

外派船员英语培训系列丛书

船舶轮机员 实用英语口语

张晓峰 孙洪庆 编著



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Practical Oral English for Engineering Officers

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编者的话

笔者在多年来的教学和船员培训工作中发现,目前所使用的船员轮机口语教材尚存不足之处,究其原因有六:

1. 口语化的内容缺乏真实的船员生活和工作环境。
2. 围绕在机舱内使用的相关用语较少,而社会交流用语偏多。
3. 只按语言的功能分类而忽视了按使用的功能分类。
4. 语句过长,用词和句子结构不符合船上轮机部工作特点。
5. 能够被船员直接使用,可以脱口而出而实用成型的“套话”较少。
6. 缺乏时代气息,近年来对安全检查和防污染越来越重视,而院校的书籍却变化很少。

鉴于上述英语书籍“书卷之气”十足,而“海之风韵”贫乏等不足,笔者深入船员的生活实践中,并采用计算机进行相关的语言收集和统计,经过长期地与广大轮机员同志们交流,对船员在轮机部工作所使用的语言进行总结归纳、分析推断,编成教材,在船员中进行小规模试用并得到船员的认可后,再修改而形成了本教材。本教材系《船舶驾驶员实用英语口语》的姊妹篇。

在本教材的酝酿中,黄林森电机员、韩兴石三管轮、隋立功电机员、李瑞云二级无线电电子员、韩国庆二级无线电电子员等同志以不同的形式参加了写作工作。参加编写的还有:邹文生轮机长、赵金文轮机长、刘文举电机员。

笔者在此一并表示感谢。

同时还需要指出的是,船舶的设备及型号不同其操作程序与管理维修会有所不同,注意在学习阅读材料时应该学习其语言的特点,而不要把阅读材料提供的操作内容和维修等业务内容生搬硬套地用于自己所司职的船舶上,而导致不该有的设备故障。

由于笔者的精力与时间有限,书中的错误在所难免,期盼广大的轮机员和同行批评指正。

编者

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Lesson one Standby Engine (备车)

Dialog A: Conversation between Chief Engineer and Captain (轮机长和船长对话)

Captain: Hello, Chief Engineer. This is Captain speaking.

Chief Engineer: Good morning, Sir. This is Chief Engineer.

Captain: I herein inform you that loading work will be completed by tomorrow noon and I decide to depart at 1600 hours. Is there any repair work not finished yet?

Chief Engineer: No. 4 cylinder of main engine has been overhauled and I am sure it will be reassembled and tested by 1600 hours today. I don't think it will cause any delay.

Captain: Well, have you ordered enough spares and stores? You know this is a long voyage.

Chief Engineer: Yeah, I think it is OK. Sir. Several bearings delivered onboard yesterday were found wrong. Could you contact agent to change them as soon as possible?

Captain: I will call agent later. Please standby engine 1500 hours tomorrow.

Chief Engineer: Yes, Sir. I will try to do my best, Sir.

Captain: Did you calculate oil consumption for next voyage?

Chief Engineer: Sure, we need another 500 tons of fuel oil and 200 tons of diesel oil.

Captain: Well, sounds good. Oil bunkering will be started at 1600 hours. Please get ready for it.

Chief Engineer: Yes, Sir!

Dialog B: Breakdown in Standby Engine (备车时出现故障)

Captain: Chief Engineer, We are about to sail at 5 o'clock PM. Can you prepare engine one hour ahead?

Chief Engineer: Yes, Sir. (On the telephone) Second Engineer, please inform all staff except duty watch gang to assemble in my cabin. I

will arrange safety meeting and then prepare to standby engine.

Second Engineer: Yes, Sir, right away.

Chief Engineer: (One hour later). All engineers and No.1 Oiler get into engine room to participate in standby engine now. As Third Engineer reported, the air reservoirs seem to be abnormal. We will watch them again and report to me if anything happens. Third, can you start No.1 air compressor to pump air in the air reservoirs immediately?

Third Engineer: Yes, Sir. (Twenty minutes later). Chief, come down. I think the air reservoirs can't be pumped into enough air.

Chief Engineer: OK, I must report to Captain. We are in the canal, and bridge may use main engine frequently. In this case, we can't respond the order. We need a delay. Well, call all engine department staff to come down, Second Engineer. Then I will consult the repairing procedure with you after all.

Second Engineer: Yes, Sir.

Dialog C: Chief Engineer and Duty Engineer (轮机长和值班轮机员对话)

Chief Engineer: Start fuel oil pump, lube oil pump, cooling water pump and others for standby main engine and report.

Duty Engineer: Yes, Sir. Fuel oil pump, lube oil pump, cooling water pump have been operated.

Chief Engineer: Attention: Cylinders and pistons must be warmed up to 60 centigrade Celsius.

Duty Engineer: Yes, Sir. The temperature is well kept at 60 centigrade Celsius, Sir.

Chief Engineer: The officer of the watch ordered from the bridge that rudder and telegraph should be checked. Would you do it and report?

Duty Engineer: Yes, Sir. (To the bridge). Third Mate, this is Fourth Engineer. Now check the telegraph, OK? You order and I will read.

Third Mate: Dead Slow Ahead, Slow Ahead, Half Ahead, Full Ahead,

Stop Engine, Dead Slow Astern, Slow Astern, Half Astern, Full Astern. Is that OK?

Duty Engineer: Right. Now turn to the rudder.

Able Body: Now, I do and you read, OK?

Duty Engineer: Deal!

Able Body: Port 5, 10, 15, 20, 25, and Hard – a – Port; midships; Starboard 5, 10, 15, 20, 25, and Hard – a – Starboard. Finished.

Duty Engineer: Well done!

Duty Engineer: Now, rudder and telegraph are in good working order, Sir.

Chief Engineer: OK, now engage main engine, and turn it for 20 minutes and lubricate the cylinders by hand.

Duty Engineer: Yes, Sir.

Chief Engineer: Make sure to disengage the turning gear with main engine. Close indicator cocks. Inform the officer of watch of turning on main engine now.

Duty Engineer: Yes, Sir. Standby is ringing, should we reply?

Chief Engineer: Yes, we should. The main engine is running. Check lube oil level now. Check exhaust temperatures in all cylinders and in the cooling water tank and report if abnormal.

Duty Engineer: Yes, Sir. Now standby is ringing, should we reply?

Chief Engineer: Sure. As soon as the main engine is running, you should check lube oil level occasionally. Check exhaust temperatures in all cylinders and in the cooling water tank and report if abnormal.

Duty Engineer: Yes, Sir.

(After two hours)

Chief Engineer: Duty officer informed us that the ship is outward from the harbour and proceed at full speed. We should change fuel oil now. Open the fuel oil steam valve and report.

Duty Engineer: Yes, Sir. Now, the valve is opened.

Chief Engineer: What is the temperature now?

Duty Engineer: Sir, it is at 90 centigrade Celsius, Sir.

Chief Engineer: OK, you know the next step, Fourth Engineer.

Duty Engineer: Yes, Sir. I will open the service fuel oil tank valve and

close the service diesel oil tank valve.

Chief Engineer: Good guy. You see, the viscosity of the fuel oil and engine speed is rising. It means that heavy oil is consumed now.

Duty Engineer: Sir, I was wondering that the engine speed rises up so quickly after change oil, Sir.

Chief Engineer: You didn't study well in your maritime college, son. The specific gravity of fuel oil is heavier than that of diesel oil. That means the heating content of fuel oil is more than that of diesel oil.

Duty Engineer: I see. Thank you, Sir.

Chief Engineer: The fuel oil temperature must be kept at 120 to 125 centigrade Celsius.

Duty Engineer: Yes, Sir!

Chief Engineer: Now, I will leave the engine control room. This is my night order for all of you. Call me that if you find abnormal condition. Engine control room should be manned. Do not sleep while watching.

Duty Engineer: Yes, Sir.

Dialog D: Standby Engine Procedure (备车过程)

Chief Engineer: Fourth Engineer. I was informed that our vessel will depart in 6 hours. You know my left leg was hurt. Do you know what I mean?

Fourth Engineer: Yes, Chief Engineer. I will standby engine at 9 PM.

Chief Engineer: I always rely on you. If you find something abnormal, inform me without any hesitation. Now, tell me the procedures for standby engine.

Fourth Engineer: The cylinders and pistons must be warmed up gradually to the temperature of about 40 centigrade.

Chief Engineer: And the purified fuel oil tanks?

Fourth Engineer: The purified fuel oil tanks must be topped up if necessary and warmed up to the required temperature.

Chief Engineer: What about the crankcase lubricating oil drain tank?

Fourth Engineer: I'll fill it with purified lube oil to the required level.

Chief Engineer: The turning gear?

Fourth Engineer: I'll take out turning gear.

Chief Engineer: How about the starting air reservoirs?

Fourth Engineer: I will pump the air reservoirs to their maximum pressure.

Chief Engineer: How about the other systems?

Fourth Engineer: The cooling system, the lubricating oil system, the fuel oil system and the compressed air system will be prepared as well.

Chief Engineer: Right. Don't forget to check the reversing and control gear before getting on starting air.

Fourth Engineer: Don't worry about it. Everything is under control.

Chief Engineer: I hope so.

Practical Sentences (实用的句子)

1. Starting the back generator.
启动备用发电机。
2. Pump up the starting air reservoirs to the maximum pressures.
把空气瓶充气至最大值。
3. Warm up cylinders.
暖缸。
4. Start lubricating oil pump and cooling fresh water pump.
启动滑油泵和淡水冷却水泵。
5. Engage the turning gear.
合上盘车机。
6. Heat up the fuel oil in service oil tank.
加热日用油柜的油。
7. Turn the turning gear and lubricate cylinder oil by hand.
盘车并手动加注汽缸油。
8. Close the scavenging drain valves, air cooler drain valve.
关闭扫气放残阀,空气冷却器放残阀。
9. Disengage the turning gear.
脱开盘车机。
10. Blow off cylinders.
冲车。
11. Close the indicator cocks.

关闭示功旋塞。

12. Report the bridge for testing telegraph and rudder.
向驾驶台报告对车对舵情况。
13. Bridge inform of standby engine.
驾驶台通知备车。
14. Call Chief Engineer and Second Engineer to get into engine room,
now.
叫轮机长和大管轮下机舱。
15. Warm up main engine.
主机暖缸。
16. Start L.O pump and check pressure.
启动滑油泵并试压。
17. Start cooling fresh water pump and check pressure.
启动冷却水泵并试压。
18. Check air bottles pressure.
检查气瓶压力。
19. Start fuel oil pump, and report.
启动燃油泵,并报告。
20. Check fuel oil pressure and adjust it.
检查燃油压力并调节。
21. Open indicator cock.
打开示功旋塞。
22. Open air valve.
开气阀。
23. Ring up engine.
主机定速。
24. Finish with engine.
结束用车。
25. Tell bridge that main engine is ready.
告诉驾驶台车备妥。
26. Inform bridge that main engine is trouble.
通知驾驶台主机有故障。
27. Start second generator for parallel operation.
启动第二发电机准备并机运行。

28. The control gear put in STOP position, engage the main engine and turn the main engine several turns.

把控制装置设定在停止的位置上,合上盘车机,盘车把主机转几转。

Reading Material (阅读材料)

Standby Engine Procedures

Prior to berthing, unberthing, docking, undocking, anchoring, unanchoring, Captain or his nominated officer telephones the Chief Engineer to standby engine before one hour to maneuver the vessel. Chief Engineer, in turn, orders his subordinates to standby engine, and the Chief Engineer must attend the whole process of standby engine. In the engine control room, the duty officer informs the duty Oiler that main engine standby. Then duty Oiler reports the duty engineer and the duty engineer enter the engine room. He starts the lube oil pump, jacket water pump, piston cooling water pump and fuel oil feed pump for main engine in engine control room and duty Oiler put in engine in "ENGAGE" position, and let the main engine run for 15 minutes and meanwhile turn cylinder lubricator by hand, then disengage the turning gear. Close the scavenging drain valves. Open the main air receiver valve and main starting air valve. The duty officer informs the duty engineer to adjust rudder and check clock and telegraph. The duty engineer asks the bridge to test the main engine by putting in the starting air. Then motorman closes the indicator cocks and turns the engine ahead and astern, if there is not problem inform the bridge that the main engine is ready. Put the main engine control lever to standby position. Check diesel oil in the tank and lube oil level and consumption of water tank added if necessary.

Before starting the main engine, start lube oil pump and cooling water pump. Disengage turning gear. Check the compressed air. Make it to 25 ~ 30 kg/cm². Test and blow main engine by means of starting air. If no problem, close the indicator cocks.

When the temperature and starting air pressure are right, may reply. Start the main engine. After the main engine is running. Check the exhaust temperatures, fuel oil temperature, lube oil pressure and temperatures,

water temperatures and pressures .

Check the exhaust temperatures and water temperatures .

Take operational procedures on arrival at port as example :

1. Before the vessel arrives at a port , the day gang must be in the engine room for the maneuvering and switching of bunker to diesel fuel to the main engine . One hour is enough time to replace all bunker , fuel oil to diesel oil in the supply headers of the main engine for maneuvering . The diesel service tanks should be heated at about 60 centigrade Celsius or 140 Fahrenheit before the switch over and the bunker fuel temperature must gradually be brought down to the diesel temperature to avoid sudden change of fuel oil temperature which is detrimental to the fuel pumps and spray nozzles parts .
2. All low suctions sea chests must be switched to high suction chests regardless of the ship entering sea , river , or canal ports . These precautions are necessary to keep all engine room coolers from clogging and wearing of the pumps due to muddy bottoms .
3. Fire the steam boiler and by-pass main engine exhaust . After closing exhaust boiler damper , allow boiler circulating pump to operate for at least 30 minutes before stopping .
4. Lubricate all starting valves , pilot valves and reversing gears and links of the main engine .
5. Synchronize engine room time with the bridge clock by telephone so that the maneuver bells will be the same as the bridge .
6. Drain air reservoirs free of water , open main air stop valve and slightly open drain cocks of starting valve to rid the air pipes of condensed water to avoid entering the starting and pilot valves .
7. Start second generator engine and synchronize two generators to be ready for maneuvers as one generator will not be able to carry all loads of the engine room auxiliaries and deck winches . Always sound lube oil level of crankcase , refill if necessary before starting any generator engine . During synchronization of the generators care must be taken not to trip-off , as it will be detrimental to the working gyrocompass . For precautionary measures , the bridge should be informed before synchronizing generators .

8. Pump all bilge and bilge tank dry in the engine room and pump to sea via oily water separator under 15 ppm as no bilge pumping will be allowed during the ship's stay in port.
9. The Electrician (if not any, or an engineer nominated by Chief Engineer serves) must be on deck to attend the hydraulic winches, steering gear, and windlass to be on hand for any incident that requires notification to the engine room.

Lesson Two Safety Meeting (安全会议)

Dialog A: Holding A Safety Meeting (召开安全会议)

Second Engineer: We begin the meeting now. Here is the roll call. If you hear your name, say "Here" loudly. Third Engineer, Fourth Engineer, sorry, he is on duty, John, Peter, Bob, Kent, David, Zhang, yeah he is on duty. OK, Mr. Chief Engineer, all are here except Fourth Engineer and Oiler, Zhang, both of them are on watch duty now.

Chief Engineer: I see, thank you, Second Engineer. I herein reiterate that safety is crucial for all the department crew. Everyone knows accident yesterday. John cut his finger while change the blade in the drill. John, did you adjust the guard?

John: No, Sir.

Chief Engineer: This is the obvious mistake. When you change the blade in the drill, you should adjust the guard or cut off the electricity. OK, everyone looks at the page, which indicates your duty and safety measures. Second, write down all these in the record. I will question one by one. We learn the lesson. Before working, we must pay attention to the safety preparedness and safety measures.

Dialog B: Consulting with Safety Meeting (探讨开安全会议)

Captain: Chief Engineer, come to my cabin and chat me, OK?

Chief Engineer: I am coming, Captain.

Captain: Hi, Chief Engineer, sit down. Won't you have a cigarette?

Chief Engineer: No, thanks.

Captain: We will arrive at Rotterdam tomorrow morning. I hope both departments will have a safety meeting prior to arrival.

Chief Engineer: Yes, except for regular meeting, what is special arrangement?

Captain: Yesterday, I toured into engine room. I found one of Oilers