



NOTA MAKLUMAT DAN PANDUAN MERIN MARINE INFORMATION AND GUIDANCE NOTE

NMPM 50/2004

JABATAN LAUT SEMENANJUNG MALAYSIA

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Keperluan Pemasangan Sistem "Ship Security Alert" Di Atas Kapal-kapal Bendera Malaysia

Requirement for The Installation Of A Ship Security Alert System On Board Malaysian Flag Ships

Pemakluman kepada pemilik kapal, pengurus syarikat perkapalan dan kemudahan pelabuhan serta Nakhoda .

Information to shipowners, managers of shipping companies and port facilities and masters.

Notis Perkapalan Saudagar 02/2003, Solas Bab XI-2, Kod SAKP dirujuk

Malaysian Shipping Notice 02/2003, SOLAS Ch XI-2, ISPS Code is referred.

Bermula 1 Julai 2004, semua kapal-kapal konvensional SOLAS 74 yang mengibarkan bendera Malaysia, seperti tersenarai di bawah Peraturan 6 Bab XI-2 SOLAS 74, adalah diperlukan untuk dipasang sistem *ship security alert*. Peraturan 6 Bab XI-2 SOLAS 74 adalah terpakai ke atas :

Effective from 1 July 2004, all Malaysian flagged SOLAS 74 Convention ships, as listed under Regulation 6, Chapter XI-2 SOLAS 74, are required to be installed with a ship security alert system. Regulation 6, Chapter XI-2 SOLAS 74 applies to :

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| <p>(i) Kapal-kapal yang dibina pada atau selepas 1 Julai 2004,</p> <p>(ii) Kapal penumpang termasuk yang berkelajuan tinggi, yang dibina sebelum 1 Julai 2004, sebelum pemeriksaan pertama instalasi radio selepas 1 July 2004;</p> <p>(iii) Kapal tangki minyak, kapal tangki kimia, kapal pembawa gas, kapal kargo pukal dan kapal kargo berkelajuan tinggi, 500 GT ke atas yang dibina sebelum 1 Julai 2004, sebelum pemeriksaan</p> | <p>(i) <i>Ships constructed on or after 1 July 2004,</i></p> <p>(ii) <i>Passenger ships, including high-speed passenger craft, constructed before 1 July 2004, not later than the first survey of the radio installation after 1 July 2004;</i></p> <p>(iii) <i>Oil tankers, chemical tankers, gas carriers, bulk carriers and cargo high speed craft, of 500 GT and upwards constructed before 1 July 2004, not later than the first survey of the radio installation after 1 July 2004;</i></p> <p>(iv) <i>Other cargo ships of 500 GT and upwards and mobile</i></p> |
|---|---|

- (iv) pertama instalasi radio selepas 1 Julai 2004; Kapal-kapal kargo yang lain 500 GT ke atas dan pelantar gerudi mudah alih persisiran pantai yang dibina sebelum 1 Julai 2004, sebelum pemeriksaan pertama instalasi radio selepas 1 Julai 2006.

offshore drilling units constructed before 1 July 2004, not later than the first survey of the radio installation after 1 July 2006.

2. Panduan peruntukan dan pemasangan tersebut di atas dijelaskan di dalam dokumen pekeliling MSC/Circ. 1072. Kapal yang memasang sistem tersebut sebelum 1 Julai 2004 hendaklah mematuhi ketentuan di bawah Resolusi MSC. 136(76) dan bagi pemasangan pada atau pun selepas 1 Julai 2004 hendaklah mematuhi Resolusi MSC. 147(77). Pekeliling MSC/Circ. 1072 dan resolusi-resolusi MSC. 136(76) dan MSC. 147(77) boleh didapati dari laman web Jabatan Laut di <http://www.marine.gov.my>.

2. The guidance on the provision of ship security alert systems is given in document MSC/Circ. 1072. Ships installing this system before 1 July 2004 are to follow the standards set out in resolution MSC. 136(76) whereas for ships installing the system on or after 1st July 2004 are to follow the standards set out in resolution MSC. 147(77). Document MSC/Circ. 1072 and resolutions MSC. 136(76) and 147(77) can be obtained from the web site of the Marine Department at <http://www.marine.gov.my>.

3. Keperluan ketentuan di atas adalah disamping keperluan am yang telah dikeluarkan di bawah Resolusi Persidangan Agung IMO Bil. A 694(17).

3. The standards set out in the above documents are in addition to the general standards issued in IMO General Assembly resolution No. A694(17).

Ketua Pengarah Laut/*Director General of Marine*
Tarikh/*Date*: 4 Februari 2004/*4nd February 2004*

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MSC/Circ.1072
26 June 2003

GUIDANCE ON PROVISION OF SHIP SECURITY ALERT SYSTEMS

1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its seventh session (13 to 17 January 2003), taking into account the urgency and importance of implementing SOLAS regulation XI-2/6 on Ship Security Alert Systems adopted by the Conference of Contracting Governments to the SOLAS Convention, 1974 (7-13 December 2002) to be used in the enhancement of Maritime Security, prepared the guidance on provision of ship security alert systems.

2 The Maritime Safety Committee, at its seventy-seventh session (28 May to 6 June 2003), agreed to the proposed guidance regarding Ship Security Alert Systems, as set out in the annex.

3 Member Governments are requested to bring the annexed guidance to the attention of Maritime Administrations, shipmasters, port authorities, port facility security operators, national authorities responsible for security, shipping companies, system manufacturers and designers.

ANNEX

GUIDANCE ON PROVISION OF THE SHIP SECURITY ALERT SYSTEM

1 Regulation 6 of SOLAS chapter XI-2 requires ships to be provided with a ship security alert system. Section A/9 of the International Ship and Port Facility Security (ISPS) Code requires ships to carry a ship security plan. Performance standards for ship security alert systems are given in resolution MSC.147(77). This Circular gives guidance on the design of ship security alert systems provided to comply with the SOLAS regulation.

2 The intent of the ship security alert system is to send a covert signal or message from a ship which will not be obvious to anyone on the ship who is not aware of the alert mechanism. It is of use therefore in circumstances where a ship wishes to inform a person ashore of a problem with a minimum number of the persons onboard aware of the action. The procedures for the security alert are agreed with the ship's Administration as part of the ship security plan and ideally should be individual to the ship. It is not intended that the ship security alert procedures should be to an internationally agreed standard or conform to any particular format for all ships.

3 Possible methods of achieving the alert are as follows:

- .1 a system may employ proprietary tracking equipment provided by traffic service providers. The ship then carries a concealed equipment box working over a satellite system on its upper deck which transmits a position report at, typically, 6-hourly intervals. Interruption of power to the equipment or arming of the equipment by means of sensors or manual buttons causes the equipment to transmit a different format of position report. The tracking service providers monitor the transmission reports and inform the Company when the transmission format changes;
- .2 a system may utilise modifications of GMDSS equipment.* Some GMDSS equipment is not very suitable for modification as it is optimised for "all station" calling and may involve manual setting of frequencies etc and provides confirmation on the ship of messages sent. In these types of systems the ship security alert contains identifiers to ensure that it is not possible to confuse it with a GMDSS distress, urgency or safety alert; and
- .3 a system may utilise the exchange of messages containing key words between a ship and, typically, the Company. These messages may be by speech or data communications. Ship equipment which may be used includes cellular phones in coastal areas and satellite services away from coastal areas. It may be possible to use GMDSS VHF/MF/HF equipment in areas where there are coastal facilities for receiving addressed calls.

This list is not intended as exhaustive and is not intended to inhibit future developments.

* Inmarsat is developing modifications to existing equipment that will allow for this service to be implemented.

4 The ship security alert system requires two activation points, one of which should be on the bridge. These will typically be fixed or portable telephone handsets, fixed or portable keypads or fixed or portable buttons.

5 Measures should be incorporated in the activation points to avoid their inadvertent operation and the generation of false alerts.



ANNEX 5

**RESOLUTION MSC.136(76)
(adopted on 11 December 2002)**

PERFORMANCE STANDARDS FOR A SHIP SECURITY ALERT SYSTEM

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.886(21), by which the Assembly resolved that the functions of adopting performance standards for radio and navigational equipment, as well as amendments thereto, shall be performed by the Maritime Safety Committee on behalf of the Organization,

RECALLING FURTHER the provisions of the new chapter XI-2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, and the requirements of regulation XI-2/5, that all ships shall be provided with a ship security alert system,

RECOGNIZING that, for security reasons, a ship security alert system is necessary on board for initiating and transmitting a ship-to-shore security alert to a competent authority designated by the Administration,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Safety of Navigation at its forty-eighth session,

1. ADOPTS the Recommendation on Performance Standards for a ship security alert system, set out in the Annex to the present resolution;
2. RECOMMENDS Governments to ensure that a ship security alert system provided in compliance with relevant international instruments in force on or after 1 July 2004 conforms to performance standards not inferior to those specified in the Annex to the present resolution.

ANNEX

**RECOMMENDATION ON PERFORMANCE STANDARDS
FOR A SHIP SECURITY ALERT SYSTEM**

1 Introduction

1.1 The ship security alert system is provided to a ship for the purpose of transmitting a security alert to the shore to indicate to a competent authority that the security of the ship is under threat or has been compromised. It comprises a minimum of two activation points, one of which is on the navigation bridge. These initiate the transmission of a ship security alert. The system is intended to allow a covert activation to be made which alerts the competent authority ashore and does not raise an alarm on board ship nor alert other ships.

1.2 As required by its Administration, the competent authority receiving the alert notifies the authority responsible for maritime security within its Administration, the coastal State(s) in whose vicinity the ship is presently operating, or other Contracting Governments.

1.3 The procedures for the use of the ship security alert system and the location of the activation points are given in the ship security plan agreed by the Administration.

1.4 The ship security alert system may utilise the radio installation provided for compliance with chapter IV of the SOLAS Convention, other radio systems provided for general communications or dedicated radio systems.

2 General

2.1 In addition to complying with the general requirements set out in resolution A.694(17)¹, the ship security alert system should comply with the following performance standards.

2.2 The radio system used for the ship security alert systems should comply with relevant international standards.

3 Power supply

Where the ship security alert system is powered from the ship's main source of electrical power, it should, in addition, be possible to operate the system from another appropriate source of power.

4 Activation points

Activation points should be capable of being used on the navigation bridge and in other locations. They should be protected against inadvertent operation. It should not be necessary for the user to remove seals or to break any lid or cover in order to operate any control.

¹ Publication IEC60945

5 Operation

5.1 The activation points should operate a radio system such that transmission of the security alert does not require any adjustment of the radio system, i.e. tuning of channels, setting of modes or menu options. Operation of the activation point should not cause any alarm or indication to be raised on the ship.

5.2 The operation of the ship security alert system should not impair the functionality of the GMDSS installation.

6 Transmission of security alerts

6.1 In all cases, transmission initiated by security alert system activation points should include a unique code/identifier indicating that the alert has not been generated in accordance with GMDSS distress procedures. The transmission should include the ship identity and current position. The transmission should be addressed to a shore station and should not be addressed to ship stations.

6.2 The ship security alert system, when activated, should continue the ship security alert until deactivated and/or reset.

7 Testing

The ship security alert system should be capable of being tested.

ANNEX 7

**RESOLUTION MSC.147(77)
(adopted on 29 May 2003)**

**ADOPTION OF THE REVISED PERFORMANCE STANDARDS
FOR A SHIP SECURITY ALERT SYSTEM**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.886(21), by which the Assembly resolved that the functions of adopting performance standards for radio and navigational equipment, as well as amendments thereto, shall be performed by the Maritime Safety Committee on behalf of the Organization,

RECALLING FURTHER the provisions of the new chapter XI-2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, and the requirements of regulation XI-2/5, that all ships shall be provided with a ship security alert system,

RECOGNIZING that, for security reasons, a ship security alert system is necessary on board for initiating and transmitting a ship-to-shore security alert to a competent authority designated by the Administration,

HAVING CONSIDERED the recommendation on revision of resolution MSC.136(76) made by the Sub-Committee on Radiocommunications and Search and Rescue at its seventh session,

1. ADOPTS the Revised Recommendation on Performance Standards for a Ship Security Alert System, set out in the Annex to the present resolution;
2. RECOMMENDS Governments to ensure that a ship security alert system:
 - (a) if installed on or after 1 July 2004, conforms to performance standards not inferior to those specified in the Annex to the present resolution;
 - (b) if installed before 1 July 2004, conforms to performance standards not inferior to those specified in the Annex to resolution MSC.136(76).

ANNEX

**REVISED RECOMMENDATION ON PERFORMANCE STANDARDS
FOR A SHIP SECURITY ALERT SYSTEM**

1 Introduction

1.1 The ship security alert system is provided to a ship for the purpose of transmitting a security alert to the shore to indicate to a competent authority that the security of the ship is under threat or has been compromised. It comprises a minimum of two activation points, one of which is on the navigation bridge. These initiate the transmission of a ship security alert. The system is intended to allow a covert activation to be made which alerts the competent authority ashore and does not raise an alarm on board ship nor alert other ships.

1.2 As required by its Administration, the competent authority receiving the alert notifies the authority responsible for maritime security within its Administration, the coastal State(s) in whose vicinity the ship is presently operating, or other Contracting Governments.

1.3 The procedures for the use of the ship security alert system and the location of the activation points are given in the ship security plan agreed by the Administration.

1.4 The ship security alert system may utilise the radio installation provided for compliance with chapter IV of the SOLAS Convention, other radio systems provided for general communications or dedicated radio systems.

2 General

2.1 In addition to complying with the general requirements set out in resolution A.694(17)¹, the ship security alert system should comply with the following performance standards.

2.2 The radio system used for the ship security alert systems should comply with relevant international standards.

3 Power supply

3.1 Where the ship security alert system is powered from the ship's main source of electrical power, it should, in addition, be possible to operate the system from an alternative source of power.

4 Activation points

4.1 Activation points should be capable of being used on the navigation bridge and in other locations. They should be protected against inadvertent operation. It should not be necessary for the user to remove seals or to break any lid or cover in order to operate any control.

¹ Publication IEC60945.

5 Operation

5.1 The activation points should operate a radio system such that transmission of the security alert does not require any adjustment of the radio system, i.e. tuning of channels, setting of modes or menu options. Operation of the activation point should not cause any alarm or indication to be raised on the ship.

5.2 The operation of the ship security alert system should not impair the functionality of the GMDSS installation.

6 Transmission of security alerts

6.1 In all cases, transmission initiated by security alert system activation points should include a unique code/identifier indicating that the alert has not been generated in accordance with GMDSS distress procedures. The transmission should include the ship identity and current position associated with a date and time. The transmission should be addressed to a shore station and should not be addressed to ship stations.

6.2 The ship security alert system, when activated, should continue the ship security alert until deactivated and/or reset.

7 Testing

7.1 The ship security alert system should be capable of being tested.

Resolution A.694(17)
Adopted on 6 November 1991
(Agenda item 10)

**GENERAL REQUIREMENTS FOR SHIPBORNE RADIO EQUIPMENT
FORMING PART OF THE GLOBAL MARITIME DISTRESS
AND SAFETY SYSTEM (GMDSS) AND
FOR ELECTRONIC NAVIGATIONAL AIDS**

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECOGNIZING the need to prepare performance standards for shipborne radio equipment to ensure operational reliability and suitability of equipment used for safety purposes,

NOTING that regulation IV/14.1 of the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended, requires all equipment to which chapter IV of the Convention applies to conform to appropriate performance standards not inferior to those adopted by the Organization,

NOTING ALSO that SOLAS regulation V/12(r) requires all shipborne navigational equipment installed on ships on or after 1 September 1984 to conform to appropriate performance standards not inferior to those adopted by the Organization,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its fifty-ninth session,

1. ADOPTS the Recommendation on General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids set out in the annex to the present resolution;
2. RECOMMENDS Governments to ensure that shipborne radio equipment forming part of the GMDSS and shipborne electronic navigational aids conform to performance standards not inferior to those specified in the annex to the present resolution;
3. REVOKES resolutions A.569(14) and A.574(14);
4. DECIDES that any reference to resolutions A.569(14) or A.574(14) in existing IMO instruments be read as a reference to the present resolution.

Resolution A.694(17) — 165

Annex

RECOMMENDATION ON GENERAL REQUIREMENTS FOR SHIPBORNE RADIO EQUIPMENT FORMING PART OF THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS) AND FOR ELECTRONIC NAVIGATIONAL AIDS

1 INTRODUCTION

1.1 Equipment, which:

- .1 forms part of the global maritime distress and safety system; or
- .2 is required by regulation V/12 of the 1974 SOLAS Convention as amended and other electronic navigational aids, where appropriate;

should comply with the following general requirements and with all applicable performance standards adopted by the Organization.

1.2 Where a unit of equipment provides a facility which is additional to the minimum requirements of this Recommendation, the operation and, as far as is reasonably practicable, the malfunction of such additional facility should not degrade the performance of the equipment specified in 1.1.

2 INSTALLATION

Equipment should be installed in such a manner that it is capable of meeting the requirements of 1.1.

3 OPERATION

3.1 The number of operational controls, their design and manner of function, location, arrangement and size should provide for simple, quick and effective operation. The controls should be arranged in a manner which minimizes the chance of inadvertent operation.

3.2 All operational controls should permit normal adjustments to be easily performed and should be easy to identify from the position at which the equipment is normally operated. Controls not required for normal operation should not be readily accessible.

3.3 Adequate illumination should be provided in the equipment or in the ship to enable identification of controls and facilitate reading of indicators at all times. Means should be provided for dimming the output of any equipment light source which is capable of interfering with navigation.

3.4 The design of the equipment should be such that misuse of the controls should not cause damage to the equipment or injury to personnel.

3.5 If a unit of equipment is connected to one or more other units of equipment the performance of each should be maintained.

3.6 Where a digital input panel with the digits 0 to 9 is provided, the digits should be arranged to conform with relevant CCITT recommendations.¹ However, where an alphanumeric keyboard layout, as used on office machinery and data processing equipment, is provided, the digits 0 to 9 may, alternatively, be arranged to conform with the relevant ISO standard.²

¹ CCITT Recommendation E161/Q.11.

² ISO Standard 3791.

4 POWER SUPPLY

- 4.1 Equipment should continue to operate in accordance with the requirements of this Recommendation in the presence of variations of power supply normally to be expected in a ship.
- 4.2 Means should be incorporated for the protection of equipment from the effects of excessive current and voltage, transients and accidental reversal of the power supply polarity.
- 4.3 If provision is made for operating equipment from more than one source of electrical energy, arrangements for rapidly changing from one source to the other should be provided but not necessarily incorporated in the equipment.

5 DURABILITY AND RESISTANCE TO ENVIRONMENTAL CONDITIONS

Equipment should be capable of continuous operation under the conditions of various sea states, ship's motion, vibration, humidity and temperature likely to be experienced in ships.¹

6 INTERFERENCE

- 6.1 All reasonable and practicable steps should be taken to ensure electromagnetic compatibility between the equipment concerned and other radiocommunication and navigational equipment carried on board in compliance with the relevant requirements of chapter IV and chapter V of the 1974 SOLAS Convention.²
- 6.2 Mechanical noise from all units should be limited so as not to prejudice the hearing of sounds on which the safety of the ship might depend.
- 6.3 Each unit of equipment normally to be installed in the vicinity of a standard compass or a magnetic steering compass should be clearly marked with the minimum safe distance at which it may be mounted from such compasses.

7 SAFETY PRECAUTIONS

- 7.1 As far as is practicable, accidental access to dangerous voltages should be prevented. All parts and wiring in which the direct or alternating voltages or both (other than radio frequency voltages) combine to give a peak voltage greater than 55 V should be protected against accidental access and should be isolated automatically from all sources of electrical energy when the protective covers are removed. Alternatively, the equipment should be so constructed that access to such voltages may only be gained after having used a tool for this purpose, such as spanner or screwdriver, and warning labels should be prominently displayed both within the equipment and on protective covers.
- 7.2 Means should be provided for earthing exposed metallic parts of the equipment but this should not cause any terminal of the source of electrical energy to be earthed.
- 7.3 All steps should be taken to ensure that electromagnetic radio frequency energy radiated from the equipment shall not be a hazard to personnel.
- 7.4 Equipment containing elements such as vacuum tubes which are likely to cause X-radiation should comply with the following requirement:
- .1 External X-radiation from the equipment in its normal working condition should not exceed the limits laid down by the Administration concerned.

¹ IEC Publications 92-101 and 945.

² IEC Publications 533 and 945.

- .2 When X-radiation can be generated inside the equipment above the levels laid down by the Administration, a prominent warning should be fixed inside the equipment and the precautions to be taken when working on the equipment should be included in the equipment manual.
- .3 If malfunction of any part of the equipment can cause an increase in X-radiation, adequate advice should be included in the information about the equipment, warning of the circumstances which could cause the increase and stating the precautions which should be taken.

8 MAINTENANCE

- 8.1 The equipment should be so designed that the main units can be replaced readily, without elaborate recalibration or readjustment.
- 8.2 Equipment should be so constructed and installed that it is readily accessible for inspection and maintenance purposes.
- 8.3 Adequate information should be provided to enable the equipment to be properly operated and maintained. The information should:
 - .1 in the case of equipment so designed that fault diagnosis and repair down to component level are practicable, provide full circuit diagrams, component layouts and a component parts list; and
 - .2 in the case of equipment containing complex modules in which fault diagnosis and repair down to component level are not practicable, contain sufficient information to enable a defective complex module to be located, identified and replaced. Other modules and those discrete components which do not form part of modules should also meet the requirements of .1 above.

9 MARKING AND IDENTIFICATION

Each unit of the equipment should be marked externally with the following information which should be clearly visible in the normal installation position:

- .1 identification of the manufacturer;
- .2 equipment type number or model identification under which it was type tested; and
- .3 serial number of the unit.