Part A
Course Framework

■ Scope

This **Management Level Course for Marine Deck Officers (Function 3)** covers the mandatory minimum requirement for approved education and training as provided for under Regulation II/2 of the STCW Convention, 1978, as amended for masters and chief mates on ships of 500 gross tonnage or more; and to meet the minimum standard of competence specified in Section A-II/2 of the STCW Code under Function: Controlling the Operation of the Ship and Care for Persons on Board at the Management Level.

This course requires a total of **fifty-five (55)** instructional hours to cover the topics enumerated in Part B – Course Outline.

■ Training Outcomes

To meet the minimum standard of competence to undertake the tasks, duties, and responsibilities at the management level specified under Table A-II/2 (Function 3) in Section A-II/2 of the STCW Code.

Specifically, at the end of the course, the trainee must be able to:

- control trim, stability, and stress;
- monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security, and the protection of the marine environment;
- maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting, and other safety systems;
- develop emergency and damage control plans and handle emergency situations;
- use of leadership and managerial skills; and
- organize and manage the provision of medical care on board.

■ Entry Standards

Entry to the course is open to Marine Deck Officers who are holders of a Certificate of Competency (COC) under Regulation II/1 of the STCW Convention, 1978, as amended, and have an approved seagoing service as an Officer in Charge of a Navigation Watch on ships of 500 gross tonnage or more for not less than 12 months.

Course Certificate

Upon successful completion of the course, a Certificate of Completion shall be issued certifying a holder's compliance of the mandatory minimum requirements as specified in Regulation II/2 of the STCW Convention, 1978, as amended, and met the minimum standard of competence under Table A-II/2 Function 3 in Section A-II/2 of the STCW Code.

Course Intake Limitation

The number of trainees shall not exceed twenty-four (24) per class.

Staff Requirements

The course must have an Instructor and Assessor with a valid Certificate of Accreditation as Instructor and Assessor for Function 3 of Management Level Course for Marine Deck Officers issued by the Administration.

Additionally, the Supervisor of training and assessment may be assumed by the training manager, training director or any person designated by the MTI. It shall be required that he/she has full understanding of the training program and the specific objectives for this training course, and has undergone IMO Model Course 6.09 and IMO Model Course 6.10. On the supervision in the conduct of assessment, he/she shall have full understanding of the assessment system, assessment methods, and practice, and has undergone IMO Model Course 3.12.

Assessment

In determining the achievement of the required competence in Column 1 of Table A-II/2 under the Function: "Controlling the Operation of the Ship and Care for Persons on Board at the Management Level", the assigned assessor shall be guided by the Intended Learning Outcomes stipulated in the Course Syllabus and the assessment tasks enumerated in the Assessment Plan.

Teaching Facilities and Equipment

For the theoretical aspect of the course, lectures and demonstrations shall be held in a classroom with set of functional audio-visual equipment. The classroom must have an area of at least 42 square meters (sqm) with no side less than 5 meters and no structural obstruction. If the classroom is less than 42 sqm, the number of trainees that can be accommodated will be computed based on the 1.75 sqm area per trainee requirement, provided that no side shall be less than 5 meters.

For the conduct of practical exercises and assessment, the following training facilities and equipment shall be available:

Items	Quantity
Facilities and Equipment	
• Computer sets with software capable of simulating cargo and stress calculation, and provide stability and trim diagrams (1 computer set : 1 trainee)	*25 units of computer sets (which includes 1 computer set for the instructor)*
• Two-way handheld radios	4 sets

Notes:

1. *Computer software duly certified by International Association of Classification Societies (IACS), capable of simulating the required knowledge, understanding and proficiencies (KUPs) for cargo handling at the management level as per Table A-II/2 of STCW Code.*
2. *Required equipment to be used by the instructor during the demonstration is already included in the specified quantity.*
3. *All equipment must be labeled with MTI's name.*
4. *In addition to the required training equipment, the following first aid equipment must be available and permanently marked **"FOR EMERGENCY PURPOSES ONLY"** and placed in an accessible area:*
   - *First aid kit;*
   - *Stretcher;*
   - *Resuscitation kit with oxygen; and*
   - *Suction unit.*

■ Teaching Aids (A)

A1 Visual Presentations

A2 Training videos related to the topic

Note: When using videos and images from external sources, the MTI shall ensure that these are obtained from reliable sources, deliver accurate information, are of high-resolution quality, adhere to educational or industry standards, and in accordance with the approved criteria established by the Accreditation Division. Appropriate references/acknowledgements shall be indicated in the presentation slides.

A3 Sample Manuals
- Life-Saving Maintenance Manual
- Fire Fighting Equipment Maintenance Manual
- Contingency Plan Manual
- Safety Management System Manual
- Manual - Planned Maintenance System (PMS)

- Emergency Towing Arrangement (ETA) Manual
- Damage Control Plan

A4 Sample Checklists and Forms

- Risk Assessment
- Checklist for Inspection Plan
- Initial Assessment Checklist
- Shipboard Drill Matrix Form
- Training Needs Analysis (TNA) Form
- Detailed Plan Form
- Incident Report Forms
- Cargo Operation Forms
- Port Log

A5 Sample Pictures

- hull plating
- frames
- bulkheads
- other structural components

A6 Exercise Sheets

A6.1 Perform damage stability criteria and calculations on the assessment of ship's response to damage and flooding.

A6.2 Monitor the validity of certificates for timely application before renewal/extension through a given scenario and analyze the potential non-compliance with the IMO conventions and legislative requirements in a given scenario.

A6.3 Monitor the responsibilities of the international conventions and instruments.

A6.4 Evaluate the methods and aids used to prevent pollution of the marine environment by ships by the established procedures in a given scenario.

A6.5 Analyze the appropriate action of the ship’s crew in handling an emergency situation in accordance with the established procedure in a given scenario.

A6.6 Analyze the appropriate emergency and damage control plans based on the results of the evaluation taking into consideration the best management practices in a given scenario.

A6.7 Evaluate the effectiveness of the methods for fire prevention, detection, and extinction and its corresponding aids in accordance with emergency procedures on board

A6.8 Evaluate the effectiveness of the functions and proper use of life-saving appliances on board a ship in accordance with emergency procedures on board

A6.9 Plan fire and abandon ship drills in accordance with established emergency procedures through a given scenario.

A6.10 Analyze the appropriate measures to be taken to protect and safeguard all personnel on board in emergencies in accordance with the contingency plan manual in given scenarios.

A6.11 Analyze appropriate measures to be taken to limit damage and salve the ship following a fire, explosion, collision or grounding in accordance with the established procedures.

A6.12 Create appropriate learning, development and operational training requirements and activities in accordance with generally accepted principles.

A6.13 Apply task and workload management in accordance with safe working practices in a given scenario and monitoring the effectiveness of task and workload management and adjust as necessary.

A6.14 Apply effective resource management in accordance with the established safety procedures in a given scenario.

A6.15 Apply the most effective decision-making techniques in accordance with the established safety procedures in a given scenario.

A6.16 Develop, implement and oversee standard operating procedures standard operating procedures in accordance with operational requirements and applicable rules (e.g. master standing order, night order book, bunkering, cargo operations, etc.) in a given scenario.

■ IMO References (R)

R1 *International Convention on Standards of Training, Certification and Watch keeping (STCW) for Seafarers 1978*, as amended (latest edition). International Maritime Organization.

R2 *Assembly Resolution on the Revised International Code of Signals* (latest edition). International Maritime Organization.

R3 *Convention on Facilitation of International Maritime Traffic (FAL)* (latest edition). International Maritime Organization.

R4 *Convention on Limitation of Liability for Maritime Claims (LLMC)* (latest edition). International Maritime Organization.

R5 *International Aeronautical and Maritime Search and Rescue (IAMSAR)* (latest edition). International Maritime Organization and International Civil Aviation Organization (ICAO).

R6 *International Code of Signals (INTERCO)* (latest edition). International Maritime Organization.

R7 *International Convention for the Prevention of Pollution from Ships* (MARPOL 73/78) (latest edition). International Maritime Organization.

R8 *International Convention for the Safety of Life at Sea (SOLAS), 1974*, as amended (latest edition). International Maritime Organization

R9 *International Convention on Civil Liability for Oil Pollution Damage (CLC)* (latest edition). International Maritime Organization.

R10 *International Convention on Salvage* (latest edition). International Maritime Organization.

R11 *International Convention on Tonnage Measurement of Ships* (latest edition). International Maritime Organization.

R12 *International Health Regulations (IHR)* (latest edition). World Health Organization.

R13 *International Life-Saving Appliance (LSA) Code* (latest edition). International Maritime Organization.

R14 *International Medical Guide for Ships* (latest edition). International Maritime Organization.

R15 *Maritime Labour Convention*, 2006 (latest edition). International Maritime Organization.

R16 *Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG)* (latest edition). International Maritime Organization.

R17 *National Legislation*

- Philippines
- U.S.A.
- China
- Japan
- Australia
- EU

R18 *The International Safety Management (ISM) Code* (latest edition). International Maritime Organization.

Note: MTIs may use additional references as deemed necessary to meet the intended learning outcomes.

Bibliography (B)

B1 Barrass, C. B., & Derrett, D. R. *Ship Stability for Masters and Mates* (latest edition).

B2 Butterworth-Heinemann.Eyres, D. J. *Ship Construction* (latest edition). Butterworth-Heinemann.

B3 George, W.E. *Stability and Trim for Ship Officers* (latest edition). Cornell Maritime Press, Inc.

B4 Hill, C. *Maritime Law* (latest edition). Lloyd's of London Pres.

B5 Holder, E. A. *Maritime Training on Board* (latest edition). Witherby Seamanship International.

B6 Taylor, D. A. *Merchant Ship Construction* (latest edition). Marine Management (Holdings) Limited.

B7 *The Ship Captain's Medical Guide* (latest edition). Stationery Office Books.

Note: The MTI may choose books from the above bibliography, or they may use the latest edition of other references provided that their contents will address the required learning outcomes. Electronic publications may be accepted as alternatives to printed copies of the latest editions and must be sourced from authorized publishers.