

# THE EMBARKATION & DISEMBARKATION OF PILOTS

## CODE OF SAFE PRACTICE

Revised July 2021

*Next Review due Spring 2024*



*Editor's Note: this version is identical to the final 2021 review of the code published on 2<sup>nd</sup> August 2021, but has been revised to reflect the BPA and UKMPA's updated logos.*

# Contents

|  |           |
|--|-----------|
| <b>INTRODUCTION.....</b>   | <b>3</b>  |
| <b>DISCLAIMER.....</b>   | <b>3</b>  |
| <b>NOTE .....</b>  | <b>3</b>  |
| <b>1. THE PILOT BOAT.....</b>  | <b>4</b>  |
| <b>2. LEAVING THE BERTH .....</b>  | <b>5</b>  |
| <b>3. PILOT BOARDING AREAS .....</b>   | <b>5</b>  |
| <b>4. ON APPROACHING THE SHIP .....</b>  | <b>6</b>  |
| <b>5. THE SHIP .....</b>   | <b>7</b>  |
| <b>6. PILOT EMBARKATION OPERATION .....</b>  | <b>8</b>  |
| <b>7. LOW FREEBOARD SHIPS .....</b>  | <b>10</b> |
| <b>8. PILOT DISEMBARKATION OPERATION .....</b>   | <b>10</b> |
| <b>9. REPORTING OF DEFECTIVE OR NON-COMPLIANT PILOT<br/>BOARDING ARRANGEMENTS.....</b> | <b>11</b> |
| <b>10. LEAVING THE SHIP’S SIDE .....</b>   | <b>12</b> |
| <b>11. HEAVY WEATHER OPERATIONS .....</b>  | <b>12</b> |
| <b>12. RESTRICTED VISIBILITY.....</b>  | <b>13</b> |
| <b>13. MAN OVERBOARD PROCEDURES .....</b>  | <b>13</b> |
| <b>14. TRAINING FOR PILOT BOAT OPERATIONS AND RETRIEVAL OF<br/>CASUALTIES .....</b>    | <b>14</b> |
| <b>15. TRANSFER OPERATIONS INVOLVING NON-REGULAR SHIPS ...</b>                         | <b>15</b> |
| <b>16. PILOT TRANSFER BY HELICOPTER .....</b>  | <b>15</b> |
| <b>Annex 1 .....</b>   | <b>16</b> |
| <b>Annex 2 .....</b>   | <b>17</b> |
| <b>References.....</b>   | <b>19</b> |

## **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 2021 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 IMO conventions, SOLAS regulations and United Kingdom legislation and has been linked in the Port Marine Safety Code, Guide to Good Practice. 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 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.

**July 2021**

## **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.

## **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 1998 (SI 1998 No. 1609), as amended
  - b. The Small Commercial Vessel Code – Maritime & Coastguard Agency (MCA)
  - c. Small Vessels in Commercial Use for Sport or Pleasure, Workboats and Pilot Boats
  - d. Alternative Construction Standards (SCV Code) Marine Guidance Note (MGN) 280(M)
  - e. Manning of Pilot Boats – MGN 50(M)
  - f. The Port Marine Safety Code
  - g. The Guide to Good Practice on Port Marine Operations
  - h. 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 CHA'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 manned 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 CHA's 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 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 capsized / 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.
- 3.3 Dynamic and formal risk assessments should be undertaken to identify environmental limits of boarding and landing 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.
- 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 boarding/landing plan when on station.
  - b) The side for the pilot ladder 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 removal of man ropes
  - h) Masters should be asked to confirm that the pilot ladder is rigged in accordance with current IMO regulations; Convention for Safety of Life at Sea (SOLAS) Regulation V/23 and IMO resolution A 1045 (27) as amended.
  - i) The assisting pilot boat deck hand should visually inspect the condition of the ship's boarding arrangements including if it is safe to do so, placing weight onto the bottom of the ladder (while hooked on)
  - j) For ships with a freeboard of more than 9m, when no side door is available a combination arrangement is required.
  - k) The traffic in the vicinity and risks associated with interaction with these vessels should be considered.

The Pilot should ascertain that the embarkation 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 should 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 board or land.
- 4.11 All non-compliant or (potentially) unsafe ladders and boarding 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 The International Convention for Safety of Life at Sea (SOLAS) Regulation V/23 and IMO resolution A 1045(27) as amended. A copy of the poster showing IMO requirements and IMPA recommendations – “Required Boarding Arrangements for PILOT” 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.
- 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 boarding 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, should 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 a height to allow the pilot boat to lie alongside the pilot ladder section, with sufficient allowance for swell, such that no part of the pilot boat can contact the accommodation ladder. The lower platform of the accommodation ladder shall be a minimum of 5 metres above sea level.
- 5.10 When using a combination arrangement, the accommodation ladder should be secured to the ship's side. The pilot ladder must be firmly attached to the ship's side 1.5m above the accommodation platform. 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 boarding arrangements
  - 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.
  - 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.
  - 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. The safest 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 last 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 boarding operations are heightened.
- 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.
- 6.10 Before stepping on the ladder, the Pilot should establish that it is properly secured in accordance with SOLAS Regulation V/23 and IMO Res 1045 (27) as amended, by communication with the officer at the top of the ladder. 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 decision 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. Taking into account:
- a) The height of climb
  - b) The pilot ladder arrangement
  - c) Prevailing environmental conditions.
- If, under these circumstances, the pilot boat leaves the ship's side particular care must be made not to foul the ladder.
- 6.13 When the Pilot has a reasonably short climb, it may be appropriate for the pilot boat to remain alongside until the climb is completed, to 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, a heaving line should be used to lift it onto the ship, after the Pilot is clear of the ladder. The ship should be informed 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 taken 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 700mm to 800mm, in accordance with SOLAS regulations.

- 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.
- c) The deck condition including if the deck is awash.
- d) Vessel fendering.
- e) Interaction between the pilot boat and ship.
- f) The physical capability of the Pilot.

## **8. PILOT DISEMBARKATION OPERATION**

- 8.1 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, the Pilot should inform the master of:

- a) Anticipated movements of any surrounding ships.
- b) VHF channels to monitor and reporting points.
- c) Heading and speed requirement for the Pilot transfer.
- d) The presence of navigational dangers, tidal height and flow.
- e) Any advice on the passage plan to be used post Pilot transfer.
- f) The anticipated helm or engine movements required to facilitate transfer.
- g) VHF channels for communication with pilot boat.
- h) Any adjustments to the pilot ladder required by pilot launch.

- 8.3 On arrival at the pilot ladder area the Pilot should check the condition and security of the pilot ladder both visually and from the officer on station. Any non-compliance or (potentially)

unsafe arrangement should be reported to the CHA and MCA Marine Office immediately and the ladder must not be used until the non-compliance is rectified (see section 9). The Pilot should check their PPE is correctly donned. Any bag should be lowered to the Pilot boat by heaving line, once the Pilot is clear of the ladder, on the deck of the pilot boat. Refer to section 6.13.

- 8.4 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.
- 8.5 Before 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, taking into consideration the points made 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 BOARDING 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 as well as the person being transferred. All parties should be conversant with regulations and ensure safety is not compromised.
- 9.2 Issues with defective or non-compliant pilot boarding arrangements continue to be faced across the international port marine and pilotage industry. It is essential that deficiencies of defective or non-compliant pilot boarding 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 boarding arrangement. CHA's should ensure that pilots and pilot boat crew are familiar with local reporting arrangements and will always be fully supported to stop the boarding / landing operation on the grounds of safety if necessary.

- b) **Competent Harbour Authority.** CHA's 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: [PSC\\_Headquarters@mca.gov.uk](mailto:PSC_Headquarters@mca.gov.uk)
- e) **Marine Accident Investigation Branch.** The MAIB are also very keen to receive reports and are maintaining a database in order to monitor trends. Reports to MAIB can be submitted using the following email address: [ISO@maib.gov.uk](mailto: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 boarding 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 Should the pilot boat have difficulty leaving the side of a ship, the coxswain should communicate the problem to the master of the ship and request appropriate action be taken by way of helm and/or engine movements.

## 11. HEAVY WEATHER OPERATIONS

- 11.1 In heavy weather, pilot boats should proceed at a speed compatible with sea conditions and pilot boat design.
- 11.2 In fast pilot boats, use should be made of the seating provided in an appropriate manner, together with seatbelts where fitted.
- 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 where fitted.
- 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. 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

## 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 and emergency life support skills, including artificial resuscitation.
  - c) The ability to identify and provide treatment for cold-water shock, and hypothermia.
  - d) 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 3 years.
- 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 Additional specialist training in emergency response and immediate emergency care should also be considered 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 sighted 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/handholds placed between 70cm and 80cm apart together with a means of climbing over the bulwark. When transferring to an unmanned barge, the transfer arrangements should be closely inspected prior to use.
- 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.

## **16. PILOT TRANSFER BY HELICOPTER**

- 16.1 CHAs 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.




**INTERNATIONAL MARITIME ASSOCIATION**  
H.Q.S. "Wellington" Temple Stairs, Victoria Embankment, London WC2R 2PN Tel: +44 (0)20 7240 3973 Fax: +44 (0)20 7210 3518 Email: office@impahq.org

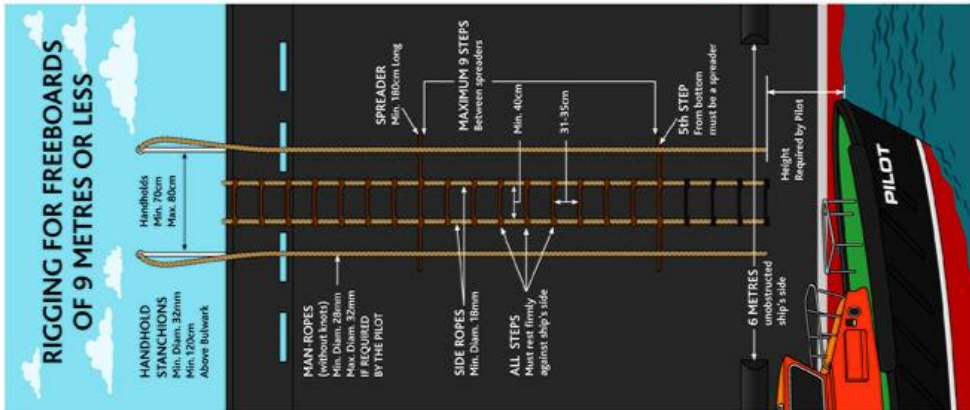
# REQUIRED BOARDING ARRANGEMENTS FOR PILOT

In accordance with SOLAS Regulation V/23 & IMO Resolution A.1045(27)  
**INTERNATIONAL MARITIME PILOTS' ASSOCIATION**

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



### RIGGING FOR FREEBOARDS OF 9 METRES OR LESS



**HANDHOLD STANCHIONS**  
Min. 1200mm  
Max. 1200mm  
Above Bulwark

**MAN ROPES**  
(without knots)  
Min. Diam. 20mm  
Max. Diam. 20mm  
IF REQUIRED BY THE PILOT

**SIDE ROPES**  
Min. Diam. 18mm

**ALL STEPS**  
Must rest firmly against ship's side

**SPREADER**  
Min. 180cm Long

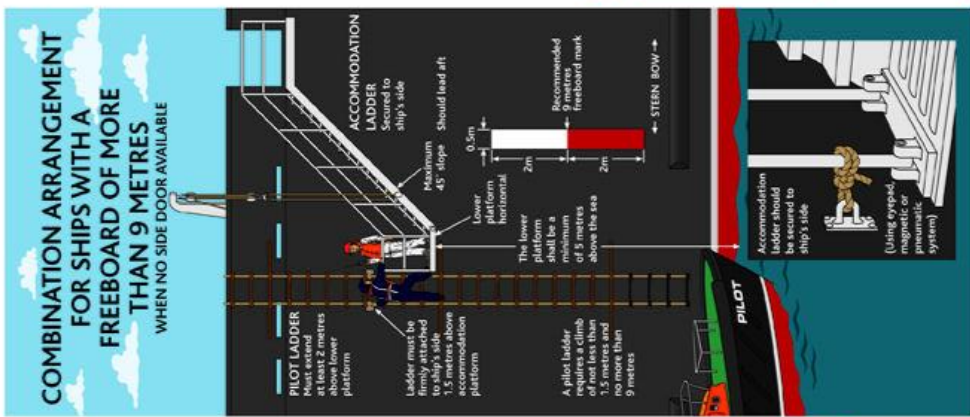
**MAXIMUM 9 STEPS**  
Between spreaders

**SHIP STEP**  
From bottom must be a spreader

**6 METRES**  
unobstructed ship's side

**Height Required by Pilot**

### COMBINATION ARRANGEMENT FOR SHIPS WITH A FREEBOARD OF MORE THAN 9 METRES WHEN NO SIDE DOOR AVAILABLE



**PILOT LADDER**  
Must extend at least 2 metres above the platform

Ladder must be firmly attached to ship's side 1.5 metres above accommodation platform

**ACCOMMODATION LADDER**  
Secured to ship's side

Maximum 45° slope - Should lead aft

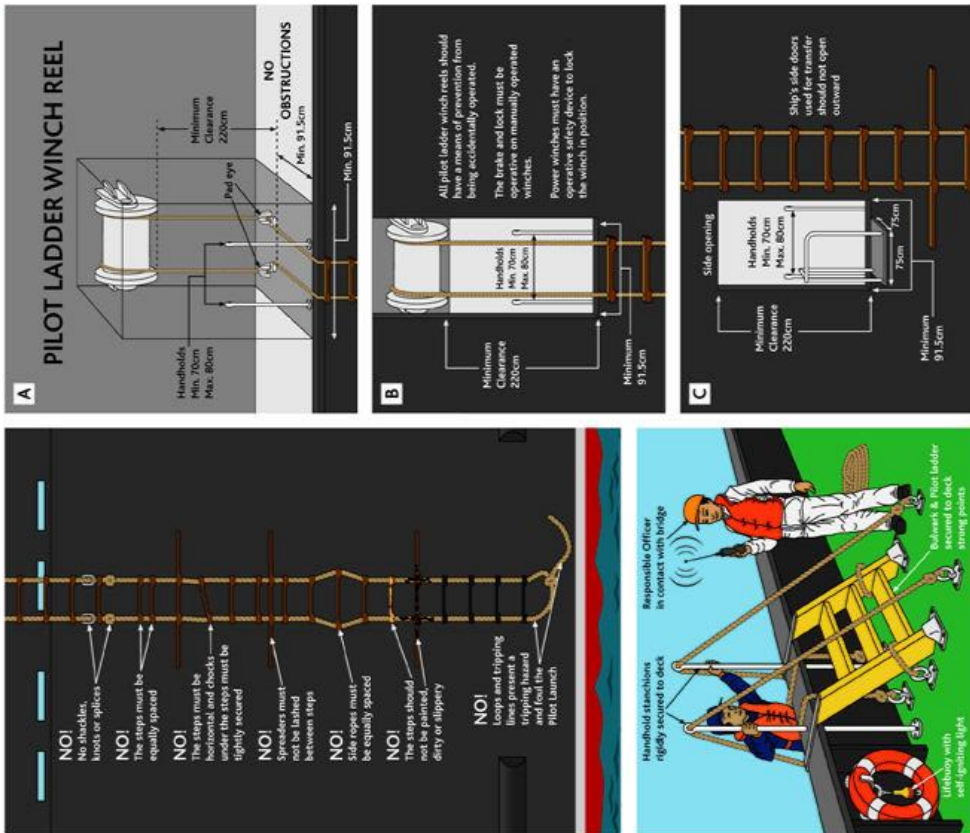
The lower platform shall be a minimum of 5 metres above the sea

A pilot ladder requires a climb of not less than 9 metres and no more than 9 metres

Recommended 9 metres freeboard mark

Accommodation ladder should be secured to ship's side (Using eye-bolt, magnetic or pneumatic system)

### PILOT LADDER WINCH REEL



**A**

**PILOT LADDER WINCH REEL**

Handholds  
Min. 70cm  
Max. 80cm

Pulley eye

Minimum Clearance 220cm

**NO OBSTRUCTIONS**  
Min. 91.5cm

Min. 91.5cm

**B**

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

The brake and lock must be operative on manually operated winches.

Power winches must have an operative safety device to lock the winch in position.

Handholds  
Min. 70cm  
Max. 80cm

Minimum Clearance 220cm

Minimum 91.5cm

**C**

Side opening

Handholds  
Min. 70cm  
Max. 80cm

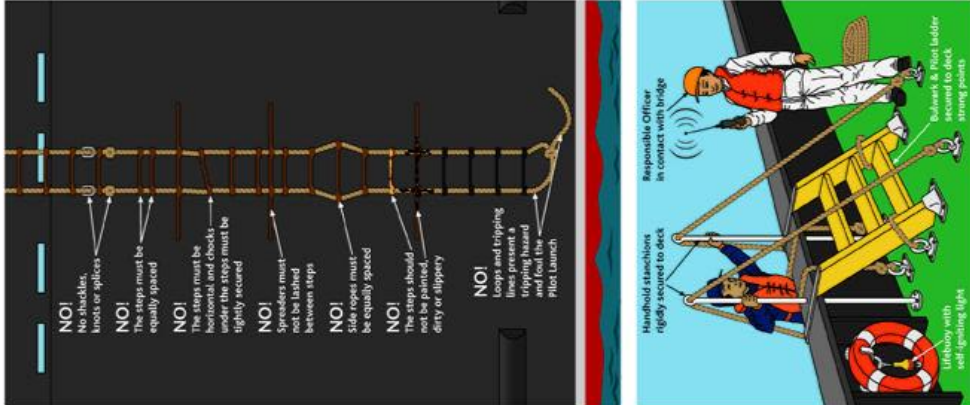
Minimum Clearance 220cm

75cm

75cm

Minimum 91.5cm

Ship's side doors used for transfer should not open outward



**NO!** No stanchions, knots or splices

**NO!** The steps must be equally spaced

**NO!** The steps must be horizontal and 400mm apart. The steps must be tightly secured

**NO!** Spreaders must not be lashed between steps

**NO!** Side ropes must be equally spaced

**NO!** The steps should not be painted, dirty or slippery

**NO!** Loops and tripping lines present a hazard to the forward and aft ladders

**PILOT LADDER**

Handhold stanchions rigidly secured to deck

Responsible Officer in contact with bridge

Bulwark & Pilot ladder secured to deck using points

Lifebuoy with self-igniting lights



## Annex 2

A2.1. All Pilots and pilot boat crew should wear appropriate PPE as identified by the duty holder. When selecting and issuing PPE, the duty holder should

- a) Choose products that are CE marked in accordance with the Personal Protective Equipment (Enforcement) Regulations 2018
- b) 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.
- c) CHA's must ensure that different items of PPE that must be worn together are compatible and effective
- d) Instruct and train people how to use PPE, tell them why PPE is needed, when to use PPE and what its limitations are

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 good 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.

- a) SOLAS water switched light
- b) Water switched or manual strobe light
- c) Facial splash guard
- d) Crotch straps or beaver tail
- e) Rear crew assist becket
- f) Locator beacon (PLB, AIS, EPIRB)
- 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 steel 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

## References

Pilotage Act 1987 – as amended

International Convention for Safety of Life at Sea, 1974 (SOLAS) Chapter V Regulation 23 (Ch V, Reg. 17 applicable before 1 July 2002)

International Maritime Organization (IMO) Resolutions A.960(23), A.1108(29), A.1045(27), MSC.1/Circ 1375 and MSC 90/22/1/corr.1

Merchant Shipping (Small Workboats and Pilot Boats Regulations 1998 (SI 1998 No. 1609)) – as amended

Port Marine Safety Code (PMSC) – as amended

PMSC Guide to Good Practice – as amended

International Maritime Pilots' Association (IMPA) – Required Boarding Arrangements for Pilots

United Kingdom Maritime Pilots Association – Personal Protective Equipment (PPE) and Clothing for Marine Pilots

Small Commercial Vessel Code – Maritime & Coastguard Agency (MCA)

The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations 1996

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

Merchant Shipping Notice (MSN) 1781 (M&F), as amended

Marine Guidance Note (MGN) 50 (M) – Manning of Pilot Boats

Marine Guidance Note (MGN) 432 (M) – Safety During Transfers of Persons to and from Ships

Marine Guidance Note (MGN) 436 (M+F) WHOLE-BODY VIBRATION: Guidance on Mitigating Against the Effects of Shocks and Impacts on Small Vessels

Small Vessels in Commercial Use for Sport or Pleasure, Workboats and Pilot Boats – Alternative Construction Standards (SCV Code) (MGN 280 M)

ICS Guide to helicopter/ship operations 4th Edition Appendix E & H – Marine Pilot Transfer

UKMPA – website – [www.ukmpa.org](http://www.ukmpa.org)

IMPA – website – [www.impahq.org](http://www.impahq.org)