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AUSTRALIAN NAVAL CLASSIFICATION AUTHORITY MANUAL (VOLUME 2)

DIVISION 3: SHIP RULES

CHAPTER 07: ESCAPE, EVACUATION AND RESCUE

PART 1: ANC RULES



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CN Dagg, CSC Assistant Secretary Australian Naval Classification Authority Department of Defence CANBERRA ACT 2600 May 2024 Edition

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¹ https://www.legislation.gov.au/Series/C1968A00063

² https://www.legislation.gov.au/Series/C2004A04868

³ https://www.legislation.gov.au/Series/C2004A03712

⁴ http://drnet/AssociateSecretary/security/policy/Pages/dspf.aspx

AUSTRALIAN NAVAL CLASSIFICATION RULES

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Division 3: Ship Rules Part 1: ANC Rules

Chapter 07: Escape, Evacuation and Rescue

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Rule 0. Goal

- 0.1 The arrangements for the Escape, Evacuation and Rescue of embarked persons shall be designed, constructed and maintained to:
- 0.1.1 Provide effective escape for all embarked persons from all manned spaces to a place of safety in the event of foreseeable accidents and emergencies at least until the threat has receded;
- 0.1.2 Provide an effective means of evacuation from the ship; and
- 0.1.3 Provide an effective means of recovering persons from the sea.

Rule 1. General

Functional Objective

1.1 The purpose of this Rule is to outline the principles and framework of Chapter 07 *Escape, Evacuation and Rescue.*

Purpose

- 1.2 Escape, Evacuation and Rescue measures are to be in place to ensure that the risks to the vessel are eliminated, or minimised So Far As Reasonably Practicable (SFARP) for all embarked persons to conduct Escape, Evacuation and Rescue, by:
- 1.2.1 Allowing embarked persons to escape as effectively as practicable to the evacuation station, whether or not by assembling at a separate muster station first;
- 1.2.2 Allowing embarked persons to evacuate as effectively as practicable from the evacuation station of the damaged vessel into survival craft;
- 1.2.3 Supporting the life of evacuated persons, who may be in a survival craft, as long as reasonably practicable and commensurate with the anticipated time for rescue; and
- 1.2.4 Permitting the rescue of persons from the sea or from survival craft.
- 1.3 Not Used

Scope

- 1.4 Division 2 Chapter 01 *General Requirements* and Division 3 Chapter 01 *Integrated Platform Survivability* apply to all chapters of the ANC Rules, as applicable to the design, and therefore in order to meet the Chapter 07 *Escape, Evacuation and Rescue* goal the requirements of both this chapter and Division 2 Chapter 01 *General Requirements* shall be met.
- 1.5 The ANC Rules exclude training requirements. Chapter 07 *Escape, Evacuation and Rescue* assumes all embarked persons have an appropriate level of competence for the operation of the installed systems. Part 3 Chapter 07 *Escape, Evacuation and Rescue* Rule 0 contains some guidance on typical training requirements.

General Performance Requirements

- 1.6 Naval ships shall be adequately designed, constructed, equipped, maintained and provided with procedures for the Escape, Evacuation and Rescue of all embarked persons following all foreseeable emergency situations and damage conditions.
- 1.7 Escape, Evacuation and Rescue measures shall meet the requirements of Division 2 Chapter 01 *General Requirements,* and additionally:
- 1.7.1 Be provided with redundancy to secure Escape, Evacuation and Rescue functionality from catastrophic failure;
- 1.7.2 Not be affected by the vessel's weapon and sensor systems;
- 1.7.3 Not have a detrimental impact on other Escape, Evacuation and Rescue measures on board;
- 1.7.4 Take into account the number and distribution of embarked persons, their physical characteristics, their knowledge of the vessel and its safety equipment; and
- 1.7.5 Reflect foreseeable emergencies resulting in Escape, Evacuation and Rescue activities: as a minimum these would include list, trim, flooding, fire, smoke, hazardous vapours and obstruction of fixtures and fittings such as doors.
- 1.8 Realistic abandonment scenarios shall be considered for the safe evacuation of the vessel.

Note: For all references in this Chapter to SOLAS, the following applies:

(1) Where the IMO document uses the term "passenger", it should be read to mean "non-crew" as defined in Division 1 Annex A *Definitions and Abbreviations*.

(2) Where the IMO document refers to SOLAS II-1/42 or II-1/43, it should be read to mean Rule 14 *Power Supply to Escape, Evacuation and Rescue Systems*.

Rule 2. Escape, Evacuation and Rescue Measures

Functional Objective

2.1 Escape, Evacuation and Rescue measures shall be fit for purpose and are to enable the evacuation of the ship within an appropriate timeframe.

Performance Requirements

2.2 Escape, Evacuation and Rescue measures shall be designed to enable rapid evacuation with minimal risk to embarked persons.

Note: See Chapter 03 *Buoyancy and Stability* Rule 7 *Preservation of Life* for evacuation timeframe requirements dependent on the damage stability criteria.

- 2.3 Not Used.
- 2.4 Not Used.

Rule 3. Escape and Evacuation Analysis and Demonstration

Functional Objective

3.1 Escape and Evacuation Analysis and Escape and Evacuation Demonstration shall ensure that effectiveness of escape and evacuation measures are optimised.

Performance Requirements

- 3.2 An Escape and Evacuation Analysis shall:
- 3.2.1 Optimise the effectiveness of escape and evacuation measures, considering:
- 3.2.2 Normal seagoing conditions;
- 3.2.3 Damaged and/or emergency conditions that result in likely ship abandonment;
- 3.2.4 Reflects representative flows of embarked persons during escape and evacuation as realistically as possible;
- 3.2.5 An Escape and Evacuation Demonstration shall:
- 3.2.6 Verify the accuracy of the Escape and Evacuation Analysis;
- 3.2.7 Aid in the identification of unforeseen shortcomings of Escape and Evacuation measures;
- 3.2.8 Represent flows of embarked persons during escape and evacuation as realistically as possible; and
- 3.2.9 Eliminate or minimise risks to persons involved in the demonstration SFARP.

Rule 4. Inspection and Maintenance

Functional Objective

4.1 Inspection and maintenance procedures shall ensure that any Escape, Evacuation and Rescue arrangement or equipment has an availability which is as high as reasonably practicable.

Performance Requirements

- 4.2 Escape, Evacuation and Rescue measures which are supplied in accordance with recognised standards shall be inspected and maintained, as a minimum, as specified by those standards.
- 4.3 Maintenance and inspection activities shall be undertaken by suitably qualified personnel in accordance with approved procedures and the activities shall be recorded.
- 4.4 The periodicity of maintenance and inspection activities shall optimise the operational availability of Escape, Evacuation and Rescue measures.

Rule 5. Availability of Escape, Evacuation and Rescue Measures

Functional Objective

5.1 Effective Escape, Evacuation and Rescue measures shall be available at all times whilst the ship is in-service.

Performance Requirements

- 5.2 Routine Escape, Evacuation and Rescue procedures shall:
- 5.2.1 Ensure that sufficient Escape, Evacuation and Rescue measures are available on board for the forthcoming operation, considering:
- 5.2.1.1 The embarked persons;
- 5.2.1.2 The areas of operation;
- 5.2.2 Ensure that any Escape, Evacuation and Rescue measures remain fully available during foreseeable operating conditions;
- 5.2.3 Ensure that crew are aware of their responsibilities and appropriately trained to discharge their duties; and
- 5.2.4 Ensure that embarked persons have received Escape, Evacuation and Rescue training appropriate and relevant to the ship.

Rule 6. Emergency Procedures

Functional Objective

6.1 Emergency procedures shall enable assigned crew members to perform their assigned Escape, Evacuation and Rescue tasks effectively.

Performance Requirements

- 6.2 Vessel-specific Escape, Evacuation and Rescue emergency procedures shall:
- 6.2.1 Cover all duties in the Escape, Evacuation and Rescue process;
- 6.2.2 Be clear and unambiguous;
- 6.2.3 Incorporate redundancy;
- 6.2.4 Be up-to-date;
- 6.2.5 Provide an effective Escape, Evacuation and Rescue plan which is supported by evidence; and
- 6.2.6 Provide a decision support system for emergency management.

Rule 7. Not Used

Rule 8. Provision of Operational Information

Functional Objective

8.1 On board documentation shall provide information for the effective conduct of all vessel Escape, Evacuation and Rescue activities.

Performance Requirements

- 8.2 On board information shall:
- 8.2.1 Cover information necessary for embarked persons to conduct Escape, Evacuation and Rescue related activities;
- 8.2.2 Be clear and understandable; and
- 8.2.3 Be readily found and shall be available at locations where they might be needed.

Rule 9. Escape, Evacuation and Rescue Equipment Stowage

Functional Objective

9.1 Escape, Evacuation and Rescue equipment stowages shall protect any on board Escape, Evacuation and Rescue equipment and ensure any on board Escape, Evacuation and Rescue equipment is readily available.

Performance Requirements

- 9.2 If applicable, the Escape, Evacuation and Rescue equipment stowages shall protect the stowed equipment as far as possible from:
- 9.2.1 External environmental factors such as wash, green water, sea state, icing or wind;
- 9.2.2 Vessel's weapon or sensor systems and aircraft down wash or jet blast; and
- 9.2.3 Heat, fire, smoke or hazardous gasses.
- 9.3 The Escape, Evacuation and Rescue equipment stowages shall protect the stowed equipment from other external factors based on the ship's specific operational roles as defined in the OSI.
- 9.4 Equipment stowages shall:
- 9.4.1 Enable stored equipment to be accessible and readily deployed;
- 9.4.2 Be robust and have maximised protection from damage;
- 9.4.3 Be readily accessible and identifiable;
- 9.4.4 Allow inspection of the stored equipment;
- 9.4.5 Not have a detrimental effect on the stored equipment;
- 9.4.6 Not have a detrimental impact on the ready deployment of any other stored equipment in case of an emergency;
- 9.4.7 Be free from undue hazards, such as protrusions or obstructions which could cause injury or ensnare clothing, life-jackets or personal thermal protection suits; and
- 9.4.8 Be able to withstand vessels seakeeping accelerations.
- 9.5 External stowages of inflatable survival craft, personal thermal protection suits and life-jackets shall enable the equipment to float free.

9.6 To ensure the ready availability of the Escape, Evacuation and Rescue equipment, environmental hazards affecting access to the stowage shall be considered.

Rule 10. General Emergency Alarm System

Functional Objective

10.1 A General Emergency Alarm System shall enable the notification of all embarked persons in a timely manner that an emergency situation exists.

Performance Requirements

- 10.2 The general emergency alarm shall:
- 10.2.1 Be clearly noticeable by all embarked persons;
- 10.2.2 Be easily distinguishable and recognisable;
- 10.2.3 Be continuously available;
- 10.2.4 Be protected from hazards such as fire, vibration, electrical interference, flooding;
- 10.2.5 Be provided such that any incident which may cause alarm failure shall be guarded against by system or equipment redundancy; and
- 10.2.6 Be operable from Strategic Escape, Evacuation and Rescue positions.

Rule 11. Main Broadcast System

Functional Objective

11.1 A main broadcast system shall enable verbal communication to embarked persons of an emergency incident and the actions to be taken.

Performance Requirements

11.2 Refer to the requirements of Chapter 08 Safety Communications Rule 7 Main Broadcast System.

Rule 12. On Board Two-Way Communication

Functional Objective

12.1 On board communication systems shall enable effective two-way communication between crew members to support Escape, Evacuation and Rescue activities.

Performance Requirements

12.2 Refer to the requirements of Chapter 08 Safety Communication Rule 6 Internal Communications and Rule 8 Portable Communications.

Rule 13. External Communication Equipment

Functional Objective

13.1 External communication equipment shall enable communication to other ships or to shore during emergencies.

Performance Requirements

13.2 Refer to the requirements of Chapter 08 *Safety Communications*, in particular Rule 2 *GMDSS Equipment* and Rule 9 *Survival Craft Communication Equipment*.

Rule 14. Power Supply to Escape, Evacuation and Rescue Systems

Functional Objective

14.1 The power supply to Escape, Evacuation and Rescue systems shall provide all sufficient power necessary to conduct any Escape, Evacuation and Rescue activities during an emergency.

Performance Requirements

- 14.2 Power supply, in accordance with Chapter 04 *Engineering Systems* Rule 10, to Escape, Evacuation and Rescue systems shall:
- 14.2.1 Have sufficient capacity to simultaneously operate any combination of Escape, Evacuation and Rescue equipment with any other essential consumers;
- 14.2.2 Operate as required to complete all Escape, Evacuation and Rescue activities;
- 14.2.3 Be provided such that any incident which may cause power supply failure shall be guarded against by system or equipment redundancy, so that Escape, Evacuation and Rescue systems will be powered continuously for evacuation; and
- 14.2.4 Have maximised protection from damage.

Rule 15. Lighting During Escape, Evacuation and Rescue Emergencies

Functional Objective

15.1 Lighting systems shall provide sufficient illumination to conduct any Escape, Evacuation and Rescue activity during an emergency.

Note: In addition to this rule, see Chapter 04 *Engineering Systems* Rule 14 *Lighting* for the requirements for lighting during Escape, Evacuation and Rescue emergencies.

Performance Requirements

- 15.2 Escape, Evacuation and Rescue lighting systems shall:
- 15.2.1 Provide sufficient illumination to any location essential for any Escape, Evacuation and Rescue activity;
- 15.2.2 Operate for a period as necessary to complete all Escape, Evacuation and Rescue activities;

- 15.2.3 Be provided such that any incident which may cause lighting failure shall be guarded against by system or equipment redundancy;
- 15.2.4 Have maximised protection from damage; and
- 15.2.5 Be readily identifiable as emergency lighting.

Rule 16. Escape Routes and Escape Exits

Functional Objective

16.1 Escape routes and escape exits shall enable the movement of embarked persons from any compartment within the ship to the muster stations (if provided) and evacuation stations as quickly and as safely as reasonably practicable.

Note: See Chapter 06 *Fire Safety* for the fire related requirements of escape routes.

Performance Requirements

- 16.2 Escape routes and escape exits shall:
- 16.2.1 Be provided from any compartment within the vessel and shall lead to the muster stations (if provided) or evacuation stations;
- 16.2.2 Be as direct as reasonably practicable;
- 16.2.3 Be as flexible as reasonably practicable to provide for the possibility that certain escape routes may not be available as a result of fire, flooding or other damage;
- 16.2.4 Remain functional as long as reasonably practicable during fire, flooding, list and trim;
- 16.2.5 Be arranged such that they do not contribute to the spread of fire, flood, smoke or other toxic gases to any muster, evacuation or launching station;
- 16.2.6 Allow for safe and easy movement of embarked persons, taking into account:
- 16.2.6.1 The anticipated number, physical characteristics and distribution of embarked persons, including the possibility that some injured personnel may be transported by stretchers or require assistance;
- 16.2.6.2 The size, location, function and risks of individual compartments on board; and
- 16.2.6.3 The clothing and personal protective equipment that may be worn or carried (e.g. firefighting outfits, Emergency Escape Breathing Devices, life-jackets or personal thermal protection suits).

Rule 17. Fixtures and Fittings on Escape Routes

Functional Objective

17.1 Fixtures and fittings on escape routes shall permit the movement of embarked persons from any space within the ship to the evacuation station as quickly and as safely as reasonably practicable.

Performance Requirements

17.2 Fixtures and fittings shall:

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- 17.2.1 Allow for safe and easy movement of embarked persons, taking into account:
- 17.2.1.1 The anticipated number, physical characteristics and distribution of embarked persons;
- 17.2.1.2 The size, location and function of individual compartments on board;
- 17.2.1.3 The clothing and personal protective equipment that may be worn or carried (e.g. firefighting outfits, Emergency Escape Breathing Devices, life-jackets or personal thermal protection suits);
- 17.2.2 Offer a level of protection against fire hazards;
- 17.2.3 Be arranged such that they do not contribute to the spread of fire, flood, smoke or other toxic gases to the muster, evacuation or launching stations;
- 17.2.4 Be operable in case of normal operations and in case of anticipated level of list or trim for damaged conditions;
- 17.2.5 Be operational in case of electrical power failure; and
- 17.2.6 Be readily identified.

Rule 18. Way Finding System

Functional Objective

18.1 A way-finding system shall allow embarked persons to safely and effectively locate muster stations (if provided) and evacuation stations.

Performance Requirements

- 18.2 Way finding systems shall:
- 18.2.1 Enable embarked persons to locate escape routes, escape exits, muster stations (if provided) and evacuation stations;
- 18.2.2 Be unambiguous and readily found;
- 18.2.3 Be operational in case of unavailability of electrical power;
- 18.2.4 Be provided taking into account:
- 18.2.4.1 The anticipated distribution of embarked persons;
- 18.2.4.2 The anticipated familiarity of embarked persons with the vessel; and
- 18.2.5 Lead from normally occupied compartments to the muster stations (if provided) and evacuation stations.
- 18.3 The arrangements of way finding systems shall SFARP take into account hazards such as fire, smoke and flood water.

Rule 19. Muster Station

Functional Objective

19.1 Muster stations shall allow assembly of embarked persons in a position of relative safety.

Performance Requirements

- 19.2 Muster stations shall:
- 19.2.1 Be of sufficient size for the number of persons assigned to it and the anticipated actions undertaken prior to moving to the evacuation station;
- 19.2.2 Be readily accessed from normally occupied compartments and provide ease of escape to evacuation stations as far as practicable;
- 19.2.3 Reflect the number and anticipated distribution of embarked persons;
- 19.2.4 Have redundancy if any primary muster station is unavailable owing to the emergency; and
- 19.2.5 Provide protection against hazard for persons within (e.g. fire, green water).

Note: See Chapter 06 Fire Safety for the fire related requirements of muster stations.

Rule 20. Emergency Escape Breathing Devices

Functional Objective

20.1 Emergency escape breathing devices shall provide embarked persons breathing and visual protection against a hazardous atmosphere while escaping to an area of relative safety.

Performance Requirements

- 20.2 Emergency escape breathing devices shall:
- 20.2.1 Provide breathing and visual protection against smoke and hazardous gases for any crew member;
- 20.2.2 Provide protection for the time necessary to escape to a place of safety;
- 20.2.3 Be clearly identifiable;
- 20.2.4 Be readily available;
- 20.2.5 Be provided and located considering:
- 20.2.5.1 The number and distribution of embarked persons;
- 20.2.5.2 Hazardous compartments;
- 20.2.5.3 Escape routes;
- 20.2.6 Be easy to don, without assistance;
- 20.2.7 Be easily apparent to operate; and
- 20.2.8 Shall not hinder the person's movement during escape.

Rule 21. Incapacitated Persons

Functional Objective

21.1 Embarked persons shall be able to move an injured/incapacitated person to a place of safety.

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Performance Requirements

- 21.2 CASEVAC equipment shall:
- 21.2.1 Enable crew members to transport any incapacitated persons horizontally and vertically throughout the ship, including from height and from confined spaces;
- 21.2.2 Be compatible for helicopter or rescue of persons from the sea pick-up;
- 21.2.3 Be provided and located considering:
- 21.2.3.1 The number, distribution and anthropometrical characteristics of embarked persons; and
- 21.2.3.2 The dimensions and escape routes of the ship.

Note: See Chapter 05 *Seamanship Systems* Rule 15 *Lifting and Hoisting Appliances* for the requirements of ship-fitted lifting points.

Rule 22. Launching and Embarkation Arrangements

Functional Objective

- 22.1 Launching and embarkation arrangements shall:
- 22.1.1 Enable the transfer of survival craft or rescue craft from stowed positions to the sea surface; and
- 22.1.2 Enable persons to embark survival or rescue craft.

Performance Requirements

- 22.2 Launching and embarkation arrangements shall:
- 22.2.1 Enable evacuation as safely and swiftly as reasonably practicable;
- 22.2.2 Be always capable of safe and efficient operation with the ship on an even keel and under the anticipated list and/or trim for damaged conditions;
- 22.2.3 Be possible to deploy easily and be provided with unambiguous instructions for use;
- 22.2.4 Be designed and surveyed according to the intended duty and have maximised protection from damage;
- 22.2.5 Not impose insurmountable dangers to the embarked persons during normal operations, training, maintenance and emergency situations;
- 22.2.6 Be appropriate for the physical characteristics of the embarked persons;
- 22.2.7 Be provided with redundancy as necessary with respect to the possibility that certain launching arrangements may not be available as a result of loss due to fire, explosion, flooding, or other hazards;
- 22.2.8 Be protected from damage by wash, heavy seas, icing and wind, the vessel's weapon and sensor systems, fire, explosion and hazardous gasses; and

Note: See Chapter 06 Fire Safety for the fire related requirements of launching and embarkation.

- 22.2.9 Be free from hazards, such as protrusions or obstructions which could cause injury or ensnare clothing, life-jackets or personal thermal protection suits.
- 22.3 Launching stations shall:
- 22.3.1 Not be located above the approved launching height of the survival craft, rescue craft or launching equipment; and
- 22.3.2 Be positioned so that survival and rescue craft can be launched clear of all obstructions with the ship on even keel and under the anticipated list and/or trim for damaged conditions.
- 22.4 Launching equipment shall:
- 22.4.1 Be able to function without power supply;
- 22.4.2 Where capable of launching lifeboats, also be capable of their recovery; and
- 22.4.3 Enable the timely launching and recovery of the rescue and survival craft.
- 22.5 Embarkation stations shall:
- 22.5.1 Be of sufficient size to accommodate the maximum number of persons anticipated to embark from each station.
- 22.6 Embarkation equipment shall:
- 22.6.1 Provide a safe means of transfer of persons into a survival craft;
- 22.6.2 Permit dry shod embarkation; and
- 22.6.3 Be suitable for the hull shape at the embarkation station and the height of the embarkation station above the waterline.

Rule 23. Not Used

Rule 24. Survival Craft

Functional Objective

24.1 Survival craft shall provide a place of relative safety away from the damaged ship following evacuation.

Performance Requirements

- 24.2 Survival craft shall:
- 24.2.1 Be provided taking into account the number of embarked persons;
- 24.2.2 Be able to manoeuvre away from the damaged vessel;
- 24.2.3 Protect embarked persons against the natural environment;
- 24.2.4 Provide provisions and habitability during the anticipated rescue time;
- 24.2.5 Be designed for minimum motion sickness;
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- 24.2.6 Allow the survival craft to be readily located under different environmental conditions (e.g. weather, sea state and darkness);
- 24.2.7 Be easily boarded from the water; and
- 24.2.8 Be suitably located for the vessel size and arrangement.

Rule 25. Life-Jackets

Functional Objective

25.1 Life-jackets shall provide effective flotation assistance for persons over board.

Performance Requirements

- 25.2 A life-jacket shall:
- 25.2.1 Turn unconscious drowning persons face-up thereby lifting the airways above the water and protect the face from waves and sea-spray;
- 25.2.2 Be provided to accommodate the full range of physical characteristics of embarked persons;
- 25.2.3 Be sufficiently provided relating to the number of embarked persons;
- 25.2.4 Be compatible with the personal thermal protection suits or other PPE that embarked persons may be wearing during evacuation;
- 25.2.5 Allow the person over board to be readily located under different environmental conditions (e.g. weather, sea state and at all times of day or night); and
- 25.2.6 Not impede entry into the survival craft (including MES transfer if provided) or interfere with occupant safety or operation of the survival craft.
- 25.3 Life-jackets for use in special operations shall:
- 25.3.1 Provide sufficient buoyancy when persons are carrying or wearing heavy equipment; and
- 25.3.2 Provide protection against fire hazards for persons with fire-fighting duties.

Rule 26. Personal Thermal Protection Suits

Functional Objective

26.1 Personal thermal protection suits shall help prevent the effect of severe environmental conditions.

Performance Requirements

- 26.2 Personal thermal protection suits shall:
- 26.2.1 Be designed to provide protection from the effect of severe environmental conditions (e.g. cold shock and hypothermia);
- 26.2.2 Maintain life support for the envisaged rescue time;
- 26.2.3 Accommodate the full range of physical characteristics of embarked persons;

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- 26.2.4 Be unpacked and donned easily, swiftly and without assistance;
- 26.2.5 Not hinder the person wearing it to conduct evacuation and rescue activities;
- 26.2.6 Remain functional during the evacuation and rescue process;
- 26.2.7 Not hinder the person wearing it to don a life-jacket, if not combined in the thermal protection suit;
- 26.2.8 Not hinder the person wearing it to swim a short distance through the water and board a survival craft; and
- 26.2.9 Be sufficiently provided relating to the number of embarked persons and stowed in accessible locations so that they can be retrieved quickly in the event of an emergency.

Rule 27. Rescue Arrangements

Functional Objective

27.1 Rescue arrangements shall enable persons to be rescued from the sea, rescue units or survival craft.

Note: See Chapter 05 *Seamanship Systems* Rule 12 *Boat Operations* and Chapter 11 *Aviation Systems* Rule 14 *Vertical Replenishment and Transfer* for the requirements when employing a boat or helicopter.

Performance Requirements

- 27.2 Rescue arrangements shall:
- 27.2.1 Permit effective and rapid rescue of persons over board;
- 27.2.2 Minimise the risk levels imposed on the rescue crew;
- 27.2.3 Permit the mass rescue of persons from another vessel or the sea. Where the OSI requires the capability to conduct a mass recovery of persons in response to a SOLAS incident, the ship shall be provided with equipment for the recovery of mass casualties; and
- 27.2.4 Allow sufficient space and equipment on board to care for and transport the person(s) from the rescue station to the medical facilities.