	Appropriate scale charts for ocean passages	
	Large scale charts for coastal waters	
	Planning charts	
	Routeing, climatic, pilot and loadline zone charts	
Have	publications been selected, including:	
	Sailing Directions and pilot books	
	Light lists/radio signals	
	Guides to port entry	
	Tide tables and tidal stream atlas	
Have	all navigation charts and publications been corrected	up to date, Including:
	The ordering of new charts/publications, if necessary	
	Notices to mariners	
	Local area warnings	
	NAVAREA navigational warnings	
Have	the following been considered?	
	ship's departure and arrival draughts together with ardue to squat	ny restrictions on under keel clearance
	ship's cargo and any special cargo stowage/carriage re	estrictions
	If there are any special ship operational requirements	for the passage
Have	the following been checked?	
	Planning charts and publications for advice and recom	nmendations on route to be taken
	Climatological information for weather characteristics	of the area
	Navigation charts and publications for landfall feature	es
	Navigation charts and publications for Ships' Routeing Vessel Traffic Services (VTS)	Schemes, Ship Reporting Systems and
	Has weather routeing been considered for passage?	
Have	the following preparations been made for port arriva	ıl?
	Navigation charts and publications studied for pilotag	e requirements
	Ship-to-Shore Master/Pilot Exchange form prepared	
	Pilot Card updated	
	Port guide studied for port information including arriv	al/berthing restrictions
Othe	r Checks	
Prepa	ared by:	
Nam	e of Cadet & Signature:	
Chec	ked by:	Date:
Train	ing Officer Name & Signature:	

THE VOYAGE INSTRUCTION

Instruction:

- 1. Paste a COPY of the actual Voyage Instruction below (Picture or, photocopy) if it is available;
- 2. If item 1 (above) is NOT, accessible. Fill up the Information below:

SHIP'S DETAILS (FOR PASSAGE PLANNING PURPOSES ONY)

1.	Name of Vessel:
	Type of Vessel:
	Port of Registry:
	Gross Tonnage :
	Deadweight :
	DRAFT:
	FWD MAX (summer):
	AFT MAX (summer):
	FWD MAX (Winter):
	AFT MAX (winter) :
	Sailing Draft: FWD : AFT:
7.	Sea Speed :
8.	Service Speed :
VOYA	GE DETAILS
1.	Departure Port :
2.	Destination Port :
3.	CARGO :
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		PA	SSASGE PLA	NNI	NG R	ISK	ASESSMENT	
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	5		High			5	Very Likely	
	4	High				4	Likely	
	3		erate			3	Quite Possible	
	2	Sligh	nt			2	Possible	
	1	Nil				1	Nil	
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Level	Ratir	na	Action					
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6-10	Tolera	ıble					that the controls are	
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16-20`	Subst	antial	Ship cannot p Allocation of re	proce sour	eed on ces and	pa l tin	required for reducing ssage without reduce the can increase to verous one risk have been n	ucing the risk. ery high amount

Passage cannot be continued even with unlimited resources.

Intolerable

21-25

٧	PASSAGE PLAN APPRAISAL FAMIL	PASSAGE PLAN APPRAISAL FAMILIARIZATION CHECKLIST							
Have	navigation charts been selected from chart catalogue	e, including:							
	Appropriate scale charts for ocean passages								
	Large scale charts for coastal waters								
	Planning charts								
	Routeing, climatic, pilot and loadline zone charts								
Have	publications been selected, including:								
	Sailing Directions and pilot books								
	Light lists/radio signals								
	Guides to port entry								
	Tide tables and tidal stream atlas								
Have	all navigation charts and publications been corrected	l up to date, Including:							
	The ordering of new charts/publications, if necessary								
	Notices to mariners								
	Local area warnings								
	NAVAREA navigational warnings								
Have	the following been considered?								
	ship's departure and arrival draughts together with any restrictions on under keel clearance								
	due to squat								
	ship's cargo and any special cargo stowage/carriage restrictions								
	If there are any special ship operational requirements for the passage								
Have	the following been checked?								
	Planning charts and publications for advice and recon	nmendations on route to be taken							
	Climatological information for weather characteristics	s of the area							
	Navigation charts and publications for landfall feature	25							
	Navigation charts and publications for Ships' Routeing	g Schemes, Ship Reporting Systems and							
	Vessel Traffic Services (VTS)								
	Has weather routeing been considered for passage?								
Have	the following preparations been made for port arrivo								
	Navigation charts and publications studied for pilotag	e requirements							
	Ship-to-Shore Master/Pilot Exchange form prepared								
	Pilot Card updated								
	Port guide studied for port information including arriv	/al/berthing restrictions							
Othe	er Checks								
Prep	ared by:								
Nam	e of Cadet & Signature:								
Chec	ked by:	Date:							
Trair	ning Officer Name & Signature:	,							

COMPETENCY 2	MAINTAIN A SAFE NAVIGATIONAL WATCH						
ACTIVITY, TRB REFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS							
ACTIVITY	BRIDGE STANDARD PROCEDURES						
TRB Reference	C 2.1 to 2.5						

Output Objectives

After the completion of this activity, YOU WILL be able to:

- 1. Compare and Contrast the various familiarization checklist on the TRB Workbook and your vessel equivalent documented procedures;
- 2. Outline the contents of Master's Standing Order;
- 3. Outline the contents of the Masters Night Order Book;
- 4. Describe the duties and responsibilities of the OOW based on your observation during your watch;
- 5. Describe: How the OOW, responded to the following navigational situations, based on your observation:
 - 5.1 Head-On;
 - 5.2 Crossing vessel (Starboard) and (Port);
 - 5.2 Overtaking Vessel (Starboard) and (Port);

- 1. Read Bridge Master's Standing Order, Master's Night order book;
- 2. Observe the action & behaviour of your officer on different situation;
- 3. Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity.
- 4. If need more space to write, use the back page of this workbook

4. If fleed filore space to write, use the back page of this workbook
Answers:

COMPETENCY 2	MAINTAIN A SAFE NAIGATIONAL WATCH
ACTIVITY, TRB RE	EFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS
ACTIVITY	BRIDGE STANDARD PROCEDURES
TRB Reference	C 2.1 to 2.5
	<u>, </u>

COMPETENCY 3	USE RADAR OR ARPA TO MAINTAIN SAFETY OF NAVIGATION		
ACTIVITY, TRB RE	FERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS		
ACTIVITY	RADAR & ARPA SIT-UP PROCEDURES		
TRB Reference	C 3.1 to 3.6		

Output Standard

After the completion of this activity, YOU WILL be able to:

- 1. Outline the procedures on setting up an RADAR or ARPA;
- 2. Outline the procedure for fixing position using range and range and Range and Bearing method using RADAR or ARPA;
- 3. Outline the procedure for setting up RADAR or ARPA for collision avoidance;

- 1. Read Radar and ARPA Manuals;
- 2. Observe the action & behaviour of your officer when setting RADAR and ARPA;
- 3. Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity.
- 4. If need more space to write, use the back page of this workbook

Ansı	wers:				
		 <u> </u>		<u> </u>	

COMPETENCY 3	USE RADAR OR ARPA TO MAINTAIN SAFETY OF NAVIGATION	
ACTIVITY, TRB REFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS		
ACTIVITY	RADAR & ARPA SIT-UP PROCEDURES	
TRB Reference	C 3.1 to 3.6	

ACTIVITY ECDIS SIT-UP PROCEDURES TRB Reference C. 4.1 to 4.3 Output Standard 1. Outlined the procedures on setting up an ECDIS, based on your experience onboard; 2. Outlined the advantage and limitation of ECDIS. Instructions: 1. Read ECDIS Manuals; 2. Observe the action & behaviour of your officer when setting up an ECDIS; 3. Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. 4. If need more space to write, use the back page of this workbook Answers:	COMPETENCY 4	USE ECDIS TO MAINTAIN SAFETY OF NAVIGATION			
TRB Reference C. 4.1 to 4.3 Output Standard 1. Outlined the procedures on setting up an ECDIS, based on your experience onboard; 2. Outlined the advantage and limitation of ECDIS. Instructions: 1. Read ECDIS Manuals; 2. Observe the action & behaviour of your officer when setting up an ECDIS; 3. Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. 4. If need more space to write, use the back page of this workbook	ACTIVITY, TRB REFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS				
Output Standard 1. Outlined the procedures on setting up an ECDIS, based on your experience onboard; 2. Outlined the advantage and limitation of ECDIS. Instructions: 1. Read ECDIS Manuals; 2. Observe the action & behaviour of your officer when setting up an ECDIS; 3. Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. 4. If need more space to write, use the back page of this workbook	ACTIVITY	ECDIS SIT-UP PROCEDURES			
 Outlined the procedures on setting up an ECDIS, based on your experience onboard; Outlined the advantage and limitation of ECDIS. Instructions: Read ECDIS Manuals; Observe the action & behaviour of your officer when setting up an ECDIS; Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. If need more space to write, use the back page of this workbook 	TRB Reference	C. 4.1 to 4.3			
 Outlined the advantage and limitation of ECDIS. Instructions: Read ECDIS Manuals; Observe the action & behaviour of your officer when setting up an ECDIS; Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. If need more space to write, use the back page of this workbook 	Output Standard	1			
 Read ECDIS Manuals; Observe the action & behaviour of your officer when setting up an ECDIS; Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. If need more space to write, use the back page of this workbook 					
 Observe the action & behaviour of your officer when setting up an ECDIS; Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. If need more space to write, use the back page of this workbook 	Instructions:				
 Observe the action & behaviour of your officer when setting up an ECDIS; Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity. If need more space to write, use the back page of this workbook 	1. Read ECD	IS Manuals;			
activity. 4. If need more space to write, use the back page of this workbook		•			
4. If need more space to write, use the back page of this workbook		DOW for advice or pointers, do not hesitate to ask questions or show your required			
Answers:	•	ore space to write, use the back page of this workbook			
	Answers:				
	Allsweis.				

COMPETENCY 4	USE ECDIS TO MAINTAIN SAFETY OF NAVIGATION
ACTIVITY, TRB RE	EFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS
ACTIVITY	ECDIS SIT-UP PROCEDURES
TRB Reference	C. 4.1 to 4.3

COMPETENCY 5	RESPOND TO EMERGENCIES		
ACTIVITY, TRB RE	FERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS		
ACTIVITY	RESPONDING EMERGENCIES ON BOARD		
TRB Reference	C. 5.1 TO 5.3		

Output Standard

- 1. Describe each of the following emergency response exercise of your vessels;
 - 1.1 Heavy Weather Damage
 - 1.2 Collision
 - 1.2. Rescue or recovery of casualty/survivor in the water'
 - 1.3 Person Overboard;
 - 1.4 Shipboard Oil pollution incident;
 - 1.5 Steering Failure;
 - 1.6 Main Engine Failure;
 - 1.7 Power Failure;
 - 1.8 Security alert
- 2. Outline the necessary action when emergency arise in port as follows:
 - 2.1 Fire
 - 2.2 Pollution

- 1. Read your vessels safety Manuals;
- 2. Ask your OOW for advice or pointers, do not hesitate to ask questions or show your required activity.
- 3. If need more space to write, use the back page of this workbook

Answers:		

COMPETENCY 5	RESPOND TO EMERGENCIES
ACTIVITY, TRB RE	EFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS
ACTIVITY	RESPONDING EMERGENCIES ON BOARD
TRB Reference	C. 5.1 TO 5.3

COMPETENCY 6	RESPOND TO A DISTRESS SIGNALS AT SEA				
ACTIVITY, TRB REFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS					
ACTIVITY	RESPONDING DISTRESSS SIGNALS AT SEA				
TRB Reference	C. 6.1 TO 6.3				
Output Standard					
	ne necessary action upon receiving a distress signal at sea: ach procedure of each necessary action in item 1.				
Instructions:					
1. Read your	vessels safety Manuals;				
	OW for advice or pointers, do not hesitate to ask questions or show your required				
	re space to write, use the back page of this workbook				
Answers:					

COMPETENCY 7	USE OF IMO SMCP & USE ENGLISH IN WRITTEN & ORAL FORM					
ACTIVITY, TRB RE	FERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS					
ACTIVITY	ACTIVITY USING IMO STANDARD MARITIME COMMUNICATION PHRASES					
TRB Reference	RB Reference C. 7					
Output Standard						
1.1 Comm 1.2 Meanii	ne IMO Standard Helm Command, to include the following: and of the OOW ng nse of the Helmsman					
Instructions:						
Ask your O activity.	dard Maritime Communication Phrases handbook; OW for advice or pointers, do not hesitate to ask questions or show your required re space to write, use the back page of this workbook					

COMPETE	NCY 8	TRANSMIT AND RECEIVE INFORMATION BY VISUAL SIGNALLING		
ACTIVITY STANDAR	•	ERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES &		
ACTIVITY	TIVITY TRANSMITING AND RECEIVING INFORMATION BY VISUAL SIGNALLING			
TRB Refe	eference TASK 8.1 & 8.2			

Output Standard:

After the completion of this activity, YOU WILL be able to:

- **1.** Draw the CODE FLAG of each Letter given on Column 2, with Phonetic Alphabet and International Code, Meaning and the Morse Code;
- **2.** Draw the Two-Letter Flag Signals, given on Column 2, with Phonetic Alphabet and International Code, Meaning and the Morse code.

Instructions:

- 1. Read the publication International Code of Signal;
- 2. Read the Ship Safety Manual;
- 3. Observe the action & behaviour of your officer when usin the flag for visual signaling
- 4. Ask your OOW's for advice or pointers, do not hesitate to ask questions or show your required activity.

CODE FLAG (Draw the Code Flag in Color)	LETTER	PHONETIC ALPHABET	INTERNATIONAL CODE (Meaning)	MORSE CODE
	A			
	В			
	С			
	D			

Flag Signalling 51.1 of 104

T	1		T T
	E		
	F		
	G		
	н		
	I		
	J		
	К		
	L		

Flag Signalling 51.2 of 104

M		
N		
0		
P		
Q		
R		
S		
т		

Flag Signalling 51.3 of 104

U		
٧		
x		
Y		
Z		
1		
3		
4		

Flag Signalling 51.4 of 104

5		
6		
7		
8		
9		
0		
1 st Sub.		
2 nd Sub.		

Flag Signalling 51.5 of 104

				<u> </u>
	3 rd Sub.			
	Answe ring Pedant			
TWO-LETTER FLAG SIGN	NALS			•
CODE FLAG (Draw the Code Flag in Color)	LETTER	PHONETIC ALPHABET	INTERNATIONAL CODE (Meaning)	MORSE CODE
	КЈ			
	IR			
	RY			
	YG			
	МС			

Flag Signalling 51.6 of 104

NC		
GW		
TI		
With "T"		
NE2		

Flag Signalling 51.7 of 104

COMPETENCY 9	MANEUVER THE SHIP				
ACTIVITY, TRB REFERENCE, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS					
ACTIVITY	MANEUVERING THE SHIP				
TRB Reference	TASK 9.1 & 9.2				

Output Standard:

After the completion of this activity, YOU WILL be able to:

- 1. Insert a copy of the maneuvering Information of your vessel;
- 2. Insert a copy the Turning Circle of your vessel;
- 3. Outline the operation and limitation of you ship's steering gear;
- 4. Describe the rate of turn of your vessel at different speed and water depths;
- **5.** Outline the proper berthing procedure;
- **6.** Outline the proper anchoring procedure.

Insert the Maneuvering Characteristics of your Vessel

- 1. While on bridge watchkeeping duty, study locate the maneuvering information of your vessel and study it;
- 2. Observe the behaviour of your ship while maneuvering;
- 3. Ask your OOW's or Master for advice or pointers, do not hesitate to ask questions or show your required activity.

Turning Circle		

Outline the operation and limitation of you ship's steering gear	

Describe the rate of turn of your vessel at different speed and water depths

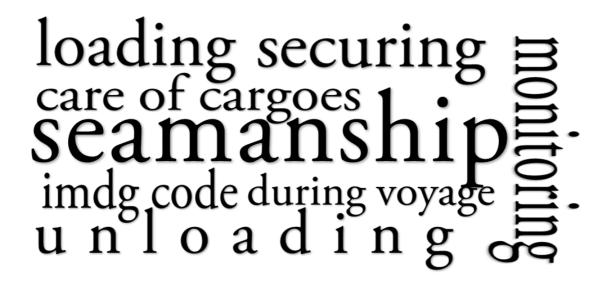
Outline the proper berthing procedure		
Outline the proper anchoring procedure.		

ON BOARD TRAINING WORKBOOK

FOR OFFICERS INCHARGE OF A NAVIGATIONAL WATCH (DECK CADETS)
On ships 500 gross tonnage or more

FUNCTION: CARGO HANDLING & STOWAGE

AT THE OPERATIONAL LEVEL



OUTPUTS

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00110777777		
COMPETENCY 10	MONITOR THE LOADING, STOWAGE, SECURING, CARE DURING THE VOYAGE	
ACTIVITY, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS		
ACTIVITY	WRITTEN REPORT	
TRB Reference	F2- 10	
Output Standards		
1. Outline the property of the	of this activity, YOU WILL be able to: procedures or measures that are implemented on board your vessel to ensure of Loading, Stowage, Securing and Care of cargo during voyage; f description of each "procedures";	
2. Write your a	S, Safety Manuals and relevant manual of your vessel; nswers on the space provided:	
3. Pictures of th	ne activity, drills and other information can be included on the answers.	

COMPETENCY 10	MONITOR THE LOADING, STOWAGE, SECURING, CARE DURING THE VOYAGE	
ACTIVITY, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS		
ACTIVITY	WRITTEN REPORT	
TRB Reference	F2- 10	
Continuations:		

ON BOARD TRAINING WOR! BOOK

FOR OFFICERS INCHARGE OF A NAVIGATIONAL WATCH (DECK CADETS)
On ships 500 gross tonnage or more

FUNCTION: CONTROLLING THE OPERATION OF SHIP & CARE FOR PERSONS ONBOARD
AT THE OPERATIONAL LEVEL

compliance life-saving appliances fire prevention safety & regulations leadership Pollution Prevention seaworthiness of the ship fight fires on board medical first aid legislative requirements

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COMPETENCY 14	ENSURE COMPLIANCE WITH THE POLLUTION PEREVENTION REQUIREMENTS
ACTIVITY, MARPOI	, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS
ACTIVITY	WRITTEN REPORT
TRB Reference	F3- 14.1
Output Standards	
Outline the protection of	of this activity, YOU WILL be able to: "proactive measures" that is implemented on board your vessel to ensur f the marine environment; f description of each "proactive measures";
nstructions:	<u> </u>
	S, Safety Manuals and relevant manual of your vessel; nswers on the space provided:
•	ne MARPOL activity, drills and other information can be included on the answers
Answer:	

FUNCTION: Contolling the	operation of the ship and care for cargoes on board	Operational Leve
COMPETENCY 15	MAINTAIN SEAWORTHINESS OF THE SHIP	
ACTIVITY, INSTRUC	CTIONS & OUTPUTS OBJECTIVES & STANDARDS	
ACTIVITY	WRITTEN REPORT	
TRB Reference	F3- C15	
Output Standards		
1. Describe the	of this activity, YOU WILL be able to: e practical application on how to maintain the seaworthiness of ple activity, measures or procedures.	the ship;
	S, Safety Manuals and relevant manual of your vessel;	
_	nswers on the space provided: ne activity, drills and other information can be included on the a	nswers.
Answer:		

FUNCTION: Contolling the	operation of the ship and care for cargoes on board Operational Leve		
COMPETENCY 16	PREVENT, CONTROL & FIGHT FIRES ON BOARD		
ACTIVITY, INSTRUC	CTIONS & OUTPUTS OBJECTIVES & STANDARDS		
ACTIVITY WRITTEN REPORT			
TRB Reference	F3- C16		
Output Standards			
1. Outline the p	of this activity, YOU WILL be able to: procedures or measure onboard use, to prevent, control & fight fires on board; ple activity, measures or procedures.		
	S, Safety Manuals and relevant manual of your vessel; nswers on the space provided:		
Pictures of the	ne activity, drills and other information can be included on the answers.		
Answer:			

FUNCTION: Contolling the	operation of the ship and care for cargoes on board	Operational Leve
COMPETENCY 17	OPERATE LIFE SAVING APPLIANCE	
ACTIVITY, INSTRUC	CTIONS & OUTPUTS OBJECTIVES & STANDARDS	
ACTIVITY	WRITTEN REPORT	
TRB Reference	F3- C17	
Output Standards		
1. Outline the p	of this activity, YOU WILL be able to: procedures on how to operate a lifesaving appliance on board ple activity, firefighting appliance only, measures or procedur	
2. Write your a	S, Safety Manuals and relevant manual of your vessel; nswers on the space provided: ne activity, drills and other information can be included on the	e answers.
Answer:		

FUNCTION: Contolling the	operation of the ship and care for cargoes on board	Operational Leve
COMPETENCY 18	APPLY MEDICAL FIRST AID ON-BOARD SHIP	
ACTIVITY, INSTRUC	CTIONS & OUTPUTS OBJECTIVES & STANDARDS	
ACTIVITY	WRITTEN REPORT	
TRB Reference	F3- C18	
Output Standards		
1. Outline the p	of this activity, YOU WILL be able to: procedures on how to apply medical first aid onboard; ple activity, measures or procedures.	
2. Write your a	S, Safety Manuals and relevant manual of your vessel; nswers on the space provided: ne activity, drills and other information can be included on the a	inswers.
Answer:	,,	
7.11.011.011		

FUNCTION: Contolling the c	pperation of the ship and care for cargoes on board Operational Level				
COMPETENCY 19	MONITOR COMPLIANCE OF LEGISLATIVE REQUIREMENTS				
ACTIVITY, INSTRUCTIONS & OUTPUTS OBJECTIVES & STANDARDS					
ACTIVITY WRITTEN REPORT					
TRB Reference F3- C19					
Output Standards					
 Outline the p onboard; 	of this activity, YOU WILL be able to: rocedures and measures to monitor ship's compliance to legislative requirements ple activity, measures or procedures.				
Instructions: 1. Read the SM:	S, Safety Manuals and relevant manual of your vessel;				
	nswers on the space provided:				
	ne activity, drills and other information can be included on the answers.				
Answer:					

ON BOARD TRAINING WOR POOK

FOR OFFICERS INCHARGE OF A NAVIGATIONAL WATCH (DECK CADETS)
On ships 500 gross tonnage or more

SEA PROJECT OUTPUTS

UNIVERSITY OF CEBU, MARITIME EDUCATION & TRAINING CENTER

1ST EDITION 2015

Section 8	SEA PROJECTS OUTPUT		
SEA PROJECTS OUTPUT, DRAWINGS, PROCEDURES/ILLUTRATIONS & REFLECTIONS			
OUTPUTS	STANDARD SEA PROJECTS		
TRB Reference	Section 8-Sea Projects		

Output Standards:

After the completion of this activity, YOU WILL be able to create Sea projects that are compliant to the output standard stated below:

- 1. Draw the longitudinal section through the center line of your ship;
- 2. Draw of the plan of the navigational bridge;
- 3. Draw a plan for each of the two other decks;
- 4. Write a short report describing the different aids to navigation carried on your ship;
- 5. Explain the role that ECDIS has and what plans are in place in the event that it fails;
- 6. On the deck plans drawn for Sea project 1C, Show the position by key letters of each type of life-saving and firefighting equipment;
- 7. List the key letters for lifesaving and firefighting equipment used in Sea Project 3A, along write a brief description of each item;
- 8. Draw a diagram of the bilge, double bottom, fore and after peaks, and other water ballast pipeline systems, indicating the positions of all valves. Briefly describe the pump(s) used
- 9. Write an account of a cargo loading operation in which you have taken part;
- 10. Draw, approximately to scale, a deck plan of your ship showing the position of fairleads, winches/capstans, and windlass highlight the particularly hazardous areas;
- 11. Write a brief description of a BERTHING operation involving your ship;
- 12. Write a brief description of a UNBERTHING operation involving your ship;

Instructions:

- 1. Read Section 8 of your ISF Training Record Book;
- 2. Create your output based on the Standard written on the box below;
- 3. After every completion of each projects, let your Training officer evaluate your output and ask for a signature.
- 4. Update Sections 3 and 4 of your Training Record Book Journal

Date Started	TITLE	SCALE DRAWINGS: Longitudinal section through the center line of your ship show	ving and naming cargo hold
Completed	SEA PROJECT	(Tanks), bunker, ballast and all other compartments/spaces.	
Name and Signature of the Training	g Officer:		Ref: Sea Project 1.A

D . C			
Date Started	TITLE	SCALE DRAWINGS: A plan of the navigational bridge showing the position and the	as name of squipment
Completed	SEA PROJECT	SCALE DRAWINGS: A plan of the havigational bridge showing the position and the	ie name or equipment
Name and Signature of	the Training Officer:		Ref: Sea Project 1.B

Date Started	TITLE	SCALE DRAWINGS: A plan for each of the two other decks showing and naming	accompodation store rooms	
Completed	SEA PROJECT	fire fighting equipment etc.	, accombaation, store rooms	
Completed	JEA I NOJECI	ine ngitting equipment etc.	T	
Name and Signature of the Training Officer:			Ref: Sea Project 1.C	

Date Started TITLE	NAVIGATION: Write a short report describing the different aids to navigation carried on your ship.		
Completed SEA PROJECT			
Name and Signature of the Training Officer:	Name and Signature of the Training Officer: Ref: Sea Project 2.0 page 1		

Date Started		TITLE	NAVIGATION: Evalgin the	role that ECDIS has and what plans are in place in the	event that it fails
Completed		SEA PROJECT	NAVIGATION: Explain the role that ECDIS has and what plans are in place in the event that it fails.		
Name and Signature	Name and Signature of the Training Officer: Ref: Sea Project 2.0 page 2			Ref: Sea Project 2.0 page 2	

Date Started	TITLE	SAFETY: On the deck plans drawn for Sea project 1C, Show the position by key le	tters of each type of life-
Completed	SEA PROJECT	saving and firefighting equipment.	tic. 5 of cach type of life
Completed	JEA I NOJECI	Saving and Jirejighting equipment.	
Name and Signature of the Training	g Officer:		Ref: Sea Project 3A

Date Started	TITLE	SAFETY: List the above key letters used in Sea Project 3	

Date Started Completed	TITLE SEA PROJECT	PIPELINE SYSTEMS: Draw a diagram of the bilge, double be ballast pipeline systems, indicating the positions of all valuates serving in ships other than tankers (use this page for	Ives. Briefly describe the pump(s) used. NOTE : For
Name and Signature of th	ne Training Officer:		Ref: Sea Project 4 page 1B

Date Started	TITLE	PIPELINE SYSTEMS: Draw a diagram of the bilge, double bottom, fore and after p	oeak, and other water
Completed	SEA PROJECT	ballast pipeline systems, indicating the positions of all valves. Briefly describe th	
		cadets serving in ships other than tankers (use this page for diagram)	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		.g	
Name and Signat	ure of the Training Officer:		Ref: Sea Project 4 page 1B

Date Started		TITLE	PIPELINE SYSTEMS: Draw a diagram of the cargo pipeline system the pump room	n) indicating the position of
		SEA PROJECT	all valves by colour code or other means to indicate their function. B	
Completed	`	DEA PROJECT		
			cargo pumps. NOTE: For cadets serving in tankers: (use this page <u>for</u>	alagram)
Name and Signate	ure of the Training O	fficer:		Ref: Sea Project 4 page 1C

Date Started Completed	TITLE SEA PROJECT	PIPELINE SYSTEMS: Draw a diagram of the cargo pipeline all valves by colour code or other means to indicate their NOTE: For cadets serving in tankers: (use this page for details)	function. Briefly describe one of the cargo pumps.
Name and Signature of th	e Training Officer:		Ref: Sea Project 4 page 1D

5 . 6			
Date Started	TITLE	CARGO WORK: (Write an account of a cargo loading operation in which you hav	
Completed	SEA PROJECT	shall follow this sequence: Cargo Hold Preparation, During Loading an	d After Loading.
Name and Signature of the Trainir	ng Officer:		Ref: Sea Project 5 page 1
			, , ,

Completed Name and Signature of the	SEA PROJECT	shall follow this sequence: Cargo Hold Preparation, During Lo	
Date Started	TITLE	CARGO WORK: (Give an account of a cargo loading operation in which	you have taken part.) NOTE: Accoun

Date Started TITLE MOORING: Draw, approximately to scale, a deck plan of your ship showing the position of fairl winches/capstans, and windlass highlight the particularly hazardous areas. On this leads of MOORING ROPES and WIRES at a port you have visited;	ads, lan show the

Date Started Completed	TITLE SEA PROJECT	MOORING: Give a brief description of a UNBERTHING operation involving follow this sequence, Preparation made before unberthing, during unberthing.	

ON BOARD TRAINING WORKBOOK

FOR OFFICERS INCHARGE OF A NAVIGATIONAL WATCH (DECK CADETS)
On ships 500 gross tonnage or more

BRIDGE PROCEDURE CHECKLIST

UNIVERSITY OF CEBU, MARITIME EDUCATION & TRAINING CENTER

1ST EDITION 2015

Bridge Procedure Checklist **ANCHORING & ANCHOR WATCH FAMILIARIZATION CHECKLIST** Has an anchoring plan been prepared taking into account: Speed reduction in ample time; Direction/Strength of wind and current; tidal stream when manoeuvring at low speeds; Need for adequate sea room particularly to seaward; Have speed and course been adjusted as necessary; Depth of water, type of seabed and the scope of anchor cable required; Have the engine room and anchor party been informed of the time of "stand-by "for anchoring? Are the anchors, lights/shapes and sound signalling apparatus ready for use? Has the anchor position of the ship been reported to the port authority? While at anchor, the OOW should: Determine and plot the ship's position on the appropriate chart as soon as practicable When circumstances permit, check at sufficiently frequent intervals whether the ship is remaining securely at anchor by taking bearings of fixed navigation marks or readily identifiable shore objects Ensure that proper look-out is maintained Ensure that inspection rounds of the ship are made periodically Ensure vessel access control precautions are maintained in respect of vessel security Observe meteorological and tidal conditions and the state of the sea Notify the master and undertake all necessary measures if the ship drags Ensure that the state of readiness of the main engines and other machinery is in accordance with the master's instructions If visibility deteriorates, notify the master Ensure that the ship exhibits the appropriate lights and shapes and that appropriate sound signals are made in accordance with all applicable regulations Take measures to protect the environment from pollution by the ship and comply with applicable pollution regulations Other checks: Prepared by: Name of Cadet & Signature: Date: Checked by: Training Officer Name & Signature:

J	BRIDGE FAMILARIZATION CHECKLIST
Has t	he operation of the following equipment been studied and fully understood?
	Bridge and deck lighting;
	Emergency arrangements in the event of main power failure;
	Navigation and signal lights, including;
	Search light
	Signalling lamp
	Morse light.
	Sound signalling apparatus, including:
	Whistles
	Fog, bell and gong system
	Safety equipment, including
	LSA equipment including pyrotechnics, EPIRB and SART;
	Bridge fire detection panel;
	General and fire alarm signalling arrangements;
	Emergency pump, ventilation and watertight door controls.
	Internal ship communications facilities, including:
	Portable radios
	Emergency "battery less" telephone system
	Public address system
	AIS and external communication equipment, including:
	VHF and GMDSS equipment
	Alarm systems on bridge
	Automatic track-keeping system, if fitted
	ECDIS and electronic charts, if fitted
	Echo sounder
	Electronic navigational position-fixing systems
	VDR or S-VDR equipment
	Gyrocompass/Repeaters
	IBS functions, if fitted
	Magnetic compass
	Off-course alarm
	Radar including ARPA
	Speed/Distance recorder
	Engine and thruster controls
Prep	ared by:
Nam	e of Cadet & Signature:
Chec	ked by: Date:
Train	ing Officer Name & Signature:

CALLING THE MASTER FAMILIARIZATION CHECKLIST			
The	OOW should notify the master immediately:		
	If restricted visibility is encountered or expected;		
	If traffic conditions or the movements of other ships a	re causing concern;	
	If difficulties are experienced in maintaining course;		
	On failure to sight land, a navigation mark or obtain soundings by the expected time;		
	If, unexpectedly, land or a navigation mark is sighted or a change in soundings occurs;		
	Of breakdown of the engines, propulsion machinery remote control, steering gear or any essential navigational equipment, alarm or indicator;		
	If the radio equipment malfunctions;		
	In heavy weather, if in any doubt about the possibility of weather damage;		
	If the ship meets any hazard to navigation, such as ice or a derelict;		
	If any vessel security concerns arise.		
	In any other emergency or in any doubt		
Other points:			
Prepared by:			
Name of Cadet & Signature:			
Chec	Checked by: Date:		
Training Officer Name & Signature:			

- .	CHANGING OVER THE WATCH FAMILIARIZATION CHECKLIST		
Whe	n changing over the watch, relieving officers should pewing:	rsonally satisfy themselves regarding the	
	Standing orders and other special instructions of the M	laster relating to navigation of the ship;	
	Position, course, speed and draft of the ship;		
	Prevailing and predicted tides, currents, weather and vupon course and speed;	risibility and the effect of these factors	
	Procedures for the use of main engines to manoeuver control, and the status of the watchkeeping arrangement	-	
	The ship security status;		
	Sufficient time has been allowed for night vision to be maintained;	established and that such vision is	
Navi	gational situation, including but not limited to:		
	The operational condition of all navigational and safet during the watch;	y equipment being used or likely to be used	
	The errors of gyro and magnetic compasses the present known to be in the vicinity;	ce and movements of ships in sight or	
	The conditions and hazards likely to be encountered du	ıring the watch;	
	The possible effects of heel, trim, water density and squat on under keel clearance;		
	Any special deck work in progress		
Other points:			
Prepared by:			
Name of Cadet & Signature:			
Chec	Checked by: Date:		
Training Officer Name & Signature:			

NAVIGATION IN HEAVY WEATHER OR IN TROPICAL STORM				
	FAMILIARIZATION CHECKLIST			
	en changing over the watch, relieving officers should per owing:	rsonally satisfy themselves regarding the		
	Have the master, engine room and crew been informe	ed of the conditions?		
	Have all movable objects been secured above and below decks, particularly in the engine room, galley and in storerooms?			
	Has the ship's accommodation been secured and all p	orts and deadlights closed?		
	Have all weather deck openings been secured?			
	Have speed and course been adjusted as necessary?			
	Has the crew been warned to avoid upper deck areas	made dangerous by the weather?		
	Have safety lines/hand ropes been rigged where nece	essary?		
Have	e instructions been issued on the following matters:			
	Monitoring weather reports			
	Transmitting weather reports to the appropriate authorities or, in the case of tropical storms, danger messages in accordance with SOLAS			
Other Checks:				
Prepared by:				
Name of Cadet & Signature:				
Chec	Checked by: Date:			
Training Officer Name & Signature:				

NAVIGATION IN RESTRICTED VISIBILITY FAMILIARIZATION CHECKLIST			
Has the following equipment been checked to ensure that it is fully operational?			
	Radar, ARPA or other plotting facilities		
	VHF		
	Fog signalling apparatus		
	Navigational lights		
	Echo sounder, if in shallow waters		
	Watertight doors, if fitted		
	Have safety lines/hand ropes been rigged where nec	essary?	
	Has planning allowed for the provision of additional	bridge personnel if required?	
	Have the master and engine room been informed, and the engines put on stand-by?		
	Are the COLREGS being complied with, particularly wat safe speed?	vith regard to rule 19 and proceeding at as	
	Is the ship ready to reduce speed, stop or turn away	from danger?	
	If the ship's position is in doubt, has the possibility of anchoring been considered?		
Other Checks:			
Prepared by:			
Name of Cadet & Signature:			
Chec	Checked by: Date:		
Training Officer Name & Signature:			

V	PASSAGE PLAN APPRAISAL FAMIL	IARIZATION CHECKLIST		
Have	Have navigation charts been selected from chart catalogue, including:			
	Appropriate scale charts for ocean passages			
	Large scale charts for coastal waters			
	Planning charts			
	Routing, climatic, pilot and loadline zone charts			
Have	publications been selected, including:			
	Sailing Directions and pilot books			
	Light lists radio signals			
	Guides to port entry			
	Tide tables and tidal stream atlas			
Have	all navigation charts and publications been corrected	up to date, Including:		
	The ordering of new charts/publications, if necessary			
	Notices to mariners			
	Local area warnings			
	NAVAREA navigational warnings			
Have	the following been considered?			
	ship's departure and arrival draughts together with ar	ny restrictions on under keel clearance		
	due to squat			
	ship's cargo and any special cargo stowage/carriage re			
	If there are any special ship operational requirements	for the passage		
Have	the following been checked?			
	Planning charts and publications for advice and recom			
	Climatological information for weather characteristics			
	Navigation charts and publications for landfall features			
	Navigation charts and publications for Ships' Routeing Vessel Traffic Services (VTS)	Schemes, Ship Reporting Systems and		
	Has weather routeing been considered for passage?			
Have	the following preparations been made for port arriva	1?		
	Navigation charts and publications studied for pilotag	e requirements		
	Ship-to-Shore Master/Pilot Exchange form prepared			
	Pilot Card updated			
	Port guide studied for port information including arrival/berthing restrictions			
Othe	r Checks			
Prepared by:				
Nam	e of Cadet & Signature:			
Chec	ked by:	Date:		
Training Officer Name & Signature:				

Bridge Procedure Checklist PREPARATION FOR SEA FAMILIARIZATION CHECKLIST Has a passage plan for the intended voyage been prepared? Has the following equipment been checked and found ready for use? Anchor Echo Sounder

Electronic navigational position-fixing systems; Gyro/magnetic compass and repeaters; Radars Required AIS data inputs made, speed/distance recorder;	
Radars	
Required AIS data inputs made, speed/distance recorder:	
required in a sum in part in analysis are an area in a sum of the	
Clocks	
Has the following equipment been tested, synchronised and found ready for use:	
Rpm indicators;	
Emergency engine stops;	
Thruster controls and indicators, if fitted;	
Controllable pitch propeller controls and indicators, if fitted;	
Communications facilities, including:	
Search lights	
Signalling lamp	
Morse Light	
Sound Signalling appliance	
Whistle	
Fog, Bell and Gong system	
Steering gear, including manual, auto-pilot and emergency changeover arrangements and rudder indicators	
Window wiper/clear view screen arrangement	
Is the ship secure for sea?	
Cargo and cargo handling equipment secure;	
All hull openings secure and watertight;	
Cargo/passenger details available;	
Stability and draught information available.	
Prepared by:	
Name of Cadet & Signature:	
Checked by: Date:	
Training Officer Name & Signature:	

idge P	Procedure Checklist
	STEERING GEAR TEST ROUTINE FAMILIARIZATION CHECKLIST
MAI	NUAL STEERING POSITION
٧	The steering gear should be tested at all the manual steering positions on the `bridge:
	After prolonged use of the auto pilot
	Once per watch
	Before entering coastal waters
MU	LTIPLE STEERING GEAR POWER UNITS
	In coastal waters, use more than one steering gear power unit when such units are capable of simultaneous operation.
BEF	ORE DEPARTURE FROM PORT
	rtly before departure, check and test the steering gear including, as applicable, the operation of following:
	The main steering gear;
	The auxiliary steering gear;
	The remote steering control system
	The main steering position on the bridge
	The emergency power supply;
	The rudder angle indicators in relation to actual rudder position;
	The remote steering gear control system power failure alarms;
	The steering gear power unit failure alarms;
	Automatic isolating arrangements and other automatic equipment
	CKS AND TESTS
Che	cks and tests should include:
	The full rudder movement according to the required capabilities of the steering gear;
	The timing of rudder movement from hard over-to-hard over, using each steering gear power unit singly and together, to ensure consistency with previous tests;
	A visual inspection of the steering gear and its connecting linkage;
	The operation of the means of communication between the bridge and the steering gear compartment.
СНА	INGEOVER PROCEDURES
	officers concerned with the operation or maintenance of the steering gear should acquaint mselves with the changeover procedures.
	regular testing of manual steering should be an opportunity for all bridge team members to test practice procedures for change over between different modes, as appropriate. Typically these will ude:
	Auto Track Keeping to Auto Pilot
	Auto Pilot to Hand Steering

Bridge Procedure Checklist

STEERING GEAR TEST ROUTINE FAMILIARIZATION CHECKLIST

Hand Steering to Non-Follow-Up

Hand Steering to Emergency Steering

EMERGENCY STEERING DRILLS

Emergency steering drills should take place at least every three months and must include direct control from within the steering gear compartment, the communication procedure with the bridge and, where RECORDS

The dates on which these checks and tests are conducted, and the date and details of emergency steering drills carried out, must be recorded in the logbook.

Prepared by:

Name of Cadet & Signature:

Checked by:

Date:

Training Officer Name & Signature:

ON BOARD TRAINING WOR?BOOK

FOR OFFICERS INCHARGE OF A NAVIGATIONAL WATCH (DECK CADETS)
On ships 500 gross tonnage or more

EMERGENCY PROCEDURE GUIDE

UNIVERSITY OF CEBU, MARITIME EDUCATION & TRAINING CENTER

1ST EDITION 2015

GUIDANCE IN CASE OF ABANDON SHIP

Actions to be carried out:			
	Broadcast DISTRESS ALERT and MESSAGE on the authority of the master		
	Instruct crew members to put on lifejackets and wear adequate and warm clothing		
	Instruct crew members to put on immersion suits, if carried, if water temperature is below 16 $^{\circ}$ C		
	Order crew members to lifeboat stations		
	Prepare to launch lifeboats/liferafts		
	Ensure that lifeboat sea painters are attached to the ship		
	Embark all crew in the lifeboats/liferafts and launch		
	Ensure lifeboats/liferafts remain in safe proximity to the ship and in contact with each other		
Oth	er actions:		

Action to be carried out:

GUIDANCE IN CASE OF COLLISION

	Sound the general emergency alarm, and carry out a crew muster to check for missing or injured personnel
	Close watertight doors and automatic fire doors
	Manoeuvre the ship so as to minimise effects of collision without endangering other ships
	Switch on deck lighting at night
	Switch VHF to Channel 16 and, if appropriate, to Channel 13
	Muster passengers, if carried, at emergency stations
	Make ship's position available to radio room/GMDSS station, satellite terminal and other automatic distress transmitters and update as necessary
	Sound bilges and tanks after collision
	Check for fire/damage
	Take appropriate damage control measures
	Offer assistance to other ship
	Inform Coastal State Authorities if appropriate
	Preserve VDR or S-VDR records if not automatically protected
	Broadcast DISTRESS ALERT and MESSAGE if the ship is in grave and imminent danger and immediate assistance is required, otherwise broadcast an URGENCY message to ships in the vicinity
Oth	er actions:

DISTRESS ALERT AND FREQUENCIES GUIDE

TERRESTRIAL RADIO COMMUNICATION

The distress alert may be sent using digital selective calling (DSC) on one or more of the following frequencies which are dedicated exclusively to the purpose:

VHF	Channel 70
MF	2187.5 kHz
HF	4207.5 kHz
HF	6312 kHz
HF	8414.5 kHz
HF	12577 kHz
HF	16804.5 kHz

The distress alert should indicate:

- on which frequency the follow-up distress message will be transmitted; and
- the mode of transmission (telephony or telex).

The frequencies that should be used for the follow-up distress message:

Radio Telephone (R/T)	Radio Telex
Channel 16 VHF	
2182 kHz	2174.5 kHz
4125 kHz	4177.5 kHz
6215 kHz	6268 kHz
8291 kHz	8376.5 kHz
12290 kHz	12520 kHz
16420 kHz	16695 kHz

SATELLITE RADIOCOMMUNICATION

The distress alert by satellite should be transmitted, with absolute priority, to a Rescue Co-ordination Centre (RCC).

GUIDANCE IN CASE OF FIRE

Act	ion to be carried out:
	Sound the fire alarm
	Call master if not already on bridge and notify engine room
	Muster crew
	Establish communications
	Check for missing and injured crew members
	On locating the fire, notify all on board of that location
	If an engine room fire, prepare for engine failure and manoeuvre ship away from danger
Ass	ess fire and determine:
	The class of fire
	Appropriate extinguishing agent
	Appropriate method of attack
	How to prevent the spread of the fire
	The necessary personnel and firefighting methods
	Close down ventilation fans, skylights and all doors including fire and watertight doors
	Switch on deck lighting at night
	Make ship's position available to radio room/GMDSS station, satellite terminal or other automatic distress transmitters and update as necessary
	Inform Coastal State Authorities if appropriate
	Preserve VDR or S-VDR records if not automatically protected
	Broadcast DISTRESS ALERT and MESSAGE if the ship is in grave and imminent danger and immediate assistance is required, otherwise broadcast an URGENCY message to ships in the vicinity
Oth	ner actions:

GUIDANCE IN CASE OF FLOODING

Actions to be carried out:		
	Sound the general emergency alarm	
	Close watertight doors, if fitted	
	Sound bilges and tanks	
	Identify location of incoming water	
	Cut off all electrical power running through the area	
	Shore up area to stem water flow	
	Check bilge pump for operation	
	Check auxiliary pumps for back-up operation, as required	
	Make ship's position available to radio room/GMDSS station, satellite terminal and other automatic distress transmitters and update as necessary	
	Inform Coastal State Authorities if appropriate	
	Broadcast DISTRESS ALERT and MESSAGE if the ship is in grave and imminent danger and immediate assistance is required, otherwise broadcast an URGENCY message to ships in the vicinity	
Other actions:		

GUIDANCE IN CASE OF MAIN ENGINE OR STEERING FAILURE

ACTI	on to be carried out:
	Inform master
	Take action to manoeuvre ship away from danger
	Prepare for anchoring if in shallow water
	Exhibit "not under command" shapes/lights
	Commence sound signalling
	Broadcast URGENCY message to ships in the vicinity, if appropriate
	Modify AIS status message to communicate relevant information
	Inform VTS or port authority if in controlled or similarly monitored waters
In c	ase of a STEERING FAILURE:
	Inform engine room
	Engage emergency steering
	Prepare engines for manoeuvring
	Take way off the ship
Oth	er actions:

GUIDANCE IN CASE OF MAN OVERBOARD

Act	tions to be carried out:
	Release lifebuoy with light and smoke signal on the side the crew member has fallen overboard
	Take immediate avoiding action so as not to run over the man overboard
	Note ship's position, wind speed and direction, and time
	Activate GPS man overboard marker
	Sound three prolonged blasts of the ship's whistle and repeat as necessary
	Post a look-out with binoculars and instructions to maintain a continuous watch on the man overboard
	Engage hand steering, if helmsman available
	Commence a recovery manoeuvre, such as a Williamson turn
	Inform master, if not already on the bridge
	Inform engine room
	Hoist signal flag "O"
	Place engines on stand-by
	Muster rescue boat's crew, master and coxswain, and jointly assess launch/recovery risks
	Prepare rescue boat for possible launching
	Consider alternative means of MOB recovery if launch/recovery of rescue boat considered to be of excessive risk
	Distribute portable VHF radios for communication
	Rig pilot ladder/nets to assist in the recovery
	Make ship's position available to radio room/GMDSS station
	Broadcast URGENCY message to ships in the vicinity
	Preserve VDR or S-VDR records if not automatically protected
	Assume role of On Scene Co-ordinator
Otl	ner actions:

REQUIRED BOARDING ARRANGEMENTS FOR PILOTS

March 2001 Pilot ladder and ship's deck lit by forward shining overside light AT NIGHT be equally spac ÖZ ÖZ ÖZ ÖZ ÖZ ÖZ ÖZ H.Q.S. "Wellington", Temple Stairs, Victoria Embankment, London WC2R 2PN Tel: +44 20 7240 3973 Fax: +44 20 7240 3518 INTERNATIONAL MARITIME PILOTS' ASSOCIATION MECHANICAL PILOT HOIST In accordance with I.M.O. requirements and I.M.P.A. recommendations Approved by I.M.O. A PILOT LADDER COMBINED WITH AN ACCOMMODATION SHIPS WITH HIGH FREEBOARD (MORE THAN 9M) LADDER is usually the safer When no side door available ÖZ PILOT Must extend at least 2 metres above lower PILOT LADDER RIGGING FOR FREEBOARDS OF 9 METRES OR LESS SPREADER lin. 180cm long Height required by pilot Max. 8 steps between spreaders PILOT 18 REQUIRED BY PILOT MAN-ROPES without knots min. diam.

GUIDANCE IN CASE ON SEARCH AND RESCUE CDT. CHRISTIAN R. DE VENENCIA

Actions to be carried out:			
Take bearing of distress message if radio direction finder fitted			
Re-transmit distress message			
Maintain continuous listening watch on all distress frequencies			
Consult IAMSAR manual			
Establish communications with all other surface units and SAR aircraft involved in the SAR operation			
Plot position, courses and speeds of other assisting units			
Monitor X-band radar for locating survival craft transponder (SART) signal using 6 or 12 nautical mile range scales			
Post extra look-outs for sighting flares and other pyrotechnic signals			
Other actions:			