

# Workplace Safety and Health Guidelines on Personal Flotation Devices – Life Jackets [For Public Consultation]



# Outline

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# Introduction

- Personal Flotation Device (PFD), when correctly worn and used, provides buoyancy and increases the likelihood of survival should a person fall into water.
- Life jacket is a type of PFD.
- The life jacket maintains the user in a face-up flotation position, with various levels of performance suitable for sheltered and non-sheltered waters.



# Case Studies 1

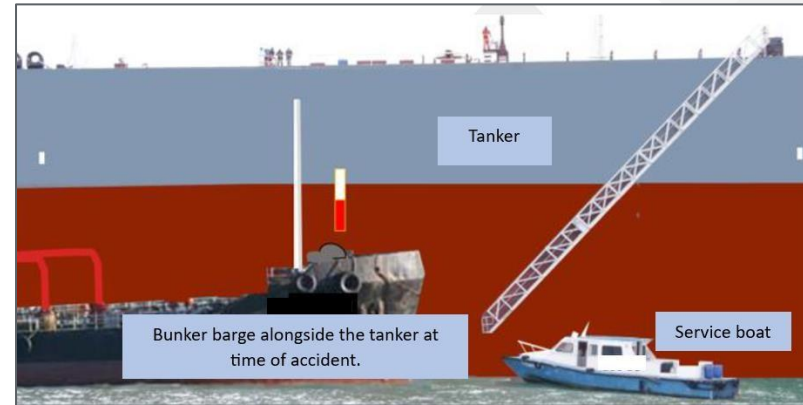
## Technician fell into the sea while crossing from tanker to service boat using an accommodation ladder

### Accident Description

- On 17 May 2022, a technician fell overboard when he disembarked from a tanker to a service boat.
- He went out of sight and his body was recovered four days later.

### Accident Findings

- The technician was wearing a manually inflated life jacket, but it was not inflated at the time of accident.
- It is unclear if the technician was disoriented or in a state of panic, unfamiliar with how to manually inflate the lifejacket, or influenced by the misleading label, which included instructions for both manual and automatic activation lifejacket.



Profile view of the vessels involved (not to scale)  
(Photo source: Transport Safety Investigation Bureau)

# Case Studies 2

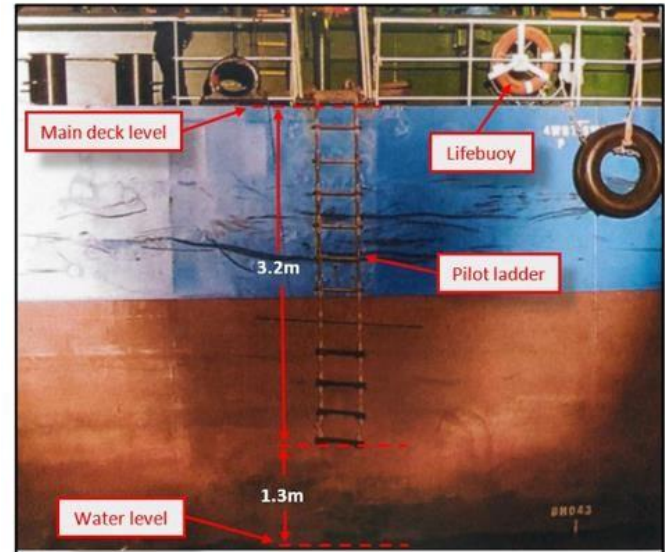
## Shore technician fell into the sea when disembarking a vessel to board a launch boat using a pilot ladder

### Accident Description

- On 16 February 2021, while disembarking from a vessel to board a launch boat via a pilot ladder, a Shore Technician (ST) fell into the sea.
- The ST was brought out of the water after some time and was sent to the hospital where he was pronounced dead.

### Accident Findings

- The lifejacket worn by the ST may have been equivalent to life jacket of performance level 100, meant for sheltered or calm waters.
- The life jacket was unsuitable for non-swimmers, stated in the manual.
- The ST carried a backpack of about 8kg, which might have affected the ST's ability to stay afloat.



View of port side pilot ladder rigged for disembarkation  
(Photo source: Transport Safety Investigation Bureau)

# Case Studies 3

## Worker drowned after falling into river

### Accident Description

- On 12 March 2019, two river cruise workers were on night shift duty to berth and charge the electric boats at the jetty.
- One of them was found missing and his body was found floating on the water 16 hours later.

### Accident Findings

- The worker did not know how to swim and was **not wearing a life jacket.**
- The worker likely exited the work area through an **unsafe path.**



Ropes used to secure the boats.

Ladders

# Workplace Safety and Health (General Provisions) Regulations, Section 23(11)

Workplace Safety and Health (General Provisions) Regulations (7)

Timeline Authorising Act Amendment Annotation Actions

Status: Current version as at 07 Aug 2024

23 Measures to be

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Reset Get Provisions

(11) It shall be the duty of the employer of a person who is exposed to the risk of falling into water and of drowning to provide —

- (a) equipment and means of rescuing and resuscitating drowning persons; and
- (b) **suitable life jackets** or other equipment for keeping such persons afloat in the event that they fall into the water.

(b) the anchorage shall not be lower than the level of the working position of the person wearing the safety harness or safety belt.

(10) It shall be the duty of the employer of the person referred to in paragraph (7) to comply with paragraphs (7), (8) and (9).

(11) It shall be the duty of the employer of a person who is exposed to the risk of falling into water and of drowning to provide —

- (a) equipment and means of rescuing and resuscitating drowning persons; and
- (b) suitable life jackets or other equipment for keeping such persons afloat in the event that they fall into the water.

(12) A person must not require, permit or direct any person to work at a place from which he would be liable to fall —

- (a) a distance of more than 2 metres; or
  - (b) into any substance which is likely to cause drowning or asphyxiation,
- unless the requirements of paragraphs (7), (8) and (9) have been complied with.

(13) [Deleted by S 434/2024 wef 01/06/2024]

[S 434/2024 wef 01/06/2024]

# Objective and Scope

The objectives of these guidelines are to:

- (i) Provide guidance on the selection of life jackets for different work environments in line with international standards; and
- (ii) Recommend good practices on the use and maintenance of life jackets.
  - In line with ISO 12402 - Personal Flotation Devices, these Guidelines do not cover the requirements for life jackets on seagoing ships, which are regulated by the International Maritime Organization (IMO) under the International Convention for Safety of Life at Sea (SOLAS).
  - Throwable devices, flotation cushions, buoyancy aids and special application PFDs are also excluded from this guidelines.
  - Additionally, equipment used in non-work related, recreation or leisure activities (e.g., water sports) will not be covered in these Guidelines.



# Key Components

Selection

Inspection

Use

Maintenance

- Types of life jackets
- Performance level
- Accessories

- Pre-use visual inspection checklist, including examining components of the life jacket (e.g., straps, buckles and zippers).

- Guidance on how to ensure a good fit and typical steps to put on life jackets correctly.

- Cleaning
- Storage
- Servicing

# Life Jacket Selection & Maintenance

- Conduct a thorough risk assessment that is specific to nature of work before selecting a life jacket of appropriate performance level for the work activity.

Performance level (to be determined via risk assessment)	100N	• For use in sheltered or calm waters. Not suitable for rough waters or non-sheltered waters.
	150N	• For use in general, offshore, and rough waters.
	275N	• For use in offshore and/ or under severe weather or sea conditions.

- Regular life jacket maintenance is crucial to ensure its reliability during emergencies.

# Workgroup Composition

	Name	Organisation
Co-Chairs	Capt. Mohd Salleh A Sarwan	Singapore Maritime Academy
	Capt. Chong Jia Chyuan	Maritime Port of Authority of Singapore
Members	Ms. Bay Yanming	Singapore Association of Shippers & Services
	Mr. Michael Phoon	Singapore Shipping Association
	Mr. Eugene Wee	Noah Agencies 'N' Marine Services Pte Ltd
	Mr. Mohd Noor Bin Hamzah	
	Mr. Harry Mok	Survitec Group Limited
	Mr. Mark Ko	Tian San Shipping (Pte) Ltd
	Mr. Sivashankar S/O Nagarejan	Ministry of Manpower

# [Public Consultation] WSH Guidelines on Personal Flotation Devices – Life Jackets

Public Consultation Period:

**19 August 2024 – 15 September 2024**

We invite industry stakeholders to share your feedback on the draft Guidelines. Please email the completed public consultation form to [contact@wshc.sg](mailto:contact@wshc.sg).



DRAFT for Public Consultation

## Workplace Safety and Health Guidelines

Personal Flotation Devices - Life Jackets



**Thank you**

