1. Course Title: Navigational Watch Rating (NWR)

2. Scope With reference to convention Imo Model Course:

The scope of the course is the training requirement of Section A-VI/3 of the STCW Code.

3. Objective:

The objective of this course is to train the personnel to make them capable of demonstrating the required minimum standard of competence set out in Table A-VI/3 of STCW '78 as amended for seafarers who may be designated to control fire-fighting operations.

4. Course Outline Shore base & On board Training:

REF.	COMPETENCE	HOURS
1.1	Carry out a watch routine appropriate to the duties of a rating forming part of an engine-room watch	20.0
1.2	For keeping a boiler watch: Maintain the correct water levels and steam pressures	2.50
1.3	Operate emergency equipment and apply emergency procedures	7.50
TOTAL		**30.00**

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

Carry out a watch routine appropriate to the duties of a rating forming part of an engine-room watch

1.1.1 Terms used in machinery spaces and names of machinery and names of machinery and equipment – 6.0 hours

REF.	REQUIRED PERFORMANCE	
1.1.1.1	**Marine Machineries**	3.0
	– Understands the basic function of main engine – Knows the operation of ballast and de-ballast – States the function of motors – Writes the function of steering gears – Writes the function of major pumps – Knows the function of purifier – Knows the basic function of refrigerator	
1.1.1.2	**Marine Equipments**	3.0
	– Knows the basic function of oily water separator – Shows the operation emergency compressor – Knows the operation of emergency fire pump – Understands the basic function of generators – Knows the function of various trips – Understands the fixed CO2 Installation	

1.1.2 Engine-room watch keeping procedures – 3.0 hours

REF.	REQUIRED PERFORMANCE	
1.1.2.1	**Watch keeping at engine-room**	3.0
	– Knows the name of various equipments & machineries	

	– Knows the various tripping alarms – Demonstrates the ability to fill up the logbook – States the proper relieving procedures – Writes when watch cannot be handed over – Understands the various safety precautions	

1.1.3 Safe working practices as related to engine-room operations – 3.0 hours

REF.	REQUIRED PERFORMANCE	
1.1.3.1	**Safe working practices at engine-room**	3.0
	– Knows the name of personal protective clothing – Knows the use of various tools – States the use of measuring instruments – Follows the checklist of enclose space – Understands the need to take hot work permit	

1.1.4 Basic environmental protection procedures – 3.0 hours

REF.	REQUIRED PERFORMANCE	
1.1.4.1	**Environment protection**	3.0
	– Understands that oily water separator requires alarming system – Knows the PPM limit of OWS – Knows the function of incinerator – Knows the function of comminuter – States the function of grinder – Knows the function of wire mesh/sieve	

1.1.5 Use of appropriate internal communication system – 2.50 hours

REF.	REQUIRED PERFORMANCE	
1.1.5.1	**Internal communication system**	2.50
	– Knows to operate AC communication system – Knows to operate DC communication system – Understands the communication by walkie talkie	

1.1.6 Engine-room alarm systems and ability to distinguish between the various alarms, with special reference to fire-extinguishing gas alarms– 2.50 hours

REF.	REQUIRED PERFORMANCE	
1.1.6.1	**Alarms system**	2.50
	– Shows ability to distinguish between the various alarms – Knows the characteristic of fire alarm – Knows the tripping alarms of equipment – Understands the need for keeping visual alarms as well – Knows how to raise fire alarm – Knows to call security duties	

1.2 For keeping a boiler watch: Maintain the correct water levels and steam pressures

1.2.1 Safe operation of boilers –2.50 hours

REF.	REQUIRED PERFORMANCE	
1.2.1.1	**Safe operation of boilers**	2.50
	– Describes the procedure of blow down the gauge glass – States the action to be taken in case of low level or no level in the gauge glass – Describes the procedure and precautions to be taken when lighting up a boiler from cold – States the safe blow down and scrumming procedures – Describes the procedure and precautions to drain and open up a boiler – Describes the procedure to be taken to enter work inside a boiler – Understands the importance of regular soot blowing.	

1.3 Operate emergency equipment and apply emergency procedures

1.3.1 Knowledge of emergency duties –2.50 hours

REF.	REQUIRED PERFORMANCE	
1.3.1.1	**Emergency duties**	2.50
	– Demonstrates ability to perform abandon ship duties – Understands fire duties – Understands man over board duties – Knows SOPEP duties – Knows other emergency duties	

1.3.2 Escape routes from machinery spaces –2.50 hours

REF.	REQUIRED PERFORMANCE	
1.3.2.1	**Emergency escape**	2.50
	– Identifies the nearest emergency route – Understands the need to keep emergency route free of all obstacles – Understands the need to mark the emergency route – Knows that emergency route to be properly illuminated	

1.3.3 Familiarity with the location and use of fire-fighting equipment in the machinery spaces – 2.50 hours

REF.	REQUIRED PERFORMANCE	
1.3.3.1	**Fire Fighting equipments**	2.50
	– Identifies varies kinds of fire extinguisher – Interprets fire control plan – States the fire duties – Knows the operation of BA set – Knows the use of fire hoses – Knows the operation of emergency fire pumps – States the function of EEBDS – States familiarity with fixed CO2 installation	

6. Entry Standard, Selection Criteria of Students:
A candidate must have SSC or higher certificate, with science back ground.
Age: More than 16 years.
Health: 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 4 Marine Engineer officer certificate of competency or equivalent with relevant sea experience.

9. Qualification and experience of assessors: Minimum qualification of any instructor must be Class 4 Marine Engineer officer certificate of competency or equivalent with relevant sea experience.

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:

Normal classroom facilities with an overhead projector must be available. VCR. Television and instructional Video Tapes are highly recommended. The demonstration room/laboratory will be required to contain the following items/models of items cross-sectioned for inspection or poster size drawings/photographs of the same so that the main components are visible:

1. Diesel and Steam Engines.
II. Boilers
III. Reciprocation air compressors and their safety valves.
IV. Various types of pumps.
V. Plate and tubular heat exchanger
VI. Valves: gate, Globe, butterfly, spring loaded, screw down and non-return type.

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

12. Total duration of Training; Duration of Practical's:
Total- 31.5 hrs.
Assessment- 1.5 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 below mentioned column 2 of Table A-VI/3 in accordance with the methods for demonstrating competence shown in column 3 of that table and the criteria for evaluating competence in column 4, by short answer, multiple choice, fill in the blanks and true/false type questions written test and by practical assessment, direct observation, oral questioning, simulation in practical test.

In case of failure, the student will be readmitted to the next batch of student.

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:

Cert No: 2016.02.008.0000276 DoS Reg. No: 2016.02.008.0011988

Course Completion Certificate

RATING FORMING PART OF A NAVIGATIONAL WATCH

This is to certify that, Mr. MOHAMMED FUSIUL ALAM Son of Mr. MOHAMMED NURUL ISLAM, Date & Place of Birth 01-07-1976 & CHITTAGONG, C.D.C.No. T/29372 has successfully completed course on **RATING FORMING PART OF A NAVIGATIONAL WATCH** conducted from **02-10-2016** to **06-10-2016** at the National Maritime Institute, Chittagong, Bangladesh

Issue Date: 09-10-2016 and Expiry Date 09-10-2021

Has been found duly qualified and satisfied the condition in accordance with the provisions of Regulation II/4 of Annex to the international convention on standards of Training, certification and watch keeping for seafarers(STCW), 1978 as amended.

CERTIFIED
TRAINING INSTITUTE

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 has 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:

Name & rank	Sign	Name & rank	Sign	Name & rank	Sign

Signature
Management Representative

Signature
Principal