

THE EMBARKATION & DISEMBARKATION OF PILOTS

CODE OF SAFE PRACTICE

Revised June 2025

Next Review due Spring 2028



UK
MAJOR PORTS
GROUP



PORT SKILLS
& SAFETY

IMPROVING STANDARDS THROUGH COLLABORATION

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INTRODUCTION

This code is designed to assist Competent Harbour Authority (CHA's) and Pilot organisations, to establish safe operating procedures for all Pilot boarding and landing operations, derived by risk assessment.

This 2025 revised edition of the Code of Safe Practice for the Embarkation and Disembarkation of Pilots is considered to be essential reading for all those involved in the Pilotage Service.

The transfer of a Pilot between pilot boat and ship presents significant risks that need to be carefully managed. This Code gives guidance to improve the control of these risks.

This version of the Code has been prepared jointly by the United Kingdom Maritime Pilots Association (UKMPA) Technical and Training Committee, the UK Harbour Masters' Association (UKHMA), Port Skills and Safety and the BPA/UKMPG Marine Pilotage Working Group.

The Code recognises SOLAS regulations and United Kingdom legislation and has been linked in the Port & Marine Facilities Code, Guide to Good Practice and Pilot Transfer Operations (IMPA). A list of relevant documents is included at the back of the Code, along with further information on Personal Protective Equipment (PPE) which gives guidance on correct use and self-checks to be carried out on lifejackets and lifesaving equipment.

The IMO's Maritime Safety Committee has adopted a revision to SOLAS Regulation V/23 and new mandatory performance standards for pilot transfer operations which will enter into force on 1 January 2028. The new requirements will apply to new installations of pilot transfer arrangements from 1 January 2028, and to existing installations on SOLAS ships¹ from their first survey after 1 January 2029, and on non-SOLAS ships from 1 January 2030. The IMO has also taken steps to encourage voluntary early implementation of the new requirements before 1 January 2028 by flag State Administrations. The joint Associations of this Code support this position. The updated provisions can be viewed via the QR code below.

The Code acts as a guide to safe practice for all those involved in all Pilot transfer operations. It not only covers the act of transfer from pilot boat to ship and vice versa but also addresses issues such as the pilot boat itself, boarding and landing areas, training and use of PPE.



[Interactive Pilot Transfer Poster](#)

June 2025

DISCLAIMER

This guidance has been produced jointly by the British Ports Association, the United Kingdom Maritime Pilots Association, the UK Harbour Masters' Association, the UK Major Ports Group, and Port Skills and Safety ("the Five Associations") to assist CHAs and pilot organisations in establishing safe operating procedures for pilot boarding and landing operations and while reasonable care has been taken by the Five Associations in its production the Five Associations do not accept any responsibility or liability (individually or jointly) for any action taken or not taken in reliance on the guidance or for the use of the guidance by any person. The Five Associations shall not be liable to any person for any loss or damage howsoever arising from the use of this guidance. This disclaimer is not intended to limit or exclude liability for death or personal injury caused by negligence on the part of the Five Associations or any matter that it would be unlawful for the Five Associations to exclude or limit liability.

¹ For the purposes of this guidance, a SOLAS ship is a ship to which SOLAS Chapter I applies. A non-SOLAS ship is any other ship.

NOTE

Regulations, instruments, and guidance referred to in this document are correct at the time of publishing. However, such material may be amended from time to time and the reader should always seek the current version.

1. THE PILOT BOAT

- 1.1 The Competent Harbour Authority (CHA) must ensure that the pilot boat/boats in their service meet the relevant requirements of:
 - a. Merchant Shipping (Small Workboats and Pilot Boats) Regulations 2023 (SI 2023 No. 1216)
 - b. The [Workboat Code Edition 3](#) – Maritime & Coastguard Agency (MCA)
 - c. The legacy [Codes](#) for boats built before December 2023, until WB3 adoption parameters complied with.
 - d. [Manning of Pilot Boats – MGN 50\(M\)](#)
 - e. [The Port & Marine Facilities Safety Code](#)
 - f. [The Guide to Good Practice on Port & Marine Facilities](#)
 - g. A Small Workboat engaged as a pilot boat from time to time, should comply with the Workboat Code as it applies to its duties as a Small Workboat and, in addition, comply with the requirements for a dedicated pilot boat for which the vessel's workboat certificate should be appropriately endorsed.
- 1.2 All Pilots and pilot boat crew should receive initial training and familiarisation with regard to the position, stowage and operation of all safety equipment aboard each pilot boat they use, as per the vessel safety plan, which is recommended to be used.
- 1.3 Prior to leaving the berth, and at least once per watch, the pilot boat coxswain should ensure that their boats are in all respects ready for sea. All openings e.g. hatches, access to below deck spaces and the engine rooms should be closed when underway at sea.
- 1.4 Prior to leaving a berth, the coxswain and crew should familiarise themselves with the position and stowage of the safety equipment fitted to that particular pilot boat.
- 1.5 On joining in harbour or at sea, the Pilots should familiarise themselves with the position and stowage of the safety equipment fitted to that pilot boat.
- 1.6 Where reasonably practicable, arrangements should be made for the mooring ropes of pilot boats to remain at the berth when the boat is at sea. Any additional ropes, not left ashore, should be properly stowed in a safe location.
- 1.7 The decks of the pilot boat should be clear of all unnecessary obstructions allowing clear passage and movement for the Pilot and crew. Where deck lighting is fitted, it should be tested in accordance with the operator's and manufacturer's procedures.
- 1.8 An up-to-date and accurate log should be maintained on board each pilot boat. Entries should include details of all periodic safety and equipment checks, drills and defects.
- 1.9 Pilots should not hinder the coxswain in the navigation of the pilot boat, for example by impeding their view of the radar, AIS, and/or the use of the pilot boat's VHF. This is particularly important in conditions of reduced visibility.
- 1.10 When circumstances require, coxswains should not hesitate to ask the Pilot for advice or for assistance in order to reduce their operational workload.

2. LEAVING THE BERTH

- 2.1 The pilot boat should not leave a berth unless it is, in all respects, ready for sea.
- 2.2 The pilot boat should be crewed in compliance with MGN 50 (M).
- 2.3 The pilot boat should not operate outside the terms of its MCA Pilot Boat Certificate, (PB1), which should be clearly displayed on board.
- 2.4 CHAs should have procedures in place, to ensure that at any time, the location and numbers of persons on board the pilot boat are known.
- 2.5 Where reasonably practicable, the position of the Pilot boat should be monitored from ashore. This is especially important in heavy weather and restricted visibility (see sections 11 and 12).
- 2.6 Pilots and pilot boat crew should be made aware of the potential dangers associated with wearing auto inflating lifejackets within the pilot boat and the associated difficulties that would arise in a capsize / flooding situation (See Annex 2).

3. PILOT BOARDING AREAS

- 3.1 CHAs have a responsibility to identify and evaluate areas for the safe boarding and landing of Pilots. The following should include, but not be limited to:
 - a) Sea Room for the manoeuvre
 - b) Depth of water
 - c) Shelter
 - d) Seabed gradient
 - e) Traffic and communication
 - f) Proximity of traffic and potential wash
- 3.2 Charted boarding locations provide general guidance for arriving vessels and may be varied as required in order to provide the safest place for a Pilot transfer in the prevailing conditions. The boarding area should be determined based on a formal navigational risk assessment and should provide sufficient sea room to accommodate an aborted inward passage, if necessary, once the pilot assumes conduct. Additionally, the location should account for the duration and scope of lee courses relative to the size of the vessels served.
- 3.3 Dynamic and formal risk assessments should be undertaken to identify environmental limits of transfer operations. A framework of safe operational limits may be published, to enable operational staff and port stakeholders, to be aware of weather conditions likely to delay or suspend pilot transfer operations.

In assessing such a framework, where established, consideration should be given to:

- a) Wind speed and direction anemometers
- b) Wave rider buoys or equivalent, to determine wave height
- c) Local meteorological forecasting services or apps
- d) Record keeping of weather conditions, by boat crews.

In marginal conditions the pilot boat crew, in conjunction with the Pilot, should make a dynamic assessment of the conditions at the boarding area, before confirming it is safe to commence or continue boarding and landing operations.

4. ON APPROACHING THE SHIP

- 4.1 CHAs should establish reporting procedures, whereby VHF radio contact is established between the pilot boat and ship (or VTS as appropriate) on the specified channel published in the Sailing Directions and ALRS Vol 6.

- 4.2 The coxswain of the pilot boat should establish the position of the ship to be served and where there is more than one ship in the vicinity, should establish the relative positions and expected movement of all vessels in the area.
- 4.3 Before a pilot transfer operation and after consultation with the Pilot involved, the pilot boat coxswain, or VTS should advise the ship to be served:
- a) Advise VTS or onshore monitoring site as to the intended transfer plan when on station.
 - b) The side for the Pilot transfer arrangement and height above the water.
 - c) Type of ladder, appropriate to the freeboard.
 - d) Recommended course and speed to provide an appropriate lee. Particular care and attention should be paid in recommending a course and speed that avoids the pilot boat boarding in following sea and swell with the potential to broach.
 - e) Sequence number where more than one ship is to be served.
 - f) When transferring more than one Pilot, the total number to be communicated between ship and pilot boat.
 - g) Any additional requirements, such as heaving lines or intention for man ropes
 - h) Masters must verbally confirm to the VTS/LPS that the Pilot transfer arrangements have been maintained, inspected and rigged under the supervision of a responsible officer in accordance with SOLAS Regulation V/23 and to provide a safe and efficient means of (dis)embarkation. This should include verbal confirmation that the pilot ladder and means of securing the pilot ladder at intermediate length are type approved and that pilot ladders, manropes and securing ropes are not more than 36 months old, from the date of manufacture. (It is recommended that copies of the certification are forwarded alongside other pre-arrival requirements.) The Pilot may wish to sight the certification on request during the Master/Pilot information exchange (MPX) and these should be displayed in a prominent and accessible place in the ship, in accordance with SOLAS Regulation I/16.
 - i) For ships with a freeboard of more than 9m, a combination arrangement is required by SOLAS Regulation V/23, which should be rigged with a minimum platform height of 5m above the surface of the water or at a specific height as locally determined for the given conditions. (See Annex 3)
 - j) The traffic in the vicinity and risks associated with interaction with these vessels should be considered.

The Pilot should ascertain that the Pilot access area on the ship is free from obstructions, the Coxswain should establish this when speaking to the vessel. This should apply even if a ladder is not required.

- 4.4 On approaching a ship from a near head-on position on the same side as the pilot ladder is rigged, care must be taken to ensure the wash created by the pilot boat does not interfere with the safe boarding or landing operation. This may require the pilot boat to remain clear of the pilot ladder until the wash created has cleared down the ship's side. Consideration should be given to passing down the opposite side and approaching the ladder from aft, in order to minimise the effect of the pilot boat's own wash on the transfer operation.
- 4.5 Particular caution should be taken when serving a ship at anchor, which is unable to manoeuvre to make a lee, particularly at slack water. The ship may need to be underway and making sufficient way so that the pilot boat can maintain position alongside the vessel before a Pilot transfer operation.
- 4.6 During the approach to the ship, both the Pilot and assisting deck hand shall remain in the wheelhouse of the pilot boat until it is settled at reduced speed, in the lee of the vessel.
- 4.7 At night the pilot boat deck should be illuminated before anyone goes on deck.
- 4.8 At night, during the final approach, the pilot boat searchlight should be turned on to assess the sea conditions, illuminate the pilot ladder and the foredeck of the pilot boat. Care must be taken not to dazzle personnel on deck or adversely affect the night vision of persons on the bridge, or on the deck of the ship to be served.
- 4.9 The decision to place the pilot boat alongside the vessel to be served should ultimately be the responsibility of the Coxswain. The Coxswain should take into consideration factors including but not limited to: adverse weather conditions, traffic density, any vessel obstructions or side overhangs, or wash when assessing the risk to personnel and/or the launch by coming alongside.
- 4.10 If there is any doubt at any time about the condition or compliance of the ladder arrangement in accordance with SOLAS requirements or safety of the transfer operation, the Pilot should not transfer.

- 4.11 All non-compliant or (potentially) unsafe ladders and transfer arrangements and any near miss incident associated with the transfer operation, must be reported to the CHA and MCA as soon as it is safe to do so (see section 9).
- 4.12 Whilst undertaking the transfer operation, the pilot boat radar should be placed in standby mode, unless due to the prevailing conditions it would impact the navigational and situational awareness (see section 12.3 regarding restricted visibility).
- 4.13 During restricted visibility, it is recommended that whenever possible, a ship to be served is approached around its stern and not across the bow. CHAs should ensure that coxswains are fully familiar with the requirements of the collision regulations governing navigation in restricted visibility.

5. THE SHIP

- 5.1 Ships have a duty to rig their pilot ladders in accordance with SOLAS Regulation V/23. A copy of the poster showing IMO requirements and IMPA recommendations – “Required Pilot Transfer Arrangements” is included in Annex 1 to this Code. Local requirements relating to the ship’s side required and height above the water should be passed via radio prior to the ship’s arrival. It should be noted that the provisions of SOLAS are a minimum, and there are ports around the World, where sea/swell conditions allow local authorities to establish a reduced maximum climb height as a condition of pilotage without compromising the safety of Pilots. (See Annex 3). Where such requirements are established, they should be publicised and be non-discriminatory, applying to all ships of the same type and size.
- 5.2 Pilot transfer operations should not be undertaken on ships that do not fully comply with transfer arrangements as referred to in section 5.1 above. It is the responsibility of the vessel to ensure a safe working environment is provided for the Pilot once embarked.
- 5.3 The pilot ladder should be rigged and secured at the appropriate pilot transfer position on the ship’s side or at the side door if fitted. This should be as near amidships as possible and on the parallel body of the ship, clear of all discharges.
- 5.4 In order to allow the ladder to sit flush against the ship’s side a list should be avoided. If a list cannot be avoided, the ladder should be rigged on the side which will allow it to remain flush against the side of the ship.
- 5.5 During Pilot transfer, the responsible officer, must be in direct contact with the bridge. This should normally be by radio.
- 5.6 During the transfer, the ship should maintain adequate steerage at the speed requested by the pilot boat Coxswain. Turning propellers are a potentially life-threatening hazard to persons involved in transfer operations.
- 5.7 During a Pilot transfer operation, a ship should not be stopped in the water, or its engines put astern, except in an emergency or when requested by the pilot boat coxswain.
- 5.8 When transferring a pilot with a combination arrangement, the accommodation ladder must always lead aft.
- 5.9 The accommodation ladder must be rigged at an appropriate height to ensure the pilot boat can lie alongside the pilot ladder section with sufficient allowance for sea/swell, preventing any part of the pilot boat or personnel from contacting the accommodation platform. Where local conditions permit, it is advisable to minimise the risk of a fall from height by utilising a combination arrangement, where feasible, provided that the lower platform remains horizontal and the slope angle of the accommodation ladder does not exceed 45 degrees at the reduced height. (See Annex 3).
- 5.10 When using a combination arrangement, the accommodation ladder should be secured to the ship’s side, with both an inboard and outboard stanchion rigged on the platform next to the ladder. The pilot ladder must be firmly attached to the ship’s side not less than 2m above the lower platform of the accommodation ladder. It is the vessel’s responsibility to ensure that the means of securing the ladder is suitable and fit for purpose.

6. PILOT EMBARKATION OPERATION

- 6.1 The decision to put a pilot boat alongside a ship is the responsibility of the pilot boat Coxswain (see section 4.9).
- In all cases, the decision to board the ship is the responsibility of the Pilot involved. In making the decision, the pilot should take into consideration factors including but not limited to:
- a) Environmental conditions.
 - b) Physical capabilities of the Pilot.
 - c) Suitability of transfer arrangements, such as the presented setup and ladder condition.
 - d) Conduct and condition of the vessel.
- 6.2 When on deck both the deckhand and the Pilot must wear appropriate PPE as required and approved by the CHA and worn in accordance with manufacturer's instructions.
- 6.3 It is strongly recommended that whilst on deck the deckhand is secured to the pilot boat by an approved method, that does not restrict their freedom of movement. This should also be made available to the Pilot. There are a number of factors for consideration for a Pilot to make an informed decision on tethering on, which are expanded on in the linked [UKMPA circular on Tethered Rail Systems](#). Any local CHA practices on Pilot tethering should be supported by an appropriate risk assessment.
- 6.4 Provided that the ladder has been rigged at the correct height, the deckhand should proceed forward, using the safest route (normally the outboard side). Some CHAs have a practice of requiring the lower steps of the ladder to be brought on board the pilot boat to avoid the risk of the ladder becoming strained should the boat pin it to the ship's side. This practice is not without risk and is not practised universally. CHAs should undertake their own risk assessments and decide upon their own control measures to deal with this risk. The deckhand should visually inspect the condition of the ship's transfer arrangements including if it is safe to do so, by placing weight onto the bottom of the ladder (while hooked on).
- 6.5 In considering the safest route from cabin to the ladder, the following should be taken into account:
- a) The width of the deck.
 - b) The location and usability of the safety rail.
 - c) If the inboard route is taken, the likelihood of the boat rolling against the side of the ship, restricting the area between the deckhouse of the pilot boat and the flat of the ship side with resulting crush injury risk. The safest and recommended route is to use the outboard side of the pilot boat unless specific port risk assessments can safely mitigate the inboard route due to vessel design.
 - d) The exposure to the elements especially when a good lee is not possible, or there is passing traffic if the outside route is used.
 - e) The heel of the pilot boat during transfer.
 - f) The proposed transfer location on the side deck.
 - g) The ability of the Coxswain to view the transfer operation.
- 6.6 When a retrieval line is considered necessary to ensure the safe rigging of a pilot ladder, the line should be fastened at or above the lowest spreader step and should lead forward. The retrieval line should not hinder the Pilot nor obstruct the safe approach of the pilot boat.
- 6.7 Where the ladder's height needs adjusting, the Coxswain should inform the ship. The Pilot and deckhand should be recalled to the wheelhouse whilst the ladder is being adjusted. The transfer should not be resumed until receiving confirmation the ladder is secure at the correct height.
- 6.8 In adverse weather conditions the risk associated with transfer operations are heightened. The experience and skill of the Coxswain are crucial in determining whether the situation remains within safe operational limits. Before proceeding, onboard discussions among all parties should identify and address any inconsistencies with these safety parameters.

- 6.9 Neither the Pilot nor the deckhand should proceed from the cabin until the pilot boat is in the lee of the ship and the decision to proceed with the transfer has been made by the Coxswain. This decision should only be made when all parties agree that a safe transfer can be completed by the agreed method. If any party has any doubts, the transfer should be aborted and the process reconsidered.
- 6.10 Before stepping onto the ladder, the Pilot should inspect the permanent marking of the lowermost spreader step for information on the date of manufacture, and visually assess the condition and establish by communication with the officer at the top of the ladder, that the pilot ladder (and man-ropes if applicable) are secured to dedicated strong points using an approved method. If the top of the pilot ladder is unattended, the Pilot should not attempt to embark.
- 6.11 The timing of stepping from the pilot boat to the ladder requires the use of proven techniques, e.g. using the top of the wave to step onto the ladder and the roll of the ship to aid the ascent. If conditions are such, that in the opinion of the Pilot a safe transfer cannot be made, then the attempt should be abandoned.
- 6.12 A clear agreement whether the pilot boat should remain alongside or not during the transfer should be made between Pilot and Coxswain prior to the Pilot leaving the cabin. Note: studies show serious bodily injury can occur from falling from increased heights at which point a fall into the water may afford increased survival prospects. Considerations should involve:
- a) The height of climb and considerations as per Annex 3.
 - b) The pilot ladder arrangement including the potential of requesting lower climb options.
 - c) The prevailing environmental conditions and the ease of station keeping for the pilot boat.
- If, under these circumstances, the pilot boat leaves the ship's side particular care must be made not to foul the ladder.
- 6.13 For shorter climbs (see Annex 3), it may be appropriate for the pilot boat to remain alongside until the climb is completed. As with all transfers, the deckhand should ensure the pilot boat does not foul the ladder when leaving the ship's side.
- 6.14 Nothing should be worn over PPE that might interfere with its normal operation at any time. Please refer to Annex 2.5 for details of why this is not recommended. If the Pilot has a bag or equipment, it is recommended that it be transported by the deck hand to ensure the Pilot can concentrate on assessing the transfer arrangements. A heaving line should be used to lift the bag or equipment onto the ship after the Pilot has completed the transfer. The ship must be informed of this process in advance.
- 6.15 The use of man ropes to assist the Pilot is the personal choice of the Pilot involved and should be provided or removed as required. This information should be passed to the ship at the earliest opportunity, to allow time for rigging or removal.

7. LOW FREEBOARD SHIPS

- 7.1 When the ship to be served has a freeboard near to, or less than, that of the pilot boat particular caution should be as these transfers can be amongst the most hazardous.
- In these circumstances, there may be insufficient parallel body for the pilot boat to work against. Such situations can be worsened further if both the ship and the pilot boat are rolling or pitching. The potential for damage to the pilot boat or injury to Pilot and deck crew is increased. There is also an added possibility that the pilot boat may become hung up on the ship's side.
- 7.2 Before the transfer takes place, the coxswain and Pilot must be satisfied that the pilot boat is sufficiently stable alongside the ship for the transfer operation to be safely completed.
- 7.3 The Pilot should not stand outside the rail of the ship waiting for an opportunity to transfer.

A side gate entrance should only be used if the gap between the stanchions is 70cm to 80cm, extending 120cm above the deck and have a diameter between 32mm-36mm.

- 7.4 When making the decision to transfer, the Pilot should give consideration to factors including but not limited to:
- a) The availability of suitable handholds or stanchions at deck level.
 - b) The time taken to affect the transfer, particularly in adverse weather and any induced motion that may develop
 - c) The deck condition including if the deck is awash.
 - d) Vessel fendering.
 - e) Interaction between the pilot boat, the ship and proximity of parallel hull space.
 - f) The physical capability of the Pilot.

8. PILOT DISEMBARKATION OPERATION

- 8.1 Prior to departure, the Pilot may wish to sight the certification relating to pilot transfer arrangements, which should be readily available onboard (SOLAS Regulation I/16), and request verbal confirmation from the Master that the pilot transfer arrangements have been maintained, inspected and rigged under the supervision of a responsible officer in accordance with SOLAS Regulation V/23 and to provide a safe and efficient means of (dis)embarkation. This should include verbal confirmation that the pilot ladder and means of securing the pilot ladder at intermediate length are type approved and that pilot ladders, manropes and securing ropes are not more than 36 months old, from the date of manufacture.

As with embarkation, communication should be established between the ship and the pilot boat and the transfer arrangements confirmed in advance. The decision to disembark from a ship to the pilot boat rests entirely with the Pilot involved.

- 8.2. Before leaving the bridge, in addition to the normal handover exchange of Conduct information, the Pilot should inform the master of:
- a) The requested disembarkation course and speed with anticipated helm or engine movements required to facilitate transfer.
 - b) VHF channels for communication with pilot boat.
 - c) Any adjustments to the pilot ladder required by pilot launch.
- 8.3 As per 6.12, no transfer is free from risk, but it is essential to understand the change in severity with increased height and reduce this exposure where possible, such as requesting a combination arrangement when the platform height can be adjusted to remain rigged in a safe and compliant position. (See Annex 3)
- 8.4 On arrival at the pilot access area the Pilot should confirm the condition and securing of the pilot ladder both visually and from the officer on station. The Pilot should check their PPE is correctly donned. Any bag should be lowered to the Pilot boat by heaving line, once the Pilot has completed the transfer, on the deck of the pilot boat. Refer to section 6.13. Note: Any non-compliance or (potentially) unsafe arrangement should be reported to the CHA and MCA Marine Office immediately and the arrangement must not be used until the non-compliance is rectified (see section 9).
- 8.5 The pilot boat deck hand should be at the bottom of the ladder to ensure that the ladder is rigged at the correct height and clear. On smaller descents, prior to stepping onto the ladder, the Pilot should check that the pilot boat is lying alongside and has not fouled the pilot ladder.
- 8.6 During the descent the deckhand should advise the Pilot how many steps to go to the deck of the pilot boat. As the Pilot is stepping from the ladder the deck hand is to be on hand to provide a timely warning of danger and to give physical assistance to the Pilot if required.

In adverse weather the stepping off point may not be the lowest step, therefore clear communication between the deck hand and Pilot is essential.

- 8.7 It is strongly recommended that whilst on deck, the deck hand is secured to the pilot boat by an approved method which does not restrict their freedom of movement.
- 8.8 It is recommended that the Pilot make their way to the cabin followed by the deck hand. The deck hand may be required to receive the Pilot's bag or equipment. The return to the cabin should be made by the safest route, noting guidance in section 6.5.
- 8.9 Once clear of the ladder, the deck hand should check the decks are clear and safe before proceeding back to the cabin. The Coxswain should not leave the lee of the ship until all personnel are safely in the cabin. Once clear of the ship, the Coxswain should call the ship on VHF and inform them that the pilot boat is clear and that the ship can resume its passage.

9. REPORTING OF DEFECTIVE OR NON-COMPLIANT PILOT TRANSFER ARRANGEMENTS

- 9.1 Responsibility for the safe transfer of Pilots and marine personnel rests with each person involved in the activity to include Pilots, pilot boat crew, Master & crew, pilotage providers, CHA, vessel owner & operators. All parties should be conversant with regulations and ensure safety is not compromised.
- 9.2 Issues with defective or non-compliant pilot transfer arrangements continue to be faced across the international port marine and pilotage industry. It is essential that deficiencies of defective or non-compliant pilot transfer arrangements are properly captured and reported to the Competent Harbour Authority, Maritime and Coastguard Agency, Marine Accident Investigation Branch and the ship concerned. The following provides some best practice on reporting:
- a) **Pilots and Pilot Boat Crew.** It is highly likely that the Pilot or pilot boat crew will be the first persons to observe the defective or non-compliant pilot transfer arrangement. CHAs should ensure that pilots and pilot boat crew are familiar with local reporting arrangements and will always be fully supported to stop the transfer operation on the grounds of safety if necessary.
 - b) **Competent Harbour Authority.** CHAs should have robust reporting mechanisms and protocols in place, that ensure reports can be submitted to them quickly and efficiently (including out of hours). Reporting in a timely manner is essential as the Harbour Master may need to give a direction that results in delay or cancellation of boarding / landing operations. Reports can be submitted in a variety of ways including the following:
 - I. Verbal reports made to VTS / LPS via VHF or mobile phone.
 - II. By calling a Harbour Master or their representative
 - III. Via email
 - IV. By utilising approved reporting apps
 - c) **Maritime and Coastguard Agency Local marine office.** The local MCA marine office should be made aware of any report as soon as possible in order for potential port state control action to be considered. Reports should include as much detail as possible, including photographs (if available) and ref to which element of SOLAS / international recommendation the arrangement is thought to have breached. A list of MCA marine office contact details can be found [here](#).



- d) **Maritime and Coastguard Agency Headquarters.** When reports are submitted to an MCA marine office, MCA headquarters should also be included in copy. The MCA is capturing statistics centrally to monitor and maintain

a central database. The following email address should be used to ensure MCA HQ are included in copy: HQ_Inspectionops@mcga.gov.uk, navigationalafety@mcga.gov.uk

- e) **Marine Accident Investigation Branch.** The MAIB wish to receive reports and are maintaining a database to monitor trends. Reports to MAIB can be submitted using the following email address: ISO@maib.gov.uk
- f) **The Vessel.** It is important that the ship is made aware of any issues with defective or non-compliant pilot transfer arrangements immediately. Whilst this is likely to be done via the Pilot / pilot boat crew or perhaps VTS / LPS in the first instance, it is important that a formal written report is followed up from the CHA to the ship / agent. If the incident involves an outbound vessel this is particularly relevant and consideration should also be given to informing the next port of call.

10. LEAVING THE SHIP'S SIDE

- 10.1 Unless a specific manoeuvre is detailed, the vessel should, as a standard practice, maintain the requested course and speed until the pilot boat has safely cleared. However, it is essential for the Pilot to brief the Master to maintain communication with the pilot boat to provide any follow-up guidance, if required, in the event the pilot boat has difficulty clearing the vessel's side. This ensures the Coxswain can request any necessary helm or engine adjustments to facilitate a safe break away.

11. HEAVY WEATHER OPERATIONS

- 11.1 In heavy weather, pilot boats should proceed at a speed compatible with sea conditions and pilot boat design. Sufficient allowances should be made in passage timings to avoid undue physical strain on personnel.
- 11.2 In fast pilot boats, use should be made of the seating provided in an appropriate manner, together with seatbelts where fitted. Amendment 4 of MGN 436 reflects evolving knowledge and best practice including the use of shock mitigating technology and data.
- 11.3 To avoid injury on passage, the stowage of ancillary equipment should be designed to be clear of seating areas, with particular emphasis on the space around head and shin.
- 11.4 Loose equipment or stores should not be carried unless properly stowed.
- 11.5 In such weather conditions the risk associated with boarding operations are heightened. Neither the Pilot nor the deck hand should proceed from the cabin until the pilot boat is in the lee of the ship and decision to proceed with transfer has been made by the Coxswain.

12. RESTRICTED VISIBILITY

- 12.1 The pilot boat must be allowed extra time on task in order to proceed at a safe speed in restricted visibility.
- 12.2 In all cases of restricted visibility, when approaching the ship, the deck hand should provide lookout and assistance until the Coxswain has a fully developed situational awareness. When leaving a ship the Coxswain will, as far as practicable, remain alongside the ship until the deck hand can keep a lookout.
- 12.3 Where fitted, the Pilot boat radar should be operational and in use, except whilst alongside engaged in a pilot transfer (see section 4.12), unless due to the prevailing conditions it would impact on the navigational and situational awareness. Once the Pilot is safely on board, use of the radar should continue.
- 12.4 Pilot boat AIS should be operational and used.

- 12.5 Pilot boat fog signal shall be operational and sounded in accordance with the International Regulations for the Prevention of Collision at Sea (ColRegs).
- 12.6 In restricted visibility it is imperative that VHF contact is established with the ship to be served. The ship's position, course, speed and position relative to other ships or navigational marks should be confirmed.

13. MAN OVERBOARD PROCEDURES

- 13.1 In the event of a man-overboard incident it is essential to locate the casualty and maintain them in sight, a task to which all crew and Pilots on board must devote their whole attention.
- 13.2 Coastguard, Port Authorities and shipping must be informed immediately and lengthy communications should be avoided. The speed of sighting and recovery remain the priority.
- 13.3 Once the casualty is located, and as the pilot boat is being positioned, retrieval equipment should be prepared and deployed as appropriate.
- 13.4 The method of recovery will depend on the equipment carried and the prevailing weather conditions.
- 13.5 A full report of the man-overboard incident is to be submitted in accordance with the CHA procedures and national legislation
- 13.6 A standard Emergency Action Plan should be agreed and shared by all parties, with regard to the onward casualty handling.

14. TRAINING FOR PILOT BOAT OPERATIONS AND RETRIEVAL OF CASUALTIES

- 14.1 Prior to using a pilot boat, all Pilots and pilot boat crews should receive training appropriate to their roles and responsibilities. This includes but is not limited to
 - a) Pilot boat operations
 - b) Familiarisation with the Boarding and Landing Code and current regulations
 - c) Training in how to recognise a compliant or non-compliant pilot transfer arrangement
 - d) Position, stowage and correct use of pilot boat safety equipment, such as immersion suits and medical stores
 - e) Operation and use of all man overboard equipment.
 - f) Donning of and the correct use of PPE.
- 14.2 Coxswains and pilot boat crew should be trained in the operation of the boat, its systems, pilot transfer operations and whole-body vibration issues. Competence should be demonstrated, recorded and maintained through a systematic process
- 14.3 Success of a rescue from the water is directly related to:-
 - a) The competence and training of those undertaking the rescue.
 - b) Familiarity with all recovery equipment, including alternative secondary systems.
 - c) Emergency life support skills, including artificial resuscitation.
 - d) The ability to identify and provide treatment for cold-water shock, and hypothermia.
 - e) The personal survival skills of the casualty in the water.

Therefore, it is essential, all persons involved in pilot boat transfer operations, who may be involved in rescue from the water, should be competent in these areas as a minimum.

- 14.4 A retrieval drill for pilot boat crew and check listing of recovery equipment should be carried out on a regular basis and at no more than 6-month intervals to ensure a satisfactory level of competence. Where possible, this training should be undertaken in a realistic environment, representative of the prevailing conditions at the transfer position.

All drills and checks should be recorded with an appropriate logbook entry.

- 14.5 Pilots are a resource in the rescue of another Pilot and/or pilot boat crew member. They should therefore receive the same training and meet the same drill practice standards as pilot boat crews in sections 14.3 and 14.4 above. Where possible, training should be at intervals in line with pilot boat crew training but not exceeding yearly.
- 14.6 All sea-going pilotage staff should be trained in Personal Survival Techniques.
- 14.7 All CHA's engaged in pilot boat operations should develop and have in place, emergency plans relating to pilot transfer operations.
- 14.8 An enhanced Immediate Emergency Care course should be considered as the required standard above the STCW Basic First Aid provisions for both pilot boat crews and Pilots.

15. TRANSFER OPERATIONS INVOLVING NON-REGULAR SHIPS

- 15.1 The CHA should, in consultation with Pilots, identify non-regular and unusual ships. The CHA, in conjunction with the Pilot and vessel operators, should risk assess in advance, any Pilot transfer operations involving non-regular or unusual ships.
- 15.2 High-speed craft and some Ro-Ro's, which do not have parallel sides that allow the ladder to lie flat, may request the Pilot to travel to and from the ship, from its port of origin.
- 15.3 Other non-regular vessels may pose additional issues that need to be addressed. Ladders should be sited midships not forward, away from fixed fenders and overhanging obstructions, suitable lighting directed so as not to affect pilot boat crew vision and overboard discharges.
- 15.4 Tug and tows. When a Pilot transfer is to a tug the approach may have to be from forward of the beam to avoid the towing equipment. Transfer should be through a gate in bulwark and if no gate is available provision should be made for suitable stanchions with dimensions as per 7.3, with a means of climbing over the bulwark.
- 15.5 Boarding an unmanned tow cannot be conducted in accordance with this Code and therefore a special procedure following a risk assessment should be developed. When transferring to an unmanned barge, the transfer arrangements should be closely inspected prior to use.

16. PILOT TRANSFER BY HELICOPTER

- 16.1 CHA's anticipating the introduction of a helicopter service for Pilot transfer operations must involve stakeholders in the production of appropriate procedures for normal operation and emergency response. These are to be based on a comprehensive risk assessment and with reference to industry best practice, including the ICS Guide to Helicopter/Ship Operations (6th edition).



INTERNATIONAL
MARITIME
ORGANIZATION

REQUIRED PILOT TRANSFER ARRANGEMENTS

In accordance with SOLAS Chapter V Regulation 23
INTERNATIONAL MARITIME PILOTS' ASSOCIATION
Email: office@impahq.org

This document and all IMO Pilot-related documents are available for download at: www.impahq.org



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RIGGING WHEN POINT OF ACCESS IS 9 METRES OR LESS ABOVE THE WATER

HANDHOLD STANCHIONS
Stanchions shall extend a Min. 120cm above bulwark. Diameter of stanchions Min. 32mm Max. 36mm. Stanchion ring diameter shall not be less than 60mm. Distance between stanchions Min. 70cm Max. 80cm.

PILOT LADDER AND MAN-ROPES shall be secured to strong points on deck.

MAN-ROPES SHALL BE RIGGED IF REQUIRED BY THE PILOT
(Man-ropes shall be made of manila rope or other material of equivalent strength without knots or apical).
Min. Diam. 28mm
Max. Diam. 32mm

SIDE ROPES
Min. Diam. 20mm
Max. Diam. 22mm

ALL STEPS Shall rest firmly against ship's side shall be horizontal.

Min. 40cm

31-35cm equally spaced

6 METRES unobstructed ship's side

Height above water required by Pilot

Retrieval line shall lead forward

SPREADER
Min. 180cm Long

MAXIMUM 8 STEPS Between spreaders

5th STEP From bottom shall be a spreader

Pilot ladders shall be secured at intermediate lengths by a device type approved for the purpose, which prevents any slippage of the side ropes and has a breaking strain of not less than 48kN.

RIGGING WHEN POINT OF ACCESS IS MORE THAN 9 METRES ABOVE WATER

PILOT LADDER
Shall extend at Least 2 metres above the lower platform.
The Pilot ladder and Man-ropes, if rigged, shall be secured to the ship's side 1.5m above the platform using sunken eyes, magnetic or pneumatic system.

The lower platform shall be rigged as requested by the pilot service, with a minimum height of 5m above the water up to a maximum height of 9m above the water.

Accommodation ladder shall be secured to ship's side (Using sunken-eyes or approved mechanical system)

Maximum 45° slope

Lower platform horizontal

Lower platform shall be rigged with both an inboard and outboard stanchion.

0.5m

2m

2m

9 metres freeboard mark

← STERN BOW →

PILOT LADDER WINCH REEL

HANDHOLD STANCHIONS shall extend 120cm above deck.
Diameter of Stanchions Min. 32mm Max. 36mm
Distance between Stanchions Min. 70cm Max. 80cm

All pilot ladder winch reels shall have a means of prevention from being accidentally operated.

Minimum Clearance 220cm

Min. 91.5cm

NO OBSTRUCTIONS

Ladders shall not be rigged over sharp edges which can damage the ropes. A curved surface of a shape such as a half-pipe should be placed on the edge to minimize the risk of chafing.

Winches shall be mechanically secured before use.

The pilot ladder shall be secured to a strong point, independent of the pilot ladder winch reel, at a distance of not less than 91.5 cm measured horizontally from the ship's side inwards.

Side opening

Minimum Clearance 220cm

The platform shall be a minimum of 5m above water level

Minimum 91.5cm

← STERN BOW →

Duties of the Responsible Officer

- 1 Have knowledge of the correct use of Pilot Transfer Arrangements
- 2 Establish direct communication with bridge
- 3 Communicate with bridge during boarding process
- 4 Oversee / Check compliant rigging of the ladder
- 5 Test safety equipment in place and ready for use
- 6 Arrange for the pilot to be safely guided to/from the bridge via a clear illuminated route

All Companies shall have an approved safety management system which includes ship-specific procedures for the safe conduct of pilot transfers. The ISM Code requires that these procedures comply with SOLAS Chapter V regulation 23 and conform to IMO recommendations, international standards and guidance from marine industry organizations.

PILOT TRANSFER ARRANGEMENTS FOR TRAP DOOR AND SIDE DOOR DIAGRAMS CAN BE VIEWED BY SCANNING THE ABOVE QR CODE.



INTERNATIONAL
MARITIME
ORGANIZATION

REQUIRED PILOT TRANSFER ARRANGEMENTS FOR TRAP DOOR AND SIDE DOOR

In accordance with SOLAS Chapter V Regulation 23
INTERNATIONAL MARITIME PILOTS' ASSOCIATION
Email: office@impahq.org

This document and all IMO Pilot-related documents are available for download at: www.impahq.org



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ACCOMMODATION LADDER (TRAP DOOR ARRANGEMENT)

The platform shall be secured to the ship's side when in use

In the case of a combination arrangement using an accommodation ladder with a trapdoor (i.e. embarkation platform), the pilot ladder and man-ropes shall be rigged through the trapdoor extending above the platform to the height of 2m.

At least 2m

Maximum 45° slope

Lower platform horizontal

The lower platform shall be a minimum of 5 metres above the water

The Pilot ladder shall rest firmly against the ship's side

Steps shall rest firmly against the ship's side

Platform shall be secured to ship's side (Using sunken-eyes or approved mechanical system)

SIDE DOOR ARRANGEMENT

Distance between Stanchions Min. 70cm Max. 80cm

When rigged from a ship's side opening manropes may be rigged from the deck head, provided that the manropes pass through the ring or the eye at the top of the stanchions at the point of access.

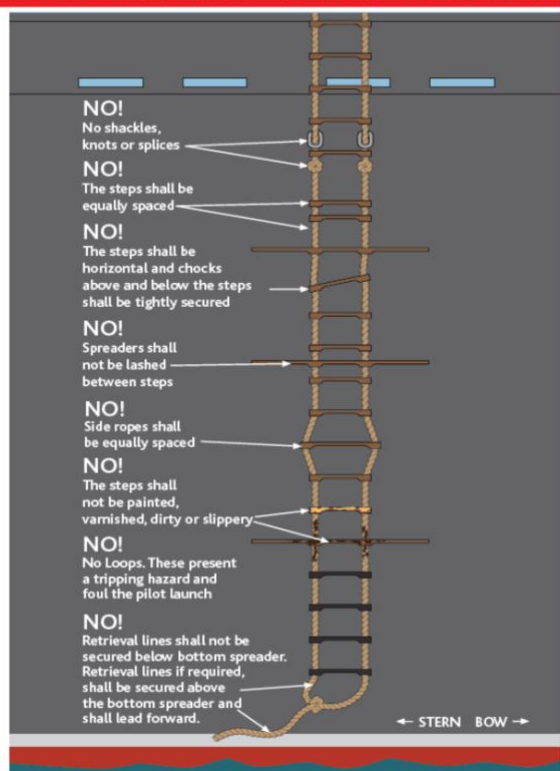
Pilot ladders shall be secured on the lowest deck within the ship side opening. Rigging from the deckhead or freeboard deck is not permitted.

Distance from top of step to entry to be no more than 320 mm

6 METRES unobstructed ship's side

Height above water required by Pilot

15



Annex 2

A2.1. All Pilots and pilot boat crew should wear appropriate PPE as identified by the duty holder's associated risk assessment process. When selecting and issuing PPE, the duty holder should:

- Choose products that are UKCA and/or CE marked in accordance with the Personal Protective Equipment (Enforcement) Regulations 2018 as amended – See the Product Safety and Metrology etc. (Amendment) Regulations 2024
- Choose equipment that suits the user, including but not limited to the size, fit and weight of the PPE. If the users help choose it, they will be more likely to use it.
- CHA's must ensure that different items of PPE that must be worn together are compatible and effective.
- Instruct and train people how to use PPE, tell them why PPE is needed, when to use PPE and what its limitations are.
- Choose Pilot coats and leggings that aid the reduction of cold water flushing whilst not impeding the wearer's ability to climb or routinely overheat in normal wearing.

There is no statutory minimum set of PPE for a Pilot or pilot boat crew undertaking pilot transfer operations. The following has been identified by industry as best practice. However, it may not be suitable in all circumstances. The duty holder must conduct a risk assessment to identify so far as is reasonably practicable an appropriate set of PPE to mitigate their risks.

- SOLAS water switched light
- Water switched or manual strobe light
- Facial splash guard
- Crotch straps or beaver tail
- Rear crew assist becket

- f) Locator beacon (PLB, AIS, VHF DSC)
- g) Whistle, to attract attention
- h) High visibility reflective tape to meet Class 2 Regulations
- i) Protective headgear to an appropriate international standard
- j) Protective footwear should be non-slip and anti-static and reinforced toecaps should be considered as part of a risk-based policy.
- k) Lifejacket covers should be Hi-Viz with vertical retro-reflective tape (this is to ensure that the lifejacket does not compromise the high visibility of a class 2 or class 3 coat when walking through the quayside areas).

A2.2 Pilots and pilot boat crew should receive training when new PPE is issued and regular checks should be undertaken in accordance with the manufacturer's recommendations. In addition, refresher training is recommended at intervals not exceeding 5 years.

A2.3 Recommended daily checks before donning lifejacket, pilot coat and helmet include:

- a) Check service history and next service date
- b) Check the Co2 cylinder is screwed in and hand tight
- c) Check the firing mechanism is ready
- d) Check the oral tube cover is in the correct position
- e) Check lights and beacon are operational
- f) Check lifejacket or pilot coat for any signs of damage
- g) Check helmet for any signs of damage

A2.4 After donning lifejacket or pilot coat

- a) Ensure all buckles, zips and clips are correctly fastened
- b) Ensure crotch straps are correctly fitted and tightened
- c) Ensure helmet chin strap is securely fastened
- d) Ensure that beacons are in the armed position

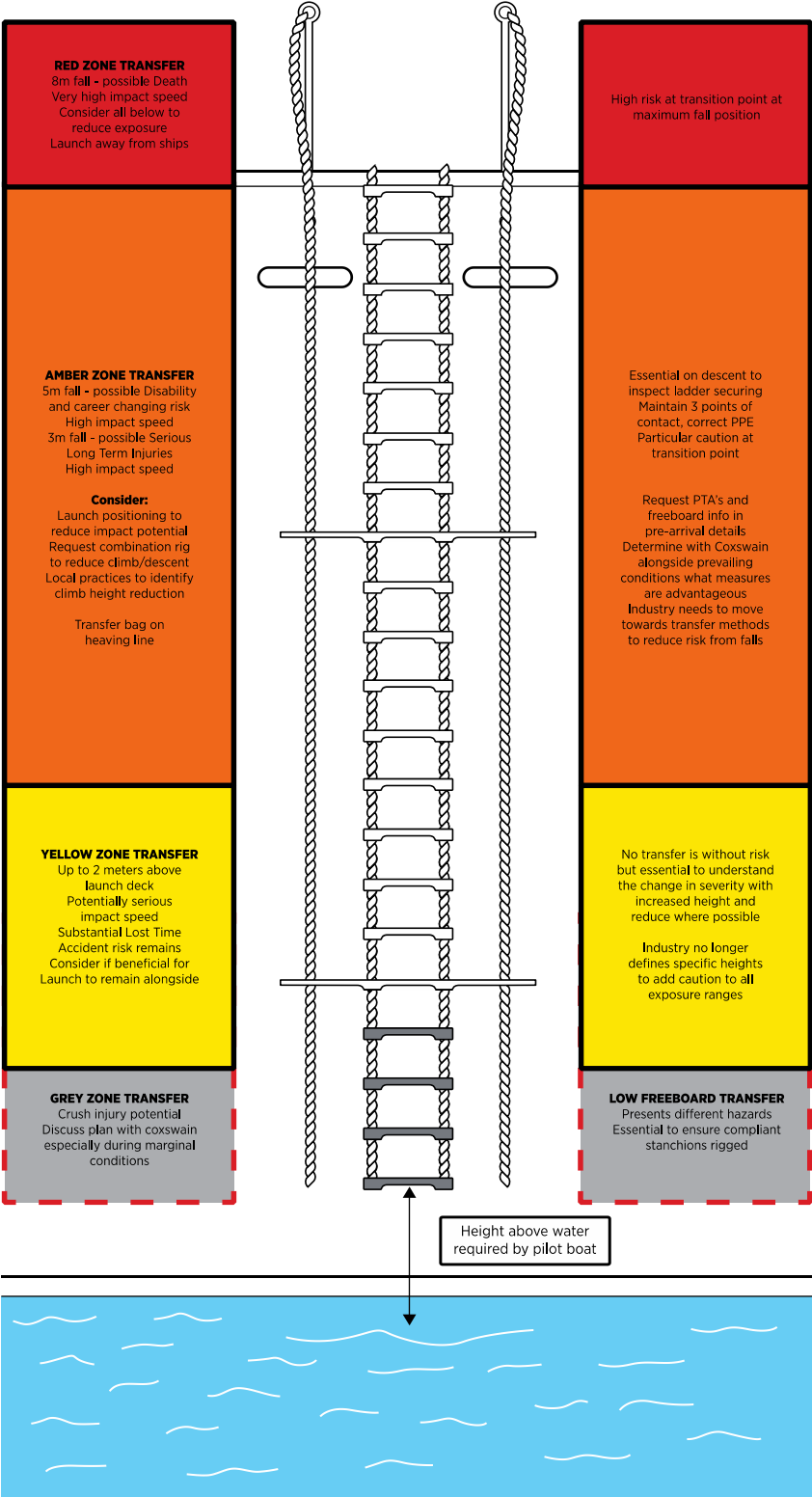
Note the wearing of crotch straps with lifejackets is essential, to prevent the lifejacket from rising up above the head.

A2.5 Unless used as part of an approved PPE system and appropriately risk assessed, the wearing of rucksacks and bags whilst climbing a ladder is not recommended for the following reasons:

- a) Wearing a bag will impair the ability to climb
- b) A bag with the straps over the shoulder or across the chest can impair the inflating of a lifejacket or pilot coat
- c) When falling from a ladder the shape and size of the bag will affect the stresses on the body when hitting the water
- d) The angle of float created by a lifejacket or pilot coat could be compromised by pockets of air within the contents of the bag

A2.6 In addition to meeting the recommended requirements of the ENG1 medical fitness standard and the physical requisites demonstrated during a Personal Survival Techniques (PST) course, Pilots should maintain a level of fitness appropriate to the specific demands of their local transfer operations.

CLIMB ZONES
Exposure and Risk from falling from height for Freeboards of 9m or less above the water



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[Port & Marine Facilities Safety Code \(PMSC\)](#)

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Merchant Shipping Notice (MSN) 1905 (M+F) as amended - Application of the ships' medical stores regulations 1995

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[Marine Guidance Note \(MGN\) 50 \(M\) – Manning of Pilot Boats](#)

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ICS Guide to helicopter/ship operations 6th Edition, Section 5.3 and Chapter 6 and associated appendices.

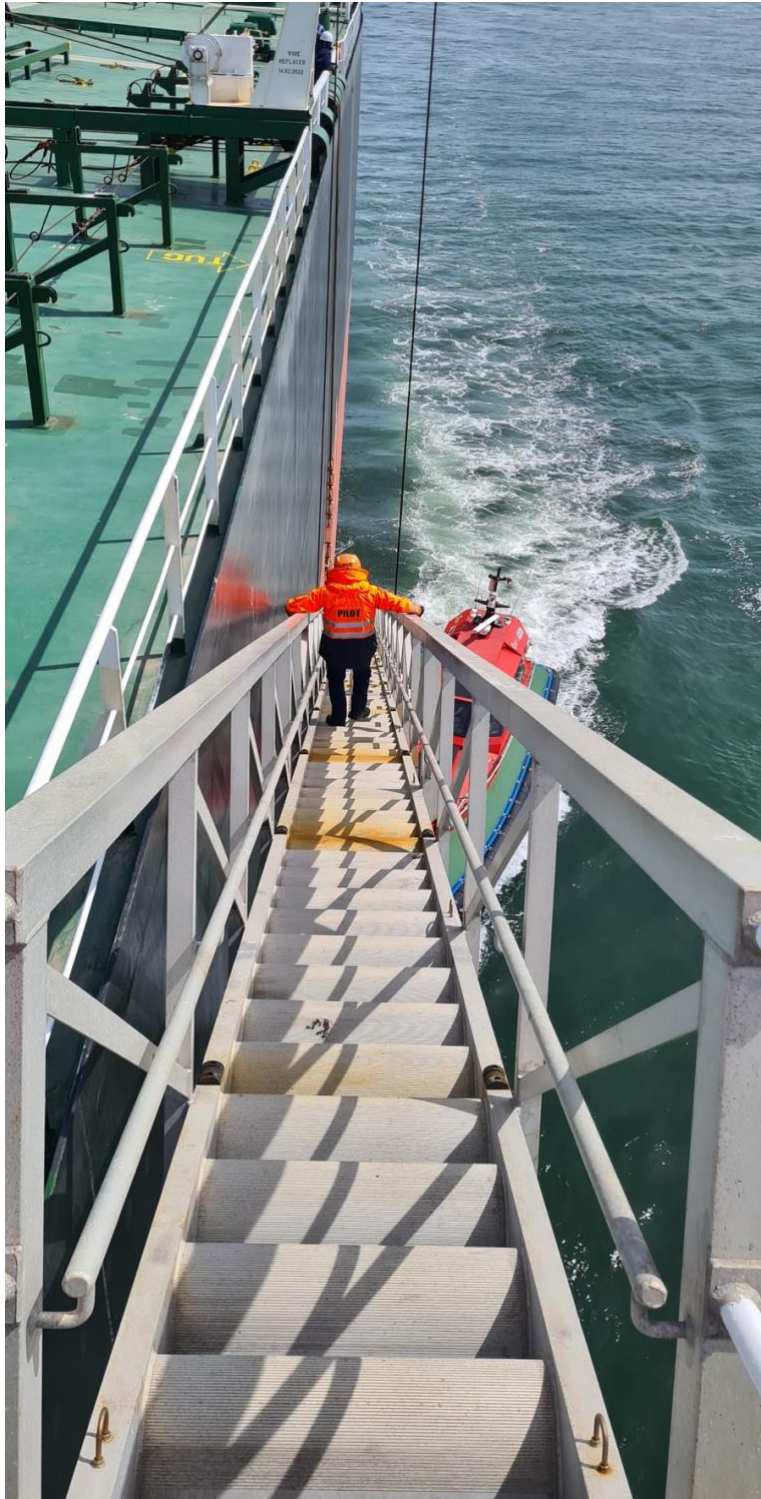
Recovery of Persons in Water (PIW) – Guide to Good Practice for Small Vessels – BTA 2022

UKMPA – website – www.ukmpa.org

IMPA – website – www.impahq.org

² See p12,p47 & p73 of Report of the Drafting Group MSC 110/WP.7 25 June 25

³ A1045(27), A1108(29) & MSC.1/Circ.1428 to be revoked 1 April 2030



17 July 2025