

中华人民共和国海船船员适任考试培训教材

English for the Marine ETR

电子技工英语

 中国海事服务中心组织编写



中华人民共和国海事局审定



大连海事大学出版社
Dalian Maritime University Press



人民交通出版社
China Communications Press

中华人民共和国海船船员适任考试教材

013

编委会成员

编委(9)

编出版文男入，京北，书出版学大事新主文，主大—，融主学知索编\ 语英工技干申

English for the Marine ETR

电子技工英语

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中国海事服务中心组织编写

中华人民共和国海事局审定

98825718-1110, 真

com

行发并出学大

隔日六「第月8平

印张8.8

册数:1—3000册

址址:大連市旅順路1号

http://www.

言编印身译知美查大

2013年8月第1版

刷面15寸,185mmX260mm

字数:182千

查中参:人 编 出

吉香曹:群编实

封面设计:王 彬



大连海事大学出版社



人民交通出版社

© 中国海事服务中心 2013

图书在版编目(CIP)数据

电子技工英语 / 滕宪斌等主编. —大连: 大连海事大学出版社; 北京: 人民交通出版社, 2013. 6

中华人民共和国海船船员适任考试培训教材. 电子电气专业

ISBN 978-7-5632-2877-5

I. ①电… II. ①滕… III. ①电子技术—英语—职业培训—教材 IV. ①H31

中国版本图书馆 CIP 数据核字(2013)第 144663 号

大连海事大学出版社出版

地址: 大连市凌海路1号 邮编: 116026 电话: 0411-84728394 传真: 0411-84727996

<http://www.dmupress.com> E-mail: cbs@dmupress.com

大连美跃彩色印刷有限公司印装

大连海事大学出版社发行

2013 年 6 月第 1 版

2013 年 6 月第 1 次印刷

幅面尺寸: 185 mm×260 mm

印张: 8.5

字数: 182 千

印数: 1~3000 册

出 版 人: 徐华东

责任编辑: 席香吉

封面设计: 王 艳

版式设计: 海 大

责任校对: 华云鹏

ISBN 978-7-5632-2877-5 定价: 26.00 元

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中国海事服务中心

2012年3月



前言

《中华人民共和国海船船员适任考试和发证规则》(简称 11 规则)已于 2012 年 3 月 1 日起生效,新的《中华人民共和国海船船员适任考试大纲》也将于 2012 年 7 月 1 日开始实施。为了更好地指导帮助船员进行适任考试前的培训,进一步提高船员适任水平,在交通运输部海事局领导下,中国海事服务中心组织全国有丰富教学、培训和航海实际经验的专家共同编写了与《中华人民共和国海船船员适任考试大纲》相适应的培训教材。本套教材编写依据 STCW 公约马尼拉修正案,采用图文并茂的形式,改变了长期以来以文字为主的教材编写方式。本套教材的创新模式对今后的船员适任培训具有重要的指导意义。

本套教材知识点紧扣考试大纲,具有权威、准确、系统、实用的特点,重点突出船员适任考前培训和航海实践需掌握的知识,旨在培养船员具备在实践中应用知识的能力,并可作为工具书帮助船员上船工作使用。

本套教材由航海英语、船舶操纵与避碰、航海学、船舶结构与货运、船舶管理(驾驶)、(高级)值班水手业务、高级值班水手英语、轮机英语、船舶动力装置、主推进动力装置、船舶辅机、船舶电气与自动化、船舶管理(轮机)、(高级)值班机工业务、高级值班机工英语、电子电气员英语、船舶电气、船舶机舱自动化、信息技术与通信导航系统、船舶管理(电子电气)、电子技工业务、电子技工英语组成。

本套教材在编写、出版工作中,得到了各直属海事局、航海院校、海员培训机构、航运企业以及人民交通出版社、大连海事大学出版社等单位的关心和大力支持,特致谢意。

中国海事服务中心

2012 年 3 月



编者的话

STCW 公约马尼拉修正案于 2012 年 1 月 1 日正式生效实施,修正案中增加了“电子技工”的职位。受中华人民共和国海事局委托,中国海事服务中心组织编写了《中华人民共和国海船船员适任考试培训教材》,本教材为这套系列教材之一。

《电子技工英语》根据中华人民共和国海事局制定的《中华人民共和国海船船员电子技工适任考试大纲》编写,满足 STCW 公约马尼拉修正案的要求,适合于无限航区 750 kW 及以上船舶电子技工适任证书培训、考试使用,也可作为海事大专院校的教学用书。

按照《中华人民共和国海船船员电子技工适任考试大纲》的要求,全书分为四章:第一章船舶常用词汇,第二章船舶电子电气专业词汇,第三章船舶电子电气专业英语简单应用,第四章船舶电子电气业务日常用语。

本教材由天津海运职业学院滕宪斌、王冉然,青岛远洋船员职业学院陈蓓,江苏海事职业技术学院吴雪花主编(主编排名不分先后)。全书由滕宪斌统稿,青岛远洋船员职业学院张我友老师参加编写,大连海事大学牛小兵教授主审,中国海事服务中心张凤羽等参与了主要审定工作。同时,本教材的编写得到了中华人民共和国海事局、相关航海院校、航运企业的鼎力支持。其中特别感谢大连海事大学张晓峰教授对编写工作的悉心指导和帮助。

由于本书内容涉及的知识面广,而编者水平有限,又限于时间仓促,书中难免有不当之处,恳请读者批评指正。

编者

2013 年 6 月



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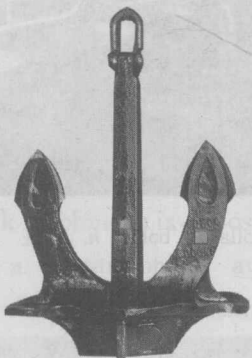
Chapter 1

Ship Vocabulary

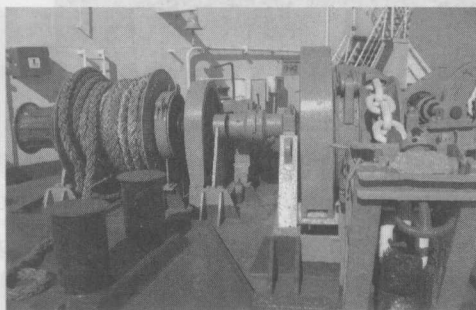
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Lesson 1 Deck Machinery

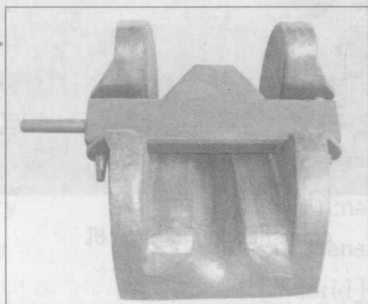
Warm-up



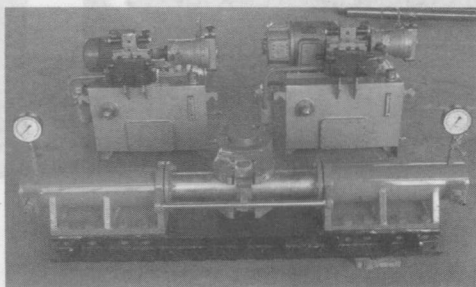
anchor ['æŋkə] n. 锚



windlass ['windləs] n. 锚机



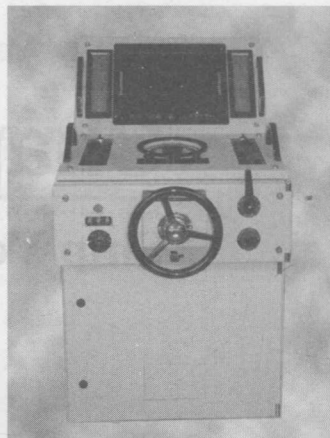
chain stopper 制链器



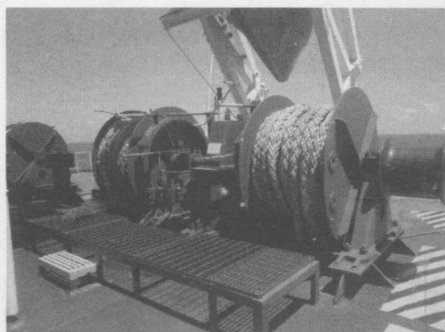
steering gear 舵机



rudder blade 舵叶



Steering Control System 操舵仪



mooring winch 系泊绞车



bollard ['bɒləd] n. 缆桩



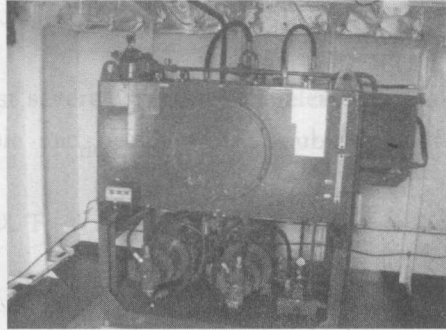
fairlead ['feəli:d] n. 导缆孔



crane [kreɪn] n. 起货机



hatch cover 舱口盖



hatch pump 开舱泵

Text

Deck machinery is extensive and varied. It can be divided into anchor handling equipment, steering gear, mooring equipment, cargo handling equipment, hatch covers and so on.^[1] The windlass is the usual anchor handling device. The steering gear is one of the most important services in the ship and its main function is to control the ship's course. Derricks and cranes are cargo handling devices to load and unload cargos from the ship, but cranes have replaced derricks on many modern ships. Winches with various arrangements of barrels are the usual mooring equipment used on board ships. The winch barrel or drum is used for hauling in or letting out the wires or ropes which will fasten the ship to the shore.^[2] Hatch covers are used to close off the hatch opening and make it watertight. Steel hatch covers comprise a number of linked steel covers. Various designs exist for particular applications, but most offer simple and quick opening and closing, with speed up the cargo handling operation.^[3]

Most deck machinery is exposed to the most severe aspects of the elements, so constant inspection is a precaution to avoid trouble and prolong the trouble-free life of the equipment.^[4] As an Electro-technical rating, he should periodically maintain the electric deck machinery. When work on the deck alone, a person should arrange to communicate at regular intervals with other persons in the machinery space or on the bridge.

(238 words)

New Words & Expressions

deck	[dek]	n.	甲板
machinery	[mə'ʃɪnəri]	n.	机械, 机器
extensive	[ɪk'stensɪv]	a.	广泛的, 大量的
varied	['veərið]	a.	多变的, 各式各样的
equipment	[i'kwɪpmənt]	n.	设备, 装备



steer	[stiə]	vt.	掌舵, 驾驶
gear	[giə]	n.	装置, 齿轮
moor	[muə]	vt.	系住, 使停泊
cargo	['kɑ:gəu]	n.	货物
hatch	[hætʃ]	n.	舱口
course	[kɔ:s]	n.	航向
load	[ləud]	vt.	装载, 装货
unload	[ʌn'ləud]	vt.	卸载, 卸货
derrick	['derik]	n.	吊杆, 吊杆式起货机
winch	[wintʃ]	n.	绞车
barrel	['bærəl]	n.	卷筒
watertight	['wɔ:tətait]	a.	水密的, 不漏水的
steel	[sti:l]	a.	钢制的
design	[di'zain]	n.	设计
particular	[pə'tikjulə]	a.	特别的, 详细的
application	[æpli'keiʃən]	n.	应用
inspection	[in'spekʃən]	n.	检查
precaution	[pri'kɔ:ʃən]	n.	预防, 预防措施
prolong	[prə'lɒŋ]	vt.	延长, 拖延
communicate	[kə'mju:nikeit]	vi.	通信, 联络
bridge	[bridʒ]	n.	驾驶台
winch barrel/winch drum			绞缆筒
haul in			收起
let out			放出
trouble-free life			无故障使用寿命
ETR (Electro-technical rating)			电子技工
machinery space			机舱

Notes

- [1] It can be divided into anchor handling equipment, steering gear, mooring equipment, cargo handling equipment, hatch covers and so on.
甲板机械可分为: 起锚设备、舵机、系泊设备、起货设备、舱口盖等。
- [2] The winch barrel or drum is used for hauling in or letting out the wires or ropes which will fasten the ship to the shore.
绞缆筒用来收起或放出缆绳把船固定到岸上。
- [3] Various designs exist for particular applications, but most offer simple and quick opening and closing, with speed up the cargo handling operation.



舱口盖根据特殊的用途有不同的设计,大多能够简单、快速地开启和关闭,以加速货物的装卸。

- [4] Most deck machinery is exposed to the most severe aspects of the elements, so constant inspection is a precaution to avoid trouble and prolong the trouble-free life of the equipment.

大部分的甲板机械暴露在最恶劣的天气状况下,所以定期检查是避免故障和延长设备无故障寿命的预防办法。

Exercises

I. Translate the following words and phrases.

a

1. 锚
2. 锚机
3. 舵机
4. 系泊绞车
5. 起货机
6. 舱口
7. 货物
8. 吊杆式起货机
9. 甲板
10. 驾驶台

b

1. winch
2. barrel
3. chain stopper
4. rudder blade
5. Steering Control System
6. mooring winch
7. bollard
8. fairlead
9. hatch pump
10. hatch cover

II. Answer the following questions according to the text.

1. What does deck machinery include?
2. What is the usual anchor handling device?
3. What is used to control the ship's course?



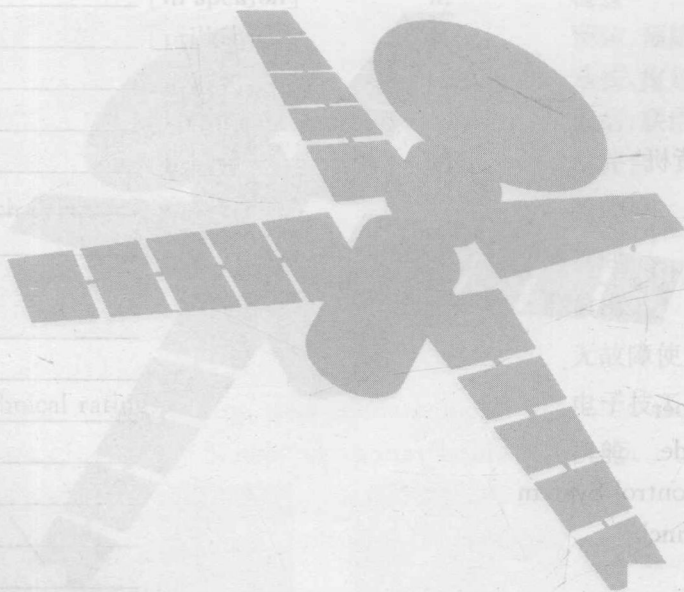
4. What are cranes used for?
5. In order to prolong the trouble-free life of deck equipment, what should be done?

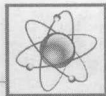
III. Choose the correct words to fill in the blanks.

A. bridge	B. big	C. determines	D. fails
E. upwards	F. is controlled by	G. electrical	

The direction of the ship _____ the steering gear. As the ship moves through the water, the angle of the rudder at the stern _____ the direction it will move. Modern ships are so _____ that moving the rudder necessitates the use of hydraulics or _____ power.

Tankers of 10,000 tons gross tonnage and _____ must have two independent steering gear control system which are operated from the _____. When one _____, changeover to the other must be immediate and achieved from the bridge position.

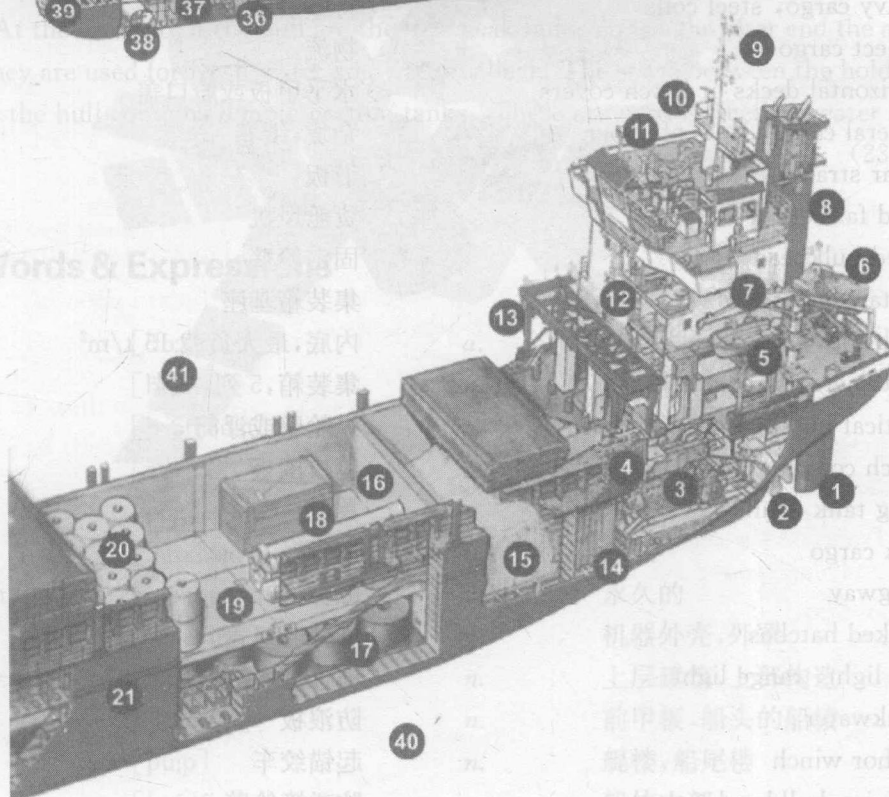
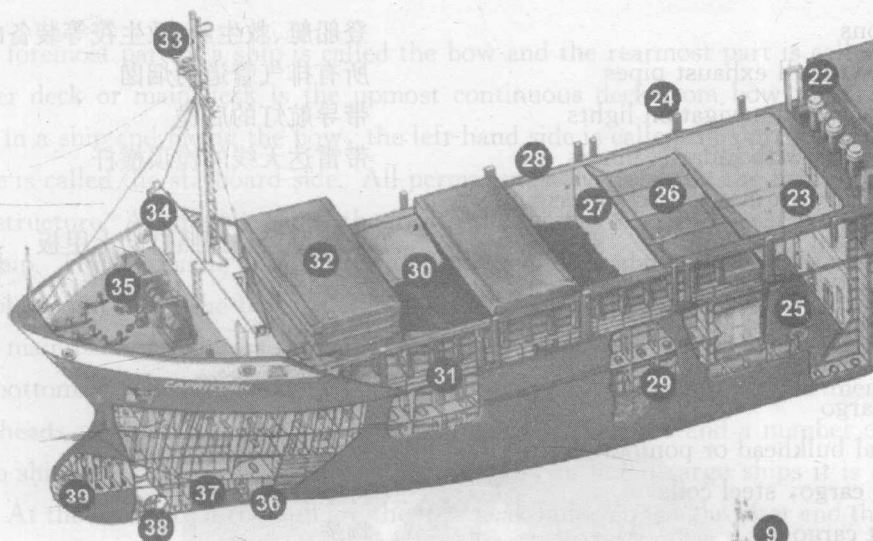




Lesson 2 Ship Structure

Warm-up

Text





- | | |
|---|------------------------------|
| 1. Rudder | 舵 |
| 2. Propeller | 螺旋桨 |
| 3. Main engine with gearbox and shaft generator | 带齿轮箱和轴带发电机的主机 |
| 4. CO ₂ bottles in CO ₂ room | 二氧化碳间的二氧化碳瓶 |
| 5. Man overboard boat (MOB) | 登船艇 |
| 6. Free fall lifeboat | 自由降落救生艇 |
| 7. Crane for MOB, lifeboat, liferaft and provisions | 登船艇、救生艇、救生筏等装备的克令吊 |
| 8. Funnel with all exhaust pipes | 所有排气管道的烟囱 |
| 9. Rear mast with navigation lights | 带导航灯的后桅 |
| 10. Cross trees with radar scanners | 带雷达天线的桅顶横杆 |
| 11. Top deck with magnetic compass and search light | 带磁罗经和探照灯的上甲板 |
| 12. Accommodation | 居住区 |
| 13. Hatch cradle | 舱口支架 |
| 14. Heavy cradle | 重支架 |
| 15. Bulk cargo | 散货 |
| 16. Vertical bulkhead or pontoon | 纵舱壁或浮筒 |
| 17. Heavy cargo, steel coils | 特重货物, 钢卷 |
| 18. Project cargo | 物流 |
| 19. Horizontal decks or hatch covers | 水平甲板或舱口盖 |
| 20. General cargo, rolls of paper | 杂货, 纸卷 |
| 21. Shear strake | 舷板 |
| 22. Hold fan | 货舱风机 |
| 23. Fixed bulkhead | 固定舱壁 |
| 24. Container pedestal | 集装箱基座 |
| 25. Tank top, max. load 15 t/m ² | 内底, 最大负载 15 t/m ² |
| 26. Containers, 5 rows, 3 bays | 集装箱, 5 列, 3 排 |
| 27. Vertical bulkhead or pontoon | 纵舱壁或浮筒 |
| 28. Hatch coaming | 舱口围板 |
| 29. Wing tank (ballast) | 翼舱 |
| 30. Bulk cargo | 散货 |
| 31. Gangway | 舷梯 |
| 32. Stacked hatches | 堆叠舱口盖 |
| 33. Top light, range light | 桅杆灯, 导航灯 |
| 34. Breakwater | 防浪板 |
| 35. Anchor winch | 起锚绞车 |
| 36. Collision bulkhead | 防碰撞舱壁 |
| 37. Deep tank | 深舱 |



38. Bow thruster in nozzle
39. Forepeak tank in bulbous stem
40. Port side
41. Starboard side

- 喷嘴式船首推进器
球形艏材艏尖舱
左舷
右舷

Text

The foremost part of a ship is called the bow and the rearmost part is called the stern. The upper deck or main deck is the upmost continuous deck from bow to stern.^[1] When standing in a ship and facing the bow, the left-hand side is called the port side and the right-hand side is called the starboard side. All permanent housing above the main deck is known as superstructure. At the fore end is the forecastle. At the after end is the poop. Bridge is at the midship. The forecastle on a ship is a small extra deck above the main deck, forward of No. 1 hold, right up in the bows.^[2]

The main part of a ship is the hull. This is the area between the main decks, the sides and the bottom.^[3] The hull is divided up into a number of watertight compartments by decks and bulkheads. The hull contains the engine room, cargo space and a number of tanks. In dry cargo ships the cargo space is divided into holds, in liquid cargo ships it is divided into tanks.^[4] At the fore end of the hull are the fore-peak tanks and at the after end the after peak tanks. They are used for fresh water and water ballast. The space between the holds and the bottom of the hull contains double bottom tanks. These are used for ballast water and fuel.

(236 words)

New Words & Expressions

foremost	['fɔ:məʊst]	a.	最前面的
bow	[bəʊ]	n.	船首
rearmost	['riəməʊst]	a.	最后的
stern	[stɜ:n]	n.	船尾
port	[pɔ:t]	n.	左舷
starboard*	['stɑ:bɔ:d]	n.	右舷
permanent	['pɜ:mənənt]	a.	永久的
housing	['haʊzɪŋ]	n.	机器外壳, 外罩
superstructure	['sju:pəstrʌktʃə]	n.	上层建筑, 上部构造
forecastle	['fəʊksəl]	n.	前甲板, 船头的船楼
poop	[pu:p]	n.	艉楼, 船尾楼
midship	['mɪdʃɪp]	n.	船体中部
forward	['fɔ:wəd]	n.	前方