

# 船员实用英语口语

ORAL ENGLISH FOR SEAFARERS

青岛远洋船员学院组织编写

轮机口语

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人民交通出版社  
中国音像电子出版社

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## 内 容 提 要

本书是《船员实用英语口语》系列教材的轮机口语分册,是根据 IMO 经 1995 年缔约国大会通过修改的《1978 年海员培训、发证和值班标准国际公约》和中华人民共和国交通部 1997 年按该公约颁布的《中华人民共和国海船船员适任考试、评估和发证规则》的要求编写而成的,本书共分为 20 个单元,每单元由短文、对话、练习、相关表达法等组成。内容包括:熟悉机舱、与驾驶台联系、物料与备件、加油、日常维修保养工作、值班、交接班、轮机部会议、吊缸、防火与消防、防污染、PSC 检查和 ISM 审核等。

本书可供航海类院校师生和在职船员学习英语口语之用。

### 船员实用英语口语

#### (轮 机 口 语)

青岛远洋船员学院组织编写

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## 序

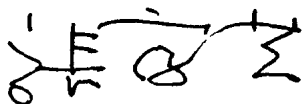
在全球经济一体化的进程中,航运的促进作用极为显著,英语作为一种通用的交流沟通语言,已为世界航运界所接受。

国际海事组织经过了多年的酝酿协商,已在海员培训、发证和值班标准国际公约中明确规定,英语是船员必须掌握的基本技能之一。国际安全管理规则又要求航运公司应当保证船上人员在履行其职责时能够有效交流。因此英语是航运界为保证海上安全,保护环境,从事各种业务交流的必要工具和不可或缺的重要手段。

青岛远洋船员学院作为培养远洋船员的航海类院校,根据形势发展,以不断培养适应国际航运市场需求人才为己任。在英语教学实践中,不仅注重理论知识的传授,还着重提高英语口语教学水平,着眼于提高船员的交流沟通能力。基于此目的,他们经过广泛调查研究,搜集了大量的国内外相关资料,与国际惯例接轨,编写了这套系列教材。经试用后,又听取了国内外专家的意见,反复修改定稿,形成了这套《船员实用英语口语》系列教材。我相信,这套教材会帮助在校学生、在职船员、航运公司管理人员,甚至英语口语教师,不断提高英语交流能力,提高员工队伍素质,为更好地适应国际航运需求发挥积极的作用。

在此,还要感谢中远集团总公司顾问沈肇圻教授为该系列教材的编写所付出的努力。

希望青岛远洋船员学院能在教学实践中,进一步听取各方面的意见,不断与时俱进,对本套教材进行补充、完善,使这套系列教材能受到船员和航海类学院的欢迎,为培养更多国际一流的优秀船员作出更大的贡献。



二〇〇三年三月二十八日

# 船员实用英语口语(轮机口语)

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## 编者的话

《船员实用英语口语》(轮机口语分册)是根据 IMO 经 1995 年缔约国大会通过修正的《1978 年海员培训、发证和值班标准国际公约》和中华人民共和国交通部 1997 年按该公约颁布的《中华人民共和国海船船员适任考试、评估和发证规则》的要求,结合远洋船舶轮机部船员的实际工作需要而编写的教材。内容包括:熟悉机舱、与驾驶台联系、物料与备件、加油、日常维修保养工作、值班、交接班、轮机部会议、吊缸、防火与消防、防污染、船上演习、紧急情况、事故、检验、修船、接船、PSC 检查和 ISM 审核等。

本书编写原则是不求专业内容精深,但求尽量覆盖远洋船舶轮机部工作的各个环节,为轮机部船员,尤其是外派船员提供尽可能多的情景语言训练素材,帮助他们掌握在各种实际工作环境下的语言交际技巧,减少语言障碍,以更加顺利地开展工作。

本书既可以作为船员英语语言教材,也可以供船员在船工作时随时参考、自学。当本书被用作教材时,建议授课教师使用 IMO 发布的 Model Course 3.17 中推荐的交际法教学 (Communicative Approach),选用教材中的适合于学员的部分,精讲多练,以情景为中心展开教学。尽可能地充分利用书中的插图,扩展学员的想像空间,以他们的需求为教学目标进行教学,以起到更加实用的效果。为便于学生自学和课下练习,本套教材配备了具有语音识别功能的英语口语学习软件。

本书共分 20 单元。每课由 1 篇短文、6 个对话、3 个练习、相关表达法与幽默、名言等组成。本书 1~10 单元短文由青岛远洋船员学院江园老师编写,对话由该院吴万千老师编写;11~20 单元短文由该院刘蓓老师编写,对话由该院王鹏老师编写。全书练

习 1 由王鹏、刘蓓二位老师共同编写,练习 2、3 及相关表达法由吴万千、江园二位老师共同编写;王鹏、刘蓓、江园三位老师共同编写了各课课后所附的幽默、名言、谜语等。全书插图由沈肇圻、刘蓓、王鹏负责。全书由中远集团高级顾问、青岛远洋船员学院特聘教授沈肇圻及王鹏老师统稿。另外,在本书编写过程中,得到了青岛远洋运输公司宋有坤轮机长、广州远洋运输公司梁西胜轮机长的大力帮助并提供了部分资料。青岛远洋船员学院机电系部分老师及轮机英语强化班的部分学员也提供了宝贵的意见和建议,在此一并感谢。大连海事大学成人教育学院院长王建斌教授审阅全书并提出了很多宝贵意见和建议,使本书的质量得到进一步的提高。对他的工作,编写组成员特别致谢。

中国远洋运输(集团)总公司张富生书记在百忙中为本套教材作序,在此表示感谢。

本书将有配套磁带及光盘陆续出版,以帮助使用者更好地使用本书。由于编者水平及时间所限,本书不足和错误之处在所难免,恳请广大教师和读者不吝赐教,以资改进。

编 者

# 软件安装运行说明

## 一、建议软、硬件配置

- 操作系统: Windows98/ME/2000/XP 简体中文版;
- CPU: Pentium II 300MHZ 以上;
- 64 兆以上内存,600 兆以上可用硬盘空间;
- 声卡及相关音频输出设备(耳机)和音频输入设备(麦克);
- 2 倍速以上光驱
- 与微软视窗操作系统兼容的鼠标、键盘;
- 可支持 16 位增强色、1024×768 的小字体显示模式;
- 微软 IE5.0 或更高的版本,使用 Windows 2000 时,IE 版本必须在 5.5 以上;

## 二、安装步骤

1. 将光盘放入光驱,将自动进入启动/安装界面。您也可以进入光盘目录下,双击安装程序 start.exe,进入启动/安装界面。

[注]:当显示属性设置的字体不是正常尺寸(小字体)时,软件将提示您将其设为“小字体”显示方式。

- 改为“小字体”的方法:

点击“开始”→“设置”→“控制面板”,双击“显示”图标,进入显示属性窗口。

点击该窗口中的“设置”选项卡,点击“高级”按钮,进入适配器设置窗口。

点击该窗口中的“常规”选项卡,将字体大小设置为正常尺寸(小字体),再重新启动计算机即可。



2. 点击启动/安装界面中的“跟我走”按钮开始进行安装。

[注]:当您的计算机所安装的 IE 浏览器的版本为 5.5 以下时,系统将提醒您将其升级到 5.5 以上。您可以忽略该提示,继续安装本软件。在软件安装完成之后再浏览器的升级安装。

如果您的软件不能正常运行,请查看浏览器的版本是否达到要求。

3. 首先进入安装欢迎界面,点击“下一步”按钮,进入选择安装路径界面。

4. 在选择安装路径界面中,默认的安装路径为:C:\ Program Files \ nsky \ 口口声声 \ 船员英语(X)V1.0,用户可以修改安装路径,确认后,点击“下一步”按钮,进入选择安装类型界面。

5. 在选择安装类型界面中,可以选择“最小安装”或“完整安装”,用户可以根据需要自行选择,确认后,点击“下一步”按钮,进行软件的安装。

6. 等待软件安装完成之后,进入安装完成界面,点击“完成”按钮,至此软件安装全部完成。

### 三、软件启动

方式 1:将光盘放入光驱后自动运行;

方式 2:双击桌面上的快捷方式;

方式 3:点“开始”→“程序”→“口口声声”→“船员英语(X)V1.0”。

软件启动后首先进入启动界面,点击该界面中的“跟我走”按钮(即安装/运行按钮)即可进入软件的主界面中。

启动界面中共有以下所述的功能按钮:

停止放音、上一课、播放、下一课、退出、帮助、安装/运行、各类单词游戏

### 四、软件卸载

打开“控制面板”,双击“添加/删除程序”图标,然后找到并选

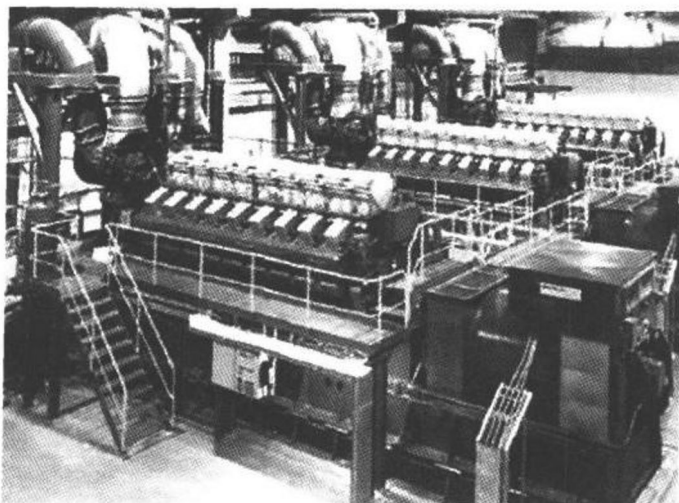
中“船员英语(X)V1.0”,再单击“添加/删除...”按钮,之后按提示操作即可。

[注]:此光盘中含有配套图书相应分册中的课文 CD 格式语音,可用 CD 播放设备或电脑播放。欲了解更详细的软件功能及注意事项,请参阅软件的帮助文档。

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## Unit 1 Familiarization with the Engine Room



Generally speaking, the work of the engine department is the operation, management and maintenance of all kinds of machinery on board to ensure the normal operation and safety of the ship. Except the deck machinery, most of the machinery is in the engine room, so the engine room is always regarded as the heart of the ship.

In the engine room, the largest and most important equipment is the main propulsion equipment, in which the main engine drives the propeller through the shaft system and the propeller drives the ship.

Most modern ships use diesel engines as the main power unit, which is called the main engine. Other equipment is called auxiliary machinery which includes pumps, ventilation system, deck machinery, refrigeration system, air conditioning equipment, domestic water system, donkey boiler and pollution prevention systems' etc.

All the members of the engine department should be very familiar with the equipment and take good care of it. They should also know and

observe relevant laws and conventions about the ship's safety and pollution prevention in their work.

**Answer the following questions**

1. What is the main work of the engine department?
2. Why is the main propulsion equipment the most important in the engine room?
3. What is included in the auxiliary machinery?
4. Why is the auxiliary equipment called "auxiliary"?
5. What laws should you be familiar with as a member of the engine department?

## **Dialogue 1**

*( in the engine room )*

**Cadet:** Hello, fourth engineer. Would you please give me a brief description of the engine room?

**4th/E:** With pleasure. It is a new ship launched last year. The machinery and equipment are very advanced and its automation has reached a high degree.

**Cadet:** Is it UMS?

**4th/E:** Yes. In the day time the alarm switch is changed over to a motorman's cabin, and the motorman is on duty. In the evening it is changed over to the cabin of the engineer who is on duty.

**Cadet:** What are the power and the revolution of the main engine?

**4th/E:** The rated power is 12,800 kW, the rated revolution is 155 rpm.

**Cadet:** How many generators are there? And what is the power of each one?

**4th/E:** There are three generators. The rated power is 750 kW for each one.

**Cadet:** It is my first time to get on board a ship. Please help me and

give me your advice from now on.

**4th/E:** No problem.

## Dialogue 2

*( in the engine room )*

**Cadet:** What type of main engine do we have here?

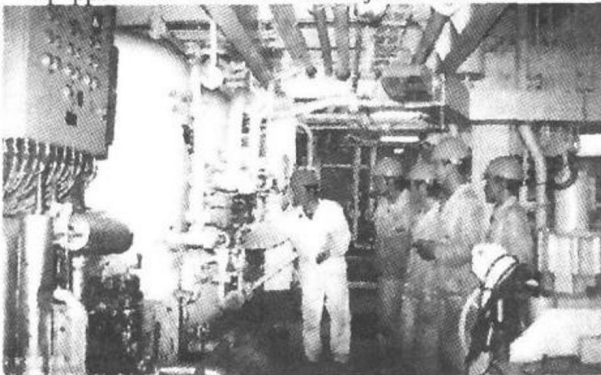
**4th/E:** It is called 7UEC60L-A. That is to say, it has 7 cylinders. 60 shows that the cylinder has a bore of 600mm. The piston stroke is 1800mm. It is a two-stroke, crosshead-type, double cam reversible, uniflow-scavenging and supercharged diesel engine.

**Cadet:** What kind of turbocharger is it?

**4th/E:** It is of the MET450-K. Its designed rotational speed is 22,000 rpm, and the operating speed is 16,000 rpm.

**Cadet:** Does this type of diesel engine have a lot of advanced technology?

**4th/E:** Yes. For example, it is of highly supercharged type. The pressure of supercharged air reaches  $2.8 \text{ kg/cm}^2$ . The ratio of the stroke to the cylinder bore is 3:1. It has short connecting rod and long stroke. The pistons use what is known as the bored injection oil-cooling technology. The thermal load of the parts in the combustion chamber is reduced. In addition, the engine is equipped with variable timed injector and electrical indicators.



- Cadet:** Is fuel oil changed over to diesel oil under the manoeuvring condition?
- 4th/E:** In normal conditions, it is not necessary for fuel oil to change over to diesel oil. This can reduce the operating cost.
- Cadet:** How does it work?
- 4th/E:** The heated fuel oil is circulated by the fuel oil circulating pump constantly.
- Cadet:** Can the fuel oil in the oil pipe be normally circulated under a low temperature?
- 4th/E:** Yes. The fuel oil is heated by means of the steam-tracing pipe.
- Cadet:** What is about the operating system?
- 4th/E:** There are many characteristics about the system. We may get to know them during the operating management in the future.
- Cadet:** All right.

### **Dialogue 3**

*( in the engine room )*

- Cadet:** How many generators are there in the engine room?
- 4th/E:** Three. They are over there.
- Cadet:** What type are they?
- 4th/E:** They are the typical improved YAMRA type. They have the characteristics of large capacity, simple construction, small size and good reliability.
- Cadet:** What are the main strong points of this improved type?
- 4th/E:** First, the components of the combustion chamber are special. There is a protective liner on the top part of the cylinder liner in cylinders. It reduces the thermal load and increases the working reliability of the cylinder liner. Secondly, its large end of the connecting rod is of built-up type. It increases the size of the crank pin and mechanical strength.

- Cadet:** As the basic characteristics of this type of generator, the lubricating pump, the fuel oil booster pump and the fresh water cooling pump of it are all self-contained, aren't they?
- 4th/E:** Yes. Besides the sump, there is a lube oil circulating tank for each generator.
- Cadet:** What is this?
- 4th/E:** This is the rocker arm lubricating oil system. It has a separate oil tank. Its function is to avoid the deterioration of lube oil caused by the fuel oil leakage.
- Cadet:** What is about its turbine?
- 4th/E:** The most outstanding characteristic is that the spindle sleeve type of bearing is adopted instead of the ball type one.
- Cadet:** As to the starting system, is there any difference between the new type and the old one?
- 4th/E:** Yes. In the starting air system there is an solenoid valve. It is an important device which can start automatically.
- Cadet:** I have learnt a lot from you. Thank you.
- 4th/E:** You are welcome.

## **Dialogue 4**

*( in the engine room )*

- 4th/E:** The auxiliary machinery is necessary for the safety of ships and the daily life of the crew. So it is important for us to be familiar with them and manage them properly.
- Cadet:** You are right. Please introduce the auxiliary machinery on board the ship.
- 4th/E:** It is great in number. Please follow me. Let's have a look at the pumps in the engine room. This is No.1 ballasting pump. That is No. 2 ballasting pump. Besides, there are service pumps, fire pumps and so on.



- Cadet:** Can these pumps be taken the place of each other?
- 4th/E:** Of course. They can also be substituted by the main sea water pump.
- Cadet:** What are the characteristics of these pumps?
- 4th/E:** They are centrifugal pumps driven by motors. These are only some of the pumps on board. Pumps are not only great in number, but also of many kinds.
- Cadet:** What are the main kinds of pumps on board the ship?
- 4th/E:** Besides the centrifugal pumps, there are reciprocating pumps, vane pumps, gear pumps and screw pumps.
- Cadet:** Besides pumps, the auxiliary machinery includes many other kinds of equipment and machinery, doesn't it?
- 4th/E:** Yes. Auxiliary machinery mainly refers to all equipment and machinery in the engine room other than the main engine, for example, the auxiliary boiler, the air conditioning system, the fresh water generator, the air compressor, the A.C. generator, the anti-pollution equipment, the emergency equipment and so on. Some deck machinery, such as the steering gear, the windlass, the winches, the cranes and the hatch covers, also belongs to the auxiliary machinery. You will be gradually familiar with them.
- Cadet:** Yes, I will work hard on it.

## Dialogue 5

( in the fourth engineer's cabin )

- Cadet:** Fourth engineer, is it important for seamen to know the legislations and regulations?
- 4th/E:** Yes. As a seaman, you should not only observe your mother country's laws and regulations, but also the international conventions and the local laws and regulations.