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MODEL
COURSE 7.08

电子电气员

ELECTRO-TECHNICAL OFFICER (2014)

中华人民共和国海事局 译



大连海事大学出版社
DALIAN MARITIME UNIVERSITY PRESS



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Foreword

Since its inception the International Maritime Organization (IMO) has recognized the importance of human resources to the development of the maritime industry and has given the highest priority to assisting developing countries in enhancing their maritime training capabilities through the provision or improvement of maritime training facilities at national and regional levels. IMO has also responded to the needs of developing countries for postgraduate training for senior personnel in administrations, ports, shipping companies and maritime training institutes by establishing the World Maritime University in Malmö, Sweden, in 1983.

Following the adoption of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW), a number of IMO Member Governments had suggested that IMO should develop model training courses to assist in the implementation of the Convention and in achieving a more rapid transfer of information and skills regarding new developments in maritime technology. IMO training advisers and consultants also subsequently determined from their visits to training establishments in developing countries that the provision of model courses could help instructors improve the quality of their existing courses and enhance their implementation of the associated Conference and IMO Assembly resolutions.

In addition, it was appreciated that a comprehensive set of short model courses in various fields of maritime training would supplement the instruction provided by maritime academies and allow administrators and technical specialists already employed in maritime administrations, ports and shipping companies to improve their knowledge and skills in certain specialized fields. With the generous assistance of the Government of Norway, IMO developed model courses in response to these generally identified needs and now keeps them updated through a regular revision process taking into account any amendments to the requirements prescribed in IMO instruments and any technological developments in the field.

These model courses may be used by any training institution and, when the requisite financing is available, the Organization is prepared to assist developing countries in implementing any course.

K.SEKIMIZU

Secretary-General

前 言

国际海事组织(IMO)自成立伊始就认识到人力资源在海运业发展中的重要性,并最优先考虑通过在国家和地区层面上提供或改善培训设备来帮助发展中国家增强其海事培训能力。为应对发展中国家主管机关、港口、航运公司及海事培训机构高层人员对研究生培训的需求,IMO于1983年在瑞典的马尔默成立了世界海事大学。

在《1978年海员培训、发证和值班标准国际公约》(STCW)通过的初期,一些IMO成员国政府就建议IMO应制定示范课程,以帮助对该公约的实施以及对航海技术新发展方面信息和技能的迅速转化。IMO培训顾问和咨询专家在对发展中国家的培训机构进行访问后确定,提供示范课程有助于教员改进现有课程的质量,也有助于提升对相关会议和IMO大会决议的实施。

此外,令人欣慰的是,海事培训领域中一套综合性简短课程将对海事院校提供的授课加以补充,并使得已在海事行政机关、港口和航运公司工作的行政管理人员和技术专家能够提高其在某些专业领域中的知识和技能。为此,在挪威政府的慷慨帮助下,IMO编写了示范课程以应对那些普遍发现的需求,同时考虑到对IMO文件中规定要求的任何修正及该领域内的任何技术发展,通过定期修订程序对示范课程进行更新。

任何培训机构可以使用这些示范课程,在筹措到必需的资金时本组织也准备帮助发展中国家实施任何课程。

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7.08 **MODEL COURSE**

Introduction

■ 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 programme to present instructors with a rigid “teaching package” which they are expected to “follow blindly”. Nor is it the intention to substitute audio-visual or “programmed” material for the instructor’s presence.

Rather, this document should be used as a guide with the course duration given as indicative of the expected time required to cover the required outcomes. The parties may modify this course to suit their respective training schemes.

As in all training endeavours, the knowledge, skills and dedication of the instructors are the key components in the transfer of knowledge and skills to those being trained through IMO model course material. For those following planned training schemes approved by the administration, it is intended that this training may form an integral part of the overall training plan and be complementary to other studies. The training may be undertaken in progressive stages; for such candidates, it is not appropriate to specify the duration of the learning, provided achievement of the specified learning outcomes is properly assessed and recorded.

The educational systems and the cultural backgrounds of trainees in maritime subjects vary considerably from country to country. For this reason the model course material has been designed to identify the basic entry requirements and trainee 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 technical intent of IMO conventions and related to recommendations.

This is the first edition of this model course. In order to keep the training programme up to date in future, it is essential that users provide feedback. New information will provide better training in safety at sea and protection of the marine environment. Information, comments and suggestions should be sent to the Head of the STCW and Human Element Section at IMO, London.

■ Use of the model course

To use the model course the instructor should review the course plan and detailed syllabus, 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 trainees should be kept in mind during this review, and any areas within the detailed syllabus which may cause difficulties, because of differences between the actual trainee entry level and that assumed by the course designer, should be identified. To compensate for such differences, the instructor is expected to delete from the course, or reduce the emphasis on, items dealing with knowledge or skills already attained by the trainees. He should also identify any academic knowledge, skills or technical training which they may not have acquired.

介 绍

■ 示范课程的目的

IMO示范课程的目的是协助海事培训机构及其教学人员组织和引入新的培训课程,提高、更新或补充现有的培训材料,以此改进培训课程的质量和培训效果。

本示范课程计划的意图并不是向教员呈交一个他们期望“盲目遵循”的“教学包”,其意图也不是用视听或“编排的”材料来代替教员的存在。

此外,本示范课程计划应作为一个指导来使用,为得到所要求的培训结果,计划里给出了预计时间作为课时。STCW公约的缔约国可以修改本示范课程以适应他们各自的培训计划。

像所有的培训一样,通过IMO示范课程资料把知识和技能传授给学员,该过程中,教员的知识、技巧和奉献精神起关键作用。对于那些按照主管机关批准的培训方案进行的培训而言,示范课程的意图是形成全面培训计划的必修内容,并作为其他学习研究的一个补充。培训应阶段式渐进进行;对某些学员而言,如果所要求的学习效果已得到正确地评估和记录,仍对其规定学习的学时是不合适的。

接受不同海事培训科目的学员所在国家的教育体制和社会背景存在着巨大的差异,因此示范课程资料用于使入学要求和每个课程具体目标(用通用术语表达)取得一致。为达到IMO公约及相关建议的专业意图,示范课程同时也清楚地规定了专业内容及其对应的知识和技能水平。

本次是示范课程的首发版本。为了保证培训课程能及时更新,使用者提供反馈信息非常重要。这些新的反馈信息将使海上安全和海洋环境保护方面能提供更好的培训。反馈信息、意见和建议应该送到STCW公约总部和在伦敦的国际海事组织人力资源部。

■ 示范课程的使用

为使用示范课程,教员应当审视课程计划和教学大纲细则,考虑课程框架中规定的入学标准所提供的信息。在审视过程中,应当牢记学员知识和技能的实际水准以及从前的技术教育水平,并应当识别出在教学大纲细则范围内由于学员实际入门水准与课程设计者假定的水准之间的差异,可能引起困难的任何部分。为弥补这些差异,希望教员将涉及学员已经掌握的知识和技能的项目从课程中删去或不做重视。此外,教员应当识别出学员可能还没有掌握的任何学术知识、技能或技术训练。