

THE EMBARKATION AND DISEMBARKATION OF PILOTS

CODE OF SAFE PRACTICE

Revised March 2007



This new version of the Code has been prepared jointly by the Marine/Pilotage Working Group of the British Ports Association (BPA) and the UK Major Ports Group (UKMPG) and the Technical & Training Committee of the United Kingdom Maritime Pilots Association (UKMPA).

Its purpose is to act as a guide to safe practice and is commended to all those involved in the Pilotage service. 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 and training.

Additionally, a reference to the transfer of Pilots by helicopters has been included as this is becoming a more common and recognised practice.

The Code should be used primarily as a basis for safe operating procedures, which are capable of being adapted and augmented to suit particular locations or type of operation.

The Code recognises recent SOLAS and UK legislation and in particular the Port Marine Safety Code and the associated Guide to Good Practice.

This Code will assist Competent Harbour Authorities (CHAs) in forming the basis for establishing safe operating procedures which are specific to each area of operation and which are to be derived by appropriate risk assessment.

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FOREWORD

I am delighted to be asked to write the Foreword for this 2007 revised edition of the Code of Safe Practice for the Embarkation and Disembarkation of Pilots and commend it as essential reading for all those involved in the Pilotage Service.

The transfer of a pilot between pilot boat and ship is a risk that needs to be carefully managed. Too often accidents still occur to pilots for a variety of reasons. The purpose of this Code is to give guidance to the best of safe practice and improve the management of a perceived risk.

The idea for such a Code originated following yet another accident involving a pilot in the late 1980's when a forward thinking UK Marine Surveyor Alistair Struthers suggested that such a Code appeared to be necessary in the absence of any other guidance. I was tasked with writing the first draft and am pleased to see that much of my original thought has stood the test of time. The Code remains today a significant example of cooperation between the UKMPA, the British Ports Association and the UK Major Ports group and shows the benefits of enlisting the support and expertise of everyone involved.

This revision is a living document. It will need to reflect changing practices and changing experience. As a result, it has been decided not to print it but to disseminate it electronically so that all agreed revisions can be incorporated quickly and effectively. With the Codes inclusion into the Port Marine Safety Code and Guide to Good Practice the work done by the UKMPA Technical and Training Committee, past and present, was used as a bench mark by a steering group set up by the DfT and MCA to agree an industry generic standard.

This Code, I believe, has achieved their aim and they are to be congratulated but it remains now for you the reader to take careful note of the provisions of the code and use them as the basis for your safe operating procedures.

I would further like to make the reader aware of the references mentioned in the back of the code, especially the UKMPA PPE document, giving details on self checks that are required to be carried out on pilot Personal Protective Equipment especially the pilot coat. These documents, along with the code can be found on the Technical section of the UKMPA web site: www.ukmpa.org.

Peter J D Russell FNI

Retired London Pilot

1. THE PILOT BOAT

- 1.1 The Competent Harbour Authority must ensure that the pilot boat/boats in service meet the relevant requirements of:

The Merchant Shipping (Small Work Boat and Pilot Boat) Regulations 1998.
Small Vessels in Commercial Use for Sport or Pleasure, Workboats and Pilot Boats – Alternative Construction Standards (SCV Code) (MGN 280 M).
The Port Marine Safety Code, Sections 2.7.7. to 2.7.10.

- 1.2 Prior to leaving the berth, and at least once per watch, the pilot boat coxswain should ensure that their boat or 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.
- 1.3 On joining and 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.
- 1.4 On joining in harbour or at sea, the Pilot should also endeavour to familiarise himself/herself with the position and stowage of the safety equipment fitted to that particular pilot boat.
- 1.5 Because complying with 1.4 above is not always easy when landing during darkness, Pilots should ensure they are familiar with the normal position and stowage of such equipment on their pilot boats, or, where several different classes of pilot boat are in operation, the normal stowage for such equipment in that class of boat.
- 1.6 Where possible, 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 to be left ashore, should be properly stowed in a safe location in the boat.
- 1.7 The decks of the pilot boat should be clear of all unnecessary obstructions allowing clear passage and movement to the Pilot and crew. Where deck lighting is fitted to the boats, it should be tested in accordance with the CHAs procedures.
- 1.8 An up-to-date and accurate log should be maintained on board each boat. Entries should include details of all checks and, in particular, safety checks.
- 1.9 Pilots should be careful, not to hinder the coxswain of the pilot boat in his navigation of the boat, by impeding for example his view of the radar, AIS (if fitted) and use of the boat's VHF. This is of increased importance in conditions of reduced visibility.

2. LEAVING THE BERTH

- 2.1 The pilot boat should not leave a berth for sea unless it is, in all respects, ready for sea.
- 2.2 The pilot boat shall be manned in compliance with the Merchant Shipping Notice MGN 50 (M) dated December 1997.
- 2.3 The pilot boat shall not operate outside the terms of its MCA Pilot Boat Certificate, (PB1), which shall be clearly displayed on board.
- 2.4 CHAs should establish procedures such that communication between operational staff ashore and the pilot boat shall establish, as appropriate, that the pilot boat is leaving the berth on task, and has, on completion of task, returned to the berth. Additional procedures should be put in place to record the number of persons onboard the pilot boat at all times.
- 2.5 All Pilots and crew on the pilot boat shall wear appropriate protective clothing and buoyancy equipment as required and approved by the CHA. The UKMPA has made recommendations in this regard. There is further reference in Section 22.9 of the SCV Code. Pilots should be made aware of the potential dangers associated with wearing auto-inflate lifejackets within the pilot boat, and the associated difficulties that would arise in a capsize/ flooding evacuation situation.

3. BOARDING AND LANDING AREAS

- 3.1 CHAs have a responsibility to identify and evaluate areas for the boarding and landing of Pilots with regard to there being sufficient sea-room for manoeuvre, depth of water and, where possible, these areas sheltered from the more exposed elements of predominant winds and weather. Additionally, where possible, these areas should be located where there is little seabed gradient. It should also be recognised that boarding and landing areas can be affected by wash from passing traffic.
- 3.2 Such areas should be clearly defined and marked on the appropriate charts, and in nautical publications.
- 3.3 Where possible, the area chosen should not be at junctions or alter course points for shipping or in areas where intense shipping activity may be expected.

4. ON APPROACHING THE SHIP

- 4.1 CHAs should establish procedures whereby VHF radio contact is established between the pilot boat and ship (or VTS as appropriate) on the specified channel established by the CHA for that purpose and as 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 embarking/disembarking a Pilot, and after consultation with the Pilot involved, the pilot boat coxswain should advise the ship to be served on which side to rig the pilot ladder in order that the best lee conditions can be created for the approaching pilot boat. Due allowance should be made for the close proximity of other ships, their intentions and their expected wash effects.
- 4.4 The required distance between the lower step of the pilot ladder and the water needs also to be transmitted to the ship to be served along with the ideal speed required for the operation. The decision as to which side the Pilot will board shall be agreed and communicated to the ship to be served as early as possible. If there are several ships to be served, these ships may be given a sequence number from the coxswain of the pilot boat, or from VTS.
- 4.5 On approaching a ship from a near head on position and on the same side as the pilot ladder is rigged, care must be taken to ensure that 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. The use of the searchlight at night to check for incoming wash is prudent.
- 4.6 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 way in order to provide a sufficiently good lee before embarking/disembarking a pilot
- 4.7 During the approach to the ship, both the Pilot and assisting deck hand should remain in the wheelhouse of the pilot boat until the boat is at reduced speed, in the lee of the vessel and settled.
- 4.8 At night the pilot boat deck should be illuminated before anyone goes on deck.
- 4.9 During final approach, the pilot boat searchlight should be turned on to illuminate the pilot ladder and forward deck 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.
- 4.10 In adverse weather conditions, where risk to personnel as well as the launch may be significant the decision whether or not to place the pilot boat alongside the vessel to be served shall ultimately be the responsibility of the coxswain.

5. THE SHIP

- 5.1 After establishing contact with the pilot station/pilot boat, the ship should rig a pilot ladder or combination on the side requested, and in accordance with The International Convention for Safety of Life as Sea (SOLAS 2004) Chapter V Reg. 23 and Annex 21 IMO resolution A889 (21) (1999). These requirements are specified in a poster produced in accordance with IMO requirements and IMPA recommendations - "Required Boarding Arrangements for PILOT". These Regulations have been incorporated in the Merchant Shipping (Pilot Transfer Arrangements) Regulations 1999 and Merchant Shipping Notice MSN 1716.
- 5.2 Embarkation and Disembarkation operations shall not be undertaken on ships that do not fully comply with transfer operations as referred to in 5.1 above.
- 5.3 The pilot ladder should be rigged and secured at the appropriate pilot ladder 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 which could cause flooding.
- 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 supervising ship's officer shall be in direct contact with the bridge. On large ships or when the embarkation point is not visible from the bridge the communication must be by radio.
- 5.6 During the transfer the ship should maintain steerage way with the engines going ahead at a speed compatible with the ability of the launch to remain comfortably alongside. It must be recognised that turning propellers are an ever-present danger to persons involved in embarkation/disembarkation operations.
- 5.7 During an embarkation/disembarkation operation a ship should not be stopped in the water or her engines put astern, except in an emergency or when requested by the pilot boat coxswain.
- 5.8 When embarking/disembarking with a combination accommodation ladder/pilot ladder, the accommodation ladder must always lead aft. (SOLAS reg. 23 sect. 3.3.1.5)
- 5.9 The accommodation ladder must be rigged sufficiently high to allow the pilot boat to lie alongside the pilot ladder section, with sufficient allowance for swell such that no part of the upper works of the pilot boat can contact the accommodation ladder. This distance may be specified by the pilot boat coxswain.
- 5.10 Where possible it is recommended that the pilot ladder / accommodation combination should be loosely attached to the accommodation ladder at the transfer point and that the pilot ladder and the accommodation ladder should be attached to the ship's side where lugs are provided on the hull.
- 5.11 It is the responsibility of the vessel to ensure a safe working environment is provided for the pilot whilst embarked.

6. LOW FREEBOARD SHIPS

- 6.1 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 such embarkations/disembarkations 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 both rolling or pitching. The potential for damage to the pilot boat and injury to Pilot and deck crew is increased with the added possibility that the pilot boat may become hung up on the ship's gunwale.
- 6.2 Once the pilot boat is alongside all that may be required is a simple step across at an opportune moment but in cases where this is not possible a different approach is required. In practice this involves looking for a suitable access point and waiting for a safe opportunity.
- 6.3 The Pilot should not stand outside the rail of the ship waiting for an opportunity to transfer.
- 6.4 Additional consideration should be given to the following points:
- The ladder must be rigged on the flat of the ship.
 - Interaction and pressure waves between the pilot boat and the ship, near the ends of the ship, increase the difficulties of manoeuvring the pilot boat safely when alongside. Particular care should be taken as the flare of the ship's bow or turn of the bilge may overhang the deck of the pilot boat.
 - Embarkation/disembarkation using a raised poop cannot always be clearly seen from the bridge of the ship being served.
 - In view of the increased difficulties and time taken when embarking/disembarking from ships with low freeboard, increased consideration should be given to the position, course and speed of the operation to ensure that the ship is not running into danger. This may cause delays to the embarking and disembarking of other ships.

7. PILOT EMBARKATION OPERATION

- 7.1 The decision whether or not to put a pilot boat alongside a ship is the responsibility of the coxswain. In all cases the decision as to whether or not to board the ship must be the responsibility of the Pilot involved.
- 7.2 When on deck both the deckhand and the Pilot must wear a life preserver as required and approved by the CHA and worn in accordance with manufacturers instructions.
- 7.3 It is strongly recommended that whilst on deck the deckhand is secured to the pilot boat by an approved method which does not restrict his freedom of movement.
- 7.4 Provided that the ladder has been rigged at the correct height, the deckhand should proceed forward, up the safest side of the pilot boat side deck (normally the outboard side), and be ready to lift the end of the ladder clear as the pilot boat comes alongside the ship. It is important that the ladder does not become trapped between the ship and the pilot boat because this may result in excessive strain on the ladder and possible damage to the ladder and/or the boat.

- 7.5 The Pilot should proceed to the ladder after agreeing with the coxswain the side of the boat to be used. In considering the safest route from cabin to the ladder the following should be taken into account:
- The width of the deck space on the pilot boat.
 - The location and usability of the safety rail.
 - If the inside route is taken the dangers 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 exposure to the elements especially when a good lee is not possible or there is passing traffic if the outside route is used.
 - The heel of the pilot boat during transfer.
 - The proposed transfer location on the side deck.
 - The ability of the coxswain to view the transfer operation.
- 7.6 Tripping lines should not be attached to the lower end of the ladder unless agreed at the time between the pilot boat and ship. If this is agreed then the line should:
- be attached to the forward side of the ladder above the black rubber rungs.
 - be secured in such a way that it cannot foul the ladder, Pilot or pilot boat.
 - not be used to lift the ladder when the pilot boat is manoeuvring to come along side.
 - not be permanently attached to the ladder, and be easily detachable.
- 7.7 Where the ladder's height needs adjusting, the coxswain shall tell the ship. The Pilot and deckhand shall be recalled to the wheelhouse while the ladder is being adjusted. The embarkation should not be attempted again until receiving confirmation the ladder is secure.
- 7.8 In adverse weather conditions the risk associated with boarding operations are heightened. Neither the Pilot nor the deckhand should proceed from the cabin until the pilot boat is in the lee of the ship being served and permission to proceed with embarkation has been granted by the coxswain.
- 7.9 Before the Pilot steps onto the ladder he should establish that it is properly secure, 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.
- 7.10 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 estimation of the Pilot a safe boarding cannot be affected, then the attempt should be abandoned.
- 7.11 When the Pilot has a reasonably short climb, it is considered better for the pilot boat to remain alongside while the climb is completed to ensure the pilot boat does not foul the ladder when leaving the ship's side.

- 7.12 With a long climb, the Pilot may prefer the pilot boat to move away from the ship's side in order to avoid serious injury in the event of a fall. Such a decision should be made as a result of consultation between Pilot and coxswain prior to the pilot leaving the cabin. If, under these circumstances, the pilot boat leaves the ship's side particular care must be made not to foul the ladder.
- 7.13 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 shall be passed to the ship at the earliest opportunity, to allow time for rigging, or removal. (SOLAS Chapter V reg 23 sec. 7)
- 7.14 When boarding by hoist, a ladder must be rigged adjacent to the hoist and available for immediate use in the event of possible mechanical failure. (SOLAS Chapter V reg 23 sec. 6.5)
- 7.15 When boarding by hoist, the Pilot should climb the flexible short pilot ladder into the rigid upper section before indicating that he is ready to be hoisted.
- 7.16 The pilot boat should move away from the ship once the Pilot enters the hoist cage.
- 7.17 Great attention must be paid by the pilot not to allow any part of his clothing or equipment to become entangled in the hoist mechanism as the hoist reaches the deck position.

8. PILOT DISEMBARKATION OPERATION

- 8.1 As with embarkation, communication should be established between the ship to be served and the pilot boat and arrangements made in advance.
- 8.2 Before leaving the bridge, the Pilot should inform the master of the anticipated movements of any surrounding ships, of any dangers and the requirements for the lee to be maintained until the Pilot is safely landed and the pilot boat clear of the ship's side.
- 8.3 Before leaving the bridge, the Pilot should inform the master that no immoderate helm or engine movements should be made until the pilot boat is clear of the ship. he/she should also verify with the Master that the pilot ladder has been properly secured. On arrival at the pilot ladder area he/she should further check the condition and security of the pilot ladder both visually and from the officer on station
- 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 further to go to the deck of the pilot boat. As the Pilot is stepping from the ladder the deckhand 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 communication between the deckhand and Pilot will be necessary.
- 8.7 When on deck both the deckhand and the Pilot must wear buoyancy aids as required and approved by the CHA and worn in accordance with manufacturers instructions.

- 8.8 It is strongly recommended that whilst on deck the deckhand is secured to the pilot boat by an approved method which does not restrict his freedom of movement.
- 8.9 It is recommended that the Pilot make his way to the cabin followed by the deck hand. The deck hand may be required to receive the Pilot's bag from above or to secure a tripping line to the ladder.
- 8.10 Once clear of the ladder the deck hand shall check that the decks are clear and safe before proceeding back to the cabin. The coxswain shall not leave the lee of the ship until all personnel are safely in the cabin. Once clear of the ship, the coxswain shall call the ship on VHF and inform him that the pilot boat is clear and that the ship can resume its passage.
- 8.11 The decision as to whether or not to disembark from a ship to the pilot boat rests entirely with the Pilot involved.

9. LEAVING THE SHIP'S SIDE

- 9.1 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 that appropriate action be taken by way of helm and/or engine movements.

10. HEAVY WEATHER OPERATIONS

- 10.1 In heavy weather pilot boats should proceed at a speed compatible with sea conditions and pilot boat design.
- 10.2 In fast pilot boats, maximum use should be made of the seating provided, together with seatbelts where fitted.
- 10.3 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.
- 10.4 Loose equipment or stores should not be carried unless properly stowed.
- 10.5 In adverse weather conditions the risk associated with boarding operations are heightened. Neither the Pilot nor the deckhand should proceed from the cabin until the pilot boat is in the lee of the ship and permission to proceed with embarkation has been granted by the coxswain.

11. POOR VISIBILITY

- 11.1 The pilot boat must be allowed extra time on task in order to proceed at a safe speed in poor visibility.
- 11.2 In all cases of impaired visibility the deckhand should provide lookout and assistance until the coxswain is aware of his surroundings. When leaving a vessel the coxswain will, as far as practicable, remain alongside the ship until the deckhand can keep a lookout.
- 11.3 Pilot boat radar should be operational and used where fitted.
- 11.4 Pilot boat AIS should be operational and used where fitted.
- 11.5 Pilot boat fog signal shall be operational and sounded in accordance with Colregs.
- 11.6 Ascertain, by VHF contact with the ship to be served, the ship's position, course, speed and position relative to other ships or navigational marks.

- 11.7 The coxswain shall navigate in accordance with the Colregs, especially Rule 19. It is recommended that whenever possible a ship to be served is approached round its stern and not across the bow.

12. MAN OVERBOARD PROCEDURES

- 12.1 In the event of a man-overboard incident the first essential is to locate the casualty and maintain him/her in sight; a task to which all crew and Pilots on board must devote their whole attention.
- 12.2 Coastguard, Port Authorities and shipping should be informed as soon as possible, but lengthy communications must be avoided. Speed of sighting and recovery remain the priority.
- 12.3 Once the casualty is located, and as the pilot boat is being positioned, retrieval equipment should be prepared and deployed as appropriate.
- 12.4 Recovery should be made as per well-practised drills. The method will depend on the equipment carried and the weather conditions.
- 12.5 A full report of the man-overboard incident is to be submitted in accordance with the CHA procedures.

13. TRAINING FOR RETRIEVAL OF CASUALTIES

- 13.1 The success or failure of the rescue is related directly to the expertise of the pilot boat crew and Pilots and their familiarity with the recovery equipment, training in the treatment of hypothermia and artificial resuscitation.
- 13.2 Retrieval drill for pilot boat crew and check listing of recovery equipment shall be carried out on a regular basis to ensure a satisfactory level of competence with an appropriate logbook entry.
- 13.3 Pilots should all be familiar with the recovery equipment on their pilot boats and during their initial training should receive man-overboard recovery training.
- 13.4 All sea going pilotage staff should receive training in resuscitation and the treatment of hypothermia to standards in MGN 50 (M) or Basic Sea Survival Certificate.

14. EMBARKATION/DISEMBARKATION OF OPERATIONS INVOLVING NON-REGULAR SHIPS

- 14.1 The CHA, in conjunction with the Pilot, is to risk assess any pilot transfer operations involving non-regular or unusual ships.
- 14.2 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. PILOT TRANSFER BY HELICOPTER

- 15.1 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.

References:

Pilotage Act 1987

Port Marine Safety Code (PMSC)

PMSC Guide to Good Practice

IMPA Required Boarding Arrangements for Pilots

United Kingdom Pilots Association - Personal Protective Equipment (PPE) and Clothing for the Marine Pilot

The Merchant Shipping (Small Work Boat and Pilot Boat) Regulations 1998.

The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations 1996 (MSN M1642/Colreg 1).

Merchant Shipping (Pilot Transfer Arrangements) Regulations 1999.

International Convention for Safety of Life at Sea (SOLAS 2004).

Merchant Shipping Notice MSN 1716

Merchant Shipping Notice MGN 50 (M)

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 3rd edition May 1989.

IMPA Shipmaster's guide to pilot transfer by helicopter (1990)

OPITO Offshore Petroleum Industry Training Organisation.

**British Ports Association
Africa House
64-78 Kingsway
London WC2B 6AH**

**Tel: 020 7242 1200
Fax: 020 7430 7474**

**UK Marine Pilots'
Association
Transport House
128 Theobald's Road
Holborn
London WC1X 8TN**

**Tel: 020 7611 2570/2571
Fax: 0207611 2757**

**UK Major Ports Group
2nd Floor, Africa House
64-78 Kingsway
London WC2B 6AH**

**Tel: 020 7430 7460
Fax: 020 7430 7461**