

SUB-COMMITTEE ON STANDARDS OF
TRAINING AND WATCHKEEPING
44th session
Agenda item 3

STW 44/3/2
17 January 2013
Original: ENGLISH

VALIDATION OF MODEL TRAINING COURSES

Model course – Leadership and Teamwork

Note by the Secretariat

SUMMARY

<i>Executive summary:</i>	This document provides the draft of a new model course on Leadership and Teamwork
<i>Strategic direction:</i>	5.2
<i>High-level action:</i>	5.2.2
<i>Planned output:</i>	5.2.2.5
<i>Action to be taken:</i>	Paragraph 3
<i>Related document:</i>	STW 40/14

- 1 Attached in the annex is a new draft model course on Leadership and Teamwork.
- 2 The preliminary draft of this new model course was forwarded to members of the validation panel for their comments. Relevant comments on the draft course have been received from the validation panel and have been incorporated, as appropriate.

Action requested of the Sub-Committee

- 3 The Sub-Committee is invited to consider the above information and take action, as appropriate.

ANNEX

DRAFT IMO MODEL COURSE ON LEADERSHIP AND TEAMWORK

MODEL COURSE 1.39

Leadership and Teamwork

Acknowledgements

This model course on Leadership and Teamwork
was developed by the Global Maritime Education and Training Association
GlobalMET Limited

IMO wishes to express its sincere appreciation to the members of GlobalMET
for their valuable expert assistance and cooperation

CONTENT

Page

Introduction

Part A: Course framework

Part B: Course outline and timetable

Part C: Detailed teaching programme

Part D: Instructor manual

Annex 1: Leadership styles

Annex 2: Sample lesson plans

Part E: Assessment and evaluation

Appendices:

1. Application of leadership and teamworking skills provisions for controlling the operation of the ship and care for persons on board at the operational level, and at the management level. STCW Convention, 1978, as amended, tables A-II/1 and A-III/1
2. Guidelines on dealing with management level issues that arise during the course for operation level seafarers

Introduction to model courses

- **Purpose of the model courses**

The purpose of the IMO model courses is to assist maritime training institutes and their teaching staff in organizing and introducing new training courses, or in enhancing, updating or supplementing existing training material where the quality and effectiveness of the training courses may thereby be improved.

It is not the intention of the model course program to present a rigid "teaching package" to be "followed blindly". Nor is it the intention to substitute audio-visual or "programmed" material for interactive personal teaching. As in all teaching endeavours, the knowledge, skills and dedication of the teacher are the key components in the transfer of knowledge and skills to those whose learning is being assisted through the IMO model course material.

Because educational systems and the cultural backgrounds of learners in maritime subjects vary considerably from country to country, the model course material has been designed to identify the basic entry requirement and learner target group for each course in universally applicable terms, and to specify clearly the technical content and levels of knowledge and skill necessary to meet the intent of IMO conventions and related recommendations.

- **Use of the model course**

The subject of this model course "Leadership and Teamwork" at the operational level is better approached through interactive teaching and learning, such as in case study discussion groups, led by a facilitator. Dominance of one way "instruction" is not appropriate and "facilitator/instructor" rather than just "instructor" is the term used in this document. Similarly, "learner/trainee" is used instead of "trainee" or "student".

To use the model course the facilitator/instructor should review the course plan and detailed competences in the teaching programme, taking into account the information provided under the entry standards specified in the course framework. The actual level of knowledge and skills and the prior technical education of the learners/trainees should be kept in mind during this review, and any areas within the detailed syllabus which may cause difficulties should be identified. To compensate for such differences, the facilitator/instructor is expected to delete from the course, or reduce the emphasis on items dealing with knowledge or skills already attained by the learners/trainees. He should also identify any academic knowledge, skills or technical training they may not have acquired.

By analysing the detailed training programme and the academic knowledge and skills required to allow learning to proceed, the facilitator/instructor can design an appropriate pre-entry course or, alternatively, insert the elements of academic knowledge required to support the elements concerned at appropriate points within the course.

Adjustment of the course objectives, scope and content may also be necessary if the learners/trainees completing the course are to undertake industry duties which differ from the course objectives specified in the model course.

Within the course plan the course designers have indicated their assessment of the minimum time that should be allotted to each learning area. However, it must be appreciated that these allocations are arbitrary and assume that the learners/trainees have fully met all entry requirement of the course. The facilitator/instructor should therefore review these

assessments and may need to re-allocate the time required to achieve each specific learning objective.

- **Lesson plans**

Having adjusted the course content to suit the learner/trainee intake and any revision of the course objectives, the facilitator/instructor should draw up lesson plans based on the detailed syllabus. The detailed syllabus contains specific references to websites, textbooks or teaching material resources proposed for use in the course. Where no adjustment in the learning objectives of the detailed syllabus has been found necessary, the lesson plans may simply consist of the detailed syllabus with keywords or other reminders added to assist the facilitator/instructor in presenting the material.

- **Presentation**

The presentation of concepts and methodologies must be repeated in various ways until the facilitator/instructor is satisfied that the learners/trainees have attained each specified learning objective. The training programme is laid out in learning-objective format and each objective specifies *what the learner/trainee must be able to do* as the learning objective.

- **Implementation**

For the course to run smoothly and to be effective, considerable attention must be paid to the availability and use of:

- Properly qualified facilitators/instructors
- Support staff
- Rooms, other spaces and equipment
- Textbooks, technical papers
- Other reference material, particularly material available online

Thorough preparation is the key to successful implementation of the course. IMO has produced "Guidance on the implementation of IMO Model Courses", which deals with this aspect in greater detail and is included as an attachment to this course.

- **Competency based training and assessment**

In simple terms, "competency based training and assessment" means that a person is trained and assessed to meet specified standards that reflect the skills, knowledge and behaviours required to safely and effectively do specified work. In the seafaring context, the work could be keeping a bridge or engine room watch, or performing a task such as making a mooring line fast or starting the emergency fire pump.

A term that often appears in a competency based training system is "outcome based". This means that at the end of the training a person is able to perform a task to the appropriate standard (the outcome). To summarize, a competency based training and assessment system:

- is about what a person can do (i.e. the outcome of training);
- ensures training is to specified standards, (rather than ranking against others);
- reflects what a person must do in "real life" or in the workplace.

Before a person can be assessed, he or she must receive structured training that addresses all the standards required to gain the qualification, e.g. a certificate of competency. The training must be planned. A training plan will detail all the skills, knowledge and behaviours that must be taught to a person in a logical sequence of the training events, how the training will be conducted and recorded, the coordination of theory and practice and how and when assessments should be performed. It should also allow for planned and sound adjustments to training if contingencies arise. The plan must be documented and made available to training staff. Finally, the training must be monitored and controlled by an appropriately skilled and qualified person.

A qualification should not be awarded unless the person concerned is assessed against a standard; i.e. as provided in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 – (2011 Edition) (STCW 2011). To ensure the quality of the assessment, the standards must be measurable, objective, valid, authentic, sufficient and current. However, the cornerstone of a competency based training and assessment system is *rigorous and objective assessment of the trainee against valid standards*. This model course stresses the need for such assessment coupled with effective facilitation of learning, rather than the more traditional one-way process of lecturing and instructing. (Please refer to Part E Assessment and evaluation.).

Criteria for evaluating competence are listed in column 4 of tables A-II/1 and A-III/1 of Code A of STCW 2011, which should be used for guidance. These criteria are general – e.g. *Training objectives and activities are based on assessment of current competence and capabilities and operational requirements*, which requires knowledge of the abilities of course participants and the work that will be expected of them. The criteria are also more specific – e.g. *Communication is clearly and unambiguously given and received*, which can be readily assessed through demonstration by the course participants.

Many leadership and teamwork issues overlap into management level operations. If the course facilitator/instructor is dealing with such issues, guidelines on the use of leadership and management skills at the management level, including tables A-II/2 and A-III/2 of Code A which have provisions for management level work, are in appendix 2.

- Some of the above is based on material in *Competency Based Training and Assessment in the Aviation Environment*, Civil Aviation Advisory Publication July 2009, Civil Aviation Safety Authority, Australia.

Part A: Course framework

▪ Scope

This model course is intended to provide a person with the knowledge, skill and understanding of leadership and teamwork at the operational level on board a ship.

The course is designed to meet STCW requirements for the application of leadership and teamworking skills, in accordance with the 2010 Manila Amendments, specifically as stated in table A-II/1, Function: Controlling the operation of the ship and care for persons on board at the operational level.

▪ Objective

On completion of the course the learner/trainee should be able to demonstrate sufficient understanding and knowledge of leadership and teamworking and have the relevant skills to competently carry out the duties of officer in charge of a navigational watch on ships of 500 gross tonnage or more, or officer in charge of an engineering watch in a manned engine-room or designated duty engineer in a periodically unmanned engine-room. The knowledge, understanding and proficiency should include, but not be limited to, those listed in Column 2 of table A-II/1 and table A-III/1:

- Working knowledge of shipboard personnel management and training
- A knowledge of related international maritime conventions and recommendations, and national legislation
- Ability to apply task and workload management
- Knowledge and ability to apply effective resource management
- Knowledge and ability to apply decision-making techniques

▪ Entry standards

It is assumed that trainees undertaking this course will, through on-campus learning and onboard experience, have sufficient familiarity with shipboard operations to understand that leadership and teamworking is an essential part of their role on board at the operational level.

▪ Course certificate, diploma or document

Documentary evidence should be issued to those who have successfully completed this course, indicating that the holder has completed a course of learning in leadership and teamworking at the operational level, the minimum standard of which is based on this model course.

▪ Course delivery

The outcome of this course may be achieved through various methods, such as, but not limited to:

- classroom learning through presentations
- group discussions
- role play

- simulations
- case study analysis

These methods should be such as to ensure that all participants have adequate opportunities to interact and express themselves in face-to-face situations similar to those likely to occur when engaged in shipboard operations.

▪ **Course intake limitations**

The number of participants should depend upon the facilities, but should be not less than is sufficient to enable appropriate interaction among learners/trainees (e.g. eight) and should not exceed a number that can effectively learn given the resources available (e.g. twenty).

▪ **Staff requirements**

With respect to this course, a "facilitator/Instructor" is a person experienced in the interactive teaching of leadership and teamworking, but who also has knowledge of shipboard situations, including multicultural crews and difficulties in communicating clearly in the English language, on board as well as with people based ashore.

▪ **Teaching facilities and equipment**

The facilities should include additional rooms for break-out discussion groups, as well as the usual equipment such as overhead projection, interactive whiteboard, flip charts and access to computer terminals. Learning materials should include leadership and teamwork materials, including computer based training presentations and hard copy handouts, together with internet access and access to relevant library books and other publications.

▪ **Teaching aids**

- A1 Facilitator manual (Part D of this model course)
- A2 Assessment and evaluation (Part E of this model course)
- A3 Guidance on the implementation of model courses

▪ **Bibliography (B)**

The following suggested textbooks and websites are recommended for developing knowledge and understanding of leadership and teamwork:

- B1 Jeffery, R (2007) *Leadership Throughout*. London: The Nautical Institute
- B2 Bass, B.M. (1990) *Bass and Stodgill's Handbook of Leadership*. Third Edition. London: The Free Press
- B3 Carnegie, Dale (1936 rev 1981) *How to Win Friends and Influence People*. Random House
- B4 Drucker, P.F. (1968) *The Practice of Management*. London. William Heinemann
- B5 Drucker, P.F. (2003) *The New Realities*. New Brunswick, NJ. Transaction Publishers
- B6 Drucker, P.F. (2004) *The Daily Drucker: 365 Day of Insight and Motivation for Getting the Right Things Done*. Harper
- B7 Goleman, D. (1996) *Emotional Intelligence: Why It Can Matter More Than IQ*. London, Bloomsbury
- B8 Grint, K. (2005) *Leadership: Limits and Possibilities*. Basingstoke, Palgrave Macmillan

- B9 Handy, C.B. (1993) *Understanding Organisations*. London, Penguin
- B10 Hart, D. (1994) *Authentic Assessment: A Handbook for Educators*, Menlo Park, CA; Addison Wesley. Excerpted from *Classroom Teacher's Survival Guide*
- B11 Jones, S. & Glosling, J *Nelson's Way: Leadership Lessons from the Great Commander*. London; Nicholas Brealey
- B12 Kotter, J. (1990) *A Force for Change: How Leadership Differs from Management*. New York, The Free Press
- B13 Moon, J. A. (2002) *Reflection in Learning and Development*. London, Kogan Page
- B14 Maritime & Coastguard Agency (MCA) UK (2010) *The Human Element: A Guide to the Human Behaviour in the Shipping Industry*. London, The Stationery Office
- B15 Reason, J. (1990) *Human Error*. New York, Cambridge University Press
- B16 Reason, J. (1997) *Managing the risks of organizational accidents*. Aldershot, Ashgate
- B17 Senge, P. M. (1994) *The Fifth Discipline*. New York, Doubleday Business
- B18 Western, S. (2008) *Leadership: A Critical Test*. London, Sage
- B19 Sidney Dekker (2007) *Just Culture: Balancing Safety and Accountability*. Aldershot, Ashgate
- B20 Gunnar Fahlgren (2011) *Human Factors*. Bloomington, AuthorHouse
- B21 Grech, Horberry, Koester (2008) *Human Factors in the Maritime Domain*. London, CRC Press
- B22 Beaty, David (1995) *The Naked Pilot*. Shrewsbury, Airlife Publishing

▪ **Electronic media (E)**

- E1 Definitions: <http://www.collinsdictionary.com/dictionary/english/chain-of-command?>
- E2 Managing Values Across Cultures: www.culturocity.com, www.youtube.com/watch?v=4DSV1NUGS3o and many other videos on leadership and teamwork in a modern context
- E3 Situational Awareness etc: www.crewresourcemanagement.net
- E4 How's Your Cheese: www.acsf.aero/attachments (pdf)
- E5 Concepts of Leadership: www.nwlink.com/~donclark/leader/leadcon.
- E6 International Maritime Organization: www.imo.org
- E7 Measuring Outcomes: thelearningmanager.com/pubdownloads/developing
- E8 Dale Carnegie's Golden Book: dalecarnegie.com
- E9 Teamwork: en.wikipedia.org/wiki/Teamwork
- E10 Situation Awareness: en.wikipedia.org/wiki/Situation_awareness
- E11 Appraisal: en.wikipedia.org/wiki/Performance_appraisal
- E12 Risk Assessment: www.ccohs.ca/oshanswers/hsprograms/risk_assessment
- E13 Strategic Thinking – Appreciation: www.acumenmobile.com/papers
- E14 TeacherVision: www.teachervision.fen.com/assessment/new-teacher/48353.html and other TeacherVision sites dealing with different teaching and assessment topics
- E15 Leadership and Teamwork: www.essaycom.com/course/chapter3.htm

▪ **IMO & regulatory references**

- R1 International Convention on Standards of Training Certification and Watchkeeping for Seafarers, 1978, as amended (2011 Edition)
- R2 International Safety Management (ISM) Code and Guidelines on the Implementation of the ISM Code (2010 Edition)
- R3 MSC Circular 1014: Guidelines on Fatigue Mitigation and Management
- R4 MSC Res A 890(21) & Res A 955(23): Principles of Safe Manning & Amendments

- **Maritime Resource Management course**

Provided by the Swedish Club Academy AB, this is a modular training course currently dealing with human factor issues such as leadership and teamwork, effective communication, attitudes and cultural factors.

Part B: Course outline and timetable

Course outline

Indicative course outline – Total 20 hours minimum, inclusive of assessment time

Subject area and topics	Hours
1 Introduction 1. Introduction and administration	1.0
2 Working knowledge of shipboard personnel management and training 2. Organization of crew, authority structure, responsibilities 3. Cultural awareness, inherent traits, attitudes, behaviour, cross-cultural communication 4. Shipboard situation, informal social structures on board 5. Human error, situation awareness, automation awareness, complacency, boredom 6. Leadership and teamworking	4.0
3 Training, structured shipboard training programs Need for international maritime conventions, recommendations and national legislation 1. International maritime conventions – SOLAS, MARPOL, STCW, MLC, – role of IMO, ILO 2. Recommendations and national legislation	1.0
4 Ability to apply task and workload management 1. Planning and coordination 2. Personnel assignment 3. Human limitations 4. Personal abilities 5. Time and resource constraints 6. Prioritization 7. Workloads, rest and fatigue 8. Management (leadership) styles 9. Challenges and responses	4.0
5 Knowledge and ability to apply effective resource management 1. Effective communication on board and ashore 2. Allocation, assignment and prioritization of resources 3. Decision making reflecting team experience 4. Assertiveness and leadership, including motivation 5. Obtaining and maintaining situational awareness 6. Appraisal of work performance 7. Short and long term strategies	4.0

Knowledge and ability to apply decision-making techniques		4.0
1. Situation and risk assessment 2. Identify and consider generated options 3. Selecting course of action 4. Evaluation of outcome effectiveness 5. Decision making and problem solving techniques 6. Authority and assertiveness 7. Judgement 8. Emergencies and crowd management		
7	Self-awareness, personal and professional development	1.0
1. Knowledge of personal abilities and behavioural characteristics 2. Opportunities for personal and professional development		
8	Conclusion	1.0
1. Evaluation of course, individual assessments and advice, certificate presentations		
Total		20.0

Course Timetable

The following timetable for a 20 hour course conducted over 5 days should be considered indicative and adjusted in accordance with the needs of course participants. The topics should be covered, but with sufficient flexibility with respect to extent and depth that takes into account the differing learning needs of the participants.

Day	AM	PM
Day 1	Teaching working knowledge of shipboard personnel management and training 1. Organization of crew, authority structure, responsibilities 2. Cultural awareness, inherent traits, attitudes, behaviour, cross-cultural communication 3. Shipboard situation, informal social structures on board 4. Human error, situation awareness, automation awareness, complacency, boredom 5. Leadership and teamworking 6. Training, structured shipboard training programs	Continuation of morning teaching, with more case studies, group and plenary discussions
Day 2	Ability to apply task and workload management 1. Planning and coordination 2. Personnel assignment 3. Human limitations 4. Personal abilities 5. Time and resource constraints 6. Prioritization 7. Workloads, rest and fatigue 8. Management (leadership) styles 9. Challenges and responses	Continuation of morning teaching, with more case studies, group and plenary discussions
Day 3	Knowledge and ability to apply effective resource management 1. Effective communication on board and ashore 2. Allocation, assignment and prioritization of resources 3. Decision making reflecting team experience 4. Assertiveness and leadership, including motivation 5. Obtaining and maintaining situational awareness 6. Appraisal of work performance 7. Short and long term strategies	Continuation of morning teaching, with more case studies, group and plenary discussions
Day 4	Knowledge and ability to apply decision-making techniques 1. Situation and risk assessment 2. Identify and consider generated options	Continuation of morning teaching, with more case studies, group and plenary discussions