

<b>DIRECTORATE GENERAL OF SHIPPING, GOVT. OF INDIA, MUMBAI</b>		
	TRAINING BRANCH	IS / ISO Clause No. 7.1
Ref : QMS 7.0	<b>Subject-Guidelines for Basic Training for Ships Operating in Polar water Course</b>	File No. TR/CIR/ 6(2)/2018
	Circular No. : STCW 2010 Training Circular No.23 of 2018	Dated 17.09.2018

1. The International Code for ships operating in Polar waters. (The Polar Code) entered into force through the new Chapter XIV of SOLAS (i.e. *Safety Measures for ships operating in Polar Waters*).

2. The amendment to the STCW Convention was carried out vide MSC Resolution 416 (97) dated 25.11.2016 and the STCW Code was amended vide MSC Resolution 417(97) dated 25.11.2016. The amendments to the STCW Convention and code introduced new training and certifications requirements for Masters, Chief Mates and Officers in charge of navigational watch on ships operating in Polar waters. The new training requirements introduced as follows:

2.1 Basic training for ships operating in polar waters

2.2 Advanced training for ships operating in polar waters.

3. The '*Manning and Training*' Chapter of Polar Code [Chapter 12, Part I-A] at Para 12.2 requires Masters, Chief Mates and Officers in charge of a navigational watch to have completed training to attain the required abilities that are appropriate to the capacities to be filled and duties and responsibilities to be taken considering the amended provisions of the STCW Convention and the STCW Code.

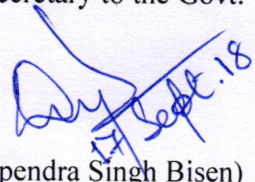
4. The DGS issued Circular NT/EXAM 02 of 2018 on Transitional provisions for Certification of Masters and deck officers on ships operating in polar waters. The said circular at para 7 specified the requirements for assessment for sea service performed onboard ship operating in polar waters or other equivalent waters towards issuance of certificate of basic training for continuing seagoing service onboard ships operating in polar waters.

5. To specify the requirement of Basic training for ships operating in polar waters, the Directorate General of Shipping has formulated the following guidelines for the conduct of the "Basic Training for Ships Operating in Polar Waters" course as annexed to this circular.

6. The ID No. assigned for the "*Basic training for ships operating in Polar waters*" Course is 309. The duration of this course is 34 hours (5 days) and the frequency of the course shall not exceed 48 in a calendar year.

7. DGS training institute, eligible to conduct this course and complying with the details specified in the annex will be eligible to apply for the conduct of this course along with a prescribed processing fee of Rs. 25,000/-.

8. This issue with the approval of Director General of Shipping & Secretary to the Govt. of India.



(Deependra Singh Bisen)  
Asstt. Director General of Shipping

To,

1. All Maritime Training Institutes.
2. Principal Officers, MMD, Mumbai/Chennai/ Kolkata/ Kochi/ Kandla
3. Shipping Masters, Mumbai/ Kolkata/ Chennai
4. INDOS Cell, DGS, GOI, Nau Bhavan Building, Mumbai- 400 038.
5. Nautical Branch, DGS, GOI
6. Engineering Branch, DGS, GOI
7. Training Branch
8. Hindi Cell (To translate in Hindi and put up in website
9. INSA/ FoSMA/ MASSA/ ICSSA/ MUU IMEI/ CMMI/ NUSI.
10. Computer Cell, DGS, GOI with a request to upload.
11. E-Governance Cell, DGS, GoI.
12. Guard File.
13. Sr. PS to DG(S) for information.
14. Sr. PS to Adtl. DG(S) for information.

## ANNEX

### GUIDELINES FOR THE CONDUCT OF BASIC TRAINING COURSE FOR SHIPS OPERATING IN POLAR WATERS

1. **AIMS** – This course is intended to provide training to navigating officers to meet the mandatory minimum requirements for training and qualification of masters and deck officers on ships operating in polar waters, as specified in Section A-V/4 of the STCW Convention and Table A-V/4-1 of the STCW Code. This course is also designed to meet the requirements of IMO Model course 7.11.
2. **OBJECTIVES** – A trainee successfully completing this course will gain:
  - 2.1 ability to contribute to safe operation of vessels operating in polar waters;
    - 2.1.1 *understanding of ice characteristics and areas where different types of ice can be expected in the area of operation.*
    - 2.1.2 *understanding of vessel performance in ice and low air temperature.*
    - 2.1.3 *understanding of safe operations and ship manoeuvrability in ice.*
  - 2.2 awareness to monitor and ensure compliance with legislative requirements;
  - 2.3 understanding to apply safe working practices, respond to emergencies;
    - 2.3.1 *understanding and awareness of correct crew preparation, working conditions and safety,*
    - 2.3.2 *understanding the need to ensure compliance with pollution- prevention requirements and prevent environmental hazards; and*
    - 2.3.3 *understanding skills to perform manoeuvres in order to safely operate ships in polar waters.*
3. **INFRASTRUCTURE AND EQUIPMENT REQUIREMENT** –
  - 3.1 **CLASS ROOM** – The lectures shall take place in a classroom of minimum 20 sq. m. with adequate desk and chair seating space for all trainees. Standard classroom facilities must be available such as appropriate projection system for power point presentation, whiteboard/chalkboard, video, ice charts etc.
  - 3.2 **Full Mission Simulator** –
    - 3.2.1 A ‘Full Mission Ship Handling Simulator’ [FMSHS] complying with the specifications given in DGS training branch Circular No. 06 of 2005 and additional ice specification given in **Appendix - 4** of this guideline. The simulator shall also comply with the performance standards specified in section A-1/12 of the STCW Code and be Type approved from any IACS Member or DG Shipping.
    - 3.2.2 Briefing / Debriefing space shall be provided in instructor’s station of the FMSHS. The Instructor station shall be equipped with seating capacity of one instructor and 4 trainees at any given time and with white / black board, overhead / LCD projector and a capability of projecting recording of ship

tracks and actions taken during the exercise for the purpose of debriefing. The Specifications of the Briefing / Debriefing room are given in **Appendix - 4**.

3.2.3 The full mission simulator shall replicate ice operations from a navigation bridge perspective and be able to create situations that provide an opportunity to acquire the required ice navigation skills and also be able to evaluate the trainee's grasp of the learning objectives and concepts of polar ice navigation.

4. **ELIGIBILITY FOR MARITIME TRAINING INSTITUTE** – Any DGS approved training institute may apply for obtaining approval for the course.

5. **ENTRY STANDARDS FOR CANDIDATES** –

5.1 Every candidate for a certificate in basic training for ships operating in polar waters shall hold a certificate as Master, chief mate or officer in charge of a navigation watch qualified in accordance with regulations II/1 or II/2 or II/3 respectively of the STCW Convention, issued or recognised by the Government of India.

OR

5.2 Deck trainees who have completed the minimum requisite sea service for appearing for the Certificate of Competency as Second Mate [FG] or NWKO (NCV) and have successfully completed followings courses approved by the Directorate.

5.2.1 Radar observers simulator course (ROSC).

5.2.2 Automatic radar plotting aids (ARPA).

5.2.3 Electronic Chart display and information system (ECDIS).

6. **COURSE INTAKE LIMITATIONS** –

6.1 The course intake is limited to a maximum of 8 trainees. [8 for classroom lectures with 4 for simulation exercises in FMSHS during exercises].

6.2 The maximum trainee to faculty ratio shall be 8 to 1 for classroom lectures and 4 to 1 for simulation sessions.

6.3 For simulation session, trainees shall be divided into two teams of maximum 4 trainees each. One team would be carrying out an exercise while the other is being lectured, debriefed or planning the next exercise.

7. **FACULTY REQUIREMENTS** – The following are the minimum qualifications recommended for course in charge and faculty delivering this course, based on the Knowledge, Understanding and Proficiency Table, set out in section A-V/4-1 of the STCW Code.

7.1 **The qualifications and experience of Course-in-charge & faculty :**

7.1.1 Certificate of Competency as Master (FG) issued or recognised by Government of India;

7.1.2 at least 5 years sea time as a certificated officer on merchant ships, of which at least 1 year as a management level officer;

7.1.3 has served on a ship in the capacity of a management level officer for a total period of at least 50 days in ice covered waters, of which 30 days should have been served in polar or equivalent waters.

**OR**

successfully completed a training course for ships operating in polar waters/ice navigation which includes practical onboard training during the course by institutes accepted by Directorate.

- 7.1.4 The course-in-charge or faculty should preferably have experience of being on a ship in ice conditions that require the ship to be assisted by an icebreaker or to make manoeuvres to avoid concentrations of ice that might have endangered the ship.
- 7.1.5 undergone and successfully completed an approved “Basic and Advanced training course for ships operating in Polar waters”.
- 7.1.6 have a detailed knowledge of the requirements of preparation of a vessel for operating in low air temperatures.
- 7.1.7 have an up-to-date knowledge of the various Ice Class and equipment requirements to navigate in ice.
- 7.1.8 have an up to date knowledge of correct crew preparation, working conditions and safety in ice conditions and low air temperatures; and
- 7.1.9 be fully aware of need to ensure compliance with pollution- prevention requirements;
- 7.1.10 have successfully completed the DG approved Training for Trainers and Assessors course.

8. **FACULTY STRENGTH** – Not less than two Master Mariners. A minimum of 50% of the entire portion must be covered by full time faculty.

9. **REQUIRED ATTENDANCE** – 100% attendance is required for successful completion of the course.

10. **COURSE OUTLINE, TIME TABLE AND DETAILED LEARNING OBJECTIVE** –

- 10.1 Course duration: 37 hrs [minimum 5 days]
- 10.2 Course outline: As per Appendix - 1
- 10.3 Course Time Table: As per Appendix - 2
- 10.4 Detailed Learning Objectives - As per IMO model course 7.11.

11. **HOLIDAYS** – Sundays shall be holidays. Independence Day (15<sup>th</sup> August) and Republic Day (26<sup>th</sup> January) shall be compulsory holidays. Trainees shall normally enjoy the holidays observed by the Govt. of the State in which the institute is located.

12. **ASSESSMENT and FEEDBACK** – Assessment through Written Test and Simulator Assessment (as per Trainee’s Assessment Checklist in **Appendix - 5**) shall be carried out. Also course feedback to be taken from each participant at the conclusion of the course.

13. **COURSE CERTIFICATE** – Course certificate, the format of which is appended at the **Appendix - 3** shall be issued by the DGS approved maritime training institute to all trainees who have successfully completed the DGS approved “Basic training for ships operating in Polar waters” Course.

14. **QUALITY STANDARDS** – As per DGS Order No. 5 of 2016

15. **INSPECTION** – As per DGS Order No. 5 of 2016

16. **FEES TO GOVERNMENT** – As per DGS Order No. 5 of 2016

17. **COST OF INSPECTIONS** – As per DGS Order No. 5 of 2016

18. **TEACHING AIDS** –

- A1 Instructor's Manual
- A2 Projector for power point presentations
- A3 White board
- A4 Videos
- A5 Ice charts
- A6 Full mission Ship Handling and Navigation Simulator which can simulate ice operations in polar waters (Specifications in Annexure I)
- A7 Nautical Charts (ENCs)

**Note:** Other equivalent teaching aids may be used as deemed fit by the faculty.

19. **REFERENCE MATERIAL(MANDATORY)** –

**Note:** Textbooks T1 to T5, TR4 or TR5, R5 and R9 mentioned below are mandatory. Other textbooks may be used as deemed fit by the faculty.

- T1 Ice Navigation in Canadian Waters, Icebreaking Program, Maritime Services, Canadian Coast Guard, Fisheries and Oceans Canada, Ottawa, Ontario (Revised August 2012)
- T2 Winter Navigation on the River and Gulf of St. Lawrence *Practical Notebook for Marine Engineers and Deck Officers* November 2011 Edition (TP14335E)
- T3 WMO Sea ice nomenclature
- T4 "Polar ship operations", The Nautical Institute
- T5 Handling Ships in Ice by Johan Buysse, The Nautical Institute publication
- TR4 Guide to Navigating Through the NSR, No. 4151B, 1996
- TR5 Ice Phenomenon Threatening Arctic Shipping, Alfred Tunik (Editor), Vladislav Benzeman, Sergey Klyachkin, Yevgeny Mironov, Yury Gorbunov, NikolayAdamovich, Backbone Publishing Company, 2012
- R5 Polar Code, International Code for Ships Operating in polar waters
- R9 IMO Guide to Cold Water Survival (2012)

20. **REFERENCE MATERIAL (NON-MANDATORY) -**

**Note:** Textbooks mentioned below are non mandatory and may be used as deemed fit by the faculty.

**Antarctica**

TA1 Secretariat of the Antarctic Treaty ([http://www.ats.aq/index\\_e.htm](http://www.ats.aq/index_e.htm)) for documents pertaining to Antarctic regulations, annexes and Madrid protocol

**Canada**

- TC1 Annual Notice to Mariner
- TC2 Arctic Ice Regime Shipping Control System
- TC3 Arctic Sailing Directions (ARC 400, ARC 401, ARC 402, ARC 403 &