



**INTERNATIONAL COURT OF JUSTICE**

**CASE CONCERNING SOVEREIGNTY OVER  
PEDRA BRANCA/PULAU BATU PUTEH,  
MIDDLE ROCKS AND SOUTH LEDGE**

**MALAYSIA/SINGAPORE**

**COUNTER-MEMORIAL OF MALAYSIA**

**VOLUME 2**

**Reports and Affidavits**

**25 JANUARY 2005**



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### VOLUME 2

#### Reports and Affidavits

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## **ANNEX MCM 1**

***Conduct Forming Part of the Normal Administrative  
Responsibilities of a Lighthouse Operator and  
Singapore's Claims in Respect of the Horsburgh  
Lighthouse and Pulau Batu Puteh, Report by Captain  
Duncan Glass and Mr David Brewer***

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**Conduct Forming Part of the Normal Administrative Responsibilities of a Lighthouse  
Operator and Singapore's Claims in Respect of the Horsburgh Lighthouse  
and Pulau Batu Puteh**

*Report by Captain Duncan Glass and Mr David Brewer*

**I. Introduction**

1. This Report has been prepared by the undersigned, Captain Duncan Glass and Mr David Brewer, in response to a request by the Government of Malaysia for an assessment, by persons experienced in the operation and management of lighthouses, of the various elements of conduct advanced by Singapore in support of its claim to sovereignty over Pulau Batu Puteh. The authors are respectively the Director of Navigational Requirements and the former Director of Administration of the Corporation of Trinity House in London. Further details of our respective backgrounds and expertise are given below and in the summary *curricula vitae* attached as Annexes 1 and 2 to this Report. We understand that this Report will be submitted as part of the Counter-Memorial of Malaysia to be filed with the International Court of Justice in the pending proceedings concerning sovereignty over Pulau Batu Puteh, Middle Rocks and South Ledge. This Report is prepared in our personal capacities and does not engage the responsibility of Trinity House or any other organisation or body.

2. For purposes of the preparation of this Report, we have reviewed the Memorials of the Governments of Malaysia and Singapore, together with relevant annexes, submitted to the International Court of Justice. Our attention was directed in particular to Chapter VI of Singapore's Memorial and the conduct described therein.

3. Following some background information on Trinity House, its work and the wider international context relevant to its activities, we address in general terms a number of elements relating to the construction, operation and management of lighthouses which are relevant to an assessment of the specific conduct advanced by Singapore. We thereafter turn to comment directly on each of the items of conduct to which Singapore refers. As will be apparent from the review and discussion that follows, we are of the opinion that the vast bulk of the practice referred to by Singapore is conduct that forms part of the normal administrative responsibilities of a lighthouse operator. This assessment is made from our perspective as professionals in the field of the provision of aids to navigation and lighthouse management. We make no comment on any other aspect of the dispute between Malaysia and Singapore or on any legal issue.

4. Our qualifications and experience are as follows:

(a) Captain Duncan Glass. I am the Director of Navigational Requirements at Trinity House. The Director of Navigational Requirements is responsible for core aspects of the Corporation's work in fulfilment of its statutory responsibility to provide, operate and maintain aids to navigation around the coasts of England, Wales, the Channel Islands and Gibraltar. In this capacity, I chair the Trinity House *Examiners' Committee*, which prescribes the level of service of visual, radar, radio and electronic

aids to navigation. I am also chairman of the International Association of Marine Aids to Navigation and Lighthouse Authorities (“IALA”) *Aids to Navigation Management Committee* and a member of its *Automatic Identification System (“AIS”) Committee*. Other elements of my background and experience are described in the *curriculum vitae* at Annex 1 hereto.

- (b) Mr David Brewer. I stepped down as the Director of Administration at Trinity House in July 2004 after 27 years at the Corporation. The Director of Administration is responsible for all aspects of the Corporation’s work in the fields of estate management, human resources, legal and public affairs, risk management and communications. In this capacity, I advised various United Kingdom Government departments and agencies, and the three General Lighthouse Authorities responsible for the provision and maintenance of aids to navigation in United Kingdom and Republic of Ireland waters (Trinity House, the Northern Lighthouse Board, and the Commissioners of Irish Lights), on a range of lighthouse service related matters. I was also engaged in and responsible for various aspects of the Corporation’s participation in the work of other national and international bodies, including IALA. Other elements of my background and experience are described in the *curriculum vitae* at Annex 2 hereto.

## **II. Trinity House**

5. The Corporation of Trinity House was constituted under a Royal Charter granted by Henry VIII in 1514. Throughout its long and distinguished history, the Corporation’s prime objective has been the safety of shipping and the welfare of seafarers. Today, the Corporation has three functions:

- under Part VIII of the Merchant Shipping Act 1995 (previously 1894 and 1854), it is the General Lighthouse Authority for England, Wales, the Channel Islands and Gibraltar, providing aids to general navigation. These include 72 lighthouses, 11 major floating aids, over 400 buoys, 48 radar beacons, and 7 differential Global Positioning System (“GPS”) stations. It is also responsible for wreck marking and dispersal in coastal waters under Part IX of the 1995 Act;
- under the UK Charities Act, it is a charitable organisation for the safety, welfare and training of mariners and relief of those in financial distress; and
- it is a statutory Deep Sea Pilotage Authority under regulations brought into force under the Pilotage Act 1987.

6. Trinity House is responsible for marking some of the busiest shipping lanes in the world, such as the Traffic Separation Scheme in the Dover Strait, and provides contractual services – including the maintenance of aids to navigation for third parties, the provision of hydrographic surveys and maintenance of data buoys – under powers granted in the Merchant Shipping 1995 Act to exploit spare capacity in its assets.

7. The Corporation is overseen by a Court of Elder Brethren. Two separate Boards have delegated power to manage, respectively, the Lighthouse Service (known as the Trinity House Lighthouse Service), and the Corporation's charitable and Deep Sea Pilotage activities.

### **III. The International Dimension**

8. Pursuant to the terms of Regulation 13 of Chapter V of the International Maritime Organisation's ("IMO") *International Convention on the Safety of Life at Sea, 1974*, as amended ("SOLAS"), each Contracting Government undertakes

"to provide, as it deems practical and necessary either individually or in co-operation with other Contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires."

The wording of Regulation 13 on the provision of marine aids to navigation is deliberately broad, avoiding issues concerning the ownership of property and territorial rights.

9. Trinity House is one of the four founder members of IALA. IALA is a non-government, non-profit-making technical association that provides a framework for aids to navigation ("AtoN") authorities, manufacturers and consultants with the aim of fostering the safe, economic and efficient movement of vessels for the benefit of the maritime community and protection of the environment.

10. The IALA *Aids to Navigation Guide* (generally known as the *NavGuide*; the 4<sup>th</sup> edition of which was published in December 2001) contains detailed guidance on the provision and maintenance of aids to navigation and the agreed standards of availability and reliability to be achieved by lighthouse authorities.

### **IV. General Observations on Elements Relating to the Construction, Operation and Management of Lighthouses**

#### ***(1) The changing character of lighthouse administration***

11. The vast majority of lighthouses throughout the world have now been automated and the lighthouse keepers withdrawn. This was probably the single largest change in the administration and operation of lighthouses in the twentieth century and was driven both by advances in technology and the pressure for substantial economies. The description of the Horsburgh Lighthouse in *Lighthouses of the World* mentions that the lighthouse's operation was automated in 1988 using solar power. In our view, such progress is a natural step in the evolution of lighthouse technology worldwide.

12. Since de-manning, station visits have reduced, both in terms of maintenance and inspection, the systems being increasingly more reliable and easier to replace and repair. Attendants have been contracted to undertake occasional housekeeping duties and enable authorised access to the stations when required. In some cases, particularly where the

lighthouse is controlled by a military arm of the State – such as in Greece and Italy – manning would be maintained primarily for security and coastguard purposes. Advances in technology have meant, however, that it is no longer essential for lighthouses to be manned to operate the aids to navigation functions to assist the safety of shipping. Automation and demanning can provide significant economies in the operation of lighthouses.

13. Systematic reviews of AtoN are essential to assist the safe passage of vessels by meeting changing user requirements. There is a general consensus among the IALA membership that there is a continuing role for conventional visual and audible aids to navigation for the foreseeable future. This will certainly be the case until the mix of electronic aids to navigation – including Global Navigation Satellite Systems (“GNSS”), e.g. Global Positioning System (“GPS”), GLONASS (the Russian equivalent of the US Navstar GPS), Vessel Traffic Services (“VTS”) and Automatic Identification Systems (“AIS”) – have been fully developed and provide the level of integrity and reliability required for safe navigation. Electronic solutions also depend on the cooperation of all Flag States and the fitting and proper maintenance of mandatory carriage requirements for vessels and standards of training for their crews. In Europe, development is already underway on a civil GNSS (the GALILEO system), but the latest prediction is that it will not be fully commissioned until at least 2008; some reports suggest 2010. Our view is that operational lighthouses will be required for some time to come, albeit in reducing numbers as new systems are introduced. Some lighthouses may remain in service as platforms for such new systems.

***(2) Lighthouses situated in the territory of one State but administered by the authorities of another State or by a corporation or other similar undertaking in another State***

14. Our general experience and understanding from discussions at IALA and in Europe is that the majority of lighthouses are operated either by a government department of the relevant sovereign state or a public undertaker of the state. Australia has privatised the major part of its lighthouse operation for financial reasons. There are also important exceptions to the general rule, notably emanating from the British colonial period, e.g. the lights in the Arabian Gulf (addressed further below), in the Red Sea approaches to the Suez Canal, as well as in particular cases of individual lighthouses, such as the Sombrero Lighthouse in Anguilla and the Gibraltar lighthouse. Benin and Senegal have close relations with France, as a legacy of French colonial rule in parts of Africa, and cooperate with and receive assistance from the French maritime administration and through IALA.

15. In addition, in some countries – for example, in the United Kingdom and the Republic of Ireland – there is a division of responsibility for general (coastal) and local (ports and approaches) navigation. The government (or an arm of government) may provide a system of coastal aids to navigation in its territorial waters and offshore in designated areas, leaving the ports, subject to audit or inspection, to provide for safe navigation and conservancy in their individual areas including the approaches in certain cases. The ports usually operate under a statutory or regulatory framework and within clearly defined geographical limits, for port operations or pilotage, or both.

(a) *The Middle East Navigation Aids Service*

16. An important exception to the general rule that stands out from others is that of the Middle East Navigation Aids Service (“MENAS”) which operates in the Arabian (or Persian) Gulf. MENAS was established as the Persian Gulf Lighting Service in 1950, its name being changed to MENAS in 1966, to serve the maritime industry in the Gulf, although its origins can be traced back to 1911. It is an independent, not-for-profit, organisation registered in the United Kingdom. The location of its centre of operations is in Bahrain, following a donation of land in perpetuity in the 1950s by the then ruler of Bahrain, the late Emir, HH Shaikh Salman bin Hamad Al Khalifa. The organisation draws revenue solely from navigation dues levied on commercial vessels above 2,000 net registered tons using Gulf waters.

17. In the case of the Horsburgh Lighthouse, the role performed by the Maritime and Port Authority of Singapore might be compared to that of MENAS. Indeed, we understand that the Horsburgh Lighthouse was one of a number of lighthouses established by the British along the Malacca and Singapore Straits and administered from Singapore. This would make the analogy with MENAS stronger still. In the Gulf, MENAS is responsible for all matters relating to the aids to navigation which it owns or operates, including the provision of Notices to Mariners. It raises its revenue from navigation dues. It does not, however, assume any territorial rights in undertaking its role for the provision of aids to navigation (save in respect of the express donation of land for its Bahrain base of operations).

(b) *Northern Ireland*

18. Another important example of an exception to the general rule is that of the lighthouses and other aids to navigation in Northern Ireland. Northern Ireland is part of the United Kingdom. Northern Ireland lighthouses and other aids to navigation are, however, operated and managed by the Commissioners of Irish Lights, the statutory General Lighthouse Authority of the Republic of Ireland based in Dublin. The Commissioners of Irish Lights is thus responsible for the provision, operation and maintenance of aids to navigation for the whole of Ireland, including Northern Ireland. The Commissioners of Irish Lights, in common with the two General Lighthouse Authorities of the United Kingdom, Trinity House and the Northern Lighthouse Board, is funded from light dues, paid into the General Lighthouse Fund, collected from commercial vessels which call at United Kingdom and Republic of Ireland ports. The General Lighthouse Fund is administered by the United Kingdom Department for Transport.

(c) *Sombrero (Anguilla – West Indies)*

19. The position regarding the Sombrero Lighthouse in Anguilla also calls for comment. Between 1984 and 2001, Trinity House assumed responsibility for the administration of Sombrero Lighthouse, at the expense of the UK General Lighthouse Fund. Although the lighthouse is now administered by the relevant Anguillan authorities, Trinity House continues to provide technical advice and training to the Anguillan Government in respect of the lighthouse.

(d) *Europa Point Lighthouse (Gibraltar)*

20. Gibraltar has been an overseas territory of the United Kingdom since the Treaty of Utrecht, 1713. It has had considerable internal government since the introduction of its present constitution in 1969. Spain continues to claim the territory as rightfully its own and continues to claim sovereignty over it. There were conflicting statements on Gibraltar by the governments of Spain and the UK when ratifying the United Nations Convention on the Law of the Sea.

21. Since 1462, when a mosque was converted into a Catholic chapel, a light has been kept burning in a tower above the chapel. This was the forerunner to the present day lighthouse at Europa Point.

22. Trinity House is the General Lighthouse Authority for Gibraltar within the meaning of the Merchant Shipping Act 1995 (an Act consolidating legislation going back to 1854). The Corporation has operated the Europa Point Lighthouse since it was established in 1841, including issuing Notices to Mariners and arranging navigational broadcasts. The lighthouse was automated in 1994. Title to the lighthouse involves a complex division of freehold and leasehold tenure between Trinity House and the Gibraltar Government. The parties reached agreement for a formal exchange of land and this was executed by an Indenture providing Trinity House with freehold tenure of the land and buildings comprising the lighthouse tower, the fog signal house and one dwelling. Trinity House remains in administrative and operational control of Europa Point Lighthouse, maintaining and developing the aids to navigation in line with the policy of reviewing navigational requirements and standardising equipment in the United Kingdom.

(e) *Channel Islands*

23. Feudal and other ancient rights exist in relation to the governance and occupation of the Channel Islands. Many issues concerning the seaward limits of the islands and British and French jurisdiction remain unresolved. However, the operation by Trinity House of the four main lighthouses – Hanois (1862), Casquets (1785), Alderney (1912) and Sark (1913) – has been largely unaffected by these jurisdictional uncertainties. Trinity House has dealt with wrecks, issued Notices to Mariners and arranged navigational warnings, carried out surveys, automated and modernised the stations, freely disposed of property (in Guernsey and Sark) and flown the Trinity House Ensign with no record of any challenge or notable disruption.

24. As all the examples just quoted illustrate, the establishment and operation of lighthouses is frequently addressed quite independently of questions of sovereignty or territorial jurisdiction.

(3) *The Issuing of Notices to Mariners*

25. The issuing of Notices to Mariners is usually a function of the national authorities of a State. However, Trinity House, in common with other lighthouse authorities (such as MENAS

and the Commissioners of Irish Lights), issues such Notices. Notices to Mariners may be combined with navigation broadcasts.

26. Trinity House has developed a system of issuing formal Notices to Mariners to the relevant authorities, the UK Hydrographer and the Coastguard (for radio broadcast), in electronic form. Notices are issued in respect of changes to aids to navigation, including the establishment of new marks, the discontinuance of marking requirements, the taking possession of wrecks, and marking hazards and changes to their characteristics or position. Trinity House undertakes this task in respect of aids provided for general navigation, while the ports issue notices and broadcasts in respect of local aids. There is an implicit obligation under SOLAS Chapter V to advise mariners of the provision of new marks or changes to the position or characteristics of existing marks. Failure to issue Notices to Mariners in respect of any changes to navigational marks or a navigational hazard of which an authority was aware would be negligent and could expose a lighthouse operator to major liability risks. Trinity House considers the issuing of Notices to Mariners to be necessary for the proper discharge of its statutory duty as a lighthouse authority and to protect the GLF from unnecessary financial risk. The Corporation issues Notices to Mariners without reference to the Government. It is not a delegated duty but one directly arising from its responsibilities in respect of lighthouses and other aids to navigation.

**(4) *The use of lighthouses for non-light purposes***

27. Lighthouses have traditionally, over the years, been used for non-light purposes. The automation and modernisation of lighthouses, combined with an increasing awareness of the historic significance of many of the structures, has also led to an upsurge in the alternative use of the surplus accommodation that is no longer required for resident lighthouse keepers. Contributions from the IALA *Panel on the Preservation of Historic Lighthouses and Associated Equipment* (“PHL”) have included the publication of *Lighthouses of the World* (the “top 100”) and a comprehensive set of guidelines on all aspects of the development of alternative uses of lighthouses – from national plans and protection of the heritage to the practical implementation of tourism ventures. Trinity House’s Business Plan for its lighthouse estate has been one of the main drivers underpinning this work.

28. Apart from their core function as aids to navigation, other traditional non-light uses of lighthouse property have included:

- meteorological observation and recording stations (formerly carried out by lighthouse keepers and now automated with data transmitted by remote link);
- coastguard lookouts;
- antenna and transponder locations;
- military outposts;
- wildlife sanctuaries.

29. This list of traditional non-light uses has now been extended to commonly include:

- holiday cottages;
- visitor attractions;
- museums;
- youth hostels;
- field study centres;
- restaurants and public houses;
- guest houses;
- shops;
- specialist libraries;
- media locations – for film productions;
- information centres.

The common theme is to secure alternative uses that will help to fund the conservation and maintenance of the stations for the access and enjoyment of future generations.

**(5) *Marine Ensigns***

**30.** Ensigns are colours which are principally worn by ships – as generally designated by the Flag State. For example, the three Ensigns authorised to be worn by British Ships are the Red, White and the Blue Ensigns – in 1864, the White Ensign was authorised to be worn by all ships of the Royal Navy, the Red Ensign by British merchant shipping and the Blue Ensign by vessels belonging to certain public authorities and by some members of the Commonwealth. Lighthouse authorities often have their own adaption of the “Red Ensign” of their State and fly their flag either on special occasions or during daylight hours to confirm its maritime affiliation. Trinity House regularly flew its Ensign above lighthouses that it owned and/or operated. It does not do so today on a regular basis as all of its lighthouses are now unmanned. However, where flagpoles remain, the Ensign is still flown on particular occasions, such as on visits by the Trinity House Elder Brethren. The Trinity House Ensign is an adaptation of the United Kingdom Union Jack, which appears in the top left hand corner of the flag. Colour plates of the Trinity House Ensign and other Trinity House flags are provided at Annex 3 hereto.

**31.** Our enquiries among a cross-section of IALA members – including Argentina, Denmark, France, Germany, Italy, Spain and the USA – has shown that little, if any significance attaches to the flying of an Ensign above a lighthouse. Some authorities fly their Ensign or their national flag at lighthouses on special occasions or on certain days of the week. There is no appreciation, however, that the flying of Ensigns or flags above a lighthouse has any bearing on sovereignty. The United Kingdom and Republic of Ireland General Lighthouse Authorities fly their Ensigns as a matter of tradition and pride in the service.

**32.** Generally, if the Ensign of a lighthouse authority was flown above a lighthouse it would be understood by a mariner or lighthouse operator as identifying the lighthouse authority, e.g. Trinity House. If a flag flown above a lighthouse was a national flag, it would be understood by a mariner or lighthouse operator as signifying the country entrusted with the operation of the lighthouse.

**(6) *Investigations into marine hazards and casualties***

33. A lighthouse authority would be likely to review and survey navigational hazards, such as wrecks, shoals and sand banks, and mark any danger to navigation caused by such hazards. Who takes responsibility for the investigation of marine casualties will depend on the status of the vessel involved in the incident. In cases in which the State in whose waters the incident occurs undertakes the investigation, the Flag State of the vessel involved would be expected to cooperate in the investigation, although it may also carry out its own investigation in more serious cases. In many countries, the distinction between lighthouse authorities and the coastguard or department responsible for marine investigations is blurred, as they tend to operate as separate sections within the same government administration. In such cases, therefore, the authority responsible for the administration of lighthouses will also be responsible for the investigation of marine casualties.

**(7) *The practice of adding on facilities and structures to a lighthouse***

34. As well as automation and modernisation using advances in technology, lighthouse development commonly includes:

- the erection of helidecks on top of offshore lighthouse towers or the construction of helipads where land permits,
- conversion to solar power,
- the conditioning of buildings,
- the addition of differential GPS equipment.

35. These developments can be seen in various ways in the majority of Trinity House Lighthouses, e.g. Hanois, Smalls, Eddystone, South Stack, Farne Island, Casquets and Longstone.

36. Licences are commonly granted by lighthouse authorities to site third party communications masts, radars and transponders. This is less so where the land or buildings are leasehold since the permission of the landlord is required and questions of rental and the commercial value of the site become an issue.

37. Vessel Traffic Services (“VTS”) is generally considered an aid to navigation and the siting of such antenna on lighthouses is commonly undertaken by lighthouse administrators.

**(8) *The exercise of regulatory authority by a lighthouse administrator***

38. A lighthouse administrator would normally have complete responsibility for the conduct of its personnel and the performance of their duties in their lighthouses. As the Keepers were generally a uniformed service, a service disciplinary regime would be administered by the lighthouse authority – usually following that of the merchant navy.

39. When Trinity House lighthouses were manned, the Keepers operated under Service Regulations governing virtually everything from their accommodation (which was rent free – as a service tenancy), to their conduct and, of course, the manual operation of the aids to navigation. Regular visits were made by engineering staff and district superintendents. In addition, the Elder Brethren of Trinity House carried out periodic inspections of the stations, sometimes accompanied by dignitaries, in order to discharge their statutory duty.

## **V. Specific Observations on the Conduct Referred to in Chapter VI of Singapore's Memorial**

40. Against the background of the preceding general observations, we turn now to make some more specific observations on the conduct identified by Singapore in Chapter VI of its Memorial. As will be apparent from what follows, we are of the opinion that, overwhelmingly, the conduct referred to forms part of the general conduct that would be undertaken by any operator of a lighthouse as part of its administrative responsibility.

### ***(1) Observation on the conduct referred to in paragraph 6.6 of Singapore's Memorial***

41. Singapore sets out a list of the conduct on which it relies in paragraph 6.6 of its Memorial. By reference to this list, our observations are as follows.

#### ***(a) Enacting legislation relating to Pedra Branca and the Horsburgh Lighthouse***

42. A law for the erection of a lighthouse at a particular location would indicate special circumstances that required unambiguous authority for an individual or a body, other than the State, to erect the structure. The Smalls and Skerries Lighthouses off the coast of Wales are examples in Britain where Letters Patent were granted to individuals to erect lighthouses and gain revenue from the private tolls charged on shipping. By the early nineteenth century, lighthouse authorities such as Trinity House in England and Wales, had been granted powers (Acts of 1822 and 1836) to buy out private lighthouse interests.

#### ***(b) Assuming responsibility for the maintenance and improvement of the lighthouse and other facilities on the island***

43. The duty of a lighthouse operator – whether as an arm of the State or an independent body – is to provide and maintain aids to navigation to assist the safety of navigation. While maintenance methods and standards may vary among the international community of lighthouse operators – as evidenced by work in the technical committees of IALA – the need to maintain the lighthouse structures and ancillary equipment and to keep the visual, audible and electronic systems functioning correctly, remains the same.

44. Today, a lighthouse is a platform for a multitude of automated systems, combining equipment for the transmission of visual and audible signals with more sophisticated radionavigation systems. The power generation systems, boat and helicopter landing facilities, all form part of the necessary supporting infrastructure for the effective operation of the

lighthouse. In the case of Trinity House, almost all offshore “rock” lighthouses have these facilities, including Eddystone, Bishop Rock, Hanois and Smalls, as well as island stations such as Casquets, Flatholm, Skerries, Skokholm and South Stack.

(c) *Exercising regulatory authority and jurisdiction over personnel residing on the island and maintaining peace and good order thereon*

45. The act of regulating the activities of personnel in relation to a lighthouse is very much in keeping with the role of a lighthouse authority, whether or not it is a State body. For example, Trinity House maintains a set of Service Regulations which provided a detailed framework of rules for the conduct, standards and work expected of its lighthouse keepers. This formed the basis for any disciplinary action. A copy of Pamphlet III of the Trinity House Lighthouse Service Regulations, which addressed these matters, is attached as Annex 4.

(d) *Collecting meteorological information from Pedra Branca*

46. Information gathered from lighthouse authorities by IALA in the context of its work on the preservation of historic lighthouses shows that the collection of meteorological information at lighthouses is commonplace, and was so particularly when the stations were manned. Today, data collection systems have been automated and still provide valuable meteorological information for weather forecasts.

(e) *Building and upgrading a jetty on Pedra Branca*

47. For centuries, boat landings and jetties have been constructed and maintained at lighthouses to facilitate ease of access. Today, a combination of helicopter and boat landings – including jetties – provide the necessary options for access. Examples of such practice can be seen at Trinity House lighthouses such as Casquets, Flatholm, Round Island and Godrevy.

(f) *Flying the British, and subsequently, the Singapore Marine Ensign on the island*

48. This issue is addressed in general terms in paragraphs 30 to 32 above. Pamphlet I of the Trinity House Lighthouse Service Regulations contains the detailed instructions issued by Trinity House to Lighthouse Keepers on the flying of flags. This is attached at Annex 5. Much of this is self-explanatory and gives the background to the use of the Trinity House Ensign, which is still flown at our main depots, although less so at lighthouses – due to de-manning. Trinity House Lighthouses bear the Corporation’s crest. Whilst this may be regarded as a sign of ownership or possession of the property, it cannot, quite clearly, be regarded as a symbol of sovereignty as the ownership and operation of lighthouses by Trinity House does not necessarily correspond to the sovereignty of the State on which the lighthouse is situated.

(g) *Vetting applications for persons (including Malaysian nationals) to visit Pedra Branca and otherwise controlling access to the island*

(h) *Regular visits by civil and military officials from Singapore to the island without seeking permission from Malaysia*

49. Secure access to the site of a lighthouse and the control of visitors is invariably the responsibility of the operator of a lighthouse. Notices similar to those on the gates of Trinity House lighthouses are quite common, declaring the premises to be private property and warning of dangers, in order to maintain security and reduce the risk of liability to trespassers.

*(i) Granting permission for Malaysian authorities to undertake scientific and technical surveys on Pedra Branca and within Pedra Branca's territorial waters*

50. Scientific and technical surveys may have the effect of interfering with the effective and reliable operation of a lighthouse. To this end, it is common practice among lighthouse operators to require that permission is sought before any such activities are carried on in the vicinity of a lighthouse. For example, Trinity House does not allow any visitors to its lighthouses unless accompanied by the lighthouse attendant who is responsible for the security of the station – including the setting and un-setting of alarms and communications to the Operations Control Centre in Harwich. Permission to visit a particular station – whether in respect of Trinity House personnel or otherwise – is at the discretion of the regional maintenance manager of Trinity House who may deny access if maintenance or other essential works are in progress.

*(j) Carrying out naval patrols and conducting naval exercises within Pedra Branca's territorial waters*

51. These activities are not normally associated with the operation of a lighthouse.

*(k) Investigating and reporting on hazards to navigation and shipwrecks in waters around the island*

52. These may or may not be activities undertaken by a lighthouse operator as opposed to another public body or government department. In the case of the United Kingdom and the Republic of Ireland, the General Lighthouse Authorities are responsible for hazards and shipwrecks in the territorial waters of their respective states.

*(l) Investigating incidents of accidental death in the waters of Pedra Branca*

53. Marine accident investigators normally work separately from lighthouse operators, although they may work in separate sectors of the same public body (usually an arm of government). In certain circumstances, the State may invite the involvement of the Flag State of a vessel to participate in the investigation of marine incidents, but this is outside the scope of the activities performed by Trinity House.

*(m) Considering sea reclamation plans to extend the island*

54. If such work were necessary in connection with providing additional facilities for the operation of the lighthouse and ancillary equipment, including, for example, the construction of

a helipad, boat landing area or antenna base, this would fall within the scope of responsibility of a lighthouse authority and could be undertaken by them. If such work was not necessary for purposes of the operation and maintenance of the lighthouse, it would not come within the scope of responsibility of a lighthouse authority and would not be undertaken by them.

**(2) Additional Observations on Specific Practice**

55. In paragraphs 6.11 and 6.21 of its Memorial, Singapore refers to tolls – light dues – imposed on ships calling at Singapore harbour. It is commonplace for the funding of lighthouses to take the form of the collection of light dues, sometimes also known as navigation dues. As both the practice of MENAS and the General Lighthouse Fund – which applies to the upkeep of both United Kingdom and Republic of Ireland lights and is administered by the United Kingdom on the basis of dues collection from commercial vessels calling at both United Kingdom and Republic of Ireland ports – shows, the collection, administration and application of light dues has no necessary connection with the State in whose territory the lights are located. In the case of the Horsburgh Lighthouse, the tolls in question were evidently to defray the cost of the upkeep of the lighthouse rather than for the maintenance or development of the island.

56. In paragraphs 6.30 and 6.31 of its Memorial, Singapore refers to various instances of conduct concerning the maintenance and improvements of facilities at the Horsburgh Lighthouse. These improvements – the extension of living accommodation, the repair and strengthening of the pier, the fitting of a radio telephone, repainting, the installation of boat davits, dihedral radar reflectors and a radio beacon – are all in keeping with those undertaken from time to time by any competent lighthouse operator. The modernisation of the station, with the installation of an electric optic, new cooling systems and solar panels, is an integral part of the evolution of lighthouse technology.

57. Paragraph 6.32 of Singapore's Memorial refers to its installation of radar on the island for purposes of the operation of a Vessel Traffic Information System ("VTIS"; also VTS). As we have already observed, IALA regards Vessel Traffic Services to be an aid to navigation and the siting of VTS equipment and facilities on lighthouses is common.

58. In paragraph 6.56 of its Memorial, Singapore refers to a logbook kept at the Horsburgh Lighthouse. It is common practice to have a logbook to record visits to lighthouses.



**Captain Duncan Glass**



**David Brewer**

c/o Trinity House  
Tower Hill  
London  
EC3N 4DH

15 November 2004

# **ANNEX 1**

## **Captain Duncan C. Glass**

**Director of Navigational Requirements, Trinity House, London**

### *Summary Curriculum Vitae*

---

#### **May 1999 – to the present: Director of Navigational Requirements and Elder Brother, Trinity House, London**

As Director of Navigational Requirements of the Trinity House Lighthouse Service, I am responsible for core aspects of the work of Trinity House in fulfilment of its statutory responsibility to provide, operate and maintain aids to navigation around the coasts of England, Wales, the Channel Islands & Gibraltar. In this capacity, I chair the *Examiners' Committee*, which prescribes the level of service of visual, radar, radio and electronic aids to navigation.

In my Trinity House capacity, I am chairman of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) *Aids to Navigation Management Committee* and a member of its *Automatic Identification System (AIS) Committee*.

I represent the United Kingdom and the General Lighthouse Authorities on the *European Maritime Radionavigation Forum* and am a member of the UK *Safety of Navigation Committee*.

I examine and annually revalidate the 30 or so Deep Sea Pilots licensed by Trinity House.

I serve as a Nautical Assessor to the Admiralty Court in London.

An Elder Brother of Trinity House is a trustee of the Corporation and its Charities. In this capacity, I am a member of the Corporate Board and as such participate in the disbursement of grants to charities, and in-house benevolence to mariners and their dependents.

#### **1964 – 1998: Andrew Weir Shipping**

I served at sea for 23 years with the company rising from Apprentice Deck Officer to Master. During this period, I sailed with the Bank Line, United Baltic Corporation and MacAndrews. I served in general cargo, container and Roll-on Roll-off vessels, both world-wide and in the Baltic trades, culminating in specialisation in ice navigation in super-ice-class ships.

I was promoted ashore as Marine Superintendent in 1986, becoming Fleet Director in 1989. Between 1989 and 1998, I directed the fleet management department in all aspects of safe and efficient vessel operation, having responsibility for more than 400 sea staff and an annual budget of £25 million.

I was latterly a Board member of Andrew Weir Shipping, having been responsible for the integration of the four shipping lines comprising the company (which had an annual turnover of around £200 million and a shore-staff of 675).

#### **Other Professional Experience**

##### **UK Chamber of Shipping**

I was at various times over many years, chairman and member of a number of committees of the UK Chamber of Shipping, including:

- *Nautical Committee* (chairman) – representing British ship-owners on the *UK Safety of Navigation Committee*;
- *Marine Policy Committee* (member);
- *Defence Committee* (member);
- *Standing Defence Advisory Committee* (member).

### **International Chamber of Shipping**

I represented British ship-owners on the International Chamber of Shipping *Radio and Nautical Panel*. In this capacity, I participated as a member of the Working Group responsible for producing the Third Edition of the ICS “Bridge Procedures Guide”.

### **UK Hydrographic Office**

I represented British ship-owners on the UK Hydrographic Office *Customer Liaison Group* and *Chart Users Advisory Panel*.

### **Other**

I have wide experience in contractual negotiation internationally in respect of shipbuilding and ship-repair. I also have extensive experience in evidence collection, risk assessment and crisis management associated with incident and casualty investigation.

I am Deputy Chairman of King George's fund for Sailors, the UK's main maritime charity, having been a member of the General Council and Trustee since 1988.

I am a Trustee of the Royal Alfred Seafarers Society and the Seaman's Hospital Society.

# **ANNEX 2**

## David Brewer

Formerly, Director of Administration, Trinity House, London

### *Summary Curriculum Vitae*

---

#### 1995 – 2004: Director of Administration and Deputy Secretary, Trinity House, London

#### 1977 – 1995: Deputy, Director of Administration, Legal and Information; before that, Manager and Officer-in-Charge, Trinity House Operational Depot, Cowes, Isle of Wight

As Director of Administration of Trinity House, I was responsible for all aspects of the Corporation's work in the fields of estate management, human resources, legal and public affairs, risk management and communications. I was also engaged in and responsible for various aspects of the Corporation's participation in the work of other national and international bodies concerned with the provision of aids to navigation and maritime safety, including as chair and member of various committees of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA).

In my various capacities at Trinity House over the years, I:

- advised UK Government departments and agencies and the UK and Republic of Ireland General Lighthouse Authorities on a range of lighthouse service related matters from liability risks and offshore structures to overseas responsibilities, including in respect of the Sombrero Lighthouse in Anguilla, the Cape Pembroke Lighthouse in the Falkland Islands, and Europa Point Lighthouse in Gibraltar;
- led an international consultation process resulting in a nationwide strategic plan for the provision of marine aids to navigation;
- provided advice and information to the International Maritime Organisation's legal team on the draft International Convention for Wreck and Salvage;
- secured a UK/France cooperation agreement for the implementation of a joint radionavigation system;
- introduced the UK and Republic of Ireland's inaugural Marine Navigation Plan for the safety of navigation and protection of the coast environment, including the establishment of a differential GPS satellite navigation service with seven lighthouse reference stations;
- negotiated various agreements for strategic partnerships involving Trinity House in respect of a range of services;
- made submissions to the European Commission on behalf of the General Lighthouse Authorities for the UK and the Republic of Ireland in response to various EC measures, e.g. on safe seas and wildlife habitats;
- prepared memoranda for submission to various public inquiries and UK Parliamentary Select Committees on such matters as the future of British shipping and the economic effects of light dues;

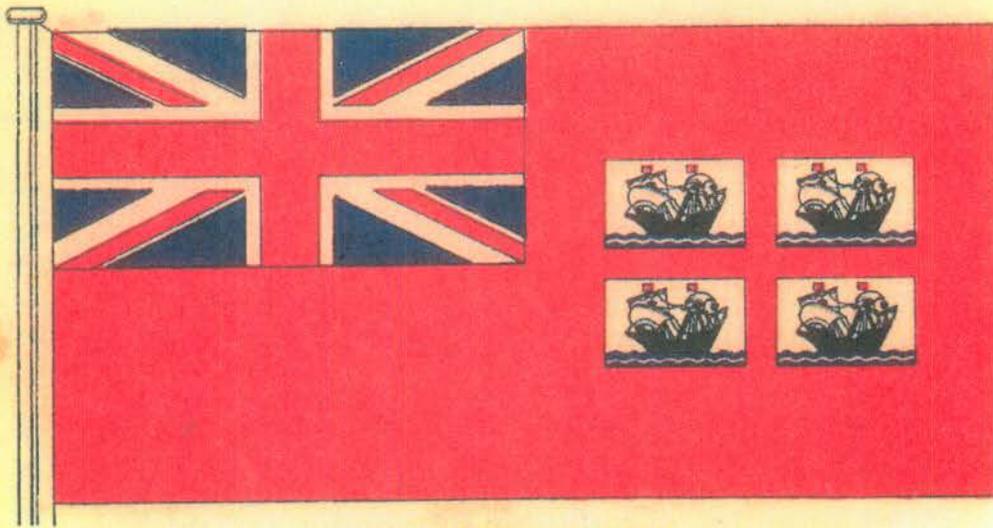
- secured changes in legislation for the more flexible and effective operation of a statutory lighthouse undertaking, after coordinating a successful lobby for the amendment of inappropriate clauses in a Government bill;
- established a risk management strategic plan and policy to support the business needs of a lighthouse service public sector operation across the UK and Republic of Ireland, including loss control and risk transfer measures for assets and liabilities valued at over £300 million;
- chaired an international advisory panel under the auspices of IALA with delegates from over 20 countries which led the production of authoritative standards and guidelines for the management and conservation of historic properties through alternative uses;
- published external/internal reviews of activities and gave presentations of papers at international conferences on the effective management and conservation of historic lighthouses;
- devised a tourism and merchandising plan from grass roots and established a cooperative for 20 lighthouse visitor attractions operated under license;
- created a lighthouse estate management strategy for the alternative use and conservation of over 50 locations in England, Wales and the Channel Islands, and established a profitable network of quality holiday accommodation and visitor attractions nationwide under a tourism and business development plan;
- managed the operation – including lighthouse keepers (prior to de-manning) – of over 20 lighthouse and light vessel stations along the South Coast of England from a central operations depot.

#### **Other**

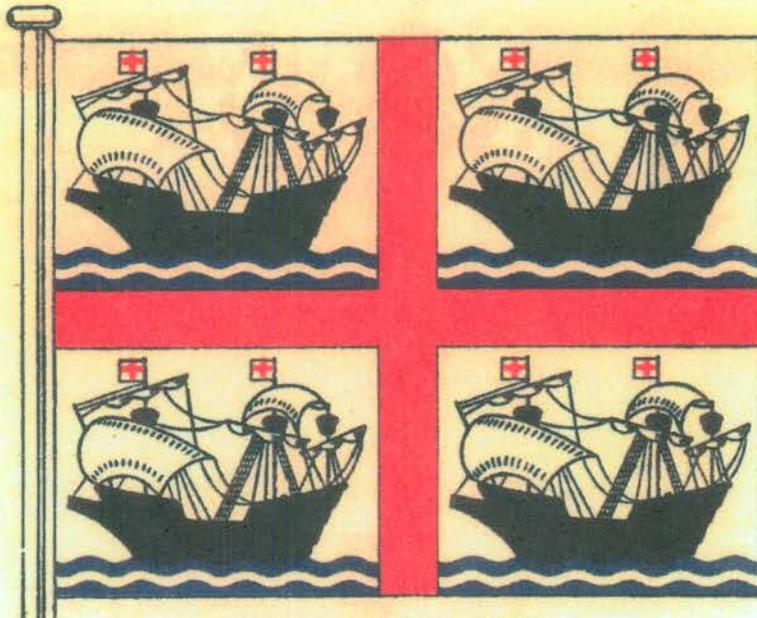
Member of the Institute of Directors

# **ANNEX 3**

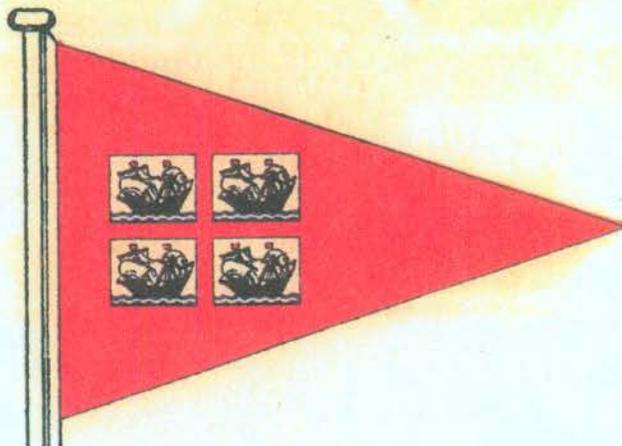
**TRINITY HOUSE ENSIGN  
AND OTHER TRINITY HOUSE FLAGS**



TRINITY HOUSE ENSIGN



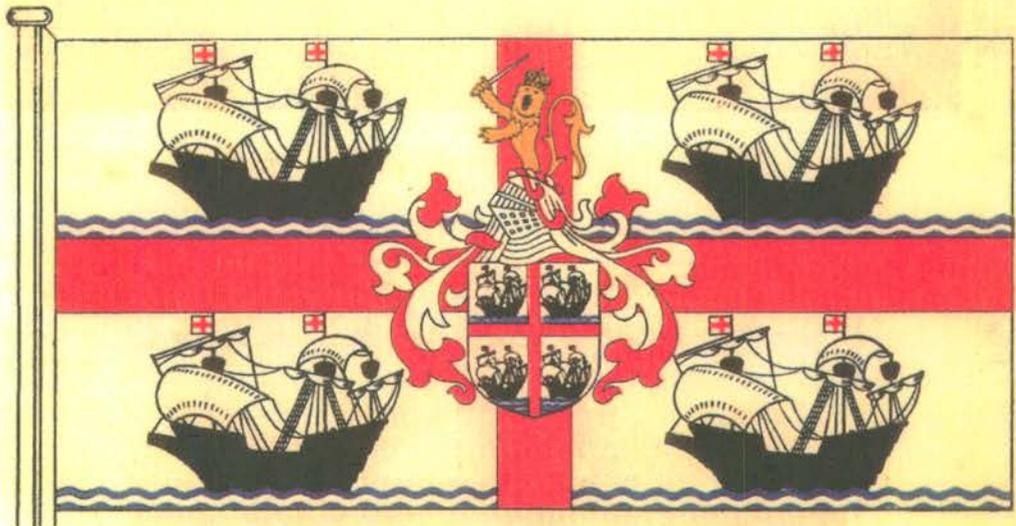
TRINITY HOUSE JACK



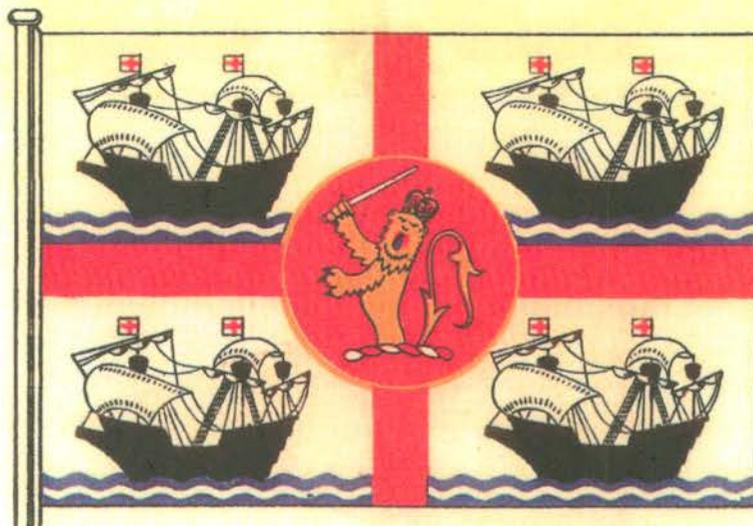
TRINITY HOUSE BURGEE  
(OR CORNET)

TRINITY HOUSE, LONDON.

PARTICULARS OF FLAGS



TRINITY HOUSE MASTER'S FLAG



TRINITY HOUSE DEPUTY MASTER'S FLAG

# **ANNEX 4**

**PAMPHLET III**

**TRINITY HOUSE LIGHTHOUSE SERVICE REGULATIONS**

**PAMPHLET III**

**TRINITY HOUSE  
LIGHTHOUSE SERVICE  
REGULATIONS**

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Delete: Isolated Shore Lighthouse Stations

## PAMPHLET III

### LIGHTHOUSE SERVICE REGULATIONS

#### INTRODUCTION

These regulations apply to all keepers in the Lighthouse Service including temporary staff and others temporarily transferred from other branches of the Service, and they shall be kept up to date by the Principal Keeper from the amendment slips issued periodically from the Trinity House and distributed by the District Superintendent.

All amendments shall be recorded in the amendment sheet provided for that purpose.

The main duties and responsibilities of the Lighthouse personnel are as set out below:—

#### III. 1.—DUTIES AND RESPONSIBILITIES OF KEEPERS

##### (a) Principal Keeper

The Principal Keeper shall be in full charge of the Lighthouse establishment and shall be responsible for the cleanliness and efficiency of the station generally. He shall take an equal share of the work with the assistant keepers and see that all the duties required to be carried out at the station are duly executed.

The Principal Keeper shall make himself thoroughly acquainted with the character and period of the light and of the fog signal (if any) at the station, and satisfy himself that the assistant keepers are equally well acquainted therewith.

The Principal Keeper shall be responsible for the care and safety of all stores and equipment and see that everything is in its place and put to its proper use. He shall take care that none of the stores are wasted, sold, given or thrown away, or embezzled and that strict economy and careful management are observed.

The Principal Keeper shall obey all orders from his superior officers: these will normally come from the District Superintendent but may, on rare occasions, be given direct from the Trinity House. In the latter case the Principal Keeper will keep his Superintendent informed.

Normally all communications from the Lighthouse shall be sent to the District Superintendent, but if the Keeper-in-Charge is required to submit a report direct to the Trinity House he shall send a copy of the report to his Superintendent.

##### (b) Assistant Keeper

All assistant keepers shall be subject to the control of their Principal Keeper and be obedient to his orders. If an assistant keeper feels aggrieved by any order of his superior, he is at liberty to appeal to the District Superintendent but he must obey the order in the meantime.

This regulation equally applies to supernumerary assistant keepers and occasional keepers when serving at any lighthouse.

**(c) Supernumerary Assistant Keeper**

**(i) Under instruction:**

When a supernumerary assistant keeper is sent to a station for instruction he shall be placed under the care of the senior assistant keeper so that he may be instructed in the use of the machinery and apparatus at the station.

The supernumerary assistant keeper shall not be left alone in the lantern or engine room nor be allowed to manipulate the engines or lamps except in the presence of a qualified keeper until such time as he is considered by the Principal Keeper to be competent.

The Principal Keeper shall ensure that the supernumerary assistant keeper becomes fully conversant with the light and fog signal apparatus so that he may obtain the necessary certificate without delay.

As soon as the supernumerary assistant keeper has completed the prescribed course of instruction the Principal Keeper shall inform the District Superintendent accordingly so that arrangements can be made for him to return to his base or transfer to another station for further instruction.

**(ii) General**

The Principal Keeper may employ a supernumerary assistant keeper for lantern or engine room watch should ~~be~~<sup>he</sup> consider him to be sufficiently experienced and reliable. A fully qualified supernumerary assistant keeper may be employed to share the duties of the station as if he were an assistant keeper.

**(iii) Winter Duty**

When a fully qualified supernumerary assistant keeper is sent to a station for winter duty, the work given to him by the Principal Keeper shall be such as will best assist the permanent keepers.

**(d) Rock Lighthouse Keepers on Shore Turn**

Keepers attached to rock lighthouses shall remain on shore in rotation for the period intervening between successive reliefs.

The normal spell of duty at the lighthouse shall be eight weeks followed by four weeks on shore, and every three months a supernumerary assistant keeper shall be sent to each rock lighthouse having a complement of four keepers in order to maintain the regular routine of reliefs.

The keeper on shore from a rock lighthouse in connection with which shore dwellings are provided, shall be responsible for seeing that the dwellings are kept in good order and that the regulations applicable thereto are observed. If visual signals are observed from the lighthouse, the keeper on shore shall attend to them and he shall also see to the transmission of correspondence, orders, etc., concerning the station.

All other rock lighthouse keepers are regarded as free of official duties during their shore turns except that cases of emergency may arise when keepers are required for immediate duty. Compensatory shore leave will be granted in such cases subject to the exigencies of the Service.

Amendment No. 31.

Following amendments should be made in manuscript:

Regulation III. 1(c)(ii) second line—correct “be” to read “he”.

Regulation III. 39(d)(ii) first line—delete “six” and substitute “eight”.

Regulation III. 4(a) Insert asterisk before the words “At the following shore stations . . . ”—Delete Dungeness from list of Stations.

At the appointed time for the relief the keeper on shore shall be in readiness to proceed to the lighthouse to relieve one of the keepers thereat. So far as the exigencies of the Service permit, supernumerary assistant keepers are allowed fourteen days ashore free of duty in respect of every eight weeks they serve at a Rock Station, or pro rata for shorter periods.

**(e) Public Duties not to be interfered with**

Keepers shall never allow any interest, private or otherwise, to interfere with the discharge of their public duties which are of the greatest importance to the safety of navigation.

Keepers are reminded that their retention and promotion in the Service depends upon strict obedience to orders, adherence to the regulations laid down for their guidance, upon industry, sobriety, and the maintenance of cleanliness and good order on the station.

**III. 2.—ABSENCE FROM STATION**

**(a) General**

At any land station having three or more keepers, an assistant keeper who requires leave of absence during the day shall consult the Principal Keeper as to the most convenient time and obtain his consent before leaving the station: if the Principal Keeper intends to be absent from the station during the day he shall inform the senior assistant keeper accordingly. Any keeper who is absent during the day shall return to the station at a reasonable time and in any case not later than midnight. The watches shall be so arranged that a keeper returning to his station at a late hour is not required to keep a watch that night.

Permission to stay away from a land station for a whole night, other than during the weekly 24-hour free from duty period, shall previously be obtained from the District Superintendent.

No keeper shall absent himself for a whole night from any rock lighthouse without the previous permission of the District Superintendent. It will only be granted in exceptional circumstances.

**(b) Absence of Principal Keeper**

In the absence of the Principal Keeper from whatever cause, the full charge of the establishment devolves upon the Senior assistant keeper, who shall be held responsible from the time of taking charge until the Principal Keeper returns.

Whenever the Principal Keeper requires to leave the establishment either for long or short periods, he shall hand the keys, books, etc., over to the keeper left in charge. If there is any personal reason why the Principal Keeper at a "man and wife" station feels unable to hand the keys of his dwelling over to the relieving keeper, he shall forward the keys to his District Superintendent.

The date and time at which the Principal Keeper leaves and returns to duty shall be entered in the monthly journal.

In the event of assistance being required due to illness or incapacity of any of the keepers, immediate application shall be made to the District Superintendent.

(c) **Two Keeper Land Stations**

At a land lighthouse having only two keepers one shall be on duty at sunset and the other, if absent on day leave, shall return to the station before dark, reporting his or her return to the other keeper who shall enter the time of return in the journal. No overnight leave shall be taken or granted without the previous permission of the Superintendent, excepting when a substitute is provided for the weekly 24 hour free from duty period, and on no account is the lighthouse to be left without one of the keepers on the premises.

**III. 3.—ALTERATIONS TO PREMISES**

No outbuildings either of a temporary character or otherwise shall be erected by the keepers, nor shall they make any alterations to the lighthouse establishment, fences or other arrangements without sanction from the Trinity House. Should any such erections or alterations be desired, the attention of the District Superintendent shall be called to them, preferably during one of his visits of inspection.

AMENDMENT NO. 204

PAMPHLET III

REGULATION III.4 - ANNUAL LEAVE

Delete existing regulation and insert:-

III. 4 - ANNUAL LEAVE AND FREE FROM DUTY PERIODS

a) **Shore Stations**

- (i) Principal Keepers, Assistant Keepers and Local Assistant Keepers at Shore Stations are granted 28 days annual leave.
- (ii) Supernumerary Assistant Keepers are granted 17 days annual leave.
- (iii) Keepers at Shore Stations who are required to be on duty on any of the following public holidays:-

New Year's Day	Summer Bank Holiday
Good Friday	Christmas Day
Easter Monday	Boxing Day
Spring Bank Holiday	

will be granted an additional day's paid leave for each holiday worked.

The period when annual leave is to be taken will be subject to the exigencies of the Service. The District Superintendent will arrange the leave dates for the Keepers on his District and, wherever possible and subject to the availability of substitute Keepers, the wishes of the Keepers in this respect will be met.

The leave year is from 1st January, to 31st December.

b) **Rock Stations**

- (i) Principal Keepers and Assistant Keepers at Rock Stations are granted 28 days free of duty following their 28 days duty on station, and no additional time off for annual leave or public holidays is granted.
- (ii) Supernumerary Assistant Keepers are granted free from duty periods ashore at the rate of one week for every month spent at a Rock Station.

Amendment No. 99

T.H. No. 461/65

REGULATION 111.4(a)

Cancel amendment No. 85 and substitute  
the following:-

Supernumerary Assistant Keepers

Under four years service - Delete 14 days

Insert 15 days

Over four years service - Delete 25 days

Insert 26 days

Assistant Keepers Delete \*25 days

Insert \*26 days

Principal Keepers Delete \*25 days

Insert \*26 days

Principal Keeper/Instructor of Lightkeepers

Delete 3 Calendar weeks and  
four days

Insert 3 Calendar weeks and  
five days

AMENDMENT NO. 174

T.H. No.100/30/1

REGULATION 11.57 and  
REGULATION 111.5

*After second paragraph add:*

at Grade I Rock/Tower Stations the scale of issue shall include 9 sheets and 8 ~~pl~~  
slips".

(b) **Rock Stations**

Principal and assistant keepers serving at rock stations are granted monthly free-from-duty periods following their normal turns of two months duty at their stations and no additional leave is granted in these cases.

**III. 5.—BEDDING**

Bedding for rock lighthouse keepers is a personal issue to each keeper who shall be responsible for it to the District Superintendent.

*SEE*

*AMENDMENT  
No 174.*

The scale of issue is as follows:—

1 Mattress	2 Pairs Sheets
1 Bolster	2 Bolster Covers
1 Pillow	2 Pillow Slips
1 Counterpane	4 Blankets

The cost of laundering is borne by the Trinity House and the actual method of carrying out the work shall be arranged with the District Superintendent. If the keepers wish they may arrange for the laundering themselves and submit the bills to the District Superintendent for payment.

Replacements due to fair wear and tear will only be made after inspection by the Superintendent who will issue a condemned certificate.

Keepers transferred from one rock station to another shall take their bedding with them but keepers transferred from a rock station to a shore station shall bring their bedding ashore, and surrender it to the District Superintendent.

**III. 6.—BOOKS**

A list of the principal text books, etc., which shall be kept at each lighthouse is set out in Appendix 1.

**III. 7.—CENSURE—METHOD OF COMMUNICATION**

AMENDMENT NO. 205

PAMPHLET III

REGULATION III. 8 - CHIMNEY SWEEPING

Delete existing regulation and insert:—

AMENDMENT NO. 207

PAMPHLET III

REGULATION III.9 - CLEANING ROUTINE

Delete existing regulation and insert:—

**III. 9 - CLEANING ROUTINE**

The Principal Keeper shall ensure that the following routine is carried out by the Keeper having the morning watch:—

- (i) The light is to be extinguished at sunrise, or later in foggy weather as appropriate, the lantern curtains put up and the light at once prepared for exhibition at the ensuing lighting-up time.
- (ii) The lighting apparatus is to be polished or cleaned in accordance with the special instructions for the type of lighting apparatus installed at the station and everything connected therewith left in perfect order and fit for immediate use.
- (iii) The lantern glass, the copper and brasswork, utensils, floors and trimming stage of the light room are to be cleaned and tidied and the service room left in good order.

### III. 10.—COLOURED SHADES

Great care shall be taken that all coloured shades are kept perfectly clean, and that where cutting shades are used, and have to be taken down for cleaning, they are replaced in precisely their original position, and the stops tightly screwed up.

In cases where the overlap of coloured shades has been increased, owing to the existence of small fractures in any particular shade, the spare shade shall be substituted for the defective one, and a new one indented for.

The shades shall be maintained as originally placed. All spare shades shall be kept clean and ready for use in case of accident. The Principal Keeper shall indent immediately for new shades to replace any that may be broken.

### III. 11.—CRANES, HOISTS, ETC.

The Principal Keeper shall keep cranes, winches, hoists or other lifting gear at the station under constant supervision and shall see that they are maintained in good working order. →

Defects shall be noted in the Repair Book or, if repair is urgent, shall be reported immediately to the District Superintendent. →

The Chief Engineer of the District Tender will inspect the wire rope hoists and associated machinery at Round Island, Lundy North, Lundy South, and South Bishop Lighthouses four times each year, on which occasions the Principal Keeper shall call his attention to any known defects.

An annual inspection of cranes and other lifting apparatus will be carried out at all lighthouses by the Master and Chief Engineer of the District Tender and every four years a thorough examination will be carried out under the direction of the Engineer-in-Chief. →

*Chief  
officer*

### III. 12.—DWELLING KEYS

Any assistant keeper obtaining leave of absence for a long or short period shall, before quitting the establishment, hand over the keys of his dwelling (unless someone such as a member of his family remains in charge thereof) to the Principal Keeper of the station. See also paragraph III.2(b).

### III. 13.—ELECTRIC LIGHT STATIONS

#### (a) Duties

At electric light stations which admit of the arrangement, each assistant keeper shall serve one week alternately in the lantern and in the engine room.

#### (b) Lighting Apparatus

The engine and machines installed in connection with the generation of electricity shall be ready for starting and the lighting apparatus ready for use 20 minutes before sunset. The electric light is to be brought into action 15 minutes before sunset and discontinued at sunrise (according to the timetable supplied to the station) on a signal given from the engine room but in foggy weather the light shall be exhibited one hour before sunset and discontinued one hour after sunrise. In case of any interruption of the electric light the keeper in the lantern shall notify the engine room and immediately light the stand-by burner which is to be kept burning until the electric light can again be exhibited when notice shall be given by the Principal Keeper that it is to be substituted for the stand-by burner.

*See amendment no. 6.*

*Add at end of first section:-*

where the lifting gear includes a traveller, the latter shall be protected by a canvas cover when not in use.

*Add at end of second section:-*

Hoist wires are to be serviced at intervals of not more than six months and renewed at intervals of not more than two years.

*Add a fifth section:-*

The Principal Keeper shall see that dates and details of tests and servicings are entered in the Test Certificate Book kept at the Station.

Amendment No. 106

T.H. No. 85/66.

REGULATION 111.13 (d)

*Add:-*

See Regulation 11.58 regarding electric filament lamps at unattended stations.

Amendment No. 6 — Regulation III.13 (b)

Add:— "In order to ensure that standby machinery is readily available for immediate use in the event of a mains failure, standby generator sets shall be tested every third day by running them for at least one hour on load. The load for this purpose shall consist of the navigation light or lights, station lighting, battery charging etc. normally used in conjunction with the standby set. Automatic standby alternator sets shall be started by simulating a mains

AMENDMENT NO. 175

these sets to mains operation

T.H. No. 619/65

REGULATION 111.13(b)

*Add:-*

"The main navigational light of the Royal Sovereign Lighthouse is to be exhibited during conditions of poor visibility".

Amendment No. 7 — Regulation III.13 (c)  
Second line — after word “vapour” insert “or acetylene”.

Amendment No. 124

T.H. No. 869/6

REGULATION 111.14 (a)

*Delete sub-paragraph numbers (vi) and (vii) but  
leave existing wording as a continuation of  
sub-paragraph (v).*

(c) **Stand-by Burners**

At stations <sup>or substations</sup> where the stand-by apparatus comprises a petroleum vapour burner or oil lamp it shall be lighted and kept burning perfectly in focus for one hour during daytime, once per week. When extinguished after this test the burner shall be made ready for use again.

*See amendment  
No 7*

At stations where a lamp exchanger is provided, the standby light shall be brought into focus and tested just before lighting-up time every day so as to ensure it is in proper working order.

(d) **Filament Lamps**

Those lamps which have been in use for 1,000 hours shall be kept in service until the Keeper-in-Charge considers either blackening of the glass bulb or deformation of the lamp filament renders it unsuitable for further use. The failure of any lamp shall be reported to the District Superintendent giving the cause and the number of hours the lamp has been in operation.

(e) **Technical Instructions**

In addition to the above Service Regulations, the Technical Instructions furnished to each electric light station for working the electric light machinery, etc., shall be strictly observed.

**III. 14.—ENTRY TO THE LIGHTHOUSE SERVICE**

AMENDMENT No 244

T.R. 383/2/12

PAMPHLET III

REGULATION III 14 - ENTRY TO THE LIGHTHOUSE SERVICE

Delete the words "be of British Nationality and" from the first paragraph of section (a). Add as a final paragraph:

"All personnel joining the Trinity House Lighthouse Service must comply with any national or Trinity House security instructions currently in force".

~~for National Service.~~

References covering employment ~~from the end of National Service~~ to date of application.

*ap* Certificate of Health from doctor.

An education test is given to ensure ability to read and write from dictation and that the candidate has a fair knowledge of simple arithmetic.

Candidates are required to pass a strict medical test with special emphasis on the following points:—

- (i) They must have sufficient teeth.
- (ii) An existing hernia, which has not been successfully cured by an operation more than six months prior to application, is a definite bar to appointment.
- (iii) Candidate must have been vaccinated within five years of date of application and if so required by the Medical Officer must submit to re-vaccination after appointment.

The following is the standard of visual requirements:—

- (iv) Candidates with unaided vision of not less than 6/6 in one eye and not less than 6/9 in the other eye will be accepted.

(v) Candidates with unaided vision less than in (iv) above, but either:—

(vi) not less than 6/12 in each eye, or

(vii) not less than 6/9 in one eye and not less than 6/36 in the other eye will also be accepted provided *glasses are worn* which correct the visual acuity to not less than in (iv) above.

Candidates with unaided vision less than 6/36 in either eye will not be accepted. No candidate who has colour blindness can be accepted.

If the certificates are found to be satisfactory the application will be submitted to the Board and, if approved, the candidate will be appointed to fill an existing vacancy in the Lighthouse Service.

Candidates on entry into the Service will be required to sign an Agreement on the prescribed form.

A supply of circulars giving the qualifications necessary for candidates for the Lighthouse Service, with conditions of service and rates of pay, etc., is kept by each Superintendent for the information of applicants.

**(b) Form of Agreement**

For details of the form of agreement signed by all new entrants see Appendix II.

### III. 15.—EXPLOSIVE FOG SIGNAL STATIONS

At explosive fog signal stations any defects in connection with either the firing gear or the explosive charges shall be promptly reported by the Keeper-in-Charge to the District Superintendent. In all cases of misfire the explosive charge shall at once be thrown into the sea. On no account shall an attempt be made to remove a detonator from a charge or otherwise to tamper with it with the view to ascertaining the cause of its failure to explode.

The keepers shall take care not to wind the jib into a vertical or firing position so quickly that on reaching that position it recoils with such force as to throw the charge over the arms of the jib.

Detonators shall only be tested by the galvanometer as supplied to the Service, and on no account shall extra battery power be applied or terminals be tampered with by the application of the blades of a knife or any other method which might set up a short circuit.

At stations not provided with a testing table and screen the detonators being tested shall, as a further precaution, be placed in an iron tube to safeguard the operator against any accidental explosion.

The Principal Keeper shall satisfy himself that his assistants are fully competent to fire the signal with safety and efficiency before he entrusts them with the duty. In addition the Principal Keeper is responsible for seeing that twice a year in May and October the whole of the jib arm, trunnion brackets, and roof fixings are examined. Any apparent or suspected defects or weakening of the equipment shall be reported to the District Superintendent

Amendment No. 50—T.H. No. 1584/1962

Regulation III 16

Add new paragraph as follows:—

Smoking is prohibited in all Battery Rooms and "NO SMOKING" notices are to be displayed in the Battery Rooms at all stations. Adequate ventilation is to be maintained in Battery Rooms.

Amendment No. 93

REGULATION 111.16

Add after amendment No. 50:—

Particular care shall be taken to ensure that nozzles of fire extinguishers are kept clean and free from any obstruction.

Amendment No. 94

T.H.No.748/64

REGULATION 111.16

Add new paragraph as follows:—

Each manned lighthouse shall have an escape rope of natural fibre attached to the lower rail of the gallery, well clear of the lantern door, as a means of escape in the event of an emergency.

The rope, which shall be long enough to go over the handrail from the inside and reach the ground, is to be coiled and hung on the outside of the rail by means of a small rope strop and toggle, for easy release.

The escape rope shall be inspected frequently by the Keeper-in-Charge and renewed when necessary.

Amendment No. 26—T.H. No. 1155/1961

Regulation III 17.

Delete third Section and substitute the following:

For the purpose of preventing casualties to fog signals through sticking solenoids and faulty diaphragms, all fog signals are to be tested regularly. The fog signal is to be started up and sounded in clear weather for approximately 10 minutes, fourteen days after it was last in operation for fog or, if there has been no fog, fourteen days after the last test. During the test plant used to drive the fog signal should be that which was *not* used when the fog signal was last in operation (or tested). So far as compressed air fog signals are concerned solenoids need not be tested provided the above routine is followed, but diaphragms on fog signal admission valves shall be examined every month and renewed if necessary. In any event the diaphragm shall be changed after 500 hours of working, or after twelve months whichever is the earlier.

so that a detailed examination may be carried out by a representative from the Engineer-in-Chief's Department. Once a year the whole shall be cleaned down for painting and a further careful examination made.

Each examination shall be recorded in the Station Journal.

### III. 16.—FIRE PRECAUTIONS

Due precautions shall be taken by the keepers to avoid accidental fire and special care taken that neither lamps, candles, coals nor any other articles are left burning anywhere so as to involve the risk of fire. Caution shall be exercised by the keepers in the storage of cotton waste, particularly any which may have been in use or become oily, owing to its liability to spontaneous combustion.

The Principal Keeper shall see that the fire fighting appliances at the lighthouse are always in position and in good order, also that their exact location is known to all the keepers and that in the event of fire each keeper is familiar with the action that he is to take in extinguishing the outbreak or calling for assistance.

### III. 17.—FOG SIGNALS

At fog signal stations the fog signal shall be kept scrupulously clean; bearings and working parts shall be carefully lubricated and the signal kept in a condition ready for immediate use. Whenever fog sets in or the atmosphere is thick from haze, snow, sleet, or misty rain at the station itself or in its neighbourhood so as to impede navigation, the signal shall be sounded and kept in operation until the fog or thick weather clears away. The keeper on watch is responsible for taking the necessary steps for starting and stopping the fog signal and the exact times of commencing and laying off sounding shall be recorded. It is specially to be borne in mind that it is better to sound the signal too much than too little, and that the fog signal is intended not only for the benefit of vessels passing close to the station, but also as an aid to navigation in the offing. It should therefore be sounded when there is any indication of fog at sea or to seaward.

In very cold weather the Principal Keeper shall see that the engine-room is heated or that other action is taken as necessary to ensure that the circulating water system or other parts of the machinery do not freeze up.

The rubber diaphragm of the fog signal admission valve deteriorates with time and to guard against failure this shall be examined once each month and renewed if found necessary. Each year in August the old diaphragm, if it has been in use for twelve months, shall be replaced by a new one, the operation being recorded in the Station Journal and all old diaphragms shall be destroyed.

The technical instructions issued to the station for the management and working of the fog signal apparatus shall be carefully observed.

The Keeper-in-Charge is held responsible for seeing that every part of the machinery is in proper working order before being set into motion.

A constant watch shall be maintained in the engine-room during fog whilst the machinery is in operation and every care and

given to the machinery to ensure that it is properly lubricated whilst in operation. At Stations which are fitted with all type engines with large flywheels, a flywheel may require to be turned round to set the engine into its proper starting position. This will be done by pulling the flywheel round by hand after first setting the decompressor levers on the exhaust valves so as to reduce the compression in the cylinder. Under no circumstances shall a wooden bar or similar device be inserted into the spokes of the flywheel for assistance in moving it nor shall a keeper use force for the purpose as such actions are liable to cause damage to the engine and to the keeper.

### FORESHORES TO BE WATCHED

The foreshores at lighthouse stations, and the action of the various protective works, shall constantly be watched by the keepers and reports furnished to the District Superintendent should be made as soon as any damage takes place, or should there be any possibility of damage to the premises.

### GOODS RECEIVED BOOKS

In order to assist with the keeping of the District Accounts the Keeper-in-Charge at each lighthouse station shall maintain a "Goods Received" book and shall send a "Goods Received" note to the District Superintendent immediately on receipt of any articles or stores that are sent direct to the station from any sources other than the District Depot.

### IRREGULARITIES OF LIGHT, FOG SIGNAL, OR ANY OTHER INSTALLATION

In cases of extinction of the light or of its becoming impaired, or any failure or irregularity in the flashing or occulting apparatus, or failure of the fog signal when it should be sounding, irregularity of R/B or R/T installations, etc., the keeper on duty shall report the circumstances at once to the Principal Keeper who will communicate immediately with the District Superintendent if urgent action is necessary.

Any telegram or other signal reporting an irregularity shall be followed by a written report to the Superintendent giving details of the occurrence and full particulars of the state of weather prevailing at the time of the breakdown.

### ISOLATED SHORE LIGHTHOUSE STATIONS

Amendment N—T.H. No. 869/1962

Regulation III

Delete existing Regulation.

needed  
or  
the  
has  
the

condition of the station is satisfactory:—

Lynmouth Foreland

Hartland Point

### III.—JOURNAL ENTRIES

The Principal Keeper shall make daily observations at 0900 hours of all sea-marks visible from the station, note the result in the monthly journal and report to the District Superintendent if any sea-mark is out of position or apparently damaged.

He shall keep an annual journal and transcribe into it daily the entries made in the monthly journal, adding any remarks that may be necessary and describing any occurrence worthy of note as well as the appearance of the lights or the sounds of the fog signals in the vicinity. The Principal Keeper shall forward the monthly journal to the District Superintendent for transmission to the Trinity House when completed, i.e., for shore lighthouses at the end of each calendar month and for rock lighthouses at each relief date.

The annual journal shall be kept at the lighthouse for at least 10 years after which it may be destroyed, unless there is adequate storage accommodation available in which event it may be retained for a longer period.

### **III. 23.—LANTERN CURTAINS**

The keepers shall see that the lantern curtains are properly hung from sunrise every day except during the process of cleaning the glass. The curtains shall be taken down and put away each day before lighting up operation are commenced.

### **III. 24.—LANTERN GLAZING**

The lantern glazing shall be thoroughly cleaned by the keepers inside and out every day and washed with water externally when necessary to remove sea-spray or other obstructions to the passage of the light. For the same reason it shall be cleaned during the night if it becomes obscured by condensation or snow.

The glazing shall be cleaned internally by being first freed from dust by using a linen rubber slightly dampened, and then rubbed with a soft chamois skin, free from everything that would injure the polish of the glass.

Two spare lantern panes of each size, and two spare shades of each size where coloured shades are fitted, shall be maintained at each station and the Principal Keeper shall indent as soon as any of the spares are used up order that the standard stock may be maintained.

Great care shall be taken to describe the lantern glazing correctly on the indent and where the panes are flat and unequal sided and there is an Engineers' drawing to describe them, the number of the drawing shall be quoted on the indent. If there is no drawing a dimensional sketch should be submitted with the indent.

The Principal Keeper shall report immediately to the District Superintendent any damage to lantern glazing which necessitates repair either at once or at a later date.

### **III. 25.—LENSES**

All the lenses and prisms shall be thoroughly cleaned every day, by first removing all dust with a linen rubber slightly dampened, and then rubbing with a soft chamois skin. If the glass becomes greasy it shall first be washed with a linen cloth steeped in methylated spirit, then carefully dried with a soft linen rubber, and rubbed with a soft chamois skin.

All rubbers used for glass work shall be freed from grease, dust or grit. A record shall be made in the Repair Book at the station whenever any of the lenses or prisms are cracked, chipped, or otherwise rendered defective, and the Principal Keeper shall report the circumstances to the District Superintendent for transmission to Trinity House on each occasion.

AMENDMENT NO. 203

PARTICLE 111

REGULATION III. 26 - LIGHTING APPARATUS

Delete existing regulation and insert:-

III. 26 - LIGHTING APPARATUS

The Principal Keeper shall ensure that:-

- (i) The light is maintained in accordance with the instructions and diagrams at the station and that the lamp(s) is/are properly adjusted and in focus.
- (ii) The lighting apparatus, lantern glazing and ventilation are in efficient order and that no condensation of moisture is allowed to impair the efficiency of the light.
- (iii) The character of the light is maintained as advertised.
- (iv) If a heating appliance is installed in the lantern it is turned on when necessary.

~~Life Assurance scheme twelve months after appointment annual premium in each case (£3 per annum) is paid in advance by the Corporation.~~

~~The disposal of the proceeds of the Life Assurance is entirely at the discretion of the Elder Brethren.~~

AM / No 225  
THS 35/14/2

**III 28.—LIFE SAVING EQUIPMENT AT ROCK LIGHTHOUSES**

**(a) Lifebuoys**

The keepers shall see that the Lifebuoys supplied to the station are in position at all times and ready for immediate use.

**(b) Life Jackets**

*life saving waistcoat*

For the prevention of accidents, as far as possible life-jackets are provided for the use of the keepers at rock lighthouses and shall be worn in landing or embarking at the reliefs, in shipping or landing stores, and on all other occasions when it is necessary for the keepers to be on the landing stage or rock. When on duty at the rock the keepers shall never expose themselves needlessly to risk, and, as a further means of preventing casualties and ensuring their personal safety, they shall take every opportunity of obtaining a knowledge of the action of the seas and set of the tides in the locality.

**(c) Schermuly Pistol Rocket Apparatus**

This apparatus, which is supplied to selected rock lighthouses, shall be kept in a safe dry place as low down in the tower as dryness permits where it is readily accessible for use.

The rockets and cartridges shall be used in rotation according to the date of supply.

Any failure shall be reported by the Keeper-in-Charge to the District Superintendent for the information of the Trinity House.

To ensure that no rockets or cartridges are kept over two years old at least one rocket shall be fired every six months. If it has not been necessary to do so for Service purposes during any half year one rocket shall be expended in practice firing at the end of June and December each year under the supervision of an officer of the District Tender, and replacements immediately indented for.

Amendment No. 52—T.H. No. 398/1962

Regulation III. 29.

Delete from list of Rock Stations:—

Strumble Head                      Pembroke Executive Council

Insert fresh paragraph after list of Rock Stations:—

Strumble Head, Orfordness, South Stack and Lynmouth Foreland Lighthouses are within the area of a local health authority and emergency medical attention should be obtained from a local doctor under the National Health Scheme.

A special line shall be kept for these practice firings and this shall be carefully dried and used again. The other...

REGULATION: 28(d)

Crane Room Doors

At Wolf, Eddystone, Smalls and Hanois Lighthouses safety bars are fitted for use when the crane room doorway is open and the crane is not in use.

When the Keeper is operating the crane he is to wear a safety harness of fixed length anchored with a suitable clip to an eyebolt.

The doors are only to be opened with the knowledge and approval of the Keeper-in-Charge.

Rock Station Journal.

AMENDMENT  
15/6

28(e) At each relief the Principal Keeper or Keeper-in-Charge shall submit a certificate to the District Superintendent that he has examined the life saving and fire fighting equipment at the station and found it correct, or, if not correct, the deficiency shall be stated.

III. 29.—MEDICAL ATTENTION

The following Rock Stations come within the area of a local health authority and in the case of Keepers at these stations requiring emergency medical attention the appropriate Doctor in the area, as instructed by the District Superintendent, should be contacted. The Doctor's fees and the cost of his transportation to the station are the responsibility of the local health authority.

<i>Station</i>	<i>Local Health Authority</i>
Skerries	Anglesey Executive Council
Longships	Cornwall .. ..
Portland Breakwater	Dorset .. ..
Beachy Head	Eastbourne .. ..
Needles	Isle of Wight .. ..
Coquet	Northumberland .. ..
Flatholm	Cardiff .. ..
Lundy North } Lundy South }	Devon .. ..
Round Island } Bishop Rock }	Isles of Scilly .. ..
Strumble Head	Pembroke .. ..

At Rock Stations other than those mentioned above the normal emergency procedure for summoning medical aid should be followed and in this case the doctor's fees and cost of transportation are payable by Trinity House.

All Shore Stations are within the area of a local health authority and the Keepers and their families at such stations should be registered with a local doctor and receive medical attention under the National Health Scheme in the normal way.

III. 30.—MEDICINE CHESTS

The Principal Keeper shall see that the station medicine chest is kept fully stocked with such drugs, etc., as are authorised in the printed list supplied for that purpose. A copy of the list shall be kept in the medicine chest which is to be kept locked. The key shall be retained by the Keeper-in-Charge.

*all items in the printed list of drugs, etc., to be kept in the medicine chest with supplies of Rum and strata's. Amendment 170.*

At each relief the Principal Keeper or Keeper-in-Charge shall submit a certificate to the District Superintendent that he has examined the contents of the medicine chest and found them correct.

### III. 31.—MINERAL OIL BURNERS

At stations which have Douglass 2 wick oil lamps in the subsidiary light, the Principal Keeper or Keeper-in-Charge shall see that the lamps and burners are in good order and that the lamps are lit and extinguished at the same times as the main light. The lightkeeper on watch shall inspect the lamps at least once during his watch.

Where these lamps are fitted with two-wick burners both wicks shall be used at all times when the burners are in action.

In order to maintain the maximum intensity of light it is essential that the wicks be carefully trimmed. This shall be carried out in the following manner:—

Every morning when the oil reservoirs are removed from the reflectors the burners shall be detached and the oil remaining in them poured out. After the reflectors have been cleaned the burners shall be placed in position and, when the refilled reservoirs have also been replaced, the wicks shall be raised about  $1/16$ th inch above the level of the top of the tips. They shall then be lighted, the cylinders placed in position and the tops of the wicks allowed to burn off, this being done without the oil being turned on from the reservoir. When the flame has completely burnt itself out the charred portion of the wick shall be carefully removed with the fingers and the air spaces well cleaned. The burners will then be ready for service. Whenever the burners are re-wicked the tops of the wicks shall be carefully burnt off as detailed above before being used for service.

The tips of burners shall be maintained perfectly clean but no attempt shall be made to keep them bright. They should be merely boiled in potash every morning and then, while hot, dipped in cold water, when any deposit may be easily removed with the fingers. Care should be taken that the tips rest truly and properly on the top of the wick tube when in place.

### III. 32.—NATIONAL INSURANCE

#### (a) General

Lighthouse keepers, excepting those attached to lighthouses in the Channel Islands and Europa Point, Gibraltar, are compulsorily insured under the National Insurance Acts, details of which are given in Pamphlet VI. The arrangements applicable to keepers attached to the Channel Islands' Lighthouses and Europa Point, Gibraltar, are as follows:—

#### (b) Channel Islands and Gibraltar

For National Insurance purposes keepers attached to Lighthouses in the Channel Islands and the Principal Keeper, Europa Point Lighthouse, Gibraltar, are in one of the following categories:—

- (i) those who have their homes in the Channel Islands and the Principal Keeper, Europa Point, who lives at the Lighthouse or
- (ii) those who return from duty at Lighthouses in the Channel Islands to their homes in England or Wales for their shore turns.

(Locally engaged keepers in the Channel Islands and Gibraltar, who are not available for duty outside their home areas, are not covered by the National Insurance Scheme and therefore pay no contributions towards it).

**Category (i)**

Keepers in this category are compulsorily insurable and continue to pay Class I contributions (but not industrial injury contributions) for twelve months from date of taking up residence in the Channel Islands or Gibraltar. After twelve months they have the option of remaining in insurance by paying Class III contributions (as for non-employed people) or of opting out of the scheme for the remainder of the time they are living in the Channel Islands or Gibraltar. On return to live in England or Wales all Keepers are required to pay Class I contributions.

Those who elect to continue in insurance after the first twelve months and have at least 45 contributions to their credit each year will be regarded as having paid at the Class I rate on returning to live in England or Wales and will thus have immediate title to all the benefits offered under the National Insurance Scheme.

Alternatively keepers who opt out of insurance, are, on return to England or Wales to live, required to pay Class I contributions for the appropriate periods before qualifying for the various benefits.

Keepers in this category are not insurable under the Industrial Injury Act 1946 whilst resident in the Channel Islands and if, therefore, they are off duty as the result of injury they will receive normal sick pay from the Corporation. (In this case, as there is no Industrial Injury Benefit payable, there will be no deduction from sick pay).

The foregoing paragraph does not apply to the keepers at Gibraltar (including in this instance the local assistant keepers). These keepers are covered by the terms of the Gibraltar Employment Injuries Insurance Ordinance and receive Injury Benefit if they are off duty as a result of injury at work. Such benefit is deducted from normal sick pay at full pay rate but not from sick pay at half pay rate. The Gibraltar Keepers receive free medical attention for any disability which results from an injury on duty.

With the exception detailed above for the keepers at Europa Point Lighthouse, keepers in category (i) are not entitled to free medical attendance or to benefits under the National Insurance and National Health Schemes ("In the Channel Islands (not Jersey) sickness benefit and maternity allowance is however payable during the first six months of absence from England or Wales") as are their counterparts in England and Wales, and they should therefore submit to their District Superintendent (or Agent) accounts for expenses incurred by themselves or their wives and children under 18 years of age for medical, dental or optical treatment. Such expenses, if reasonable, will be paid by the Corporation with the exception that charges for medicines, drugs, appliances, new dentures, dental treatment, and eye glasses will be subject to payment by the lightkeeper concerned of the same amount as is payable by keepers resident in England and Wales.

This regulation does not apply to the local assistant keepers at Gibraltar.

### Category (ii)

Keepers in this category are compulsorily insurable in Class I (General) with the exception that Industrial Injury Contributions are only payable when they are in England and Wales on relief and not when they are on actual lighthouse duty in the Channel Islands.

Information regarding the rates of contributions and of the various benefits payable may be obtained from the District Superintendent or from any office of the Ministry of Pensions and National Insurance.

### III. 33.—OCCASIONAL KEEPERS AT LAND LIGHTHOUSES

So far as is practicable a roster of occasional keepers, i.e., local men, has been set up and is maintained for each land lighthouse. These men may, when trained, be called upon for duty (in lieu of supernumerary assistant keepers) when circumstances require it.

The Keeper-in-Charge shall report to his District Superintendent the names and addresses of any suitable men who may from time to time seek employment as occasional keepers.

### III. 34.—OCCULTING OR REVOLVING MACHINERY

Occluding or revolving machinery including the revolving carriage of the lens, shall be kept scrupulously clean, and all bearings and working parts carefully lubricated.

Great care shall be taken that no dust or grit gets into the bearings or working parts of the machinery.

The machines shall be carefully wound up at regular intervals and on no account allowed to run down while they are required for service. In the case of revolving dioptric apparatus the machine shall be started and put in gear before lighting up, and in the case of occulating or revolving catoptric apparatus it shall be started as soon as possible after lighting up.

The speed of the machine shall frequently be verified and adjusted, if found incorrect, by a turn or two of the screw of the governor. It is not advisable to alter the adjustments more frequently than necessary.

The adjustment of the revolving carriage or mercury float of a lens shall on no account be altered by the keepers. Any defects or irregularities in the working of the carriage or float shall be reported immediately to the District Superintendent and adjusted only by an experienced mechanic. The weights of all fog bells, revolving, occulating, and actuating machines shall, on the lifting of a fog, or the extinction of a light, be allowed to run down on to the buffers in the base of the weight tubes. Any attempt to suspend the weights in the tubes is attended with considerable danger.

The keeper on watch is responsible for seeing that the clock driving weight is fully wound up at lighting-up-time and at the commencement of each watch the alarm arrangement, provided for warning when the weight is down to its lower position and in need of rewinding, shall be tested and proved to be in proper working order. The Keeper on watch shall stand by until this has been done.

Amendment No. 39—T.H. No. 237/1962

Regulation III.34—Add:

In order to ensure that the automatic alarm on the clockwork re-wind equipment is efficient, the alarm mechanism shall be tested by weight actuation daily after the light has been extinguished. Testing at the commencement of each watch may be carried out by hand.

*Amendment No. 16  
Refers.*

Amendment No. 129

T.H. Nos. 1467/66,  
119/2/2

REGULATION 111.36 (c)

*Add:-*

Before changing over from one tank to another the fresh tank is to be checked for water content by opening the drain cock.

Only when it is ascertained that the oil in the full tank is clean is the changeover to be made.

REGULATION 111.36 (d)

*Delete first sentence and substitute the following:-*

The three oils (excluding lubricating oil) normally in use at Lighthouses are Light Mineral Oil (L.M.O.) Petroleum Gas Oil (P.G.O.) and Domestic Heating Oil (D.H.O.) and the tanks in which they are stored shall be appropriately labelled.

Sole reliance is however not to be placed on the alarm bell gear which is intended to be a final warning that the mechanism requires rewinding, and the instructions contained in this paragraph as to regular rewinding of the clock weight shall be strictly observed. At Stations where the clock driving weight is suspended by means of a wire rope the rope shall be examined monthly to detect any fraying or damaged strands. This can readily be done by passing the hand along the wire.

### III. 35.—OFFICIAL DWELLINGS

It shall be distinctly understood by all lighthouse keepers that dwellings or other accommodation belonging to the Corporation and occupied by the keepers and their families only by virtue of their employment at the particular lighthouse where such accommodation is available, must be vacated by the keepers and their families, together with their furniture and effects, immediately they cease to be attached to the lighthouses in question.

This regulation applies in all cases of transfer, retirement through ill-health, discharge through misconduct or superannuation on reaching the retiring age.

### III. 36.—OIL

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*Amendment No. 160*

T.H. 100/6/3.

REPLACE REGULATIONS III 36 with the following:-

#### III.36. OIL

(a) Inspection and gauging of tanks

In order to safeguard against leakage or contamination, the oil store and oil room shall be inspected by the Principal Keeper, and all oil storage tanks and other receptacles for the storage of oil gauged daily. All oil in stock shall be measured by actual gauging on the last day of the month in order to arrive at an actual balance in connection with the oil accounts.

(b) Leakage

Any leakage, contamination or marked deficiency of oil that may be discovered at any time shall be reported to the District Superintendent immediately.

(c) Testing of fuel oil for water content

All fuel oil storage tanks are to be tested for water content, as follows:-

- (1) Before receiving fresh supplies of oil
- (2) 24 hours after receiving fresh supplies
- (3) Prior to changing over from one tank to another
- (4) Once a month.

After filling, storage tanks are to be left to settle for at least 24 hours before attempting to draw off fuel oil for station use.

Prior to receiving fresh supplies of oil, all station header tanks are to be filled, to prevent disturbed sediment being pumped into header tanks.

If an abnormal amount of water is detected, it should be removed immediately and the fact reported to the District Superintendent and entered into the station Journal and Oil Book.

The Principal Keeper shall see that all precautions and checks are taken to ensure that only clean fuel oil, free from sediment and water contamination, is

REGULATION III 36 cont'd.

Particular care shall be taken to see that the screw-on filler caps of all steel tanks are screwed down tightly after replenishing these tanks and kept so until oil therein is required for use.

When filling the tanks or cisterns, the strainer shall always be used and care taken to prevent dirt or water entering at any time.

When an oil store is provided it shall not be used for any other purpose whatever, and shall be kept well ventilated and perfectly clean and free from any waste oil.

The greatest care shall be taken when oil is being drawn off to ensure that none is spilled.

If any oil is spilled accidentally it shall be cleaned up immediately.

Oil shall be carried from the store for service only in the proper can provided with an airtight screwed cover, and an airtight screwed cap to the spout. After charging the receivers the can shall be returned to the store with the covers to spout and top screwed tight.

The Keepers shall not under any circumstances enter the oil store with a naked flame light of any description. Wherever it is necessary to enter the oil tanks the manhole covers shall be taken off and shall remain off for two days before the tanks are entered and no naked light shall on any account be taken into them.

Screw caps of oil drums are to be kept properly secured whether drums are empty or full, and if stored in the open, drums are to be kept covered with a tarpaulin.

Drums regularly used for transporting oil shall be steamed cleaned at intervals of approximately 15 months as a precaution against contamination of oil by rust or scale

(g) Consumption of P.V.B.

The Keepers shall ascertain carefully the quantity of oil consumed nightly by measuring the oil put into the receivers on the following morning, which can be done by means of the graduated glasses.

The consumption for each size of burner is as follows:-

<u>Size of Burner</u>	<u>Pints per Hour</u>
M/M	
35	2
50	1½
75	2½
100	3½

**III. 37.—OVERHAUL OF MERCURY FLOATS, AND LIGHT AND FOG SIGNAL EQUIPMENT**

AM No 202 The mercury trough at all lighthouses will be lowered and cleaned out every 10 years by a mechanic from the Blackwall Workshops and the light and fog signal equipment overhauled periodically as a matter of regular routine. The arrangements for both operations will be made under the direction of the Engineer-in-Chief.

**III. 38.—PAINTING**

(a) **Annual Painting of Lanterns, etc.**

The keepers, except at stations having only one keeper, shall once a year in the month of May, unless otherwise ordered, paint the lantern, gallery handrailing and gallery flat. Gutters and rain-water outlets shall be cleaned out every three months, or more often if found necessary.

Water tanks shall be cleaned out and hot limewashed annually. Where lighthouses have flashing lights and lights with sectors the insides of the lanterns (from upper side of pedestal) shall be painted matt black, but where there are fixed or occulting lights with no sectors the interior shall be painted white.

(b) **Contract Painting—Supervision by Keepers**

A lighthouse and premises are painted to make the station conspicuous as a seamark and for preservation of the structure.

ensure that only fuel is drawn off from the main storage tanks.

(d) Cleaning of Tanks

Provided all precautions specified in (111) c are adhered to, the period between cleaning of main fuel tanks will vary from station to station, dependent upon individual storage conditions, but periods of 10 years or more can be expected.

As a general rule therefore, main tanks are to be thoroughly cleaned out before the sludge level is such that there is the possibility of sludge being pumped into the header tanks. The cleaning of the main tank is to be recorded in the Station Journal and Oil Book, and the District Superintendent informed accordingly.

On stations having only one storage tank, when the presence of sludge necessitates cleaning operations, the fact should be reported to the District Superintendent, who will arrange in conjunction with the Workshops Superintendent Blackwall, for a local Contractor who specialises in tank cleaning operations, to carry out the work and provide the necessary temporary storage.

With the extended period envisaged between tank cleaning operations, it is essential that manufacturers' instructions regarding cleaning of engine fuel filters are strictly adhered to. In addition, all other filters fitted in fuel supply or draw off pipelines are to be inspected and cleaned once a month.

Fuel header tanks are to be checked periodically for accumulation of sediment and cleaned when necessary. A drain cock is provided on all header tanks for draining and the tank can then be cleaned by flushing out with paraffin or Diesel fuel.

and Use  
Oils (excluding turbine oil) normally in use at Lighthouses are  
Kerosene, Diesel Oil, and Diesel Oil (P.F.O.).  
All containers shall be appropriately labelled.  
Systems provided for the purpose  
of fuel storage shall be used.

440 2/1/1970

*Add at end:-*

Screw caps of oil drums are to be kept properly secured whether drums are empty or full, and if stored in the open, drums are to be kept covered with a tarpaulin.

Drums regularly used for transporting oil shall be steam cleaned at intervals of approximately 15 months as a precaution against contamination of oil by rust or scale.

*Add the following after second section on second page:-*

The greatest care shall be taken when oil is being drawn off to ensure that none is spilled.

If any oil is spilled accidentally it shall be cleaned up immediately.

*Amendment 160. Refs.*

PAMPHLET III

REGULATIONS III 38-PAINTING AND III 39-PAINTING ROUTINE

Delete existing regulations and insert:-

III 38 - PAINTING

Supervision of Contract Painting

A lighthouse, dwellings and other premises are painted to make the station conspicuous as a seamark and for the preservation of the structure. Special paints are used during painting contracts and to ensure that they last sufficiently well between the scheduled painting, surfaces must be properly prepared and the paints properly applied.

The Principal Keeper is to ensure that any departures from the following requirements of the contract are immediately reported to the District Superintendent:-

- (i) Paint to be cleaned off must be burnt off and entirely removed by scraper.
- (ii) Paint not to be cleaned right off. must be well cleaned down and all dirt, grease, blistered or loose paint entirely removed.
- (iii) All surfaces, including metal surfaces which must be well chipped and have all rust removed, must be well primed before any undercoat paint is applied.
- (iv) All cracks in masonry must be primed and stopped before painting.
- (v) No thinning down of paint must take place.
- (vi) Painting must not be carried out during inclement weather likely to be detrimental to the painting work.
- (vii) Paint must be delivered in sealed containers, be the material specified, and bear the maker's name and description, and thereafter be kept in a suitable store.

Painting contracts are entered into periodically and special paints are used in an endeavour to ensure that the paints last sufficiently well between one painting and the next, but, unless the surfaces are properly prepared and unless the paints are properly applied no paint, however good, will have any lasting qualities. It is therefore the duty of the Principal Keeper or Keeper-in-Charge to see that both these conditions are fulfilled, otherwise the station will become dull in appearance and lose its value as a seamarck.

**(c) Preparation of Surfaces:—**

To prepare surfaces properly the following points should be carefully watched:—

**(i) Limewhitened surfaces to be painted**

All limewhite shall be thoroughly scraped off and the surfaces brushed down or otherwise lime will be left on will kill the paint.

**(ii) Painted surfaces to be re-painted**

If the paint has to be cleaned right off, it shall be burnt off and entirely removed with a scraper. Iron surfaces shall be well chipped to remove all rust because if rust is painted over it will only burst the paint later.

If the paint is not to be cleaned right off, the surfaces shall be well washed down to remove all dirt and grease as far as possible; all blistered or loose paint shall be entirely removed and, where rust is showing the paint shall be similarly removed and the rust spots chipped away until clean iron is showing. Surfaces from which the paint has been removed shall be well primed before any undercoat paint is applied to them; metal surfaces must be primed immediately after preparation and not left uncovered overnight. It is the duty of the Principal or the Keeper-in-Charge to see that all surfaces are properly prepared before any paint is applied and the Contractor shall not be allowed to proceed with the painting until they have been prepared and primed; complete individual areas such as one side of the building shall be prepared at a time before painting is commenced and the preparation shall not be done in patches.

**(iii) Masonry**

All cracks in masonry shall be properly primed and stopped before painting and the Principal Keeper or Keeper-in-Charge shall see that this is done as it is essential for keeping the interior of the buildings free from damp.

**(d) Quality of Paints**

No thinning down of paint is permitted and the supervising keeper shall see that the paints are used as supplied and that no thinners are added.

**(e) Weather Conditions**

No painting shall be allowed during wet weather, or during inclement weather likely to be detrimental to painting work.

**(f) Specifications**

The Principal Keeper or Keeper-in-Charge shall carefully read the Terms and Conditions of Contract and General Specification and see that the instructions are carried out faithfully. He shall particularly note clauses XX and XXI of the General

Specification which make him responsible for seeing that the surfaces are properly prepared and that he is not to permit any painting until they are. The preparation of surfaces is fully described in clause XVII of the General Specification; clauses XVIII and XIX explain the reference letters of treatment referred to in the Schedule of Painting (Schedule No. 2) which also states the finishing colour. The keeper who is supervising the painting shall see that the paints delivered are the paints specified and that they bear the maker's name and description and that the paint is delivered in sealed containers.

He shall see that he receives the samples referred to in clause VII of the General Specification and that they are in sealed tins marked with the name and description of the paint. He shall, as soon as he receives them, send them at once to the Engineer-in-Chief at the Trinity House.

In the case of island and rock stations the samples will be sent to the District Superintendent and forwarded by him to the Engineer-in-Chief.

No paint shall be opened by the Contractor until the Principal Keeper or Keeper-in-Charge has received notification from the Engineer-in-Chief or from the District Superintendent that the samples are approved and then only if he is satisfied that the surfaces are properly prepared and ready for painting.

**(g) Inspection**

The lighthouse tower will be examined from a cradle by the Engineer-in-Chief's representative and the Principal Keeper or Keeper-in-Charge shall notify him by wire three days before it is to be cleaned down, ready for inspection. On no account shall the keeper arrange for the Engineer-in-Chief's representative to arrive at the station only to find that it has not been properly prepared or that the Contractor has already started painting. The keeper shall try to get as much of the rest of the station prepared before the representative's visit so that he can inspect all surfaces before painting commences.

**(h) Irregularities**

If the Contractor fails to carry out the instructions of the Principal Keeper or the Keeper-in-Charge, or performs any irregularities the keeper shall send a telegram at once to the Engineer-in-Chief and ask for a visit of inspection.

**(i) Paint to be left at the Station**

The keeper shall see that the paint specified in Schedule No. 3 to be left on the station is handed over to him by the Contractor before he leaves the station; if not he shall report the deficiency at once to the Engineer-in-Chief through the District Superintendent. This paint shall only be accepted in sealed containers; open or part used containers shall not be accepted. The keeper shall sign for the paint on the proper form of receipt, and forward the receipt to the Engineer-in-Chief through the District Superintendent.

**(j) Progress Reports**

The Principal Keeper or Keeper-in-Charge shall forward a weekly progress report, stating in general terms what surfaces have been prepared and what painting has been executed during the current week. It is to be sent to the Engineer-in-Chief every Saturday on the form sent to the Station with the other Contract

**Amendment No. 53—T.H. No. 928/1960**

**Regulation No. III. 39(b)(i)**

**Line 2: Delete "four"**

**Insert "three"**

Painting Papers and a copy sent to the District Superintendent. Isolated rock stations shall report by wire in code and forward the report sheet at the first opportunity. A sample report and wire for isolated rock stations will also be found with the contract papers.

**(k) Completion Reports**

When the painting Contract is nearing completion the keeper shall notify his Superintendent direct. Isolated Rock Stations to report by wire as follows:—

“Painting nearing completion”.

These notifications shall be sent five days before the anticipated date for completion.

When the painting is finished the station will be inspected by the District Superintendent.

**III. 39.—PAINTING ROUTINE**

The following routine is normally followed regarding the painting of Lighthouses, Lighthouse Dwellings, etc.:—

**(a) Rock Lighthouses (External)**

- (i) Towers of granite construction are not painted. Towers of masonry construction are painted every four years by contract. Specifications in these cases are prepared by the Engineer-in-Chief and tenders are invited by the Lights Department at Trinity House.
- (ii) Ironwork is painted every two years by local contract, by the Depot Staff, or by the keepers. Specifications are prepared and tenders are invited by the District Superintendent.

**(b) Rock Lighthouses (Internal)**

- (i) At stations with granite towers internal painting is carried out every ~~four~~<sup>eight</sup> years by local contractors or by the keepers. Specifications are prepared and tenders are invited by the District Superintendent.
- (ii) At masonry tower stations the internal painting work is included in the contract for the external painting.

**(c) Shore Lighthouses (External)**

- (i) The whole station including the dwellings is painted externally every four years by contract. Specifications are prepared by the Engineer-in-Chief and tenders are invited by the Lights Department at Trinity House.
- (ii) External ironwork is painted every two years by local contract or by the Depot Staff. Specifications are prepared and tenders invited by the District Superintendent.

**(d) Shore Lighthouses (Internal)**

- (i) Internal painting of Towers and other buildings, apart from the dwellings, is included in the contract for the external painting every four years.
- (ii) Dwellings are painted internally every ~~six~~<sup>EIGHT</sup> years by local contract. Specifications are prepared and tenders invited by the Superintendent.

- (iii) Colour Scheme.

A standard colour scheme has been adopted by the Corporation for all internal painting of Lighthouse Dwellings and no other colours are to be used. The approved colours will be specified in the contract documents.

(e) **Structural Ironwork (including R/B Masts, gantries, bridges, etc.)**

All structural ironwork is painted every two years. Specifications are prepared by the Engineer-in-Chief and tenders are invited by the Lights Department at the Trinity House.

*NOTE*:—The painting procedure set out in this paragraph has been approved as the standard routine, but the practice is to put painting in hand only where found, after inspection by the District Superintendent, to be necessary.

**III. 40.—PETROLEUM VAPOUR BURNERS**

The keepers shall change the burners on alternate nights to ensure that each spare burner is kept in a proper state of efficiency.

Burners shall be lighted every evening at 15 minutes before Sunset and kept constantly burning bright and clear till Sunrise, the times of which are stated in the time-table supplied to the station: but in foggy weather burners shall be lighted one hour before Sunset and kept burning till one hour after Sunrise. To ensure the light proceeding from the burner being properly directed, it must be accurately placed in the focus of the apparatus, that is, the axis or centre of the mantle must be exactly in the axis or centre of the apparatus.

The following are the distances of the top of each of the burners below the focal plane:—

SIZE OF BURNERS	DISTANCE OF TOP OF BURNER BELOW FOCAL PLANE
M/M	Inches
35	$\frac{5}{8}$
50	$\frac{3}{4}$
75	$1\frac{1}{8}$
100	$1\frac{3}{8}$

The spare burners shall be kept in the Service Room in the place provided. The Keeper-in-Charge shall daily see that the working burner is disconnected, dismantled and cleaned in accordance with the detailed instructions set out in the framed instructional drawing for "Hood" Petroleum Vapour Burners, particular care being taken to ensure that no loose scale or carbon remains in the vapouriser tube after cleaning.

During the time that the burner is in operation the keeper on watch shall take care that the working pressure of the burner as shown on the pressure gauges in the lantern does not exceed 60 lb. per square inch.

In case of any burner or part getting out of order to such an extent that it cannot be repaired by the keepers, it shall be packed securely and forwarded at once to the Superintendent, Trinity Workshops, Blackwall, and an indent for its repair sent through the District Superintendent. Care shall especially be taken that the establishment is never left without a sufficient quantity of spare burners and parts. The ventilating tube and the upper portion of the dome ceiling shall be carefully brushed through and the deposit removed at least once a week.

*Cancelled 8/2/79.*

PAMPHLET III

REGULATION III 44 - RAIN WATER SUPPLY

Delete existing title and Regulation and insert:-

III 44 - RAIN WATER SUPPLY - CLEANLINESS OF ROOFS, GUTTERS AND TANKS

At stations where rain water is collected for domestic purposes and/or for use with fog signal engines, the Principal Keeper is to ensure that:-

- (1) All roofs, gutters and rain water outlets of Lighthouse dwellings and fog signal houses etc., are kept clean and free of dead birds, dirt and other material which might get washed into the downpipes. This cleaning must be carried out every three months or more often if found necessary.
- (11) The water supply tanks are kept clean at all times and cleaned out at least once a year.

At all other stations the Principal Keeper is to ensure that:-

- (111) All roofs, gutters and rain water outlets at the station are cleaned out atleast once a year or more often if found necessary.

## PAMPHLET III

## REGULATION III.41 - PREMISES TO BE KEPT IN GOOD ORDER

Delete existing regulation and insert:-

## III.41 - PREMISES TO BE KEPT IN GOOD ORDER

The Principal Keeper shall ensure that:-

- (i) All the buildings, approach roads, garden paths, water tanks, ditches, drains etc. connected with the establishment are kept in good order and repair as far as practicable.
- (ii) In cases where extensive repairs due to storms or other causes are necessary a detailed report is made at once to the District Superintendent.
- (iii) When a Trinity House dwelling is referred to in a report, indent or other document the dwelling is clearly identified either by number or geographical or other description (e.g. West Dwelling, North Dwelling, Tower Dwelling etc.). If necessary, the occupant's name shall also be given.

In cases in which the dwellings at a Lighthouse establishment are numbered, or geographically or otherwise described (e.g., East dwelling, West dwelling, etc.), such designation shall also be inserted.

## III. 42.—PROMOTION

After satisfactory service and progress in training supernumerary assistant keepers are, as vacancies occur, appointed to stations as permanent assistant keepers and married quarters are provided (or house allowance paid in lieu) as appropriate for the station concerned.

If a supernumerary assistant keeper is not appointed to the post of assistant keeper before the completion of FIVE years service he will be appointed to the assistant keeper grade irrespective of whether there is a vacancy and will receive the pay and all the emoluments of an assistant keeper, including house allowance.

Assistant Keepers are promoted to the post of Principal Keeper as vacancies occur in order of seniority, and provided they are suitable.

## III. 43.—QUITTING THE SERVICE

Any lighthouse keeper who desires to quit the Service shall give seven days' notice of his intention to do so and, in the case of a keeper who is afloat or on duty at a lighthouse on the date of expiry of his notice, such notice shall be treated as expiring immediately after he next comes on shore or has been relieved.

## III. 44.—RAIN WATER SUPPLY

The roofs and gutters of lighthouse dwellings, fog signal houses, etc., shall be kept clean and free from dead birds and all kinds of dirt or other material which may collect and might get washed down into the gutters and downpipes. This not only applies to those stations at which rainwater is collected for drinking and/or for use with fog signal engines, but also to those stations where water is obtained from the local supply.

To ensure that a high standard of cleanliness is maintained the Keeper-in-Charge shall see that all flat roofs and their gutters, as well as the gutters of slated roofs are swept and cleaned regularly by the light keepers as often as may be necessary and in any case not less frequently than once a month.

### III. 45.—RECORDS TO BE KEPT

The keeper on watch shall write up the Monthly Journal according to the headings of the columns and shall record all occurrences worthy of note in connection with the station. If anything is observed to be wrong with any seamark the Principal Keeper shall inform the District Superintendent by the earliest possible means.

The letters "G.M.T." or "B.S.T." as the case may be shall be inserted at the head of each day's record in the Journal.

In the Journal and in all official communications 24-hour clock time shall be used.

During the day-time there shall always be a keeper on duty and he shall be responsible for making records. The day duties of the station shall be arranged mutually between the keepers subject to the approval of the Principal Keeper. At shore light-houses without fog signals manned by two keepers only, this regulation may be relaxed, it being understood however that the station shall not be left unguarded; one keeper shall remain at the station though not necessarily on duty. Weather records at the two-keeper land stations may be taken at 0800 and 1600 in lieu of 0900, 1200 and 1500.

AMENDMENT NO. 209

T.H. 535/14/2

~~REGULATION III~~

REGULATION III. 46 - REFLECTORS

Delete existing Regulation and Index entry.

#### REGULATION III. 47 - RELIEFS - ROCK LIGHTHOUSE ROUTINE

Delete existing regulation and insert:-

#### III. 47 - RELIEFS - ROCK LIGHTHOUSE ROUTINE

The following Rock Lighthouses are relieved every 28 days by helicopter:-

##### East Coast District - Inner Dowsing

South Coast District - Bishop Rock, Casquets, Hanois, Longships, Round Island, Royal Sovereign, Wolf Rock.

West Coast District - Bardsey, Platholm, Lundy South, Skerries, Skokholm, Smalls, South Bishop.

The following Rock Lighthouses are relieved locally:-

##### East Coast District

Coquet - Every 4th Tuesday by local boat from Amble.

Longstone - Every 4th Tuesday by Trinity House Launch from Seahouses.

##### South Coast District

Beachy Head - Every 4th Tuesday by local boat from Newhaven.

Eddystone - Every 29th day following previous relief by local boat from Plymouth.

Nab - Every 4th Tuesday by Pilot Launch from Ryde Pier.

Needles - Every 4th Thursday by local boat from Yarmouth, Isle of Wight.

Sark - Every 4th Wednesday by local ferry from Guernsey.

##### West Coast District

Lynmouth Foreland - Every 4th Tuesday overland by car.

South Stack - Every ~~4th Monday~~ overland by car from Holyhead. WJHFSdy.

Strumble Head - Every 4th Tuesday overland by car.

Amendment No.114

T.H.No.L.Misc/66

REGULATION 111.47

*Delete the section beginning "Harwich District:-  
- Orfordness....."*

*Delete reference to Plymouth Breakwater under  
the heading "Penzance District".*

Regulation III. 47—8th line—amend to read: “Eddystone and  
Wolf Rock Lighthouses are . . . .”  
26th line—delete “Eddystone (Tug from Plymouth)”.  
Last line—delete all reference to Holyhead Breakwater  
Lighthouse.  
Regulation III. 38(a)—third line—insert comma after the word  
“lantern”.

Amendment No. 54—T.H. No. 398/1962

Regulation III. 47

Add, before “Strumble Head”:  
“Lynnmouth Foreland and”

Amendment No. 91  
Regulation III 49(a)

Amendment No. 56 replaces paragraph 7, which is to be deleted.

Amendment No. 56—T.H. No. 42/1962

Regulation III. 49(a)

All reserve provisions with the exception of [redacted] tobacco shall be renewed by the District Depot every twelve months, the redundant items being retained at the station for two months thereafter and offered for sale to station personnel before being returned to the District Depot.

**Penzance District**

Every fourth Tuesday—  
Plymouth Breakwater (By Local Tug).

The following are relieved on the 29th day after each previous relief:—

Eddystone (Tug from Plymouth).  
Longships (Local boat from Seena).  
Round Island (Local boat from St. Mary).  
Bishop Rock Ditto.

**Swansea District**

Strumble Head—every fourth Tuesday—overland by car.

**Holyhead District**

South Stack—every fourth Monday—overland by car from Holyhead.

Longstone—every fourth Tuesday—Trinity House Launch from Seahouses.

Coquet—every fourth Thursday by local boat from Amble.

~~Holyhead Breakwater—overland by foot—every fourth Wednesday.~~

*Deleted  
Amendment  
Page 65  
Revisions*

*LYNNOUTH FORELAND AND*

**III. 48.—REPAIR BOOK**

All defects and matters requiring attention at the station shall be entered in the repair book and the entries cancelled when the repairs have been effected.

**III. 49.—RESERVE PROVISIONS**

(a) **General**

The stock of reserve provisions kept at rock lighthouses may be drawn upon by the keepers should their usual period at the lighthouse be extended or should their own provisions run short at any time.

The keepers are not required to take any of the reserve provisions unless they desire to do so.

No issues shall be made by the Keeper-in-Charge without the consent of the District Superintendent except in the case of failure of communication in which case the District Superintendent shall be informed by the earliest possible means.

The stock of reserve provisions at the lighthouse shall be mustered and signed for by the incoming Principal Keeper or Keeper-in-Charge on the relief, and an account of stock expended and remaining shall be sent ashore to the District Superintendent.

Stocks of reserve provisions at the lighthouses shall be replenished from time to time to maintain the quantities authorised for the various stations as set out below and, should the necessity arise, keepers may call upon the emergency stocks carried by the District Tenders.

Reserve provisions should be issued in strict rotation in the order of their supply and for this purpose each tin shall have the date of supply painted on it.

All stocks more than three years old shall be examined periodically and any instance of the contents being bad shall be reported to the District Superintendent.

The issue prices of reserve provisions will be fixed at Trinity House and may be varied from time to time as necessary.

(b) Scales of reserve provisions to be maintained at stations

Rock Lighthouses	Flour or Biscuits lbs.	Meat 12 ozs. Tins
Longstone	56	50
Coquet	28	25
Farne Island	30	20
<del>Spuna</del>	Nil	Nil
<del>Orfordness</del>	Nil	Nil
Beachy Head	Nil	Nil
Nab	Nil	Nil
Needles	28	25
<del>Portland Breakwater</del>	Nil	Nil
Casquets	56	50
Hanois	56	25
Alderney	Nil	Nil
Sark	Nil	Nil
<del>Plymouth Breakwater</del>	Nil	Nil
Round Island	28	25
Lundy North	Nil	Nil
Lundy South	Nil	Nil
<del>Flatholm</del> <small>FLATHOLM FORELANDS</small>	Nil	Nil
Strumble Head	Nil	Nil
Skokholm Island	28	25
Bardsey	Nil	Nil
<del>Holyhead Breakwater</del>	Nil	Nil
South Stack	Nil	Nil
Skerries	28	25

Special Rock Lighthouses	Flour or Biscuits lbs.	Meat 12 ozs. Tins
Eddystone	150	200
Longships	150	200
Wolf Rock	150	200
Bishop Rock	150	200
Smalls	150	200
South Bishop	150	200

All the "Special" Rock Lighthouses named above have the following "additional" Reserve Provisions:—

Tea	(lbs.) 3	Butter	(lbs.) 8
Cocoa	(lbs.) 3	Jam	(lbs.) 4
Sugar	(lbs.) 12	Bovril (large pots)	2
Milk	(tins) 12	Dried Potatoes	(lbs.) 56
Yeast	(lbs.) 2	Cigarettes	500
Vegetables	(lbs.) 56	Tobacco	(lbs.) 3
Soup	(lbs.) 24		

The following extra items of reserve provisions are to be kept at Wolf Rock, Longships and Bishops Rock Lighthouses:—

Plums	or other fruit	(tins)	6
Apricots	obtainable	(tins)	6
Marmalade		(lbs.)	3
Grape Fruit (or sliced oranges)		(tins)	3
Sardines		(tins)	6
Pilchards		(tins)	3
Herrings		(tins)	3
Pork Loaf or Pork Meat		(tins)	3

Amendment No. 55—T.H. No. 398/1962

Regulation III. 49

Paragraph (b) Delete: "Holyhead Breakwater	Nil	Nil"
Add, after Lundy South		
"Lynmouth Foreland	Nil	Nil"

### III. 50.—RETURNS

A list of the periodical returns to be rendered by the Principal Keeper or Keeper-in-Charge to the District Superintendent is set out in Appendix III.

AMENDMENT No 240

T.H. 46/6/1

PAMPHLET III

REGULATION III 51 - ROCK LANDINGS - REPORT

Add at the end of the first paragraph:-

Mooring rings, chains and eyebolts are to be periodically examined and if any are found to be worn or defective in any way the matter should be reported to the District Superintendent.

### III. 52.—ROCK LIGHTHOUSES

Except in the case of the undermentioned lighthouses there is no limit to the period of service during which a keeper is attached to a rock station. Normally keepers are transferred first from "outside" to "inside" stations and eventually to land stations, the postings being based as far as possible on seniority:—

Wolf Rock—period of service limited to two years, inclusive of the monthly shore periods.

Bishop Rock, Longships and Smalls—period of service limited to three years exclusive of the monthly shore periods.

### III. 53.—SIGNALLING PRACTICE

Signalling by means of the Semaphore and Morse Code alternately shall be practised by the keepers every Monday and the time

AMENDMENT NO.212

PAMPHLET III

REGULATION III. 54 - STATION BEARING ARCS AND LOCAL CHARTS

Delete existing title and regulation and insert:-

III. 54 - STATION BEARING PLATES AND LOCAL CHARTS

All lighthouse keepers shall make themselves acquainted with the bearing plates fixed around the wall of the lantern room indicating compass points in relation to true North, also to the navigational dangers in the vicinity as shown on the large and small scale local charts supplied to the station in order that they may warn vessels standing into danger.

#### (a) Receipt and Expenditure

The Principal Keeper shall be responsible for the proper issue of consumable stores and accounting for them in the General Service Stores or the Station Consumable Stores Receipt and Expenditure Book at the station as may be appropriate. He shall report any imperfections in the quality of the oil or other stores and shall indent for further supplies when necessary. If at any time the stock of oil at the station falls to within the quantity required to maintain the station for two months the Keeper-in-Charge shall notify the District Superintendent immediately.

All stores shall be checked from time to time by the Principal Keeper to ascertain that quantities are correct.

**(b) Action on change of Principal Keeper**

When a change of Principal Keeper takes place at a station the outgoing Principal Keeper shall see that the stores lists are balanced up to date and the stores checked by the Incoming Principal Keeper.

If for any reason the outgoing Principal Keeper leaves before the incoming Principal Keeper arrives, however short the period, he shall hand over the stores to the Assistant Keeper-in-Charge who will sign a certificate as the keeper taking over (as directed below). In this event the Keeper-in-Charge will in due course hand over the stores to the incoming Principal Keeper.

After the stores have been checked the keeper taking up duty shall complete, in duplicate, a certificate worded as under, each copy of which shall be countersigned by the outgoing keeper. One copy of the certificate shall be despatched to the District Superintendent and the other retained at the lighthouse.

The form of certificate to be used is as follows:—

“.....LIGHTHOUSE  
I, the undersigned, hereby certify that on taking over this station I have checked ALL the stores and Inventory Equipment and found them:—

(i) in order: { delete either  
(i) or (ii)

(ii) in order except for the following, viz:—  
(particulars of deficiencies and the outgoing keeper's explanation should be stated).

Signed ..... Principal Keeper or  
Assistant Keeper-in-  
Charge.

.....Date

Countersigned ..... Outgoing Principal  
Keeper or Assistant  
Keeper-in-Charge.

**(c) Inventory**

A duplicate of the inventory of equipment at each lighthouse shall be kept at the station and when any change of Principal Keeper takes place the outgoing Principal Keeper shall be called upon to account for any articles missing.

**(d) Condemned Stores**

All stores which have been condemned on survey by the District Superintendent shall, unless absolutely valueless, be returned to the District Depot at the first opportunity.

**(e) Losses**

The Principal Keeper shall report immediately to the District Superintendent all losses of stores or equipment which occur other than through normal consumption or fair wear and tear.

**(f) Annual Certificate**

Annually on 1st January the Principal Keeper or Keeper-in-Charge shall submit to the District Superintendent a certificate on the prescribed form that all transactions in stores during the previous year have been duly recorded.

### III. 56.—SUNDAY OBSERVANCE

The keepers shall be given an opportunity to attend a Place of Worship when within reasonable distance each Sunday in turn, and, where this rule is incompatible with the performance of the lighthouse duties, the keepers shall be given an opportunity for religious observance at the station.

### III. 57.—SUPERNUMERARY ASSISTANT KEEPERS

#### (a) Training

A supernumerary assistant keeper on appointment will be placed under the orders of the Chief Superintendent and be trained at Harwich to obtain his No. 1 Certificate. After obtaining this Certificate he will be sent to, and based on, a District for service at lighthouses which will enable him to gain the knowledge necessary to obtain Nos. 2, 3, and 4 Certificates for the purpose of becoming qualified to perform the full duties of a light keeper. Except in cases of emergency supernumerary assistant keepers will not be called upon to carry out normal duties until they have obtained Nos. 1 and 2 Certificates.

Certificates cover the following subjects:—

#### Certificate No. 1—*from the Principal Keeper/Instructor of Light Keepers.*

“Hood” Burners, various sizes—  
general management and small repairs.  
Explosive Fog Signals—  
general management and small repairs.  
Meteorological Instruments. Use and knowledge of principles. Weather coding, recording of Journal.  
Morse Signalling by lamp.  
Use and care of Aldis Lamp and Semaphore signalling.  
International Code Signalling and general Flag Management.  
Elementary Knotting and Splicing.  
First Aid.  
Cooking.  
Soldering.  
Fire Fighting apparatus, Care, Maintenance and use of.  
R/T Apparatus Transmitting and Receiving.

#### Certificate No. 2

Management of Dioptric Apparatus, including the Revolving Mechanism (consisting of the Rollers, Mercury Float, and Rotating Machine).  
General Management of a Lantern.  
Working of a Fog Signal with Oil Engines, including Air Compressors, Storage Receivers, Sirens, Admission Valves and Actuating Machines.  
Slight repairs to Lamps, Pipes, etc.

#### Certificate No. 3

Management of Electric Generating Plant, Switch Gear and Filament Lamps.  
Management of Semi-Diesel Engines.  
Management of Burner Changer and Automatic Stand-By Light.  
Management of Automatic Clock-winding Apparatus.

#### **Certificate No. 4**

Management of batteries.  
Management of battery-charging plant and control boards.  
Management of wireless equipment, including clock-setting, changing valves, and cleaning aerials.

The services of a supernumerary assistant keeper are liable to be terminated should he fail to obtain satisfactory certificates, and, in cases of inefficiency in any particular subject or subjects, he is liable to be called upon to undergo a second term of instruction and further examination thereon.

In order to qualify for Certificate 2, 3 and 4 supernumerary assistant keepers will be sent to appropriate lighthouses by their District Superintendents having regard to the equipment installed at the various stations and to the availability of suitable living accommodation.

#### **(b) Report Book**

A report book in the authorised form will be issued from Trinity House in respect of each supernumerary assistant keeper on appointment. It shall be kept in the charge of the Chief Superintendent or the Superintendent of the District in which the supernumerary assistant keeper is based and shall be sent by the Superintendent direct to the Principal Keeper of any lighthouse station to which the supernumerary assistant keeper may be sent for instruction or duty.

When the supernumerary assistant keeper leaves the station the Principal Keeper shall insert his report and return it by post to the Chief Superintendent, Harwich, or the Superintendent of the District concerned, who will re-issue it to the next lighthouse station to which the supernumerary assistant keeper is sent.

When a supernumerary assistant keeper is sent from one rock lighthouse direct to another, or from a shore station direct to a rock lighthouse without in the interim returning to his base, the Report Book shall be sent direct by the Keeper-in-Charge of the former to the Keeper-in-Charge of the latter, but in the case of a supernumerary assistant keeper proceeding direct from one shore lighthouse to another, this book shall be returned to the Chief Superintendent, Harwich, or to his District Superintendent.

The Principal Keeper shall record in the book to be kept at the station a copy of each report he makes on a supernumerary assistant keeper.

The Chief Superintendent, Harwich, or the Superintendent of the District on which the supernumerary assistant keeper is based shall report at once to the Board any case of unsatisfactory work or conduct on the part of the supernumerary assistant keeper.

### **III. 58.—TRADING OR TAKING LODGERS FORBIDDEN**

The keepers shall not carry on any trade for profit, expose any article for sale on the establishment, take in boarders or lodgers, sell refreshments on or off the premises or take in other persons' goods for sale.

### III. 59.—TRANSFER OF KEEPERS

When a keeper is transferred to another station he shall report to his Superintendent the date and time of leaving his old station and of arrival at the new station.

### III. 60.—UNIFORM CLOTHING

#### (a) Issue conditions

(i) The uniform clothing is issued to the individual for his personal use but it is to be understood that the whole of the clothing so issued remains strictly the property of Trinity House.

(ii) Uniform clothing shall be worn at all times when on duty at the lighthouse including Sundays and Public Holidays and when away from the station on duty, also whenever the Elder Brethren or the District Superintendent visit the lighthouse and when conducting visitors over the establishment at those lighthouses where visitors are allowed. When on engine room or general cleaning duties the keepers may wear the blue dungaree clothing at the discretion of the Keeper-in-Charge.

(iii) Whilst dungaree clothing is authorised as the working dress and may be worn over uniform or other clothing the keepers shall see that at all times the outer garments present uniformity of appearance, e.g., a "mixed" appearance such as dungaree jacket with serge trousers shall not be worn.

(iv) Uniform caps shall be worn with uniform.

(v) Medal ribbons may be worn on jackets but not on overcoats.

(vi) All the garments issued by the Corporation shall be produced for inspection when required by the District Superintendent or such other officer as he may appoint.

(vii) Garments lost, damaged or rendered unserviceable otherwise than by fair wear and tear shall, if so ordered by the Trinity House, be replaced by new articles issued on repayment—the cost to be recovered from the individual concerned. Where the loss or damage is due to Service exigencies not involving negligence on the part of the individual concerned (of which the Elder Brethren will be the sole judges) the garment or garments will be replaced by a new issue free of any charge to the man.

(viii) If for any reason a keeper leaves or is dismissed from the Service before his appointment has been confirmed, the whole of the last issue of Uniform Clothing made to him before the date of his leaving or being dismissed shall be returned to the District Superintendent before the keeper is paid-off.

(ix) If a keeper leaves the Service in any circumstances other than those covered by the preceding paragraph he will not be required to return any of the articles of Uniform Clothing in his possession at date of leaving.

#### (b) Scales of Issue

Subject to the conditions set out in sub-paragraph (a) above, uniform clothing will be issued free to the established personnel of the Lighthouse Service on first appointment on the following scale:—

Grade	Type No. Uniform	Garment, etc.	Scale of Issue
Lighthouse Keepers	10	<i>A.1 Type Suit</i> Serge Reefer Jacket	one each year
Fog Signal Keepers	11	Blue Pullover	one each year
Supernumerary Assistant Keepers	12	Serge Trousers	3 pairs each 2 years
River Lights Attendant	31	Black Silk Tie	one each year
	27/28	Dungarees or	
	29	Boiler Suit	one each year
	9	Overcoats and Raincoats	1st year Overcoat 4th year Raincoat 7th year Raincoat 10th year Overcoat and so on in cycle
		N.B.—River Lights Attendant to have 2 pairs trousers each year instead of 3 pairs each 2 years. Supernumerary Assistant Keepers to have 1 pair trousers in 1st year and 2 pairs in 2nd year and so on.	
	32	Peak Cap (white top)	one each year.
	—	Gold Embroidered Cap Badge	Issued on appointment and renewed when no longer serviceable in not less than two years.
Occasional Keepers (Not a personal issue but to be kept at the Lighthouse)	27/28 32	Dungarees Peak Cap (White top) Gold Embroidered Cap Badge	Two Suits One One
		N.B.—These items for the Occasional Keepers are issued on appointment and are only replaced when no longer serviceable, the minimum renewal period being three years.	

(c) **Europa Point Lighthouse, Gibraltar**

There are special scales of issue for the Keepers at Europa Point Lighthouse.

In this case uniform suits (which are made of special serge for the climate) and caps are purchased locally by the Agent after he has submitted his proposals and details of prices to Trinity House.

Shoulder Flashes - "Trinity House" in gold wire  
to be worn immediately below the joining seam between  
sleeve and shoulder.

When overcoats, mackintoshes or badges are due, and required, they will normally be purchased in England under the current contract after the Trinity House Agent has submitted the usual requisitions for these items.

**(d) Waterproof Clothing**

Waterproof clothing is a "station issue" to the stations listed below only.

Nash Lighthouse	3 sets
Lundy South Lighthouse	3 sets
Lundy North Lighthouse	3 sets
St. Ann's Head Lighthouse	3 sets
North Stack Fog Signal Station	2 sets
Wolf Rock Lighthouse	3 sets
Eddystone Lighthouse	3 sets
Flatholm Lighthouse	3 sets
Longships Lighthouse	3 sets
Portland Breakwater Lighthouse	3 sets
Dungeness Lighthouse	4 sets
Needles Lighthouse	3 sets
Berry Head Lighthouse	1 set (less Rubber Boots)
Bideford Lighthouse	1 set (less Rubber Boots)
Dee Buoy Keeper	1 set (less Rubber Boots)
Whitby Lighthouse	3 oilskin coats only

Sets of waterproof clothing to comprise the following:—

- One Oilskin Coat.
- One Sou'wester.
- One pair of Sea Boots or Rubber Boots according to Station.

*Replacements* of individual items on submission of a condemned certificate when completely unserviceable.

The River Lights Attendant is supplied with a pair of rubber boots each year and a raincoat and waterproof leggings every two years.

**(e) Badges of Rank**

Principal Keepers and River Lights Attendant wear a gilt metal star on either side of collar of reefing jacket and overcoat.

**III. 61.—VENTILATORS**

The Keeper-in-Charge shall see that the lantern ventilators are kept clean and free so that they can be properly regulated, and that those in the lantern pedestal at oil stations are carefully regulated in conjunction with the casement windows in the service room to maintain sufficient draught for the burners.

**III. 62.—VISITORS**

**(a) At Stations with Engine Rooms**

Visitors shall not (without special permission from the Trinity House) be permitted to enter the engine room or fog signal house while the machinery or the signal is in operation; the engines shall not be started for the purpose of showing visitors the light, or enabling the fog signal to be heard. The machinery shall not be uncovered to show visitors their internal construction without express orders from the Trinity House. When such special permission is given the fact is to be noted in the station journal.

(b) **Lighthouse keepers' friends or relations**

Keepers are permitted to have friends or relations to reside in the land lighthouse dwellings which they occupy, without restriction as to length of stay, on condition that they notify the District Superintendent of their intention to do so and subsequently give notice of the departure of their visitors.

(c) **General**

Visitors shall not be permitted without prior permission from the Trinity House at the following stations:—

All unwatched and semi-watched lights.

Orfordness	Longships
Hanois	Round Island
Casquets	Wolf Rock
Needles	<del>Plymouth Breakwater</del>
Nab (unless the visitor holds a permit from the Admiralty)	Smalls
Eddystone	South Bishop
Bishop Rock	Longstone
<del>Beachy Head</del>	Coquet

Visitors may be permitted to view all other lighthouses, at the discretion of the Keeper-in-Charge, without special permission from the Trinity House, on week-days between the hours of 1300 and one hour before sunset, but not after that time nor at any time on Sundays, nor when the fog signal is in operation.

Lighthouse keepers, who shall conduct themselves with civility towards visitors, shall not permit large parties to enter at the same time nor admit any person in a state of intoxication, and they are authorised to refuse admission altogether in the event of an excessive number of people seeking admission at one time.

The keepers shall take care that no person is permitted to inspect any part of the establishment unattended by one of them and they shall be held responsible for seeing that no damage is caused by the visitors to the lighting apparatus or any part of the

"Care is to be taken to see that valuable equipment which can easily be removed is kept locked up when visitors are on the premises."

A notice board shall be exhibited at the entrance gate to all lighthouses at which visitors are authorised, excepting for certain rock lighthouses where this is not practicable. The notice boards shall bear the following standard writing:—

NOTICE

~~On application to the Keeper-in-Charge the public may be admitted free of charge and at their own risk to view certain portions only of this Lighthouse Establishment.~~

Admission will be at the discretion of the Keeper-in-Charge, but the public are not permitted in any circumstances to enter the keepers' dwellings\* or the wireless or battery rooms, nor to stray about the lighthouse premises.

Admission is only allowed on week-days between the hours of one p.m. and one hour before sunset and then only provided the fog signal is not sounding.

By order,  
T. H. BURLEIGH,  
Secretary.

\*The words "or the wireless or battery rooms" are omitted where there are no such rooms at the lighthouse.

~~Amendment No. 57—Trinity House No. 853/1961 and 1132/1963  
Regulation III. 62(c)~~

~~Add, to the list of stations:—~~

~~Dungeness  
Withernsea~~

*Amendment No. 141.  
Refers.*

Amendment No. 115

T.H. No. 18/66

REGULATION 111.62(c)

*Delete Orfordness and Plymouth Breakwater  
from list of stations as these are unwatched  
lights.*

*Add Beachy Head to list*

T.H. No. 2423/51

Amendment No. 184 - Regulation III.62 (C)

Delete notice board wording at end of page and substitute the following:-

NOTICE

1. This property is private property. Every person whilst on the property is there entirely at his or her own risk and the Corporation of Trinity House and its servants and agents will not accept any liability for any injury or damage however caused and whether or not due to any breach of duty or any negligent act or omission on the part of the Corporation or its servants or agents.
2. Subject to this condition the Keeper-in-Charge (or Attendant) may, at his discretion, admit members of the public free of charge to view certain parts of the Lighthouse on week days from one hour after noon to one hour before sunset only.
3. The public are not permitted in any circumstances:
  - (a) to enter the Lighthouse if a fog signal is sounding
  - (b) to enter any other buildings associated with the Lighthouse
  - (c) to stray over the property.

By Order of the Corporation.

L. N. POTTER.

Secretary.

In the case of persons visiting any of the rock lighthouses by virtue of a special permit issued by the Corporation the Keeper-in-Charge is authorised, at his sole discretion, to refuse admission at any particular time if conditions of wind, weather and sea or any matters affecting the work of the station or any other reason render it undesirable to admit the prospective visitor or visitors at that time.

### III. 63.—WATCHKEEPING ARRANGEMENTS

#### (a) General

The watchkeeping arrangements at lighthouses shall be at the discretion of the District Superintendent and shall, so far as possible, ensure that each watch does not include more than four

#### REGULATION III. 63 - WATCHKEEPING ARRANGEMENTS

Delete existing regulation and insert:-

#### III. 63 - WATCHKEEPING ARRANGEMENTS

- (a) The Watchkeeping arrangements at lighthouses are at the discretion of the District Superintendent and will, so far as possible, ensure that each watch does not include more than four hours during the period of darkness and that no watch exceeds eight hours in duration.
- At shore lighthouses where a 24 hour watch is kept the watches will be arranged so that each Keeper has at least 24 consecutive hours free from duty every week and where this is not practicable without assistance an Occasional Keeper will be employed.
- Watches will be changed every night so that the same Keeper does not have the same watch two nights consecutively.
- (b) The Principal Keeper shall:-
- (i) Ensure that a regular and constant watch is maintained in the central control room (at stations where this is applicable) or other position as directed and that the Keeper on watch makes frequent visits to the engine, lantern and service rooms etc., as necessary,
  - (ii) Ensure that Keepers going off duty are properly relieved before going off duty.
  - (iii) Bear in mind that nothing in this regulation is intended to prevent a Keeper on watch from summoning assistance in the case of an emergency.
- (c) At stations where these general instructions regarding watchkeeping do not apply the Principal Keeper shall ensure that any special instructions written in the order book are followed.

case of an emergency.

In the case of three keepers having to work both light and fog signal the watches at night shall be so arranged that each keeper takes the watch for four hours in the lantern followed by a four-hour watch in the engine room. The keeper on duty in the lantern at night is responsible for calling out the keeper next on turn for duty in case of fog coming on, and also for the fog signal being stopped when it is no longer required.

At rock lighthouses where there is an explosive fog signal and three keepers, the keeper on watch shall call up the keeper next on turn for duty to work the fog signal.

#### (c) Day watches during fog

During fog by day the keeper on watch shall take the work in the engine room and be responsible for starting and stopping the fog signal.

(d) **Special stations**

At stations where these general instructions regarding watch-keeping do not apply, the special instructions written in the order books of the stations shall be followed.

(e) **Engine room watches**

A chair will be allowed in the engine room but no article on which to recline and the keeper on watch there shall not, on any pretence whatever, leave the engine room except to visit the fog signal house at stations where the latter is detached from the engine room. Every care and attention must be given to the machinery to ensure that it is properly lubricated and maintained.

**III. 64.—WORKMEN EMPLOYED AT LIGHTHOUSES**

The Principal Keeper shall keep careful account of all work in the form of repairs to the lighthouse or adjoining premises, of the number of workmen employed and of the hours worked and transmit the information to the District Superintendent.

In the case of repairs executed by Trinity House masons or Blackwall Workshops mechanics and their assistants, the Principal Keeper shall check the number of hours worked and sign the weekly time cards or time sheets issued by the Engineer-in-Chief or by the Workshops Superintendent.

In all cases the Principal Keeper or Keeper-in-Charge shall enter in the Station Journal the date and time of arrival and departure of workmen.

**III. 65.—WORKSHOPS MECHANICS**

When mechanics from Blackwall Workshops are engaged on work at lighthouses, they shall ~~render assistance to lighthouse keepers and/or relieving staff whenever called upon in an emergency, unless the work they have in hand at the time makes it impossible to do so. Conversely keepers shall render assistance to a mechanic should he get into difficulties and require help.~~

*Amendment  
appended*

By Order of the Board,  
Trinity House, London, E.C.3.  
April, 1957.

Insert New Regulation III.66

**EAR MUFFS**

Where personnel are exposed to high level sound e.g. from fog signals or engine rooms they are to wear the ear muffs provided.

AMENDMENT NO. 234

535/14/2

PAMPHLET 111

REGULATION III 66 - SOLID FUEL HEAT RETENTION COOKING STOVES

Amend number of regulation to III 67.

AMENDMENT NO. 208

PAMPHLET III

REGULATION III. 65 - WORKSHOPS AND INSPECTOR OF WORKS PERSONNEL

Delete existing regulation and insert:-

III. 65 - WORKSHOPS AND INSPECTOR OF WORKS' PERSONNEL

When Blackwall Workshops or Inspector of Works' personnel are engaged on work at lighthouses they shall render assistance to keepers and/or relieving staff whenever called upon in an emergency, unless the work they have in hand makes it impossible to do so. Conversely keepers shall render assistance to Blackwall Workshops and Inspector of Works' personnel should they get into difficulties and require help.

Amendment No. 37—T.H. No. 1990/1953

Pamphlet III—Appendix I.

Delete Pear's Encyclopaedia and Whitaker's Almanac.

Add "For Rock Lighthouses at sea only—Bends, Hitches, Knots  
and Splices (Lt. Cdr. John Irving R.N.)

## APPENDIX I

### PRINCIPAL BOOKS TO BE KEPT AT LIGHTHOUSES

The following books shall be kept at each lighthouse and entered up in the proper manner, kept for reference or otherwise disposed of as may be appropriate:—

Order Book,  
Circular Book,  
Annual Journal,  
Monthly Journal,  
Visitors' Book,  
Oil Book,  
Goods Received Book,  
Service Regulations,  
Medical Guide,  
~~Bears—Encyclopaedia,~~  
Repair Book

General Service Stores Receipt  
and Expenditure Book.  
Station Consumable Stores Receipt  
and Expenditure Book.  
Fog Signal Store Account Book.  
Explosive Fog Signal Store—  
Account Book (if applicable).  
Inventory Book.  
Supernumerary Assistant Keeper  
Report Book.  
International Code of Signals  
(Volume 1).  
~~Whitakers—Almanac.~~  
Instruction Cards (Morse and  
Semaphore).

*For Rock Lighthouses only.*

*Bends, Heekes, Knots & Splices  
(By Lt. Cdr. John Irving R.N.)*

## APPENDIX II

### Application for Appointment as Supernumerary Assistant Keeper in the Light House Service.

Name of Candidate:—

Surname.....

Christian Names (in full).....

Age ..... Date of Birth.....

Place of Birth..... Nationality.....

I, .....  
hereby declare that the particulars in regard to myself as stated above are true and correct to the best of my knowledge and belief and I hereby apply to be appointed as a Supernumerary Assistant Keeper in the Lighthouse Service of the Corporation of Trinity House on the understanding that if appointed I shall be subject to the following conditions in particular:—

(1) That from the date of my appointment until the expiration of not less than 12 months I shall be on probation and that at any time during this probationary period the Corporation may give me one week's notice of the termination of my service without reason assigned.

(2) That I am free at any time to leave the Corporation's Service subject to giving not less than seven days' notice in writing of my intention to do so, but that as the nature of my employment is such that circumstances might arise which would involve my being on duty afloat or at a Lighthouse on the date of expiry of the notice given by me the Corporation in any such event and at their entire discretion shall be at liberty to treat such notice as expiring immediately after I have next come on shore or been relieved. If I should absent myself from duty without leave at any time I shall be regarded as having discharged myself from the Corporation's Service without notice.

(3) That the confirmation of my appointment at the end of the probationary period shall be conditional upon a satisfactory certificate being furnished by the Superintendent of the District to which I am appointed as to my general efficiency and good conduct.

(4) That at the end of one year's service and subject to obtaining a satisfactory medical certificate, I shall join the Corporation's Life Insurance Scheme.

(5) That at any time during my service I shall be liable to be transferred to any Lighthouse and that I will go whenever directed by the Corporation to any Station under their jurisdiction.

(6) That the Corporation may call upon me to retire from their Service on account of age or infirmity and may then (subject to the financial sanction of the Ministry of Transport and Civil Aviation) grant me superannuation allowances subject also to the conditions hereinafter named, viz.:—

The same rules, regulations and limitations shall govern the conditions of retirement from the Corporation's Service as regards age and ill-health and the amount of the pension or superannuation allowance as at the time govern those matters in the Civil Service.

PAMPHLET 111 - APPENDIX 11.

*Delete "Ministry of Transport & Civil Aviation" from paragraph (6) and substitute "Board of Trade"*

(7) That I will give implicit obedience to all lawful orders that I may receive from my superiors.

(8) That my service may be terminated without notice at any time including the probationary period should the Corporation be satisfied, after due enquiry that I have owing to my own fault become inefficient or that I have committed any act or default against good order and discipline.

(9) That the Corporation's Regulations and Rules in force from time to time are, and shall be, binding on me.

(10) That I am unmarried at the time of my appointment.  
married\*

\*Delete as appropriate.

(11) That I enter the Service as a Supernumerary Assistant Keeper and remain in that rank until appointed Assistant Keeper at a particular Lighthouse Station.

Signature of Candidate .....

Address of Candidate .....

Witness to Signature of Candidate:—

(Signature) .....

(Occupation) .....

(Address) .....

Date .....

## APPENDIX III

### PERIODICAL RETURNS

#### WEEKLY

Attendance of Occasional Keepers.

#### MONTHLY

Journal.

Oil Bills.

Stores consumed (Fog Signal)

Gas Account.

Relief Return (Rock Lighthouse).

Report on Sea Defences.

Attendant's Report (Unwatched Lights).

Sounding of Fog Signal.

Communications (Telephone).

" (R/T).

Explosives and Stores in stock at Reliefs.

Explosives Account.

Postages Account.

Return of chargeable containers.

#### QUARTERLY

Reserve Provisions Account.

Electric Filament Lamps.

Births, Marriages and Deaths.

#### ANNUALLY

Census.

Atmospheric Obscurity.

Oil Books.

Inventory Certificate.

~~Repairs required to Lantern Glazing.~~

Leave Roster.

*Amendment No. 52.*

# **ANNEX 5**

**PAMPHLET I**  
**TRINITY HOUSE LIGHTHOUSE SERVICE REGULATIONS**  
***FLAGS AND THEIR USES***

# PAMPHLET I

## INSTRUCTIONS APPLICABLE THROUGHOUT THE SERVICE

### SECTION C

#### FLAGS AND THEIR USES, WITH APPENDIX OF HISTORICAL NOTES BY H. GRESHAM CARR ESQ., F.R.G.S.

Persons of note visit the Station either  
immediately to the Superintendent

##### —TYPES OF FLAGS

###### a) Standards

A standard is a flag which depicts the armorial bearings of the person who is entitled to wear it. The Reigning Sovereign and certain members of the Royal Family have Personal Standards which are flown to denote their actual presence in any ship or place, whether in residence or on a visit.

###### (b) Colours

“Colours” is the term used to describe any flag which is flown in order to denote the nationality of a ship, or a body of people, or of a place. An example is the Union Flag of the United Kingdom. Afloat the wearing of the Union Flag on the jack staff, or at the masthead when the Reigning Sovereign is embarked, denotes a ship of the Royal Navy and it may not be worn by any other vessel.

###### (c) Distinguishing Flags

“Distinguishing Flags” is the term also used to describe any flags of special design which are worn by individuals to denote their rank, command or office, and by certain public authorities responsible for the performance of special duties. Flags of the Master and the Deputy Master, the Trinity House Jack (Elder Brethren’s flag) and Burgee (Superintendents’ flag) are all “distinguishing flags.”

N.B.—Colours, standards, and distinguishing flags are said to be “worn” by ships and individuals. They may also be “flown” in a ship or on shore. Other types of flags are only described as being “flown,” never as “worn.”

###### (d) Ensigns

Ensigns are colours which are principally worn by ships. The three ensigns authorised to be worn by British Ships are the Red, the White, and the Blue Ensigns. Up to the time of the Union the National flag worn by English Ships was the St. George’s Cross. By Royal Proclamation dated 12th April, 1606, the Banner of St. Andrew of Scotland was incorporated, and by a further Royal Proclamation dated 1st January, 1801, the St. Patrick’s Flag, representing Ireland, was added to the Union Flag. Since that date the Union Flag has been the National Emblem, or Colours, of the United Kingdom. It is always worn with the broader diagonal band of the white uppermost in the hoist, and the narrow diagonal band of

white uppermost in the fly. From early in the 17th Century the various fleets of the Royal Navy were divided into Red, White, and Blue Squadrons. By the middle of that Century the ships of each of these squadrons were distinguished by wearing their appropriate ensign. In 1864 this system was abandoned and by Admiralty Order-in-Council the White Ensign was authorised to be worn by all ships of the Royal Navy, the Red Ensign by British Merchant Shipping and the Blue Ensign (defaced in the fly) by vessels belonging to certain public authorities and to some members of the British Commonwealth. Since then this general allocation of Ensigns has remained in force, but from time to time by subsequent Acts of Parliament, Orders in Council or Admiralty Warrant certain yachts and other vessels have been given permission to fly the Red or Blue Ensign defaced. The use in the Trinity House Service of the Red Ensign, embodying the Union Flag and the "Four Ships" design can be traced back to the eighteenth century. The actual date on which it first came into use cannot be determined; nor can it be explained why the Red Ensign was preferred by the Elder Brethren to either the White or the Blue. There are however two factors either or both of which may have affected their original decision. Firstly the Red Ensign was the senior of the three ensigns. Secondly until 1837 some Light Vessels always flew by day a red flag as a distinguishing mark; other hypotheses are that at some time in the past the Master of the Corporation may have been an Admiral of the "Red", or that Trinity House vessels sailed with one of the Red Squadrons.

(e) **Signal Flags**

Signal Flags are specially designed in colour and shape to be easily distinguished at a distance. They are hoisted singly or in greater numbers to indicate orders or messages which are interpreted by either the International or Naval Code of Signals.

(f) **Special Flags**

"Special Flags" are flags or pendants such as the Fishery Flag and the Royal Mail Pendant flown in ships to indicate the duties on which they are engaged.

(g) **The Trinity House Ensign and Flags**

Ensigns and Flags which may be worn or flown by Trinity House Steam Vessels, Light Vessels, District Depots and Light-houses, are as follows, viz:—

The Master's Flag.

The Deputy Master's Flag.

The Trinity House Jack (Elder Brethren's flag).

The Trinity House Ensign.

The Trinity House Burgee (or Cornet) (Superintendents' flag).

The White Ensign.

## IC. 2.—WHITE ENSIGN (AUTHORITY TO FLY)

In a letter dated 21st June, 1894, the Lords Commissioners of the Admiralty granted permission to the Elder Brethren to "fly the

White Ensign of H.M. Fleet on Board their steam and sailing vessels on all occasions upon which the ships are dressed and while escorting Her Majesty in company with Royal Yachts and Ships of War.”

Certified true copies of the letter referred to above (reproduced in Appendix) have been forwarded to Superintendents for distribution to Commanding Officers of District Tenders. The certified true copy shall be retained on board each Tender for production if the right to fly the White Ensign on the authorised occasions is ever challenged or queried.

If the authority referred to is not accepted by the challenger the Commanding Officer of the Tender will refuse to lower the White Ensign and he will refer the Officer or Authority challenging the right to the District Superintendent who will take such immediate action as he may consider necessary to maintain the privilege granted to the Elder Brethren, and report the full circumstances to the Secretary.

### **IC. 3.—OCCASIONS FOR FLYING THE TRINITY HOUSE FLAGS**

#### **(a) At Lighthouses**

The Trinity House Ensign shall be flown, weather permitting, on the following days:—

Sundays  
Birthday of the Reigning Sovereign  
Birthday of the Master of the Trinity House  
Trinity Monday

On these occasions the Ensign shall remain hoisted between 0800 and sunset within the period 25th March to 20th September and between 0900 and sunset for the rest of the year.

The Ensign shall also be hoisted upon all occasions of Elder Brethren or the District Superintendent visiting and of Trinity House Vessels, British or Foreign Ships of War, Royal Yachts and vessels belonging to the Commissioners of Northern or Irish Lights approaching, leaving or passing the Station.

#### **(b) On board Light Vessels**

The Trinity House Ensign shall be flown, weather permitting on the following days:—

Birthday of the Reigning Sovereign  
Birthday of the Master of the Trinity House

On these occasions the Ensign shall remain hoisted between 0800 and sunset within the period 25th March to 20th September and between 0900 and sunset for the rest of the year.

The Ensign shall also be hoisted to Trinity House Vessels, Ships of War (British and Foreign) Royal Yachts and Northern and Irish Lighthouse Commissioners' Vessels when approaching, leaving, or passing the Station.

Amendment No. 103

T.H. No.55/1966

REGULATION 1.C. 3(d)(iii)

*Add the following note:-*

District Tenders are to be dressed as detailed on the birthdays of the Reigning Sovereign, and of the Royal Consort.

The words "as may be ordered" refer only to other occasions of public rejoicing.

**(c) At District Depots**

Where facilities exist for flying two flags the Trinity House Ensign and the Burgee (Cornet) shall be flown daily including Sundays and Holidays from 0800 until sunset.

If only one flag can be flown this shall be the Ensign.

When the Master or Deputy Master is present his flag only shall be flown at the Depot and when an Elder Brother other than the Deputy Master is on the premises the Trinity House Jack only shall be flown.

**(d) On Board District Tenders**

Weather permitting and unless there are other sufficient reasons to the contrary, the following regulations shall be observed on board the Trinity House Tenders regarding the use of flags:—

**(i) At Anchor or Moorings**

Either at the Home Port or elsewhere, daily including Sundays and Public Holidays, from 0800 to sunset within the period 25th March to 20th September and from 0900 to sunset for the rest of the year:—

Jack Staff Forward	—The Trinity House Jack
At the Mainmast	—The Burgee
At the Stern	—The Trinity House Ensign

**(ii) On Special Occasions when in Port**

On the birthdays of the Reigning Sovereign, of the Royal Consort and of the Master of Trinity House, also on Trinity Monday and on occasions of Public Rejoicing:—

Jack Staff Forward	—The Trinity House Jack
At the Foremast Head	—The White Ensign
At the Mainmast Head	—The Trinity House Ensign
At the Stern	—The Trinity House Ensign

**(iii) Dressing Ship when in Port**

On the birthdays of the Reigning Sovereign and of the Royal Consort; also on other occasions of Public Rejoicing *as may be ordered*:—

Jack Staff Forward	—The Trinity House Jack
At the Foremast Head	—The White Ensign
At the Mainmast Head	—The Trinity House Ensign
At the Stern	—The Trinity House Ensign
Overall	—Ship dressed with Flags Rainbow fashion

**(iv) Dressing Ship when under way**

On the special occasions mentioned in (iii) above only Mast-head Flags, Jack and Ensign to be flown:—

Jack Staff Forward	—The Trinity House Jack
At the Foremast Head	—The White Ensign
At the Mainmast Head	—The Trinity House Ensign
At the Stern	—The Trinity House Ensign

**(v) When Under Way on Normal Occasions**

At the Gaff	—The Trinity House Ensign
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(vi) **Under Way with District Superintendent on Board**

At the Mainmast Head—The Trinity House Burgee

At the Gaff —The Trinity House Ensign

N.B.—On all occasions if the Master, Deputy Master, or an Elder Brother is on Board the appropriate flag is to be flown at the Main in lieu of the Trinity House Ensign.

SPECIAL DISTINGUISHING FLAGS

(vii) **When the Master of Trinity House is on board.**

When the Master of Trinity House is on board his Flag shall be kept flying day and night:—

At the Mainmast Head—The Master's Flag

At the Stern —The Trinity House Ensign  
by day only

(viii) **When the Deputy Master is on Board.**

When the Deputy Master of Trinity House is on board his Flag shall be kept flying day and night:—

At the Mainmast Head—The Deputy Master's Flag

At the Stern —The Trinity House Ensign  
by day only

(ix) **When an Elder Brother (other than the Master and the Deputy Master) is on board.**

When an Elder Brother (other than the Master and the Deputy Master) is on board the Trinity House Jack shall be kept flying day and night:—

At the Mainmast Head—The Trinity House Jack

At the Stern —The Trinity House Ensign  
by day only

(x) **When the Reigning Sovereign, or the Master or other Member of the Royal Family and the Deputy Master are on board.**

The Royal Standard, the Master's Flag or the Personal Standard as appropriate shall be kept flying day and night, also the Deputy Master's Flag:—

At the Mainmast Head—Royal Standard or Personal Standard or Master's Flag as appropriate

At the Foremast Head —The Deputy Master's Flag

At the Stern —The Trinity House Ensign  
by day only

(xi) **When the Reigning Sovereign or the Master, or other Member of the Royal Family and an Elder Brother or Elder Brethren (other than the Deputy Master) are on board.**

As stated in (x) above but with the Trinity House Jack in lieu of the Deputy Master's Flag:—

At the Mainmast Head—Royal Standard or Personal Standard or Master's Flag as appropriate

At the Foremast Head —The Trinity House Jack  
At the Stern —The Trinity House Ensign  
by day only

**(xii) If in Foreign Waters on a courtesy visit and Distinguished Persons as in (x) and (xi) above are on board.**

The Flag of the Country concerned shall be flown at the Foremast Head in addition to the Flags shown in (x) and (xi) above:—

At the Starboard —Deputy Master's Flag or Trinity  
Yardarm House Jack as appropriate

At the Foremast Head —Flag of Foreign Country

At the Mainmast Head—Royal Standard or Personal  
Standard or Master's Flag as  
appropriate

At the Stern —The Trinity House Ensign

**(xiii) When an Elder Brother (other than the Master or the Deputy Master) is on board in Foreign Waters on a Courtesy Visit.**

The Flag of the Foreign Country shall be flown in addition to the Trinity House Jack:—

At the Foremast Head —Flag of Foreign Country

At the Mainmast Head—The Trinity House Jack

At the Stern —The Trinity House Ensign

**(xiv) When a Foreign Sovereign, President or Royal Personage is on board with the Deputy Master or other Elder Brother.**

The Foreign Personal Standard or Personal Flag or the Foreign National Flag shall be flown in addition to the Deputy Master's Flag or the Trinity House Jack:—

At the Foremast Head —Deputy Master's Flag or Trinity  
House Jack as appropriate

At the Mainmast Head—Foreign Personal Standard or  
Foreign Personal Flag or For-  
eign National Flag as appro-  
priate

At the Stern —The Trinity House Ensign

**(xv) If in addition to those mentioned in (xiv) above, the Reigning Sovereign or other Member of the Royal Family is on board.**

The Royal or Personal Standard shall be flown side by side with the Foreign Standard or Flag in addition to the Deputy Master's Flag or the Trinity House Jack:—

At the Foremast Head —The Deputy Master's Flag or  
the Trinity House Jack as ap-  
propriate

At the Mainmast Head—Foreign Personal Standard or  
National Flag side by side with  
the Royal Standard or Per-  
sonal Standard as appropriate

At the Stern —The Trinity House Ensign

**(xvi) When a Governor-General, Governor or Lieut-Governor is on board on an Official Visit or on Duty, with the Deputy Master or other Elder Brother.**

The Distinguishing Flag of the Governor-General, etc., shall be flown in addition to the Deputy Master's Flag or Trinity House Jack:—

At the Foremast Head —The Distinguishing Flag of the Governor-General, Governor or Lieut-Governor as appropriate

At the Mainmast Head—The Deputy Master's Flag or the Trinity House Jack as appropriate

At the Stern —The Trinity House Ensign

In this particular case if no Distinguishing Flag is available it is to be noted that the Union Flag is *under no circumstances* to be used as a substitute.

**(xvii) Showing the Ensign**

The Trinity House Ensign shall be shown during daylight when a Trinity House Tender is passing, meeting, or parting from any other Trinity House Vessel, any of Her Majesty's Ships, Royal Yachts, Foreign Men of War, or Vessels belonging to a Lighthouse Authority, and also when passing or approaching Forts, Towns, Lighthouses or Light Vessels.

**(xviii) Dipping the Ensign**

The Trinity House Ensign only is to be slowly dipped once to British and Foreign Men of War and kept at the dip when passing the Royal Yacht with the Reigning Sovereign on board.

**(ixx) Mourning**

On occasions of General Mourning or when mourning is specially ordered the Trinity House Ensign only shall be flown at half-mast as a general rule and for the purpose of this regulation, mourning will terminate at the hour of interment.

**(xx) Boat Ensigns**

Boat Ensigns shall not be flown in British Waters except when visiting Foreign Vessels or when the ship is dressed.

**(xxi) Boat Flags**

When the Master, the Deputy Master or other Elder Brethren leave the District Tender in uniform the appropriate Flag or Jack shall be flown in the bows of their boat.

**(xxii) Flags of H.M. Ships**

As a general rule movements made with regard to flags by H.M. Ships present shall be followed by District Tenders as far as possible.

NOTES:—The Term “Royal Family” mentioned in paragraphs (x) (xi) and (xv) of these instructions includes H.R.H. Prince Philip Duke of Edinburgh, Her Majesty Queen Elizabeth the Queen Mother and all other persons, being subjects of Her Majesty the Queen, who bear the title “Royal Highness.”

It should be noted that the Sovereign may, on occasion, decide to exercise the Royal Prerogative and modify the Flag arrangements. Details of any such procedure will be communicated to the Commanding Officer of the District Tender in advance.

#### **IC. 4.—SALUTING BY MEANS OF SERVICE ENSIGN**

Commanding Officers of the District Tenders shall see that Junior Officers and/or Deck Ratings as may be appropriate are given instructions in the matter of dipping the Ensign to ensure that this is carried out in an efficient, dignified, and seamanlike manner.

A suitable member of the crew is to be available on all proper occasions when the Tender is on passage to make and return salutes promptly and it is stressed that the White Ensign of the Royal Navy is invariably to be saluted irrespective of the class or type of vessel (other than a private yacht) which may be displaying it.

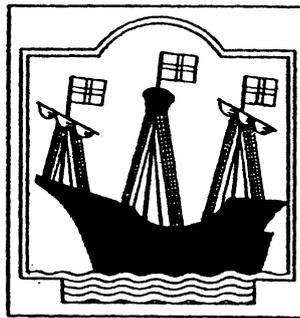
## APPENDIX

### FLAGS OF THE CORPORATION OF TRINITY HOUSE LONDON

by H. Gresham Carr, F.R.G.S.

In common with those who have attempted to trace the origin and history of the Corporation of Trinity House, London, the flag research worker soon discovers that his task is indeed a formidable one. Its early records were lost during the Commonwealth (1649 - 1659): others were destroyed as a result of a number of disastrous fires. The worst of these occurred (a) on two occasions at Water Lane, namely in 1666 (the Great Fire of London) and again in 1714, (b) at Tower Hill during the blitz on the memorable night of 30th December, 1940. It is, therefore, very difficult to say with certainty when a flag was first adopted by the Corporation.

Captain Joseph Cotton, a notable Deputy Master, in his book "Memoir on the Origin and Incorporation of the Trinity House of Deptford Strond," published in 1818, points out that provision was made for a Common Seal, to "serve and seal for the business and occasions of the said Guild or Fraternity," in the Charter of Henry VIII. He expresses the opinion that it remained in use until the reign of Elizabeth I, and goes on to say "Although no record exists thereof, it is evidently exemplified upon the monument of Sir Thomas Spert, Knight (Comptroller of the Navy to King Henry VIII and founder of the Corporation), as erected by that body to his respected memory in the year 1622, in a separate and distinct shield from his arms." It will be seen from the accompanying illustration that this consisted of a somewhat crude representation of a three-masted ship with a banner, presumably that of St. George, flying from each of the mastheads.



He continues: "From this the arms in 1573, which follow, were unquestionably compiled in the improved spirit of that day." The heraldist will, no doubt, agree with this assumption for he is well aware that devices previously used as seals frequently give him valuable information as to the origin of many Coats-of-Arms.

Captain Cotton then gives the text of the Grant of the Corporation's Coat-of-Arms as received from the College of Arms and signed by Garter Principal King of Arms in 1573 together with an illustration in line. These armorial bearings consist of a white shield bearing the red cross

of St. George; in each quarter thus formed there is a representation of a sailing ship of the Elizabethan period, in black, sailing upon the sea towards the observer's left. Surmounting the shield is an esquire's helm with white and red mantling and crest—a demi-lion, crowned and with its head facing the observer, in gold, holding a sword in the right paw. The motto "TRINITAS IN UNITATE" is borne on a scroll beneath the shield.

During the colourful period of the 16th and 17th centuries full advantage was taken to "show" arms in banner-flag form when state barges and small craft took part in the many water processions and pageants on London River. The City Livery Companies, etc., all had their distinctive barge flags and it seems most unlikely that the Corporation would have been found wanting in that respect. It is, therefore, probable that the Trinity House flag made its first appearance soon after the granting of the Arms in 1573. On the other hand it may well be that these arms, and the flag, were in use prior to that date because the practice of using unauthorized arms in those days was not uncommon. In passing it should perhaps be mentioned that the details on the shield only are usually used for the banner-flag—not the full armorial bearings.

In early flag charts and books this flag was variously designated "The flag of Trinity House of Deptford Strond," "The Trinity House Flag," etc.: subsequently, the exact date has yet to be ascertained, it became known officially as the "Trinity House Jack." Indeed, it was described as such in Hounsell's "Flags of all Nations" circa 1873—the prototype of the Admiralty Flag Book, the first edition of which appeared in 1875.

The reason for using the term "jack" in this instance is not apparent; technically speaking it should be described thus only when a diminutive of it is worn at the jack-staff.

Thus, the red cross of St. George between the four ships forms the basic design of the five flags which comprise the Corporation's suite of flags.

The personal flag of the Master (in modern times this office has been held by a prince of the Blood Royal—at the time of writing, H.R.H. the Duke of Gloucester) has the complete display of armorial bearings superimposed in the centre of the basic four-ship design. Here again, the date of adoption has yet to be ascertained but a Court Minute dated 3rd April 1779, ordered "that a new silk flag with the Arms of the Corporation emblazoned thereon be made by Mr. Robert Mangles preparatory to Trinity Monday next." A coloured illustration of this flag was included in Hounsell's book and also in the first edition of the Admiralty Flag Book, both of which have been previously mentioned. In each case the proportions of the field were shown as being six to five. However, when the second edition of the Admiralty book appeared in 1889 these were shown as they are at the present day, namely, two to one.

When the Master is embarked this flag is flown at the main mast-head; in these circumstances it has the status of a "command flag." It is also flown at the Trinity House, Tower Hill, London, whenever he is present.

The present writer had the honour and privilege of designing a Personal Flag for the Deputy Master; it was approved and adopted on 10th June, 1952. This flag is similar to the Master's except that the field is three by two and the charge in the centre thereof consists of a gold-lined red disc, the diameter of which is equal to one-half the hoist, bearing the Corporation's Crest.

It is flown at the main masthead when the Deputy Master is embarked and like the Master's flag has the status of a "command" flag. Further, it is flown at District Depots whenever he is present and at the Trinity House on Trinity Monday should the Master be absent.

The new flag was flown for the first time in the Trinity House vessel *Patricia* on 14th July, 1952, when the Deputy Master, Captain Gerald Curteis, M.V.O., R.N. (now Captain Sir Gerald Curteis, K.C.V.O., R.N.) embarked at Harwich and proceeded to Helsinki for the Olympic Games. En route, H.R.H. the Duke of Edinburgh (who had been elected an Elder Brother the preceding month) joined the vessel at Oslo when his Personal Standard was broken at the masthead. At the express wish of the Duke the Deputy Master's Flag was flown at the yardarm—the vessel at that time having one mast only—thus giving it a "flying start." However, a second mast was stepped abaft the funnel just prior to the Coronation Naval Review, 15th June, 1953.

An Elder Brother of Trinity House, by virtue of a Board Order dated 26th June, 1928, "is entitled when afloat to fly the Trinity House Jack at the masthead of the vessel he is on board, when he is on official duty in the service of the State, or of the Corporation of Trinity House." Among those who have made use of this privilege are H.R.H. the Duke of Edinburgh, Admiral the Earl Mountbatten of Burma, Field Marshal the Earl Alexander of Tunis and Sir Winston Churchill.

This flag is also flown at the Trinity House on special occasions such as the birthdays of members of the Royal Family: a diminutive of it is worn at the jack-staff when (a) vessels are moored alongside or at anchor, (b) ships are dressed.

The proportions of the field of this flag are five to four. Incidentally, these are substantially the same as those in use in 1873 if not before.

The Ensign has a red field bearing the Union Flag in the upper portion of the hoist, the basic four-ship design forming a rectangular panel in the fly. The earliest known pictorial representation of this ensign and also the "jack" are shown in the pictures "The Trinity House Yacht approaching the mouth of the Humber to inspect the new Lighthouse on Spurn Point on April 7th, 1777" by F. Holman, and "The Trinity House Yacht off the Caskets" by Thomas Whitcombe, 1795. However, it may well be that this Ensign had been in use for a period up to sixty years prior to 1777. These pictures now hang in the Trinity House once again, the restoration of the blitzed building having been completed in 1953.

The proportions of this ensign were three to two, with the Union Flag occupying two-fifths of the hoist but on 1st December, 1953, the Board decided to amend them to two to one, with the Union Flag occupying the first quarter of the field: at the same time the rectangular panel was placed in the centre of the fly.

All Trinity House vessels wear this Ensign, and it is also flown at (a) all the Corporation's Lighthouses, (b) the Trinity House throughout the year except on those occasions when special distinguishing flags are flown, (c) District Depots.

The Burgee (or Cornet) consists of a red triangular flag, proportions three to two, bearing the basic four-ship design in a rectangular panel similar to that on the Ensign. It is flown at (a) the masthead in District Tenders when they are in port: also when they are under way with the District Superintendent on board, (b) all District Depots in addition to the Ensign, providing two flags can be flown simultaneously.

The Corporation of Trinity House as the chief Pilotage Authority around our coasts, has been closely associated with Royal Yachts ever since they were introduced into this country by Charles II on his return in 1660. The first prescriptive duty in this connection comprised embarking one or more of its pilots in the Royal Yacht whenever the Sovereign was on board and when navigating in pilotage waters. Subsequently, it became the custom for a vessel of the Corporation to escort and precede the Royal Yacht when the Sovereign embarked in her. Commander Hilary P. Mead, in his "Trinity House" expresses the opinion that this very jealously guarded prerogative dates from August, 1822 when George IV went to Scotland in the Royal Yacht *Royal George*.

An incident occurred on 21st May, 1894, when the right to fly the White Ensign on board the Trinity House Steam Vessel "Satellite" was challenged by the Commanding Officer of H.M.S. "Mersey." The Elder Brethren were unable to produce any written authority for their practice of flying the White Ensign in their vessels on all occasions when ships were dressed. They claimed that the practice was observed prior to 9th July, 1864, when, in accordance with an Order in Council, Squadron Colours were abandoned and the White Ensign was allocated to the Royal Navy, the Blue Ensign to the Royal Naval Reserve and the Red Ensign to the Merchant Service.

The Elder Brethren therefore petitioned the Admiralty to grant them a warrant. The Admiralty decided that the matter did not justify a formal warrant but that the required authority should be conveyed by letter. The Secretary of Trinity House duly received a letter under reference No. L. 4608 dated 21st June, 1894, which reads as follows:—

"Sir,

With reference to your letter of the 18th instant, No. 2387, I am commanded by My Lords Commissioners of the Admiralty to convey to you their permission for the Elder Brethren of Trinity House to fly the White Ensign of H.M. Fleet on board their Steam and Sailing Vessels on all occasions upon which Ships are dressed, and while escorting Her Majesty in company with Royal Yachts and Ships of War.

2. A copy of this letter may be produced as authority for the use of the White Ensign on the occasions referred to above.

I am, Sir,

Your obedient Servant,  
(Sgd.) EVAN MACGREGGOR."

A copy of this letter is always carried on board all Trinity House Vessels in order that the Elder Brethren shall not be found wanting in the event of a similar challenge being made in the future.

Mention has already been made of the Corporation's jealously guarded prerogative of escorting the Royal Yacht when the Sovereign is on board. In modern times the Trinity House vessel "Patricia" performs this duty, undertaken at Naval Reviews and on other special occasions.

At the Coronation Naval Review on 15th June, 1953, she flew the Deputy Master's Flag at the main masthead (the Master, H.R.H. the Duke of Gloucester, having embarked in H.M.S. "Surprise"—commissioned as a royal yacht for the occasion because the building of H.M.Y. "Britannia" had yet to be completed) and the White Ensign at the fore masthead: she wore the Trinity House Ensign at the stern and a diminutive of the Trinity House Jack at the jack-staff. In accordance with long established custom these flag arrangements obtained throughout the period during which she was employed on escort duties.

Her Majesty Queen Elizabeth II and H.R.H. the Duke of Edinburgh completed the last stage of their Commonwealth Tour in the Royal Yacht "Britannia" having transferred from the "Gothic" at Tobruk, North Africa. The "Patricia" with H.R.H. the Duke of Gloucester on board, met the "Britannia" at the Nore on 15th May, 1954, and escorted her up the Thames. The flag arrangements in the former were similar to those mentioned above except that the Master's Flag was flown at the main masthead.

H.R.H. the Duke of Edinburgh flew his Personal Standard at the main masthead in the "Britannia" when he returned in her from Canada during August, 1954. At the same time the Union Flag (the flag of an Admiral-of-the-Fleet afloat) and the Trinity House Jack (the flag of an Elder Brother afloat) were flown at the fore and mizzen mastheads respectively.

In this connection, it is interesting to recall that when the Prince of Wales (afterwards King George V) embarked in the Royal Yacht "Victoria and Albert III" to attend the coronation of the King and Queen of Norway in June 1906 he flew his Personal Standard at the main masthead and the flag of the Master of Trinity House at the fore masthead.<sup>1</sup> The same procedure was adopted in the "Ophir" during his colonial tour and also in H.M.S. "Indomitable" when he went to Quebec.<sup>2</sup>

A somewhat similar arrangement obtained when the Prince of Wales (afterwards King Edward VIII), an Elder Brother, flew his Personal Standard in conjunction with the Trinity House Jack in H.M.S. "Renown" when he went to India in 1921.<sup>3</sup>

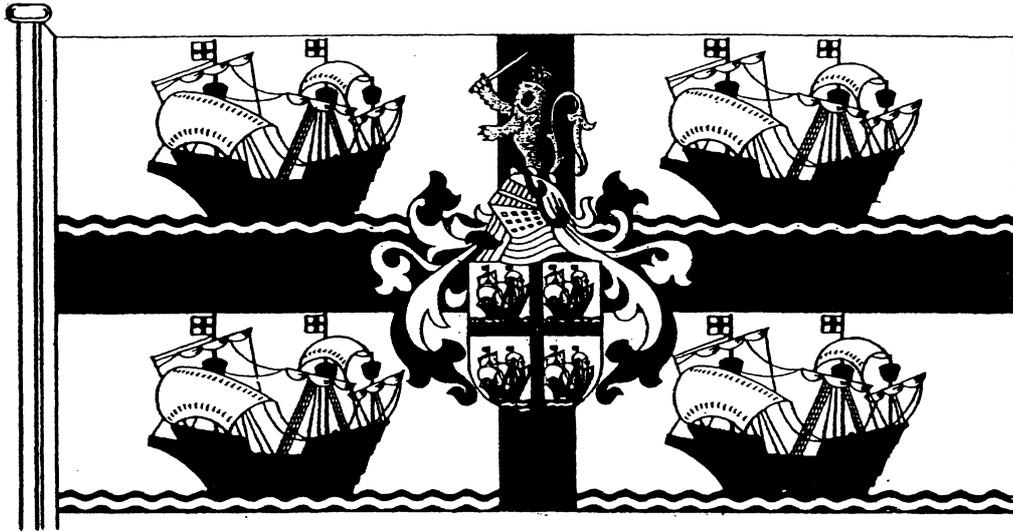
<sup>1</sup>Gavin's "Royal Yachts," page 233  
(Rich and Cowan, Ltd. 1932)

<sup>2</sup>Cecil King's "The King's Flags and Some Others"  
("The Mariner's Mirror," 1952,  
Vol. 38, No. 2, page 96)

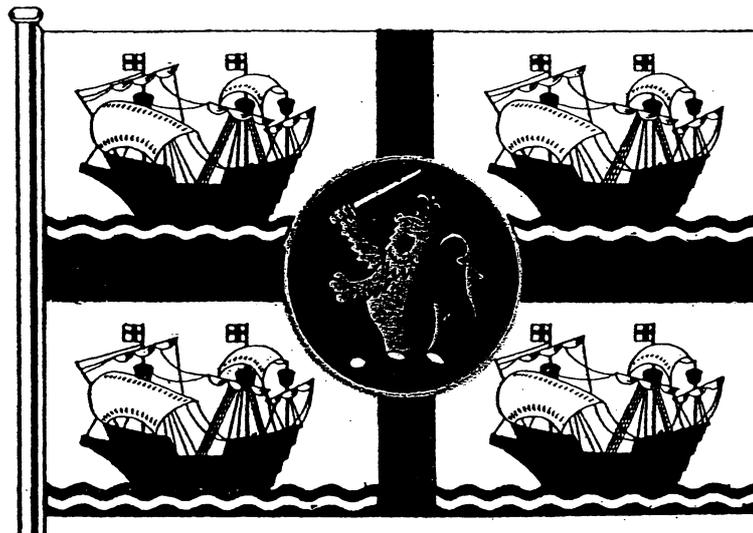
<sup>3</sup>Ibid.

TRINITY HOUSE, LONDON.

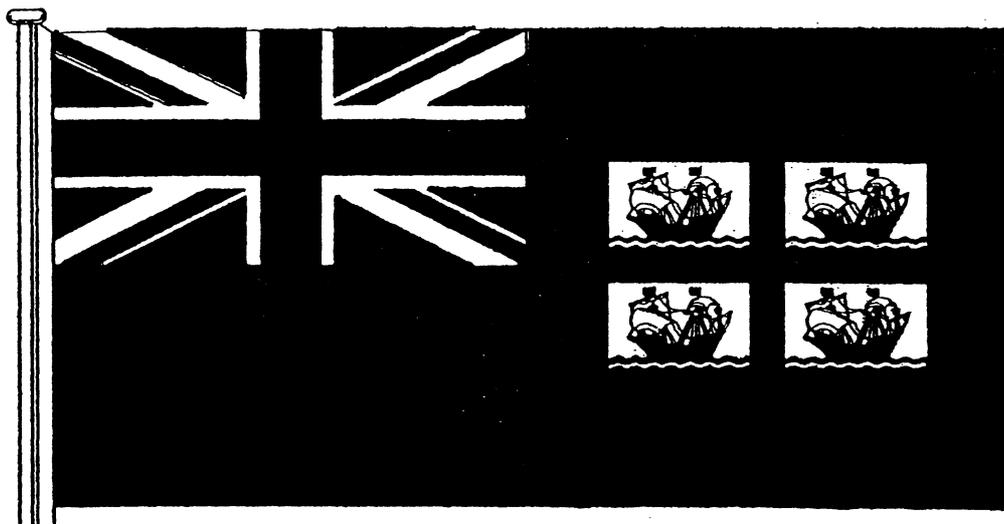
PARTICULARS OF FLAGS



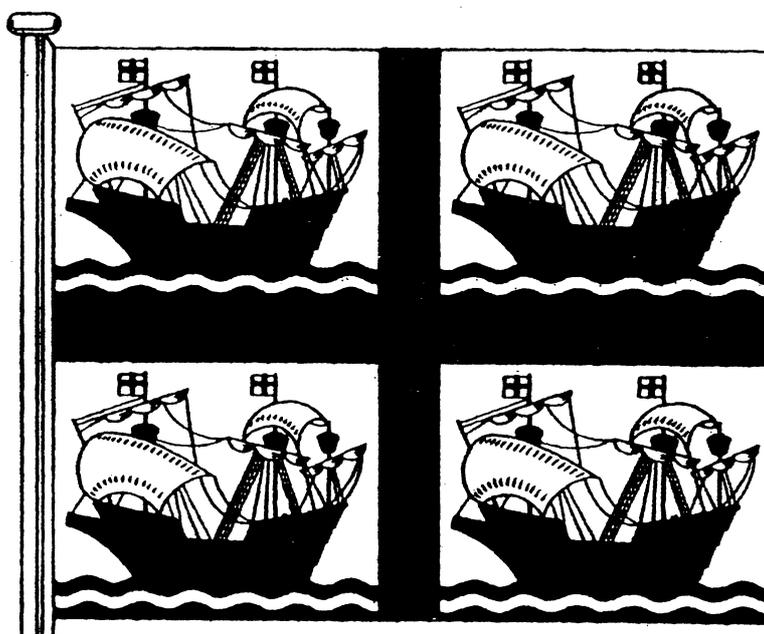
TRINITY HOUSE MASTER'S FLAG



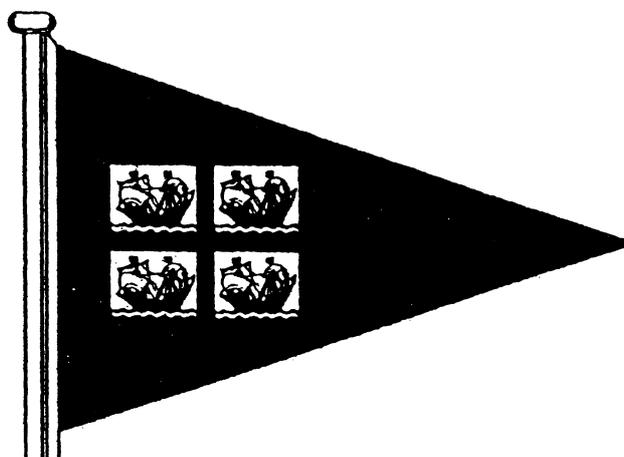
TRINITY HOUSE DEPUTY MASTER'S FLAG



TRINITY HOUSE ENSIGN



TRINITY HOUSE JACK



TRINITY HOUSE BURGEE  
(OR CORNET)

# TRINITY HOUSE, LONDON

## RULES FOR DIMENSIONS OF FLAGS

### MASTER'S FLAG.

The Hoist is to the Fly as 1 is to 2.

The width of St. George's Cross is  $\frac{1}{12}$  of the length of the Fly.

The height of the Coat of Arms is  $\frac{2}{5}$  of the length of the Fly.

The width of the Coat of Arms is  $\frac{1}{3}$  of the length of the Fly.

### DEPUTY MASTER'S FLAG.

The Hoist is to the Fly as 1 is to  $1\frac{1}{2}$ .

The width of St. George's Cross is  $\frac{1}{14}$  of the length of the Fly.

The outside diameter of the Disc is  $\frac{1}{3}$  of the length of the Fly.

### ENSIGN.

The Hoist is to the Fly as 1 is to 2.

The union is  $\frac{1}{4}$  of the Ensign.

Four ships—Fly is  $\frac{1}{3}$  of the total Fly.

Four ships—Hoist is  $\frac{7}{16}$  of the total Hoist.

Four ships—St. George's Cross is  $\frac{1}{7}$  of the hoist of the four ships.

Inset design of four ships is to be centred in the outer half of the Ensign, i.e. centre of St. George's Cross horizontal is to be in line with bottom line of Union, and centre of St. George's Cross vertical is to be midway between Union and end of the Fly.

### JACK.

The Hoist is to the Fly as 1 is to  $1\frac{1}{4}$ .

The width of St. George's Cross is  $\frac{1}{12}$  of the length of the Fly or 1 inch to 1 foot.

### BURGEE (or CORNET).

The Hoist is to the Fly (measured through the centre of the Flag) as 1 is to  $1\frac{1}{2}$ .

The Hoist of the 4 ships is  $\frac{2}{5}$  the whole of the Flag.

The Fly of the 4 ships is to the Hoist as 1 is to  $1\frac{1}{4}$ —the same as for Jacks.

The width of St. George's Cross is  $\frac{1}{12}$  of the Fly of the 4 ships.

Note:—The heads of the ships should be all towards the Flagstaff on both sides of the Flags.

# TRINITY HOUSE, LONDON

## DIMENSIONS OF FLAGS

Master's Flag	1st size ft. ins.	2nd size ft. ins.	Car flag ft. ins.	
Hoist ... ..	7 6	6 0	0 4½	
Fly ... ..	15 0	12 0	0 9	
Width of St. George's Cross ... ..	1 1½	0 11	0 0¾	
Height of Coat of Arms	6 0	4 9½	0 3½	
Width of Coat of Arms	4 8¼	3 9	0 2¾	
Base of Shield above bot- tom edge ... ..	1 1½	0 11	0 0¾	

Deputy Master's Flag	1st Size ft. ins.	2nd Size ft. ins.	3rd Size ft. ins.	4th Size ft. ins.	Car flag ft. ins.
Hoist ... ..	5 0	4 0	3 0	2 0	0 4½
Fly ... ..	7 6	6 0	4 6	3 0	0 7
Width of St. George's Cross ... ..	0 6½	0 5	0 4	0 2½	0 0½
Outside diameter of disc	2 6	2 0	1 6	1 0	0 2½

Ensigns	1st Size ft. ins.	2nd Size ft. ins.	3rd Size ft. ins.	Launch or boat 4th Size ft. ins.
Hoist ... ..	5 0	4 0	3 0	1 9
Fly ... ..	10 0	8 0	6 0	3 6
Union-Hoist ... ..	2 6	2 0	1 6	0 10½
Union-Fly ... ..	5 0	4 0	3 0	1 9
4 Ships-Hoist ... ..	2 2¼	1 9	1 3¾	0 9¼
4 Ships-Fly ... ..	3 4	2 8	2 0	1 2
Space between Union and 4 ships ... ..	0 10	0 8	0 6	0 3½
Space between 4 ships and end of Fly ... ..	0 10	0 8	0 6	0 3½
Space between 4 ships and top and bottom of Hoist	1 4⅞	1 1½	0 10⅞	0 5⅞
Width of St. George's Cross ... ..	0 3¾	0 3	0 2¼	0 1¼

Jacks	1st Size ft. ins.	2nd Size ft. ins.	3rd Size ft. ins.	4th Size ft. ins.	Car flag ft. ins.
Hoist ... ..	5 0	4 0	3 0	2 0	0 4½
Fly ... ..	6 3	5 0	3 9	2 6	0 5⅞
Width of St. George's Cross ... ..	0 6¼	0 5	0 3¾	0 2½	0 0½

Cornets	1st Size ft. ins.	2nd Size ft. ins.	3rd Size ft. ins.	4th Size ft. ins.
Hoist ... ..	5 0	3 6	2 6	1 9
Length through centre ...	7 6	5 3	3 9	2 7½
Hoist of 4 ships ... ..	2 0	1 5	1 0	0 8½
Fly of 4 ships ... ..	2 6	1 9	1 3	0 10½
Width of St. George's Cross ... ..	0 2½	0 1¾	0 1¼	0 0⅞
4 ships from head of Flag	0 5	0 3½	0 2½	0 1¾

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## **ANNEX MCM 2**

*The History and Working of the Middle East Navigation  
Aids Service (“MENAS”) and Related Issues, Report by  
Commander Peter John Christmas, Royal Navy  
(Retired)*

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# **THE HISTORY AND WORKING OF THE MIDDLE EAST NAVIGATION AIDS SERVICE (“MENAS”) AND RELATED ISSUES**

by

**Commander Peter John Christmas, Royal Navy (Retired)**

## **1.0 Introduction**

1.1 This Report has been prepared by Commander Peter John Christmas, Royal Navy (Retired), in response to a request by the Government of Malaysia for a review of the history and working of the Middle East Navigation Aids Service (“MENAS”) and various associated issues concerning the administration of lighthouses. I understand that the Report will be submitted as part of Malaysia’s Counter-Memorial to the International Court of Justice in the proceedings between Malaysia and Singapore concerning sovereignty over Pulau Batu Puteh, Middle Rocks and South Ledge. I understand further that an element of the dispute is the weight to be attached to conduct by Singapore in respect of the Horsburgh Lighthouse, which was constructed on Pulau Batu Puteh in the mid-19<sup>th</sup> century and has been administered since then by Singapore and its predecessors.

1.2 For purposes of preparing this Report, I have not been shown or asked to comment upon the pleadings or other documents of either Party already submitted to the Court. I make no comment on the dispute or on any legal issue.

1.3 From October 2001 to December 2003, I was the General Manager of MENAS, based in Bahrain. MENAS is a not-for-profit corporation registered under English law. The General Manager is the operational head of MENAS, reporting to the Chairman of MENAS in London. As General Manager, I was responsible for all aspects of MENAS’s activity in the region, including operations, finance and contract negotiation. During the period of my tenure, MENAS owned and operated around 100 aids to navigation in the Arabian/Persian Gulf (“the Gulf”), a number of which are lighthouses situated on the territories of Kuwait, the United Arab Emirates or Qatar. Over 250 additional aids to navigation in the Gulf were maintained by MENAS under contract to other authorities. This situation is broadly unchanged today.

1.4 Prior to taking up my position in MENAS, from May 1995 to October 2001, I was Director of Operations and Navigational Requirements of the Northern Lighthouse Board (“NLB”). The NLB is the statutory General Lighthouse Authority for Scotland and the Isle of Man, providing and operating over 400 aids to navigation. As Director of Operations and Navigational Requirements, I provided all navigational advice, managed the operations department, oversaw the superintendence of all aids to navigation, managed and operated the NLB’s vessels, contract helicopter and depots, and managed the budget for those.

1.5 I am also a “Younger Brother” of the Corporation of Trinity House in London, one of the oldest lighthouse authorities in the world, established by charter in 1514.<sup>1</sup> In my various capacities at MENAS, the NLB and Trinity House, I have also had extensive dealings with others in the lighthouse and marine aids to navigation community internationally, including the International Association of Marine Aids to Navigation and Lighthouse Authorities (“IALA”).

1.6 Prior to taking up my post at the NLB, from January 1961 to June 1994, I was an Officer of the British Royal Navy, reaching the rank of Commander. During this period, I was the Navigating Officer of two submarines, the Second-in-Command of three submarines and the Commanding Officer of three submarines.

1.7 More detailed biographical information may be found in the summary *curriculum vitae* annexed to this Report.

1.8 The information contained in this Report is largely drawn from my own personal knowledge as General Manager of MENAS and from my roles in the other positions just noted concerned with the administration of lighthouses and other aids to navigation. In some cases, to check my recollection or fill in blanks in my knowledge, I have consulted both published and unpublished material, including private documents confidential to MENAS.

1.9 This Report is prepared in my personal capacity and does not engage the responsibility of any organisation or authority with which I have been associated.

## **2.0 Historical Foundations and Establishment of MENAS**

2.1 Little is known about the origins of the early modern-day aids to navigation in the Gulf, until, by the end of the 19<sup>th</sup> century, some had been established to assist ships on specific tasks. These were probably installed without the permission of the littoral states involved by the British India Steam Navigation Company. The early 20<sup>th</sup> century saw the expansion of the Ottoman Empire, with the occupation of Hasa (Eastern Saudi Arabia) and Qatar. As a result of this development, the British Government took control of such aids to navigation as there were in 1911 with the actual task of administration being performed by the Government of India, being the closest British territory from which such an operation could be based. The costs were shared between the British and Indian governments using a fund known as the Persian Gulf Lighting Service Fund.

2.2 Although oil had been discovered elsewhere many years beforehand, the first oil to be found in the Gulf Region was at Masjid-I-Suleiman in inland Persia in May 1908. However, it was the discovery, made in the USA in 1909, of how to ‘crack’ oil that then made its extraction commercially viable.

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<sup>1</sup> The title “Younger Brother” refers to a member of the fraternity of Trinity House, invited to become so through acknowledged expertise in a maritime field.

2.3 In about 1913, Winston Churchill, then the First Lord of the Admiralty, made a decision that the British Fleet would change from coal- to oil-power. In consequence, the British Government took a controlling interest in the Anglo-Persian Oil Company. In order to implement the policy, it became necessary to mark major marine hazards, and lighthouses were built on Little Quoin (now Didamar) Island and Tunb Island, to the west of the Straits of Hormuz. They were brought into service in 1914 and Didamar remains operational to this day.

2.4 After World War 1, the Indian Government continued to have responsibility for the maintenance and administration of the Persian Gulf lights, which was carried out from a base in Bombay.

2.5 In 1923, the British Government decided that, to ease the financial burden of administering the Gulf lighthouses, light dues should be introduced. An advisory committee was set up in 1924, consisting of the main shipping companies, with the Flag Officer, Royal Indian Navy, as Chairman. Light dues collection started in 1925, with authority for collection vesting in the Basrah Port Directorate in Iraq. The King of Iraq's discarded Royal Yacht *Nearchus* was the first aids to navigation vessel to be used for the maintenance of aids to navigation.

2.6 This situation remained virtually unaltered until after World War 2, although by then oil had been discovered in commercial quantities in Bahrain. However, by 1948, matters were changing. Whilst the 31 existing aids to navigation in the Gulf at that time were just sufficient for the traffic, the British Government realised that, with the rapid expansion of the demands for oil from the Gulf, many more aids to navigation would soon be required. In addition, with the ending of the British Mandate in Iraq, the arrangement whereby the Basrah Port Directorate maintained the aids could not continue for much longer. In addition, with India now independent, the Indian Government had no further wish to take responsibility for the Gulf lights. The control of the administration and finance of the lighting service in the Persian Gulf was thus transferred from the Government of India to the British Ministry of Transport on 1 June 1948.

2.7 At first, the British Government tried to hand over responsibility for the maintenance and administration of the Gulf navigation aids to the littoral states. However, this met with considerable protest from the users, particularly from tanker companies. In addition, light dues rates were in constant dispute and even the right to collect them was being questioned.

2.8 The British Ministry of Transport sought ways of obtaining the co-operation of the shipping companies and the Anglo-Iranian Oil Company, as it was now called, proposed the idea of a non-profit-making company, to be known as the Persian Gulf Lighting Service ("PGLS"). This proposal was accepted by the British Government in 1949 and all equipment, funds and investments pertaining to the existing organisation were transferred from the British Treasury to the company on 12 January 1950.

2.9 The PGLS was incorporated in England, under the Companies Act 1948, on 12 January 1950 as a company limited by guarantee and not having a share capital, the word “limited” being omitted by licence of the Board of Trade. The company was a non-profit-making company and was granted exemption from paying income tax in the United Kingdom. Its terms of reference and defined objects included:

“.....the provision within the Persian Gulf and the Approaches thereto of a service of aids to navigation for ships and aircraft, comprising lights, buoys, beacons, radio stations, radar and all other devices now existing or hereafter developed.”

2.10 In 1952, the Emir of Bahrain gifted a tract of land on the sea to PGLS and a compound was established, with a jetty for the organisation’s ship and bungalows for the British expatriate managers, as well as the necessary offices and stores.

2.11 In 1966, it was decided to change the name of the company to the Middle East Navigation Aids Service. It has been known ever since by its acronym MENAS.

2.12 MENAS remains a not-for-profit organisation, registered under UK charity law, with a Chairman, a Board of Governors and very small administrative staff based in London. The work force, with a General Manager as head, live and work in Bahrain and operate under Bahraini law. The Board of Governors is composed of representatives of major shipping lines, but also one each from Bahrain, Kuwait and the United Arab Emirates.

### **3.0 Significant Developments Since the Establishment of MENAS**

3.1 MENAS’s work is clearly divided at present into:

- operating and maintaining those aids to navigation which they provide;
- maintaining other authorities’ aids to navigation under formal contract;
- giving advice to organisations and authorities.

3.2 Navigation dues – formerly known as light dues – have been collected by MENAS and its predecessor governments ever since 1925 from any ship entering the Gulf region and involved in cargo distribution. There is no clear or established legal basis for such dues being collected by MENAS but very few shipping companies refuse to pay (although there are some). Most acknowledge that, if MENAS did not provide the services that it does, probably no other body would. There is always the concern that, should all the Gulf States start to charge Navigation Dues, some ships at least would be liable to pay more than once in Gulf waters. The system of charging what are currently named Navdues has been evolving, especially recently. In view of the lack of a legal basis for the collection of these Navdues, MENAS is attempting to introduce a fleet-based system, based upon a formal contract with the shipping companies, to replace the flat-rate-per-ship present system.

3.3 In 1952, the Light Tender *Relume*, a special-to-task vessel which had been ordered in the United Kingdom by the new company, arrived in Bahrain to replace the now-ageing *Nearchus*. This was, in turn, replaced by a second vessel named *Relume* in about 1979.

3.4 MENAS has now built a new vessel, as a replacement for the present, 25-year-old ship. This craft has new capabilities for which they will be seeking contracts, in particular oil-spill recovery and support for various under-water activities, including diving, the control of remotely-operated vehicles and hydrography. In this way, MENAS is looking to expand its revenue-earning activities, in part to offset the slow but steady fall in Navigation Dues over the last few years. The ship arrived in Bahrain on 16 October 2004.

3.5 In recent years, the Omani government indicated that it wished to run its own aids to navigation and collect its own Navdues. Following negotiations, Oman has gone ahead and taken ownership of all of its aids to navigation in the last year and has started to charge its own Navdues. The Omani Government compensated MENAS for those navigation aids which had been provided originally by MENAS.

#### **4.0 Where the Principal Lights Were Situated**

4.1 Several major lights were established in the Gulf in the period 1913 to 1950 by the British and Indian Governments with additional lights having been established since then by the PGLS/MENAS.

4.2 Of the countries involved, Oman, Bahrain and Qatar were British Protectorates until 1971, and Kuwait until 1961. This may have had a bearing on the way in which what was essentially a British-backed corporation was able to build aids to navigation on the territory of foreign States, albeit often with the permission of the rulers of those States.

4.3 Some of the more important lights established in the Gulf by the British or Indian Governments in the period 1913 to 1950, prior to the creation of the PGLS/MENAS, were:

##### **Tunb Island**

Position: 26°16N 55°18'E (West of entrance to Straits of Hormuz; now disputed territory)

Established: 15 July 1913

Legal status: The consent of the Ruler of Sharjah, regarded as the owner of the island, was obtained. The island was seized by Iranian forces on 15 December 1972. MENAS continued to maintain the light until 1977.

##### **Quoin (Didamar) Island**

Position: 26°28'N 56°32'E (Entrance to the Straits of Hormuz; Omani territory)

Established: 1 February 1914

Legal status: It is assumed that the British Government recognised the Sultan of Muscat (which changed its name to Oman in 1970) as the owner of the island, but records do not reveal this to be so.

Sir Abu Nu'air Island Beacon

Position: 25°14'N 54°12'E (Off the coast of Sharjah)

Established: 23 June 1923

Legal status: Permission granted by the Ruler of Sharjah.

Muscat Beacon

Position: 23°38'N 58°37'E (Coast of Oman, Muscat)

Established: 12 February 1926

Legal status: MENAS records do not establish that the Sultan of Muscat's consent was ever obtained for the establishment of this light. However, when, in 1958, the PGLS informed the Consul General Muscat of a proposal to replace the light by one more powerful, his reply implied confirmation of PGLS' ownership of the light.

4.4 The following additional lights are known to have been among the aids to navigation taken over by the PGLS in 1950, although more details than those given are not known:

- Bahrain Inner Light Buoy; established 1913.
- Bahrain Outer Light Buoy; established 1913.
- Shatt al Arab Light Float; established 1914.
- Bahrain Light Float; established 1935.
- Bahrain West Spit Light Buoy; established 1938.

4.5 Significant lights established in the region by the PGLS/MENAS in the period since 1950 include:

Halul Island

Position: 25°40'N 52°25'E (Off the coast of Qatar; Qatari territory)

Established: 1952

Legal status: Not recorded. Note that the date was well within the time during which Qatar was a British Protectorate. It is around the time when, after the PGLS had been formed, the organisation would have been assessing the aids to navigation available and going about the business of improving them.

Kubbar Island

Position: 29°04'N 48°30'E (Off Kuwait; Kuwaiti territory)

Established: 17 February 1953

Legal status: MENAS claim that the light was established "with the authority of the PA [Port Authority] of Kuwait, after obtaining the consent of the Ruler of Kuwait

and that full records of this are filed in the Residency.” The light was established to replace one that had been built by the British in 1914.

#### Auha Island

**Position:** 29°23'N 48°26'E (Island off Kuwait; Kuwaiti territory)  
**Established:** 8 May 1961  
**Legal status:** After a request from the Kuwaiti Government, originally in 1954, but re-stated in 1958, the Ruler of Kuwait agreed the allocation to the PGLS of a site on the island. The site was approved by the Kuwaiti Government in September 1959.

#### Zarqa Island

**Position:** 24°43'N 52°50'E (Off Abu Dhabi; Abu Dhabi territory)  
**Established:** 24 November 1963  
**Legal status:** The light and other aids were established by PGLS under contract, as a result of a request by the state-owned Abu Dhabi Petroleum Company (“ADPC”) to support a new oil terminal at Jebel Dhanna. In May 1964, the ADPC considered that the Zarqa Light was a “main route light and not really part of the approach aids to Jebel Dhanna Terminal” and suggested that the PGLS should buy it from the ADPC for a “nominal sum” and operate and maintain it at their own expense. The ADPC subsequently accepted £1 for the light and, on 12 November 1964, formally transferred ownership of it to the PGLS.

#### Ras al Ardh

**Position:** 29°21'N 48°06'E (Kuwaiti mainland)  
**Established:** 22 November 1968  
**Legal status:** The original light was established in 1929, with no records showing whether permission was granted. However, in 1953 and again in 1966, the Kuwaiti authorities asked the PGLS to upgrade the light. On both occasions, the lights were installed at the direct request of the Kuwaiti Government on a site allocated to the PGLS for the purpose by the Ruler of Kuwait.

#### Ras al Hadd

**Position:** 22°30'N 59°48'E (On the most easterly point of the coast of Oman)  
**Established:** 11 September 1969  
**Legal status:** In March 1968, MENAS carried out a detailed survey and, as a result, formally sought and obtained from the Sultan of Oman:

- a grant of land on which to establish the light;
- permission to build the light;
- free access to the site for the operation and maintenance of the light.

#### Fujairah Main Beacon

**Position:** 12°08'N 56°20'E (By the port of Fujairah)  
**Established:** 1981

Legal status: Installed with the authority of the Government of Fujairah.

#### Dalmaniyat Island

Position: 23°52'N 58°04'E (Off Oman; Omani territory)

Established: 30 March 1981

Legal status: Permission granted by the Government of the Sultanate of Oman in 1981.

#### Qarnain Island Beacon

Position: 24°56'N 52°51'E (Central southern Gulf; UAE territory)

Established: 11 May 1981

Legal status: Permission obtained, although from who specifically is not clear, through the Head of Coastguard of the UAE.

#### Ras Sheikh Mas'ud Beacon

Position: 26°15'N 56°13'E (Off the cost of northern Oman)

Established: 26 June 1982

Legal status: Permission obtained from the Government of Oman.

4.6 MENAS provides far more than these lighthouses. In 2003, MENAS provided around 90 other aids to navigation, in the form of buoys, lit beacons and Differential GPS (DGPS). The latter is a classic example of MENAS's reach around the Gulf, in that the system provides 1-metre accuracy signals for navigation from four stations, which together provide coverage of the entire water surface of the Gulf. In this case, the building of the four stations was a properly-negotiated undertaking, with the land upon which the transmitter masts stand being either officially set aside for the purpose (as in Bahrain) or formally leased (one in Kuwait and two in the UAE). The system became operational in 1997. There are MENAS-owned lighthouses currently situated on the territory of Kuwait, the UAE and Qatar.

4.7 The status of the waters in which non-lighthouse navigational aids belonging to MENAS are situated is of no significance, such lights being located in both international and non-international waters. The relevant consideration for MENAS is whether the lights are necessary for general navigational purposes. Generally, the buoys marking channels into specific ports will be owned by the port authorities, while those marking specific dangers, such as wrecks, will be provided by MENAS.

### **5.0 Relationship Between MENAS and Relevant States**

5.1 MENAS is thought to be the only recognised lighthouse authority in the world that is not specific to a particular State. MENAS is the only lighthouse authority that is an Associate Member of IALA.<sup>2</sup> At least four Gulf States are members of IALA (Iran, Saudi Arabia, Kuwait and Oman). However, there is no direct relationship between these States and MENAS, unless there is a normal business contract entered into in order to maintain

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<sup>2</sup> Only national authorities may become Full Members of IALA.

nationalised aids to navigation. This has occurred in Kuwait, for example, where the Ministry of Communications is responsible for some buoyage, which MENAS has maintained under contract.

5.2 That said, all Gulf State governments are aware of MENAS, including Iran, where, since 1987, MENAS has had no business dealings.

5.3 The MENAS Light Tender obeys the same regulations as any other vessel, when wishing to enter the waters of one of the Gulf nations.

5.4 Overall, MENAS operates in the Gulf largely as a result of custom and practice, following decades of informal cooperation with the various States in the area. The organisation has traditionally enjoyed a very high reputation throughout the region.

## **6.0 Scope of MENAS's Responsibilities in Managing Lights**

6.1 MENAS's responsibilities are two-fold:

- Operation of the light;
- Maintenance of the light itself and the fabric of the structure.

6.2 Operation The light is assumed to be working as advertised (ie, in accordance with how it is described on a navigational chart or in the *Admiralty List of Lights*), unless it is reported not to be so. This can be because either it is not working at all, or it is displaying a different 'character': that is, a different flash length or flash interval. In the event of such a report, steps must be taken by MENAS, as soon as operationally possible, to investigate and rectify the defect. This will entail sending a small team, usually of two technicians, by whatever means is necessary to access the lighthouse. It should be noted that MENAS operates no lights that are manned. This means that defects must either be reported by other sources (such as passing vessels) or discovered by MENAS maintenance personnel during routine visits.<sup>3</sup>

6.3 Maintenance This is straightforward and consists of:

- regular maintenance of the technical parts of the light itself. This may consist of changing the bulb, cleaning the lens and checking the power source – mains, batteries, generator;
- longer-interval checking of the soundness of the structure, re-painting etc.

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<sup>3</sup> In many other General Lighthouse Authorities (GLAs), lighthouses, and indeed other aids to navigation, are monitored remotely. Defects are, therefore, detected immediately and can, in certain cases, be forecast before they occur. MENAS has chosen not to go down this route and, therefore, is forced to rely on external reports. This means that down-time can be more protracted than strictly necessary, since local Gulf sea-goers, such as fishing vessels, have rarely been known to make any such reports.

6.4 Duration Since the lights are recognised as “belonging” to MENAS, there is no contract covering these responsibilities. There is thus no time limit to the continuance of this activity.

## **7.0 The Flying of Flags Above Lighthouses**

7.1 Flags of any kind, whether national or company, are not flown above MENAS lighthouses. It is not known whether this has ever occurred, although certainly Quoin/Didamar Island Lighthouse has a flag-pole as part of what looks like the original structure.

7.2 The significance of any flag flown above a lighthouse would be two-fold:

- the flag would almost certainly indicate from which State the operating organisation owed its existence. The British Lighthouse Authorities’ flags, which are still flown above some lighthouses on some occasions, have a Union Flag as part of the design, while most countries fly the national flag;
- the flag would almost certainly indicate that the lighthouse was manned. The absence of a flag would not in itself, however, indicate that the lighthouse was not manned.

## **8.0 The Normal Responsibilities of a Lighthouse Operator**

8.1 A State is responsible for providing and maintaining a safe system of aids to navigation in its waters. Chapter V, Regulation 13 of the IMO’s *International Convention for the Safety of Life at Sea* (“SOLAS”) provides as follows:

### **“REGULATION 13 – Establishment and Operation of Aids to Navigation**

1. Each Contracting Government undertakes to provide, as it deems practical and necessary either individually or in co-operation with other Contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires.
2. In order to obtain the greatest possible uniformity in aids to navigation, Contracting Governments undertake to take into account the international recommendations and guidelines\* when establishing such aids.
3. Contracting Governments undertake to arrange for information relating to aids to navigation to be made available to all concerned. Changes in the transmissions of position-fixing systems which could adversely affect the performance of receivers fitted in ships shall be avoided as far as possible and only be effected after timely and adequate notice has been promulgated.

\* Refer to the appropriate recommendations and guidelines of IALA and SN/Circ.107 – Maritime Buoyage System”

8.2 In practice, nearly all States have a delegated lighthouse authority which is responsible for fulfilling this task (such as the Trinity House Lighthouse Service and the Northern Lighthouse Board in the United Kingdom, the Commissioners of Irish Lights in the Republic of Ireland, and the United States Coast Guard in the USA).<sup>4</sup> That said, personal experience has shown that, even if a State is a member of IALA, this does not necessarily indicate compliance with the aims and intentions of that organisation. What follows therefore describes what should be regarded as best practice.

8.3 The first responsibility of a lighthouse authority should be to ensure that the right aids to navigation are provided in the right places around the coast. This will involve knowledge of traffic patterns, cargoes carried and any particularly environmentally sensitive areas of coast-line, so that a full risk analysis can be carried out. For example, as a result of the stranding and break-up of MV ‘Braer’ off the Northern Isles, the British Appellate Judge Lord Donaldson, in his report on the incident, recommended that large vessels with polluting cargoes should consider not using the Minches for passage off the west coast of Scotland but should sail to the west of the Outer Hebrides. As a result, the Northern Lighthouse Board, after studying the route, built three new lighthouses to make the outer passage navigationally safer.

8.4 In much the same way as MENAS operates in the Gulf, a lighthouse authority will not necessarily be directly responsible for all aids to navigation. Many will be the direct responsibility of the relevant port authority, such as the Port of London Authority in the UK. However, at least in the UK, the lighthouse authority is still responsible for overseeing any other authority’s work (the word ‘superintendence’ is used) and providing any advice needed. In the UK, this involves not only physical inspection of a local lighthouse authority’s aids to navigation but also inspection of maintenance and availability records. They are also the source of official navigational advice to government.

8.5 The second responsibility is to ensure that the aids provided by the lighthouse authority itself are operating correctly. In the UK, the characteristics of all lighthouses and most of the important buoys, are listed in the *Admiralty List of Lights*, as well as being shown on navigational charts with all other aids to navigation. It is the responsibility of the lighthouse authority to ensure that the correct information is passed to the UK Hydrographic Office (UKHO) for inclusion in these publications. It is then the same Authority’s responsibility to ensure that the performance of the aid continues to match that information.

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<sup>4</sup> The Commissioners of Irish Lights is a statutory authority of the Republic of Ireland. It is, however, responsible for the provision of aids to navigation for all of Ireland, including Northern Ireland. Trinity House, the Northern Lighthouse Board and the Commissioners of Irish Lights are the three General Lighthouse Authorities responsible for the provision of navigational aids in the waters of the United Kingdom and Ireland. In practice, they cooperate closely and are funded from a common source, the General Lighthouse Fund, which derives its income mainly from light dues collected from commercial shipping which call at United Kingdom and Republic of Ireland ports.

IALA, in its publication known as the *Navguide*,<sup>5</sup> details how to measure the availability of an aid to navigation and recommends target figures for three categories of aid, by navigational importance. In company with many other authorities, the UK lighthouse authorities measure these constantly and do not consider that they provide a good service if the figures fall below the recommended levels. Since many lighthouses around the British coast are off-shore or otherwise remote, the accent on availability has led, in some instances, to a review of the basic design of the lighthouse and improvements made to ensure redundancy/back-up is built in. In many instances today, technicians can investigate and rectify defects by accessing the lighthouse systems remotely. Because a recent UK legal opinion stated that to rely on a mariner reporting a defect to an aid may be considered unsafe, the remote monitoring of UK aids to navigation is on the increase. If a defect to an aid is reported, then all speed is used to rectify that defect.

8.6 In order to carry out defect rectification and, indeed, general maintenance of aids to navigation, most authorities have a number of special-to-task ships, as well as contract helicopters, available on a continuous basis.

8.7 All lighthouse authorities are responsible for the security of, and access to, the lighthouses operated by them, as well as any activity by personnel within them. Only criminal activity would attract outside authorities and then usually in cooperation with the lighthouse authority.

8.8 There are several uses to which lighthouse structures have traditionally been put over the years, besides the primary purpose of displaying the light. These include:

- as a day-mark, for navigation during daylight (there is a descriptive column in the *Admiralty List of Lights* for the structure, colour, height etc);
- the siting of DGPS antennae;<sup>6</sup>
- the siting of AIS antennae;<sup>7</sup>
- the siting of RACONS;<sup>8</sup>
- the siting of radar apparatus;
- the siting of radio antennae;
- the collection of meteorological data. This can be done either automatically, by remote monitoring of fitted equipment, or by verbal reporting if a lighthouse is manned;
- if manned, for assisting in search and rescue;
- as a visitor attraction.

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<sup>5</sup> IALA, *Aids to Navigation Guide*, 4th ed., December 2001.

<sup>6</sup> Differential Global Positioning System. This uses the GPS signal to produce a more accurate position than GPS.

<sup>7</sup> Automatic Identification System. This is a system whereby ships' positions (and other information) are transmitted automatically and displayed in other ships and/or shore stations.

<sup>8</sup> Radar beacons. These are triggered by a radar pulse to create a vector on a radar screen, emanating from the RACON's position. They are used, for example, to differentiate a buoy, upon which a RACON may be fixed, from a vessel on radar.

8.9 The only additional uses to which MENAS lighthouse structures have been put are as a day-mark and for the siting of RACONs. Additional uses to which the United Kingdom lighthouse authorities put their lighthouse structures include as a day-mark; the siting of DGPS antennae, AIS antennae, RACONs, radar apparatus and radio antennae; and the collection of meteorological data. Some are also used as a visitor attraction.

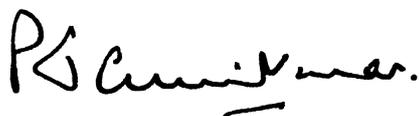
## **9.0 Other Activities Associated with MENAS's Lighthouse Responsibilities**

9.1 Since 1976, MENAS has carried out the role of Sub-Area Co-ordinator for IMO Sea Area IX, reporting to Pakistan for the Gulf Area. In this capacity, MENAS also issues NAVTEX messages to advise vessels in the area of any dangers to navigation and also relays distress messages.<sup>9</sup> MENAS also transmits local Notices to Mariners. These functions are not necessarily part of the role of a lighthouse authority and MENAS does not carry them out for the whole of the Gulf.<sup>10</sup> However, in common with MENAS, many other lighthouse authorities, such as Trinity House and the Northern Lighthouse Board, issue Notices to Mariners.

9.2 MENAS liaises closely with the UK Hydrographic Office (UKHO), in Taunton, UK, freely sharing any relevant information. This includes information passed in the form of material which will be turned into Notices to Mariners, but the liaison has also manifested itself in visits made by UKHO personnel when in the Gulf.

9.3 MENAS is also a centre for advice of a navigational nature, especially for those organisations within the region for whom MENAS carries out work under contract. For example, Port Authorities have in the past asked MENAS for advice on how to mark navigational channels and consultants, retained by a Saudi Port Authority, visited MENAS to discuss a proposed Traffic Separation Scheme.

9.4 As an Associate member of IALA, MENAS is represented at regular meetings of committees at the IALA headquarters in Paris and at the four-yearly conferences at various venues.



**Peter J. Christmas**  
Commander, Royal Navy (Retired)

**10 November 2004**

19 East Abercromby Street  
Helensburgh  
Dunbartonshire G84 9HZ  
United Kingdom

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<sup>9</sup> NAVTEX messages are sent out by radio as an immediate means of notifying shipping of dangers to navigation. These are cancelled when, and if, they are translated into a written Notice to Mariners.

<sup>10</sup> It does not do so, for example, in Iranian waters.

**Peter John Christmas**

**Commander, Royal Navy (Ret'd)**

*Summary Curriculum Vitae*

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**October 2001 – December 2003: General Manager, Middle East Navigation Aids Service (“MENAS”), based in Bahrain**

I was brought in for a short period, to be the General Manager of a unique organisation that operates across national boundaries throughout the Arabian Gulf and its approaches, operating and/or maintaining in the order of 450 aids to navigation. These included lighthouses (mixed mains and solar), buoys (all solar-powered), light-beacons (mostly solar-powered), and a 4-station, Gulf-wide, dual-coverage DGPS service. MENAS is the only member of the International Association of Marine Aids to Navigation and Lighthouse Authorities (“IALA”) not to represent a single specific State.

Based in Bahrain, I was responsible to the Chairman in London for all aspects of Operations, Finance, Contract Negotiation and General Management of the Bahrain operation, including:

- Management of a work-force of 70, of mixed nationalities;
- Operation of the Board’s vessel, MV RELUME;
- Management of the real estate (six houses, offices, workshops and storage areas);
- Control of a budget of around £4.5 million;
- Negotiation of contracts for aids to navigation maintenance and provision;
- Making and maintaining contacts throughout the Gulf countries (including Iran and Iraq).

During this period, I travelled to all the Gulf nations, with the exception of Iran and Iraq, although contact was made with both. On behalf of MENAS, I also attended meetings of the Operations Committee (as it was then called) of the IALA and attended the 2002 IALA Conference in Sydney.

Around 100 aids to navigation were owned and operated by MENAS, while over 250 were maintained by MENAS under contract to other authorities. MENAS has been active in persuading other authorities in the Gulf Region to change from gas to solar power.

**May 1995 – October 2001: Director of Operations and Navigational Requirements, Northern Lighthouse Board (“NLB”)**

NLB is the statutory General Lighthouse Authority for Scotland and the Isle of Man, with the stated aims of ensuring safety of the mariner and preservation of the marine environment. Over 400 aids to navigation are provided and operated by NLB and it was my Departmental responsibility that they were operated correctly and within IALA guidelines for availability. The latter were either achieved or exceeded. Port and Harbour Authorities operate a further 1600 (or so) aids to navigation and NLB is responsible for superintendence of these.

In my capacity as Director, I:

- managed all Operations Department personnel (101 full-time, 135 part-time, spread throughout NLB’s area of responsibility);
- provided all navigational advice, within the Board and to outside Authorities;
- oversaw the superintendence of all aids to navigation within the Board’s jurisdiction;

- managed and operated the Board's two vessels, contract helicopter and two Depots;
- controlled the budgets associated with the above (around £5 million).

Tasks associated with the post included:

- attendance at all Board meetings;
- membership of the Board's Management, Navigation and Ship Committees;
- organisation of the annual User Group meetings and communications with external users;
- representing the Board at meetings of the IALA and other bodies, outside the Board's headquarters;
- assisted the UK Department of Transport, the responsible UK Government Department, (as was) in the formulation of the UK's Port Marine Safety Code;
- assisting in negotiations for various contracts.

#### **January 1961 – June 1994: Officer, Royal Navy**

My career in the UK Royal Navy was spent as a Seaman Officer, reaching the rank of Commander. I was the Navigating Officer of two submarines, the Second-in-command of three submarines and the Commanding Officer of three.

I was the Officer-in-Charge of a training school for three years (1981-1983) and the Second-in-command of a submarine squadron for three years (1990-1993), responsible for, among many other matters, all aspects of the training standards of the eight submarine crews, very much including navigation.

**Younger Brother of Trinity House**  
**Fellow of the UK Chartered Institute of Management**  
**Member of the UK Institute of Directors**

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## **ANNEX MCM 3**

**Note on Lighthouses and Their Functions, by Rear-Admiral (retired) Jean-Charles Leclair**

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## **NOTE ON LIGHTHOUSES AND THEIR FUNCTIONS**

Rear Admiral (retired) Jean-Charles Leclair\*

### **General Comments**

This Note responds to various questions put to the International Association of Marine Aids to Navigation and Lighthouse Authorities (“IALA”) by counsel for the Government of Malaysia. It is prepared by Rear Admiral (retired) Jean-Charles Leclair, under the authority of the IALA Secretary-General, on behalf of IALA. For ease of reference, the question to which each answer relates is reproduced immediately before the relevant answer.

Given its representative function, and given that both Malaysia and Singapore are IALA Members, IALA is not in a position to advise or act as expert for either party in the proceedings before the International Court of Justice. In particular, IALA has, and can have, no position on the question of sovereignty over Pulau Batu Puteh (Pedra Branca). IALA may, however, answer questions or give information concerning lighthouses to one of its Members as long as this information is neutral and factual. This is the purpose of this Note.

### **Answers to Questions**

**1. Are there examples of lighthouses which are situated on the territory of one State but administered by the authorities of another State or by a corporation or other similar undertaking in another State?**

It is possible to give two examples of such situations. The first relates to the aids to navigation situated in Northern Ireland (UK) which are maintained by the Commissioners of Irish Lights (Republic of Ireland).<sup>1</sup> The second relates to the position in the Persian/Arabian Gulf in which various lighthouses and other aids to navigation are

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\* IALA Representative to the International Maritime Organisation; formerly responsible for maritime safety in France and Head of the French Authority for lighthouses and aids to navigation.

<sup>1</sup> The Commissioners of Irish Lights (“CIL”) is a statutory body established under the laws of the Republic of Ireland. It is, however, the General Lighthouse Authority for all of Ireland, including Northern Ireland. In practice, the CIL works in close consultation with the other General Lighthouse Authorities responsible for the provision of aids to navigation in UK waters, the Corporation of Trinity House and the Commissioners of Northern Lighthouses.

maintained by the Middle East Navigation Aids Service (MENAS), which is a private company.

These situations must be seen in the light of the relevant international conventions. Two conventions deal with Safety of Navigation: the UN Convention on the Law of the Sea, in particular, Articles 24, 43 and 44, and, mainly, the IMO Convention on Safety of Life at Sea (SOLAS 74). Chapter V, Regulation 13, paragraph 1 of SOLAS stipulates: "Each Contracting Government undertakes to provide, as it deems practical and necessary either individually or in co-operation with other Contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires". This means that a coastal State has the responsibility to mark dangers such as islands and that this can be done in co-operation with other States. Therefore, cases such as that of Pulau Batu Puteh are provided for in international conventions but within the framework of co-operation between States. International co-operation, as such, has no effect on the status of the lighthouse and its surrounding area.

**2. Would administrators of lighthouses, mariners or experts in maritime navigation consider that the fact that the authority of a State was responsible for the operation of a lighthouse signified that the territory on which that lighthouse was situated belonged to that State?**

The answer is not necessarily since, according to the SOLAS Convention, Chapter V, Regulation 13, quoted above, one State can operate a lighthouse situated on the territory of another State under the framework of a cooperation agreement between the two States. A user will, however, direct any complaints to the authority of the State where the lighthouse is situated.

**3. Who issues Notices to Mariners? Specifically, is the issuing of such Notices only undertaken by States or do non-State entities issue such Notices? Are Notices to Mariners issued in respect of hazards on the high seas?**

The matter is provided for by the LoS Convention and by the SOLAS Convention. Chapter V, Regulation 13, paragraph 3 of the latter requires *inter alia* that "Contracting Governments undertake to arrange for information relating to aids to navigation to be made available to all concerned." In addition, Regulation 4 of the same Chapter V requires that "Each Contracting Government shall take all steps necessary to ensure that, when intelligence of any dangers is received from whatever reliable source, it shall be

promptly brought to the knowledge of those concerned and communicated to other interested Governments.”

The publication of information on navigation safety is coordinated by means of the World-Wide Navigational Warning Service that was established jointly by the IMO and the IHO (International Hydrographic Organisation) in 1977. The World-Wide Navigational Service is administered through 16 NAVAREAS. Each NAVAREA has an Area Coordinator who is responsible for collecting information, analysing it, and transmitting NAVAREA Warnings by dedicated means of communication. Pulau Batu Puteh is within the NAVAREA XI coordinated by Japan.

Within each NAVAREA, warnings (Maritime Safety Information) are published at national level by a National Coordinator or under his responsibility. This means that the National Coordinator is responsible for publishing navigational warnings regarding the aids to navigation of his country and its adjacent waters even if such warnings or notices to mariners are issued by other authorized State or non-State entities. As regards the high seas, every National Coordinator receiving such information has the duty to pass it to the NAVAREA Coordinator.

**4. Are lighthouses commonly used for non-light purposes? If so, in what way?**

Lighthouses are often used for other purposes than aids to navigation. The predominant applications are for the collection of meteorological and hydrological data and for telecommunication installations. More recently, in the framework of a move to preserve the historic and cultural value of lighthouses, their use as a tourist attraction has been developed.

**5. What is the significance of a Marine Ensign? What significance, if any, attaches to the flying of a Marine Ensign above a lighthouse? What would a maritime navigator or ship's captain understand from the sight of an ensign flying above a lighthouse?**

A Marine Ensign is typically used by ships (military and civil) to identify their nationality. Every ship must have a nationality and fly her national ensign. The dimensions and, sometimes, the design of the Marine Ensign differ from flags used for non-marine activities. But often ashore, buildings in relation with marine activities fly a Marine Ensign.

The use of a Marine Ensign above a lighthouse has no special significance for mariners. Generally, it cannot be identified by ships crossing offshore due to its size and the distance.

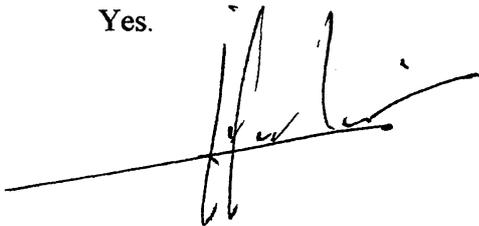
**6. Who, normally, would be responsible for undertaking investigations into navigational hazards and marine casualties? Do lighthouse operators traditionally have any role as regards the investigation of marine hazards?**

According to the SOLAS Convention, Chapter I, Regulation 21, “each Administration undertakes to conduct an investigation of any casualty occurring to any of its ships subject to the provisions of the present Convention when it judges that such an investigation may assist in determining what changes in the present regulations might be desirable.” In addition, according to the LoS Convention, Article 27, a coastal State is entitled to investigate a foreign flagged ship in its territorial waters in certain limited cases specified in the Article.

Lighthouse operators may have a role as regards investigation of marine hazards as witnesses or if the functioning of the aid to navigation is at stake.

**7. As regards the administration and operation of a lighthouse, is it standard practice for a lighthouse operator to add additional facilities and structures on to the lighthouse – such as communications towers, helipads, etc?**

Yes.



**R. Adm. (rtd) Jean-Charles Leclair**

**20 October 2004**

For the International Association for Marine Aids  
to Navigation and Lighthouse Authorities  
20 ter Rue Schnapper  
78100 St Germain-en-laye  
France

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## **ANNEX MCM 4**

**Affidavit of Rear Admiral (Rtd) Dato' Karalasingam  
Thanabalasingam**

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**INTERNATIONAL COURT OF JUSTICE**  
**CASE CONCERNING SOVEREIGNTY OVER PEDRA BRANCA/PULAU BATU**  
**PUTEH, MIDDLE ROCKS AND SOUTH LEDGE**

**BETWEEN**  
  
**MALAYSIA**  
  
**AND**  
  
**SINGAPORE**

**AFFIDAVIT OF REAR-ADMIRAL (RTD)**  
**DATO' KARALASINGAM THANABALASINGAM**

I, KARALASINGAM THANABALASINGAM (Identity Card No. 360312-10-5303), Rear-Admiral (Retired), of 103 Lorong Chong Khoon Lin 5, Ukay Heights, 68000 Ampang, Selangor Darul Ehsan, Malaysia, do solemnly affirm and say as follows:

1. From 1955 to 1976, I was a serving naval officer, first in the (British) Royal Malayan Navy and subsequently in the Royal Malayan/Malaysian Navy. I joined the Royal Malayan Navy as an officer cadet on 15 May 1955, transferring to the Royal Malayan Navy when it was formally handed over by Britain to the Malayan Government on 1 July 1958. With the establishment of Malaysia in 1963, this became the Royal Malaysian Navy. On 1 December 1967, with the rank of Commodore, I assumed the post of Chief of the Royal Malaysian Navy, retiring from this position with the rank of Rear-Admiral on 31 December 1976.
  
2. For purposes of this affidavit, I have been shown extracts from the Memorial of Malaysia, and its attached annexes, in the case between Malaysia and Singapore before the International Court of Justice. In particular, my attention has been drawn to Chapter 7 of the Malaysian Memorial and, specifically, to paragraphs 270 to 273 and Annex 76 and Map 25 thereof, which refer to a confidential "Letter of

Promulgation” which I issued on 16 July 1968 in my capacity as Chief of the Navy. Save where indicated, the following statements are made from my own knowledge and are true. Where they are not made from my own knowledge, they are true to the best of my information and belief.

3. I address matters below under the following headings:
  - (1) Personal Background
  - (2) The Royal Malaysian Navy
    - (a) Background
    - (b) The Funding, Staffing and Responsibilities of the Royal Malayan/Malaysian Navy
    - (c) The Chief of the Navy
    - (d) The Woodlands Naval Base and the Further Development of the Royal Malaysian Navy
    - (e) Naval Orders and Operational and Administrative Instructions
  - (3) Pulau Batu Puteh
    - (a) General Issues
    - (b) Naval Conduct Concerning Pulau Batu Puteh
      - (i) In General
      - (ii) The Letter of Promulgation of 16 July 1968
    - (c) Local Fishing Practices and Piracy Control
  - (4) Conclusion

**(1) Personal Background**

4. I was born in Kuala Lumpur on 12 March 1936. On 15 May 1955, I joined the Royal Malayan Navy as one of 9 officer cadets from Malaya under a special officer-training scheme. At that time, Britain had responsibility for all naval matters both in the Colony of Singapore, which had been established in 1946, and in the Federation of Malaya, which, in 1948, had replaced the Malayan Union, which had also been established in 1946. At that time, and for some years after this

until the major withdrawal of British naval forces from east of Suez announced in around 1968, the Royal Navy had a major naval base in Singapore. I describe the history and development of the Royal Malaysian Navy in more detail below.

5. After a brief period of initial training in Singapore, I was sent to the Britannia Royal Naval College in Dartmouth in the United Kingdom where I went through the cadet and midshipman phases of my training. I was commissioned as an Acting Sub-Lieutenant in the Royal Malayan Navy on 1 May 1958 and served on board *HMS Chichester*, a British air-direction frigate which was then being built in Glasgow.
6. While I was serving on this ship, I received a letter from the Chief Secretary of the Malayan Government asking whether I would consider transferring to the Royal Malayan Navy, which the British were making preparations to hand over to the Malayan Government. I believe that most if not all of my Malayan colleagues in the Royal Malayan Navy received similar letters. I agreed to transfer. Britain handed over the Royal Malayan Navy to the Malayan Government on 1 July 1958. I became an officer of the Royal Malayan Navy at around that time, becoming an officer of the Royal Malaysian Navy on the establishment of the Federation of Malaysia in 1963.
7. I returned to Malaya in December 1958. In January 1959, I was appointed Cadet Training Officer at the Federal Military College in Port Dickson. In August 1960, I was appointed to serve on board the minesweeper *KD Mahameru*. The following year, in August 1961, I was given my first command of a Royal Malayan Navy ship, the Seaward Defence Motor Launch ("SDML") *KD Sri Pahang*. I was still a Sub-Lieutenant at the time. This was a special command, not simply because it was my first but because the ship was one of the oldest in the Royal Malayan Navy and had neither radar nor other electronic navigational equipment. Navigation was by magnetic compass and depth readings were by hand-lead line. The ship was equipped with two 20 mm manual guns, one forward and one aft.

8. After this, I spent a period seconded on board a Royal Navy ship or attending specialist naval courses. During 1962, as a Lieutenant, I spent six months on board *HMS Cavalier*, at my request, as I was concerned that I had become out of touch with the anti-submarine warfare aspect. *HMS Cavalier* was a British destroyer based at the British Singapore Naval Base. During this period, we conducted submarine exercises in the South China Sea and “blind navigation” exercises on our return to Base. The term “blind navigation” exercises refers to exercises involving the navigation of the ship from below deck rather than from the bridge.
  
9. In 1963, I was sent to *HMS Vernon* (a shore establishment), where I undertook a Torpedo and Anti-Submarine (“TAS”) specialisation course. Immediately following this, I did a diving course and qualified as a Ship’s Diver. Thereafter, I was appointed the Commanding Officer of *KD Sri Kelantan* for its commissioning and its maiden voyage from Portsmouth in the United Kingdom to Malaysia. During the period of the Indonesian-backed insurgency against Malaysia, commonly referred to as the “Confrontation”, which lasted from 1963 until 1966, I served on active duty on a number of ships. I was promoted to the rank of Lieutenant Commander on 18 February 1965 and appointed Executive Officer of the frigate *KD Hang Tuah*, the Royal Malaysian Navy flagship. On 14 October 1966, I was appointed Commanding Officer of K.D Sri Tawau and concurrently Resident Naval Officer, Tawau, Sabah.
  
10. In February 1967, I was informed by the Malaysian Minister of Defence that I would take up the position of Chief of the Navy, in line with the policy of appointing a Malaysian naval officer to the post. Until this point, the Royal Malayan/Malaysian Navy had been headed by either British or Australian naval officers. In preparation for this, I was promoted to the rank of Commander on 1 March 1967 and given command of *KD Hang Tuah*. Thereafter, on 1 September 1967, I was promoted to the rank of Captain and posted to the Naval Staff Division where I worked with the then Chief of the Royal Malaysian Navy, Commodore Dollard. I subsequently took up the post of Chief of the Navy, with the rank of

Commodore, on 1 December 1967, becoming the first Malaysian to assume this role. I was 31 at the time. I was promoted to the rank of Rear-Admiral on 1 January 1973. I retired from the Royal Malaysian Navy in December 1976. Since then, although I have kept close contact with the navy, and with many of my former colleagues, I have pursued other interests and have not had any active involvement in the service.

## **(2) The Royal Malaysian Navy**

### **(a) Background**

11. Prior to the Second World War, Britain had started the Malay Section of the Royal Navy. It was referred to in this way because virtually all of the recruits came from the Malay States, mostly from Johor. A very few came from Singapore. The officers were British. Many from the Section saw action during the Second World War and had to flee to India and what was then Ceylon before the fall of Singapore. With the end of the Second World War, for reasons of financial constraints, the Malay Section was disbanded in April 1947. It was, however, re-started in December 1948, under the name the Malayan Naval Force, following the declaration of a State of Emergency by Britain earlier that year to combat the communist insurgency. The Malayan Naval Force became the Royal Malayan Navy in August 1952. The Malayan Naval Force and, thereafter, the Royal Malayan Navy, was based at the Woodlands Naval Base in Singapore.
12. In parallel with the establishment of the Malay Section of the Royal Navy, there was also a small reserve force known as the Straits Settlements Royal Naval Volunteer Reserve. This was established on 27 April 1934. The Volunteer Reserve remained separate from the Malay Section of the Royal Navy and was based in Singapore Harbour, rather than at the Woodlands Naval Base. The Volunteer Reserve had no sea-going capability. As I recall, *HMS Laburnum*, which was tied

up in Singapore Harbour, was converted to be the Headquarters of the Volunteer Reserve.

13. On 31 August 1957, the Federation of Malaya became independent. This followed the conclusion of the Federation of Malaya Agreement which brought together into a single Federation the Malay States and the former Straits Settlements of Penang and Malacca. It was in consequence of this independence that Britain took steps in 1958 to transfer the Royal Malayan Navy to the control of the Malayan Government. This transfer took place on 1 July 1958. At a ceremony on 12 July 1958, Britain also handed over the Woodlands Naval Base in Singapore to Malaya, this being the principal naval base of the Royal Malayan Navy.
14. The hand over by Britain of the Royal Malayan Navy and the Woodlands Naval Base to the Malayan Government took place shortly before Singapore was granted self-government, which I understand took place in late 1958 and 1959 following the (British) State of Singapore Act of 1 August 1958.
15. During my tenure as the Chief of the Navy, I took steps to move the Royal Malaysian Navy from the Woodlands Naval Base to other more suitable bases in Malaysia. These developments are described in more detail below. I understand that Malaysia only finally fully vacated the Woodlands Naval Base, handing it over to Singapore, towards the end of 1997.

***(b) The Funding, Staffing and Responsibilities of the Royal Malayan/Malaysian Navy***

16. From its origins as the Malay Section of the Royal Navy, the Royal Malayan Navy was made up almost entirely of recruits from Malaya. There were a very small number of enlisted men and maybe one or two junior officers from Singapore, but no more.

17. At the outset, the senior officers of the Royal Malayan Navy were all naval officers from Britain, Australia and New Zealand. The first Commanding Officer of the Malayan Naval Force, and subsequently of the Royal Malayan Navy, was Captain H.E.H. Nichols, of the Royal Navy. He was succeeded by Captain E.D. Norman, also of the Royal Navy. On the handover of the Royal Malayan Navy to the Malayan Government on 1 July 1958, Captain Norman was promoted to Commodore and became the first Chief of the Royal Malayan Navy. Commodore Norman was followed in the post in 1960 by Captain W.J. Dovers of the Royal Australian Navy. Captain Dovers was followed in 1962 by Commodore A.M. Synnot, also of the Royal Australian Navy, who served until 1965. He, in turn, was followed by Commodore A.N. Dollard, again from the Royal Australian Navy. Commodore Dollard served until I succeeded him on 1 December 1967.
  
18. Below this level, many of the senior officers of the Royal Malayan/Malaysian Navy were also from Britain, Australia and New Zealand, with a handful also from India. Even in December 1967, when I took over as the Chief of the Navy, all my senior staff were British, Australian or New Zealanders. They were only replaced by Malaysian personnel when their terms expired. These officers usually went back to senior positions within their own navies. All of these officers were intimately involved at an operational level in formulating the policies and practices of the Royal Malayan/Malaysian Navy and, in many cases, would have consulted with their own navies on certain matters, a practice which was encouraged and was helpful to us because it gave us a wider body of experience on which to draw in these formative years of the service.
  
19. With the hand over to the Malayan Government of the Royal Malayan Navy and the Woodlands Naval Base, Malaya eventually assumed full financial responsibility both for the running of the Base and for the funding of all aspects of the navy. I am not aware of whether Malaya made any payment to Singapore for the use of the Woodlands Base from the point at which it took control of the Base on 12 July 1958 until Singapore joined the Federation of Malaysia on 16 September 1963.

After Singapore's separation from Malaysia on 9 August 1965, I understand that provision was made for Malaysia's continued use of the Woodlands Base in the Separation Agreement concluded between Malaysia and Singapore. In this regard, my attention has been drawn to Annex 15 of the Malaysian Memorial, which contains this Agreement, and in particular to Article V(3) thereof, which I am told preserved Malaysia's right to continue to maintain its bases and other facilities used by its military forces in Singapore.

20. From the point of Singapore's separation from Malaysia, I believe that some nominal amount was paid by Malaysia to Singapore for the use of the Woodlands Base, although I understand that this arrangement may have been revised subsequently.
21. From 1958 to 1963, as was also the case before this time, the Royal Navy was responsible for the defence of Singapore, which remained a colony. Between September 1963 and August 1965, the Royal Malaysian Navy was responsible for the defence of Singapore, as part of Malaysia. This continued after Singapore's independence in 1965. I am told that the Separation Agreement, to which I have already referred, provided expressly that Malaysia would continue to afford to Singapore assistance for external defence and also for the continuation of defence agreements that had been concluded with other States. In this regard, my attention has been drawn to Article V(2) and Annex B, paragraph 13 of the Separation Agreement which, I am told, address such matters. One such defence agreement which was particularly important was the Anglo-Malayan Defence Agreement of 1957, which formed the basis of the assistance given to Malaysia by Britain during the period of Confrontation in the mid-1960s. Although I believe that initiatives were taken by Singapore after 1965 to establish its own navy, I am not aware that Singapore had an effective and functioning navy of its own until at least the mid-1970s.

22. Following the establishment of Malaysia in 1963, we faced a period of insurgency against Malaysia backed by President Sukarno of Indonesia. The Royal Malaysian Navy received considerable assistance in responding to this Confrontation from the British, Australian and New Zealand navies. This took place broadly under the framework of the 1957 Anglo-Malayan Defence Agreement and took the form of coordinated naval patrols by the four navies. This assistance was particularly important because the Royal Malaysian Navy was still in its early stages of development as an effective naval force.
  
23. These patrols by the four navies, which I recollect as beginning in 1963 but may have begun earlier, were coordinated on the basis of what was known as Standard Combined Areas for Patrol, the patrols being commonly referred to as SCAP patrols. I do not know exactly when the SCAP period ceased but, with the end of Confrontation in 1966, coordinated patrols by the British, Australian and New Zealand navies would have ended. In any event, by 1968, and the beginning of the large-scale withdrawal of British naval forces from east of Suez, combined naval operations no longer took place on a regular basis.
  
24. I expect that Singaporean officials would have been familiar with the arrangements for the SCAP patrols from their commencement in 1963 through to 1965. The reasons for this were that, during the period 1963 to 1965, Singapore was part of Malaysia. In this period, Singapore naval officers from what had been the Royal Naval Volunteer Reserve served on Malaysian ships and shore establishments and would no doubt have seen the relevant documentation relating to the SCAP patrols, including sector designations and other arrangements. In this regard, I should note that, during Confrontation, the Indonesian insurgents frequently made lightning raids into Singapore to attack, for example, the oil refinery on Pulau Bukum. We therefore had to have very tight patrols of perhaps 12 to 15 ships along the length of the Singapore Straits to stop such incursions.

25. After Confrontation, the Royal Malaysian Navy continued to patrol Singapore waters, although less intensively than before. The basis for doing so was the Separation Agreement arrangements which provided that Malaysia would continue to afford Singapore assistance relating to its defence. As the Royal Malaysian Navy remained based very largely at its Woodlands Naval Base in Singapore, we transited Singapore waters every time we left from and returned to the Base.

*(c) The Chief of the Navy*

26. I took over as Chief of the Navy on 1 December 1967. As such, I was responsible for all operational aspects concerning Malaysia's maritime defence as well as for all other aspects of the navy, including recruitment, training, administration, etc. Chief of the Navy is not a naval rank but the title given to the person who is in overall charge of the navy. In some countries, the position is called Chief of Naval Operations or Chief of Naval Staff. The point to emphasise is that, in Malaysia, the Chief of the Navy is responsible for operational matters as well as for administrative matters.

27. As Chief of the Navy, I reported directly to the Minister of Defence. I was also consulted by the Government on all policy matters which had a naval or maritime dimension. I was thus involved in the internal discussions leading to Malaysia claiming a territorial sea of 12 nautical miles in 1969. I was consulted on questions that arose in the context of the negotiations between Malaysia and Indonesia in the Singapore and Malacca Straits, between Malaysia and Thailand concerning the border in the South China Sea, and other negotiations. I was also consulted concerning the maritime passage between Sabah and peninsular Malaysia.

28. In addition, I had extensive and on-going contacts with my opposite numbers in other navies around the world. In particular, I had regular contacts with other Naval Chiefs from the ASEAN countries, with my counterparts in the United Kingdom, Australia, New Zealand and other Commonwealth countries and the United States of America.

29. As Chief of the Navy, I had my own flag. This would be flown on ships and on shore establishments when I was on board or visiting. For example, every time I visited the Woodlands Naval Base in Singapore, the flag was hoisted, staying flying until I left the Base.

*(d) The Woodlands Naval Base and the Further Development of the Royal Malaysian Navy*

30. In 1968, Britain announced the withdrawal of its naval forces from east of Suez. This was a significant development for us as, until this point, the Royal Navy had provided considerable assistance to Malaysia in respect of its maritime defence. This was especially the case during the period of Confrontation. With the British naval withdrawal east of Suez, the Royal Navy decided to close down its Naval Base in Singapore and the Anglo-Malayan Defence Agreement of 1957 could no longer be relied upon as an effective framework for Malaysia's defence.

31. The immediate consequence of these developments for Malaysia was a realisation that we had to build up our own armed forces. As one element of this, I was directed by the Malaysian Government to take steps to equip the navy with missiles. At this time, the navy was the most sophisticated of the three Malaysian armed services (navy, army and air force) and it was accordingly prioritised for purposes of development of a deterrent capability.

32. In 1970, the navy began equipping with surface-to-surface missile (Exocet) capability. By this time, however, there was some political tension between Malaysia and Singapore and I was instructed not to build any more facilities within our Naval Base in Woodlands. This presented a problem as the new, and expensive, missiles had to be stowed in specially built, air-conditioned stowage and maintenance areas. In consequence of the moratorium on the construction of such

facilities in the Woodlands Base, the missiles had to be temporarily stowed at an army camp in Johor.

33. These developments prompted me to advise the Government that Malaysia should build naval bases on its own soil. I was given the go ahead to look for suitable sites for such bases and decided that the principal naval base should be constructed at Lumut on the west coast of peninsula Malaysia. Detailed feasibility studies began in 1970, with the assistance of the German Government. These concluded in 1972. Construction of the Lumut Base began in early 1973, most of the work being completed by the early 1980s. By the time I retired from the navy in 1976, a few Royal Malaysian Navy ships had been relocated to other bases in Malaysia but the main naval force was still based at Woodlands in Singapore. I understand that the Woodlands Base was only finally vacated by the Royal Malaysian Navy and handed over to Singapore towards the end of 1997.
34. Construction was also begun on other smaller naval bases in the mid-1970s, including the Kuantan Naval Base on the east coast of peninsula Malaysia. This was completed in the late 1970s.
35. I should add, concerning the Woodlands Naval Base, that we flew the Malaysian Naval Ensign at the masthead at the Base every day without fail. The Naval Ensign is only flown during daylight hours. The Ensign was thus hoisted at a ceremony in the Base at 0800 each morning and lowered at another ceremony at sunset each day. Singapore never objected to this practice. I understand that Singapore contends that the flying of its Marine Ensign above the Horsburgh Lighthouse indicates that Pulau Batu Puteh belongs to Singapore. I am not an expert on lighthouses, but, to a naval officer, the flying of the Singapore Marine Ensign, or even the Singapore Naval Ensign, above the lighthouse would be understood as indicating only that Singapore managed the lighthouse, not that it had sovereignty over the island on which the lighthouse stood.

*(e) Naval Orders and Operating Administrative Instructions*

36. Naval orders take various forms. Naval discipline is addressed in legislation. It is also addressed in other regulations and instructions. For example, in my time in the Royal Navy, discipline was addressed in, if I recall the name correctly, the Queen's Regulations and Admiralty Instructions. They may have changed to the Queen's Regulations of the Royal Navy. In the period after the Malayan Government took control of the Royal Malayan Navy until 1972, when the (Malaysian) Armed Forces Act was passed, disciplinary matters were still addressed by reference to these Regulations and Instructions.
37. Two forms of naval orders and instructions were, and I believe remain, particularly important to the task of the Chief of the Navy and his senior officers. These were Secret Operational and Administrative Instructions ("SOAIs") and Letters of Promulgation.
38. SOAIs are sensitive security classified documents which address in detail the rules and policies relevant to the conduct of naval operations. They are substantial documents. They are prepared after careful review of all relevant materials, including national laws and applicable international conventions. They will, for example, contain a detailed description and coordinates of all relevant maritime zones, both for Malaysia and for other States whose maritime zones will be relevant to the operations of the Royal Malaysian Navy. This is necessary to ensure that Royal Malaysian Navy ships do not inadvertently stray into the maritime zones of other States or are otherwise sensitive to areas which may be in dispute. SOAIs will also designate security areas, controlled areas and other zones relevant to naval operations. For example, the coordinates of the SCAP areas were laid down in SOAI 201. SOAIs will also set out detailed rules of engagement relating to the use of force by the Royal Malaysian Navy as well as other rules relating to conduct in specific areas, for example, international straits, or, exceptionally, the use of force by the Royal Malaysian Navy in the territorial or other waters of other States.

Other matters that have been addressed in SOAIs include operating limitations, towing of ships, action and emergency alarm signalling, registration and licensing information of vessels, rules concerning the request of helicopters, and so on.

39. SOAIs are issued under the authority of the Chief of the Navy, usually by his Deputy or by the Operations Commander or Operations Officer at the Ministry of Defence. Given both their sensitive and bulky nature, SOAIs are circulated restrictively, to senior staff at the Ministry of Defence, to Fleet Commanders and to other senior officers. SOAIs are not carried on every ship. Typically, they will be carried on flagships and by squadron commanders. Smaller patrol vessels carried versions of the Instructions that were appropriate to their tasks and the seniority of their Commanding Officer. Compliance with SOAIs is required as a matter of naval discipline. Non-compliance would attract sanctions ranging from disciplinary proceedings to courts martial, depending on the seriousness of the violation.
40. SOAIs are updated and replaced as required. They apply until revoked. Given their sensitive nature, all copies of SOAIs had to be accounted for on a fortnightly or monthly basis, depending on its subject-matter. Outdated SOAIs were destroyed.
41. SOAI 107 addressed “Foreign Territorial Limits to be Observed”. I have no specific recollection of its details, and have not been able to refresh my memory on the matter as all copies of SOAI 107 were apparently destroyed. I know of its scope, however, from a partial surviving index of SOAIs.
42. It is evident to me from the subject matter of other SOAIs that SOAI 107 addressed foreign territorial limits generally insofar as they were relevant to the operations of the Royal Malaysian Navy, rather than the territorial limits of any particular State specifically. This is apparent from the fact that SOAI 116 addressed the “Limits of Indonesian Claimed Waters in the Malacca and Singapore Straits”. From this, I

believe that SOAI 107 addressed general issues relating to the observation of the territorial limits of various foreign States relevant to the operations of the Royal Malaysian Navy, including, very probably, Singapore, Indonesia and Thailand. My belief that this is an accurate characterisation of the subject-matter of SOAI 107 is confirmed by the terms of the Letter of Promulgation which I issued on 16 July 1968, the operative parts of which are annexed to Malaysia's Memorial. I return to this in more detail below.

43. Apart from SOAI 107, I am not aware of any other SOAI that addressed the limits of Singapore's territorial waters.
44. Letters of Promulgation are issued to enforce points addressed in an SOAI. They are issued by the Chief of the Navy and only by him. They are circulated as appropriate to Senior and Commanding Officers. They amount to directives to the entire navy, both ship and shore establishments, to comply with the matters which they address. They may be general or specific. They may incorporate and further reinforce orders previously issued in some other form, for example, by the Fleet Commander. Given their authority, and the additional attention that must be given to their preparation, Letters of Promulgation are not issued on a regular basis but rather as and when required.
45. I should emphasise that normal naval orders are not issued by way of Letters of Promulgation. Letters of Promulgation are reserved for specific orders of particular importance. The object of a Letter of Promulgation is to inform Senior and Commanding Officers of matters that it is essential for them to know, such as the limits of a State's territorial waters, or particular problems associated with international waterways or foreign waters about which they should be especially aware.
46. Letters of Promulgation are prepared with particular attention. In my time, they were subject to careful scrutiny both by my senior staff and by me. Every care was

taken to ensure that Letters of Promulgation were properly and accurately formulated.

**(3) Pulau Batu Puteh**

**(a) *General Issues***

47. Pulau Batu Puteh stands at the entrance to the Singapore Straits, about 8 nautical miles off the coast of south-eastern Johor. It is about 26 nautical miles from the nearest point in Singapore and around 35 nautical miles from Singapore Harbour. An appreciation of what this distance means in terms of sailing time is important.
48. A small fishing boat with an inboard engine of around 50 to 80 horsepower might travel at an average speed of 7 to 10 knots, that is, 7 to 10 nautical miles an hour. Depending on the size of the boat and the engine, and whether it is an inboard or an outboard engine, average speeds might be lower or higher, at the top end perhaps around 10 to 12 knots. At these speeds, it would take between 35 minutes to 1 hour 10 minutes for a fishing vessel to travel from the Johor coast to Pulau Batu Puteh, between 2 hours 10 minutes and 3 hours 45 minutes for such a vessel to travel from the nearest point in Singapore to Pulau Batu Puteh, and between 2 hours 55 minutes and 5 hours for such a vessel to travel from Singapore Harbour to Pulau Batu Puteh.
49. A small civilian, marine or naval launch might travel at an average speed of 10 to 12 knots, possibly going as high as 18 knots. I have a recollection that Singapore used civilian launches or vessels to supply the Horsburgh Lighthouse from the headquarters of the Port of Singapore Authority in Singapore Harbour, which I understand was responsible for the administration of the lighthouse. At such speeds, it would take a Port of Singapore Authority launch between 2 to 3 hours to reach the lighthouse.

50. From time to time, when I was on duty in the area, I recall seeing small launches heading in the direction of Pulau Batu Puteh. I knew that these were supply vessels for the lighthouse because the navy was familiar with the supply routine. My recollection that these were civilian rather than marine or naval vessels is because I do not recall ever seeing a Marine or Naval Ensign flying from these vessels, which would have been standard practice. It is, of course, possible that there might have been an ensign wrapped around the flag staff, or that the lighthouse was supplied by vessels other than the ones I observed. My recollection, however, is that the lighthouse was supplied on a regular basis by civilian launches.

**(b) *Naval Conduct Concerning Pulau Batu Puteh***

**(i) *In General***

51. I have clear recollections of Pulau Batu Puteh. The Royal Malayan Navy patrolled the waters around Pulau Batu Puteh right from the point that Britain first handed over the navy to the Malayan Government in July 1958. We were certainly patrolling this area in 1960-62 when I served on the minesweeper *KD Mahameru* and was in command of *KD Sri Pahang* as both of these vessels were engaged in patrols in the waters around Pulau Batu Puteh at this time.

52. During the tenure of my command of *KD Sri Pahang*, there was one occasion which I recall particularly vividly. I do not recall the precise date but it would probably have been around April or May 1962. The weather on the day in question was very calm and clear and I decided to land on Pulau Batu Puteh. It was not often that one got the chance to get very close to Pulau Batu Puteh as the bigger ships, because of their size and draught and the hazards close to the island, had to keep their distance. Additionally, especially during the northeast and southeast monsoons, the sea could be quite choppy. As *KD Sri Pahang* was the smallest ship in the Royal Malayan Navy (at approximately 75 feet in length), and as I had been specifically tasked to patrol Southeast Johor and the Pulau Batu Puteh area, I took

the opportunity to land on the island and view the surrounding area. I would never have done so if I thought, even for a moment, that Pulau Batu Puteh was not Malayan territory.

53. As it was, I sailed the ship as close to Pulau Batu Puteh as possible, stopped the engines and handed control of the ship to my coxswain. *KD Sri Pahang* would have been very clearly identifiable to the lighthouse keepers as a Royal Malayan Navy ship. It had two 20 mm guns mounted on the deck, one forward and one aft. The vessel was too small to be a Royal Navy ship. We were flying the Malayan Naval Ensign. I and my crew were clearly visible and were in uniform. We wore white uniforms, shorts, short sleeved shirts, stockings and white canvas shoes with leather soles.
54. Once we had stopped the ship, I had a dinghy lowered. I and another member of my crew then rowed to the island.
55. Before disembarking on to the island, I removed my stockings and leather-soled shoes. The rocks were slippery and I wanted to be sure to keep my balance. I recall seeing some steps leading up to the lighthouse but I did not use these and simply clambered on to the rocks. I recall it being quite difficult to do. I remember that the rocks were yellowish and slightly grey in colour.
56. When I was on the rocks, I recall looking up at the lighthouse and seeing a man on the viewing platform above looking down at me. He was evidently the lighthouse keeper. I waved to him and he waved back. After a short while, I returned to my ship and continued patrolling.
57. Throughout the period of my naval service, I had no doubt that Pulau Batu Puteh was a Malaysian island, even though Singapore operated the lighthouse. I also had no doubt that it was regarded as a Malaysian island by the senior naval officers from the Royal Navy, and the Australian and New Zealand navies, with whom I

served, as well as by Singapore. Quite apart from the long tradition of local fishing in the waters around Pulau Batu Puteh by the fishermen from the south eastern Johor coast – with which I was directly familiar because of my naval duties – my sense of Pulau Batu Puteh as a Malaysian island was consistently affirmed by various factors.

58. Before I mention these, I should note that, during my period in the navy, I do not recall that we ever had any difficulty with the fact that Singapore was operating a lighthouse on a Malaysian island. One of the reasons for this was the historically close connections between Malaysia and Singapore, going back to the British period. We were also all aware that Singapore had for many years operated other lighthouses on Malaysian territory. For example, as a naval officer, I was familiar with the Pulau Pisang Lighthouse. Singapore operated this lighthouse but we all knew that it was located on Malaysian territory. To those of us in the navy, Horsburgh and Pulau Pisang were seen in similar terms. Singapore was running the lighthouses but both were on Malaysian territory.
  
59. Singapore never asked for permission to supply the Horsburgh Lighthouse and Malaysia never expected it to do so. Singapore had been running the lighthouse for many years. It was not a source of difficulty. The Royal Malayan/Malaysian Navy regularly patrolled the waters around Pulau Batu Puteh. We did so on a transit basis. In other words, we did not give the island special attention, in the same way that we did not give special attention to the many other islands along the Malaysian coast. Malaysia, both peninsula Malaysia and the eastern states of Sabah and Sarawak, has a very long coastline of around 4,300 km. At times, there may be a particular need for a naval presence at various points along the coast. The Royal Malaysian Navy does not have unlimited resources. This was even more the case during the period of the Royal Malayan Navy all the way through to the late 1970s and early 1980s during which virtually all of our fleet was based at the Woodlands Naval Base in Singapore. Royal Malayan/Malaysian Navy patrols in the area

around south eastern Johor and Pulau Batu Puteh were thus routine. We did not generally lay anchor off the island. There was no need to do so.

60. My understanding that Pulau Batu Puteh was a Malaysian island was consistently affirmed throughout my naval service by various factors. I have already noted that we patrolled this area routinely from the very first days following independence in 1957 and our control of the Royal Malaysian Navy in July 1958. To my knowledge, and, certainly, as I took on progressively senior roles in the navy during 1967, I would have been aware of such developments, Singapore never once protested against these patrols. In illustration of Royal Malaysian Navy patrols in the waters around Pulau Batu Puteh I have been shown, and do now exhibit hereto as Attachments 1 – 5, Passage Narratives and Reports of Proceedings of a number of Royal Malaysian Navy ships which conducted patrols and other activities in Pulau Batu Puteh waters in the period January 1965 to November 1971. I confirm that the patrols and activities to which these documents refer took place routinely in Pulau Batu Puteh waters throughout the period of my tenure as Chief of the Royal Malaysian Navy from 1 December 1967 to 31 December 1976.
  
61. Pulau Batu Puteh's status as a Malaysian island was also affirmed during the period of my service on board *HMS Cavalier* in 1962, the British Royal Navy destroyer, to which I have already referred. During this time, we used to go off to the South China Sea, from the Naval Base in Singapore, to conduct submarine exercises. As I have noted, on our return, it was the practice to undertake blind navigation exercises. For this purpose, we were required to plot a course back to the Naval Base by taking navigational bearings from various points "on Malayan territory". On this basis, as we approached the south eastern tip of Malaya, I would plot a course taking bearings, on the one side, from Tanjung Penyusoh, and the small islands, such as Pulau Lima, just off this point, and from Pulau Batu Puteh, on the other. Of course, we were then engaged in blind navigation and our principal concern was to avoid hazards to navigation. We were not directly concerned with the status of the island. I note the point, however, to illustrate that Pulau Batu

Puteh featured regularly in operational discussions with the Royal Navy at this time and was always regarded, without any doubt, as a Malayan island.

62. There were also other occasions, when I was on exercises with the British, Australian and New Zealand navies, that Pulau Batu Puteh featured in the planning and was again uniformly regarded as a Malaysian island. The SCAP area designations, to which I have already referred, and which were common to the Malaysian, British, Australian and New Zealand navies, all featured Pulau Batu Puteh. I do not recall any discussion or comment in the context of these coordinated patrols that alluded to Pulau Batu Puteh in terms that suggested that it was anything other than a Malaysian island. All of the ships taking part in these patrols had charts on which the territorial waters of the various States were clearly marked, including the extent of Malaysian territorial waters and those of Indonesia. When Singapore separated from Malaysia in August 1965, Singapore's territorial waters would have been similarly marked on the charts.
  
63. Another element that I recall, which affirmed Pulau Batu Puteh's Malaysian character, were the requests by the Royal Navy for permission for the survey ship *HMS Dampier* to survey off Pulau Batu Puteh. One particular request of which I subsequently became aware, was that on 20 February 1967 at around the time that I was informed that I was to take up the position of Chief of the Navy. The request came from the Royal Navy Office of Commander Far East Fleet, Singapore to the Ministry of Defence (Navy), Kuala Lumpur requesting clearance "for *HMS Dampier* and detached parties to carry out surveys in West Malaysia". The coordinates of the survey given in the letter of request, which I have been shown and exhibit hereto as Attachment 6, are the coastal reference points of the survey to be conducted. The survey included the waters around Pulau Batu Puteh, as is clearly evident from the Fair Sheet Report of *HMS Dampier* in respect of this survey. The Fair Sheet Report, which I have been shown and exhibit hereto as Attachment 7, was signed by the Captain of *HMS Dampier*.

(ii) *The Letter of Promulgation of 16 July 1968*

64. The clearest naval practice affirming Pulau Batu Puteh's Malaysian character comes from my Letter of Promulgation of 16 July 1968 and the chartlets and notes attached to it.
65. Because of the heavy maritime traffic through the deep channel to the north and west of Pulau Batu Puteh, Royal Malaysian Navy patrols would usually stay to the south, east, or north east of the island, ie, away from the main shipping channel. To the south and the east, however, there was a risk of running into what we referred to as Indonesian Claimed Waters ("ICW"). Some time before I took over as Chief of the Navy in 1967, Indonesia had unilaterally claimed a territorial sea of 12 nautical miles. Pulau Batu Puteh is less than 8 nautical miles from the Indonesian Island of Pulau Bintan. Pulau Bintan is about 5.6 nautical miles from South Ledge, which we also considered to be Malaysian.
66. Malaysia first claimed a territorial sea of 12 nautical miles in 1969. When I took over as Chief of the Navy in December 1967, the question of Malaysia's territorial sea limits was actively under consideration. As I understand it, the Geneva Convention on the Territorial Sea and the Contiguous Zone, to which Malaysia was a party, provided that, in the case of opposite States, the outer limit of the territorial sea was to be the median line between the two States. Given the width of the Singapore Straits (less than 12 nautical miles at its widest), Malaysia and Indonesia would have had overlapping territorial claims in the area. We therefore began discussing maritime delimitation issues with Indonesia at this point, concluding an agreement delimiting the continental shelf between the Malaysia and Indonesia in 1969.

67. The depth of the water in the area around Pulau Batu Puteh is variable and includes a number of navigational hazards. I have been shown a large scale version of (British) Admiralty Chart 2403, which I had annotated and attached to my Letter of Promulgation of 16 July 1968. I understand that Malaysia will be attaching this large scale version of the chart to its Counter-Memorial. Reference to this chart shows that the water depth immediately to the south and the east of Pulau Batu Puteh ranged from around 7 fathoms (or 42 feet or 12.8 metres) to around 19 fathoms (or 114 feet or 34.7 metres), the average depth being 12 to 14 fathoms. The chart also shows a 10 fathom line as well as Middle Rocks, South Ledge and other navigational hazards in the area.
68. The importance of these factors is that, when it came to drawing up the Letter of Promulgation that I eventually issued in July 1968, two factors weighed heavily on the process. The first was the need to identify the limits of Malaysian territorial waters, pending the extension of these waters to 12 nautical miles, which I expected would occur. The second was to identify the limits of foreign claimed waters, notably those claimed by Indonesia and the limits of Singapore's territorial waters. The reason was to ensure that naval operations were sensitive to the limits of these waters. In particular, especially as Malaysia had just emerged from the period of Confrontation with Indonesia, I wanted our ships to be aware of and respect Indonesian Claimed Waters. This was the reason for drawing up the Letter of Promulgation in 1968. The narrow width of the Straits and the shallow depth of the waters meant that the annotation of these limits on the charts had to be done with precision.
69. As the Letter of Promulgation indicates, its purpose was to show "the outer limits of Malaysian Territorial Waters and foreign claimed waters in West Malaysia" for the information of Senior and Commanding Officers. While only Commanders and other Senior Officers will have seen the Letter itself, the chartlets attached to the Letter were provided to all Royal Malaysian Navy ships and the details would have been incorporated on to their large scale charts.

70. The notes and chartlets attached to the Letter of Promulgation indicate clearly both the outer limits of Malaysia's territorial waters and various points of uncertainty, which we were concerned to represent faithfully. Thus, referring to "Chart 2403 – Singapore Strait", which is attached as Map 25 to Malaysia's Memorial, a number of boundary lines (actual or claimed) are depicted in manuscript annotation on the original Admiralty Chart. The thick solid line that runs the length of the Singapore Straits marks the limit of Indonesian Claimed Waters, as we understood them to be at the time. This is evident from the by now rather faint, but nonetheless still clearly visible, manuscript annotation along the line "Limit of ICW".
71. The thick solid line that runs between Malaysia and Singapore, to the north, west and east, is the boundary line described in detail in the Straits Settlements and Johore Territorial Waters Agreement of 19 October 1927. There is a typographical error in the reference to this line in the notes attached to the Letter of Promulgation, which refers to this as the "1923 Treaty".
72. To the east of Singapore, at the point of the Johore Straits between Singapore and Johore, the thick solid line comes to an end, being picked up further south by a lighter pecked line which diverges to the east and the west. At this point on the chart, there is another faint manuscript annotation which reads "See Note 1". Note 1, in the notes attached to the Letter of Promulgation in respect of this chart (which is attached as Annex 76 to Malaysia's Memorial), provides:

"The boundary between Singapore and Malaysia would seem to be still based on a 1923 Treaty [sic] between the British and Johore Governments which specifies the centre of the deep water channel of the Johore Strait as the dividing line. As far as can be ascertained, the exact line has never been officially drawn and published. As the treaty can be interpreted more than one way south of Calder Harbour, the dividing line in that area has been omitted on this chartlet. The pecked line south of the Johore Shoal Buoy represents the outer limit of Singapore/Malaysian Territorial Waters."

73. Where there was uncertainty about territorial waters' limits, we were thus careful to reflect that uncertainty. The pecked line at this point, which became a solid, but still somewhat faint line, reflected Malaysia's understanding of the limits of both its own and of Singapore's territorial waters at the time.
74. The continuation of the faint solid line which follows the arc of the south eastern Malaysian coast continues to depict the outer limits of Malaysian territorial waters. Where this comes to a point adjacent to Pulau Batu Puteh, Middle Rocks and South Ledge, this line takes the form of a circle around the three features, indicating that the three features fall within Malaysian territorial waters. At the point at which the territorial waters line intersects the line showing Indonesian Claimed Waters, it takes the form of a pecked line in the area adjacent to the Indonesian island of Pulau Bintan. At this point, there is another manuscript annotation on the chart reading "See Note 2". Note 2, on the notes accompanying the Letter of Promulgation for this chart, provides:

"The pecked line south of the Horsburgh Light represents the outer limit of Malaysian Territorial Waters as authorised by the 1958 Geneva Convention, i.e. a three mile circle around South Ledge flattened at the southern end by a true median line between South Ledge and the isolated rock close north of Tanjong Sading. R.M.N. vessels are to comply with S.O.A.I. 107 in regard to this area."

75. As I examine this chart today, and read the accompanying notes, 36 years after I issued the Letter of Promulgation, I am quite clear that, in 1968, we had no doubt that Pulau Batu Puteh (as well as Middle Rocks and South Ledge) were Malaysian territory. Equally important is the fact that these chartlets formed the basis of the ongoing Royal Malaysian Navy patrols in these waters to which I have already referred. The only restriction that they marked in respect of patrols in the waters around Pulau Batu Puteh was south of the line marking Indonesian Claimed Waters.

***(c) Local Fishing Practices and Piracy Control***

76. As a result of my naval duties, I had some familiarity with the practices of the fishermen from south eastern Johor in the waters around Pulau Batu Puteh. This requires further explanation.
77. During Confrontation with Indonesia from 1963 to 1966, the Royal Malaysian Navy patrolled actively in the waters of the Singapore Straits, including around Pulau Batu Puteh. For reasons of security, all Malaysian naval vessels patrolled completely darkened, without even navigation lights. The safety of the ship, as well as of other vessels in the vicinity, thus lay completely in the hands of the Commanding Officer. We navigated using radar.
78. In the circumstances of Confrontation, and navigating in this darkened state, we had to be particularly alert. Whenever we identified a small vessel of whatever kind, we stopped it and boarded it for purposes of identifying who was on board, where it came from and whether it was a fishing vessel, a vessel engaged in barter trade or a vessel engaged in the insurgency. There were many occasions like this when we boarded our own fishing vessels in the area around Pulau Batu Puteh. They were the vast majority of such vessels in the area. Once we had identified that they were Malaysian fishing vessels, we allowed them to proceed.
79. The barter trade vessels were mostly in the vicinity of Singapore, coming from the Riau islands. I do not recall coming across fishing boats from Singapore in the vicinity of Pulau Batu Puteh. As I have noted, it would take a small fishing boat between 3 to 5 hours to reach Pulau Batu Puteh from Singapore. This is quite a time and distance for local fishermen to travel in small boats simply to reach a fishing area. It is not surprising therefore that the waters around Pulau Batu Puteh were used almost exclusively by Johor fishermen.

80. There is another element to this. Because of the heavy traffic in the international shipping lane to the west and north of Pulau Batu Puteh, it would be impossible for local fishermen from the Johor coast to do any fishing in this area. It would be dangerous and the current is fast. Any nets or lines that they might use would be quickly cut if they became entangled in the propellers of a large ship. For this reason too it did not surprise us to find Johor fishermen in the area around Pulau Batu Puteh. These waters are relatively sheltered.
81. I turn finally to the question of piracy. There was, during my time in the navy, quite a lot of piracy in the Singapore and Malacca Straits. However, there was very little in the area around Pulau Batu Puteh for a number of reasons. First, it is an exposed area with little place to hide and not much hope of outrunning a marine or naval vessel in open water. Second, piracy was mostly directed towards the barter trade. As I have noted, most of the barter trade took place across the waters leading to and from Singapore, not further to the east. Third, another focus of pirates was big, expensive fishing nets which they could sell for good returns. Because of the costs of such large nets and the limitations on using them in the area of the international shipping lanes, Johor fishermen used only small nets. These were not so attractive to pirates. For these reasons, therefore, the navy did not encounter many pirates in the waters around Pulau Batu Puteh.

#### **(4) Conclusion**

82. Throughout the period of my naval service, there was never any doubt that Pulau Batu Puteh was part of Malaysia, notwithstanding that Singapore operated the lighthouse. This was the basis on which I conducted patrols in the waters around the island. This was the reason why I felt free to land on the island in early 1962. This was the understanding that evidently underlay the conduct of Senior and Commanding Officers from the British, Australian and New Zealand navies with whom I worked. This was the basis of my Letter of Promulgation of 16 July 1968.



# **ATTACHMENT 1**

# KD LANG TUAH

## Commanding Officers

1. Commander MJ Mory RN 27 Oct 1964 - 26th May 1966
2. Commander BEI Hyde Smith R.MN 27th May 1966
3. Commander THANABALASINGAM AMN RMN 4 March 67.
4. Commander CHEAH LEONG Voon AMN RMN 22 - May - 67  
to 8 - JULY - 1968
5. COMMANDER THONG YIN SIN AMN RMN 8th JULY 1968 - 31st July 69
6. COMMANDER MOHD ZAIN BIN MOHD SALLEH - 1st August - 1969  
to  
16th May 1970
7. COMMANDER M.W. ALVISSE  
to 17th May 1970
8. COMMANDER CHARLES THONG C.S  
to 21st July 1970  
to 22nd July 1970  
to 20th Jan 1971
9. COMMANDER BOEY KUNG WEI  
20th Jan 1971
10. Komander Abdul Wahab Nawir 20 March 1972.
11. Komander N. E. Peterson 1 - Nov. 1973.
12. Left Kolnot (Laut) Tuan Hashim Bin Tuan MOHAMAD 1 - JAN 77 - 29

Passage Narratives

- 1) 1964 October 2nd, K.D. Hang Tuah commissioned for service in the Royal Malaysian Navy.

From 5th to 22nd she carried out post refit trials.

- 2) Work up in Portland 23rd October to 6th November 1964

Generally, the weather was unfavourable and the visibility poor, causing several surface, A.A., NGS Firings and helicopter trials to be cancelled. One complete day's serial was lost due to boiler condenseritis. The final inspection by the Admiral was also cancelled due to a major steering gear failure.

While in Portland, the ship participated in the home Command SMASHEX on the night of 27/28 October. Hang Tuah was the first ship to sail and the second surface vessel to arrive on the scene of the exercise, off the needles, the first ship being the MTB HMS BRAVE SWORDSMAN from Portsmouth. A signal from F.O.S.T. was received which read as follows:

"You got away very smartly this morning and carried out your part in the exercise competently. Your communications were particularly good."

- 3) Portsmouth to Gibraltar

Sailed Portsmouth 0900Z Thursday 12th November for the first leg of the passage home to Malaysia. After leaving harbour, proceeded to St. Helens Bay, off the Isle of Wight for an hours MFDF calibration. On completion, course was set for Gibraltar at 15 knots until 2100 when the second boiler was shut down and speed reduced to 10.5 knots. For the first 3 days, the sea was rough and strong wind blew from the South West, this bringing the speed down to as much as 8 knots at times. After rounding USHANT, course was set to pass about 20 miles off Cape Finisterre. Sights could not be taken due to continuous cloud but radio fixes indicated the ship to be port of track, being blown by the strong wind and set by the current to the bay of Biscay. On the final day in the Bay of Biscay, Sun sights confirmed our position and course was adjusted to regain track. On the morning of the 15th, the wind die down and the sea was calm except from a long swell from the North West. The good weather remained for the rest of the passage. ISLA BELENGA LT was raised visually at 20 miles and we passed about 13 miles to seaward of it to evade the small inshore fishing crafts. Speed was increased during the night to 11.25 knots to regain the time lost whilst in the Bay. On the final morning we had a few hours in hand and this was used up for cleaning ship. Although Gibraltar was a familiar harbour, a pilot was compulsory. Arrived 1100 (-1) 17th November and secured alongside 42 jetty.

- 4) Gibraltar to Malta

Sailed Gibraltar 0800 (-1) Friday 20th November. Again a pilot was embarked and disembarked immediately outside the breakwater. The ship proceed to the triplane target east of the Rock for A.S practice and finally fired a pattern projectile. After recovering the A.S bombs, course was set for Malta. ALBORAN Island was raised on type 909 at 16 miles at 1730 (-1) soon afterwards, both engines was stopped for temporary repairs on the eccentric oil pay to be made. Course was resumed after repairs,  $7\frac{3}{4}$  hours later but after a short while, leaks in the oil pay developed again. It was decided that ETA Malta be advanced a day so that the dockyard could make a lasting repair on the fan and still sail for port said as scheduled. Speed was increased to 15 knots on the afternoon of the 21st, during the Dog watches, the gyro broke down and the AGMC was used for steering until about 3 hours later when the gyro was believed to be working correctly again. The next morning, at sunrise, the gyro was found to have an error of 1 degree high and this error remained for the passage home. The weather was fine throughout and a set of about  $\frac{1}{4}$  to  $\frac{1}{2}$  a knot from astern was experienced along the North coast of Africa. Gozo was raised on type 909 at 21 miles and speed was adjusted to make ETA. The ship entered Grand Harbour at 1500 (-1) and secured to head and stern bouys in Dockyard creek.

It is worth noting that the vast number of churches spires and towers, most of them conspicks, can cause confusion in identifying

8) Aden to Cochin

Sailed Aden 0900 (-3) 9th Dec. for two Maxbus serials with RAF Hunters. The first sortie arrived at 1010 and carried out several realistic attacks and we fired breakup shots. For mutual benefits, the ship streamed a splash target which the Hunter fired with such accuracy that it shook the ships company, especially the bofor aimers. On completion of the second serial, we turned back for Aden because brine was mistake discharged into the feed tank. Arrived harbour 1515 (-3) and berthed alongside HMS ZULU. Both boilers had to be cleaned and 2 days later, at 0545 (-3) we slipped to a fuelling berth. After topping up with fuel, we sailed at 1040 (-3) without the first lieutenant, who had been landed to hospital for treatment on an injured finger caused whilst hoisting the whaler. On both occasions of berthing and unberthing at the fuelling berth a pilot was embarked. After clearing the harbour, course was set for Cochin at 13 kts to meet the original ETA. The weather was fine and accurate sights were taken. Passed Socotra on the morning of the Sunday and course was altered to make landfall on Minicoy. Sights taken indicated the ship to be to stbd of track and the distance off track kept increasing to regain track. The good weather had allowed good progress and sights indicated we were all ahead of DR. On the night of 16th, the second boiler was shut and speed reduced to  $10\frac{1}{2}$  kts. The next morning, Minicoy was raised on type 277 which confirmed our position, and an hour's before firing practice was carried out. Arrived Cochin at 0900 ( $-5\frac{1}{2}$ ) and berthed at Indian Naval Jetty on INS Talwar. The channel in and out of harbour is well marked with buoys and beacons $\frac{1}{2}$

9) Cochin to Singapore

Sailed Cochin 0900 ( $-5\frac{1}{2}$ ) 21st December on the last leg of the passage home. After waiting off the Fairway buoy for about 3 hours in the hope that to Malabar Coast. Early next morning, course was altered to the south in preparation to evade cyclone Tيروس, which at this time was just east of Ceylon. At noon, when further reports of the cyclone was received, course was altered to the south east and finally, when reports confirmed that Tيروس had taken the usual path of moving northwards, east of Ceylon we altered course to return to the original track. The weather during this time of the year expected and the set was northerly and on the final day, before making landfall on Nicobar, sights indicated we were some 5 miles north of track and course was adjusted accordingly. By this time too, we were directed by Mindef to refuel at Penang before making passage down the Malacca Straits. The second boiler was flashed up and speed increased to 13 kts at noon on the 26th. The following forenoon we came across school of Whales and they provide a good practice for the SCR's crew. At 0700 ( $-7\frac{1}{2}$ ) on Monday December the ship came to anchor at the Man of War anchorage, Penang. The First Lieutenant, who had flown out from Aden rejoined us with a few bags of mail, which boosted the morale of the ships company a little, since no leave was granted to various factors. After topping up with fuel and the ship touched up for the arrival in Singapore, we weighed anchored at 1730 and proceeding out of Penang via the southern entrance. On the way down the Melaka Straits, patrols were carried out with the ship completely darkened. On the 29th, a rendezvous with Perak for mail was made. The morning of the 30th poured heavily with rain until about 0300. We proceeded up the Johore Straits to R/V KD Mahamiru, flying the broad pennant of the Chief of the Naval Staff. At 0800 the ship fired a gun salute to the C in C Far Eastern Fleet off Bierlieu Shoal Buoy. Hang Tuah secured to M1 buoy at 0900 ( $-7\frac{1}{2}$ )

10) Exercise and Patrol

Slipped 14 berth 1400 ( $-7\frac{1}{2}$ ) Monday 11th Jan. 1965 for exercise off the east coast and night patrols between Horsburgh Lt. and Jasons Bay. The patrols were fruitless as the sea was fairly rough, force 4 to 5 and landings by sea although not possible was unlikely.

The exercises carried out were 1 Maxbus serial in which KD Mahamiru joined us before proceeding to Tawau; 2 AALRF, 2 AALRX, RIX NEX with illuminants, TOWEX light jackstay transfer, RAS, OOW manoeuvres and on all stages operation awkward. The ship returned to harbour for the weekend.

The direction of the flow of the tidal stream was another factor when firing at anchor. Other exercises were also carried out by day except off days, when ship remained at Tawau for maintenance. Among the exercises conducted were OOW manoeuvres, 4" surface, 40/60 surface, small arms shoot, RAS beam jackstay transfer, heaving line transfer and other internal exercises. For recreation, which was badly needed due to the long stay in Tawau, swimming games with the local teams and deck hockey were among the favorites. Mabul provides the best swimming place and a good anchorage on the northern side of the island. The ship anchored at 5 cables off the shore.

The only defect developed was condenseritis\* and we had to remain alongside Tawau jetty for three days before repairs were completed. During the period HANG TUAH was in Tawau, things were quiet and the kumpit trade was decreasing. HMS Killesport relieved Hang Tuah as guardship on Saturday 15 May.

19. TAWAU TO SINGAPORE.

Sailed Tawau 1400 (-8) Saturday 15th May for Singapore. Lt Teo Kim Chooi RMN attempting his ocean Navigation Certificate planned the passage home. Course was set via "Sibutu Passage" at 13 knots and by the forenoon of the following day, we were in the Malawali Channel. At 1400 the ship anchored at 279 Kukuban Island 5 cables for swimming. The island provided a good beach although 50 yards off the shore, the island was surrounded by rocks and corals which made the passage for the whaler a little tricky for the whaler at low water. The ship got underway again at 1730 and by 1900 was clear of Malawali Channel. The remainder of the passage was uneventful except for the last stretch from REPONG to HORSBOROUGH Lt. A fix taken at 0245 (-7½) (a range and bearing from Pulau Repong) indicated the ship to be on DR, but the following morning, when a good fix was taken at 0900 it was found that we were 13 miles north ~~off~~ off track. Course was altered south for the straits. Arrived SNB 1530 (-7½).

20. 'ANTI INTRUDER PATROL AND EXERCISES'

Sailed SNB 1400 (-7½) Sunday 6th June for patrol off Tanjong Punggai. At 1900 Sri Kelantan acting under the orders of Hang Tuah came onboard for briefing. She was ordered ~~xxx~~ to patrol south of Punggai and we patrolled ~~xx~~ east of Punggai, a 5 miles line of 055/235. There no incidents during the night, but the following morning, a suspicious looking sailing craft was investigated to be barter trader. The boat was handed over to the Police. Course was set for Pulau Aur for A/S check firing. After recovering light squid Projectiles, proceeded south to R/V with Tidereach for fuel. The stern rig was used. Although the float line were parted we managed to recover it without the marker. Completed fuelling 1900 and carried out heaving line transfer for mail. On completion, course was set the same patrol area, Sri Kelantan given the same patrol again. Another uneventful night passed. During the forenoon, R/V with H. M. Submarine for casex A4/5. Exercise completed at 1200 and course set to R/V with fort Sanddusky for RAS ammo. This went smoothly and ~~completely~~ completed at 1400. The same patrol was again carried out during the night and again with no incidents. The following proceeded to M 1 Buoy. Arrived 1000 and sailed again at 1400 for patrol in Eastern Singapore straits. Suspicious contacts were investigated with illuminants to be floating logs and debris. No more excitement occurred during the night. At dawn course was set for SNB arriving at 0930, secured alongside Tidepool for fuel. Sailed again at 1630 for the same patrol in the eastern part of the straits. At 2200 we were ordered to patrol off Horsborough Lt, in place of Agincourt, who had developed engine trouble. At 2350 a fast sampan was sighted illuminated and a Bofor warning shot was fired. The sampan stopped and on investigation they turn to be 2 Indons Chinese going back to Indonesia from Singapore in a twine engined boat loaded with biscuits. they were held onboard and turned over to the police the following morning. The ship then proceeded to M1 Buoy. Arrived at 0900 (-7½).

21. V.I.P. CRUISE EAST COAST A.I.P.

Slipped M1 Buoy 1700 ~~(-7½)~~ (-7½) 11th June and proceeded down the straits for Seletar. 1750 came to starboard anchor, just off the main channel south of seletar buoy. At 1910 V.I.P. party, consisting of Tun Razak (Acting PM Inche Kah Kai Boh (Min. for Housing), H.A. Regent of Perlis, American Ambassador H.E. Australian High Commissioner, plus 2 and a detective arrived. Weighed anchor at 1920 and proceeded down the channel. On clearing Singapore straits,

boats and troops were embarked and assault landings were exercised. After a break for supper further landing trials on beaches were carried in complete darkness. Returned to anchorage at 0430. Sailed 0800 the following morning for final rehearsal, before the night's exercise. Completed rehearsal at 1000, but one boat was damaged in a collision and had to be withdrawn from the final exercise.

EXERCISE DRAKE'S DROM.

During the forenoon various observers arrived headed by Brigade Commander 3 CDO and NOIC West Malaysia. With boats and troops embarked sailed 1915 to R/V with Sri Trengganu North of Pulau Babi Besar. Arrived R/V on schedule and boats were lowered and troops disembarked into the boats. The ship then carried out a patrol off Babi Besar. Waiting for the arrival of the boats to return from the raids on Pulau sibu. The exercise was abandoned because the boats were swarmed by the breakers on the beach. Hang Tuah proceeds towards Sibu and anchored 1.7 miles off the assault beach to collect "survivors" By the morning swarmed boats were refloated and all boats and personnel were embarked before detaching Sri Trengganu to Singapore with the enemy and Hang Tuah proceeded to Tioman. Came to anchor at 1200. At 1740 after embarking 1 MSSU and boats, sailed for SNB arrived at 0350 and anchored in quarantine anchorage to disembark troops weighed anchor at 0715 and proceeded to alongside berth. Secured in no 8 berth bows east. The tug assisted in berthing as a strong wind was blowing off the jetty.

27. ANTI-INTRUDER PATROL.

Slipped 'C' Buoy 0900 (-7½) Tuesday 7th Sept. and proceeded to Singapore straits for trials on main bearings. Trials were successfully completed, carried out night patrol off Horsborough Lt. Patrol was unevenful except for the sighting of a B.T. boat. Returned to 'M' Buoy 1000 on 9th. Slipped again at 1615 for patrol off Sultan Shoal. During the morning watch of the 10th, one darken sampan with twin outboard, crewed by two chinese was intercepted. Preliminary investigation showed they were from Indonesia and ~~xxx~~ they were handed to the police for further investigations. The ship then proceeded to the Malacca straits to patrol off Cape Richardo. For the next 7 days, incident that took place were the sighting of two Indonesian merchant ships of which photographs were taken. One Indonesian warship burning navigation lights was sighted and thought to be a Kronstadt class. On the 17th hands were closed up at action station when the a Shakleton reported an Indonesian warship proceeding towards our patrol area. on gaining contact she was thought to be 'B' class and shadowed until she was seen heading OFB. On Manday 13th a helo from K.L. landed for anti piracy patrol and recce. One sortie was flown. The following day another helo was attached to the ship and two sorties were flown. On 14th, fullled abeam a t sea from RFA TIDE SPRING. A trip was made to Port Dickson to collect mail. For resreation, deck hockey was played against ship working unders the orders of H dang Tuah during the Dog watches. On Wednesday 15th, Senior Officer Flotillas carried out general inapection of Mutiara. The ship also carried out several exercises, Major D.C.X, Steering gear break downs, Towex, man over board OOWmanoeuvres, rocket and small arms firing, and heaving line transfer. Returned to Singapore straits on Friday 17th for a night patrol off Horsborough Light. The following morning returned to SNB to ammunition ship. On completion, moved to berth 14 South and secured at 1130 (-7½) on Saturday 18th Sept for SMP.

28. SINGAPORE TO TAWAU.

Sailed SNB 0830 (-7½) Saturday 2nd October. On clearing Singapore straits, steered 068 to pass north of Subi. No allowance for current was made as it was negligible. Course was altered to 075 on passing Subi for Tanjung Baram. Evening stars showed we were north of track and on DR. The following morning on raising land at 0400 (-8) we were 15 miles south of track. Course was altered to regain original track. Arrived Labuan 1230 (-8) berthed on shell jetty bows east.

Sailed 1500 the same day after unloading stores and fullled. Course and speed was set to arrived Malawali Channel at dawn. On entering Malawali Channel, speed was increased to 14 knots. the tide was with us all the way and even though we had to

stop for two hours to repair the engine, speed was reduced to R/V RFA Gold Ranger 150 Hand Rock 9 at 0700 (-8) for RAS. On completion of fuelling, came to anchor in anchor berth 'A' at 0900-(8) Tuesday 15th October.

29. TAWAU GUARDSHIP.

This was the third time Hang Tuah performed the task of guardship this year. Took over duties 1400 (-8) from HMS BLACKPOOL on 5th October. The ship carried out normal night patrol except on 2 off nights and 1 when we had steering gear breakdown. Kumpit movements have thinned down to a large extent in this area. 2 NGS firing were carried out and failed to fire on a 3rd exercise when communications with the spotting bearer was not achieved. Various exercises were carried out those included were 4" surface, starshell 40/60 surface and AA, 2" rockets and small arms firing, OOW manoeuvres heaving line transfer, RAS abeam and astern and squid firing. Recreation was played games mostly and a bayan once at Mabul. A defect on the steering engine developed during the 2nd week while the ship at Wallace Bay. Passage was made to Tawau on hand pump steering and the ship arrived at anchor and remained in Tawau all night, to determine the damage done and find any solution possible and if repairs could be done locally. It was found that the damage was the major one and a new engine had to be found. From then onwards the ship move from A to B on hand pump steering and guard ship duties was carried out as normal. One further defect was discovered on 19th on the gyro when it was reading 2 low. Checks were made and nothing obvious was discovered except for the slight noise being generated. The error fluctuated from 5 high to 5 low on the passage home. It was found later by the fleet gyro officer that the main bearings were damaged and new one has to be replaced.

HMAS Vendetta relieved Hang Tuah as guardship at 1400 (-8) on Thursday 21st October, 1 day ahead of schedule.

30. TAWAU TO SINGAPORE.

Sailed Tawau 1500 (-8) Thursday 21st October for Singapore. At 1700 squid firing was conducted while intended AA firing had to be cancelled due to the fact that clearance had not been granted. Course was set via Sibutu passage at  $14\frac{1}{2}$  knots and by noon the following day we were in the Malawali Channel. The gyro was checked to be 5 low. Cleared the channel at 1630. Due to the unsteady state of gyro track was altered at 2355 and a course of 260 (C) for "265" (T) was steered to pass Maglum Island at 11 miles. At 0400, all dangers cleared, course was altered to 221 (T) but sounding dropped from 87fms to 6fms and course was altered West until the depth increased to 225 fms when we came back to 221 (T). At sunrise, the gyro was checked to be  $\frac{1}{2}$  high. At 1100, altered course to 252 (T) and steered 252 (C). Evening stars were observed, which indicated the ship to be some 15 miles to the north of intended track and well ahead of DR. Course was altered to 247 (C) at 1800 ( $-7\frac{1}{2}$ ) and speed reduced to  $13\frac{1}{2}$  knots at 2300 ( $7\frac{1}{2}$ ). Morning stars the following day found us again north of track and this was confirmed when raised on type 277. Course was altered to regain original track. After passing the Repong Island a course of 240 (C) was steered for 245 (T) and on raising land the following morning, we were on DR. Speed was adjusted on passing Horsborough light to make ETA. The gyro was checked by transit to be 3 low. Arrived BSB 1130- ( $7\frac{1}{2}$ ) Monday 25th October and secured alongside 2 12 berth Dockyard. Although we were steering by hand pump, the tug was not used in securing to this ~~awkward~~ awkward berth, struck between 2afds. The sling streamed 2,345 miles on hand pump steering.

31. WEST COAST PATROL AND M.S.S.U. EXERCISE.

Sailed SNB 1430 ( $-7\frac{1}{2}$ ) Friday 12th November for Port Swettenham, having repaired the gyro and steering engine. On clearing JSB, course was set for a fast passage at 150 revs. to Arrived Port Swettenham on time for a visit by school children. Arrived no 3 wharf at 0830 Saturday 13th berthing bows north. After two successful days sailed in company with Sri Pahang, Sri Selangor and Sri Sabah at 1630 Sunday 14th. The 3 PCs were detached on clearing the harbour and course was set for Pulau Langkawi at 14 knots. The gyro was checked to be 2 high and this remained until the ship arrived Langkawi and anchored in 7 fms of water in position 038 Tg Sawi 5 cables. The following day was spent on hoisting and lowering trials of MSSU boats. On completion of the days trials sailed for Penang

at 0100 Tuesday 17th. Arrived Esso jetty Butterworth 0745 for ~~full~~ fuel. The jetty is short but the least depth is 21 ft. On completion of fuelling slipped and came to anchor in the man of war anchorage at 1320. Weighed anchor at 1600 and proceeded back to Langkawi, arriving at the anchorage at 2100. The whole of the next week was spending exercising with the MSSU. The last evening of 23 / 24 was the passing out exercise - Drakes Drum 2 - watched by the Brigade Commander 3 CDO, NOIC W/M and Staff officer from ~~King~~ Mindif. After debriefing on 24th sailed for Penang to embarked film Negara, who will cover the ship's activities for a recruiting film. The cameraman arrived onboard at 1615 and the proceeded via the southern channel with Sri Pahang in company. The next forenoon, pre refit full power trials was carried out, attaining a ~~xxx~~ speed of 17 knots. During the afternoon watch, it was discovered that a few bearings were wiped and speed had to be reduced. A slow passage back at  $7\frac{1}{2}$  knots was made to Horsborough light. Friday 26th November, NOIC W/M and staff arrived at 0730 by helicopter for sea inspection. On completion of inspection a patrol off Horsborough was carried out. No incident occurred and the ship sailed M Buoy at 0845. Sunday 28th was the families day and the ship sailed M Bupy at 1600. Slipped at 0730 Monday 29th November and came alongside RNAD jetty for ~~the~~ deammunitioning. On completion sailed for SNB and secured in 14 berth at 1620. The ship was placed at extended notice for steam for major refit.

WORK - UP - PERIOD.

After the major refit, Hang Tuah slipped from the Dockyard at 0700 on Monday 28th and proceeded under own power to ammunition at RNAD jetty. The ammunitioning was completed by sunset and the ship slipped shifted berth to 'M' Buoy for the night.

The next morning 29th March we sail for work up. We proceeded to ~~the~~ Pulau Bukom for D.C. ranging. On the way to Bukom in Action and cruising stations were exercised.

Gun functioning trials and squid firings on Wednesday 30th were followed by two hours Casex with HM Submarine Oberon.

Post refit fullpower trials were carried out on 31st March between JSB and HORSBOROUGH Lt. House and speed of 16.7 knots was achieved. For this trial revolutions were restricted to 160 as the engine were not wholly run in but 170 revs should be possible in due course.

The ship slipped from no 12 berth HM Dockyard at 0730. The first date on the WPP was the helicopter landing trials in the vicinity of Horsborough Lt. ~~xxxxxxx~~ On the way to the R/V area Action and steering gear break down were exercised.

The landing trials ~~xxxx~~ was a success. Many of the ship company came up onto the upper deck to watch.

On completion of the landing trials, the ship set course for Pulau Aur where operation Awkward was carried out. This operation was not as successful as it should have been due to the fact that the majority of the ship's company did not have the slightest idea as to the form of the Operation. AS a result they were not sure of thier duties. The none duty part of the watch did not raise a finger to help and walked around indifficently in the ship confident in thier mind that they were supposed to-be ashore. A lesson is learn here that a definite dividing line must be drawn during the briefing between those who were meant to remain on board and those who leave ashore. In this way the ship's company will realise that those remaining on board, no matter whether they duty or not are all involed in the operation.

The next day the ship weighed anchor and steamed for area X-Kilo to do surface long range andclosed range firings. Although the target was not blown to pieces, the fall of the shot were in close proximity of the target.

On completion of this exercise the ship entered harbour on a flooding tide and was secured alongside LOCH FADA. ~~xxxx~~ at 12 berth HM Dockyard. This entry into harbour was prompted by the port main ~~engine~~ bearing being over heated.

At 2200 on 11th day of the month we slipped again. The exercise for the week included REX with Loch Fada, Towex, OOW Man. Light Jack stay and heaving line transfer with Jerai. RAS was carried out with Tidespring A casex was also held this week with HM Submarine Ambush.

At 0800 on 18th Hang Tuah set course for Pulau Aur where she had NGSF. The ship anchored off Pulau Aur that night.

By 23rd April Hang Tuah completed her Work Up. It was interesting and valuable period all round.

THE WEST COAST PATROL ~~23rd~~ 23rd - 26th APRIL.

The end of the work up was marked by the attachment of an Allutte and the Malacca straits patrol.

On the morning of 23rd sailing with the current along the Singapore straits, the course were set for Malacca straits and the speed was adjusted to 14 knots along the ground in order to arrive at R/V area with the helo. The R/V was made west of Pulau Kukup at 1130 GH at which we arrived in time.

Throughout the Malacca patrol, the Allutte did two sorties a day between sunriase and sunset. The patrol here was rather quiet. A few boats were searched but found them all to be fishermen.

On the night of 26th an Indonesian Police ~~hunting~~ boat was reported by a Shakelton in area siera south. After half an hour of the report Sarawak which was patrolling in that area and acting under Hang Tuah's orders held the contact. The boat was doing the northly course at about 15 knots.

When it arrived our patrol area and we having had a visual contact with it Action Station was sounded. We followed the boat which was showing Navigation light for about 45 mins keeping her within 4 cables from us. After an unsuccessful attempt to annoy her we abandaned the chase and resumed patrol.

The next day the Helo was dispatched and Hang Tuah Patrolled JSB/HORS. Lt.

Whilst in Malacca straits the sea was calm and there was not a single day with rain, the current experienced throughout was northly at  $\frac{1}{2}$  knot reaching 1 knot at Cape Richardo.

SINGAPORE TO EAST MALAYSSIA.

At 1200 12th May slipped MBJ for East Malaysia with Tun Razak and party embarked. The passagw was made through Api passage in company with Sri Sarawak. Whilst on passage 4" bofors and small arms firing and OOW manoeuvres was carried out.

From Horsborough Lt. to Tg API it was noticed that the current was setting northely at slightly more than a knot. Occassionaly correction to the cojrse steered was necessary to make good the planned course 085.

Cruising at speed of 12 knots Kayu Ara was sighted at 0100 on Radar. It was found that the ship was set about a mile north of track by that time. By 0610 on 13th there was no visul or radar fix. But the sky was clear and the morning fix put us still in track.

By 1300 St. Petris Rock came on radar and from then an regular fixes were available.

At 2300 on 13th the ship was anchored by her strbd anchor in a 7 fms depth of water by Tg. Po. The ship remained at anchor untill the following morning after Tun and party were transfer to Sri Sarawak.

At 0800 on 14th weighed anchor and set course 030 along the coast for Miri. At 1550 a/c 090. There were other alterations of course like:

- a) at 1812 a/c 085
- b) 2153 a/c 060
- c) 0205 a/c 040

By 0900 On 15th we anchored in a position 2.4 miles off Miri jetty.

From Miri the ship sailed for Labuan. We anchored in Brunei Bay south of Tg. Burong. The following morning weighed anchor and berthed at Shell jetty.

17th May slipped Labuan and went to Kuching where berthed at Bazar Wharf. Trip up Sarawak river was with the help of the pilot.

At 1600 the ship sailed from Kuching on the flood tide to

make her

make her rendezvous with Sri Sarawak off Tg. Po where the Chief of Naval Staff was embarked on his arrival the ship sailed for Singapore with Sri Sarawak. Various exercises were carried out on passage and it was understood that the Chief of Naval Staff was pleased with what he saw.

#### EXERCISES UP PULAU TIOMAN

The ship sailed for Pu. Tioman PM 29th of May to do exercises under the command of Cdr. Hyde Smith. Various aspects of ship's handling was exercised in the forenoon. In the afternoon, a number of seamanship demonstration and evolutions were carried out. The ship's divers were also exercised during the hours of darkness.

At 0800 31st May weighed anchor and proceeded to rendezvous with HMS Anchorite (Lt. Cdr. A.F. HOSIE RN) for Casex. The type 164 sonar developed a minor fault during the earlier stages of the exercise but this, although annoying, did not prevent the ship from making full use of the exercise.

#### PATROLS IN MALACCA AND SINGAPORE STRAITS

2nd - 6th AND 13th - 21st JUNE

The patrol carried out in the Singapore Straits were uneventful and no sighting were made. This patrol was formed 2nd to 6th June.

One of the main aims of KD HANG TUAH patrol in Malacca Straits was to prevent Indon BT Launches from molesting Malaysian Craft and to endeavour to establish the pattern of operations the BT Launches were using.

Contact was made with BT Launches nearly every night of the patrol. They appeared to sail from PJ. Karimun at dusk and work up the Malacca Straits well inside the I.C.W. until buoys and other navigational marks in the Malacca Channel were easy to spot.

We sailed through Alice Channel at night. Easy passage here and no shipping whatsoever. Fixing regularly at 15 minutes interval ensured the O.O.W. that the ship was in the right course.

The ship rendezvous with KD MAHAMIRU off Lingitan Light to do O.O.W. manoeuvres. On completion headed for Tawau, where the ship anchored at 'B' anchorage.

#### FROM TAWAU TO SANDAKAN

IT TOOK The ship 20 hours from Tawau to Sandakan at the average speed of 12 knots. H/T had never made any trip to Sandakan before and admittedly it was quite a job to locate the jetty. The jetty was situated conveniently close to town. But from a navigational point of view it was ill placed. Any ship were able to come only on her starboard side. With ebbing tide of knots, this made the approach extremely easy. However should it be in flooding tide  $1\frac{1}{2}$  knots of current pushing the ship from her port quarter unto the jetty, the approach would have been of a great risk.

Roughly opposite Muar or Batu Pahat. They then tried to steer for fishing areas off these places. When detected they either headed southwards straight towards Pu Karimun or tried to dodge us by going towards Sumatra and stopping beyond Long Bank until they thought we had lost track of them.

During this patrol, a helicopter was attached. Did two sorties: at dawn and dusk each day. She patrolled KD HANG TUAH'S assigned areas and part of the adjacent areas.

#### ENGINE TRIALS 29-9-66

At 0900 on 29th the ship slipped from 14 berth HM Dockyard to do her engine trials up the East Coast. When she had barely passed the BSB, one of her main bearings on Port engine was reported to be hot. Ship slowed down to 5 knots and remained at this speed until she was anchored south of Tg Johore. The bearing was removed, scraped and adjusted. On completion, weighed anchor and proceeded at 80 Revs up the coast. No further trouble from the bearing was experienced up to 120 Revs.

The next day at 1000 ship anchored in Telok Tekek to take readings of the crank shaft deflections. These were found to be within limits. The trials continued after weighing anchor at 1330 and the ship reached 140 Revs without trouble. However, after 30 minutes at this speed No 4 and No 6 main bearings on starboard engine began to overheat. The temperature returned to normal after the ship decreased speed to slow ahead.

By 2130 on 30th the trials were completed and the ship set course 092 for East Malaysia.

SINGAPORE TO TAWAU

30th SEPT - 5th OCT.

Immediately after the engine trials the ship sailed for East Malaysia. It was discovered that the general direction of the stream was from south at an average rate of  $1\frac{1}{4}$  knots. When St. Petrus Rock was sighted at 1515 on 1st we found that we were set 2 cables to port in spite of the fact that four degrees was steered into the current.

Through the Api Passage, weather good and night clear Fixing was very easy as there were land marks all round. After The Api Passage a course of 060 was set. Visual fix was no more possible. The next morning the weather was cloudy and so no sight was taken.

However at 0400 the next day a land echo was received on 277. The fix put us 3 miles ahead of DR and half a mile to Port. This made our ETA at Labuan 15 minutes earlier. 8 hours at Labuan for fuelling and a little rest. At 1800 we sailed from Labuan to Tawau at 12 knots to make ETA at Malawali Channel at day break.

Weather was very clear whilst at Malawali Channel and for that matter for the rest of the passage to Tawau. Various beacons and'

# **ATTACHMENT 2**

Ref No. JR RCP/04/66

K.D. JERAI  
at Ruthenia Jetty

1st May 1966

REPORT OF PROCEEDINGS - MONTH OF APRIL 1966 - K.D. JERAI

( All times in this report are in Zone GH (-7 1/2) )

Sir,

I have the honour to submit the Report of Proceedings for the month of April for Kapal di Raja JERAI under my command.

2. At 0730 on Friday 1st the JERAI weighed anchor and proceeded to berth alongside K.D. KIMABALU on Swettenham Pier, Penang, to embark water. Upon completion the ship cast off and at 11.00 berthed at Pina River Pier outbound to the Pina River. The Pina River is a narrow waterway and the Pina River Shipping Company rent and recreation along completion of the river "SUNDA".

3. In company with K.D. KIMABALU (Lieutenant Commander J.E. Buchanan R.A.N.) JERAI cast off at 0730 on Monday 4th and proceeded for passage to patrol area in Malacca Straits. During the passage Voice Procedure and Flaming exercises were carried out, Jackstay and "Launch" transfers performed and towing and small arms shoots completed. At 0600 on Tuesday 5th JERAI was detached and resumed anti infiltration patrols.

4. On Thursday 7th at 0715 whilst carrying out patrol off Batu Pahat area the ship was hailed by a fishing boat (BPF 220) reporting that another boat had been involved in collision with a ship approx. 210 Tg Telaga 10 and had been sunk. The one survivor was treated by the Sick Berth Assistant onboard and it was revealed that the other occupant of the boat was missing. JERAI searched the area for approximately one hour without result, prior to proceeding to further patrols in Singapore Straits.

5. During patrol on the night of the 7th a defect occurred on the port main engine. Next day Base Technical assistance was received and the fault diagnosed as sticking valves. The fault was rectified by late afternoon on the 8th and patrol duties resumed.

6. Upon completion of patrol at 0630 on Saturday 9th the ship proceeded to Ruthenia Jetty berthing alongside at 1000. The ship had, apart from the previous main engine problem, two defective auxiliary generators. Base Technical Staff met the ship on arrival and throughout the weekend worked well to rectify all defects, and by 0600 Monday 11th, reported the ship technically operational. The duty Base Staff during that period performed their work well and their aid was much appreciated.

7. JERAI cast off at 0600 on Tuesday 12th and proceeded to rendezvous with K.D. HANG TUAN in position 063 Horseburgh Light 15.5. During the day the ship assisted in towing splash targets, transfers and towing along with Officer of the Watch manoeuvres. At 1633 the JERAI was detached and proceeded to come to anchor for the night in 7 fathoms of water off S.E. Johore.

8. After weighing anchor at 0600 on 13th another rendezvous was made with K.D. HANG TUAN and further exercises carried out during the forenoon. At 1210 after being detached JERAI proceeded to Ruthenia Jetty for stand off. During the stand off loop repairs were successfully completed alongside H.M.S. MULL OF KINTYRE in H.N. Naval Base.

# CONFIDENTIAL

9. The period 19th until 25th was spent upon uneventful patrol duties in Malacca Straits. The ship was able to replenish during this period in Port Dickson.

10. When patrol duties were completed at 0630 on the 26th course and speed was set for passage to Penang where the ship was to spend a three day operational

11. On the 27th the ship berthed at Shell Jetty, Penang, where fuel and stores were embarked. Upon completion the ship cast off and proceeded to South Swettenham Pier securing alongside at 1020.

12. The Officer paid a call of respect upon the Penang Harbour Master. Pleasanties were exchanged and a warm welcome to the Island of Penang was extended. The Officers and Crew of the Ship Company were able to have the opportunity to visit the tourist attractions, use the shopping facilities and take maximum leave. Blood Donour Volunteers numbering three officers and twelve ratings gave blood to the Blood Donor Clinic at 1100 hours on Thursday afternoon.

13. The ship was opened to visitors from 1000 until 1300 on both Friday 28 and Friday 29. Parties to be invited to the ship were a group of 12 Australian school children from Royal Australian Air Force School, Canberra and their parents who were on board the ship during the forenoon of Friday 29. The ship was also open to the public in the afternoon on both days.

14. The ship was enjoyed by all on board. Liaison has been established with the Harbour authorities, Reserve Establishment R.M. 5000 and local residents and it is hoped that JUTIE will be returning to Penang for a further visit in the near future.

15. At 0900, Saturday 30th the ship cast off and proceeded to the passage from Malacca Straits to Raffles Jetty Singapore.

16. Apart from the defects occurring as mentioned in paragraph 5 and 6 the engine and electrical equipment in the ship appears to be in a good state of repair and has run well during the month. The extensive trial off received during the month have enabled the technical staff to get a good idea of the condition of the ship and it is hoped that the trial off will be completed.

17. Throughout the month which offered the ship a good opportunity for training patrols, working with a single patrol boat, the ship's crew were able to take the patrol boat, the crew were able to get a good idea of the condition of the ship and it is hoped that the trial off will be completed.

18. The ship was opened to visitors from 1000 until 1300 on both Friday 28 and Friday 29.

19. The ship was enjoyed by all on board.

*Raymond*  
Raymond Mendenhall

# **ATTACHMENT 3**

K.D. HANG TUAH,  
di-Singapura.

2hb Mei, 1966.

Bil:ET/111

PEMERENTAH TENTERA LAUT,  
MALAYSIA BARAT (2).  
-----

Sir,

I have the honour to submit my report of proceedings for Kapal Diraja HANG TUAH under my command for the month of April, 1966. The month started with a programmed period of engine adjustments and harbour radio/radar trials on completion of which the ship sailed on 7th April. A premature return to harbour was necessary when a main bearing on the port main engine wiped badly but after various tribulations HANG TUAH sailed again for work-up and patrol. The ship returned to SINGAPORE at the end of the month for self-maintenance.

2. HANG TUAH sailed from H.M. Dockyard at 0730 on 7th April, exercising action stations and steering gear break-downs during the passage down harbour. After successful helicopter landing trials with an ALOUETTE of 3 Squadron R.M.A.F. the ship proceeded to PULAU AUR. All stages of operation ANKWARD were carried out in slow time and a further exercise was planned for the following night. However, No.5 Main Bearing on the Port Main Engine, which had been opened up by ship's staff on arrival at the island, was found to have wiped badly and it was necessary to return to harbour for repairs. A programmed 4 inch and Bofors surface shoot at a home made target was carried out en-route and the ship secured alongside H.M.S. LOCH FADA (Commander D. MONSKILL, Royal Navy) at 1830 on Friday the 8th.

3. Repairs were undertaken by H.M. Dockyard and HANG TUAH sailed again at 0645 on Monday 11th. A proper basin trial had been impracticable as the ship had been secured in a trot of 3 frigates and, sadly, it was clear soon after slipping and while still at 80 revolutions that the problem was unsolved. The bearing again overheated badly. Approval was obtained for the ship to return alongside and this was accomplished using the starboard engine at 0930. The aim became that of getting to sea in time to carry out a Casex scheduled for 0800 the next morning. Thanks to untiring efforts by the Dockyard fitters and the co-operation of the Captain of the Dockyard's department, which secured the ship for a basin trial, HANG TUAH was ready for sea by 2200 that night and slipped to proceed to the practice area.

4. The week was spent working-up. Apart from the Casex with H.M. S/M ANCHORITE (Lt. Cdr. A.F. HOSIE, RN) a variety of exercises were carried out. These included Towex (forward and aft), Jackstay and heaving-line transfers and several periods of O.O.W. manoeuvres by voice and flags with K.D. JERAI (Lieut. Cdr. K.H. MacGOWAN, RAN). The first R.A.S. of the commission was carried out with R.F.A. TIDES-PRING and an entertaining if very primitive Night Encounter exercise was held with H.M.S. LOCH FADA. Starshell and rockets were fired and after chasing her for a while course was altered to permit LOCH FADA to adjust her starshell fuze settings. Man overboard and approaches to a mock jetty were exercised by officers of the Watch and after a further and most encouraging CASEX, during which the submarine was held continuously and many attacks carried out, the ship re-entered SINGAPORE on Friday evening and remained at M Buoy for the week-end.

Opportunity was taken to illuminate ship. Although we still have something to learn in the matter of avoiding minor shadows the general effect was attractive.

5. HANG TUAH sailed at 0800 on Monday 18th with the N.G.S.F. team embarked. An N.G.S.X. and various seamanship drills were conducted on passage and at 1530 the team was landed on PULAU AUR. A number of indirect bombardment runs were carried out during the dog watches with the ship underway at 8 knots. After dark starshell illumination under spotter control was exercised. On completion the ship anchored off PULAU AUR and night diving and bottom searches were carried out.

For the remainder of the week the ship carried out practices by day and patrolled by night. Exercises included :-

- 1 Further NGSF (3 Runs improved results and a reduction in firing interval)
- 1 R.A.S. (Included embarking 10 x 45 gallon drums luboil by jackstay)
- 1 Bofors Firing (Target towed by K.D. JERAI)
- 2 CASEX A 4/5 (Good results)
- 1 CASEX A2 (2 patterns fired)
- 1 Board Patrol Craft (K.D. SRI SARAWAK)
- 1 Ammo R.A.S. (FORT LANGLEY 166 4", 4 squid)
- 1 SULRF (H.M.T. AGILE)

Man overboard and practice 'berthings' on two smoke floats by Officers of the Watch were exercised in the dog watches. It was unfortunate that a change in H.M.S. LOCH FADA's programme resulted in the cancellation of what had promised to be the most valuable series of exercises of the work up.

7. On Sunday 24th May the ship left the SINGAPORE area and proceeded to carry out a 3 day patrol in the MALACCA Straits with a helicopter of 3 Squadron, R.M.A.F. embarked. Dawn and dusk sorties were flown daily and the 100th deck landing on board was celebrated by the presentation of a cake to Squadron Leader DODD, the Commanding Officer of 3 Squadron. A large number of fishing craft were at sea and many were inspected visually from the air. Sadly no BT craft or other suspicious vessels were sighted by the helicopter. Some minor excitement was, however, provided for our visitors on the night of 26th April when the ship closed a contact reported by the patrolling SHACKLETON and identified it as a BT Boat. K.D. SRI SARAWAK (Lieut. P.D. MCKAY, RAN) operated under HANG TUAH's orders during this patrol.

8. On 27th April the helicopter disembarked and after two patrols off HORSBOROUGH Light and fuelling at BUKOM, HANG TUAH returned to SINGAPORE, securing to M Buoy at 0900 on Friday 29th April.

9. In general it has been an encouraging month with all departments working hard and cheerfully and making sound progress. HANG TUAH is now ready for the strictly limited operations which have so far been required in countering confrontation. The ship cannot, however, be considered to be a worked-up frigate until opportunities occur for exercises in company with ships of similar size.

In particular multi-ship A/S exercises and AA firings and tracking exercises are required. Although lack of exercise facilities to date has prevented the attainment of the standard of competence achieved a year ago I am confident that, given the opportunity, the same standard would be attained. A brief 'state of progress' report is attached as an Appendix to this letter.

10. During the month the ship spent 19 days at sea, steamed 273.3 miles and spent 14 night patrol.  
The health, morale and conduct of the ship's company have

I have the honour to be,

Sir

Your obedient Servant



(M.J. MANN)  
Commander, R.N.  
PEGAWAI MEMERENTAH

WY/

# **ATTACHMENT 4**

~~RESTRICTED~~  
K.D. PENDEKAR  
di - Tanjong Rhu.

Bil: PD/140

14 hb June, 1971

PEMERINTAH TENTERA LAUT  
MALAYSIA BARAT ( 2 copies )  
-----

Sir,

REPORT OF PROCEEDINGS - JUNE 1971

Bilangan : PFB 3204

I have the honour to submit the following report of proceedings for Kapal Diraja PENDEKAR under my command for the period 1 hb to 14 hb June 1971.

2. All times quoted are in zone GH unless otherwise stated.

3. K.D. PENDEKAR remained non-operational till 070300 for post refit checks and routine maintenance. The ship sailed MBJ at 040910 for 'A' gun functioning trials which was carried out at 041053 using 40/60 MM Break Up shots off Johore River mouth. On completion KD PENDEKAR proceeded back to MBJ. However while off Panggol Beacon K.D. PENDEKAR was ordered to join K.D. GEMPITA ( Lieutenant AHMAD RAMLI BIN HJ. MOED. NOR, RMN ) for SS12 firing in area Xray Lima Lima. GEMPITA's signal DTG 040415Z refers. On arrival at the area all the photographers and observers from K.D. HAMDALAN ( Lieutenant SIEW KOI SENG, RMN ) were transferred to K.D. PENDEKAR by bump transfer on proteus at 041340. On completion of the bump transfer K.D. PENDEKAR was under orders of K.D. GEMPITA for the SS12 firing which was successfully executed. After the SS12 firing the FPBS proceeded back to MBJ. While off Horsburgh Lighthouse K.D. HAMDALAN transferred 1,200 gallons of fuel to K.D. PENDEKAR by bump transfer on General Motors after all K.D. PENDEKAR's passengers have previously been transferred by bump transfer on proteus to K.D. GEMPITA. The fuel transfer lasted from 041920 to 042020. Then with K.D. HAMDALAN in company K.D. PENDEKAR returned to MBJ arriving at 042230. For the whole day K.D. PENDEKAR, being still non-operational, was with neither food nor sufficient fuel. However the unscheduled sea trip for the ship was worth while.

4. The following four days were spent alongside MBJ for fuelling, routine maintenance and SS12 conversion preparations. K.D. PENDEKAR sailed to KALL TECK SHIPYARD, Tanjong Rhu at 080810 arriving at 081120 for SS12 Conversion.

5. On 11 hb June Lieutenant MOSTAFA BIN ABDUL RAHMAN, RMN joined the ship as additional for taking over command. Lieutenant MOSTAFA BIN ABDUL RAHMAN, RMN assumed command of K.D. PENDEKAR on 14 hb June. KEMANTAN KL signal DTG 050332Z paras 3 and 4 refer.

.....2/  
~~RESTRICTED~~

6. So far only one rating has been granted a week's annual leave for this period.

7. During the period covered by this report the health and morale of the ship's company remained satisfactory.

I have the honour to be,

Sir,

Your obedient servant,



.....  
( MOHD. HUSSIN BIN TAMBY )  
Leftenan, TLDM  
Pegawai Memerintah.

Salinan Kapada :-  
Pegawai Kanan,  
Skuadron Kapal 2 Ronda Laju Ke-11,  
K.D. PERKASA.

/Rg

# **ATTACHMENT 5**

# RESTRICTED-TERF

K.D. SRI TRENGGANU,  
di - Sibn.

Bil: TN/25/71.

13b Disember, 1971.

PEMERINTAH TENTERA LAUT  
MALAYSIA BARAT.

---

Sir,

## REPORT OF PROCEEDINGS FOR MONTH OF NOVEMBER 1971

Berhubung : P.P.M.B. 3204.

I have the honour to submit the following report of proceedings for Kapal Diraja SRI TRENGGANU under my command for the month of November 1971.

2. All times quoted are in zone Golf Hotel unless otherwise stated.

### Movements

3. A total of 9 days were spent in the East Coast i.e. from the 3rd to 6th and then 13th to 16, and from 7th to 12th the ship was in Vosper Thornycraft Singapore. Until sailing again for Labuan for a two months patrol duty on the 23rd, the ship remained alongside MBJ, in preparation for the trip.

### East Coast Patrols

4. On the 3rd the ship was brought to immediate notice for sea at 1330 and was told that pending on further signals from KEMANTAN FL, the ship would be required to proceed to the East Coast for a search and possible arrest of a North Vietnamese Trawler. Later in the evening, at 1700 the order was received and the ship sailed MBJ under the Tactical Command of KD SRI NEGRI SEMBILAN (LT. CDR. PANG MENG KUNG, RSN, Senior Officer Second Patrol Craft Squadron) at 1725. On arrival at Horsbrough Light at 2050, the ship was detached to proceed for patrol north of Pulau Aur. No incidence occurred during the night.

5. The following day, KD HANG TUAH (CDR. BOEY KUNG WEI, RSN) joined and took over as OTC and the search continued but to no avail. On the 5th both KD HANG TUAH and KD SRI NEGRI SEMBILAN were recalled back to MBJ and the ship was to remain at anchor at Pulau Tioman.

6. Whilst at anchor, water was found in the port engine cylinders and the ship was told to proceed to arrive VTS at 0900 on the 7th for emergency repair.

Salinan kpd:

1. Pemerintah Tentera Laut  
Malaysia Timor.
2. Pegawai Kanan,  
Sekwadran Kapal 2 Ronda Ke-dua.  
(KD SRI NEGRI SEMBILAN).

## RESTRICTED-TERM

7. On the 13th at 1400 the ship sailed again for 4 days East Coast Patrol with the main intention of carrying out full trials on the port engine. Unfortunately, whilst approaching Pulau Aur on the following day, the starboard propeller came loose and the patrol was thus interrupted. (My DTG: 140410Z Nov. 1971 and letter TN/25a/71 dated 23rd November refers).

### Sabah Patrol

8. After a quiet Hari Raya Holiday, with contented ships company, the ship sailed for Labuan at 1400 on the 23rd and arrived at 1030H on the 25th after a journey of reasonable fair weather, except the heavy swells of 6 - 7 feet from the north-easterly direction.

9. On completion of fueling and replenishing, the ship received her first task i.e. to escort LCM 4 to Kuala Paloh for KD SRI REJANG (LT. CDR. AHMAD KAMAL BIN YAHAYA, RMN). On completion, the ship proceeded to Kuching to standoff and remain to carry out Sarawak Patrol.

### Defects and Repair

10. The port engine was again the culprit (My DTG: 051533Z Nov. 1971 refers) and on the 7th, the ship was sent to VTS for emergency repair where all the port engine cylinder heads were renewed. So far the port engine has performed very satisfactorily. While in VTS, the starboard generator which failed to give the correct voltage sometimes was also repaired.

11. Thanks to the good effort of the FTS and the ships technical staff the ship was able to sail and arrive Labuan intact and will try to remain so.

### Progress and Training

12. The boarding party was exercised several times whilst on East Coast patrols where some fishing and barter trader boats were boarded and searched. Progressive internal exercises were also carry out, and the RCs and RPs conformed to scheduled harbour training while in MBJ. On the technical side, the POERM gives regular lectures to the junior MEs under training and it is observed that these MEs are quite quick on the uptake.

### Sports and Recreations

13. The Fasting and then the public holidays gave little opportunity for sporting activity. On arrival in East Malaysia, no game was played so far as the ships company will need some tuning up. Unfortunately the ship missed the Festa Sukan at the Base, otherwise it would be quite a boost to the crew who are really quite sporting spirited. The Commanding Officer, who was selected to represent the RMN in the Armed Forces Basketball competitions was also unable to go because of the ships programme.

### Health and Morale

14. The health and morale of the ships company remained good throughout the period covered by this report.

I have the honour to be

Sir,

Your obedient servant.

  
( LAI MAN YUNG )

# **ATTACHMENT 6**

~~RESTRICTED~~

Office of Commander  
Far East Fleet  
Singapore  
Tel. 59141 Ext. ( 5735 )

FEF.121/1.Ops

20th February 1967

Ministry of Defence (Navy)  
Kuala Lumpur

HMS DANIELER - SURVEY CLEARANCES

1. It is requested that clearance be obtained for  
HMS DANIELER and detached parties to carry out surveys in  
West Malaysia as detailed in the enclosure.



(J. BLINSON)  
Commander, Royal Navy  
for Fleet Commander

Enclosure: Details of Surveys in West Malaysia, March to  
May 1967

Copies to:

The Hydrographer of the Navy  
The Commanding Officer, HMS DANIELER

**NAVAL STAFF DIVISION**  
1207 FEB 1967  
152/1  
**MINISTRY OF DEFENCE**

503 ch

25 FEB 1967



# **ATTACHMENT 7**

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## **ANNEX MCM 5**

**Affidavit of Idris Bin Yusof**

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**MAHKAMAH KEADILAN ANTARABANGSA**  
**KES BERHUBUNG KEDAULATAN KE ATAS PEDRA**  
**BRANCA/PULAU BATU PUTEH, MIDDLE ROCKS DAN SOUTH**  
**LEDGE**

**ANTARA**  
**MALAYSIA**  
**DAN**  
**SINGAPURA**

**AFIDAVIT IDRIS BIN YUSOF**

Saya, IDRIS BIN YUSOF (K/P: 450714-01-5457), nelayan dari Sungai Rengit, beralamat di Jalan Bunga Raya Satu, Kg. Sungai Buntu, 81600 Pengerang, Johor, Malaysia, dengan sesungguhnya berikrar dan menyatakan seperti berikut:

1. Saya dilahirkan di Sungai Rengit pada 14 Julai 1945. Sekarang saya menetap dengan keluarga saya di Sungai Buntu, sebuah kampung lebih kurang 1.5 kilometer dari Sungai Rengit. Saya mempunyai 5 orang anak. Semua perkara yang dideposkan di sini adalah dalam pengetahuan saya sendiri melainkan dinyatakan sebaliknya. Di mana

ianya di luar pengetahuan saya, ia adalah benar pada makluman dan kepercayaan saya.

2. Sungai Rengit adalah sebuah perkampungan nelayan di tenggara pantai Johor. Ia adalah lebih kurang 5 batu nautika dari Pulau Besar dan Pulau Lima dan adalah lebih kurang 10 batu nautika dari Pulau Batu Puteh di luar pantai Johor.
3. Saya bersekolah sehingga darjah 6. Sejak dari itu saya menjadi nelayan, sekarang sudah 45 tahun. Saya yang pertama di dalam keluarga menjadi nelayan. Mulanya saya menangkap ikan untuk majikan berbangsa Cina dari Malaysia. Kemudiannya saya memiliki sebuah bot yang kecil dan menangkap ikan secara bersendirian. Selepas itu saya menangkap ikan dengan bot yang lebih besar bersama 3 nelayan lain. Ini membawa perbezaan yang besar kepada pendapatan saya.
4. Lebih kurang pada tahun 1979 saya telah dilantik sebagai ketua kumpulan nelayan dari Sungai Rengit yang mempunyai permit dari Jabatan Perikanan kawasan untuk menangkap ikan di kawasan lebih

daripada 3 batu nautika dari pantai Malaysia. Kumpulan ini terdiri daripada 150 hingga 180 orang nelayan. Saya menjawat jawatan ketua nelayan sehingga tahun 2000. Tugas ketua nelayan adalah untuk membantu nelayan-nelayan di dalam kumpulan dan mewakili mereka apabila mereka membuat aduan. Dari tahun 2003 saya memegang jawatan Timbalan Pengerusi Persatuan Nelayan kawasan Pengerang, merangkap ahli Lembaga Pengarah Persatuan Nelayan kawasan Pengerang.

5. Menangkap ikan merupakan punca pencarian rezeki tradisi penduduk Sungai Rengit sejak turun-temurun. Pada asalnya nelayan-nelayan menggunakan bot yang mempunyai layar dan dayung. Kemudian mereka menggunakan bot enjin sangkut 40 kuasa kuda dan bot yang lebih besar dengan enjin dalam 120 hingga 150 kuasa kuda. Seseengah nelayan Sungai Rengit memiliki bot mereka sendiri sementara yang lainnya menyewa bot dari pengusaha tempatan yang menerima sebahagian daripada nilai hasil tangkapan. Di mana bot yang disewa dari pengusaha tempatan memerlukan 3 orang pekerja, biasanya setiap nelayan akan mendapat 20% daripada hasil tangkapan manakala pemilik bot mendapat 40% hasil tangkapan. Nelayan

kadangkala menangkap ikan berseorangan di dalam botnya dan kadangkala di dalam sekumpulan 4 atau 5 bot. Nelayan dari Sungai Rengit biasanya menjual tangkapan mereka kepada orang tengah tempatan berbangsa Cina dari Sungai Rengit.

6. Pada 1960-an, 1970-an dan awal 1980-an, kadang-kadang saya dan nelayan-nelayan lain dari Sungai Rengit diupah untuk membawa mereka dari Malaysia dan Singapura untuk memancing. Mereka dari Singapura akan datang ke Sungai Rengit untuk menyewa bot kami. Kami tidak pergi ke Singapura. Upah yang diperolehi dari aktiviti ini membawa pendapatan yang lumayan di antara RM600 hingga RM850 sehari.
7. Nelayan dari Sungai Rengit menggunakan pancing dan jaring untuk menangkap ikan. Apa yang digunakan bergantung kepada samada tangkapan dibuat pada siang atau malam, keadaan cuaca, dan kedalaman air. Ikan boleh nampak jaring dan mengelaknya pada siang hari. Kami menggunakan jaring pada waktu malam apabila ikan-ikan berada lebih dekat dengan permukaan air dan tidak nampak jaring yang digunakan. Kedua-dua pancing dan jaring elok digunakan untuk

menangkap ikan. Kami menetapkan bila dan di mana untuk menangkap ikan bergantung kepada keadaan cuaca dan faktor lain seperti kesesakan kawasan tangkapan tersebut.

8. Nelayan dari Sungai Rengit telah lama menangkap ikan di sekitar Pulau Batu Puteh. Samada kami pergi ke Pulau Batu Puteh atau ke tempat lain bergantung kepada musim dan keadaan cuaca. Biasanya kami tidak ke Pulau Batu Puteh di antara bulan November dan Mac sebab musim tengkujuh. Dari April hingga Oktober kami biasanya menangkap ikan di sekitar Pulau Batu Puteh lebih kurang 10 hingga 12 hari setiap bulan bergantung kepada keadaan.
9. Sekiranya kami tidak dapat menangkap ikan di sekitar Pulau Batu Puteh, kami akan menangkap ikan di luar pantai Desaru dan Tanjung Punggai ke utara pantai Johor, dan di sekitar Pulau Besar dan Pulau Lima.
10. Pulau Batu Puteh merupakan kawasan menangkap ikan yang penting bagi nelayan dari Sungai Rengit sejak turun temurun kerana ia berdekatan dengan perkampungan dan perairannya kaya dengan ikan.

Tidak perlu menggunakan bot yang berenjin untuk ke Pulau Batu Puteh. Sehari menangkap ikan di perairan Pulau Batu Puteh biasanya memberikan tangkapan yang setimpal dengan 3 atau 4 hari menangkap ikan di kawasan lain. Ini adalah kerana perairan sekitar Pulau Batu Puteh adalah kawasan lindungan di mana arusnya lebih perlahan dan ini menarik berbagai jenis ikan. Nelayan tidak perlu keluar menangkap ikan setiap hari kerana tangkapan di sekitar Pulau Batu Puteh adalah lumayan. Inilah sebabnya kebanyakan nelayan dari Sungai Rengit dahulunya sering menangkap ikan di sekitar Pulau Batu Puteh.

11. Pulau Batu Puteh adalah tempat yang elok untuk menangkap ikan walaupun bagi nelayan di Sungai Rengit yang mempunyai bot kecil kerana pulau tersebut merupakan tempat berlindung. Semasa ribut, para nelayan dapat menarik bot mereka ke atas batu dan berlindung di rumah api. Dahulunya, penjaga rumah api selalu menolong dan menyediakan makanan dan tempat berlindung untuk nelayan. Para nelayan akan membelikan barang keperluan di Sungai Rengit untuk penjaga rumah api manakala penjaga rumah api pula memberi perlindungan dan minyak petrol kepada nelayan. Barang keperluan

yang diberikan oleh nelayan kepada penjaga rumah api termasuk minyak masak, roti, biskut dan bahan makanan lain, dan kadangkala rokok. Sekiranya penjaga rumah api kehabisan barangan keperluan ini, mereka terpaksa menunggu seminggu sebelum mendapatkan bekalan baru. Daripada menunggu, penjaga rumah api akan memberikan duit kepada nelayan dan keesokan harinya nelayan akan memberikan apa yang dikehendaki.

12. Tempoh yang paling baik untuk menangkap di sekitar Pulau Batu Puteh adalah apabila terdapat air pasang dan surut kerana pada masa ini terdapat paling banyak ikan di sekitar pulau tersebut. Nelayan yang menggunakan bot kecil berenjin 40 kuasa kuda akan mengambil masa 50 minit untuk sampai ke Pulau Batu Puteh. Sekiranya bot yang digunakan adalah besar dan berat dan walaupun ianya mempunyai enjin 120 atau 150 kuasa kuda, ia akan mengambil masa 1½ jam untuk tiba ke Pulau Batu Puteh.
13. Apabila kami keluar menangkap ikan di sekitar Pulau Batu Puteh pada siang hari, kami akan bertolak lebih kurang pada pukul 5 atau 6 pagi dan balik pada waktu senja. Apabila kami menangkap ikan pada

siang hari kami akan menggunakan pancing. Apabila kami keluar menangkap ikan pada waktu malam, kami akan keluar lewat petang dan balik awal pagi. Apabila kami menangkap pada waktu malam, kami akan menggunakan jaring. Kami akan berlabuh lebih kurang 100 meter dari Pulau Batu Puteh. Ikan yang kami tangkap di kawasan ini kebanyakannya ikan Cermin dan ikan Cencaru yang mempunyai nilai jualan yang sederhana.

14. Pernah sekali atau 2 kali semasa tahun 1960-an dan 1970-an kami pernah dihalang oleh Polis Marin Malaysia untuk pemeriksaan semasa menangkap ikan di sekitar di Pulau Batu Puteh. Apabila kami memberitahu mereka bahawa kami di dalam perjalanan ke Pulau Batu Puteh, kami dibenarkan meneruskan perjalanan kami tanpa pemeriksaan lanjut. Polis Marin Malaysia jarang memeriksa bot nelayan Johor yang mempunyai nombor pendaftaran. Ini membolehkan bot-bot tersebut dikenalpasti dari jauh dengan lebih senang oleh Polis Marin Malaysia. Biasanya kami akan melihat Polis Marin Malaysia berlabuh mana-mana di antara Pulau Batu Puteh dan Pulau Lima supaya mereka boleh nampak kedua-dua pulau.

15. Tiada larangan untuk menangkap ikan di sekitar Pulau Batu Puteh sehingga lebih kurang pada tahun 1985 atau tidak lama selepas itu. Selepas itu Polis Marin Singapura atau Tentera Laut Singapura mula menghalang kami dengan melarang kami daripada berlabuh di kawasan sekitar Pulau Batu Puteh. Sebab yang diberikan oleh mereka ialah bahawa terdapat kabel di dalam air dan kemungkinannya sauh kami akan membahayakan sekiranya tersangkut pada kabel dan kami akan terkena kejutan elektrik. Saya tidak tahu samada ini adalah benar atau mereka cuma cuba menakutkan kami. Sejak dari itu nelayan Johor tidak dibenarkan untuk berlabuh kurang dari 1 batu nautika dari Pulau Batu Puteh. Sebelum ini kami selalu berlabuh lebih kurang 100 meter dari pulau tersebut.
16. Sebagai nelayan dari Sungai Rengit yang sejak itu tidak dapat menangkap ikan di sekitar perairan Pulau Batu Puteh, kami kini terpaksa menangkap ikan di tempat lain termasuk kawasan ke utara lagi sepanjang pantai Johor dan sekitar pulau-pulau berhampiran Tanjung Penyusoh. Hasil tangkapan ini adalah tidak selumayan di kawasan ini berbanding dengan di sekitar Pulau Batu Puteh dan ramai nelayan menanggung masalah kerana terpaksa berhenti menangkap

ikan di kawasan Pulau Batu Puteh dan mencari punca pencarian di kawasan lain.

Diikrarkan oleh **IDRIS BIN YUSOF** )



pada 8 November 2004 di Putrajaya )

Di hadapan saya,



8/11/04.

Pesuruhjaya Sumpah

**TRANSLATION**

**INTERNATIONAL COURT OF JUSTICE**

**CASE CONCERNING SOVEREIGNTY OVER PEDRA BRANCA/PULAU BATU  
PUTEH, MIDDLE ROCKS AND SOUTH LEDGE**

**BETWEEN**

**MALAYSIA**

**AND**

**SINGAPORE**

**AFFIDAVIT OF IDRIS BIN YUSOF**

I, IDRIS BIN YUSOF, a fisherman from Sungai Rengit, of Jalan Bunga Raya Satu, Kg. Sungai Buntu, 81600 Pengerang, Johor, Malaysia, do solemnly affirm and say as follows:

1. I was born in Sungai Rengit on 14 July 1945. I now live in Sungai Buntu, a small village about 1½ km from Sungai Rengit, with my family. I have 5 children. All matters deposed to are within my own knowledge and are true unless otherwise stated. Where they are not made from my own knowledge, they are true to the best of my information and belief.
2. Sungai Rengit is the main fishing village on the south-eastern coast of Johor. It is about 5 nautical miles from the islands of Pulau Besar and Pulau Lima, and about 10 nautical miles from the island of Pulau Batu Puteh, off the Johor coast.
3. I went to school until standard 6. I have worked as a fisherman since then for the past 45 years. I was the first in my family to become a fisherman. I started fishing for a Malaysian Chinese employer. I then had my own small boat and fished as a

single fisherman. Later, I went fishing in a larger boat which had three fishermen. This made a big difference to my income.

4. In about 1979, I was appointed as the Head of Fishermen for the group of fishermen from Sungai Rengit who had permits from the Fisheries Department of the area to go fishing beyond 3 nautical miles from the Malaysian coast. This group was made up of about 150 to 180 fishermen. I was the Head of Fishermen until 2000. The role of the Head of Fishermen is to assist the fishermen from the group and to represent them when they made complaints. From 2003, I have been the Deputy Chairman of the Fishermen's Association of Pengerang, as well as a member of the Board of Directors of the Fishermen's Association of Pengerang.
5. Fishing has been the traditional source of livelihood for the people of Sungai Rengit for generations. Fishermen originally used boats with sails and oars. Later, they used small boats with outboard motors of around 40 horsepower and bigger boats with inboard motors of up to 120 or 150 horsepower. Some fishermen from Sungai Rengit own their own boats. Others hire their boats from local businessmen who finance the boat for a share of the catch. In the case of a three-man boat owned by a local businessman, each fisherman would usually take 20% of the catch, with 40% going to the owner of the boat. Fishermen sometimes fished alone, in single boats, and sometimes in groups of 4 or 5 boats together. Fishermen from Sungai Rengit would usually sell their catch to local Malaysian Chinese middlemen from the village.
6. Sometimes, during the 1960s, 1970s and the early 1980s, I and other fishermen from Sungai Rengit would be hired to take people from Malaysia and Singapore sports fishing. People from Singapore would come to Sungai Rengit to rent our boats. We never went to Singapore. Using our boats for this purpose brought in a good income of Ringgit Malaysia 600 – 850 per day.

7. Fishermen from Sungai Rengit use both lines and nets for fishing. What is used will depend on whether we are fishing during the day or night, on the weather conditions, and on the depth of the water. We usually use lines for fishing during the day, when the fish stay deeper in the water. During the day, the fish can also see the nets and avoid them. We use nets at night, when the fish come closer to the surface and cannot see the nets. Both lines and nets are good for fishing. We decide when and where to go fishing depending on the weather conditions and other factors, such as whether an area is too crowded.
8. Fishermen from Sungai Rengit have always fished around Pulau Batu Puteh. Whether we would go to Pulau Batu Puteh or some other place would depend on the time of year and the weather conditions. Usually, we would not go to Pulau Batu Puteh between November and March, because of the monsoons. From April to October, we would usually fish around Pulau Batu Puteh for around 10 to 12 days each month, depending on the conditions.
9. If we could not go fishing around Pulau Batu Puteh, we would go fishing off Desaru and Tanjung Punggai, further north along the Johor coast, and around the islands of Pulau Besar and Pulau Lima.
10. Pulau Batu Puteh has been an important fishing area for fishermen from Sungai Rengit for generations because it is close to the village and the waters are very rich in fish. It was not necessary to have a boat with an engine to get to Pulau Batu Puteh. In 1 day of fishing in the waters around Pulau Batu Puteh, a fisherman could usually catch the equivalent of about 3 or 4 days of fish compared to fishing in other areas. The reason for this is that the waters around Pulau Batu Puteh are sheltered, with a slower current, and this attracts many fish. Because the catch was so good around Pulau Batu Puteh, it meant that the fishermen did not need to go fishing on a daily basis. For this reason, most of the fishermen from Sungai Rengit used to fish around Pulau Batu Puteh.

11. Pulau Batu Puteh was a good place to fish even for fishermen from Sungai Rengit with very small boats because the island provided shelter. In stormy waters, the fishermen were able to pull their boats onto the rocks and seek shelter in the lighthouse. The lighthouse keepers were always helpful and would provide the fishermen with food and shelter. There was an arrangement that the fishermen would provide the lighthouse keepers with supplies which they would buy for them in Sungai Rengit in exchange for shelter and petrol. The supplies that the fishermen brought to the lighthouse keepers included cooking oil, bread, biscuits and other foodstuffs, and sometimes cigarettes. If the lighthouse keepers ran out of these things, they could wait for a week before they got fresh supplies. Instead of waiting, they would give the fishermen money and the next day the fishermen would deliver what they had asked for.
12. The best time to go fishing around Pulau Batu Puteh was when there was a rising or a receding tide as this was when there would be most fish around the island. If the fishermen were using a small boat with a 40 horsepower engine, it would take about 50 minutes to get to Pulau Batu Puteh. If the boat was larger and heavier, even though it may have been using 120 or 150 horsepower engine, it could take up to 1½ hours to get there.
13. When we went fishing around Pulau Batu Puteh during the day, we would set off at around 5.00 or 6.00 am and stay out until night fall. When we fished during the day, we would use lines. When we went fishing during the night, we would set off late in the afternoon and come back in the early morning. When we fished at night, we would use nets. We would usually anchor about 100 meters from Pulau Batu Puteh. The fish that we caught in these waters were mostly Cermin and Cencaru, which have medium commercial value.
14. On one or two occasions during the 1960s and 1970s, when we went fishing around Pulau Batu Puteh, we were stopped by the Malaysian Marine Police for inspection. When we told them that we were going to Pulau Batu Puteh, they would allow us to

proceed without any further checks. The Malaysian Marine Police checked the Johor fishing boats less often once they all had registration numbers. This allowed them to be identified more easily by the Malaysian Marine Police from a distance. Usually, we would see the Malaysian Marine Police boats anchored somewhere between Pulau Batu Puteh and Pulau Lima, so that they could see both islands.

15. There were no restrictions on fishing around Pulau Batu Puteh until about 1985 or a little later. After that, the Singapore Marine Police or Singapore Navy began to stop us, prohibiting us from anchoring in the area around Pulau Batu Puteh. The reason they gave was that there were cables in the water and there was a danger that our anchors would pull on the cables and we would be electrocuted. I do not know if this was true or whether they were just trying to frighten us. From this time, Johor fishermen have not been permitted to anchor within 1 nautical mile of Pulau Batu Puteh. Before that, we would anchor about 100 meters from the island.
  
16. As fishermen from Sungai Rengit have been unable to fish in the waters around Pulau Batu Puteh since this time, we have had to fish elsewhere, including further north along the Johor coast and around the islands off Tanjung Penyusoh. The fishing is not as good in these areas as it was around Pulau Batu Puteh and many fishermen have suffered, having had to give up fishing around Pulau Batu Puteh and to earn a living elsewhere.

Solemnly affirmed by **IDRIS BIN YUSOF** )  
on **8 November 2004** at **Putrajaya** )

(signed)

Before me,

signed

**(Nor Sham Bte Said)**  
Commissioner for Oaths  
Court of Appeal  
Putrajaya

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## **ANNEX MCM 6**

**Affidavit of Saban Bin Ahmad**

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**MAHKAMAH KEADILAN ANTARABANGSA**

**KES BERHUBUNG KE DAULATAN KE ATAS PEDRA  
BRANCA/PULAU BATU PUTEH, MIDDLE ROCKS DAN SOUTH  
LEDGE**

**ANTARA**

**MALAYSIA**

**DAN**

**SINGAPURA**

**AFIDAVIT SABAN BIN AHMAD**

Saya, SABAN BIN AHMAD (K/P No: 480118-01-5079), nelayan dari Sungai Rengit, beralamat R.95, Kampung Jomis Sungai Rengit, 81620 Pengerang, Johor, Malaysia, dengan sesungguhnya berikrar dan menyatakan seperti berikut:

1. Saya dilahirkan pada 18 Januari 1948 di Sungai Rengit, sebuah perkampungan nelayan di tenggara Johor dan masih menetap di sana dengan keluarga saya. Semua perkara yang dideposkan di sini adalah dalam pengetahuan saya sendiri melainkan dinyatakan sebaliknya. Di mana ianya di luar pengetahuan saya, ia adalah benar pada makluman dan kepercayaan saya.

2. Saya berasal dari keluarga nelayan dan telah sepanjang hayat saya bekerja sebagai nelayan. Bapa dan datuk saya dulu pun nelayan, turun temurun keluarga saya keluarga nelayan. Saya berhenti sekolah selepas darjah 3, lebih kurang umur 9 tahun, dan terus ke laut mengikut bapa saya menangkap ikan. Beliau meninggal dunia semasa saya berumur 11 tahun.
3. Semasa saya mula menangkap ikan dengan bapa saya pada tahun 1957, kami menggunakan sampan dengan dayung dan pergi ke laut bersama dua orang nelayan lain dalam bot yang sama. Kemudian, kami menggunakan bot enjin sangkut yang kecil. Mulai tahun 1960-an, kami menggunakan bot yang lebih besar untuk tiga orang nelayan dengan enjin 80 kuasa kuda. Saya selalunya pergi menangkap ikan secara bersendirian dalam satu bot dan bukan dalam kumpulan dengan bot-bot lain. Sekarang ini saya memiliki bot sendiri.
4. Pulau Batu Puteh adalah kawasan menangkap ikan turun temurun untuk nelayan Johor dari Sungai Rengit. Saya ingat lagi kisah yang diceritakan oleh bapa dan datuk saya mengenai pengalaman mereka menangkap ikan di perairan tersebut. Pada zaman bapa dan datuk

saya, mereka akan menggunakan bot yang mempunyai layar dan dayung. Bergantung kepada keadaan angin mereka akan mengambil masa lebih kurang lima jam untuk sampai ke Pulau Batu Puteh. Mereka akan berlindung di kawasan perairan sekitar pulau tersebut. Kalau cuaca teruk mereka akan menarik bot ke atas batu dan akan dijemput oleh penjaga rumah api untuk berlindung di rumah api. Penjaga rumah api juga akan menawarkan makanan kepada mereka. Sebaliknya, bapa dan datuk saya akan memberikan mereka sebahagian kecil daripada tangkapan atau bekalan seperti sayur-sayuran, buah-buahan, cili, kelapa atau apa-apa yang diperlukan oleh penjaga rumah api. Ini juga berlaku kepada nelayan lain dari Sungai Rengit.

5. Saya masih ingat lagi, datuk menceritakan bahawa tangkapan ikan di sekitar Pulau Batu Puteh sangat baik. Apabila ada majlis perkahwinan memadai untuk menangkap ikan sehari sebelum perkahwinan tersebut kerana sudah tentunya akan mendapat tangkapan yang lumayan.
6. Pulau Batu Puteh merupakan pilihan pertama dan tempat yang paling saya suka untuk menangkap ikan kerana tangkapannya selalunya

lumayan. Bergantung kepada keadaan cuaca saya sering menangkap ikan dalam bulan April hingga Oktober dari tahun 1960-an hingga 1980-an. Dalam keadaan air tenang, ia akan mengambil masa lebih kurang 30 minit untuk sampai ke pulau tersebut dengan bot enjin 80 kuasa kuda. Selalunya saya akan mula menuju ke Pulau Batu Puteh. Sekiranya keadaan tidak mengizinkan ataupun kawasan tersebut sesak, saya akan menukar hala tuju untuk ke Pulau Lima. Biasanya saya akan keluar menangkap ikan lebih kurang 20 hari sebulan.

7. Bila saya pergi menangkap ikan di Pulau Batu Puteh saya akan keluar sama ada awal pagi lebih kurang pukul 6 pagi dan pulang lebih kurang pukul 5 petang, atau keluar lebih kurang pada pukul 6 petang dan pulang subuh keesokan harinya. Biasanya saya tidak akan keluar untuk lebih daripada satu hari.
8. Siang hari, saya menggunakan pancing untuk menangkap ikan. Malam pula biasanya saya menggunakan jaring. Siang hari, ikan akan dapat melihat jaring dan mengelakkannya. Malam pula, mereka tidak nampak jaring. Jaring yang digunakan adalah agak kecil iaitu lebih kurang 8 atau 10 meter. Lubang-lubang jaring pula adalah sebesar 5 inci. Jaring-jaring ini adalah sesuai untuk kawasan air cetek dan

bukan air dalam. Bergantung kepada kedalaman air, kami akan mengagak sedalam mana jaring akan dilepaskan. Jenis-jenis ikan yang biasa saya dapat di perairan Pulau Batu Puteh adalah ikan sagai, selar, cermin, cencaru, tenggiri, kerapu, delah dan jenahak. Ikan-ikan ini adalah sederhana nilainya. Biasanya saya akan menjual tangkapan saya kepada orang tengah rakyat Malaysia berbangsa cina di Sungai Rengit.

9. Saya berpendapat bahawa perairan di sekitar Pulau Batu Puteh menjanjikan tangkapan yang amat lumayan kerana perairan tersebut tenang dan tidak tercemar. Oleh itu, ia adalah kawasan yang merupakan tempat ikan berlindung.
10. Biasanya saya tidak menangkap ikan di kawasan perairan di sebalik Pulau Batu Puteh kerana saya diberitahu bahawa kawasan ini adalah kawasan perairan Indonesia. Pada tahun 1960-an, saya ditahan oleh polis marin Indonesia di perairan ini sebanyak dua kali. Bot saya ditunda ke Tanjung Pinang di Pulau Bintan di Indonesia dan kemudiannya saya diarah untuk pulang. Walau bagaimanapun, bot saya telah kehabisan diesel dan oleh itu saya memohon pertolongan

dari penjaga rumah api dan beliau telah memberikan saya sedikit diesel bagi perjalanan balik ke Sungai Rengit.

11. Biasanya, saya tidak mendarat di Pulau Batu Puteh kerana lebih suka berlabuh di perairan pulau tersebut untuk menangkap ikan. Sejak tahun 1960-an, ada lebih kurang 10 kali saya mendarat di Pulau Batu Puteh. Ada sekali tangkapan saya sangat baik sehinggakan saya terpaksa meninggalkan sebahagian di dalam guni di atas batu untuk diambil keesokan hari. Ada juga beberapa kali penjaga rumah api memberi bantuan dan tempat berlindung. Saya masih ingat tiga orang penjaga rumah api iaitu Samy, seorang India, Salim, seorang berbangsa Inggeris yang memeluk Islam, dan Thomas, seorang Cina. Yang paling saya ingat ialah Samy dan Salim kerana mereka sangat baik kepada saya. Biasanya ada beberapa orang lain di rumah api tersebut bersama penjaga rumah api, termasuk seorang tukang masak dan seorang lagi pembantu yang membantu mengendalikan api. Pada tahun 1960-an dan 1970-an penjaga rumah api dan yang lainnya akan ditukar secara bergilir setiap bulan.

12. Lebih kurang sebelum tahun 1986, saya tidak pernah dihalang daripada pergi ke Pulau Batu Puteh. Sekali atau dua kali sebulan saya

akan lihat Polis Marin Malaysia di kawasan tersebut dan tidak pernah di halang oleh mereka. Lebih kurang sebelum tahun 1986, saya tidak pernah melihat Polis Marin Singapura atau Tentera Laut Singapura di kawasan tersebut. Walau bagaimanapun, mulai waktu itu, mereka mula menghalang saya memasuki kawasan sekitar pulau tersebut kerana dikatakan akan menggugat hubungan di antara Malaysia dan Singapura. Mereka tidak memberikan sebab yang lain. Mereka mengarahkan saya beredar dari situ dan menangkap ikan di luar kawasan 1 batu nautika dari pulau tersebut.

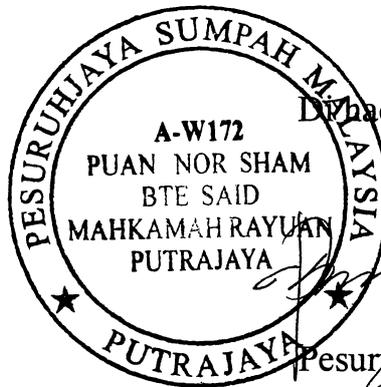
13. Sekiranya saya pergi ke kawasan lebih daripada 1 batu nautika dari Pulau Batu Puteh ke arah Johor, saya akan memasuki laluan perkapalan di mana airnya dalam dan arusnya kuat. Adalah mustahil dan merbahaya untuk menangkap ikan di kawasan ini. Lagipun, tiada apa untuk ditangkap di sini. Di sebalik Pulau Batu Puteh pula adalah kawasan perairan Indonesia dan saya juga tidak boleh menangkap ikan di sana. Hari ini, kalau saya pergi menangkap ikan saya cuma boleh pergi ke kawasan sekitar Pulau Lima atau sepanjang pantai Johor. Kawasan ini tidaklah sebaik kawasan menangkap ikan seperti Pulau Batu Puteh dahulunya.

14. Hari ini, saya jarang keluar menangkap ikan dan sekarang ini saya mempunyai perniagaan membuat belacan yang digunakan dalam masakan Melayu. Adalah kerugian yang besar bagi para nelayan Sungai Rengit memandangkan kami tidak dapat pergi menangkap ikan di Pulau Batu Puteh lagi.

Diikrarkan oleh **SABAN BIN AHMAD** )



pada 8 November 2004 di *Putrajaya* )



Di hadapan saya,

  
Pesuruhjaya Sumpah

8/11/04.

## **TRANSLATION**

### **INTERNATIONAL COURT OF JUSTICE**

#### **CASE CONCERNING SOVEREIGNTY OVER PEDRA BRANCA/PULAU BATU PUTEH, MIDDLE ROCKS AND SOUTH LEDGE**

**BETWEEN**

**MALAYSIA**

**AND**

**SINGAPORE**

#### **AFFIDAVIT OF SABAN BIN AHMAD**

I, SABAN BIN AHMAD, a fisherman from Sungai Rengit, of R.95, Kampung Jomis Sungai Rengit, 81620 Pengerang, Johor, Malaysia, do solemnly affirm and say as follows:

1. I was born on 18 January 1948 in Sungai Rengit, a fishing village on the south-east coast of Johor, and continue to live there with my family. All matters deposed to are within my own knowledge and are true unless otherwise stated. Where they are not made from my own knowledge, they are true to the best of my information and belief.
2. I come from a fishing family and have been a fisherman all my life. My father was a fisherman and his father before him and so on for many generations. I left school after standard 3, at about 9 years old, and began fishing with my father. He passed away when I was 11.
3. When I began fishing with my father in about 1957, we used a boat with oars and went with 2 other fishermen in the same boat. Later, we used a small boat with an outboard engine. From the 1960s, we began to use a bigger boat with an 80

horsepower engine and three-man crew. I usually went fishing alone, in a single boat, rather than in a group with other boats. Today, I own my own boat.

4. Pulau Batu Puteh has been a traditional fishing area for Johor fishermen from Sungai Rengit for generations. I remember stories from my father and grandfather about the fishing in these waters. In my father and grandfather's time, they would use boats with sails and oars. Depending on the wind, it would take them about five hours to get to Pulau Batu Puteh. They would shelter in the waters around the island. If the weather was bad, they would move the boat on to the rocks and would be invited by the lighthouse keepers to shelter in the lighthouse. The lighthouse keepers would also offer them food. In exchange, my father and grandfather would give the lighthouse keepers a small portion of their catch or other provisions, such as vegetables, fruit, chillies, coconuts, or whatever the lighthouse keepers needed. It was the same for other fishermen from Sungai Rengit.
5. I remember my grandfather saying that the fishing was so good around Pulau Batu Puteh that, when there was a wedding, it was only necessary to go fishing the day before the wedding. They were so sure of getting a good catch.
6. Pulau Batu Puteh was my first choice and favourite place to go fishing because the catch was always so good. Depending on the weather conditions, I used to fish there all the time in the months of April to October from the 1960s to the 1980s. In calm water, it would take about 30 minutes to reach the island with an 80 horsepower engine. I would usually start by going out towards Pulau Batu Puteh. If the conditions there were no good, or if it was too crowded, I would change course to go to Pulau Lima. I would usually go fishing for about 20 days each month.
7. When I went fishing at Pulau Batu Puteh, I would either start out early, at around 6.00 am, returning at around 5.00 pm in the evening, or set out at around 6.00 pm in

the evening, returning around first light the next day. I would not usually stay out for more than 1 day.

8. When I went fishing during the day, I used a line. At night, I would usually use a net. During the day, the fish could see and avoid the nets. At night, they could not. The nets are quite small, being about 8 or 10 meters in size. They have 5 inch holes. They are for fishing in relatively shallow water. They are not deep water nets. Depending on the depth of the water, we would adjust the amount that we would let out. The types of fish that I would usually catch in the waters around Pulau Batu Puteh are Sagai, Selar, Cermin, Cencaru, Tenggiri, Kerapu, Delah and Jenahak. These are medium value fish. I would usually sell my catch to Malaysian Chinese middlemen in Sungai Rengit.
9. I think the waters around Pulau Batu Puteh are so good for fishing because they are not polluted and are calm and are therefore a place where the fish shelter.
10. I did not usually go fishing in the waters on the other side of Pulau Batu Puteh because I was told that these are Indonesian waters. In the 1960s, I was twice detained by the Indonesian Marine Police in these waters, who towed my boat to Tanjung Pinang in Pulau Bintan in Indonesia and then told me to return. However, my boat ran out of diesel and I had to ask for help from the lighthouse keeper, and he gave me some diesel for my journey back to Sungai Rengit.
11. I usually did not land on Pulau Batu Puteh, preferring to anchor in the waters of the island to do my fishing. Since the 1960s, however, I landed on Pulau Batu Puteh on maybe 10 occasions. On 1 occasion, my catch was so great that I left some of it in a sack on the rocks to be collected the next day. On other occasions, the lighthouse keepers gave me shelter and assistance. I remember three lighthouse keepers in particular: Samy, who was Indian, Salim, who was English but had converted to Islam, and Thomas, who was Chinese. I especially remember Samy and Salim as they were kind to me. Usually, there were others in the lighthouse

with the lighthouse keeper, including a cook and someone to help with the light. The keepers and the others were rotated once a month during the 1960s and 1970s.

12. Before about 1986, I was never stopped when going to Pulau Batu Puteh. Once or twice a month, I saw Malaysian Marine Police in the area but was never stopped by them. Before about 1986, I never saw the Singapore Marine Police or the Singapore Navy in the area. At about this time, however, they began to stop me saying that entering the area around the island would jeopardise relations between Malaysia and Singapore. They never gave any other reason. They ordered me to go at least 1 nautical mile from the island to fish.
13. If I were to go more than 1 nautical mile from Pulau Batu Puteh towards Johor, I would be in the shipping lane where the water is deep and the current is strong. It is impossible and dangerous for me to fish in this area and there is nothing to catch. On the other side of Pulau Batu Puteh is Indonesian waters, and I cannot fish there either. If I go fishing today, therefore, I can only go around Pulau Lima or further up along the Johor coast. This area is not as good a fishing area as Pulau Batu Puteh used to be.
14. Today, I seldom go fishing and now have a business making shrimp paste for traditional Malay cooking. It is a big loss to the fishermen of Sungai Rengit that we cannot go fishing around Pulau Batu Puteh any more.

Solemnly affirmed by **SABAN BIN AHMAD** )  
on **8 November 2004** at **Putrajaya** )

signed

Before me,  
signed

**(Nor Sham Bte Said)**  
Commissioner for Oaths  
Court of Appeal  
Putrajaya