



International Shipping Federation

船上訓練紀錄簿

申請助理級輪機當值人員適任證書

ONBOARD TRAINING RECORD BOOK
FOR RATINGS FORMING PART OF AN
ENGINEERING WATCH AND RATINGS
QUALIFYING AS ABLE SEAFARER ENGINE

依據 IMO STCW 2010 修正案之適任性要求
As required by the 2010 amendments to the IMO STCW Convention
交通部航港局核定

船上訓練紀錄簿

申請助理級輪機當值及輪機助理員適任證書

ONBOARD TRAINING RECORD BOOK

FOR RATINGS FORMING PART OF AN ENGINEERING WATCH AND RATINGS QUALIFYING AS ABLE SEAFARER ENGINE

依據國際海事組織航海人員訓練發證及當值標準國際公約 2010 年修正對適任性之要求
Based on the competence requirement of the 2010 amendments to the IMO STCW Convention

姓名 (Name): 中文 陳資穎 英文 Cheng, Tzu-Ying

住址 (Home Address): _____

訓練開始日期 (Date training started): (船員向航務中心辦理任職，於船員服務手冊登載首日。)

編號 (Series No.): ESTR

105 年 1 月版



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MAY 16 2016

各職級船上訓練紀錄簿審核須知

一、交通部航港局（以下簡稱本局）為落實「船員訓練檢覈及申請核發證書辦法」第五十四條、第五十五條、第五十七條及第五十八條有關船員申請核發適任證書應檢附船上訓練紀錄簿規定，辦理船上訓練紀錄簿審查事宜，特訂定本須知。

Ministry of Transportation and Communications, Maritime and Port Bureau (MOTCMPB) set this direction to implement the Article 54,55,57,58 in “The Regulation for Seafarer Training Assessment and Application for Certification” about seafarers’s application for certificate of competency should attach with “On-board training record book” (OBTRB),

二、船員進行船上訓練紀錄簿所列之各項訓練前，應備妥船上訓練紀錄簿，並應於「船員訓練檢覈及申請核發證書辦法」第六十三條所列船舶及航行區域完成。自一百零六年一月一日起申請核發適任證書者，應檢附依據「航海人員訓練、發證及當值標準國際公約二〇一〇年修正案」適任性要求且經本局核定之版本。

Before on-board training proceed, seafarers should prepare OBTRB and should follow the Article 63 of “The Regulation for Seafarer Training Assessment and Application for Certification”, complete the ship and touring area in the book. Since 1st of January of 2017, all the applicant should follow the requirement in 2010 STCW amendment and hold the updated version of OBTRB which approved by MOTCMPB.

三、船上訓練紀錄簿規定欄位均應完成簽署。但符合「船員訓練檢覈及申請核發證書辦法」第六十二條者，准予豁免，惟其適任證書應加註限制。

All the sections on OBTRB to be completed, except clause which could be exempted as mentioned in the Article 62 of “The Regulation for Seafarer Training Assessment and Application for Certification”, but should issue a restriction the same in the FINAL REPORT section.

四、於公務船或港勤工作船舶完成船上訓練紀錄簿之船員，申請核發適任證書應加註限制。如於公務船或港勤工作船舶完成船上訓練紀錄簿符合一般商船船員標準，雇用人應檢附船舶設備相關資料送本局審議。

When seafarers working on official ship and/or workboat, completed the OBTRB, Certificate should issue with endorsement. If the training keep the same with common merchant seafarers standard, employer should attached with revelvant document for review by this office.

五、學員與船上訓練紀錄簿簽署人員，於訓練期間應服務於同一艘船舶，並請學員檢附簽署人員基本資料表（格式如附件），俾利審查。

Trainee and the signatory in OBTRB, should service on same ship and same time, trainee should fill the Attachment-Basic data of Signatory on OBTRB hereunder for easy reviewing.

六、船上訓練紀錄簿訓練項目簽署完成後，須經船長或輪機長及其所屬雇用人於總結報告填寫評定意見，按照訓練紀錄簿規範及所載項目完成訓練且經評估合格，再予正楷簽署，未填寫評定意見者不予受理。

After OBTRB has been completed, the Master and/or Chief Engineer of the ship should post address their comment in the final report, as the regulation on OBTRB, complete all the items, evaluate and signature. OBTRB will not be accepted by this office if no comment posted.

附件-船上訓練紀錄簿簽署人員基本資料表
Attachment-Basic data of Signatory on "on-board training record book"

簽署人姓名 Name of the signatory	簽署人國籍 Nationality	簽署人 職務 Duty	船員服務手冊字號 (外籍船員免填) Seaman Book Number(N.A. if other Nationality)	船名/任卸職日期 Ship's name/Date Sign On-Off	公司確認後蓋章 Company Endorsement
(於本紀錄簿簽署之所有人員皆應於此頁登載相關資訊， 如本頁不敷使用，請自行影印空白頁使用。)					
王大華	中華民國	船長	KEE-03801	大平輪/2015.1.1 -2015.8.30	

國際航運同盟 (ISF) 第二版 SECOND EDITION

1909年所設立之國際航運同盟 (ISF) 係代表國際海運協會當在勞工事務、人力和訓練問題時，所使用的名稱。ISF/ICS之會員包括36個國家之船東協會。ISF享有國際海事組織 (IMO) 諮詢之地位並率海運雇主代表自始至終完成2010年6月在馬尼拉所召開修正STCW國際公約之外交會議。

Established in 1909, the International Shipping Federation (ISF) is the name used by the International Chamber of Shipping (ICS) when representing maritime employers globally on labour affairs, manpower and training issues. ISF/ICS membership comprises national shipowners' associations from 36 countries. ISF enjoys consultative status with the International Maritime Organization (IMO) and led the representation of maritime employers throughout the revision of the STCW Convention culminating with the Diplomatic Conference, in Manila, in June 2010.

本紀錄簿未獲國際海事秘書業務公司之允許不得複製或翻譯。

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本中譯之船上訓練紀錄簿係獲國際海事業務公司於2014年9月9日來函同意並授權中華民國船長公會以中文翻譯其刊行之「船上訓練紀錄簿」在案。

The Master Mariners' Association of the Republic of China had been received a latter of permission from Maritime International Secretariat Services Limited. (ISF), Dated on 9th Sep, 2014, for authorize of translation and publication of this "ON Board Training Record Book" in Chinese edition.

二版2nd Edition 2011

出版者Published by : Marisec Publications, 38 St Mary Axe. London, EC3A 8BH 版權所有

Tel +44 20 7090 1460

Publications@marisec.org ; www.ics-shipping.org ; © Maritime International Secretariat Services Limited 2012



國際航運同盟 (ISF) 第二版序 SECOND EDITION INTRODUCTION

國際海事組織之航海人員訓練發證及當值標準公約 (STCW) 業於 2010 年予以修正更新。本訓練紀錄簿完全考慮及該項對助理級輪機當值乙級船員的需求，並針對 IMO 標準對輪機助理員建構訓練。

In 2010, the IMO Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) was revised and updated. This Training Record Book takes full account of these new requirements for ratings forming part of an engineering watch. This book also address the additional competence standards stipulated by IMO for the grade of Able Seafarer Engine.

該修正 STCW 國際公約持續重視對訓練成果之評估，即航海人員適任所執行職責之能力。尤其是該 2010 公約要求乙級船員之海勤資歷必需適當建構並記錄於訓練紀錄簿，經負責簽發適任證書之海事主管機關核定。修正之 STCW 本文明確提及 ISF 訓練紀錄簿為此文件之例。

The revised STCW Convention continues to place emphasis on assessment of the outcome of training, i.e. the ability of seafarers to perform their duties competently. In particular, the 2010 Convention requires that a rating's seagoing service must be properly structured and recorded in a training record book approved by the maritime administration responsible for issuing certificates of competence. The footnotes of the amended STCW text specifically refer to ISF training record books as an example of such documentation.

STCW 章程含有經修正 STCW 國際公約之詳細規定，對申請為助理級輪機當值或輪機助理員達到適任性所需之各項技能作一致之標準。該 STCW 章程亦對學員達到此等適任性應經指派訓練員予以評估之標準作出規定。

The STCW Code, which contains the detailed requirements of the revised STCW Convention, sets out uniform standards for the attainment of competences in the various maritime skills required to qualify as a watchkeeping rating or an Able Seafarer Engine. The STCW Code also stipulates criteria by which a trainee's attainment of these competences should be assessed by designated on board training officers.

在本紀錄簿中之科目業經周密之設計以協助學員符合 STCW 所規定適任性之發證要求，並儘可能使監督他們訓練之訓練員利用 STCW 章程表 A-III/4 及 5 為基準予以評估。然該等科目已考慮安排在船上訓練監督。該訓練科目與評估之標準在許多情況下比在該公約全文中者更為詳盡。這是為了協助學員確使其在海上服務中作最佳之利用並協助學員之訓練員作客觀之評估他們是否的確適任。

The tasks contained in this Record Book have been carefully designed to help ensure that trainees meet the requirements for certification stipulated by the STCW competences and that as far as possible the officers supervising their training use evaluation based on Table A-III/4 and Table A-III/5 of the STCW Code. However, the tasks have been arranged with on board training in mind. The training tasks and associated criteria are, in many instances, presented in more detail than in the text of the Convention. This is to help ensure that trainees make the best use of their seagoing service and to help officers supervising trainees make an more objective evaluation of whether they are indeed competent.

本船上訓練紀錄簿可提供足夠之書面證據，證明該學員業已完成船上適當之訓練方案，並證明其技能可適任 STCW 2010 修正案之標準，為此得核發助理級輪機當值或輪機助理員之適任證書。

Completion of the On Board Training Book should provides sufficient documentary evidence that a trainee has completed a properly structured on board training programme and has demonstrated competence in the skills required by the amended STCW Convention in order to be certificated as a rating forming part of an engineering watch and/or as an Able Seafarer Engine.

註：基於發證國家之不同，需求亦有所不同，本紀錄簿已儘可能依照前述 A-VI/1 及 A-III/4 and A-III/5 列出訓練之項目。

Note: The certificate issuing administration, which may or may not be the same as the flag of the ship(s) on which on board training is conducted, may determine appropriate training, assessment and certification requirements in addition to the competences and tasks contained in the Record Book. In practice, however, most if not all such requirements will form part of shore based Basic Training (in accordance with Section A-VI/1 of the STCW Code) and Special Training, as applicable (in accordance with Regulation III/4 and III/5)

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第一部分 使用說明 SECTION 1 GUIDE TO COMPLETION

輪機長、指派船上訓練員及學員應注意事項

For the attention of chief engineer officer, designated on board training officers and trainees

本紀錄簿之目的 Purpose of the Record Book

- 本紀錄簿之目的在協助乙級船員，使其在海上期間遵循建構之訓練進度作最佳之運用。依此他們能取得 STCW 國際公約 2010 年修正所要求成為適任助理級輪機當值或輪機助理員所需實際訓練與經驗。因此小心遵循本指導是很重要的。

The purpose of this Record Book is to help ensure that ratings follow a structured programmed of training and make best use of their time at sea. In so doing they will gain the practical training and experiences necessary to become competent watchkeeping engine ratings, and/or able seafarer engine in accordance with the STCW Convention, as amended in 2010. It is therefore important that this guidance is carefully followed.

- 本訓練紀錄簿依規定需陳送政府指定之審查員處，因此適當使用及填寫本紀錄簿是很重要的。所填寫之內容應經該學員所服務船舶之輪機長、指派訓練員及船公司仔細核閱。

Given that this Training Record Book will be submitted to government appointed examiner proper use and completion of this Book is essential. It should be subject to close scrutiny by the chief engineer officer of the ships on which the trainee serves, by the trainee's designated on board training officers and the shipping company.

當收到本紀錄簿時 On receipt of this Book

- 受訓學員應填寫下列各頁所要求之資料，包括第 5 頁依 STCW 國際公約應接受之基本訓練與任何特殊訓練之細節。並由學員個人在整個訓練過程中，對本紀錄簿負起安全保管之責。

The trainee should complete the information required on the following pages including details of Basic Training (page 5) received in accordance with the STCW Convention. The trainee will then be personally responsible for the safe keeping of this Book throughout training.

上船後應儘速完成事項 As soon as possible after joining each ship

- 第三部分有關強制之安全熟悉（第 14 頁）與強制之船上熟悉（第 16 頁）學員應於向各船報到後立即完成，並由一位甲級船員簽署以表示依 STCW 國際公約規定之該強制性熟悉業已施行。

Section 3, concerning details of mandatory Safety Familiarization (page 14) and mandatory Shipboard Familiarization (page 16), should be completed immediately after the trainee joins each ship. An officer should sign to signify that mandatory familiarization as required by the STCW Convention has been undertaken.

- 學員應填寫第 20 頁第四部分有關該船之技術性細項。各船之船長與指派訓練員應提供機會以進行此訓練。

The trainee should complete Section 4 (page 20) concerning the technical details of the vessel. The master and the designated training officer on board each ship should provide an opportunity for this exercise to be undertaken.

- 由輪機長指派之訓練員應檢查此紀錄簿以確定已依程序為之。為了解尚未完成之適任性評估項目，應作成計畫以便掌握。有關科目概要表如第八部分（第 93 頁）。

The designated on board training senior officer appointed by the chief engineer officer should inspect this Book in order to check progress already made. A plan should be made to tackle the competences that still need to be demonstrated. A Task Summary Chart can be found in Section 8 (page 93).

當學員於海上服務期間 Throughout the trainee's seagoing service

- 第六及第七部分助理級輪機當值及輪機助理員之訓練科目，應予循序完成。對於記錄程序之附加指導在第五部分（第 26 頁）另有說明。

Section 6,7 which contains a list of on board training tasks, should be progressively completed. Additional guidance on recording progress is given at the start of Section 5 (page 26).

- 在第八部分（第 93 頁）之科目概要表亦應循序完成。The Task Summary Chart in Section 8 (page 93) should also be progressively completed.
- 本紀錄簿應每月及合約期滿離船時陳送輪機長核閱。輪機長之意見應予記錄於第 10 頁並加註日期及蓋章。所提之意見應限於與該學員適任性及實際進度有關者。

The Book should be submitted to the chief engineer officer for inspection every month and at the end of each voyage. The chief engineer officer's comments should be recorded, dated and stamped on page 10. Comments should only relate to the trainee's competence and practical progress.

- 當學員向各船報到時應遞交本紀錄簿指派訓練員。嗣後在航程情況許可下應每週遞交指派訓練員。其意見應予記錄於第 8 頁。

The Book should be submitted to the designated on board training officer on joining each vessel - and then, as far as the voyage pattern allows, every week. Comments should be recorded on page 8.

- 本紀錄簿亦應由船公司予以審閱。其意見應予記錄於第 12 頁。

The Book should also be inspected by the shipping company. Comments should be recorded on page 12.

- 學員之海勤資歷包括在機艙當值任務累計時間應予確切記錄於第 7 頁。

A precise record should be kept of the trainee's seagoing service including time spent on bridge watchkeeping duties page 7.

重要注意事項 Important note

- STCW 國際公約規定施行船上訓練之任何人員應限於不致嚴重影響船舶正常操作之情況下及有時間專注於訓練與任何適任性評估時始施行之。

The STCW Convention requires that any person conducting on board training shall do so only when it will not adversely affect the normal operation of the ship and time can be dedicated to the training and any evaluation of competence.

- 任職輪機部門乙級船員職務，始得填寫本訓練紀錄簿。相關事項依我國「船員訓練檢覈及申請核發證書辦法」辦理。Engine hands, is the man could complete this book. Other matters should refer to the regulation 「Mariner training review and issuing certificate rules」 from MOTCMPB

第二部分 學程摘要紀錄 SECTION 2 SUMMARY RECORD OF PROGRESS

學員資料 PARTICULARS OF TRAINEE

應由學員以正楷填寫 to be completed by the trainee in **BLOCK CAPITALS**

中文全名 Name in Chinese 陳資穎 英文全名 Name in Full Cheng, Tzu-Ying

船員服務手冊字號 Seafarer's Book No. KEE-82343 出生日期 Date of Birth 1986.3.10

住址 Home Address _____

住址變更（如變更時） Change of Address (if applicable) _____

照片
PHOTO

公司 Sponsoring Company _____

地址 Address _____

契約 Trainee Agreement 起始日期 Date Started _____ 終止日期 Date Expired _____

公司變更（如變更時） Change of Sponsoring Company (if applicable) 所有任職公司皆應登載，如表格不敷使用，請自行影印空白頁使用。

地址 Address _____

訓練進度 Training Program (適用時 as applicable)

學校階段 COLLEGE PHASES		
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :
海上階段 SEA PHASES:		
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :
	起 From :	迄 To :

基本訓練 BASIC TRAINING

依 STCW 章程 A-VI/1 節第 2 項之規定

As required by Section A-VI/1 paragraph 2 of the STCW Code

依證書登載資訊填寫

為航前訓練之一部分，應於航前完成下列之基本訓練或講授。並將此訓練或講授詳細填寫於下表。

As part of your pre-sea training you should have completed Basic Training or instruction as listed. Enter details of this training or instruction below.

訓練項目	日期 Date	訓練單位 Location	文件字號 Document Number
基本安全訓練 Basic training：(應包含以下四項訓練)	2018.3.6	國立臺灣海洋大學	G121033790
人員求生技能 Personal survival techniques			
防火及基礎滅火 Fire prevention and basic fire fighting			
基礎急救 Elementary First aids			
人員安全與社會責任 Personal safety and social responsibility			

其他訓練紀錄 RECORD OF OTHER TRAINING

訓練項目 Training Item	日期 Date	訓練單位 Location	文件字號 Document Number
助理級輪機當值 Rating forming part of an engine-room watch			
輪機助理員 Able seafarer engine			
救生艇筏及救難艇操縱 Proficiency in Survival Craft and Rescue Boats			
快速救難艇 Proficiency in Fast Rescue Boat			
保全意識 Security Awareness Training			
保全職責 Security Training for Seafarers with Designated Security Duties			
油輪與化學液體船貨物操作基本訓練 Basic Training for Oil and Chemical Tanker Cargo Operations			
液化氣體船貨物操作基本訓練 Basic Training for Liquefied Gas Tanker Cargo Operations			
客輪訓練 Passenger Ship Training			
駛上駛下客輪訓練 Ro-Ro Passenger Ship Training			
高速船基本訓練 High Speed Craft Basic Training			

船上服務紀錄 SHIPBOARD RECORD OF SERVICE

船名 Ship	IMO 號碼 IMO Number	日期 Dates		機艙當值累計時間 Time Spent on Watchkeeping Functions		海上航行服務合計 Voyage Total -Seagoing Service	
		任職 Sign on	卸職 Sign off	月數 Months	日數 Days	月數 Months	日數 Days
大平輪	9481463	2015.1.1	2015.8.30	2		8	
總計服務 Total Service							

備註：

- i. 依「船員訓練檢覈及申請核發證書辦法」第 57 條申請助理級輪機當值適任證書須出具於國內航線至少 1 年、或於國際航線至少 2 個月之海勤資歷。並須具備國內航線至少 4 個月、或於國際航線至少 20 日之機艙當值累計時間。
- ii. 依「船員訓練檢覈及申請核發證書辦法」第 58 條申請輪機助理員適任證書須出具於國際航線任職幹練水手或舵工至少 1 年之海勤資歷。並須具備國際航線至少 4 個月之機艙當值累計時間。

指派訓練員對訓練進度之審查

指派訓練員應與實習生於同時段、同船舶服勤。

DESIGNATED TRAINING OFFICER'S REVIEW OF TRAINING PROGRESS

指派訓練員應為同部門較自身高階之甲級船員，本表至少應在該船航務允許之期間或每週一次內完成(視公司規定自行加頁)。

This table should be completed at least once a week or at such intervals as the trading of the vessel allows.

所填之意見限與學員實際進度及適任性有關者，不應涉及個人性格特質。

Comments should only relate to the trainee's practical progress and competence and should NOT refer to character.

船名 Ship	意見 Comments	正楷姓名 Name in BLOCK CAPITALS	簽名 Signature	日期 Date
大平輪	受訓情形良好	林澄宇	林澄宇	2015.5.27

指派訓練員對訓練進度之審查（續）

DESIGNATED TRAINING OFFICER'S REVIEW OF TRAINING PROGRESS

船名 Ship	意見 Comments	正楷姓名 Name in BLOCK CAPITALS	簽名 Signature	日期 Date

輪機長每月對紀錄簿之核閱

CHIEF ENGINEER OFFICER'S MONTHLY INSPECTION OF RECORD BOOK

所填之意見限與學員實際進度及適任性有關者，不應涉及個人性格特質。

Comments should only relate to the trainee's practical progress and competence and should NOT refer to character.

船名 Ship	意見 Comments	輪機長正楷姓名 Chief engineer officer's Name in BLOCK CAPITALS	輪機長簽名 Chief engineer officer's Signature	日期 Date	船章 Ship's Official stamp
大平輪	受訓情形良好	王世輝	王世輝	2015.5.3	



輪機長每月對紀錄簿之核閱（續）

CHIEF ENGINEER OFFICER'S MONTHLY INSPECTION OF RECORD BOOK

船名 Ship	意見 Comments	輪機長正楷姓名 Chief engineer officer's Name in BLOCK CAPITALS	輪機長簽名 Chief engineer officer's Signature	日期 Date	船章 Ship's Official stamp
大平輪	受訓情形良好	王世輝	王世輝	2015.6.7	

公司對紀錄簿之核閱 船公司應視實際需求抽查紀錄簿之填寫情形，如換公司實習，所有公司皆應填寫本頁。

COMPANY'S INSPECTION OF RECORD BOOK

所填之意見限與學員實際進度及適任性有關者，不應涉及個人性格特質。

Comments should only relate to the trainee's practical progress and competence and should NOT refer to character.

[illegible]

基本訓練學習所採用書籍、錄影帶或訓練用電腦課程之清單 船上訓練涉及所有教材皆應登載。

**LIST OF PUBLICATIONS, VIDEO OR COMPUTER-BASED TRAINING
PROGRAMMES STUDIED/USED**

日期 Date	標題 Subject/Title	訓練員簽名 Officer's Signature
2015.2.9	SOLAS	林澄宇

第三部分 強制之安全與船上熟悉

SECTION3 MANDATORY SAFETY AND SHIPBOARD FAMILIARISATION

安全熟悉 SAFETY FAMILIARISATION 一艘船簽一欄

依 STCW 章程第 A-VI/1 節第 1 項之規定 as required by Section A-VI/1 paragraph 1 of the STCW Code

在船上被指派任務之前，所有船員應接受安全熟悉訓練，以瞭解在緊急情況下該如何處理。各船之船長或負責之甲級船員應在下表簽署，並加註日期顯示業已接受訓練或講授，足以執行所交付之任務或責任。

Before being assigned to shipboard duties all seafarers must receive basic safety familiarization to know what to do in an emergency. The master or responsible officer on each ship should sign and date below to signify that you have received training or instruction to be able to carry out the following tasks or duties.

船名 Ship's Name	○○輪				
任務/職責 Task/Duty	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date
具有下述能力 Be able to : 能夠與船上其他人員溝通有關基本 安全事宜 Communicate with other persons on board on elementary safety matters	張小明 2015.8.15				
能夠瞭解安全資訊之符號、標記與警 報信號 Understand safety information symbols, signs and alarm signals					

<p>知道如何處理下列情況 Know what to do if : 人員落水 A person falls overboard 偵測到火災或煙霧 Fire or smoke is detected 發出之火警或棄船警報 The fire or abandon ship alarm is sounded</p>					
<p>具有下述能力 Be able to : 了解部署表，登艇站位置及緊急逃生路線 Identify muster and embarkation stations and emergency escape routes</p>					
<p>救生衣與浸水衣之位置與穿著 Locate and don life jackets and survival suits</p>					
<p>啟動警報，並具有使用輕便滅火器之基本知識 Raise the alarm and have a basic knowledge of the use of portable fire extinguishers</p>					
<p>於遇到事故時採取立即行動或在得到船上進一步醫護救助前可能的緊急醫護處置 Take immediate action upon encountering an accident or other medical emergency before seeking further medical assistance on board</p>					
<p>除了艙口蓋，能夠開關該船上一切之防火、風雨密及水密門 Close and open the fire, weather tight and watertight doors fitted in the particular ship, other than those for hull openings</p>					

船上熟悉 SHIPBOARD FAMILIARISATION

依 STCW 國際公約規則 I/14 之規定 as required by Regulation 1/14 of the STCW Convention

必需利用時間，短期內熟悉你未來所需應用之設備及特定之當值、安全、環境與應急程序及執行職責所需之安排。由於安全與應急設備因船而異，應確定熟悉與你經常或應急有關之職責及所有船上之佈置、裝置、設備操作程序及船舶特性，在報到該船後，應儘早完成下列科目或職責。

You will be given a period of time during which you will have an opportunity to become acquainted with the equipment you will be using, and specific watchkeeping, safety, environmental and emergency procedures and arrangements required to perform your duties. The location of safety and emergency equipment varies from ship to ship. To be sure that you are familiar with your duties and all ship arrangements, installations, equipment procedures and ship characteristics that are relevant to your routine or emergency duties, you must complete the following tasks or duties as soon as possible on joining your ship.

船名 Ship's Name					
任務/職責 Task/Duty	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date	訓練員 簽名/日期 Officer's Signature/Date
當值程序與佈置 Watchkeeping procedures and arrangements : 熟悉駕駛台、瞭望台、艙艙、艙甲板、主甲板及其他工作區域 Visit bridge, look-out post, forecastle, poopdeck, main deck and other work areas					
熟悉舵輪控制台、電話、電報與其他駕駛台設備及顯示器 Get acquainted with steering controls, telephones, telegraphs and other bridge equipment and displays					

在監督下，操作例行作業之設備 Activate, under supervision, equipment to be used in routine duties					
安全與應急程序 Safety and emergency procedures : 對公司之火災與安全規定能予以解讀並以實作證明瞭解 Read and demonstrate an understanding of your Company's Fire and Safety Regulations					
示範能夠識別下列警報信號 Demonstrate recognition of the alarm signals for : 火警 FIRE 應急 EMERGENCY 棄船 ABANDON SHIP					
確定醫療與急救設備之位置 Locate medical and first aid equipment					
確定滅火設備之位置：警報作動點、警鈴、滅火器、消防栓、太平斧與水龍帶 Locate firefighting equipment alarm activating points, alarm bells, extinguishers, hydrants, fire axes and hoses					
確定火箭拋繩器之位置 Locate rocket line throwing apparatus					
確定遇險火箭、紅光火焰及其他煙火信號彈之位置 Locate distress rockets, flares and other pyrotechnics					

確定呼吸器及消防員裝具等之位置 Locate breathing apparatus and firefighter's outfits etc					
確定 EPIRB、SART 及攜帶式無線電對講機之位置 Locate EPIRB, SART and walkie-talkie radios					
確定應急逃生呼吸設施之位置 Locate Emergency Escape Breathing Devices (EEBDs)					
確定二氧化碳瓶室及泵間、液貨艙與貨艙內滅火設備的控制閥位置 Locate CO2 bottle room, and control valves for smothering apparatus in pump rooms, cargo tanks and holds					
確定應急泵之位置並瞭解其操作方法 Locate and understand the operation of the emergency pump					
環境保護 Environmental protection : 熟悉處理廚餘、垃圾及其他廢棄物之程序 Get acquainted with the procedure for handling garbage, rubbish and other wastes					
垃圾集壓器或其他適當裝置之使用 The use of garbage compactor or other equipment as appropriate					

救生艇與召集站 BOAT AND MUSTER STATIONS

在下表之適當欄內填入救生艇與消防召集站暨其他細節(時間; 任務)。呈請船長於該欄內簽署。

Insert Boat and Fire Muster Stations and other details in the appropriate space. Ask the master to sign in the space provided.

船名 Ship's Name					
救生艇召集站 Boat Muster Station					
消防召集站 Fire Muster Station					
船長正楷姓名 Master's Name BLOCK CAPITALS					
船長簽名 Master's Signature					
日期 Date					

此表為船舶基本資料，記得要填寫。

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第四部分 船舶規格 SECTION 4 PARTICULARS OF SHIPS

瞭解所服務船舶為訓練重點，為協助你符合此重要規定，當你在各船上時應將下列規格予以記錄。對照先前所服務之船舶，在申請適任證書之口試與評估中，這方面的內容有可能會被詢問。

It is an essential feature of your training that you obtain knowledge of the ships on which you serve. To assist you in meeting this important requirement the following particulars are to be recorded during the time spent on each ship. Questions on this subject, with particular reference to your last ship, are likely to be put to you during an oral examination and assessment for your certificate of competency.

第一艘船 FIRST SHIP

船名 MV/SS:	IMO 號碼 IMO Number:	呼號 Call Sign:
船舶規格與容量 Dimensions and Capacities	柴油容量 DO capacity _____ m3/ton	最大輸出量 Max electrical output _____
全長 Length Over All _____ m	重燃油消耗率 HFO consumption _____ ton/day	錨 Anchors
船寬 Breadth _____ m	柴油消耗率 DO consumption _____ ton/day	左錨 Port _____ tonnes
船深 Depth _____ m	航速 Service speed _____ knots	右錨 Starboard _____ tonnes
夏季吃水 Summer draft _____ m	淡水機 Fresh water generator _____ ton/day	貨物裝卸機具 Cargo Handling Gear
夏季乾舷 Summer freeboard _____ m	輔機 Auxiliary Machinery	吊桿/起重機 Derricks/cranes (數量與安全負荷量
總噸位 Gross tonnage _____ tonnes	舵機系統 Steering Gear Type _____	No. and SWL) _____ tonnes
載重量 Deadweight _____ tonnes	螺旋槳 Propeller (Type/no. of blades/diameter) _____	絞纜機 Winches (型式 types) _____ tonnes
輕載排水量 Light displacement _____ tonnes	_____	壓水艙 Ballast tanks (數量 No.) _____
散裝/液體容積 Grain/Liquid capacity _____ tonnes	橫車 Thruster (no./type) _____	貨艙 Cargo tanks (數量 No.) _____
主機 Main Engine	發電機 Generator (數量 No. / 型式 Type) _____	貨泵 Cargo pumps (數量 No.) _____
引擎 Engine (製造廠 Maker) _____	_____	泵輸出量 Pumping rate _____ cbm/Hrs
引擎 Engine (型式 type) _____	輸出功率 Output _____ kW	管路 Pipelines (口徑 sizes) _____
額定最大連續輸出 (MCR) _____ kW	發電機引擎燃料 Generator engine fuel :	型式與輸出量 Type and rating
在每分鐘 at _____ 轉 (rpm)	種類 Category _____	_____ tonnes/hour
鍋爐 (製造廠/型式) Boiler (maker/type) _____	每日耗油量 Fuel consumption per day _____ T	其他裝卸貨設備 Other cargo equipment
_____	緊急發電機 Emergency generator engine (型式 type) _____	_____
重燃油容量 HFO capacity _____ m3/ton	_____	_____

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<p>滅火設備 Fire Fighting Equipment</p> <p>緊急救火泵 Emergency fire pump (型式/容量 type/cap.) _____</p> <p>滅火器 (數量與容量)</p> <p>型式 Types : 水 Water 公升 liters</p> <p> 泡沫 Foam 公升 liters</p> <p> 乾粉 Dry powder 公斤 kg</p> <p> 二氧化碳 CO₂ 公斤 kg</p> <p>消防水龍帶 Fire hoses (數量與口徑 No. and size) _____ mm</p> <p>呼吸器 Breathing apparatus (數量/製造廠 no/make) _____</p>	<p>救生設備 Lifesaving Equipment</p> <p>救生艇(數量/容量/引擎)Lifeboats(No./cap/engine) _____</p> <p>救生筏 (數量/容量) Life-rafts (No./capacity) _____</p> <p>救生圈 Lifebuoys (數量 No.) _____</p> <p>求生衣 Survival Suits (數量 No./型式 type) _____</p> <p>逃生呼吸組 (數量/型式) EEBD (No./type) _____</p>	
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第二艘船 SECOND SHIP

船名 MV/SS:	IMO 號碼 IMO Number:	呼號 Call Sign:
船舶規格與容量 Dimensions and Capacities	橫車 Thruster(no./type) _____	救生設備 Lifesaving Equipment
全長 Length Over All _____ m	發電機 Generator (數量 No. / 型式 Type) _____	救生艇 (數量/容量/引擎) Lifeboats (No./cap/engine) _____
船寬 Breadth _____ m	輸出功率 Output _____ kW	救生筏 (數量/容量) Life-rafts (No./capacity) _____
船深 Depth _____ m	發電機引擎燃料 Generator engine fuel: _____	救生圈 Lifebuoys (數量 No.) _____
夏季吃水 Summer draft _____ m	種類 Category _____	求生衣 Survival Suits (數量 No. / 型式 type) _____
夏季乾舷 Summer freeboard _____ m	每日耗油量 Fuel consumption per day _____ T	逃生呼吸組 (數量/型式) EEBD (No./type) _____
總噸位 Gross tonnage _____ tonnes	緊急發電機 Emergency generator engine(型式 type) _____	
載重量 Deadweight _____ tonnes	最大輸出量 Max electrical output _____	滅火設備 Fire Fighting Equipment
輕載排水量 Light displacement _____ tonnes	錨 Anchors	緊急救火泵 Emergency fire pump _____
散裝/液體容積 Grain/Liquid capacity _____ tonnes	左錨 Port _____ tonnes	(型式/容量 type/cap.) _____
主機 Main Engine	右錨 Starboard _____ tonnes	滅火器 (數量與容量) _____
引擎 Engine (製造廠 Maker) _____	貨物裝卸機具 Cargo Handling Gear	型式 Types: 水 Water _____ 公升 liters
引擎 Engine (型式 type) _____	吊桿/起重機 Derricks/cranes (數量與安全負荷量 No. and SWL) _____ tonnes	泡沫 Foam _____ 公升 liters
額定最大連續輸出 (MCR) _____ kW	絞纜機 Winches (型式 types) _____ tonnes	乾粉 Dry powder _____ 公斤 kg
在每分鐘 at _____ 轉 (rpm)	壓水艙 Ballast tanks (數量 No.) _____	二氧化碳 CO ₂ _____ 公斤 kg
鍋爐 (製造廠/型式) Boiler (maker/type) _____	貨艙 Cargo tanks (數量 No.) _____	消防水龍帶 Fire hoses (數量與口徑 No. and size) _____ mm
重燃油容量 HFO capacity _____ m3/ton	貨泵 Cargo pumps (數量 No.) _____	呼吸器 Breathing apparatus (數量/製造廠 no/make) _____
柴油容量 DO capacity _____ m3/ton	泵輸出量 Pumping rate _____ cbm/Hrs	
重燃油消耗率 HFO consumption _____ ton/day	管路 Pipelines (口徑 sizes) _____	
柴油消耗率 DO consumption _____ ton/day	型式與輸出量 Type and rating _____ tonnes/hour	
航速 Service speed _____ knots	其他裝卸貨設備 Other cargo equipment _____	
淡水機 Fresh water generator _____ ton/day		
輔機 Auxiliary Machinery		
舵機系統 Steering Gear Type _____		
螺旋槳 Propeller(Type/no. of blades/diameter) _____		

第三艘船 THIRD SHIP

船名 MV/SS:	IMO 號碼 IMO Number:	呼號 Call Sign:
船舶規格與容量 Dimensions and Capacities	橫車 Thruster(no./type) _____	救生設備 Lifesaving Equipment
全長 Length Over All _____ m	發電機 Generator (數量 No. / 型式 Type) _____	救生艇(數量/容量/引擎)Lifeboats(No./cap/engine) _____
船寬 Breadth _____ m	輸出功率 Output _____ kW	救生筏(數量/容量) Life-rafts (No./capacity) _____
船深 Depth _____ m	發電機引擎燃料 Generator engine fuel :	救生圈 Lifebuoys (數量 No.) _____
夏季吃水 Summer draft _____ m	種類 Category _____	求生衣 Survival Suits (數量 No. / 型式 type) _____
夏季乾舷 Summer freeboard _____ m	每日耗油量 Fuel consumption per day _____ T	逃生呼吸組(數量/型式) EEBD (No./type) _____
總噸位 Gross tonnage _____ tonnes	緊急發電機 Emergency generator engine(型式 type) _____	
載重量 Deadweight _____ tonnes	最大輸出量 Max electrical output _____	滅火設備 Fire Fighting Equipment
輕載排水量 Light displacement _____ tonnes	錨 Anchors	緊急救火泵 Emergency fire pump
散裝/液體容積 Grain/Liquid capacity _____ tonnes	左錨 Port _____ tonnes	(型式/容量 type/cap.) _____
主機 Main Engine	右錨 Starboard _____ tonnes	滅火器(數量與容量)
引擎 Engine (製造廠 Maker) _____	貨物裝卸機具 Cargo Handling Gear	型式 Types : 水 Water 公升 liters
引擎 Engine (型式 type) _____	吊桿/起重機 Derricks/cranes (數量與安全負荷量	泡沫 Foam 公升 liters
額定最大連續輸出 (MCR) _____ kW	No. and SWL) _____ tonnes	乾粉 Dry powder 公斤 kg
在每分鐘 at _____ 轉 (rpm)	絞纜機 Winches (型式 types) _____ tonnes	二氧化碳 CO ₂ 公斤 kg
鍋爐 (製造廠/型式) Boiler (maker/type) _____	壓水艙 Ballast tanks (數量 No.) _____	消防水龍帶 Fire hoses (數量與口徑 No. and size) _____ mm
重燃油容量 HFO capacity _____ m3/ton	貨艙 Cargo tanks (數量 No.) _____	呼吸器 Breathing apparatus (數量/製造廠 no/make) _____
柴油容量 DO capacity _____ m3/ton	貨泵 Cargo pumps (數量 No.) _____	
重燃油消耗率 HFO consumption _____ ton/day	泵輸出量 Pumping rate _____ cbm/Hrs	
柴油消耗率 DO consumption _____ ton/day	管路 Pipelines (口徑 sizes) _____	
航速 Service speed _____ knots	型式與輸出量 Type and rating _____ tonnes/hour	
淡水機 Fresh water generator _____ ton/day	其他裝卸貨設備 Other cargo equipment _____	
輔機 Auxiliary Machinery		
舵機系統 Steering Gear Type _____		
螺旋槳 Propeller(Type/no. of blades/diameter) _____		

第四艘船 FOURTH SHIP

船名 MV/SS:	IMO 號碼 IMO Number:	呼號 Call Sign:
船舶規格與容量 Dimensions and Capacities 全長 Length Over All _____ m 船寬 Breadth _____ m 船深 Depth _____ m 夏季吃水 Summer draft _____ m 夏季乾舷 Summer freeboard _____ m 總噸位 Gross tonnage _____ tonnes 載重量 Deadweight _____ tonnes 輕載排水量 Light displacement _____ tonnes 散裝/液體容積 Grain/Liquid capacity _____ tonnes	橫車 Thruster(no./type) _____ 發電機 Generator (數量 No. / 型式 Type) _____ 輸出功率 Output _____ kW 發電機引擎燃料 Generator engine fuel : 種類 Category _____ 每日耗油量 Fuel consumption per day _____ T 緊急發電機 Emergency generator engine(型式 type) _____ 最大輸出量 Max electrical output _____	救生設備 Lifesaving Equipment 救生艇(數量/容量/引擎) Lifeboats(No./cap/engine) _____ 救生筏(數量/容量) Life-rafts (No./capacity) _____ 救生圈 Lifebuoys (數量 No.) _____ 求生衣 Survival Suits (數量 No. /型式 type) _____ 逃生呼吸組(數量/型式) EEBD (No./type) _____
主機 Main Engine 引擎 Engine (製造廠 Maker) _____ 引擎 Engine (型式 type) _____ 額定最大連續輸出 (MCR) _____ kW 在每分鐘 at _____ 轉 (rpm) 鍋爐 (製造廠/型式) Boiler (maker/type) _____ 重燃油容量 HFO capacity _____ m3/ton 柴油容量 DO capacity _____ m3/ton 重燃油消耗率 HFO consumption _____ ton/day 柴油消耗率 DO consumption _____ ton/day 航速 Service speed _____ knots 淡水機 Fresh water generator _____ ton/day 輔機 Auxiliary Machinery 舵機系統 Steering Gear Type _____ 螺旋槳 Propeller(Type/no. of blades/diameter) _____	錨 Anchors 左錨 Port _____ tonnes 右錨 Starboard _____ tonnes 貨物裝卸機具 Cargo Handling Gear 吊桿/起重機 Derricks/cranes (數量與安全負荷量 No. and SWL) _____ tonnes 絞纜機 Winches (型式 types) _____ tonnes 壓水艙 Ballast tanks (數量 No.) _____ 貨艙 Cargo tanks (數量 No.) _____ 貨泵 Cargo pumps (數量 No.) _____ 泵輸出量 Pumping rate _____ cbm/Hrs 管路 Pipelines (口徑 sizes) _____ 型式與輸出量 Type and rating _____ tonnes/hour 其他裝卸貨設備 Other cargo equipment _____	滅火設備 Fire Fighting Equipment 緊急救火泵 Emergency fire pump (型式/容量 type/cap.) _____ 滅火器 (數量與容量) 型式 Types : 水 Water 公升 liters 泡沫 Foam 公升 liters 乾粉 Dry powder 公斤 kg 二氧化碳 CO ₂ 公斤 kg 消防水龍帶 Fire hoses (數量與口徑 No. and size) _____ mm 呼吸器 Breathing apparatus (數量/製造廠 no/make) _____

第五艘船 FIFTH SHIP

船名 MV/SS:	IMO 號碼 IMO Number:	呼號 Call Sign:
船舶規格與容量 Dimensions and Capacities	橫車 Thruster(no./type) _____	救生設備 Lifesaving Equipment
全長 Length Over All _____ m	發電機 Generator (數量 No. / 型式 Type) _____	救生艇 (數量/容量/引擎) Lifeboats (No./cap/engine) _____
船寬 Breadth _____ m	輸出功率 Output _____ kW	救生筏 (數量/容量) Life-rafts (No./capacity) _____
船深 Depth _____ m	發電機引擎燃料 Generator engine fuel : _____	救生圈 Lifebuoys (數量 No.) _____
夏季吃水 Summer draft _____ m	種類 Category _____	求生衣 Survival Suits (數量 No. / 型式 type) _____
夏季乾舷 Summer freeboard _____ m	每日耗油量 Fuel consumption per day _____ T	
總噸位 Gross tonnage _____ tonnes	緊急發電機 Emergency generator engine(型式 type) _____	
載重量 Deadweight _____ tonnes	最大輸出量 Max electrical output _____	逃生呼吸組 (數量/型式) EEBD (No./type) _____
輕載排水量 Light displacement _____ tonnes	錨 Anchors	滅火設備 Fire Fighting Equipment
散裝/液體容積 Grain/Liquid capacity _____ tonnes	左錨 Port _____ tonnes	緊急救火泵 Emergency fire pump
主機 Main Engine	右錨 Starboard _____ tonnes	(型式/容量 type/cap.) _____
引擎 Engine (製造廠 Maker) _____	貨物裝卸機具 Cargo Handling Gear	滅火器 (數量與容量)
引擎 Engine (型式 type) _____	吊桿/起重機 Derricks/cranes (數量與安全負荷量	型式 Types : 水 Water 公升 liters
額定最大連續輸出 (MCR) _____ kW	No. and SWL) _____ tonnes	泡沫 Foam 公升 liters
在每分鐘 at _____ 轉 (rpm)	絞纜機 Winches (型式 types) _____ tonnes	乾粉 Dry powder 公斤 kg
鍋爐 (製造廠/型式) Boiler (maker/type) _____	壓水艙 Ballast tanks (數量 No.) _____	二氧化碳 CO ₂ 公斤 kg
重燃油容量 HFO capacity _____ m3/ton	貨艙 Cargo tanks (數量 No.) _____	消防水龍帶 Fire hoses (數量與口徑 No. and size) _____ mm
柴油容量 DO capacity _____ m3/ton	貨泵 Cargo pumps (數量 No.) _____	呼吸器 Breathing apparatus (數量/製造廠 no/make) _____
重燃油消耗率 HFO consumption _____ ton/day	泵輸出量 Pumping rate _____ cbm/Hrs	
柴油消耗率 DO consumption _____ ton/day	管路 Pipelines (口徑 sizes) _____	
航速 Service speed _____ knots	型式與輸出量 Type and rating _____ tonnes/hour	
淡水機 Fresh water generator _____ ton/day	其他裝卸貨設備 Other cargo equipment _____	
輔機 Auxiliary Machinery		
舵機系統 Steering Gear Type _____		
螺旋槳 Propeller(Type/no. of blades/diameter) _____		

第五部分 訓練科目資訊及應予達成之適任性

SECTION 5 INFORMATION ON TRAINING TASKS AND COMPETENCES TO BE ACHIEVED

本部分明列訓練科目的細節，學員應充分的利用並在海上期間完成之。學員可在下列各頁內看到應進行之科目與職責。完成它們將讓你符合適任性的要求。

This section of your Record Book gives details of the training tasks that you should follow to make best use of your time at sea. You will see that each page lists the tasks or duties that you should undertake. Completion of these will lead to meeting the competences.

你的進度與表現應由同部門較自身高階之甲級船員予以審查後，於該頁之右側陰影空格內簽入姓名及日期，表示你在該項目的表現已符合評估標準並證明為適任。該甲級船員並可在需要改進之部分作出建議。茲將 STCW 章程對助理級輪機當值及輪機助理員適任性表列之要求列出如次：

A senior officer should review your progress and indicate, with Signature and date in the blue box on the right hand side of the page, that your performance is considered to meet the Criteria for Evaluation and that competence has been demonstrated in that element. The officer may offer advice on areas in which improvement is necessary. The competences required by ratings forming part of an engineering watch and able seafarer engine as tabulated in the STCW Code are listed below. This Section is organised as follows:

構成有人值守機艙當值一部分或指派在定期無人值守機艙執行職責乙級船員之適任性 (STCW 章程表 A-III/4)

COMPETENCES FOR RATINGS FORMING PART OF A WATCH IN A MANNED ENGINE-ROOM OR DESIGNATED TO PERFORM DUTIES IN A PERIODICALLY UNMANNED ENGINE-ROOM (STCW CODE TABLE A-III/4)

助理級-輪機工程 Marine engineering at the Support Level (第 32 頁)

1. 助理級輪機當值職責之例行值班 Carry out a watch routine appropriate to the duties of a rating forming part of an engine-room watch
2. 維持正確水位及蒸汽壓力（值鍋爐班者） Maintain the correct levels and steam pressures (for keeping a boiler watch)
3. 操作緊急設備及應用緊急程序 Operate emergency equipment and apply emergency procedures



在有人值守機艙或指派在定期無人值守機艙執行職責輪機助理員發證之適任性 (STCW 章程表 A-III/5)

COMPETENCES FOR CERTIFICATION OF RATINGS AS ABLE SEAFARER ENGINE IN A MANNED ENGINE-ROOM OR DESIGNATED TO PERFORM DUTIES IN A PERIODICALLY UNMANNED ENGINE-ROOM (STCW CODE TABLE A-III/5)

助理級-輪機工程 Marine engineering at the Support Level (第 51 頁)

4. 致力於安全輪機當值 Contribute to a safe engineering watch
5. 致力於機艙當值之監控 Contribute to the monitoring and controlling of an engine-room watch
6. 致力於加燃油與駁油作業 Contribute to fuelling and oil transfer operations
7. 致力於艙底水與壓載水作業 Contribute to bilge and ballast operations
8. 致力於設備與機械之安全操作 Contribute to the safe operation of equipment and machinery

助理級-電機、電子與控制工程 Electrical, Electronic And Control Engineering at the Support Level (第 69 頁)

9. 電機設備之安全使用 Safe use of electrical equipment

助理級-保養及維修 Maintenance and Repair at the Support Level (第 73 頁)

10. 致力於船上之保養及維修 Contribute to shipboard maintenance and repair

助理級-船舶操作與船上人員管理 Controlling the Operation of the Ship and Care for Persons On Board at the Support Level (第 82 頁)

11. 致力於物料處理 Contribute to the handling of stores
12. 應用預防措施並致力於防止海洋環境之污染 Apply precautions and contribute to the prevention of pollution of the marine environment
13. 應用職業健康與安全之預防措施 Apply occupational health and safety precautions

如何填寫訓練科目及達成適任性之範例

Example of How to Complete the List of Training Tasks and Competences Achieved

項次 Ref No	訓練 Training		評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
1	適任 Competence : 助理級輪機當值職責之例行值班 Carry out a watch routine appropriate to his duties of a rating forming part of an engine-room watch				
1.1	正確使用機艙所使用之術語、機器與設備之名稱 Use correct terms in machinery spaces and names of machinery and equipment		語文溝通清晰簡明，對當值資料或說明不能明白瞭解時能夠尋求當值輪機員之意見或說明 Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood	2/E 劉七	31/08/14
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者 (簽名/日期) Instructor (Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者 (簽名/日期) Instructor (Signature/Date)	
1	依輪機日誌、引擎操縱日誌及其他紀錄簿之指導記錄資訊 Record information, as instructed, in the engine-room log book, engine movements log and other record books	MM 孫八25/08/14	各欄位填寫清晰，但多注意讀數、計算及抄寫。多比對正當之情況即可立即找出功能失常之處	2/E 劉七	29/08/14
2	觀察及標註正常之水位並對任何不正常之變更採取適當之行動或予以注意 Observe and note normal operating temperatures/pressures	MM 孫八26/08/14			
3	示範正確使用機器空間所使用之術語及機器與設備之名稱 Demonstrate correct use of terms used in the engine-room and names of machinery, equipment and tools	2/E 劉七27/08/14			

- (1) 簽名部分含職級與中文正楷全名，如為外籍船員請簽英文正楷全名。
- (2) 先完成各別細項（如上述1.1.1~1.1.3）並分別由同部門較自身高階之船員作為施訓者簽署，如有需改進處於其右方空白欄位填寫需改進事項，並於完成再次訓練後簽署。
- (3) 各別細項皆簽署完成後，請同部門較自身高階之甲級船員於大項（如上述1.1）簽署適任性證明。

- 深色陰影部分之適任性（此例為「助理級輪機當值職責之例行值班」）係直接摘自STCW章程之本文。應於學員海勤資歷期末予以記錄，以認定其能儘可能適任此等適任性。
The competence shaded blue (in this case 'carry out a watch routine appropriate to his duties of a rating forming part of an engine-room watch') is directly taken from the text of the STCW Code. By the end of the period of seagoing service the trainee should be recorded as being considered competent in as many of these competences as possible.
- 主要之科目（此例為1.1「依輪機日誌、引擎操縱日誌及其他紀錄簿之指導記錄資訊」）經再分項列於該頁訓練科目或職責之左側。學員應儘可能完成此等訓練科目。然可能因船舶之設備、貨物或航程之情況，此等所有之科目並不期望學員在任務前能被認為足以適任。應予注意者某些適任性之技能與知識可能需要岸上訓練時取得。
The primary tasks (in this case 1.1 'Record information, as instructed, in the engine-room log book, engine movements log and other record books') is sub-divided into training tasks or duties on the left hand side of the page. The trainee should complete as many of these training tasks as possible. However, in view of the likely equipment, cargo or voyage pattern of the ship, it is not expected that all these tasks will be completed before the trainee is considered competent in the primary task. It should be noted that some of the skills and knowledge that underpin the competences may well have been obtained during shore based training.
- 各訓練科目之完成提供兩空格供施訓者記錄。此並不意謂該各科目應完成兩次，依該施訓者之意見，一次亦可。
Space is provided to record completion of each training task twice by the instructor. This does not mean that each task must be completed twice if, in the opinion of the instructor, once is considered sufficient.
- 施訓者並不必要為指派訓練員。
Instructor does not necessarily have to be the designated training officer.
- 船長或同部門較自身高階之甲級船員在淡色陰影部分空格前記錄「適任性證明」時，得對改進部分作建議。為此目的，在評估標準之下方留有較大之空格，以便填寫。如此等主要科目之適任性證明為適任，則應由船長或同部門較自身高階之甲級船員，在評估標準下方陰影部分靠右側之適當空格簽署，並加註日期（年月日）。
Before 'Competence Demonstrated' is recorded (in the light blue box), the master or designated on board training officer may record any appropriate advice about areas for improvement. A large blank space for this purpose is provided beneath the criteria for evaluation. As competence in these primary tasks is demonstrated, the appropriate light blue box next to the criteria for evaluation, on the far right hand side of the page, should be signed and dated (day, month and year) by the master or designated training officer on board the ship to attest that competence has been demonstrated.
- 當船長或同部門較自身高階之甲級船員確認學員能在無監督之下執行其職責或該學員在執行其職責時亦可監督其他人員時，始可簽署「適任性證明」欄位。
A trainee's attainment of the competence should only be recorded as 'Competence Demonstrated' when the master or designated training officer is satisfied that the trainee can perform the duty without supervision or, where appropriate, that the trainee is able to supervise others in the performance of the duty.
- 當記錄「適任性證明」時應仔細考慮在該頁右側內之評估標準，亦為航海人員與良好安全工作實踐之最佳方法。
When recording 'Competence Demonstrated', careful account should be taken of the criteria for evaluation contained on the right hand side of the page, as well as the best practices of seafarers and good safe working practices.

第六部分 助理級輪機當值之科目

SECTION 6 TASKS FOR SUPPORT LEVEL RATINGS FORMING PART OF AN ENGINEERING WATCH

申請發證為助理級輪機當值者可以單獨完成本部分，或申請發證為輪機助理員者可以合併完成第七部分之訓練。

This section can be completed on its own for certification as ratings forming part of an engineering watch, or can be completed in combination with the training set out in Section 7 for certification as an Able Seafarer Engine.

在本部分訓練中包含申請發證為助理級輪機當值之要求，STCW 章程第 A-III/4 節所含之適任性僅限於助理級輪機工程專長。

The training in this section of this record book covers the requirement for the certification of ratings forming part of an engineering watch. The competences covered by Section A-III/4 of the STCW Code are limited to the function Engineering at the Support Level.

STCW 規則 III/4 STCW Regulation III/4

構成有人值守機艙當值一部分或指派在定期無人值守機艙執行職責乙級船員發證之強制性最低要求

Mandatory minimum requirements for certification of ratings forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

1. 凡在主機推進動力 750 瓩以上之構成有人值守機艙當值一部分或指派在定期無人值守機艙執行職責乙級船員，除正在接受訓練之乙級船員及在當值時其職責屬非技術性之乙級船員外，應經適當發證以執行此職責。

Every rating forming part of an engine-room watch or designated to perform duties in a periodically unmanned engine-room on a seagoing ship powered by main propulsion machinery of 750kW propulsion power or more, other than ratings under training and ratings whose duties are of an unskilled nature, shall be duly certificated to perform such duties.

2. 凡申請發證者應：

Every candidate for certification shall:

- .1 年滿 16 歲；be not less than 16 years of age;
- .2 業已完成：have completed:
 - .2.1 認可之海勤資歷，包括至少 6 個月之訓練及經歷；或
approved seagoing service including not less than six months of training and experience, or
 - .2.2 上船前或在船上之特殊訓練，包括至少 2 個月經認可之海勤資歷；及

special training, either pre-sea or on board ship, including an approved period of seagoing service which shall not be less than two months; and

.3 符合 STCW 章程第 A-III/4 節所述之適任標準。

meet the standard of competence specified in section A-III/4 of the STCW Code.

3. 第 2.2.1 及 2.2.2 目所要求之海勤資歷、訓練及經歷，應與輪機部門當值功能相關，並涉及在適格之輪機甲級船員或適格之乙級船員直接監督下所執行之職責。

The seagoing service, training and experience requirement by subparagraphs 2.2.1 and 2.2.2 shall be associated with engine-room watchkeeping functions and involve the performance of duties carried out under the direct supervision of a qualified engineer officer or a qualified rating.

艙面乙級船員填寫本 ISF 訓練紀錄簿者，應確已採取構架之方法以使該學員首先能適格為助理級輪機當值。合併完成第六部分與第七部分者可協助提早發證為輪機助理員。

Completion of the ISF Training Record Book for deck ratings should ensure a structured approach is undertaken so that trainees can first qualify as ratings forming part of an engineering watch. However, completing Sections 6 and 7 together might assist in early certification as an Able Seafarer Engine.

學員可利用第八部分之科目概要表標出其所完成船上訓練科目。

A Task Summary Chart, which trainees can tick off as they complete their on board training tasks, can be found in Section 8.

**船上訓練科目如實習船舶無此設備或項目時，
請船公司備註「此船無此設備」，並加蓋公司章。**

專長 FUNCTION：助理級-輪機工程

MARINE ENGINEERING AT THE SUPPORT LEVEL

項次 Ref No	訓練 Training		評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
1	適任 Competence : 助理級輪機當值職責之例行值班， 瞭解指令與當值職責有關之事宜 Carry out a watch routine appropriate to His duties of a rating forming part of an engine-room watch. Understand orders and be understood in matters relevant to watchkeeping duties				
1.1	正確使用機艙所使用之術語、機器與設備之名稱 Use correct terms in machinery spaces and names of machinery and equipment		語文溝通清晰簡明，對資料或說明並不能明白瞭解時會尋求當值輪機員之意見或說明 Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	
.1	依指示將活動寫入輪機日誌、機器作動日誌及其他紀錄簿 Record information, as instructed, in the engine-room log book, engine movements log and other record books	MM 林澄宇	2015.7.26		

.2	觀察及記錄正常之溫度與壓力 Observe and note normal operating temperatures/pressures	MM 林澄宇	2015.8.9			
.3	能正確使用機艙所使用之術語及機器與設備之名稱 Demonstrate correct use of terms used in the engine-room and names of machinery, equipment and tools					
1.2	執行機艙當值程序 Conduct engine-room watchkeeping procedures			語文溝通清晰簡明，對當料或說明並不能明白瞭解時會尋求當值輪機員之意見或說明。依公認之原則及程序值班、交班及接班 <i>Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood. Maintenance, handover and relief of the watch is in conformity with accepted principles and procedures</i>		
.1	協助主機備便開航 Assist with preparing machinery for a sea passage					
.2	協助檢查制動空氣壓縮機並啟動空氣系統 Assist with checking the starting air compressor and prepare starting air systems					
.3	協助輪機甲級船員之下列職責： 機艙當值 Seagoing watches					
.4	港口/錨泊當值 Port/anchor watches					
.5	按步接班與交班 Accept and handover the watch duties in a timely manner					

.6	在監督下執行所有之例行當值職責，檢查自動控制與監測系統之正確功能 Under supervision carry out all routine watchkeeping duties, checking the correct functioning of automatic control and monitoring systems					
.7	如有必要予以調整 Make adjustments as found necessary					
.8	在監督下清潔主機冷卻水吸入口 Under supervision clean main engine cooling water suction					
.9	瞭解吸入口水位高低之需求及其變更之程序 Understand the need for high and low level suction and changeover procedures					
.10	檢查高壓燃油管護套及附裝之漏洩指示器 Check efficiency of sheathing on high-pressure fuel pipes and associated leak-off indicators					
.11	執行例行檢查並予保持冷卻水系統櫃與鍋爐熱井於正確水位 Perform routine checks and top ups to maintain cooling water system tanks and boiler hot well at the correct levels					
.12	執行例行檢查並予保持燃油與潤滑油系統櫃於正確油位 Perform routine checks and top ups to maintain fuel oil and lube oil system tanks at the correct levels					
.13	在監督下沖排洩掃氣室積水 Under supervision blow down scavenge drains					
.14	確使自動排水之功能正常 Ensure that automatic drains are functioning correctly					
.15	協助鍋爐水檢測與處理 Assist with boiler water tests and treatment					
.16	檢查鍋爐及其水位與燃燒器之正確操作 Check the correct operation of the boiler including water level and burner					

.17	協助吹灰或相關之程序 Assist with soot-blowing or associated procedure					
.18	協助備便蒸發器/淡水機 Assist with preparing an evaporator/fresh water generator					
.19	檢查所有蓄氣瓶之排水 Check all air receiver drains					
.20	檢查下列設施之正確操作： Check correct operation of: 燃油淨油機與過濾器 Fuel oil purifiers and filters					
.21	潤滑油淨油機與過濾器 Lube oil purifiers and filters					
.22	協助更換潤滑油冷卻器 Assist with changeover of lube oil coolers					
.23	協助更換淡水冷卻器 Assist with changeover of fresh water coolers					
.24	協助艙櫃清潔作業 Assist with a tank cleaning operation					
.25	協助當值甲級船員備便開航 Assist watch officer on standby departure					
.26	協助當值甲級船員備便抵港 Assist watch officer on standby arrival					
.27	協助變更下列機器至備便任務： Assist with the changeover to standby duties for: 主機 Main engines					
.28	發電機 Generators					
.29	泵 Pumps					

.30	舵機 Steering gear					
.31	協助準備操縱 Assist with preparations for manoeuvring					
.32	協助由重燃油變更為柴油作業 Assist with changeover from heavy fuel oil to diesel fuel oil operation					
.33	協助由柴油變更為重燃油作業 Assist with changeover from diesel fuel oil to heavy fuel oil operation					
.34	當引擎使用完畢後協助關閉主機與輔機系統 auxiliary systems when finished with engines					
.35	瞭解並執行英語之下列指令： Understand and execute orders in English concerning : 例行作業 Routine operations					
.36	緊急狀況 Emergency situations					
.37	協助製造淡水 Assist with maker up of fresh water					
.38	檢查淡水之比重 Check density of fresh water					
.39	協助更換乾燥劑與過濾器 Assist with replacing desiccant and filters					
.40	協助裝接污水系統管線 Assist with putting sewage system on line					
.41	協助建立 Assist with setting up: 壓載水連線以便泵送 Ballast water system for pumping					

.42	艙底水泵 Bilge pump					
.43	協助 Assist with: 加油 Receiving bunkers					
.44	將燃油轉駁至日用櫃 Transfer of fuel from bunker tanks to service tanks					
.45	協助甲級船員 Assist an officer with: 排放/打入壓艙水/收艙 Deballasting/ ballasting/ stripping tanks					
.46	將組件拆解、清潔及重組 Opening units, cleaning parts and reassembly					
1.3	用安全作法執行機艙當值 Use safe working practices as related to engine-room operations			語文溝通清晰簡明，對資料或說明並不能明白瞭解時會尋求當值輪機員之意見或說明 Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood		
.1	開航前協助準備並試驗舵機與傳鐘 Assist with preparation and testing the steering gear and telegraphs for sea					
.2	瞭解曲軸箱油霧偵測器之用途 Understand the purpose of the crankcase oil mist detector					
.3	確認在電力危險區域應採取之任何特別防護事項 Identify any special precautions to be taken for electrical maintenance in hazardous areas					
.4	證明能瞭解使用電動工具之工作實務與安全程序 Demonstrate an understanding of safe working practices and procedures for use of power operated tools					

.5	證明能瞭解進入密閉空間（艙櫃、尾軸通道、電纜與管路箱道、冰庫、貨艙、出入箱櫃及其他危險空間）之工作實務與安全程序 Demonstrate an understanding of safe working practices and procedures for entry into enclosed spaces (tanks, duct keels, cable and pipe trunks, fridges, cargo holds, access trunks and other hazardous spaces)					
.6	證明能瞭解在底肋板下之工作實務與安全程序 Demonstrate an understanding of safe working practices and procedures for work beneath floor plates					
.7	證明能瞭解使用起重機具與修正索具、吊鏈與吊環之工作實務與安全程序 Demonstrate an understanding of safe working practices and procedures for use of lifting gear and correct rigging, slinging and eyebolts					
.8	證明能瞭解涉及移動重機械之工作實務與安全程序 Demonstrate an understanding of safe working procedures involved in moving heavy machinery					
.9	證明能瞭解下列工作實務與安全程序： Demonstrate an understanding of safe working practices and procedures: 在冰庫工作 Work within refrigeration machinery spaces					
.10	惰氣房 Inert Gas machinery spaces					
.11	在電機房，包括掛有告示牌、斷電上鎖/掛籤的房間內工作 Work on electrical machinery, including signage, lock out and tagging					
.12	處理油漬廢物料 Disposal of oily waste materials					
.13	穿著適當之防護衣 Use of appropriate protective clothing					

.14	熱作及熱作許可 Hot work and hot work permit					
.15	以封鎖帶或柵欄標示工作區域 Marking off work areas with blocking tape or fencing					
.16	證明能瞭解在臺架上工作所需之防護 Demonstrate an understanding of the precautions required for working on staging					
.17	證明能瞭解警告、法定安全與禁止之符號 Demonstrate an understanding of warning, mandatory safety and prohibition signs					
.18	證明能瞭解依照管路系統內容物或功能，確認管路系統之標誌 Demonstrate an understanding of commonly used markings identifying piping systems in accordance with content or function					
.19	協助測試緊急停止電力 Assist with testing of electrical emergency stops					
.20	協助開關並固定機艙與天窗 Assist with the opening, closing and securing of engine-room and machinery hatches					
.21	協助試驗水密門、舷窗、艙口與緊急開關閥 Assist with the testing of watertight doors, ports, hatches and quick closing valves					
.22	確認所有之裝置、工具、備品等適當儲存與固定 Ensure that all gear, tools, spares etc are properly stowed and secured					
.23	協助裝設安全索與護欄 Assist with the rigging of safety lines and guard rails					

1.4	執行基本環境保護程序 Practice basic environmental protection procedures			語文溝通清晰簡明，對資料或說明並不能明白瞭解時會尋求當值輪機員之意見或說明 <i>Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood</i>		
.1	協助建立並使用油水分離器 Assist with setup and use of oily water separator					
.2	協助使艙底水之泵送符合 MARPOL 公約規定 Assist with bilge pumping in compliance with MARPOL					
.3	操作廢品壓碎器/壓實器/焚化爐 Operate waste shredder/compactor/incinerator					
.4	依 MARPOL 公約規定在岸上/海上處理垃圾 Dispose of garbage ashore/at sea in compliance with MARPOL					
.5	協助處理油泥至岸上收受設施 Assist with disposal of sludge to shore reception facilities in compliance with MARPOL					
.6	對上述任務，知道保存所有操作之紀錄 For above duties, be aware of record keeping requirements for all operations					
1.5	使用適當之船內通信系統 Use of appropriate internal communication system			語文溝通清晰簡明，對資料或說明並不能明白瞭解時會尋求當值輪機員之意見或說明 <i>Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood</i>		

1	示範進入無人當值機艙工作與離開時之報告程序 Demonstrate the reporting procedures when entering, working in and leaving an otherwise unmanned machinery space (UMS)					
2	正確示範使用船內通信系統 Demonstrate correct use of internal communication systems					
1.6	測試機艙警報系統並證明有能力區別各種警報，尤其是滅火氣體警報 Test engine-room alarm systems and demonstrate ability to distinguish between the various alarms, with special reference to fire extinguishing gas alarm			語文溝通清晰簡明，對資料或說明並不能明白瞭解時會尋求當值輪機員之意見或說明 <i>Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood</i>		
1	協助測試機艙火警偵測系統，並證明瞭解所裝置各種不同型式偵測器之目的 Assist with the testing of the engine-room fire detection system, and demonstrate an understanding of the purpose for which the different types of detector are fitted					
2	協助測試機艙固定滅火系統之氣體釋放閥 Assist with the testing of the engine-room fixed fire extinguishing system gas release valve					
3	瞭解在測試上述系統前所需之安全防護 Be aware of the safety precautions required prior to testing either of the above systems					
4	瞭解在釋放滅火氣體進入機艙前所需之安全防護 Be aware of the safety precautions required prior to release of a fire extinguishing gas into the engine-room					

<p>[5]</p>	<p>試驗並能辨識不同之警報並瞭解當下列警報發布時應採取之行動： Test and be able to identify the different alarms and understand actions to be taken when these alarms operate: 通用警報 General alarm 火警警報 Fire alarm 高水位警報 High level alarm 低水位警報 Low level alarm 油水分離警報 OWS alarm 有毒氣體警報 Gas release alarm 關閉水密門警報 Water tight door closing alarm 其他機艙警報 Other engine-room alarms(列出 list)</p> <p>_____</p> <p>_____</p> <p>_____</p>					
<p>[6]</p>	<p>如裝置有滅火用之固定二氧化碳系統。證明具有使用與辨識警報程序之知識 Where fixed CO2 system is fitted for fire extinguishing, demonstrate knowledge of procedures for use and recognise alarms</p>					
<p>[7]</p>	<p>如裝置有灑水滅火系統。證明具有使用程序之知識與辨識警報 Where water drench system is fitted, demonstrate knowledge of procedures for use and recognise alarms</p>					

在鍋爐當值之乙級船員應證明有安全操作鍋爐與附屬設備程序之知識，並證明有維持正確水位與蒸汽壓力之能力，暨在鍋爐區域進行必要之清潔與良好管理之實務。

On ship where a boiler watch is maintained ratings should demonstrate a knowledge of procedures for the safe operation of boilers and associated equipment and demonstrate ability to maintain correct water levels and steam pressure: and the necessity for cleanliness and good housekeeping practice in the boiler area.

2	適任 Competence : 維持正確之水位及蒸汽壓力 (值鍋爐班者) Maintain the correct levels and steam pressures (for keeping a boiler watch)		評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
2.1	鍋爐之安全操作 Safe operation of boilers		對鍋爐狀況評估準確，並基於現場、遙控指示器及親自檢查所得之有關資訊。調整及時序保持安全與最佳效果 Assessment of boiler condition is accurate and based on relevant information available from local and remote indicators and physical inspections. The sequence and timing of adjustments maintains safety and optimum efficiency		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	
.1	協助提升燃油之溫度至正確油溫 Assist with raising the temperature of fuel oil from cold to the correct level				
.2	協助鍋爐加水並由冷爐加溫 Assist with filling a boiler and raising steam from cold				

.3	協助由重燃油轉換至柴油作業 Assist with changeover from heavy fuel oil to diesel fuel oil operation					
.4	協助由柴油轉換至重燃油作業 Assist with changeover from diesel fuel oil to heavy fuel oil operation					
.5	使蒸汽通入管路或系統，採取所有防範措施 避免溫度與壓力之驟變及水鎚之發生 Admit steam to a line or system, taking all precautions against thermal and pressure shock and the avoidance of water hammer					
.6	檢查蒸汽管路之安全並防止膨脹 Check the security of steam pipes and provision for expansion					
.7	檢查蒸汽祛水器與凝水排洩之功能 Check that steam traps and drains are functioning					
.8	關閉蒸汽管路遵守程序予以排放冷凝水 Close down a steam line, observing procedure for draining					
.9	檢查燃燒之品質，注意： Check quality of combustion, noting: 由煙囪冒出之煙 Smoke from the funnel 火焰周圍之明晰度 Clarity around the flame 火焰形狀、大小與顏色 Flame shape, size and color 過剩空氣、一氧化碳/二氧化碳讀數過高 Excess air, CO ₂ /CO readings 積存之碳與未燃之燃油 Carbon and unborn fuel deposits					
.10	檢查由加熱盤管與其他回水可能的污染 Check returns from heating coils and other possible sources of contaminated feed water					
.11	協助檢查所有鍋爐狀況顯示器與警報之正確功能 Assist with checking the correct functioning of all boiler condition indicators and alarms					

.12	協助更換與翻修油頭 Assist with changing and overhauling burners					
.13	檢查是否保持正確水位 Check that correct boiler water level is maintained					
.14	能瞭解循環水溫度變化之效能 Understand the effect of varying the temperature of circulating water					
.15	協助停用鍋爐 Assist with taking a boiler out of service					
3	適任 Competence : 操作緊急設備及應用緊急程序 Operate emergency equipment and apply emergency procedures			評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
3.1	演示緊急狀況下之職責 Demonstrate emergency duties			得知緊急或異常情況時所採取之最初行動與業已建立之程序相符。不論何時能清晰簡明的溝通且命令以船員方式確認 <i>Initial action on becoming aware of an emergency or abnormal situation conforms to established procedures. Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner</i>		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)		對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	
.1	在下列緊急演習中採取正確之行動： Take correct action during emergency drills: 消防演習 Fire drill					

.2	電力失靈演習 Black out drill					
.3	棄船演習 Abandon ship drill					
.4	由密閉空間救人演習 Rescue from an enclosed space					
.5	協助在主機現場操控及緊急操縱 Assist with use of main engine local control and emergency manoeuvring					
.6	協助主機恢復至正常運轉之程序 Assist with procedure for returning main engine to normal running					
.7	協助應急運轉程序之演練 Assist with a drill for emergency running procedures					
.8	能示範舵機緊急操作之知識 Demonstrate knowledge of steering gear emergency operation					
.9	於船上之緊急應變演練中參與控制溢油 Participate in an emergency response exercise for controlling spillage of oil on board					
.10	參與演練危險貨物溢出之清理 Participate in drill for clean-up of hazardous cargo spillage					
.11	參與例如 在碰撞、坐礁或擱淺致泛水之緊急應變演練 Participate in an emergency response exercise for water ingress, e.g. in case of collision, stranding or grounding					
.12	說明火箭拋繩器之操作方法 Explain the operation of rocket line throwing apparatus					
.13	協助檢查與保養救生設備、下水吊桿與裝置 Assist with the inspection and maintenance of life saving appliances, launching davits and gear					
.14	協助例行保養救生艇引擎 Assist with the routine maintenance of a lifeboat engine					

.15	參與海上緊急急救演習 Participate in an emergency first aid drill at sea					
.16	證明能對下列急救原則具有之基本瞭解： Demonstrate a basic understanding of first aid principles: 止血 Stopping bleeding					
.17	處理窒息/溺水 Treatment of suffocation/drowning					
.18	在適當場所安置傷患 Placing casualty in the recovery position					
.19	示範如何處理休克之傷患 Demonstrate how to handle a casualty in shock					
.20	示範能依照處理中暑之程序 Demonstrate procedures for dealing with heat stroke					
.21	說明處理電擊事故之程序 State procedure for dealing with a casualty of electric shock					
.22	示範處理燙傷之程序 Demonstrate procedure for treating burns					
.23	示範安全帶與安全索之使用 Demonstrate use of safety harness and line					
3.2	從機艙逃生之路線 Use escape routes from machinery spaces			得知緊急或異常情況時所採取之最初行動與業已建立之程序相符。不論何時能清晰簡明的溝通且命令係以船員方式確認 Initial action on becoming aware of an emergency or abnormal situation conforms to established procedures. Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner		
.1	指出從機艙之逃生路線並示範如何活用 Locate and demonstrate use of the escape routes from machinery spaces					

.2	確認所有緊急逃生呼吸器(EEBDs)之位置 Identify location of all emergency escape breathing devices (EEBDs)					
.3	示範緊急逃生呼吸器之穿戴與使用 Demonstrate donning and use of emergency escape breathing device set					
.4	參與由機艙之搜索與救助演練 Participate in a search and rescue drill from a machinery space					
3.3	證明熟悉機器空間之滅火設備位置及其使用 Demonstrate familiarity with the location and use of fire-fighting equipment in the machinery spaces	<p>得知緊急或異常情況時所採取之最初行動與業已建立之程序相符。不論何時能清晰簡明的溝通且命令係以船員方式確認</p> <p><i>Initial action on becoming aware of an emergency or abnormal situation conforms to established procedures. Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner</i></p>				
.1	協助例行測試與保養下列設備： 消防泵 Fire pumps					
.2	防火窗 Fire flaps					
.3	機艙滅火系統及設備 ER fire extinguishing system and equipment					
.4	瞭解下列設備之使用並協助保養： 輕便泡沫滅火器 Portable foam extinguisher					
.5	輕便二氧化碳滅火器 Portable CO2 extinguisher					
.6	輕便乾粉滅火器 Portable dry powder extinguisher					

.7	執行火警巡邏任務 Perform fire patrol duties					
.8	參與在海上與岸上火警緊急回應演練 Participate in an emergency response exercise for fire at sea and in port					
.9	如裝置有下列系統協助其測試： Assist with the testing of the following systems, where fitted： 固定自動灑水器 Fixed automatic sprinklers					
.10	固定蒸汽系統 Fixed steam systems					
.11	固定泡沫滅火器 Fixed foam extinguishers					
.12	固定二氧化碳系統 Fixed CO2 systems					
.13	防火窗與擋板 Fire flaps and dampers					
.14	自動與人工防火門 Automatic and manual fire doors					
.15	緊急開關閥，停泵與主機停止開關 Emergency shut off valves, pump stops and main engine stops					
.16	示範消防員裝具設備之使用 Demonstrate use of equipment in the fire-fighter's outfit					
.17	示範固定滅火系統之使用 Describe the operation of the fixed fire extinguishing system					
.18	示範進入密閉空間之程序與所需之防護 Demonstrate the procedures and precautions required for entry into an enclosed space					
.19	示範呼吸器裝具之穿戴與使用 Demonstrate donning and use of breathing apparatus sets					
[20]	示範防護衣與設備之穿戴與使用 Demonstrate donning and use of protective clothing and equipment					

第七部分 輪機助理員之科目 SECTION 7 TASKS FOR RATINGS QUALIFYING AS ABLE SEAFARER ENGINE

輪機助理員之訓練科目得與第六部分助理級輪機當值科目併予完成，以協助早日取得輪機助理員適任證書。

The training tasks for Able Seafarer Engine which follow may be completed alongside watch rating tasks for Marine Engineering at the Support Level contained in Section 6. This may assist in the early achievement of Able Seafarer Engine certification.

STCW 公約對輪機助理員之適任標準除反應助理級輪機當值乙級船員之廣泛工作外，並包括適任於輪機工程外另增加之三種助理級適任性專長：

The STCW competence standards for Able Seafarer Engine reflect the broader work of engine ratings and include additional competences in Engineering plus competences for three additional Support Level functions :

■ 電機、電子及控制工程 Electrical, Electronic and Control Engineering

■ 保養與維修 Maintenance and Repair

■ 船舶操作與船上人員管理 Controlling the Operation of the Ship and Care for Persons on Board

STCW 規則 III/5 STCW Regulation III/5

在有人值守機艙或指派在定期無人值守機艙執行職責之輪機助理員發證之強制性最低要求 Mandatory minimum requirements for certification of ratings as Able Seafarer Engine in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

1. 凡在主機推進動力 750 瓩以上航行船舶上服務之輪機助理員應經適當發證。

Every Able Seafarer Engine serving on a seagoing ship powered by main propulsion machinery of 750kW propulsion power or more shall be duly certificated.

2. 凡申請發證者應：Every candidate for certification shall :

.1 年滿 18 歲；be not less than 18 years of age;

.2 符合構成有人值守機艙當值一部分或指派在定期無人值守機艙執行職責之乙級船員發證之要求；
meet the requirements for certification as a rating forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room;

.3 具有資格承擔助理級輪機當值之同時，並具有認可之輪機部門海勤資歷：

while qualified to serve as a rating forming part of an engineering watch, have approved seagoing service in the engine department of:

.3.1 至少 12 個月；或

not less than 12 months, or

.3.2 至少 6 個月並已完成認可之訓練；及

not less than 6 months and have completed approved training; and

.4 符合 STCW 章程第 A-III/5 節規定之適任標準。

meet the standard of competence specified in section A-III/5 of the STCW Code.

學員可在第八部分所列科目概要表上標出其需完成之船上訓練科目。

A Task Summary Chart, which trainees can tick off as they complete their on board training tasks, can be found in Section 8.

專長 FUNCTION：輪機工程 MARINE ENGINEERING AT THE SUPPORT LEVEL

項次 Ref No	訓練 Training			評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
4	適任 Competence : 致力於安全輪機當值 Contribute to a safe engineering watch					
4.1	能夠瞭解指令及與當值甲級船員進行溝通有關職責之事宜 Ability to understand orders and to communicate with the officer of the watch in matters relevant to watchkeeping duties			溝通清晰簡明 Communications are clear and conciser		
	科目/職責 Task/Duty		科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	
1	瞭解口令為出航作下列之測試與準備： Understand orders for testing and preparing for sea: 機艙舵機系統 Steering system 傳鐘 Telegraphs 輔機與設備 Auxiliary plant and equipment 主機操縱（另列） Main engine manoeuvring (list others):					
2	瞭解口令並溝通 Understand and communicate orders					
3	如甲級船員之口令不明或違反安全實務，能瞭解需要及時尋求闡明與確認 Understand the need to promptly seek clarification and confirmation if an officer's order is unclear or contrary to safe practice					
4	在團隊中隨時扮演有效之角色 Play an effective role as a team member at all times					

4.2	接班、值班及交班程序 Procedures for the relief, maintenance and handover of a watch	值班、交班與接班符合公認之方法與程序 Maintenance, handover and relief of the watch is in conformity with acceptable practices and Safety Management System (SMS) procedures			
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	
[1]	按規定穿著，準時並適合當值 Consistently arrive on watch appropriately dressed, fit for duty and on time				
[2]	在下列情況明確之接收、傳遞有關當值任務之信息： Receive and pass on information relevant to watch duties clearly during: 機艙無人當值控制作業 UMS control operation				
[3]	駕駛台控制作業 Bridge control operation				
[4]	接班時如對任何事項無法把握時能尋求闡明 Seek clarification if unsure on any matter when taking over watch (at sea, at anchor, in port)				
[5]	瞭解在下列情況應遵守之程序： Understand procedures to be followed during: 機艙無人當值控制作業 UMS control operation				
[6]	駕駛台控制作業 Bridge control operation				
[7]	檢查自動控制與監測系統之正常操作 Check normal operation of automatic control and monitoring systems				
[8]	依適當之巡邏機艙週遭情況報告或記錄於輪機日誌 Perform routine ER rounds and report or log rounds as appropriate				

[9]	瞭解如有理由相信接班者不能有效執行當值時應拒絕交班 Understand the need to refuse to hand over the watch if there is reason to believe that the relief is not capable of carrying out watchkeeping duties effectively					
4.3	需要安全當值所需之資訊 Information required to maintain a safe watch			值班、交班與接班符合公認之方法與程序 Maintenance, handover and relief of the watch is in conformity with acceptable practices and Safety Management System (SMS) procedures		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)		對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	
[1]	在港依指示保持安全當值 In port, maintain watch as per instructions					
[2]	檢查空氣壓縮機並啟動空氣系統 Check starting air compressor and starting air system					
[3]	檢查平台、走道與進口上危及安全之危險 Check for safety hazards on plates, walkways and access points					
[4]	協助開關並予固定機艙及機器空間之天窗 Assist with the opening, closing and securing of engine room and machinery hatches					
[5]	在錨泊依指示保持當值 At anchor, maintain watch as per instructions					
[6]	如遇警報或由操作環境發生不平常之需求, 呼叫協助 Call for assistance if alarms or unusual demands arise from operational circumstances					
[7]	當主機使用完畢後協助關閉主機 Assist with shut down of main engines when finished with engines					

[8]	當主機使用完畢後協助關閉相關輔機系統 Assist with shut down of auxiliary systems when finished with engines					
[9]	執行鍋爐水試驗並報告結果 Conduct boiler water tests and report results					
5	適任 Competence : 致力於機艙當值之監控 Contribute to the monitoring and controlling of an engine-room watch			評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
5.1	主推進機與輔機功能操作之基本知識 Basic knowledge of the function and operation of main propulsion and auxiliary machinery			對主推進機與輔機之監控頻率與範圍符合認可之原則與程序 The frequency and extent of monitoring of main propulsion and auxiliary machinery conforms with accepted principles and procedures		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)		對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	
[1]	在駕駛台可以操作前協助檢查舵機 Assist with steering gear checks with bridge prior to operation					
[2]	描述下列系統： Trace out and describe the following systems: 主機燃油系統 Main engine fuel system					
[3]	主機潤滑油系統 Main engine lubricating oil system					
[4]	主海水冷卻系統 Main sea water cooling system					
[5]	協助準備操作機艙內之機器 Assist with preparations of engine room machinery for manoeuvring					

[.6]	協助由機艙控制室操縱主機，包括啟動、停機與倒俾 Assist in manoeuvring the main engine from the engine-room control position, including starting, stopping and reversing					
[.7]	瞭解自緊急操縱位置控制主機之程序包括啟動/停機/倒俾或可變螺距螺旋槳 (CPP) 或倒俾離合器之操作 Understand the procedure for controlling the main engine from the emergency manoeuvring position(s), including start/stop/reverse or CPP or reverse clutch operation					
[.8]	在監督下、在操船期間回應駕駛台之指令並操作主機控制器 Under supervision, respond to instructions from the bridge and operate the main engine controls during periods of manoeuvring					
[.9]	執行主機與輪軸啟動之前的檢查 Carry out post start-up checks of main engine and shafting					
[.10]	在監督下、調整主機與輔機以便出航 Under supervision, adjust main engine and auxiliary machinery for sea passage					
[.11]	在監督下、變更重燃油為柴油作業 Under supervision, change over from HFO to diesel fuel oil operations					
[.12]	在監督下、變更柴油為重燃油作業 Under supervision, change over from diesel fuel oil to HFO operations					
[.13]	描述下列系統： Trace out and describe the following systems: 輔助蒸汽系統 Auxiliary steam system					
[.14]	柴油機冷卻水系統 Diesel engine water cooling systems					
[.15]	將主要及備用壓縮機變更至正常運轉模式 Change over main and standby compressor to normal running mode					

[16]	各泵變更至備用任務 Change over to standby duties for pumps					
[17]	在監督下、啟動污水系統 Under supervision, start up sewage system					
[18]	執行飲用淡水系統之例行作業 Conduct routine operations on potable fresh water service					
[19]	瞭解艙底水例行之泵出作業 Understand routine operations for pumping bilges					
[20]	檢查下列排氣管之漏洩： 主機 Main engines					
[21]	輔機 Auxiliary engines					
[22]	緊急引擎 Emergency engines					
[23]	操作輔助鍋爐包括燃燒系統 Operate auxiliary heating boilers including combustion system					
[24]	協助作下列之例行試驗： 主機冷卻水 Engine cooling water					
[25]	燃油 Fuel oil					
[26]	潤滑油 Lube oil					
[27]	潤滑油與燃油淨油機之監測作業 Monitor operations of lube oil and fuel oil purifiers					
[28]	在監督下、執行給水處理 Under supervision, conduct feed water treatment					

[29]	依據資深甲級船員之指示測試發現及調整給水處理 Adjust feed water treatment according to test findings and instruction from a senior officer					
[30]	檢查所有鍋爐狀況指示器與警報之正確功能 Check the correct functioning of all boiler condition indicators and alarms					
[31]	啣合、脫開及操作轉盤裝置 Engage, disengage and operate turning gear					
[5.2]	主推進機與輔機控制壓力、溫度與水位之基本瞭解 Basic understanding of main propulsion and auxiliary machinery control pressures, temperature and level			有誤差但可被接受。在繼續進行工作前能立即確認不安全之狀況或潛在之風險，並予以報告及矯正 <i>Deviations from the norm are identified. Unsafe conditions or potential hazards are promptly recognized, reported and rectified before work continues</i>		
[1]	執行例行之當值任務、檢查自動控制與監測系統之正確功能 Carry out routine watchkeeping duties, checking the correct functioning of automatic control and monitoring systems					
[2]	監測並報告主機冷卻水溫度 Monitor and report main engine cooling water temperature					
[3]	瞭解引擎冷卻水進口與出口溫度偏差之範圍 Understand the range and deviation of temperatures of engine cooling water intake and outflow					
[4]	瞭解保持循環水正常溫度之必要性 Understand the need to maintain normal temperatures in circulating water					
[5]	協助例行之主機冷卻水套冷卻水試驗 Assist with routine main engine jacket cooling water tests					
[6]	主機油壓與溫度之監測與報告 Monitor and report main engine oil pressure and temperature					

[7]	瞭解引擎潤滑油系統溫度與壓力偏差之範圍 Understand the range and deviation of temperatures and pressures of engine lube oil systems					
[8]	具有系統閥正常運轉位置之知識 Have a knowledge of the system valve positions for normal running					
[9]	協助執行例行之主機安全斷路器與警報測試 Assist in carrying out routine testing of main engine safety trips and alarms					
[10]	燃油日用櫃油位與含水量之檢查及報告 Check and report fuel service tank level and water content					
[11]	輔機冷卻水溫度之檢查及報告 Check and report auxiliary engine cooling water temperature					
[12]	輔機油壓與溫度之檢查及報告 Check and report auxiliary engine oil pressure and temperature					
[13]	協助執行例行之輔鍋爐安全斷路器與警報之試驗 Assist in carrying out routine testing of auxiliary boiler safety trips and alarms					
[14]	在監督下、執行沖放水位計玻璃並施行檢查鍋爐水位指示器之正確度 Under supervision, blow down gauge glasses and perform checks on the correct boiler water level indication					
[15]	協助準備運轉蒸發器/淡水機 Assist in preparations to run an evaporator/fresh water generator					
[16]	協助試驗調整飲用淡水之純淨度 Assist in tests and conditioning for purity of potable fresh water					
[17]	檢查船用交流電機之正常操作 Check normal operation of ship's AC plant					

.18	協助安全關閉冷凍機/交流電機 Assist with shut down and secure refrigeration/AC plant					
.19	執行交流電過濾器之清潔程序 Carry out correct cleaning procedures for AC filters					
.20	瞭解需要依據 MARPOL 公約規定記錄任何冷凍劑氣體之再填充 Understand the need for logging (in accordance with MARPOL) of any refrigerant gas recharge					
.21	檢查曲拐軸箱油霧偵測器並瞭解當警報發出之際需採取之行動 Check crankcase oil mist detector and understand the need for action to be taken in case of an alarm					
.22	證明具有正常操作調速器之知識 Demonstrate a knowledge of the normal operations of governors					
.23	證明具有正常壓力櫃安全設計之知識 Demonstrate a knowledge of pressure tank safety devices					
⑥	適任 Competence : 致力於加燃油與駁油作業 Contribute to fuelling and oil transfer operations			評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
6.1	燃油系統與駁油作業之功能與操作之知識，加燃油與駁油作業之準備 Knowledge of the function and operation of fuel system and oil transfer operations, including preparations for fuelling and transfer operations	依既定之安全措施與設備 操作說明書進行駁油作業 <i>Transfer operations are carried out in accordance with established safety practices and equipment operating instructions</i>				
	科目/職責 Task/Duty	科目已完成 Task Completed	對改進部分之建議		科目已完成 Task Completed	

		施訓者簽名/日期 Instructor(Signature/Date)	Advice on Areas for Improvement	施訓者簽名/日期 Instructor (Signature/Date)
[1]	管路連線至各艙櫃準備轉駁燃油 Open up lines to tanks in preparation for fuel transfer			
[2]	如屬適當使用十字接頭 Use cross connections, where appropriate			
[3]	執行例行連線作業並接受燃油 Conduct routine operations for lining up and receiving fuel oil			
[4]	具有遵守防止污染規定之知識 Have knowledge of and observe pollution prevention requirements			
[5]	對於內部轉駁依指示準備並執行燃油轉駁 For an internal fuel transfer, prepare for and carry out fuel oil transfer, as instructed			
[6.2]	<p>燃油系統與駁油作業之功能與操作之知識，包括加燃油與駁油軟管之連接與拆卸之程序</p> <p>Knowledge of the function and operation of fuel system and oil transfer operations, including procedures for connecting and disconnecting fuelling and transfer hoses</p>		<p>依據既定之安全措施處理危險、有毒與有害液體。在操作員職責範圍內持續進行有效之溝通</p> <p>The handling of dangerous, hazardous and harmful liquids complies with established safety practices. Communications within the operator's area of responsibility are consistently successful</p>	
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)
[1]	為團隊之一員，檢查燃油轉駁軟管之正確連接與拆卸 As a team member, check correct connection and disconnection of fuel transfer hose			
[2]	檢查 MARPOL 取樣器已正確連接並取樣 Check MARPOL sampler is correctly connected and sample taken			

[3]	為團隊之一員，在拆卸轉駁軟管前先予洩清 As a team member, drain transfer hose before disconnection				
[6.3]	燃油系統與駁油作業之功能與操作之知識，包括在加燃油與駁油作業過程中可能出現有關故障之應急程序 Knowledge of the function and operation of fuel system and oil transfer operations, including procedures relating to incidents that may arise during fuelling or transferring operation			依據既定之安全措施處理危險、有毒與有害液體。在操作員職責範圍內持續進行有效之溝通 The handling of dangerous, hazardous and harmful liquids complies with established safety practices. Communications within the operator's area of responsibility are consistently successful	
[1]	證明能有在駁油作業中圍堵溢油及清理之知識 Demonstrate a knowledge of spill containment and clean up procedures during transfer operations				
[2]	提升儲櫃中燃油之溫度自冷至正確之溫度標準 Raise the temperature of fuel oil in storage tanks from cold to the correct level				
[3]	示範關閉 Demonstrate shut down				
[4]	使用緩衝櫃 Use holding tanks				
[6.4]	燃油系統與駁油作業之功能與操作之知識，包括安全之加燃油與駁油作業 Knowledge of the function and operation of fuel system and oil transfer operations, including securing from fuelling and transfer operations			依據既定之安全措施處理危險、有毒與有害液體。在操作員職責範圍內持續進行有效之溝通 The handling of dangerous, hazardous and harmful liquids complies with established safety practices. Communications within the operator's area of responsibility are consistently successful	
[1]	在加油完畢將閥鎖緊並加封籤 Secure and tag valves on completion of bunkering				

[2]	將甲板上之歧管上閘板鎖緊 Secure blank on deck manifold					
[6.5]	燃油系統與駁油作業之功能與操作之知識，包括正確測量與報告油位之能力 Knowledge of the function and operation of fuel system and oil transfer operations, including ability to correctly measure and report tank levels			依據既定之安全措施處理危險、有毒與有害液體。在操作員職責範圍內持續進行有效之溝通 <i>The handling of dangerous, hazardous and harmful liquids complies with established safety practices. Communications within the operator's area of responsibility are consistently successful</i>		
[1]	測艙底水深並將資料予以記錄 Sound bilges and record information					
[2]	使用量計設備測計燃油艙櫃之餘深液面並記錄艙櫃之油位 Take fuel oil tank ullages and record tank levels using gauging equipment					
[3]	使用捲尺測燃油深度並記錄艙櫃之油位 Using tape take fuel oil soundings and record tank levels					
[4]	依指示自燃油艙櫃轉駁燃油至日用櫃之正確油位 Transfer fuel oil from bunker tanks to service tanks to correct levels as instructed					
[5]	自沉澱櫃排洩水/油泥 Drain water/sludge from settling tanks					

7	適任 Competence : 致力於艙底水與壓載水作業 Contribute to bilge and ballast operations		評估標準 Criteria for Evaluation		適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
7.1	艙底水與壓載水系統之功能安全性、操作與維護之知識，包括報告轉駁過程中所生之事故 Knowledge of the safe function, operation and maintenance of the bilge and ballast systems, including reporting incidents associated with transfer operations		依據既定之安全措施與設備操作規範進行操作與維護，以避免海洋環境污染。在操作員職責範圍內持續進行有效之溝通 Operations and maintenance are carried out in accordance with established safety practices and equipment operating instructions and pollution of the marine environment is avoided. Communications within the operator's area of responsibility are consistently successful			
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement		科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	
1	分辨清潔壓載水艙由於洩漏或不明之污染使水含油 Recognise that clean ballast water tanks may contain oily water due to leakage or unknown contamination					
2	瞭解到任何油或 Understand that any oil or oily water pumped or leaking into harbour/dock must be promptly reported					
3	瞭解艙櫃轉駁應限在甲級船員指示下為之 Understand that tank transfers should only be executed on the instructions of an officer					

[4]	協助艙底水泵出系統包括含油水分離器之作業，並協助完成必要之紀錄 Assist in the operation of the bilge pumping system including the oily water separator, and assist in completion of necessary records					
[5]	檢查並清潔艙櫃吸入口、過濾箱、泌水與污水井 Check and clean tank suctions, strum boxes, bilges and wells					
[7.2]	艙底水與壓載水系統之安全功能、操作與維護之知識，包括正確測量與報告艙內液位之能力 Knowledge of the safe function, operation and maintenance of the bilge and ballast systems, including ability to correctly measure and report tank levels			在操作員職責範圍內持續進行有效之溝通 Communications within the operator's area of responsibility are consistently successful		
[1]	測艙底水深並將資料予以記錄 Sound bilges and record information					
[2]	以人工及使用量測系統測深並將資料予以記錄 Take and report tank soundings manually and using gauging system					
[3]	協助泵抽艙底水以符合 MARPOL 防止污染之規定與要求 Assist in pumping bilges in compliance with MARPOL pollution prevention regulations and requirements					
[4]	依指示轉駁/注入壓載水艙至正確水位 As instructed transfer/flood ballast water tanks to correct levels					

8	適任 Competence : 致力於設備與機械之安全操作 Contribute to the safe operation of equipment and machinery		評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
8.1	設備之安全操作，包括閥與泵 Safe operation of equipment, including: valves and pumps		依據既定之安全措施與設備 操作規範進行操作，在操作 員職責範圍內持續進行有效 之溝通 Operations are carried out in accordance with established safety practices and equipment operating instructions. Communications within the operator's area of responsibility are consistently successful		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)	
1	協助甲級船員從事 Assist an officer with: 打入壓載水 Ballasting				
2	打出壓載水 Deballasting				
3	收艙 Stripping tanks				
4	操作潤滑油淨油機 Operate a lube oil purifier				
5	操作燃油淨油機/油水分離器 Operate a fuel oil purifier/separator				
6	操作正壓式泵 Operate positive displacement pump				

[7]	操作離心泵 Operate a centrifugal pump					
[8]	啟動緊急壓縮機並連接於管路 Start-up and put on line the emergency compressor					
[9]	啟動緊急發電機並連接於線路 Start-up and put on line the emergency generator					
[10]	啟動緊急消防泵 Start-up the emergency fire pump					
[11]	列出你曾操作之其他設備： List other equipment you have operated: _____ _____ _____					
[8.2]	設備之安全操作，包括起吊設備 Safe operation of equipment, including hoists and lifting equipment	<p>依據既定之安全措施與設備操作規範進行操作，在操作員職責範圍內持續進行有效之溝通</p> <p><i>Operations are carried out in accordance with established safety practices and equipment operating instructions. Communications within the operator's area of responsibility are consistently successful</i></p>				
[1]	在監督下操作機艙高架起重機 Operate engine-room lifting gantry under supervision					
[2]	瞭解吊重設備之吊重受限於安全工作負載值 Understand hoists and lifting equipment are limited by Safe Working Load (SWL)					
[3]	確認用以吊重之鏈滑車、接環、吊鏈、滑車吊索等之安全工作負載值 Identify SWL of chain blocks, shackles, slings, strops etc used for lifting					
[4]	協助拔出主機活塞 Assist with pulling main engine piston					

[5]	使用機艙吊桿移動備品 Use stores crane for handling engine-room stores					
8.3	設備之安全操作，包括艙口蓋、 水密門、舷窗與相關之設備 Safe operation of equipment, including hatches, watertight doors, ports and related equipment			依據既定之安全措施與設備 操作規範進行操作，在操作 員職責範圍內持續進行有效 之溝通 Operations are carried out in accordance with established safety practices and equipment operating instructions. Communications within the operator's area of responsibility are consistently successful		
[1]	固定機艙通氣管、通氣管軸與防火窗 Secure engine-room vents, vent shafts and fire flaps					
[2]	協助移動曲拐軸箱門 Assist with removing crankcase doors					
[3]	瞭解在艙口、門及舷窗上之密封橡皮需定期 更換 Understand that rubber sealing on hatches, doors and ports needs replacing periodically					
[4]	裝配防護鋼索、鏈或柵欄於開啟之艙口、艙 底板等 Rig guard wires, chains or fences at open hatch ways, floor plates etc					
[5]	瞭解危險會隨遙控操作水密門時發生 Understand dangers associated with remotely operated water tight doors					

[6]	開關水密門包括艏、艉及船體外板上之門 Open and close water tight doors including bow, stern and shell doors					
[8.4]	有能力使用並瞭解起重機、絞機與起吊信號 Ability to use and understand basic crane, winch and hoist signals			依據既定之安全措施與設備 操作規範進行操作, 在操作 員職責範圍內持續進行有效 之溝通 Operations are carried out in accordance with established safety practices and equipment operating instructions. . Communications within the operator's area of responsibility are consistently successful		
[1]	瞭解並示範控制起吊設備與絞纜機所用之 一般手語信號 Understand and demonstrate use of commonly used hand signals for control of lifting appliances and winches					
[2]	瞭解在不同文化下之信號可能有差異 Understand that in different cultures signals commonly used may differ					
[3]	瞭解應採用需經作業團隊人員協議之信號 Understand the need to agree signals to be used and which person in a team is in control of lifting operation					

專長 FUNCTION：助理級-電機、電子及控制工程

ELECTRICAL, ELECTRONIC AND CONTROL ENGINEERING AT THE SUPPORT LEVEL

項次 Ref No	訓練 Training		評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
9	適任 Competence : 電機設備之安全使用 Safe use of electrical equipment				
9.1	電機設備之安全使用與操作， 包括在開始工作或修理前之安全防護措施 Safe use and operation of electrical equipment, including safety precautions before commencing work or repair		確認並報告有漏電危險與不安全之設備了解手動設備之正確電壓 Recognizes and reports electrical hazards and unsafe equipment. Understands safe voltages for hand held equipment		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	
[1]	證明能對電機危險性之基本瞭解 Demonstrate a basic understanding of the risks associated with electrical equipment				
[2]	瞭解電壓愈高致命電擊之危險愈大 Understand that the higher the voltage the greater the risk of fatal shock				
[3]	瞭解高電壓可能出現於低電壓設備 Understand that high voltages may be present in low voltage equipment				
[4]	在開始危險工作前即有應變計劃與準備 Identify risks, plan and prepare before starting work				
[5]	瞭解何種作業在開始工作前需經許可 Understand what tasks require a permit to work prior to starting work				

[.6]	危險區域內安全使用電機設備之知識 Apply knowledge of safe use of electrical equipment for use in hazardous areas					
[.7]	證明有錯誤接地之知識及如何避免之 Demonstrate a knowledge of earth faults and how to avoid them					
9.2	電機設備之安全使用與操作，包括絕緣之程序 Safe use and operation of electrical equipment, including isolation procedures			瞭解高壓設備與船上工作之危險 Understands risks associated with high voltage equipment and on board work		
[.1]	當從事修理或保養工作時將相關之設備盡可能予以絕緣、斷電上鎖/掛籤 Isolate, tag and lock out where possible associated equipment when engaged in repair or maintenance work					
[.2]	瞭解由電弧、短路及高電壓所生之危險 Understand the dangers from arcs, short circuits and high voltage					
[.3]	在高電壓設備內工作採正確之接地程序 Adopt correct earthing procedures for work on high voltage equipment					
9.3	電機設備之安全使用與操作，包括應急之程序 Safe use and operation of electrical equipment, including emergency procedures			瞭解高壓設備與船上工作之危險 Understands risks associated with high voltage equipment and on board work		
[.1]	演練遭電擊之醫療急救 Demonstrate an electric shock first aid rescue					
[.2]	證明具有減緩風險之措施包括絕緣工具、絕緣手套、絕緣橡膠蓆等之使用 Demonstrate a knowledge of risk mitigation measures including use of insulated tools, electrical insulated gloves, rubber isolation mats etc					

9.4	電機設備之安全使用與操作，包括船上不同之電壓 Safe use and operation of electrical equipment, including different voltages on board			瞭解高壓設備與船上工作之危險 <i>Understands risks associated with high voltage equipment and on board work</i>		
1	協助追查及糾正主輔電機系統接地之錯誤 Assist in tracing and correcting earth faults on main and secondary electrical systems					
2	證明能辨識接地之因素，例如絕緣破裂、設備鬆脫、有燃燒或弧光之跡象 Demonstrate recognition of factors indicating earths, e.g. broken insulation, loose equipment, signs of burning or arcing					
3	協助進行下列之例行保養： Assist in the routine maintenance of: 斷路器 Circuit breakers					
4	跳脫機制 Tripping mechanisms					
5	馬達起動器 Motor starters					
6	照明燈 Lighting					
7	緊急蓄電池 Emergency storage batteries					
8	協助例行馬達與發電機之測試與保養 Assist in routine testing and maintenance motors and generators					
9	證明具有在主配電盤進行危險工作之知識 Demonstrate knowledge of hazards of working on main switch boards					
10	證明具有交流電機或發電機跳脫，並將之復原之知識 Demonstrate knowledge of alternator or generator trips and their resets					

9.5	<p>電擊之原因與防止電擊應遵循之安全保護知識</p> <p>Knowledge of the causes of electric shock and precautions to be observed to prevent shock</p>	<p>瞭解高壓設備與船上工作之危險</p> <p><i>Understands risks associated with high voltage equipment and on board work</i></p>		
1	<p>證明瞭解船舶許可工作系統</p> <p>Demonstrate an understanding of the ship's permit to work system</p>			
2	<p>使用電力操作工具與設備當應用安全工作實務</p> <p>Apply safe working practices in using electric power operated tools and equipment</p>			
3	<p>瞭解電擊之風險在有濕氣或潮濕之情況下較大</p> <p>Understand the risk of shock is greater in damp or humid conditions</p>			

專長 FUNCTION：助理級-保養及維修

MAINTENANCE AND REPAIR AT THE SUPPORT LEVEL

項次 Ref No	訓練 Training		評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)	
10	適任 Competence : 致力於船上之保養及維修 Contribute to shipboard maintenance and repair				
10.1	表面準備技術之知識 Knowledge of surface preparation techniques		依據技術、安全與程序規範 進行保養行動 Maintenance activities are carried out in accordance with technical, safety and procedural specifications. Selection and use of equipment and tools is appropriate		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	
1	使用動力除鏽設備與磨床為鋼件之塗裝作準備 Prepare steel work for coating using powered scaling equipment and grinders				
2	瞭解可能需要不同之塗裝順序，並應與塗料製造廠商之說明書核對 Understand different coating sequences may be required and paint manufacturers' instructions should be checked				
3	瞭解某些鐵鏽去除劑與去污劑可能會腐蝕眼睛與皮膚，故應予防護 Understand some rust removers and degreasing agents may be corrosive and eyes and skin should be protected				

[4]	瞭解單包裝與組合塗料間之不同 Understand the difference between one pack and two pack paints					
[5]	瞭解組合塗料一旦混合可能僅有有限之時間可以應用 Understand two pack paints once mixed may have limited time for application					
[6]	證明具有與一般機艙不同塗料之知識，例如瓷漆與環氧樹脂漆 Demonstrate a knowledge of the different paints commonly used in the engine-room e.g. enamel and epoxy paints					
[10.2]	使用油漆、潤滑劑及清潔材料與設備之能力 Ability to use painting, lubrication and cleaning materials and equipment	依據技術、安全與程序規範進行保養行動 Maintenance activities are carried out in accordance with technical, safety and procedural specifications. Selection and use of equipment and tools is appropriate				
[1]	油漆面之清潔與保養 Clean and maintain paintwork					
[2]	清潔與保養甲板清除油與油脂 Clean and maintain deck plates free of oil and grease					
[3]	使用刷/滾筒施加油漆 Apply paints using brush/roller					
[4]	依指示施加保護塗料 Apply protective coatings as directed					
[5]	瞭解油漆可能含有毒性或刺激物質 Understand paints may contain toxic or irritant substances					
[6]	瞭解在密閉空間內油漆時及油漆後應予通風 Understand need for interior and enclosed spaces to be well ventilated during and after painting					

[7]	瞭解溶劑可能散出可燃與潛在爆炸之揮發氣 Understand solvents may give rise to flammable and potentially explosive vapors					
[8]	瞭解有計劃之保養日程施加潤滑劑、翻修及測試起吊與機械設備 Understand that planned maintenance schedules apply for the lubrication, overhaul and testing of lifting and mechanical equipment					
[9]	選擇與使用正確之潤滑劑或油脂 Select and use correct lubricant or grease					
[10]	依需要加潤滑油及牛油於設備與轉動部分 Lubricate and grease equipment and moving parts as required					
[11]	在工作完成後將工作之區域予以清潔整理 Leave areas clean and tidy on completion of work					
10.3	安全處置廢料之知識 Knowledge of safe disposal of waste materials			依據技術、安全與程序規範進行保養行動 Maintenance activities are carried out in accordance with technical, safety and procedural specifications. Selection and use of equipment and tools is appropriate		
[1]	證明具有貯藏與處理剩餘油漆、溶劑及含油抹布程序之知識 Demonstrate a knowledge of the procedures for storage and disposal of paint residues, solvents and oily rags					
[2]	證明具有貯藏與處理可燃廢料、廢油與污油程序之知識 Demonstrate a knowledge of the procedures for storage and disposal of combustion waste, waste oils and slops					
[3]	操作碎紙機與焚化爐 Operate shredder and incinerator					
[4]	依需要操作廢物處理設備 Operate waste handling equipment as required					

10.4	瞭解與執行例行保養與修理程序之能力 Ability to understand and execute routine maintenance and repair procedures	依據技術、安全與程序規範 進行保養行動 <i>Maintenance activities are carried out in accordance with technical, safety and procedural specifications. Selection and use of equipment and tools is appropriate</i>				
.1	更換下列 Replace: 熔絲 Fuses					
.2	控制燈 Control lamps					
.3	照明設備 Lighting equipment					
.4	協助追查接地錯誤 Assist in tracing earth faults					
.5	在監督下檢查空氣過濾器 Check control air filters under supervision					
.6	在監督下檢查空氣乾燥機並更換消耗品 Check control air driers and replace consumables under supervision					
.7	在監督下啟動淨油機/油水分離機進行清潔 Open up purifiers/separators for cleaning and maintenance under supervision					
.8	在監督下重行組裝淨油機/油水分離機 Re-assemble purifiers/separators under supervision					
.9	協助主壓縮機之例行保養 Assist with routine maintenance on the main compressor					
.10	協助主冷凍機之例行保養 Assist with routine maintenance on refrigeration plant					
.11	協助淡水機之例行保養 Assist with routine maintenance on fresh water generator					

.12	協助啟動離心泵 Assist with opening up centrifugal pump					
.13	協助啟動及保養正壓式泵 Assist with opening up and overhaul positive displacement pump					
.14	協助保養及測試各閥包括： 閘閥 Gate					
.15	螺旋止回閥 Screw down non return (SDNR)					
.16	螺旋提升閥 Screw lift					
.17	洩壓閥 Relief					
.18	雙向或三向旋塞 Two or three way cock					
.19	關斷旋塞 Shut off cock					
.20	執行下列例行之保養： 舵機 Steering gear					
.21	吊貨絞機 Cargo winches					
.22	吊貨起重機 Cargo crane					
.23	協助測試水密門、舷窗、艙口蓋、及快速關斷閥 Assist with the testing of watertight doors, ports, hatches and quick closing valves					

.24	協助試驗電機緊急停止器 Assist with testing of electrical emergency stops					
.25	執行下列之例行保養： Carry out routine maintenance of: 消防泵 Fire pumps					
.26	防火窗 Fire flaps					
.27	機艙滅火系統與設備 Engine-room fire extinguishing system and equipment					
.28	緊急發電機 Emergency generator					
.29	緊急空氣壓縮機 Emergency compressor					
.30	排洩至艙外各泵之遙控停止器 Remote stops for pumps with overboard discharges					
.31	燃油跳脫器 Fuel trips					
.32	協助保養主機氣缸頭 Assist in overhaul of main engine cylinder head					
.33	協助保養更換主機活塞環 Assist in overhaul/replacement of main engine piston rings					
.34	協助更換主機軸承 Assist in replacing main engine bearing					
.35	協助清潔渦輪增壓機之進氣側 Assist with cleaning of air side of the turbo charger					
.36	協助以水洗渦輪增壓機之排氣側 Assist with water wash exhaust side of main engine turbo charger					

[37]	協助保養輔機 Assist with overhaul of auxiliary engines				
[38]	在監督下測試水位計玻璃並檢查其通路、旋塞及閥件清楚 Under supervision, test water gauge glasses and check that passages, cocks and valves are clear				
[39]	協助啟動鍋爐 Assist with opening up a boiler				
[40]	協助啟動 Assist with opening up: 鍋爐安全閥 Boiler safety valve				
[41]	鍋爐給水止回閥 Boiler feed check valves				
[42]	將你曾經執行例行保養與修理過之其他設備列出： List other equipment on which you have carried out routine maintenance or repairs: _____ _____				
10.5	瞭解製造廠商之安全準則與船上之規範 Understand manufacturer's safety guidelines and shipboard instructions			依據技術、安全與程序規範進行保養行動 Maintenance activities are carried out in accordance with technical, safety and procedural specifications. Selection and use of equipment and tools is appropriate	
[1]	證明瞭解船舶之工作許可系統 Demonstrate an understanding of the ship's permit to work system				
[2]	證明能瞭解安全準則之規定 Demonstrate an understanding of safety guidelines provided				

[3]	證明能瞭解進入密閉空間之慣例 Demonstrate an understanding of enclosed space entry routine					
[4]	熟悉船上環境程序的必要已經瞭解 Demonstrate an understanding of the need for ship board familiarisation procedures					
[5]	證明已瞭解何種安全資訊可能在製造商之手冊中提供 Demonstrate an understanding of what safety information may be provided in manufacturers' manuals					
[6]	證明已瞭解那些安全資訊可能會在船上之操作與保養手冊中提供 Demonstrate an understanding of what information may be provided in the ship's operations and maintenance manuals					
10.6	瞭解應用、保養並使用手持與動力工具、量測儀器暨機械工具之知識 Knowledge of the application, maintenance and use of hand and power tools and measuring instruments and machine tools			依據技術、安全與程序規範進行保養行動 Maintenance activities are carried out in accordance with technical, safety and procedural specifications. Selection and use of equipment and tools is appropriate		
[1]	將你曾經使用過之其他手持式或動力工具列出： List hand and power tools you have used: _____ _____					
[2]	將你曾經使用過之量測設備列出： List measuring equipment you have used: 線規 Liner gauge 測微計 Micrometer 其他 Others: _____ _____					

[3]	協助保養起動器 Assist with maintenance of a starter					
[4]	協助追查接地 Assist with tracing earths					
[10.7]	金工工作之知識 Knowledge of metal work			依據技術、安全與程序規範 進行保養行動 <i>Maintenance activities are carried out in accordance with technical, safety and procedural specifications. Selection and use of equipment and tools is appropriate</i>		
[1]	將你曾經工作過之金工（例如管工、軸承、鋼板、板金等）列出： List below metal work you have worked on (for example, pipe work, bearings, steel plate, sheet metal etc): _____ _____ _____					

專長 FUNCTION：助理級-船舶操作與船上人員管理

CONTROLLING THE OPERATION OF THE SHIP AND CARE FOR PERSONS ON BOARD AT THE SUPPORT LEVEL

項次 Ref No	訓練 Training	評估標準 Criteria for Evaluation	適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)
II	適任 Competence： 致力於物料處理 Contribute to the handling of stores		
11.1	安全處理、儲存及穩固物料之程序與知識 Knowledge of procedures for safe handling, stowage and securing of stores	依據既定之安全措施與設備操作規範進行物料操作。危險、有毒與有害物料之處理符合既定之安全措施。在操作員職責範圍內持續進行有效之溝通 Stores operations are carried out in accordance with established safety practices and equipment operating instructions. The handling of dangerous, hazardous and harmful stores complies with established safety practices. Communications within the operator's area of responsibility are consistently successful	
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement
	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)		
1	協助接收、檢查、儲存與固定船舶物料 Assist with receiving, checking, stowage and securing ship's stores		
2	辨識物料之標籤係危險、危害或有害物質與液體 Recognise labels that indicate stores are classified as dangerous, hazardous or harmful substances and liquids		

[3]	瞭解將此等物料（固體材料與流體）隔離之理由與必要性 Understand the reasons and need for segregation of such stores (solid materials and fluids)					
[4]	說明危險材料漏洩或溢出之際所遵循之程序 Describe the procedure to follow in event of leakage or spillage of dangerous materials					
[5]	瞭解材料安全數據表所提供在隔離與儲存時之資訊與建議 Understand that Material Safety Data sheets provide information and advice on segregation and stowage					
[12]	適任 Competence : 應用預防措施並致力於防止海洋環境之污染 Apply precautions and contribute to the prevention of pollution to the marine environment			評估標準 Criteria for Evaluation		適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)
[12.1]	防止海洋環境污染所應採取預防措施之知識 Knowledge of the precautions to be taken to prevent pollution of the marine environment	隨時遵循保護海洋環境所指定之程序 <i>Procedures designed to safeguard the marine environment are observed at all times</i>				
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)		對改進部分之建議 Advice on Areas for Improvement		科目已完成 Task Completed 施訓者簽名/日期 Instructor (Signature/Date)
[1]	瞭解材料安全數據表所提供之關於滿溢或漏洩時之資訊與建議 Understand that Material Safety Data sheets provide information and advice on responding to spills or leaks					
[2]	證明具有對加燃油、減壓載水、油水分離、焚化爐等之知識 Demonstrate a knowledge of the emergency shutdown procedures for bunkering, deballasting, OWS, incinerator, etc.					

[3]	瞭解廢物需要隔離、記錄數量並送岸處置 Understand the need to segregate waste, record amounts and land ashore for disposal				
[4]	瞭解需依 MARPOL 公約儲存與處置含油廢物 Understand the need to store and dispose of oily waste according to MARPOL				
[5]	證明瞭解海洋環境需要保護 Demonstrates an awareness of the need to protect the marine environment				
12.2	使用與操作防污染設備之知識 Knowledge of use and operation of anti-pollution equipment	隨時遵循保護海洋環境所指定之程序 <i>Procedures designed to safeguard the marine environment are observed at all times</i>			
[1]	參與在船上控制溢油之回應演練 Participate in an emergency response exercise for controlling spillage of oil on board				
[2]	參與清除危險貨物溢出之演習 Participate in drill for cleanup of hazardous substance spillage				
[3]	證明具有對收集與隔離廢物與垃圾程序之知識 Demonstrate a knowledge of the procedures to collect and segregate waste and garbage				
[4]	操作如設有之垃圾絞碎機/壓縮機組及焚化爐 Operate garbage shredder/compactor unit and incinerator (where fitted)				
[5]	瞭解嚴格遵守當地有關廢水與污水處理規則之必要性 Understand the need to strictly observe local regulations concerning waste water and sewage disposal				
[6]	瞭解嚴格遵守當地有關煙道氣排放規則之必要性 Understand the need to strictly observe local regulations concerning flue gas emissions				

.7	瞭解嚴格遵守 MARPOL 規則之必要性 Understand the need to strictly observe MARPOL regulations					
.8	瞭解嚴格遵守當地有關加壓載水與減壓載水規則之必要性 Understand the need to strictly observe local regulations concerning ballast water and deballasting					
12.3	以認可方法處置海洋污染物之知識 Knowledge of use and operation of anti-pollution equipment			隨時遵循保護海洋環境所指定之程序 <i>Procedures designed to safeguard the marine environment are observed at all times</i>		
.1	瞭解海洋污染物應依 MARPOL 公約之規定送至岸上安全處置 Understand that marine pollutants must be landed ashore for safe disposal in compliance with MARPOL					
.2	瞭解有嚴格之規定適用於所有船舶在海上處置含油之水混合物 Understand there are strict rules covering disposal at sea of oily water mixtures applicable to all ships					
.3	瞭解有嚴格之規定適用於所有船舶在海上處置有毒液體物質 Understand there are strict rules covering disposal at sea of noxious liquid substances applicable to all ships					
.4	瞭解有嚴格之規定適用於所有船舶在海上處置以包裝型式載運有害物質 Understand there are strict rules covering disposal at sea of harmful substances carried in packaged form applicable to all ships					
.5	瞭解有嚴格之規定適用於所有船舶防止污水污染 Understand there are strict rules covering pollution prevention by sewage applicable to ships					

.6	瞭解嚴格符合當地有關廢水與污水處置規定之重要性 Understand the importance of strict compliance with local regulations concerning waste water and sewage disposal				
.7	瞭解有嚴格之規定適用於所有船舶防止船舶在海上之垃圾污染 Understand there are strict rules for prevention of pollution by garbage from ships at sea, applicable to all ships				
.8	瞭解嚴格遵守當地有關垃圾儲置與岸上處理規則之必要性 Understand the need to strictly observe local regulations concerning garbage stowage and disposal ashore				
.9	瞭解有嚴格之規定適用於所有船舶在海上由船舶日益增加之空氣污染 Understand there are strict rules covering air pollution from ships at sea which will progressively apply to all ships				
.10	瞭解嚴格遵守當地有關煙道氣排放規則之必要性 Understand the need to strictly observe local regulations concerning flue gas emissions				
.11	瞭解在海上處置廢物與海洋污染物通常會被取締並規範於岸上處置 Understand that disposal of waste and marine pollutants is generally banned at sea and the norm is to land ashore for disposal				
.13	適任 Competence : 應用職業健康與安全之預防措施 Apply occupational health and safety precautions		評估標準 Criteria for Evaluation		適任性證明 Competence Demonstrated 同部門較自身高階之 甲級船員簽名/日期 Assessor (Signature/Date)

13.1	安全工作做法與人員在船安全之工作知識， 包括：電機安全 Working knowledge of safe working practices and personal shipboard safety, including: Electrical safety	隨時遵循用保護人員與船舶 之指定程序，隨時遵守安全 工作做法並正確使用適當之 防護設備 Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times		
	科目/職責 Task/Duty	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)	對改進部分之建議 Advice on Areas for Improvement	科目已完成 Task Completed 施訓者簽名/日期 Instructor(Signature/Date)
1	證明瞭解在使用電動工具與設備之安全工作 實務 Demonstrate an understanding of safe working practices in using electric power operated tools and equipment			
2	瞭解使用輕便電燈附帶之風險 Understand risks associated with using portable electric lamps			
3	瞭解在有濕氣或潮濕之狀況下電擊之風險較 大 Understand risk of shock is greater in damp or humid conditions			
4	證明具有在危險區域安全使用電力設備之知 識 Demonstrate knowledge of safe use of electrical equipment for use in hazardous areas			
5	示範使用測氧計檢查可能有危險之空間 Demonstrate use of oxygen meter for checking spaces that may be at risk			
6	對有缺點或受損之電機設備、接頭或電纜提 出報告 Report defective or damaged electrical equipment, connectors or cables			

13.2	<p>安全工作做法與人員在船安全之工作知識， 包括：上鎖/加籤</p> <p>Working knowledge of safe working practices and personal shipboard safety, including: Lockout/tag-out</p>	<p>隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備</p> <p><i>Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times</i></p>		
1	<p>確使將有危險之動力源予以隔離、加標籤並在任何修理開始前予以鎖住使其不能操作</p> <p>Ensure hazardous power sources are isolated, tagged and locked and rendered inoperative before any repairs are started</p>			
2	<p>遵照船舶之程序鎖定並加標籤處理電力、機械力、氣壓或液壓之風險</p> <p>Follow ship's procedure for locking and tagging to manage electrical, mechanical, pneumatic or hydraulic risks</p>			
13.3	<p>安全工作做法與人員在船安全之工作知識， 包括：機械安全</p> <p>Working knowledge of safe working practices and personal shipboard safety, including: Mechanical safety</p>	<p>隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備</p> <p><i>Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times</i></p>		
1	<p>應用安全工作實務於使用起重機具</p> <p>Apply safe working practices in using lifting gear</p>			
2	<p>對於穩妥固定之機具在啟動前確使作正確之安全防護</p> <p>Ensure correct safety guards for appliances are correctly fitted and suitable for use before start-up</p>			

[3]	瞭解以液力及氣力操作之機械設備所附帶之風險 Understand hazards associated with hydraulic and pneumatically operated mechanical equipment					
[13.4]	安全工作做法與人員在船安全之工作知識， 包括：作業許可制度 Working knowledge of safe working practices and personal shipboard safety, including: Permit to work systems			隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備 Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times		
[1]	證明瞭解船舶之作業許可制度 Demonstrate an understanding of the ship's permit to work system					
[2]	依據工作實務準備工作區域 Prepare work areas in accordance with safe working practices					
[3]	在工作完成後收藏設備工具及剩餘之物料 Stow equipment, tools and surplus materials on completion of work					
[4]	如對任務或安全事項有任何疑問時請求指導 Seek guidance if in any doubt concerning task or safety matters					
[5]	證明瞭解工作完成後“簽退”之程序 Demonstrate an understanding of the procedure to "sign off" on completion of work					
[13.5]	安全工作做法與人員在船安全之工作知識， 包括：高空作業 Working knowledge of safe working practices and personal shipboard safety, including: Working aloft			隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備 Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times		

[1]	證明具有在高空工作安全工作實務之知識 Demonstrate a knowledge of safe working practices when working at height					
[2]	證明具有在頭頂工作安全工作實務之知識 Demonstrate a knowledge of safe working practices when working overhead					
[3]	瞭解輕便梯、台架與塔樓所附之風險 Understand the risks associated with portable ladders, scaffolds and towers					
[13.6]	安全工作做法與人員在船安全之工作知識， 包括：在密閉空間內作業 Working knowledge of safe working practices and personal shipboard safety, including: Working aloft			隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備 <i>Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times</i>		
[1]	證明具有如何辨識密閉空間之知識 Demonstrate a knowledge of how to recognise an enclosed space					
[2]	在進入密閉空間（如進入艙櫃、在艙底板下、驅氣之空間、鍋爐等）前請求工作許可 Seek permit to work before entry into an enclosed space (tank entry; beneath floor plates; scavenge spaces; boilers; etc)					
[3]	進入密閉空間一貫採用安全工作實務 Consistently apply safe working practices for entry into enclosed spaces					
[4]	說明在發現於密閉空間內之事故時所採取之行動 State action to take on finding casualty in an enclosed space					

13.7	<p>安全工作做法與人員在船安全之工作知識， 包括：舉重之技巧與防止背部受傷之方法</p> <p>Working knowledge of safe working practices and personal shipboard safety, including: Lifting techniques and methods of preventing back injury</p>	<p>隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備</p> <p><i>Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times</i></p>		
.1	<p>示範安全工作實務於人力舉重與搬運</p> <p>Demonstrate safe working practices in manual lifting and carrying</p>			
.2	<p>示範正確之人力操作技巧</p> <p>Demonstrate correct manual handling techniques</p>			
13.8	<p>安全工作做法與人員在船安全之工作知識， 包括：化學與生物危害安全</p> <p>Working knowledge of safe working practices and personal shipboard safety, including: Chemical and biohazard safety</p>	<p>隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備</p> <p><i>Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times</i></p>		
.1	<p>當在下列操作時符合健康、衛生與安全之規定： 有害物質</p> <p>Comply with health, hygiene and safety requirements when handling: Hazardous substances</p>			
.2	<p>污水處理設備</p> <p>Sewage treatment plant</p>			
.3	<p>醫療廢棄物</p> <p>Medical waste</p>			

.4	壓載水處理 Water ballast treatment					
.5	當以清潔液、油漆、毒性材料等工作時依照說明書及防護措施為之 Follow instructions and precautions when working with cleaning fluids, paints, toxic materials etc					
.6	瞭解生物危險威脅及人類生命並能在船上發生 Understand that a biological hazard (biohazard) is a threat to human life, and that they can arise on board					
13.9	安全工作做法與人員在船安全之工作知識， 包括：個人安全設備 Working knowledge of safe working practices and personal shipboard safety, including: Personal safety equipment	隨時遵循用保護人員與船舶之指定程序，隨時遵守安全工作做法並正確使用適當之防護設備 Procedures designed to safeguard personnel and the ship are observed at all times. Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times				
.1	請求告知如何正確使用個人安全設備以從事手邊之任務 Seek advice to use correct personal safety equipment for the tasks in hand					
.2	瞭解需要及時對安全設備之缺失與不足提出報告 Understand the need to report promptly faults or deficiencies in safety equipment					
.3	確認並瞭解禁止、警告、強制與緊急之安全告示牌之意義 Recognise and understand meaning of prohibition, warning, mandatory and emergency safety signage					

第八部分 科目概要表 SECTION 8 TASK SUMMARY CHART

本概要表之目的在提供你、你的公司及你船船長與甲級船員一種指南以繼續檢查你在第六部分及第七所列應完成之各項科目或職責那些尚未完成。對已完成部分於欄內填註完成日期並用斜線刪除。在下表有陰影之方格係表示新一組科目或職責之開始。

The purpose of the summary chart is to provide you, your company and your ships' masters and officers with a guide and continuous check on the numbers of tasks or duties that you have completed (as listed in Section 6, 7), and those that remain outstanding. Tick off only those tasks which you have completed. In the charts below the tinted boxes simply indicate the start of a new group of tasks or duties.

助理級輪機當值 RATINGS FORMING PART OF AN ENGINEERING WATCH

專長 FUNCTION：助理級-輪機工程 Marine Engineering at the Support Level

1. 適任 Competence-助理級輪機當值職責之例行值班 Carry out a watch routine appropriate to the duties of a rating forming part of an engine-room watch

1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.2.4	1.2.5	1.2.6	1.2.7	1.2.8	1.2.9	1.2.10	1.2.11	1.1.12	1.2.13
2015.7.26	2015.8.9														
1.2.14	1.2.15	1.2.16	1.2.17	1.2.18	1.2.19	1.2.20	1.2.21	1.2.22	1.2.23	1.2.24	1.2.25	1.2.26	1.2.27	1.2.28	1.2.29
1.2.30	1.2.31	1.2.32	1.2.33	1.2.34	1.2.35	1.2.36	1.2.37	1.2.38	1.2.39	1.2.40	1.2.41	1.2.42	1.2.43	1.2.44	1.2.45
1.2.46	1.3.1	1.3.2	1.3.3	1.3.4	1.3.5	1.3.6	1.3.7	1.3.8	1.3.9	1.3.10	1.3.11	1.3.12	1.3.13	1.3.14	1.3.15
1.3.16	1.3.17	1.3.18	1.3.19	1.3.20	1.3.21	1.3.22	1.3.23	1.4.1	1.4.2	1.4.3	1.4.4	1.4.5	1.4.6	1.5.1	1.5.2
1.6.1	1.6.2	1.6.3	1.6.4	1.6.5	1.6.6	1.6.7									

2. 適任 Competence：維持正確水位及蒸汽壓力（值鍋爐班者）Maintain the correct levels and steam pressures (for keeping a boiler watch)

2.1.1	2.1.2	2.1.3	2.1.4	2.1.5	2.1.6	2.1.7	2.1.8	2.1.9	2.1.10	2.1.11	2.1.12	2.1.13	2.1.14	2.1.15

3. 適任 Competence：操作緊急設備及應用緊急程序 Operate emergency equipment and apply emergency procedures

3.1.1	3.1.2	3.1.3	3.1.4	3.1.5	3.1.6	3.1.7	3.1.8	3.1.9	3.1.10	3.1.11	3.1.12	3.1.13	3.1.14	3.1.15	3.1.16
3.1.17	3.1.18	3.1.19	3.1.20	3.1.21	3.1.22	3.1.23	3.2.1	3.2.2	3.2.3	3.2.4	3.3.1	3.3.2	3.3.3	3.3.4	3.3.5
3.3.6	3.3.7	3.3.8	3.3.9	3.3.10	3.3.11	3.3.12	3.3.13	3.3.14	3.3.15	3.3.16	3.3.17	3.3.18	3.3.19	3.3.20	

輪機助理員 ABLE SEAFARER ENGINE

專長 FUNCTION：助理級-輪機工程 Marine Engineering at the Support Level

4. 適任 Competence：致力於安全輪機當值 Contribute to a safe engineering watch

4.1.1	4.1.2	4.1.3	4.1.4	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.3.1	4.3.2	4.3.3
4.3.4	4.3.5	4.3.6	4.3.7	4.3.8	4.3.9										

5. 適任 Competence：致力於機艙當值之監控 Contribute to the monitoring and controlling of an engine-room watch

5.1.1	5.1.2	5.1.3	5.1.4	5.1.5	5.1.6	5.1.7	5.1.8	5.1.9	5.1.10	5.1.11	5.1.12	5.1.13	5.1.14	5.1.15	5.1.16
5.1.17	5.1.18	5.1.19	5.1.20	5.1.21	5.1.22	5.1.23	5.1.24	5.1.25	5.1.26	5.1.27	5.1.28	5.1.29	5.1.30	5.1.31	5.2.1
5.2.2	5.2.3	5.2.4	5.2.5	5.2.6	5.2.7	5.2.8	5.2.9	5.2.10	5.2.11	5.2.12	5.2.13	5.2.14	5.2.15	5.2.16	5.2.17
5.2.18	5.2.19	5.2.20	5.2.21	5.2.22	5.2.23										

6. 適任 Competence：致力於加燃油與駁油作業 Contribute to fuelling and oil transfer operations

6.1.1	6.1.2	6.1.3	6.1.4	6.1.5	6.2.1	6.2.2	6.2.3	6.3.1	6.3.2	6.3.3	6.3.4	6.4.1	6.4.2	6.5.1	6.5.2
6.5.3	6.5.4	6.5.5													

7. 適任 Competence：致力於艙底水與壓載水作業 Contribute to bilge and ballast operations

7.1.1	7.1.2	7.1.3	7.1.4	7.1.5	7.2.1	7.2.2	7.2.3	7.2.4

8. 適任 Competence：致力於設備與機械之安全操作 Contribute to the safe operation of equipment and machinery

8.1.1	8.1.2	8.1.3	8.1.4	8.1.5	8.1.6	8.1.7	8.1.8	8.1.9	8.1.10	8.1.11	8.2.1	8.2.2	8.2.3	8.2.4	8.2.5
8.3.1	8.3.2	8.3.3	8.3.4	8.3.5	8.3.6	8.4.1	8.4.2	8.4.3							

專長 FUNCTION：助理級-電機、電子及控制工程 Electrical, Electronic and Control Engineering at the Support Level

9. 適任 Competence：電機設備之安全使用 Safe use of electrical equipment

9.1.1	9.1.2	9.1.3	9.1.4	9.1.5	9.1.6	9.1.7	9.2.1	9.2.2	9.2.3	9.3.1	9.3.2	9.4.1	9.4.2	9.4.3	9.4.4
9.4.5	9.4.6	9.4.7	9.4.8	9.4.9	9.4.10	9.5.1	9.5.2	9.5.3							

專長 FUNCTION：助理級-保養及維修 Maintenance and Repair at the Support Level

10. 適任 Competence：致力於船上之保養及維修 Contribute to shipboard maintenance and repair

10.1.1	10.1.2	10.1.3	10.1.4	10.1.5	10.1.6	10.2.1	10.2.2	10.2.3	10.2.4	10.2.5	10.2.6	10.2.7	10.2.8	10.2.9	10.2.10
10.2.11	10.3.1	10.3.2	10.3.3	10.3.4	10.4.1	10.4.2	10.4.3	10.4.4	10.4.5	10.4.6	10.4.7	10.4.8	10.4.9	10.4.10	10.4.11
10.4.12	10.4.13	10.4.14	10.4.15	10.4.16	10.4.17	10.4.18	10.4.19	10.4.20	10.4.21	10.4.22	10.4.23	10.4.24	10.4.25	10.4.26	10.4.27
10.4.28	10.4.29	10.4.30	10.4.31	10.4.32	10.4.33	10.4.34	10.4.35	10.4.36	10.4.37	10.4.38	10.4.39	10.4.40	10.4.41	10.4.42	10.5.1
10.5.2	10.5.3	10.5.4	10.5.5	10.5.6	10.6.1	10.6.2	10.6.3	10.6.4	10.7.1						

專長 FUNCTION：船舶操作與船上人員管理 Controlling the Operation of the Ship and Care for Persons On Board at the Support Level

11. 適任 Competence：致力於物料處理 Contribute to the handling of stores

11.1.1	11.1.2	11.1.3	11.1.4	11.1.5

12. 適任 Competence：應用預防措施並致力於防止海洋環境之污染 Apply precautions and contribute to the prevention of pollution to the marine environment

12.1.1	12.1.2	12.1.3	12.1.4	12.1.5	12.2.1	12.2.2	12.2.3	12.2.4	12.2.5	12.2.6	12.2.7	12.2.8	13.3.1	13.3.2	13.3.3
13.3.4	13.3.5	13.3.6	13.3.7	13.3.8	13.3.9	13.3.10	13.3.11								

13. 適任 Competence：應用職業健康與安全之預防措施 Apply occupational health and safety precautions

13.1.1	13.1.2	13.1.3	13.1.4	13.1.5	13.1.6	13.2.1	13.2.2	13.3.1	13.3.2	13.3.3	13.4.1	13.4.2	13.4.3	13.4.4	13.4.5
13.5.1	13.5.2	13.5.3	13.6.1	13.6.2	13.6.3	13.6.4	13.7.1	13.7.2	13.8.1	13.8.2	13.8.3	13.8.4	13.8.5	13.8.6	13.9.1
13.9.2	13.9.3														

項目帶框者為舊版本所無

第九部份 總結報告 SECTION 9 Final Report (正本)

申請助理級輪機當值適任證書

學員姓名 Full Name		出生年月日 Date of Birth		船員服務手冊字號 Seaman's Registration	
適任證書等級、級別及編號 Capacity of competency certificate and No.		適任證書有效期限 Valid Until.		紀錄簿起迄時間 Period of Record book	起 From 迄 To
<p>輪機長評定意見 Evaluating competence by chief engineer officer</p> <p>輪機長意見內容應含「適任」或「建議發證」等類似詞語。</p>				<p>倘未能及於加蓋船章但船已離港且船員已下船，權衡之計得蓋「公司章」。</p>	
				簽名 Signature	日期 Date
					
<p>船公司評定意見 Evaluating competence by company</p> <p>公司意見一定要寫明「建議航政機關發證」等類似詞語。</p>					
				簽名 Signature	日期 Date
				公司章 Stamp	
<p>航政機關評定意見 Evaluating competence by administration</p> <p>由官方填寫。</p>					
				簽名 Signature	日期 Date
				蓋戳章 Stamp	

註：請使用複寫紙製作副本。

紀錄簿編號 (Series No) : ESTR



第九部份 總結報告 SECTION 9 Final Report (副本)

申請助理級輪機當值適任證書

學員姓名 Full Name		出生年月日 Date of Birth		船員服務手冊字號 Seaman's Registration	
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輪機長評定意見 Evaluating competence by chief engineer officer					
<div style="text-align: right;"> 簽名 Signature <div style="margin-left: 100px;">日期 Date</div> </div>					
船公司評定意見 Evaluating competence by company					
<div style="text-align: right;"> 簽名 Signature <div style="margin-left: 100px;">日期 Date</div> <div style="margin-left: 100px;">公司章 Stamp</div> </div>					
航政機關評定意見 Evaluating competence by administration					
<div style="text-align: right;"> 簽名 Signature <div style="margin-left: 100px;">日期 Date</div> <div style="margin-left: 100px;">蓋戳章 Stamp</div> </div>					

註：請使用複寫紙製作副本。

紀錄簿編號 (Series No) : ESTR



第九部份 總結報告 SECTION 9 Final Report (正本)

申請輪機助理員適任證書

學員姓名 Full Name		出生年月日 Date of Birth		船員服務手冊字號 Seaman's Registration	
適任證書等級、級別及編號 Capacity of competency certificate and No.		適任證書有效期限 Valid Until.		紀錄簿起迄時間 Period of Record book	起 From 迄 To
輪機長評定意見 Evaluating competence by chief engineer officer					
<div style="display: flex; justify-content: space-between;"> <div>簽名 Signature</div> <div>日期 Date</div> </div>					
船公司評定意見 Evaluating competence by company					
<div style="display: flex; justify-content: space-between;"> <div>簽名 Signature</div> <div>日期 Date</div> <div>公司章 Stamp</div> </div>					
航政機關評定意見 Evaluating competence by administration					
<div style="display: flex; justify-content: space-between;"> <div>簽名 Signature</div> <div>日期 Date</div> <div>蓋戳章 Stamp</div> </div>					

註：請使用複寫紙製作副本。

紀錄簿編號 (Series No): ESTR



第九部份 總結報告 SECTION 9 Final Report (副本)

申請輪機助理員適任證書

學員姓名 Full Name		出生年月日 Date of Birth		船員服務手冊字號 Seaman's Registration	
適任證書等級、級別及編號 Capacity of competency certificate and No.		適任證書有效期限 Valid Until.		紀錄簿起迄時間 Period of Record book	起 From 迄 To
<p>輪機長評定意見 Evaluating competence by chief engineer officer</p> <div style="text-align: right; margin-top: 100px;"> 簽名 Signature 日期 Date </div>					
<p>船公司評定意見 Evaluating competence by company</p> <div style="text-align: right; margin-top: 100px;"> 簽名 Signature 日期 Date 公司章 Stamp </div>					
<p>航政機關評定意見 Evaluating competence by administration</p> <div style="text-align: right; margin-top: 100px;"> 簽名 Signature 日期 Date 蓋戳章 Stamp </div>					

註：請使用複寫紙製作副本。

紀錄簿編號 (Series No): ESTR



船長公會的小叮嚀

- 此本紀錄簿為航港局核定版本, 如果使用盜版, 後果請自行負責。
- 依據本公會評估本訓練紀錄部已涵蓋足夠的訓練, 只要按部就班的完成它們, 你將絕對是一個未來稱職的船副。
- 接到此本, 請密切注意第一及第二頁的使用說明, 並且盡量尋求指引與合作, 完成此次訓練。
- 船員如依一般商船船員標準於公務船舶或港勤工作船舶上完成訓練紀錄簿者, 應由船公司於總結報告之評定意見欄, 敘明「不限服務於公務船舶或港勤工作船舶」。
- C頁的附件-船上訓練紀錄簿簽署人員基本資料是作為認證之用, 證明紀錄簿中簽署人的簽字字樣由船公司認證, 因此建議學員在開始本訓練紀錄簿前將當時的相關的指派訓練員或簽署人的簽式樣紀錄在案, 並儲存當時的船員名單(蓋船章之船員名單), 將能事半功倍。
- 須注意船舶規格欄位需與事實相符, 不可抄襲他人船舶規格, 實習時間重來, 將會嚴重耽擱畢業或賺錢的時間。
- 安全熟悉及船舶熟悉兩欄位均應在上船後一周內完成, 超過時間恐會遭到質疑。
- 須注意: 訓練紀錄簿是學員的重要文件及經驗, 如果自己不做管理, 他人無法替代。因此船長、輪機長、訓練員、施訓人均要您自己按時遞送簽字填註意見, 如果自己不做, 別人沒注意所造成的後果, 自己負責。
- 如何填寫訓練科目及達成適任性之範例, 應主動提供給船長、輪機長及訓練員參考。
- 第五部分是完成當值的重要步驟, 需不時的親身體驗及研讀再三, 把它融入當值的一部分。
- 如果船舶上的書籍、船圖、說明書、海圖、管理、程序、設備、工具等處於缺失或待修或未做說明狀態, 不足以支援學習環境時, 請記錄下來, 如有可能請攝影存證各項練習。

- 如果長官不放心學員, 任何操作可請長官派員監督, 須注意此機器是船東的, 長官只是受雇人, 不要讓長官無法對船東交代。每個人有每個人的處事態度, 尊重別人就是對尊重自己。
- 訓練員或施訓人不願簽署紀錄簿中任何欄位時請透過其他管道溝通或聯絡公司處理, 不要直接面對不愉快的產生。因此請學員在上船前與公司建立溝通管道。
- 由於各船狀況航程各異, 因此不見得每一個狀況皆能得遇, 船長、輪機長或船員亦各有其專長, 因此不是每一個題目皆能得到正確的練習機會, 建議在未能得到適當練習的各個欄位, 在下一大機會或回至岸上後尋求公司或網上的搜尋得到正解。
- 對於一般可能遭遇之狀況, 可在上船訓練前先準備好過去學習經驗或網上資訊加以比對。
- 在每一次下船前檢視本紀錄簿是否有未完成簽署之欄/格位, 尤其是盡量減少”數格一簽”的情形發生。
- 建議學員在完成本記錄簿後將之掃描存檔, 以便日後在本公司或換公司服務時備查。
- 本船上訓練應避免跳槽其他公司完成。將會有無比之麻煩, 同時也會在將來就業時會有所刁難。
- 但如實在無法避免, 有在A、B、C、D公司船訓練後, 需要E公司船之船長做總結報告時, 請務必再次演練已完成諸欄位內項目, 以昭信任。
- 由於過去有學員在演練某個議題、或裝備、或程序時受傷, 為了自身的安全起見, 操作時請務必小心謹慎, 不到熟練請不要未經告知上級就單獨行動。
- 由於在船作學員往往有保險上的限制, 而且即便是船員也有不保之項目, 諸如不穿工作鞋以至於做工時砸到腳, 在不同的保險條件下將有不同的待遇, 因此, 請務必小心謹慎, 不要在受到傷害後, 得不到賠償。
- 如有任何疑問請利用下列聯絡諸元
 - 電話: +886-2-27120022
 - 傳真: +886-2-27128860
 - Email 1: master.mariner@msa.hinet.net
 - Email 2: seaharmonic@gmail.com