



QUEEN'S HARBOUR MASTER PORTSMOUTH

PILOTAGE AND TOWAGE DIRECTIONS (DEFENCE RELATED ACTIVITIES)

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QHM PILOTAGE AND TOWAGE DIRECTION IS APPROVED FOR
USE THROUGHOUT THE DOCKYARD PORT OF PORTSMOUTH

QHM PORTSMOUTH

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QUEEN'S HARBOUR MASTER

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INTRODUCTION

This Pilotage and Towage Direction document is issued by the Queen's Harbour Master (QHM) Portsmouth as part of the QHM Portsmouth Safety Management System. It is a live document and will be re-issued periodically as required.

This document is also part of the wider Solent civilian harbours' Competent Harbour Authority (CHA) construct and is complementary to the civilian Pilotage and Towage Directions issue by Portsmouth International Port (PIP), ABP Southampton, Cowes Harbour Authority, and Langstone Harbour Authority, all of whom license civilian pilots to conduct acts of pilotage through the waters of the Dockyard Port of Portsmouth to and from their own ports. On occasions when naval vessels transit the waters of the Dockyard Port of Portsmouth to the aforementioned adjacent civilian ports (i.e. UK SSNs visiting Southampton) they will be subject to all appropriate pilotage directions and early liaison with QHM Portsmouth staff will be required to ensure that an appropriate pilotage construct has been discussed and agreed ahead of the vessel's arrival.

PILOTAGE AND TOWAGE DIRECTIONS

1. Pilotage and Ship handling

The following vessels are subject to compulsory Pilotage and are to embark an Admiralty Pilot when entering and leaving harbour:

- a. Royal Naval Warships of 150m or more in length.
- b. Royal Naval Warships of 48m – 150m length require an Admiralty Pilot unless a MOD PEC has been acquired as per DIN 2020DIN03-2019.
- c. All Foreign Warships.
- d. All Submarines.
- e. All Royal Fleet Auxiliaries.
- f. All Commercial vessels bound to or from a Naval Base berth.
- g. Any vessel with a defect such that QHM considers allocation of an Admiralty Pilot and/or tugs is a sensible risk mitigation measure.
- h. All vessels entering or leaving a Lock or Dock or moving within a Non-Tidal Basin.
- i. Foreign navies' ships and submarines proceeding to an anchorage within the waters of the Dockyard Port of Portsmouth.
- j. With the exception of Type 45 Destroyers, vessels over 150m in length and larger foreign warships proceeding to/from MOD berths or anchorages will be required to take an Admiralty Pilot from the extremities of the Dockyard Port (effectively Nab Tower in the east and Prince Consort Buoy in the west).
- k. Military vessels other than RN warships not proceeding to MOD berths and transiting the Solent must comply with the pilotage directions of the appropriate CHA and liaise directly with such a CHA to discuss pilotage requirements (eg ABP Southampton for transits north of Cowes).

In addition to the above requirements, QHM may instruct any ship to embark a Pilot if it is considered necessary to protect the port or for safety reasons. Also note that any ship may request an Admiralty Pilot for any move giving as much notice as possible. For out of hours activity, there is normally one Duty Pilot at 2 hours notice. **Use of tugs other than in push/pull mode or secured by a single hawser is only to be undertaken with an Admiralty Pilot embarked.**

2. Remote Pilotage

This is intended to be used for a “follow my lead” operation where the requirements for shelter from sea or wind conditions force the embarkation or disembarkation of pilots close to or north of Outer Spit Buoy but where pilotage further south is required.

3. Pilotage Exemption Certificates (PEC’s)

A PEC may be granted at the discretion of the CHA and with the agreement of QHM or his representative to the Master of a non-tidally constrained MoD contractor’s vessel. The qualifying criteria for any specific PEC will be tailored to the vessel concerned and operating area within the DPoP. The PEC will be valid for the duration of the task or a maximum of 12 months for the qualifying Master for the vessel concerned only.

4. Under Keel Clearance (UKC)

When underway within the waters of the Dockyard Port of Portsmouth RN and foreign warships and RFAs are to have not less than 2 metres of water under the keel. When alongside, at anchor or secured to a buoy this may be reduced to 1 metre except for single hull tankers where a minimum UKC of 2.0 meters is to be maintained.

5. AIS

Unless a specific operational security condition is in force for an RN/RFA vessel or visiting foreign warship AIS is to be set to transmit ship’s name within the Dockyard Port of Portsmouth and with a unique MMSI. Where operational rules allow, vessels are strongly urged to use own names within the Nab VTS area (12nm from Nab Tower) to assist in traffic management around the often busy Nab pilot boarding areas.

6. Weather Effects.

Portsmouth’s position in relation to the prevailing Atlantic south westerly winds coming up the channel and its exposure to the funnelling effect in the Eastern Solent during Easterly blows means that adverse weather conditions can significantly affect maritime operations within the DPoP. This does not mean that operations need necessarily be halted but the effects of the weather must be carefully assessed and mitigated wherever necessary. The following is offered as guidance; specific advice on conditions should be sought from QHM staff. Strong winds from any direction will affect the berthing and movement of vessels with significant freeboard:

- i. For large ships (e.g. RFA, LPD, LPH, Maersk Rapier) a steady wind of 25 Knots or more, or a lower wind speed with gusts of 25-30 Knots or more, will normally result in postponement of the movement. The limiting factors are steerage way in the harbour entrance and, for those vessels departing, developing sufficient speed, and hence steerage way, before being set down in the narrow confines of the harbour.
- ii. For cold moves winds above 25 - 30Kn, depending on direction, are likely to result in postponement; for cold moves into or from a lock, dock or basin, the limit will normally be 20Kn but may be increased if there is a significant W or E component.
- iii. Operational limits for QUEEN ELIZABETH Class (QEC) aircraft carriers are being developed as experience builds. Precise limits are classified, but it is unlikely that the vessels will move in strong winds.

7. **Amphibious Operations.**

Landing Craft (LC) Operations. Other than for routine passage to, from or within The Dockyard Port of Portsmouth, LC operations and exercises within DPoP must be discussed and agreed with QHM staff at least a week in advance in order that other mariners can be informed.

8. **Towage**

These towage directions are subject to amendment when necessary by QHM, as advised by the Chief Admiralty Pilot, to reflect adverse environmental or other conditions, or to account for vessel defects.

- a. Escort Towage. Escort Towage for Solent and port entry channel transit is not normally required, except for SSN and QEC moves, but will be allocated if vessel defects, weather or other circumstances indicate that its use would be appropriate. Table 1 below shows the normal allocations for UK vessels by type/class, based on use of either or a combination of 2509 or 2909 ASD/ATDs (40 tonne bollard pull) or 2009 ASDs (20 tonne bollard pull). Where shown as “passive”, tugs will generally not be secured but deployed as agreed by the Pilot and CO/Master. For classes of vessel not specified, including non-UK naval or auxiliary vessels, tugs will be allocated according to vessel type and the closest equivalent class shown below, or as required by QHM/Chief Admiralty Pilot.
- b. During Submarine Entries Once tugs are in attendance the submarine is to be prepared to take lines and then be in a position to secure them at short notice as soon as it is considered safe by the submarine CO for personnel to work on the casing (see Note). As a rule the decision to rig to receive tugs is to be made in consultation with the pilot, and only in exceptional circumstances would this not occur. Likewise, during departures careful consideration is to be given when submarine bollards are lowered and personnel cleared from the casing. This decision will always be a balance between navigational safety and the safety of personnel on the casing.

Note. As long as the CO considers it is safe to keep personnel on the casing.

- c. Passive Escort Towage for SSNs. Escort tugs for SSNs will take up close positions either side of the submarine. During course alterations, the tugs will adjust their positions with the outboard tug moving ahead and the inboard dropping slightly back, then returning to the previous position once the submarine has steadied. Submarines are to be ready at immediate notice to secure tug lines.
- d. Harbour (Berthing/Unberthing) Towage. Vessels subject to escort towage will be allocated the same tugs for berthing or unberthing, with additional tugs where considered necessary by QHM or Chief Admiralty Pilot or as indicated in Table 2 below. Vessels not subject to escort towage will be allocated tugs as indicated in Table 2. For classes of vessel not specified, including non-UK naval or auxiliary vessels, tugs will be allocated according to vessel type and the closest equivalent class shown below, or as required by QHM/Chief Admiralty Pilot.

Table 1 - Tug Allocation for Escort Towage.

| Vessel Type | Class | Number of Tugs | Configuration | Remarks |
|--|-----------------|---|---|---|
| QUEEN ELIZABETH Class Aircraft Carrier | QEC | Escort Nab to OSB to Nab – 4 Entry to Naval Base - 6 | Bow, Stern (2), 4 th passive escort/ redundancy, 2 in push mode for harbour phase | Configuration tailored to conditions on day and precise move requirements. Tugs secured from Dean Tail. For entry, to be secured before vessel committed to the approach channel. |
| Deep draught or large windage area single screw auxiliary. Large single hull tanker. | AFSH, AOR, Wave | Entry to Naval Base – 3/4. | Bow, Stern and secured alongside A/R | For entry, to be secured when vessel committed to the approach channel. |
| Large windage area, conventional twin screw auxiliary | ARGUS | Entry to Naval Base – 3. | Bow and Stern; 3 rd passive | For entry, to be secured when vessel committed to the approach channel. |
| Large windage area, azipod auxiliary | Bay | Entry to Naval Base – 3. | Bow; 2 nd and 3 rd passive | For entry, to be secured when vessel committed to the approach channel. |
| Large windage twin screw capital warship | LPD | Entry to Naval Base – 3/4. | Bow; Stern 3 rd and 4 th passive | A 4 th tug will be allocated if required for berthing |
| Large twin screw warship | T45 | Entry to Naval Base - 3 | Bow, Stern, Shoulder | Secured as bow tug. Stern tug A/R |
| Twin screw FF/DD | T23 | Entry to Naval Base - 2 | Bow, Stern | |
| Minor War Vessel | MCMV | Entry to Naval Base - 1 | Bow or passive as required | Will normally be a 2009 or SUTT allocated |
| Nuclear Submarine | SSN | 2 | Passive | Note: Escort towage for SSN moves is mandatory |

Table 2: Berthing/Unberthing Tug Allocations.

| Vessel Type | Class | Number of Tugs | Configuration | Remarks |
|-------------|-------|----------------|---------------|---------|
|-------------|-------|----------------|---------------|---------|

| | | | | |
|---|-------------|-----|--|---|
| QUEEN ELIZABETH Class Aircraft Carrier | QEC | 6 | Bow, Stern (2), 3 in push mode for harbour phase. Bow, Stern (2) and passive/ redundancy escort to Nab or as agreed with CO. | Configuration tailored to conditions on day and precise move requirements. |
| Large windage area, conventional twin screw auxiliary | ARGUS | 4 | Bow, Stern and secured alongside. Or push/pull shoulder/quarter as directed. | |
| Large windage area, azipod auxiliary | Bay | 3 | Bow and Stern 3 rd passive | A 4 th tug will be allocated if weather conditions require it. |
| Large windage twin screw capital warship | LPD | 3/4 | Bow and Stern and push/pull shoulder/quarter as directed | |
| Large twin screw warship | T45 | 2 | Bow and Stern | A 3 rd tug will be allocated if weather conditions dictate. |
| Twin screw FF/DD | T23 | 2 | Bow and Stern | |
| Minor War Vessel | MCMV/ P2000 | 1 | Passive as required | Will normally be a 2009 or SUTT, a 2 nd tug will be allocated if required. |
| Nuclear Submarine | SSN | 2 | Bow and Stern | A 3 rd tug will be allocated if weather conditions indicate a requirement. |

9. Towing in Severely Restricted Visibility.

Towing in severely restricted visibility (for guidance, when visibility is 200m or less) presents hazards to the tugs over and above those encountered in normal conditions, but can be achieved safely if proper precautions are taken. In Portsmouth, the demands of navigation for vessels requiring towage, including when tugs are in passive escort (e.g. SSNs), are such that the movement is likely to be postponed due to restricted visibility before it becomes a particular issue for towage. Other circumstances (eg operationally essential or an emergency) may however drive consideration of such movements in poor visibility. For movements wholly within the harbour, visibility for towage rather than navigation is likely to be the limiting factor. Specific risk assessments are required for moves involving towage in

severely restricted visibility. QHM, DQHM, CAP, Commanding Officer/Master and the Tug Masters must be involved in the process. A Tug Master retains the right not to secure for towing if he is not content that risks have been appropriately mitigated; should this be case, the Tug Master concerned must make this clear to the Pilot and CO/Master before the move is commenced. The risk assessment will consider:

- a. Whether the movement is essential.
- b. Tidal and other environmental conditions.
- c. The capabilities of the vessel and tugs involved and experience of their ship's company/crews.
- d. The state of VTS equipment and navigation aids.
- e. The berth location and adjacent vessels.
- f. The minimum and maximum speeds necessary for the movement.
- g. Contingency plans including the possibility of a tug disengaging due to the Tug Master considering the tug or crew to be in danger.

An Admiralty Pilot is always to be embarked for movements in severely restricted visibility when tugs are used in berthing or unberthing. In such moves, vessel speeds when tugs are secured are to be kept to the minimum, which may include stopping the vessel before berthing or after slipping in order to secure or let tugs go safely.

10. Cold Moves

Tug allocation for cold moves will be directed by QHM through the CAP, as the authority responsible for the conduct of a cold move in the Dockyard Port. Certain Locking and Docking scenarios require additional tugs for transition from tidal to non-tidal waters and vice versa. Details can be provided by CAP.

11. Pilotage in SOLFIRE Emergencies

The Commodore Clipper incident (2010) brought into focus the complex pilotage relationships that stem from the co-location of Portsmouth Naval Base and the commercial port and raised questions about when commercial and Admiralty pilots need to embark upon vessels in distress and when they do not. Detailed guidance on Admiralty and Commercial pilot employment during emergencies can be found in the SOLFIRE manual.

There are however two factors that need to be highlighted here. Firstly, in an emergency that involves a risk to life and where the vessel has to enter port, the entry should not be unduly delayed because the right type of pilot cannot be embarked in time. If necessary the ship can be brought into the harbour and the correct type of pilot embarked inside the harbour.¹ The second factor is that while a pilot is often the best choice to be a Forward Control Co-ordinator in accordance with the SOLFIRE C2 arrangements, others can also fulfil this role if required.

¹ Admiralty pilots are not licensed to conduct moves in the commercial port.

**QHM PORTSMOUTH PILOTAGE AND TOWAGE DIRECTIONS
(DEFENCE RELATED ACTIVITIES)**

- A. Dockyard Ports Regulation Act 1865 (dated 6th July 1865 as transcribed from Treasury Solicitors Department document 25th Nov 1999).
- B. Dockyard Port of Portsmouth Order 2005 made on 7th June 2005 (Statutory Instruments 2005 No.1470).
- C. QHM Portsmouth Safety Management System.
- D. BRd 9424 Chapter 2 (Fleet Operating Orders).
- E. NP 167 Tidal Streams in the Approaches to HM Naval Bases Portsmouth Chapter.
- F. Portsmouth QHM Standing and Harbour Control Orders.