

Onboard Maintenance Checklist

船上保養檢查表

This checklist is solely provided as a guidance tool for the ship's Master and crew during routine maintenance and housekeeping on the ship.

此份檢查表僅作為提供船長及船員執行船上例行維護保養及內部管理之指南

The list does not claim to be complete and covers mainly those items that are frequently inspected by PSC.

此份檢查表並未完整呈現，且僅涵蓋港口國管制經常檢查的項目

Ship Name 船 名	
Checklist No. 檢 查 表 編 號	
Date 日 期	

WHY PORT STATE CONTROL 為何實施港口國管制

Port state authorities have the right to board ships without announcement to check whether those ships are complying with the relevant international Conventions and Regulations.

Thus, Port State Control is intended as a tool to eliminate sub-standard ships.

港口國當局有權利不經過通知登船，檢查船舶是否符合相關國際公約及法規，因此港口國管制目的是作為消除次標準船舶。

In order to avoid problems and delays due to PSC, a ship should always be
為避免因港口國管制產生問題造成延誤，船上必須：

- well maintained,保養良好
- be manned with a sufficient number of qualified crew; and 配置足夠符合資格的船員；及
- be in compliance with maritime regulations 符合海事法規要求
- don't overdue any survey in no case 無論如何不要逾期檢驗

HOW PSC IS CARRIED OUT 港口國管制如何執行

Port State Control Officers may come aboard to check the certificates, documents, condition of hull and machinery, equipment and the living conditions as well as adherence to operational requirements in accordance with the relevant Conventions.

港口國管制官員得登船檢查證書、文件、船體及機器狀況、設備、生活起居情形及操作要求是否符合相關公約。

The Officer will get a general view of the overall condition of the ship while boarding and, after introduction to the Master, check the validity of the ship's certificates.

官員登船時先目視全船狀況，再向船長自我介紹之後檢查船上證書有效期限。

If the first impression of the ship gives clear grounds to the Officer that the ship does not substantially meet the regulations he will conduct a more detailed inspection.

假使船上第一印象給官員明顯理由相信本船未實際符合法規，將導致更詳細檢查。

If the authorities verify deficiencies constituting a hazard to safety, health or environment they will ask for rectification and can detain a ship until such deficiencies have been corrected.

假使當局確認缺失構成危險影響安全、健康或環境，他們會要求矯正缺失並可能留置船舶，直到缺失矯正完成。

The Master will be informed about the deficiencies found by receiving a Boarding Report including a list of the deficiencies together with the action taken (applicable deficiency action codes) to rectify them immediately or within a given time frame.

船長會收到登船報告被通知所發現缺失，包含缺失清單及採取措施(缺失適用代碼)，要求立刻或限期矯正。

If the Officer decides to detain the ship until rectification, a detention order will be presented to the Master. This information also is forwarded to the Flag State as well as to the Classification Society which issued the relevant certificates and to IMO.

假使官員決定留置直至缺改完成，留置命令將交給船長；並知會船旗國、簽發證書所屬船級協會、及國際海事組織。

In case of a detention please inform CR. The surveyor can assist in reporting the rectification to the PSC authorities in order to lift the detention.

假使發生留置，請通知 CR。驗船師能協助向港口國管制當局報告矯正情形，俾利解除留置。

HOW TO USE THE CHECKLIST 如何使用檢查表

The ship's master and officers should check the condition of his ship in accordance with this checklist regularly, e.g. once every month or every few months depending upon the ship's operating conditions.

船長與甲級船員應定期使用此檢查表確認船況，如每月或數月一次，依船舶營運狀況而定。

However, the list does not claim to be complete and covers only those items that are frequently reported by PSC. 然而此份檢查表並未呈現完整，且僅涵蓋港口國管制報告經常提到的項目。

This Society, CR, hope that this checklist will be helpful and useful for the ship's Master, as well as for ship owners. 本中心期望此檢查表能對船長及船東有所助益。

1. Documentation 文件

No. 項次	Certificate 證書	Next Due Date 到期日	Expiry Date 失效日	N. A. 不適用	Yes 是	No 否	Action to be taken 採取行動
1.1	Are all required certificates valid and respectively endorsed? 所有需要之證書是否都在有效期限內且經簽署？						
	Registry Certificate 登記證書(國籍證書)			☐	☐	☐	
	Class Certificate 船級證書			☐	☐	☐	
	Radio Station Licence 無線電台執照			☐	☐	☐	
	Panama Canal Tonnage Certificate 巴拿馬運河噸位證書			☐	☐	☐	
	Suez Canal Tonnage Certificate 蘇伊士運河噸位證書			☐	☐	☐	
	International Tonnage Certificate 國際噸位證書			☐	☐	☐	
	Load Line Certificate 國際載重線證書			☐	☐	☐	
	Load Line Exemption Certificate 國際載重線豁免證書			☐	☐	☐	
	Minimum Safe Manning Document 船員最低安全配額文件			☐	☐	☐	
	Safety Management Certificate 安全 管理證書			☐	☐	☐	
	Document of Compliance (DOC) [copy] 符合證書(影印本)			☐	☐	☐	
	International Ship Security Certificate 國際船舶保全證書			☐	☐	☐	
	Certificate of competency for seafarers 船員適任證書			☐	☐	☐	
	IOPP Certificate 國際防止油污染證書			☐	☐	☐	
	ISPP Certificate 國際防止污水污染證書			☐	☐	☐	
	IAPP Certificate 國際防止空氣污染證書			☐	☐	☐	
	EIAPP Certificate 柴油機國際防止空氣污染證書			☐	☐	☐	
	International Energy Efficiency Certificate (IEEC) 國際能源效率證書			☐	☐	☐	

No. 項次	Certificate 證書	Next Due Date 到期日	Expiry Date 失效日	N. A. 不適用	Yes 是	No 否	Action to be taken 採取行動
	International Anti-Fouling System Certificate (IAFS) 國際防污系統證書			☐	☐	☐	
	International Ballast Water Management Certificate (BWMC) 國際壓艙水管理證書			☐	☐	☐	
	Maritime Labour Certificate (MLC) 海事勞工證書 DMLC Part I 海事勞工符合聲明-第 I 部分 DMLC Part II 海事勞工符合聲明-第 II 部分			☐	☐	☐	
	Crew Accommodation Report 船員住艙報告			☐	☐	☐	
1.2	Technical Documents, Manuals and Booklet 技術文件、手冊和日誌等						
	Intact Stability Booklet 完整穩度手冊			☐	☐	☐	
	Damage Control Plan and booklet 損害管制計畫及手冊			☐	☐	☐	
	Cargo Securing Manual 貨物繫固手冊			☐	☐	☐	
	IAMSAR Manual Volume III 國際海空搜尋救助手冊第三冊			☐	☐	☐	
	Plans and Procedure for Recovery of Persons from Water 人員落海搜救計畫及程序書			☐	☐	☐	
	Monthly boat drill & fire drill Record 每月船上救生、消防演習紀錄			☐	☐	☐	
	Maintenance plan for fire-safety system 消防安全系統保養計畫			☐	☐	☐	
	Fire control Plan/booklet 火災控制圖及手冊			☐	☐	☐	
	Fire safety training manual /operational booklet 消防安全訓練手冊及操作手冊			☐	☐	☐	
	Voyage data recorder system-certificate of compliance 航行資料記錄器系統-系統元件測試合格證書			☐	☐	☐	
	Emergency Towing Procedure 緊急拖曳程序書			☐	☐	☐	
	Coating Technical File 塗層技術檔案			☐	☐	☐	

No. 項次	Certificate 證書	Next Due Date 到期日	Expiry Date 失效日	N. A. 不適用	Yes 是	No 否	Action to be taken 採取行動
	Noise Survey Report (applicable to ship keel laid on or after 01/01/2015; delivery on or after 01/07/2018) 噪音檢驗報告			☐	☐	☐	
	Continuous Synopsis Record (CSR) 連續概要紀錄			☐	☐	☐	
	Garbage Management Plan & Garbage Record Book 垃圾管理計畫及垃圾紀錄簿			☐	☐	☐	
	Technical File for Verification for Control of NOx Emission 氮氧化物技術卷			☐	☐	☐	
	Ship Energy Efficiency Management Plan (SEEMP) 船舶能源效率管理計畫			☐	☐	☐	
	Ship Security Plan and associated Records 船舶保全計畫及紀錄			☐	☐	☐	
1.3	for Cargo Ships 除上述證書及文件外貨船必須攜帶						
	Cargo Ship Safety Construction Certificate 貨船安全構造證書			☐	☐	☐	
	Safety Equipment Certificate 貨船安全設備證書			☐	☐	☐	
	Safety Radio Certificate 貨船安全無線電證書			☐	☐	☐	
	Exemption Certificate (if any) 豁免證書 (若有)			☐	☐	☐	
	Document of authorization for the carriage of grain 載運穀物許可文件			☐	☐	☐	
	Enhanced Survey Report File (for oil tanker, bulk carrier) 加強檢驗報告檔案 (油輪、散裝船)			☐	☐	☐	
	Record of oil discharge monitoring and control system for the last ballast voyage 最近一次壓載航程有關排放油監視與控制系統之紀錄			☐	☐	☐	
	Cargo information 貨物資料			☐	☐	☐	
	Bulk Carrier Booklet 散裝貨船手冊			☐	☐	☐	
	Grain loading manual 穀物裝載手冊			☐	☐	☐	

No. 項次	Certificate 證書	Next Due Date 到期日	Expiry Date 失效日	N. A. 不適用	Yes 是	No 否	Action to be taken 採取行動
	Dedicated Clean Ballast Tank Operation Manual 專用清潔壓載油櫃操作手冊			☐	☐	☐	
	Crude Oil Washing Operation and Equipment Manual 原油清洗操作及裝備手冊			☐	☐	☐	
	Condition Assessment Scheme (CAS) Statement of Compliance, CAS Final Report and Review Record 船況評估計畫最終報告及檢查紀錄			☐	☐	☐	
	Hydrostatically Balanced Loading Operational Manual 靜水平衡負載操作手冊			☐	☐	☐	
	Oil Discharge Monitoring and Control (ODMC) Operational Manual 油排放監視及控制操作手冊			☐	☐	☐	
	Subdivision and Stability Information 艙區劃分及穩度資料			☐	☐	☐	
1.4	for Ships Carrying Noxious Liquid Substances 除上述證書、文件外，適用時，載運有毒液體物質之貨船尚需備有下列證書、文件						
	International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk 國際載運有毒液體物質防止污染證 書			☐	☐	☐	
	Cargo Record Book (for NLS) 貨物紀錄簿（有毒液體物質）			☐	☐	☐	
	Procedures and Arrangement Manual 程序及布置手冊			☐	☐	☐	
	Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances 船舶有毒液體物質海上污染應急計 畫			☐	☐	☐	
1.5	for Chemical Tankers 除上述證書、文件外(1.2~1.4)，適用時，化學船必須攜帶下列證書、文件						
	International Certificate of Fitness for the Carriage of Dangerous Chemicals in bulk 國際適合載運散裝危險化學物質證 書			☐	☐	☐	
	Emergency Towing Arrangement (for 20,000 DWT or over) 緊急拖曳佈置(20,000 載重噸以上)			☐	☐	☐	
1.6	for Liquid Gas Carriers 除上述證書、文件外(1.2~1.3)，適用時，液化氣體船必須攜帶下列證書、文件						

No. 項次	Certificate 證書	Next Due Date 到期日	Expiry Date 失效日	N. A. 不適用	Yes 是	No 否	Action to be taken 採取行動
	International Certificate of Fitness for the Carriage of Liquid Gases in Bulk 國際適合載運散裝液化氣體證書			☐	☐	☐	
	Towing Arrangement (for 20,000 DWT or over) 緊急拖曳佈置(20,000 載重噸以上)			☐	☐	☐	
1.7	for Ships Carrying Dangerous Goods 除上述證書、文件外(1.2~1.3)，適用時，載運危險物質之船舶必須備有下列文件						
	Document of compliance with the special requirements for ships carrying dangerous goods 船舶載運危險物品特別要求符合文件			☐	☐	☐	
	Dangerous Goods Manifest or Stowage Plan 危險貨物積載圖			☐	☐	☐	
1.8	Other necessary documents 其他必需文件						
	Log Book (properly recorded) 航海日誌			☐	☐	☐	
	Reports of Previous PSC Inspection 港口國管制檢查報告			☐	☐	☐	
	Calibration Certificate for the 15ppm Bilge Alarm 15ppm 艙水警報校正證書			☐	☐	☐	
	Service Record of Lifeboat 救生艇維修紀錄			☐	☐	☐	
	Service Record of Liferaft 救生筏維修紀錄			☐	☐	☐	
	Service Record of EPIRB EPIRB 維修紀錄			☐	☐	☐	
	LRIT Conformance Test Report LRIT 符合測試報告			☐	☐	☐	
	Annual Testing Report of AIS AIS 年度測試報告			☐	☐	☐	

2. Navigation Equipment 航海裝備

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
2.1	Are nautical publications including pilot books, list of lights, sailing directions, tide tables, international code of signals to be used for the intended voyage updated to the latest amendments/corrections/ editions? 使用於計畫航程之航海書籍包含領航圖書、燈號表、航行指南、潮汐表、國際信號代碼等是否為最新版本？	☐	☐		
2.2	Are nautical charts to be used for the intended voyage updated to the latest available Notice to Mariners? 計畫航程所使用航海圖表是否依最新的航船佈告修訂？	☐	☐		
2.3	Is a system for correcting all nautical publications onboard available? 船上航海刊物修正系統是否建立？	☐	☐		
2.4	Are navigational instruments as radar including ARPA devices, echo sounder and speed log in operational condition? 航海儀器如 ARPA 裝置、回聲測深儀、航速儀保持正常使用？	☐	☐		
2.5	Is the steering gear including rudder angle indicator as well as emergency steering gear including switch-over devices in operating condition and the steering gear alarm functioning? 舵機系統(含舵角指示器，緊急舵機含切換裝置)，功能是否正常？	☐	☐		
	Are instructions for handling posted in vicinity? 操作指示是否張貼於附近？	☐	☐		
2.6	Are the navigation lights incl. duplication and failure alarm working? 航行燈(含備用)及故障警報功能是否正常？	☐	☐		
2.7	Are shapes in operational condition? 號標是否在可用狀況下？	☐	☐		
2.8	Is the daylight signalling lamp and the independent power supply in good operational condition? 日間信號燈及其獨立電源供應是否操作正常？	☐	☐		
2.9	Is the automatic position indicator (e.g. GPS) available and in good condition? (The RDF is no longer required and may be removed) 自動船位指示器(如 GPS)是否備便及正常？ (RDF 不再需要，可以移除)	☐	☐		
2.10	Are communication systems between bridge and engine room and steering gear room in working condition? 駕駛台、機艙及舵機房的通訊系統是否正常可用？	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
2.11	Is illustrated table of life saving signals incl. helicopter communication signs posted on the bridge? 救生信號圖表(包含直昇機聯絡信號)是否公佈於駕駛台?	☐	☐		
2.12	Is the magnetic steering compass in good condition and properly visible from steering position? 操舵用磁羅經是否在良好狀態，可從操舵位置正常目視?	☐	☐		
	Is a spare magnetic compass available and in good condition? 磁羅經是否有備份？是否保持良好狀態？	☐	☐		
	Is table/ curve of residual deviation (every 1 year) available? 磁差表/圖是否備便？(每年)	☐	☐		
	Is it confirmed that there are no bubbles in the magnetic compass? 確認磁羅經內沒有氣泡？	☐	☐		
2.13	Is the heading information (gyro compass repeater) to emergency steering position available? 緊急操舵位置是否有航向裝置(子羅經)?	☐	☐		
2.14	Is a VDR/S-VDR fitted and annual performance test certificate of compliance on board? VDR/S-VDR 年度性能測試報告?	☐	☐		
2.15	Is BNWAS working in order and properly secured? 駕駛臺航行當值警報系統是否正常運轉？是否管制開關?	☐	☐		

3. Radio Equipment 無線電裝備

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
3.1	Are main and reserve transmitting and receiving equipment including sources of energy in working condition? 發射及接收裝備包含電源是否在可使用狀態？	☐	☐		
3.2	Are portable VHF hand held radios for survival craft including batteries with spares / re-charger in good working condition? 使用於救生艇筏可攜帶手持式 VHF 無線電，包含備用電池及充電器是否在良好使用狀態？	☐	☐		
3.3	Are antenna systems in good condition without any signs of corrosion or damage? 天線系統是否在良好狀況沒有任何腐蝕或損壞跡象？	☐	☐		
3.4	Are Radar Transponders in working condition and ready in case of emergency? 雷達詢答機是否在使用狀況，且已備便在緊急時使用？	☐	☐		
	Are they serviced in accordance with manufacturer's requirements by shore service? 是否依據製造廠的要求進行岸上維修使用？	☐	☐		
3.5	Is in case of a freefall boat arrangement one Radar Transponder permanently stowed within the freefall lifeboat? 若裝置自落式救生艇，雷達詢答機是否固定儲存於救生艇內？	☐	☐		
3.6	Is the EPIRB in correct and float free position? Is the expiration date of battery and hydrostatic release still valid? 應急指位無線電示標(EPIRB)是否在正確及可自由漂浮位置，電池有效期及靜水壓釋放裝置是否仍然有效？	☐	☐		
3.7	Are radio publications and manuals updated? 無線電刊物及手冊是否最新版？	☐	☐		
3.8	Is a valid Radio Licence onboard? 船上無線電台執照是否有效？	☐	☐		
3.9	Are the reserve sources of energy (batteries) properly maintained and in working condition? 船上備用電源(電池)是否妥當維護及可用狀況？	☐	☐		
3.10	Are radio operators familiar with cancellation procedures for false distress alarms? 無線電操作員是否熟悉錯誤遇險警報之消除程序？	☐	☐		

4. Safety in General 一般安全

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
4.1	Are SOLAS training manuals available, showing specific instructions for appliances onboard and are written in a language understood by all crew members? SOLAS 公約規定之訓練手冊是否已備妥，是否對於船上有關之裝備能以船員容易瞭解之文字予以指導？	☐	☐		
4.2	Is a plan or program for maintenance available? 是否備妥保養計畫或方法？	☐	☐		
4.3	Have regular drills for fire fighting, abandon ship and rescue boat operation been carried out satisfactorily as required? (every month and within 24 hrs of departure if 25% of the crew have not participated on board the ship) 是否有定期實施消防、棄船及救生艇操作之演練且能令人滿意達到要求？(每個月；或開航後 24 小時內，若更換超過 25%船員時)	☐	☐		
	Are they recorded in the logbook? 是否紀錄於航海日誌內？	☐	☐		
4.4	Are Instruction Manuals for onboard maintenance of life-saving appliances available and understood by all crew members? 對於船上救生設備保養是否備有救生指導手冊，而且船員都能瞭解？	☐	☐		
	Is regular maintenance being recorded? 定期保養是否予以紀錄？	☐	☐		
4.5	Are Operating Instructions for lifesaving appliances posted on scene and under emergency illumination? 救生設備之操作指導是否公佈在現場且有緊急照明燈光？	☐	☐		
	Are they in a language understood by all crew members? 操作指導所使用之語言文字是否被所有船員所能瞭解？	☐	☐		
4.6	Are up-to-date fire control plans been exhibited in accommodation area, are clearly readable and show a sign of approval? 最新版火災控制圖已經張貼在起居間旁走道，圖面清晰易讀且經簽證核定？	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
	Is one copy stored in a prominently marked and weather tight container outside the deckhouse? 火災控制圖影本儲放在甲板室外有明顯標誌及防風、雨之容器內？	☐	☐		
4.7	Is a working language established and recorded in the logbook? 是否已建立工作所使用之語言，且記錄於航海日誌內？	☐	☐		
	Are IMO symbols properly used for marking escape ways and locations of emergency equipment? 是否適當標示 IMO 符號於逃生路線及緊急裝備存放處？	☐	☐		
4.8	Are all escape ways accessible and free of obstructions and are they properly illuminated? 是否所有逃生路線都可進入且無阻礙物品與適當照明？	☐	☐		
4.9	Is the crew familiar with the use of all lifesaving and firefighting equipment? 船員是否熟悉使用所有救生及消防裝備？	☐	☐		
4.10	Are up-to-date muster lists written in a language understood by the crew members? 人員部署表是否最新版，且以船員瞭解之文字撰寫？	☐	☐		
	Are duties about maintenance of safety equipment included? 安全裝備維護職掌是否列入？	☐	☐		
	Are duties about carrying two-way VHF into the survival crafts included? 攜帶緊急無線電裝備進入救生艇筏之任務是否包含於部署表內？	☐	☐		
	Are they posted on the bridge, in engine control room and accommodation spaces? 部署表是否公佈於駕駛台、機艙控制室、及起居室？	☐	☐		
4.11	Is the designated lifeboat/rescue boat crew familiar with starting the engines? 指派救生艇或救難艇船員是否熟悉操作機器之啟動？	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
4.12	Are public alarm systems as for general alarm and engineer's alarm of unmanned machinery system working properly? 作為一般警報及無人化機艙通知機艙人員之公用警報系統功能是否正常？	☐	☐		
4.13	Is the portable instrument for measuring oxygen in good condition? 攜帶式氧氣偵測器是否保持良好狀況？	☐	☐		
4.14	Are all paint materials stored inside the designated paint locker only? 是否所有噴塗使用之油漆材料僅置放於專用之油漆庫內？	☐	☐		
4.15	Are pilot ladders and related boarding arrangements clean and in good condition? 領港梯及相關登船佈置是否清潔及在良好狀態？	☐	☐		
4.16	Is the crew working on the bridge familiar with the steering gear switch-over procedures and with the use of emergency steering device? 駕駛台人員是否熟悉舵機轉換程序及使用緊急舵機裝置？	☐	☐		
4.17	Have drills for use of emergency steering gear and switch-over procedures been carried out? 緊急操舵及正常程序轉換之演練是否實施？	☐	☐		
	Are they recorded in the logbook? 是否紀錄於航海日誌內？	☐	☐		
4.18	Is the key engine crew familiar with emergency power arrangements? 重要機艙人員是否熟悉緊急電源佈置？	☐	☐		
	Are key persons familiar with starting the emergency generator ? (both means) 重要人員是否熟悉啟動緊急發電機？(兩種方式)	☐	☐		
	Automatic start , if applicable, tested 自動啟動(若適用)測試	☐	☐		
4.19	Are key persons for firefighting familiar with starting the emergency fire pump? 重要消防人員是否熟悉起動緊急消防泵？	☐	☐		
4.20	Are responsible personnel familiar with the use of the OWS arrangements? 專責人員是否熟悉油水分離器裝置之操作與使用？	☐	☐		

5. Lifesaving Appliances 救生設備

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
5.1	Is inspection & maintenance of lifesaving appliance and arrangement implemented and recorded accordingly? 救生設備與佈置之檢查及維護是否依規定執行並記錄？	☐	☐		
5.2	Are lifeboats with all parts in proper condition without wastage, are blocks and release mechanisms properly maintained as necessary? 救生艇及設備是否保持可用狀態未耗損？滑車及釋放機構是否依需要維護妥當？	☐	☐		
	Is retro-reflective tape adhered as required on bottom, sides and top? 反光帶是否依規定黏附在船底、船側及頂部？	☐	☐		
5.3	Is lifeboat inventory complete and in good condition? 救生艇配品是否完整及在良好狀況？	☐	☐		
	Are dates of expiration for pyrotechnics and foodstuff rations recorded and not outdated? 煙火及配給食物之失效期限是否記載，而且未過期？	☐	☐		
5.4	Are rescue boats complete and in good condition? 救難艇是否完整及處於良好狀況？	☐	☐		
	Is the inventory as required stored in the boat? 各項配品是否依需要儲存艇上？	☐	☐		
5.5	Are lifeboat/rescue boat engines in good working condition and starting easily? 救生艇及救難艇是否處於良好狀態以及易於啟動？	☐	☐		
5.6	Are life rafts and launching arrangements in good working condition? 救生筏及下水裝置是否在良好狀態？	☐	☐		
	Is the ship's name updated on the outside data placards if available? 是否標記正確船名在筏外？	☐	☐		
5.7	Is the hydrostatic release for the rafts properly connected and still valid? 救生筏靜水壓釋放裝置是否正確安裝及在有效期間內？	☐	☐		
	Documents of service for inflatable life rafts & their hydrostatic release units 救生筏及其靜水壓力釋放器維修檢查文件	☐	☐		
5.8	Is a ladder or other means for embarkation for the additional life raft at the bow (if appropriate) readily available? 船艏置放之額外救生筏之登艇梯子或其他措施已準備妥當？	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
5.9	Are launching arrangements for lifeboats/ rescue boats and life rafts including limit switches in good condition and without wastage? 救生艇/救難艇及救生筏之下水裝置包含極限開關是否在良好狀態沒有耗損？	☐	☐		
5.10	Are the embarkation ladders incl. their shackles and padeyes on deck in good condition? 登輪梯包含甲板上之接環及眼板是否在良好狀態？	☐	☐		
5.11	Are wire falls of all launching/recovery arrangements in good condition and renewed as required? 下水及回收裝置之吊索是否在良好狀態？是否需要換新？	☐	☐		
	Has renewal of falls/crane wires been recorded? 吊桿及吊索之鋼索換新是否有紀錄？	☐	☐		
5.12	Are life buoys (including reflective tape, correct ship's name/home port and lights and smoke signals with non-outdated batteries) available in sufficient amount and in good condition? 有關救生圈之反光帶是否黏貼、是否標註船名與船籍港；燈光及煙霧信號器(附帶未過期之電池)等是否備妥？數量是否足夠？是否在良好狀態下？	☐	☐		
5.13	Is a "heavy" life buoy (4kg) attached to the smoke/light-buoy at bridge wings in a free-fall arrangement? 在駕駛台兩翼之「重力級」救生圈(4kg)？	☐	☐		
5.14	Are lifejackets (including whistles plus lights and non-outdated batteries) available in sufficient amount and good condition? 救生衣(包含口哨及未過期電池之燈光)數量是否足夠，狀況是否良好？	☐	☐		
5.15	Are line throwing appliances complete with valid expiration dates of the pyrotechnic units? 拋繩器是否完整附帶有效期限內之發射裝置？	☐	☐		
5.16	Are parachute distress signals available in sufficient amount and in good condition with valid expiration dates placed on the bridge in an appropriate containment which is marked? 位於橋艙適當裝置且予以標識之降落傘遇難信號是否備有足夠數量，處於良好狀況且在有效期限內？	☐	☐		
5.17	Are immersion suits and thermal protective aids (including lights and special attachments) available in required amount and in good condition 浸水衣及保溫裝具(含燈光及特殊附件)是否備齊需要數量及在良好狀況？	☐	☐		
5.18	Is the emergency illumination at all survival craft stations sufficiently working with illuminating the ship's side and the instructions posted?	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
	各救生艇筏站緊急照明是否足夠配合工作所需？ 操作指導是否公佈？				

6. Fire Fighting Arrangements 消防佈置

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
6.1	Are fire main piping and all hydrants in good condition without signs of corrosion or wastage and without soft patches? 消防管路及消防栓是否保持良好狀況而無腐蝕及耗損以及無貼補？	☐	☐		
	Are couplings and valves free of leakages? 法蘭接頭及閥是否有洩漏？	☐	☐		
6.2	Are fire pumps including prime mover in engine room in proper working condition and with sufficient delivery of water pressure? 機艙消防泵包含原動機工作狀況是否正常？輸送水壓是否足夠？	☐	☐		
6.3	Is emergency fire pump including prime mover in proper working condition with sufficient suction and water pressure to be delivered? 緊急消防泵包含原動機工作是否正常？進口及輸出水壓是否足夠？	☐	☐		
	Is crew in charge aware of starting procedures? 船員操作時是否注意啟動程序？	☐	☐		
6.4	Are all fire stations with required equipment of hoses, nozzles, spanners in good condition? 各救火站是否備有足夠之水管、噴嘴、板手？	☐	☐		
	Are nozzle spray adjustments workable and hoses without deterioration? 噴嘴噴灑調整裝置是否可用？水管是否變形損壞？	☐	☐		
6.5	Are portable fire extinguishers available in sufficient amount and in good condition? 攜帶式滅火器數量是否足夠？是否保持良好狀況？	☐	☐		
	Are due dates for required servicing recorded and not outdated? 是否記載需要維護到期日而未超過期限？	☐	☐		
6.6	Are firefighter's outfits available in sufficient and complete amount, good condition and ready for use, including breathing apparatus with air bottles properly filled? 消防人員裝備是否完整？數量是否足夠？是否保持良好且隨時可用狀況？包含呼吸裝置之氣瓶是否適當充填？	☐	☐		
6.7	Are fixed fire fighting systems for engine room and cargo spaces in proper working condition? 機艙及貨艙之固定式消防系統是否在良好工作狀況？	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
	Have filling status of gas bottles or foam tanks been checked? 氣瓶或泡沫櫃充填狀況是否有檢查？	☐	☐		
	Is the CO₂ room properly closable and a spare key available under glass in vicinity? CO ₂ 艙間是否關閉？備用鑰匙是否在附近之玻璃箱內？	☐	☐		
	Are the last test records of the systems available? 系統最近測試紀錄是否完成？	☐	☐		
6.8	Does the fire extinguishing arrangement in paint locker comply with regulations, and the equipment as required in place and in good working condition? 油漆庫滅火系統裝置是否符合法規？裝備是否存在定位且保持良好狀況？	☐	☐		
6.9	Are all fire dampers and ventilation closing appliances including gaskets, handles, screws and other mechanical mechanisms in proper working condition? 所有防火檔板及通風切斷裝置包含墊片、把手、螺絲及其他機械構件是否在良好使用狀況？	☐	☐		
6.10	Are all fire doors closing properly by their automatic closing devices? 所有防火門自動關閉裝置是否正常？	☐	☐		
6.11	Are all quick closing devices for tank shut-off and emergency stop of pumps and fans in proper working condition? 油櫃之所有快速切斷裝置，及泵、風扇緊急停止裝置是否在正常工作狀況？	☐	☐		
6.12	Are Emergency Breathing Devices (EEBDs) available in required amount (plus additional training unit) and as per fire control plan within superstructure and engine room? 緊急呼吸裝置是否備有需要數量(包含額外訓練使用)？是否與上層結構及機艙內之火災控制圖一致？	☐	☐		
6.13	Is the international shore connection including reducer piece with appropriate bolts and nuts as per safety plan available? 國際岸上接頭包含縮減件及適當螺絲、螺帽如藍圖所記載是否備齊？	☐	☐		
6.14	Are the fire fighting systems and equipment inspected and tested in according to (Appendix I (onboard guidance for maintenance and inspection of fire-fighting systems and equipment)? 船上消防系統及裝置是否依(附錄 I 船上消防系統及裝置之保養及檢查指南表)之規定執行檢查及測試？	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action taken 採取行動	Completed Date / Signature 完成日期/簽名
6.15	Are isolation valves operating normally? 隔離閥是否操作正常？	☐	☐		

7. Hull and Machinery Condition 船體及機器情況

No. 項次	Question 問題	Yes 是	No 否	Action 採取行動	Completed Date / Signature 完成日期/簽名
7.1	As far as visible, are the ship's side shell plates without damage and excessive wastage? 就目視所及舷側外板沒有損傷及過度磨耗？	☐	☐		
7.2	Is the structure of cargo holds with regard to bulkheads, frames, brackets, tank tops etc. without damages and excessive wastage? 貨艙結構有關於隔艙板、肋骨、肘板、內底板等是否無損傷與過度耗損？	☐	☐		
7.3	Are electric cable arrangements properly installed and insulated, no loose wiring? 電纜佈置是否適當安裝及包覆而無電線鬆脫？	☐	☐		
	Are light covers properly fixed on all lamps? 燈罩是否適當固定在燈上？	☐	☐		
	Does the main switchboard have insulation mats around it? 主配電盤四周是否鋪設絕緣墊？	☐	☐		
7.4	Is the engine room with regard to work and fire safety in a generally clean condition? 機艙與有關工作與消防安全是否在一般清潔狀況？	☐	☐		
7.5	Is the main propulsion system as well as auxiliary engine and power system including emergency arrangement for supply of electrical power in proper working condition? 主推進系統與輔機及動力系統包含緊急電源供應裝置是否在正常工作狀況？	☐	☐		

8. Requirements regarding Load Line 載重線公約要求

No. 項次	Question 問題	Yes 是	No 否	Action 採取行動	Completed Date / Signature 完成日期/簽名
8.1	Are bulwarks, handrails, cat walks , without signs of damage and excessive wastage? 舷牆、欄杆、天橋是否無損傷與過度耗損現象？	☐	☐		
8.2	Are hatch cover arrangements including gaskets and all closing appliances weather tight and in good condition without signs of excessive wastage? 艙口蓋裝置包含墊片與所有關閉裝置均呈風雨密，且保持良好狀況，而無過度耗損現象？	☐	☐		
8.3	Are ventilators and air pipes including any closing appliances properly working without signs of damage and excessive wastage and to be closed weather tight? 通風與通氣管包含任何關閉裝置是否工作正常，無損傷與過度耗損現象且可保持風雨密？	☐	☐		
8.4	Are weather tight doors and small access hatches weather tight? 風雨密門與小艙口通道是否保持風雨密？	☐	☐		
8.5	Are draft marks and load line marks painted in contrasting colour? 吃水線標與載重線標誌是否以顯著對比油漆噴塗？	☐	☐		
8.6	Are load line marks permanently marked and in accordance with the Load Line Certificate? 載重線標誌是否依據載重線證書永久標誌？	☐	☐		
8.7	Is stability information available, approved by CR and written in a language understood by the ship's command? 穩度資訊是否經 CR 審核，且以船上工作的語言所撰寫？	☐	☐		

9. MARPOL Requirements 國際防止船舶污染公約要求

No. 項次	Question 問題	Yes 是	No 否	Action 採取行動	Completed Date / Signature 完成日期/簽名
9.1	Is the oily water separation system including all piping and solenoid valve arrangements as required in proper working condition and without any illegal by-pass piping? 油水分離系統包含管路及電磁閥裝置是否依需求處於正常工作狀況，且無違規安裝旁通管路？	☐	☐		
	Is the testing arrangement in proper working condition? 測試佈置是否在正常工作狀況？	☐	☐		
	Is the crew in charge familiar with the system and its use? 負責船員是否熟悉系統及操作？	☐	☐		
9.2	Is (if installed) 15 ppm alarm and automatic closing system in proper working condition? 15PPM 之警報及自動關閉裝置系統是否在正常工作狀況？(若有時)	☐	☐		
9.3	Are all pipings arrangements in proper condition without any signs of damage or corrosion? 是否所有管路系統正常無損壞或腐蝕現象？	☐	☐		
9.4	Is the Oil Record Book available, are the required entries correct and periodically signed by the Master? 油料紀錄簿是否備便？須要填入資料是否正確且定期經船長簽證？	☐	☐		
	Are the tanks listed as per IOPP Cert. and as actually arranged? IOPP 證書所列艙櫃清單與實際是否相符？	☐	☐		
9.5	Are the specially required manuals for tankers, chemical tankers and gas carriers available? 對於油輪、化學品船及氣體載運船其特別要求手冊是否備便？	☐	☐		
9.6	Is the Shipboard Oil Pollution Emergency Plan (SOPEP) available with updated communication data as required (especially the national operational contact points which is updated quarterly by IMO)? 船上油污染應急計畫是否備便，是否依需要更新聯絡點(特別是每一季國際海事組織更新港口國聯絡點)？	☐	☐		
9.7	Are engine room bilges and other machinery areas free of excessive oil matters? 機艙舢水及其他機器所在區域沒有過量之油質？	☐	☐		

No. 項次	Question 問題	Yes 是	No 否	Action 採取行動	Completed Date / Signature 完成日期/簽名
9.8	Are ship's crews familiar with fuel oil change-over procedure and recording? (SOx Emission Control Areas) 船員是否熟悉燃油轉換程序與紀錄？(SOx 排放控制區域)	☐	☐		
9.9	Are the officers and crews familiar with garbage management plan and recording? 船員是否熟悉垃圾管理計畫與紀錄？	☐	☐		
9.10	Are the officers and crews familiar with BWMP and their duties? 船員是否熟悉壓艙水管理計畫及各自的職責？	☐	☐		

10. Accommodation and Living Conditions

住艙設施及生活情形

No. 項次	Question 問題	Yes 是	No 否	Action 採取行動	Completed Date / Signature 完成日期/簽名
10.1	Are records of the master's inspections of the vessel's accommodation available? (The inspector shall conduct check of cabins to ensure they are clean and fully functional) 是否有船長檢查船員起居艙間的紀錄？（檢查員應檢查船員起居艙間，確保其清潔且功能齊全）	☐	☐		
10.2	Are the sanitary facilities in crew accommodation clean and in proper condition? 船員起居艙間衛生設備是否清潔及正常狀況？	☐	☐		
10.3	Are sick bay and medical locker complete and in condition as required? 醫務室與醫藥箱是否完整及符合所需？	☐	☐		
10.4	Is medical guide available onboard? 船上是否有醫療指南？	☐	☐		
10.5	Are the ventilation and air conditioning arrangement in proper working condition? 通風及空調裝置是否在正常工作狀況？	☐	☐		
10.6	Are the galley and provision rooms clean and without possible signs of vermin? 廚房及糧食庫是否清潔且無有害物的跡象？	☐	☐		
10.7	Is the galley ventilation grease trap clean? 廚房通風之集油盆是否清潔？	☐	☐		
10.8	Is all garbage collected, separated and disposed of in accordance with Garbage Management Regulations? 所有垃圾收集、分類、處理是否依據垃圾管理規定執行？	☐	☐		
10.9	Is the accommodation ladder including hoisting arrangements and safety net in good condition? 舷梯包含升降裝置與安全網是否在良好狀況？	☐	☐		

11. STCW Requirements

國際航海人員訓練、發證和當值標準公約

No. 項次	Question 問題	Yes 是	No 否	Action 採取行動	Completed Date / Signature 完成日期/簽名
11.1	Is the actual crew composition in accordance with the requirements as per Safe Manning Certificate? 實際船員組成是否依據船上最低安全配額證書之要求？	☐	☐		
11.2	Are the Master, deck officers, engineer officers and ratings in possession of a respective certificate of competence ? 船長、艙面甲級船員、輪機甲級船員及乙級船員是否有各自的適任證書？	☐	☐		
11.3	Do certificates of the crew have endorsements by flag as appropriate? 船員證書是否有經船旗國主管當局簽證？	☐	☐		
11.4	Are crewmembers in possession of valid medical examination certificates as appropriate? 船員是否有健康檢查證書？	☐	☐		
11.5	Have new crew members been made familiarised with their duties and the safety equipment onboard? 新進船員是否已熟悉個人職務及船上安全裝備？	☐	☐		

12. ISM Requirements

國際安全管理要求

No. 項次	Question 問題	Yes 是	No 否	Action 採取行動	Completed Date / Signature 完成日期/簽名
12.1	Is the crew familiar with the company's safety and environmental protection policy (including preventing drug and alcohol abuse)? 船員是否熟悉公司安全及環境保護政策（包含防止吸毒和酗酒）？	☐	☐		
12.2	Is the International Safety Management Manual readily available on board, continuously updated and is it being conducted effectively? 國際安全管理手冊是否備便於船上，持續更新並能有效執行？	☐	☐		
12.3	Is the documentation written in a language understood by the crew? 文件所用語言是否為船員所瞭解？	☐	☐		
12.4	Can all crew communicate effectively on board? 在船上船員是否能有效地溝通？	☐	☐		
12.5	Can senior ship officers identify the responsible company ? 高階船員能否確認實際負責的公司？	☐	☐		
12.6	Can senior officers identify the " designated person "? 高階船員能否確認誰是指派人員？	☐	☐		
12.7	Are procedures and data available and updated to establish contact with shore management? 程序及資料紀錄是否備妥及更新，俾能建立與岸上管理系統之聯繫？	☐	☐		
12.8	Can the Master understand of his overriding authority ? 船長是否知道其越級處置之職權？	☐	☐		
12.9	Are the shipboard certificates properly managed and up-to-date? 船長對船上證書之管理是否妥當且保存最新版本？	☐	☐		
12.10	Is there a programme of drills and exercises to address potential emergency shipboard situations and is it being conducted effectively? 是否有安排演練和演習計畫，以處理潛在的船上應急狀況，並能有效執行？	☐	☐		
12.11	Is on-job education and training on board arranged properly and is it being conducted effectively? 船上的在職教育和訓練是否安排妥當，並能有效執行？	☐	☐		
12.12	Are adequate crew familiarization and handover procedures in place to ensure that new personnel and personnel transferred to new assignments are given proper familiarization with their duties, and are documents available to confirm effective familiarization?	☐	☐		

	是否制定了適當的船員熟悉和交接程序，以確保新進人員和調至新任務的人員已充分熟悉其職位，並有文件可確認是否已有效熟悉？				
12.13	Is the latest shipboard report of internal and external audits available, and are corrective actions being taken in response to non-conformances? 是否提供最新的船上內部和外部稽核報告，並且是否針對不符合規定而採取糾正措施？	☐	☐		
12.14	Are there procedures for reporting, investigation and handling of non-conformities, accidents, and hazardous situations available and are they being followed? 是否有報告、調查和處理不符合事項、意外和危險情況的程序，以及這些程序是否被執行？	☐	☐		
12.15	Are on-board safety meetings held regularly and, are they reviewed by Master and feedback provided where necessary? 船上安全會議是否定期舉行，是否由船長審閱，並在有需要時提供意見？	☐	☐		
12.16	Does the master periodically review the effectiveness of the onboard Safety Management System, report the findings to shore based management and receive feedback from them? 船長是否定期檢討船上安全管理系統的成效，向岸上管理層彙報調查結果，並聽取他們的意見？	☐	☐		
12.17	Is the vessel provided with an enclosed space entry procedure, and is there documented evidence that it was followed, and is there evidence that the crew assigned to responsibilities requiring entry into enclosed spaces has attended a dedicated enclosed space entry course? 該船舶是否已提供密閉空間進入程序，是否有文件證明已遵循，是否有證據證明被指派負責進入密閉空間的船員已參加專門的密閉空間進入課程？	☐	☐		
12.18	Is entry into and rescue from enclosed space training undertaken and are regular drills conducted? 是否進行進入和救援密閉空間訓練，並定期進行演習？	☐	☐		
12.19	Are portable gas detectors suitable for atmosphere testing of enclosed spaces provided; in good condition; calibrated in accordance with the manufacturer's instructions, and are officers trained and competent with their operation? 攜帶式氣體探測器是否適合在密閉空間進行大氣測試，是否完好無損，是否按照製造商的指示進行校正，以及是否受過訓練和勝任操作？	☐	☐		
12.20	Are procedures in place for the control of hot work, are they incorporated in the safety management system and is there documented evidence of compliance? 管制熱工程序是否已制定，是否納入安全管理體系，以及是否有文件證明符合規定？	☐	☐		
12.21	Has a permit to work been introduced for high-risk duties and are the permits being used effectively? 是否已為高風險職務申請工作許可證，以及這些許可證是否有效使用？	☐	☐		

12.22	Is an effective and up to date planned maintenance system available and being followed on board the vessel? 船上是否備有有效且為最新的計畫性維護系統並遵照執行?	☐	☐		
12.23	Is a copy of the DOC with the endorsement for the latest office audit available onboard? 符合文件副本附帶最近主管單位稽核之簽署是否置於船上?	☐	☐		

附錄 I 船上消防系統及裝置之保養及檢查指南表

(檢查項目 6.14 之引用資料)

項目		檢查及測試種類	IMO 發佈之文件及檢查期限	巴拿馬、 中華民國
可攜式滅火器	泡沫及乾粉	查驗(外觀、壓力、重量等)	A.951(23) 每年	完全同 IMO
		釋放試驗&內部檢查 (同型且同年份製造者擇一)	每 5 年	
		水壓試驗	每 10 年	
	二氧化碳	查驗(外觀、壓力、重量等), 損耗量超過原內容物 10%, 需重新充填	每年	
		釋放試驗&內部檢查 (同型且同年份製造者擇一)	每 5 年	
		水壓試驗	每 10 年	
固定式滅火系統	二氧化碳	(1)吹氣測試釋放管路; (2)確認內容量(稱重)(漏失不得超過 10%)	MSC.1/Circ.1318 客船: 每 2 年±3 個月 貨船: 中檢及特檢	
		pilot lines 壓力測試	客船: 每 2 年±3 個月 貨船: 每 5 年	
		水壓試驗總數量的 10%, 若有檢查不合格, 則再取總數量的 50%; 再有不及格, 則取 100% 的數量試壓 (下一個 10 年測試的 10%, 不可為前一次試驗所試過的 cylinder)	每 10 年	
		軟管換新	依據 Maker 規定, 但不得超過 10 年	
	其他氣體滅火器	(1)吹氣測試釋放管路; (2)確認內容量(稱重, 漏失不得超過 5%)	MSC.1/Circ. 1432 每 2 年	
		控制閥拆檢	每 5 年	
	泡沫	small scale fire test & chemical stability test (for protein-based alcohol-resistant foam concentrate)	MSC.1/Circ. 670, 1312, 1432 每年	

		吹氣測試高膨脹泡沫系統之釋放管路	每年
		其他濃縮泡沫之 Control test	首次第 3 年，以後每年
		壓力試驗供水之泡沫泵(測試壓力及容量)	每年
		控制閥內檢	每 5 年
	Aerosol	查驗氣動式或電動式作動器	MSC.1/Circ.1432
			每年
	Aerosol	換新 Condensed or dispensed aerosol generators (依 Maker 規定)	每 10 年
	乾粉	(1)吹氣測試 blow-through with nitrogen to ensure associated pipes and nozzles are clear;	MSC.1/Circ.1432
		(2)操作測試 local and remote controls and section valves; and	
		(3)內容物確認 propellant gas cylinders	每 2 年
		採樣檢驗乾粉，含濕度	每 2 年
		壓力測試 safety valve and discharge hose	每 2 年
		水壓試驗或非破壞試驗 powder containment vessels and associated piping	每 10 年
定壓式噴水系統 自動灑水器及		吹氣測試釋放管路是否通暢	MSC.1/Circ.1432
			每年
		flow test all pumps for proper pressure & capacity	每年
		operation test of water mist, water spray & sprinkler system	每年
		至少操作測試 2 個 automatic sprinkler or automatic water mist nozzle	每年
		pressure tank section valve & control valve internally inspection	每 5 年

	灌水至 ro-ro deck deluge system	每 5 年	
	水壓試驗 gas & water pressure cylinders	每 10 年	
SCBA	查驗充氣系統、面罩、閥等	MSC.1/Circ.1432 每年	
	氣瓶水壓試驗	每 5 年	
EEBD	查驗	MSC.1/Circ.1432 每年依據 Maker 規定	
Portable foam applicator	控制試驗 protein-based foam (control test)	MSC.1/Circ.1432 首次 5 年，以後每年	
	控制試驗 Non-protein-based foam (control test)	首次 10 年，以後每年	
Wheeled (mobile) fire extinguishers	查驗	MSC.1/Circ.1432 每年，依據 Maker 規定	
	水壓試驗 All extinguishers 及 propellant cartridges	每 10 年	
Fire mains, fire pump, hydrants, hoses & nozzles	(1)外觀檢查及操作試驗； (2)flow test all fire pumps(包括應急消防泵及隔離閥關閉)； (3)壓力測試 ample of fire hoses at max. fire main pressure, 所有 fire hoses (5 年內試驗完畢)	MSC.1/Circ.1432 每年	
Fire detection & fire alarm system	(1)外觀查驗所有 detectors； (2)試驗火警系統； (3)試驗緊急電源供應	MSC.1/Circ.1432 每年	
Ventilation system & fire dampers	(1)試驗所有 fire dampers 的遙控操作； (2)查驗廚房排煙管及濾網，沒有積油； (3)試驗與滅火系統互動的通風控制系統	MSC.1/Circ.1432 每年	