

ROMANIAN NAVAL ACADEMY



TRAINING SHIP MIRCEA C A D E T NOTEBOOK

CADET'S PERSONAL DATA:

Last name.....

First name.....

Date of Birth.....Place of Birth.....

Address.....

PROFESSIONAL TRAINING DATA:

Admission to the university (college):Date.....Annual Average Score.... 1st year.

Date.....Annual Average Score.....

2ndyear. Date.....Annual Average Score.....

3rd year. Date.....Annual Average Score.....

4th year. Date..... Annual Average Score.....

Endorsement of the University Secretariat

PRACTICE PERIOD DATA:

Vessel.....From.....To.....

Vessel.....From.....To.....

Vessel.....From.....To.....

Vessel.....From.....To.....

ASSIMILATION OF TECHNICAL STANDARDS (OCTS) OCCUPATIONAL SAFETY AND GENERAL SAFETY ON BOARD VESSEL

This specific training is carried out immediately after embarkment and before any other professional duties is assigned. The practice record book must be signed by the officer designated for this training after the completion of the O.C.T.S. training.

Ship	1 st SHIP	2 nd SHIP	3 rd SHIP	4 th SHIP
TRAINING FOR:	FIRST DECK OFFICER'S NAME. DATE AND SIGNATURE	FIRST DECK OFFICER'S NAME. DATE AND SIGNATURE	FIRST DECK OFFICER'S NAME. DATE AND SIGNATURE	FIRST DECK OFFICER'S NAME. DATE AND SIGNATURE
UNDERSTANDING SYMBOLS, SIGNS AND ALARM SIGNALS				
TAKE PERSONAL EMERGENCY ACTION ON BOARD SHIP.				
1. In responding to emergencies on board the candidate is able to: Take initial action in an emergency in accordance with vessel's emergency procedures. Raise the alarm promptly by the most appropriate method available. Implement the necessary evacuation, emergency shut down and isolation procedures. Communicate information to the emergency services promptly and accurately. Take action to comply with the vessel's muster requirements on recognizing an alarm signal.				
2. In proving the knowledge of fire fighting appliances the candidate is able to : To locate and operate the fire alarm main board and repeaters. Recognize and use the portable fire extinguishers as per their type and destination. Recognize and use the fixed fire fighting installations as per type and destination. Recognize and use the fire fighting protective equipment and tools .				
3. In fighting fires at sea the candidate is able to : Maintain personal safety during fire fighting. Use appropriate clothing and equipment with respect to anticipate hazards. Use lifelines and guidelines to comply with accepted fire fighting practice. Take individual actions which are appropriate to the emergency and on instructions received. Select and utilize the appropriate appliance to fight fire. Communicate clearly using recommended procedures.				

4. In simulating surviving at sea in the event of abandonment the candidate is able to : Respond correctly to abandonment signals. Take actions to comply with the vessel's muster procedure. Prepare and launch survival craft correctly. Wear clothing and survival equipment appropriate to the situation Board a life raft in the correct manner. Comply fully and promptly with survival instructions. Comply with recommended in-water survival positions and procedures Use survival techniques which maximize the safety of self and others.				
5. In simulating applying immediately basic first aid at sea the candidate is able to : Assess the situation to ensure the safety of self and others Raise the alarm and assess the casualty \identify the nature and extent of injuries Reassure and calm the casualty Give initial first aid which is appropriate to injuries .				
6. In taking charge of the launching and recovery of craft the candidate is able to : Direct the preparation, boarding and launching of craft, meeting the operational requirements . Ensure the craft clears the vessel safely Ensure the propulsion is available Supervise the disembarkation of personnel Take initial action on leaving the vessel to minimize the threat to survival Direct the recovery of the craft , to meet operational requirements				
7. In taking charge of pollution response the candidate is able to : Locate the antipollution store and the antipollution materials . Use in a proper manner the antipollution materials, tools and equipment. To act as per vessel response plan and accordingly with the muster list. To dispose the materials, tools, equipment and the pollution result.				
8. In taking charge of man overboard response the candidate is able to : Identify correctly the emergency signal. Take correct immediate action accordingly with vessel's emergency plan.				

KNOWLEDGE OF THE SHIP

(It is filled in by the DECK CADET OFFICER for each ship he has been embarked on)

SHIP'S PARTICULARS	1st SHIP	2nd SHIP	3rd SHIP	4th SHIP
DIMENSION AND CAPACITIES				
Maximum length (L _{max}) [m].				
Length between perpendiculars.				
Breadth (B) [m].				
Height (H) [m].				
Classification society.				
Ship's class according to the Register standards.				
Navigational restrictions according to the Register standards.				
Summer draught at load line (S) [m].				
Winter draught at load line (W) [m].				
Summer freeboard [m].				

Winter freeboard [m].				
Gross Register Tonnage (GRB) [m].				
Net Register Tonnage (NRT) [tonnes].				
Summer deadweight (Dw) [tonnes].				
Winter deadweight (Dw) [tonnes].				
Light unloaded displacement [tonnes].				
Fresh water draught allowance [m].				
Immersion per cm [t/cm].				
Unit moment of trim [MCTC].				
Bulk grain capacity [m ³].				
Bale capacity [m ³].				
Ideal stowage factor [m ³].				
Bulk liquid capacity [m ³] (for specialized ships).				
Refrigerated capacity [m ³] (for specialized ships).				
MAINTAIN STEEL WORK AND DECK EQUIPMENT				
1. In preparing for maintenance the candidate is able to : Plan the maintenance work in according with orders. Select and prepare the appropriate equipment, tools and materials required for maintenance task.				

Prepare the work are as per safe working practices.				
LIFE SAVING EQUIPMENT				
Lifeboats [No].				
Lifeboats capacity [No. of persons].				
Life – rafts [No.]				
Life – rafts capacity [No. of persons]				
Davits [type]				
Release rope diameter [mm.]				
Life belts [No.]				
Lifebuoys [No.]				
FIRE – FIGHTING EQUIPMENT				
Fire extinguishers[No. and capacity]:				
- Water extinguishers [litres]				
- Foam extinguishers [litres]				
- Dry powder extinguishers [Kg.]				
- CO ₂ extinguishers [Kg.]				
Fire hydrants [No., diam.]				

Fire hoses [No., diam.] [mm.]				
Breathing apparatus [type]				
Prevention system [type]				
NAVIGATIONAL AND COMMUNICATION EQUIPMENTS				
Magnetic compass [type]				
Gyrocompas [type]				
Autopilot [type]				
Radar [No., type]				
Goniometer [type]				
Radio direction finder [type]				
Loch [type]				
Echo Sounder [type]				
Navtex [type]				
G P S				
SATCOM				
GMDSS (No)				

EPIRB [No].				
PROPELLER SYSTEM				
Engine [type].				
Boilers [No., type]				
Bunker capacity [m ³ /tonnes]				
Daily consumption [tonnes]				
Economical speed [knots]				
Main engine output [kw, CP]				
Revolutions per minute [RPM]				
Critical speed.				
Endurance (at sea)				
Steering gear [type]				
MANOEUVRING / ANCHOR ARRANGEMENT				
Windlass [type]				
Capstan [type]				

WARPING ROPES

- fibre rope [No., diam.]				
- synthetic fibre [No., diam.]				
- wires [No., diam.]				
- towing line [No., diam.]				

ANCHORS

Port (type, weight) [tonnes]				
Starboard (type, weight) [tonnes]				
Spare (type, weight) [tonnes]				
Stream (type, weight) [tonnes]				
Port / Starboard cable (length) [quay]				

CONTRIBUTE TO MOORING, ANCHORING AND THE SECURITY OF THE VESSEL

In carrying out anchoring operations the candidate is able to: Prepare equipment correctly for anchoring operations according to instructions. Carry out anchoring operations in accordance with instructions received. Secure moorings and equipment on completion of operations. Use effective safe working practice during operations.				
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In carrying out anchoring operations the candidate is able to: Prepare correctly for mooring operations. Carry out mooring, letting go and shifting vessel operations in accordance with instructions received. Secure moorings and equipment on completion of operations. Rig and secure access arrangements Use effective safe working practices during operations.				
TANKS				
Ballast tanks [No.] [m ³]				
Fresh water tanks [No.] [m ³]				
Technical water tanks [No.] [m ³]				
Bunker tanks [No.] [m ³]				
Cargo tanks [No.] [m ³] (for specialized ships)				
Cargo pumps [No.]				
Discharge rate [tonnes/h]				

Specific Objectives of the Hands-on Training

- a) developing skills for the execution of activities on board ships, according to the provisions of the “Regulation of service on board naval ships”;
- b) developing skills for accurately determining the ship’s fix using coastal, estimated and astronomical methods;
- c) developing skills for the execution of several works aloft and in the rigging of the training ship;
- d) developing skills for the execution of the duties provided for in the “Combat Series Book”;
- e) developing skills for handling the boats on board the training ship;
- f) developing (individual or team) skills for damage control;
- g) developing skills for the use of individual and collective rescue equipment on board the ship;
- h) developing the skills for standing watch as OOW, mail runner as well as boat commander.

Contents and activities* / number of hours according to fields of study:

Chapter I FUNDAMENTALS OF NAVIGATION. – 36 hours

Chapter II ELECTROTECHNICS AND ELECTRICAL MACHINES. THEORY OF AUTOMATIC ADJUSTMENT SYSTEMS. – 24 hours

Chapter III ASTRONOMICAL NAVIGATION. – 30 hours

*** The detailed description of the related topics and sessions will be carried out annually through the hands-on training program approved by the department and attached to the documents regarding the organization and planning of the hands-on training**

Specific Competences

Knowledge and understanding (*knowledge and proper use of specific concepts related to the field of study*)

- 1. Knowledge, understanding, definition and correct application of the concepts used in the practice of astronomical navigation.
- 2. Knowledge, understanding, definition and correct application of the concepts used in the practice of electrotechnical systems, electrical machines and the theory of automatic adjustment systems

Explanation and interpretation (*explanation and interpretation of ideas, projects, processes as well as theoretical and practical contents of the field of study*)

- 1. Explaining the principles for plotting based on star observations.
- 2. Explaining the principles for making compass corrections onboard the ship based on star observations.
- 3. Explaining the operation principles of three-phased electrical generators, electrical transformers, electrical power grid onboard the ship, emergency generators, electrical accumulators, etc.

Instrumental - applicative competences (*planning, developing and assessing practical and specific activities; using several methods, techniques and investigation and application instruments*)

1. Knowing the algorithms for operations carried out onboard the ship in order to solve specific issues related to safe ship handling.
2. Using the knowledge acquired within fundamental and specialized fields of study: linear algebra, analytical geometry, spherical trigonometry, physics, fundamentals of seamanship and fundamentals of navigation, developing the skills for plotting by using coastal, estimate and astronomical procedures.
3. Using the charts and nautical publications (nautical ephemerides, nautical tables).
4. Applying the knowledge acquired within Electrotechnics and Electrical Machines regarding the generation and distribution of electrical power onboard the ship, with reference to the emergency generators, electrical accumulators.
5. Determining the fix by help of celestial bodies
6. Determining the magnetic compass and gyrocompass errors by use of astronomical means; introduction of corrections for such errors.
7. Using the Navisphere or star finder in order to prepare star observation or identification.

Attitudinal competences (*showing a positive and responsible attitude towards the field of study / cultivating a scientific environment centered on democratic values and relations / promoting a system of cultural, moral and civic values / tapping into one's own optimal and creative potential for scientific activities / involvement in institutional development and in the promotion of scientific innovations / engagement in partnership relations with other persons, institutions with similar responsibilities / participation in own professional development*)

1. Raising awareness of the contributions of the specific competences in the field of study to safe ship handling.
2. Developing a thorough and responsible approach to problems specific to the field of study and raising awareness of adjusting results and methods according to specific international regulations.
3. Capitalizing one's own optimal and creative potential to developing several scientific activities.
4. Participation in one's own professional development.

EVALUATION GRID

No. Crt.	Assessed competence	Grade/ accepted- rejected	
1.	Knowledge of the ship	Accepted/rejected	
2.	Knowing the abandon of the ship role	Accepted/rejected	
3.	Knowing the role of fire fighting	Accepted/rejected	
4.	Knowing the role of water fighting	Accepted/rejected	
5.	Knowing the role of man over board	Accepted/rejected	
6.	Knowledge of the cleaning role; its correct execution	Grade	
7.	Knowing the roles in sailing; their correct execution	Grade	
8.	Mode of involvement in practice activities (general attitude to training, general attitude towards crew members and colleagues, inclusion in the program, execution of related services [messroom responsible, GSB, guide, flagman , etc.])	Grade	
9.	Officer of the watch practice:		
	- knowledge of the attributions of the officer of the watch	Grade	
	- knowledge of the main bridge equipment	Grade	
	- knowledge of the navigation on paper charts (shore and estimated navigation procedures)	Grade	
	- knowledge of completing the navigation log and the logbook	Grade	
10.	Execution of bow/stern watch services, courier of the guard officer, helmsman, guard, etc	Grade	
11.	Knowledge of shipboard power generation and distribution equipment, including emergency generator and UPS systems	Grade	
12.	Identification of the main constellations (stars) used in celestial navigation; celestial calculations (adl.anmb.ro)	Grade	
13.	Knowledge of acoustic and whistle signals	Grade	
14.	Completing the cadet notebook	Grade	
FINAL GRADE (arithmetic average of grades)			

CONTENTS OF THE WORKBOOK

1. The main measures for security and healthy work on board Training ship *Mircea*
2. The main parts of the ship diagram
3. The main roles/procedures on board of ship: abandon of the ship , fire fighting and water fighting , man over board , cleaning , sailing etc.
4. Responsibilities of to the officer of the watch
5. Responsibilities of the bow/stern watch cadet, courier of the guard officer, helmsman, guard, etc.
6. Schematic of equipment on the main bridge
7. Rules for completing the navigation book and logbook;
8. Acoustic signals from bells and whistle
9. Main electric power diagram, inclusive the emergency diesel generator and UPS systems
10. Three navigation procedures (shore and estimated navigation) used during the voyage (with specific examples)
11. Three celestial calculations (adl.anmb.ro)

