

1. Course Title: Personal Survival Techniques

2. Scope With reference to convention Imo Model Course: This training is intended to meet the requirements set out in Table A-VI/1-1 of the STCW Code. The greatest and most immediate threat to life in the event of abandoning ship is cold exposure. Precautions to protect against it together with knowledge of survival equipment and its use, is the main message of this training other problems that a survivor will encounter are covered so as to ensure the highest possible chances of survival.

3. Objective:

- a. This course will provide sufficient knowledge for a person intending to go to sea, the essential basic knowledge and experience of personal survival principles and techniques that can be applied to maximize his/her chances of survival in the event of a marine casualty.
- b. On successful completion of this course, the participant should be able to:
 - a) Understand the principles of survival at sea.
 - b) Demonstrate the use of personal survival appliances.
 - c) Demonstrate launching, boarding and operation of survival craft.

4. Course Outline Shore base & On board Training:

1. Introduction, Safety and Survival

1. 1 Safety guidance	
1. 2 Principles of survival at sea	1.5
1. 3 Definitions, survival craft and appliances	

2. Emergency Situations

2. 1 Types of emergencies	
2. 2 Precautions	
2. 3 Foundering	
2. 4 Crew expertise	3.0
2. 5 Muster list and emergency Signals	
2. 6 Crew and emergency instructions	
2. 7 Extra equipment and survival	
2. 8 Abandoning ship complications	

3. Evacuation

3. 1 Abandoning ship – last resort	
3. 2 Personal preparation for abandoning ship	
3. 3 Need to prevent panic	1.5
3. 4 Crew duties to passengers	
3. 5 Muster list and emergency signals	
3. 6 Means of survival	

4. Survival Craft and Rescue Boats

4. 1 Lifeboats	
4. 2 Life rafts	4.5
4. 3 Rescue boats	

5. Personal Life-saving Appliances (Demonstrations)

5. 1 Lifebuoys	
5. 2 Lifejackets	1.5
5. 3 Immersion suits	
5. 4 Thermal protective aids	

6. Personal Life-saving Appliances (Demonstrations)		1.5
6. 1 Lifebuoys		
6. 2 Lifejackets		
6. 3 Inflatable lifejackets		6.0
6. 4 Immersion suits		
6. 5 Thermal protective aids		
6. 6 Personal survival without lifejacket		
6. 7 Boarding survival craft		
		6.0
7. Survival at Sea		
7. 1 Dangers to survivors		1.5
7. 2 Best use of survival craft facilities		
	1.5	
	1.5	
8. Helicopter Assistance		
8. 1 Communicating with the helicopter		
8. 2 Evacuation from the ship and survival craft		1.5
8. 3 Helicopter pick up		
	1.5	
	1.5	
9. Emergency Radio Equipment		
9. 1 Radiotelegraph installation for life boats		1.5
9. 2 Portable radio apparatus for survival craft		1.5
9. 3 Emergency Position indicating Radio Beacons		1.5
	1.5	
10. Assessment	0.75	2.25
	0.75	225
SUBTOTALS	17.25	9.75
TOTAL		27.0

5. Competence Standard/Course Syllabus Checked with up-to-date STCW/IMO Model Course:

Learning Objectives		Hours
1	Introduction, Safety and Survival	1.5
1.1	Safety guidance	.25
	.1 Understands the basic safety rules for personal survival .2 States the safety procedures during drills	
1.2	Principles of survival at sea	0.5
	.1 Knows the importance of regular training and drills .2 Describes how to prepare for any emergency .3 States the actions to be taken in case of .1 called to survival craft stations .2 required to abandon ship .3 in the water .4 aboard a survival craft .4 Knows the main dangers to survivors	
1.3	Definitions, survival craft and appliances .1 Defines .1 survival craft .2 rescue boat .3 float-free launching .4 free fall launching .5 immersion suit .6 inflatable appliance .7 thermal protective aid .8 launching appliance	0.75
2	Emergency Situations	3.0
2.1	Types of emergencies 1. Lists emergencies leading to foundering of ships e.g. collision, stranding, chemical reaction of dangerous and hazardous good and cargo, shifting of cargo, fire and explosion etc.	0.25
2.2	Precautions .1 States precautions taken against any emergency mentioned above	0.5
2.3	Foundering .1 Lists the basic principles in ship construction to combat foundering .2 Describe precautions and actions to be taken against foundering	0.25
2.4	Crew expertise .1 Understands the importance of crew skills and expertise in combating emergency and foundering	0.5
2.5	Muster list and emergency signals .1 Explains the need for muster list, emergency signals and emergency drill	0.25
		Hours
2.6	Crew and emergency instruction .1 States the necessity to be familiar with and have knowledge of the followings immediately after joining a ship: - emergency signals - instructions on muster list	0.5

	<ul style="list-style-type: none"> - location and use of life-saving appliances - fire plan - escape routes and emergency exits - emergencies involving the sinking of the ship - means provided for the survival on the ship and survival craft 	
2.7	Extra equipment and survival .1 Lists the extra equipment that is to be taken to the survival craft from the ship if time permits	0.25
2.8	Abandoning ship – complications .1 Knows that complications may arise in abandoning a ship due to: <ul style="list-style-type: none"> - problems in launching survival crafts - absence of lighting - absence of personnel assigned to certain duties 	0.5
3	Evacuation	1.5
3.1	Abandoning ship – last resort .1 Understands that the ship is the safest place for survival at sea and abandoning ship is the last resort	0.25
3.2	Personal preparation for abandoning ship .1 Describes how to prepare for abandoning a ship	0.25
3.3	Need to prevent panic .1 Explains the need to prevent panic	0.25
3.4	Crew duties to passengers .1 Describes the duties of crew with respect to passengers	0.25
3.5	Master's order to abandon ship .1 States that the order to abandon ship comes only as a verbal order from the master	0.25
3.6	Means of survival .1 Describes that means of survival includes: <ul style="list-style-type: none"> - keeping afloat - keeping warm - drinking water and food - communicating with ships and rescue services 	0.25

4	Survival Craft and Rescue Boats	4.5
4.1	Lifeboats .1 Describes different types of lifeboats as: <ul style="list-style-type: none"> - open - partially enclosed - self-righting partially enclosed - totally enclosed - totally enclosed with a self-contained air support system - fire protected .2 States requirements of lifeboat capacity for both passenger and cargo ships .3 Describes the procedures for lifeboat launching both by davits and free-fall .4 Knows the personal safety precautions during lifeboat launching .5 Describes the means of embarkation	2.25
4.2	Life rafts .1 Describes the two types of life rafts-inflatable and rigid .2 Describes the hydrostatic release arrangements for life rafts	1.5
4.3	Rescue boats .1 States the number requirements of rescue boats for passenger and cargo ships	0.75

	.2 knows the requirements for a lifeboat to be classed as a rescue boat	
5	Personal Life-saving Appliances	1.5
5.1	Lifebuoys .1 States the distribution of lifebuoys onboard the ships .2 Describes the requirements for additional attachments lifebuoys	0.25
5.2	Lifejackets .1 States the number requirements of lifejackets for passenger and cargo ships .2 Explains that lifejacket buoyancy is achieved by either inflating or packing with buoyant materials .3 Lists the attachments to the lifejackets	0.5
5.3	Immersion suits .1 Describes an immersion suit .2 State that it is a requirement to make immersion suits available to each person designated to crew the rescue boat .3 Knows that for both passenger and cargo ships with non-enclosed lifeboats at least three immersion suits must be carried for each lifeboat	0.5
5.4	Thermal Protective aids .1 Describes the main purpose of a thermal protective aid .2 Knows that for both passenger and cargo ships with non-enclosed lifeboats a thermal protective aid must be provided for persons not provided with immersion suit	0.25
6	Personal Life-Saving Appliances (Demonstrations)	6.0
6.1	Lifebuoys .1 Takes a lifebuoy from stowage, throws it into the water and checks the following functions as intended: - Lifebuoy - self-igniting lights - self-activating smoke signals - buoyant lifelines	0.75
6.2	Lifejackets .1 Dons and non-inflatable lifejacket correctly within a period of one minute and without assistance .2 Jumps into the water from a height while wearing a lifejacket .3 Swims a short distance while wearing a life jacket .4 Tests the whistle on the lifejacket	0.75
6.3	Inflatable lifejackets .1 Dons and inflatable lifejacket correctly within a period of one minute and without assistance .2 Jumps into the water from a height while wearing an inflatable lifejacket .3 Swims a short distance while wearing an inflatable lifejacket .4 Tests the whistle on the inflatable lifejacket .5 Tests the non-automatic method of inflation	1.25
6.4	Immersion suits .1 Unpacks and dons an immersion suit without assistance within 2 minutes .2 While wearing immersion suit and lifejacket: - climbs up and down a vertical ladder at least 5m in length - jumps from a height of not less than 4.5 meters into the water - swims a short distance and boards a survival craft	1.25

	<ul style="list-style-type: none"> - performs assigned duties during a simulated abandonment 	
6.5	Thermal protective aids <ul style="list-style-type: none"> .1 Unpacks and dons a thermal protective aid without assistance whilst in a survival craft or rescue boat .2 Removes a thermal protective aid which impedes swimming in not more than 2 minutes 	
6.6	Personal survival without lifejacket <ul style="list-style-type: none"> .1 Demonstrates how to keep afloat without the use of lifejacket/immersion 	0.5
6.7	Boarding survival craft <ul style="list-style-type: none"> .1 Boards a life raft from the ship (simulated) and from the water .2 Helps others to board .3 Demonstrates the use of equipment including a sea anchor .4 Rights a capsized life raft .5 Demonstrates how to abandon life raft 	1.5

		Hours
7	Survival at Sea	1.5
7.1	Dangers to survival <ul style="list-style-type: none"> .1 Describes dangers from and precautions against: <ul style="list-style-type: none"> - heat stroke, sun stroke, exposure to cold and hypothermia - effects of seasickness - failure to maintain body fluids correctly causing dehydration - misuse of food and fresh water - drinking sea water - fire or oil on water sharks 	
7.2	Best use of survival craft facilities <ul style="list-style-type: none"> .1 Explains correct use of drogue or sea anchor to reduce drift .2 Lists duties of a lookout .3 States means of facilitation detection by others .4 Knows how to maintain morale 	0.5
8	Helicopter Assistance	1.5
8.1	Communicating with helicopter <ul style="list-style-type: none"> .1 Recognizes the hand signals used .2 Describes how to communicate with the helicopter through a shore station 	0.25
8.2	Evacuation from the ship and survival craft <ul style="list-style-type: none"> .1 Knows the need for a clear pick-up space free of any obstruction or impediment .2 Describes the means of evacuation from survival crafts 	0.5
8.3	Helicopter pick up <ul style="list-style-type: none"> .1 Describes the harness, stretcher, rescue net, seat and basket .2 Describes the method of pick-up by the above strops .3 Recognizes all the hand and arm signal's for safe lifting .4 Knows how a helicopter crew can assist in pick-up .5 Understands the importance of following instructions from the helicopter crew .6 Demonstrates correct way to don the harness and adopt a safe posture in it 	0.75
9	Emergency Radio Equipment	3.0
9.1	Radiotelegraph installation for lifeboats <ul style="list-style-type: none"> .1 Knows the radiotelegraph requirements for lifeboats of passenger ships .2 Demonstrates how to send alarm and distress signals by radiotelegraph equipment .3 Demonstrates how to recharge the battery 	1.5

	.4 Demonstrates how to support the antenna at maximum practicable height .5 Demonstrates the use of the receiver	
9.2	Portable radio apparatus for survival craft .1 States the number and stowage requirements of radio apparatus .2 Demonstrates how to send alarm and distress signals .3 Demonstrates how to recharge the battery .4 Demonstrates how to support the antenna at maximum practicable height .5 Demonstrates the use of the receiver	0.75
9.3	Emergency Position Indicating Radio Beacons (EPIRB) .1 Explains the purpose of EPIRBs .2 Knows the number and stowage requirements for EPIRBs .3 Demonstrate how they are activated	0.75
10	Assessment	3.0
10.1	Theory	0.75
10.2	Practical and Orals	2.25

6. Entry Standard, Selection Criteria of Students:

Passed Secondary School Certificate

Age limits: 16-20 years.

Good health condition to be certified by a qualified doctor.

7. Intake limitation, with specific mention Instructor-student ratio:

For practical exercises student/teacher ratio should not exceed 10:1

8. Qualification and experience of instructors:

Minimum qualification of any instructor must be Class 2 Deck Officer/Class 2 Marine Engineer Officer Certificate of Competency of equivalent with sea experience in merchant vessels as required by Department of Shipping.

9. Qualification and experience of assessors: For practical exercises, there should be a minimum of two suitably qualified staff available. The person conducting the practical training must be in possession of a recognized First Aid qualification. The person conducting the practical training should also be in possession of a recognized life saving qualification.

10. Details Facilities & Equipment, materials and resources available for the training; Visual aids lecture Notes, Library facilities, Rental documents, Workshops Training Equipment: Navigational, Engineering, Communication, Seamanship etc:

- i. A normal classroom facilities with an overhead projector, VCR, TV and instructional video tapes;
- ii. A demonstration hall where an inflated life raft and all associated gear and equipment are displayed. This includes a display of posters and other visual aids relating to lifesaving appliances and systems commonly found on merchant ships, including;
 - donning instructions for different types of lifejackets
 - operating instructions for davit launched life rafts
 - hydrostatic release units
 - portable radio equipment
 - marine evacuation system (MES)
- iii. A pond where wet drill can be conducted.

The equipment provided for the conduct of the training is at Annex A

11. Conduct of Training with number of classroom lectures, practical work use of simulator, video etc:

Period → Day ↓	0900-0945	0945-1030	1030- 1115	1115- 1145	1145-1230	1230-1315	1315-1400	1400- 1500	1500-1545	1545-1630	1630-1715	1715- 1800
1 st Day	Emergency situations (MI)	Tea Break	Emergency situations (AR)	Introduction, safety and survival (AR)	Launch Break	Personal life-saving appliances (demonstrations) (DA)						
2 nd Day	Evacuation (MI)		Personal life-saving appliances (demonstrations) (DA)	Survival at sea (AR)		Helicopter assistance (MI)						
3 rd Day	Survival craft and rescue boats (MI)		Emergency radio equipment (AR)	Review and final assessment (AR)								

Legend:

1. MI=Capt. ~~Matiur Islam~~
2. AR=Ataur Rahman
3. DA=Dijarum Alam

12. Total duration of Training; Duration of Practical's:

Theory- 16.50 hrs.

Practical- 7.5 hrs.

Assessment- 3.0 hrs.

13. Assessment procedure, whether independent of instruction or continuous performance evaluation:

The training is organized so that, by demonstration, trainees are able to show that they meet the requirements of column 2 of Table A-VI-2 in accordance with the methods for demonstrating competence shown in column 3 of that table and the criteria for evaluating competence in column4.

A variety of sources of evidence are used which include evidence of candidates' ability, under realistic conditions, to take precautions against immediate threats to life in the event of having to abandon ship.

Short answer, multiple choices, fills in the blanks and true/false type questions in a written test are used for assessment. Practical assessment includes direct observation, oral questioning, simulation and role-play.

14. Formats of certificate to be issued with correct reference to STCW and reference to approval and authorization by the Department of Shipping and contact point of the issuing institution for verifying authenticity:



15. Maintenance of records in Data-base for facilitation of checking including assessments:

NMI will maintain a data-base of all the students who have completed the course. The following records for each individual will be kept so as to ensure that the certificate is issued to a candidate who have met the requirements as laid down by the governing authority regarding issuance of a certificate on Bridge Resource Management.

- Application form
- Assessment papers after completion of course
- Attendance Sheet
- Attested Xerox copy of the issued certificates & licenses
- A registered data-base in hard copy and soft form

16. Internal Quality Standard System if any. Students Impressions, past results:

The institute maintains quality standard system ISO 9001:2008, Certified by DNV GL

17. Course notice served, course conducted as per course notice, progression report served:

Will be complied as per DOS Instruction.

18. Attendance of Students and Instructors:

Students and Instructor attendance sheet attached.



Annex- 03

NATIONAL MARITIME INSTITUTE

TRAINING RECORD

Instructor:

Venue:

Subject:

Brief description on training material:

Attendance:

Signature
Management Representative

Signature
Principal

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