THE DOCKYARD PORT OF PORTSMOUTH

ANNUAL REPORT 2023





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KINGS HARBOUR MASTER PORTSMOUTH

Foreword by Naval Base Commander Portsmouth



Cdre J E Voyce OBE ADC – Duty Holder for the Dockyard Port of Portsmouth

Since June 2022 I have held the roles of Naval Base Commander Portsmouth and Duty Holder for Marine Safety for the Dockyard Port of Portsmouth. The scale of the Dockyard Port, and the variety of activity it hosts is remarkable. Some of the largest merchant ships in the world pass through the area on their way to and from Southampton, and the Solent is a recreational and commercial hub for all manner of water activity, which must safely co-exist. Portsmouth is one of busiest ports in the country, with users including warships, ferries, commercial vessels, fishing vessels and a large number of recreational craft of all descriptions. There is rarely a quiet moment, and the waters are often extremely busy.

Portsmouth is home to a large proportion of the Royal Navy's surface vessels, including the aircraft carriers *HMS Queen Elizabeth* and *HMS Prince Of Wales*, together with the Type 45 Destroyers, several Type 23 Frigates and 15 smaller warships. As Naval Base Commander, the support of the Royal Navy is a key focus but as the Duty Holder for the Dockyard Port of Portsmouth I have a wider responsibility for maritime safety for all users of the area, and the King's Harbour Master (KHM) and his team are charged with delivering this on my behalf.

In order to deliver my remit, I have a strong commitment to the Department for Transport's Port Marine Safety Code (PMSC) as a template for safe operations within the Dockyard Port; this is a requirement of Defence Maritime Regulations. To deliver compliance with the PMSC, KHM operates a Marine Safety and Environmental Management System, built on detailed risk assessments and control measures, competent personnel and a comprehensive marine safety plan, backed up by a system of compliance audits.

This report covers activity in the port during 2023, including details of traffic volumes, key events and headlines and a summary of the marine incidents recorded throughout the port. Having received the port's compliance audit written by the Designated Person, I am assured that the port is fully compliant with the PMSC. As such, I am confident that the Dockyard Port of Portsmouth is a safe environment for mariners, in addition to providing strong support to the Royal Navy and its operational output. I commend this report as a record of the port's 2023 activity.

Introduction and Aim

1. The 2023 Dockyard Port of Portsmouth (DPP) annual report aims to demonstrate the DPP's performance in conforming to the Defence Maritime Regulations for Health, Safety and Environmental Protection¹ (DMR Regs). A key requirement of these regulations (Regulation 701) is for MOD owned or operated ports and marine facilities to comply with the Port Marine Safety Code (PMSC)² while meeting Defence needs by maintaining core operational outputs.

2. Formal assessment of compliance to DMR Regs and the PMSC is demonstrated by internal First Party Assurance Audits (1PAA) and external Second Party Assurance Audits (2PAA) by the port's Designated Person (DP), Captain Port Operations. This is complemented by other audit activity, including by Trinity House as the General Lighthouse Authority and the Maritime and Coastguard Agency (MCA) regarding the compliance of the Oil Spill Response Plan and annual reports of Maritime Pollution (MARPOL) incidents. Finally, the King's Harbour Master (KHM) briefs the Duty Holder, the Naval Base Commander, monthly on activity in the port with a focus on marine safety.

3. For the KHM department, the year was one of steady operational activity, with a few particularly busy periods. A number of KHM staff members have left the MOD this year; work on filling gaps is ongoing. This will be my final report; I handover to Graham Bishop on 15 March 2024, who will then assume duties as the King's Harbour Master.

4. Despite carrying vacant positions, the department maintained operational outputs throughout the year, facilitating a safe and effective port, available for the Royal Navy and the large number of non-military port users, both commercial and recreational. Key operational highlights were ongoing support to both Queen Elizabeth class aircraft carriers which included a particularly busy period during November, and a number of visits by foreign warships.

Marine Safety Plan

5. The KHM Portsmouth Marine Safety Plan was reviewed in 2023 and sets out how the port aims to develop its Safety and Environmental Management System (SEMS) over the next two years. Much of the work achieved in 2023 was in response to the 2PAA conducted in May 2022 (a 2PAA was also conducted in November 2023, in which the department was assessed as fully compliant with the PMSC). Reviews of individual risk assessments were conducted, with the assistance of appropriate stakeholders. A key aim of the Marine Safety Plan was to refresh the hazard identification process last completed in 2016. This was initially planned for 2020 but was postponed due to COVID and was conducted in February 2023, verifying the current hazards in the port but also identifying some areas that needed more attention, resulting in several new risk assessments being produced.

6. Risk management processes are well-developed in the port, with a mature and wellunderstood SEMS. Use of the MARNIS risk management and incident record system underpins this, and KHM staff regularly review reported incidents, re-visiting risk assessments and improving risk control measures where appropriate.

7. There is a well-established process of third-party event organisers contacting KHM to discuss their events. Event plans and risk assessments covering around 829 individual marine events were shared in 2023.

Dockyard Port Headlines

¹ Defence Safety Agency (DSA) 02-DMR - Defence Maritime Regulations for Health, Safety and Environmental Protection ("DMR Regs").

² The Port Marine Safety Code (PMSC) is a Department for Transport publication, with the latest version published on 3 November 2016. Its accompanying Guide to Good Practice on Port Marine Operations (GtGP) was updated on 4 April 2018.

8. **Port Emergency and Contingency Plan.** KHM's Port Emergency and Contingency Plan was updated and re-published in October 2023. This was in response to changes in the wider pan-Solent emergency response capability with the introduction of the Solent Maritime Framework agreement which replaced the SOLFIRE emergency plan. The Port Emergency and Contingency Plan was validated by an exercise in November 2023.

9. **Leavers and joiners.** A number of staff members departed the team this year, with recruitment campaigns being run and new staff joining the team. These include the new Marine Services Superintendent, Port Safety Officer Assistant, two new VTS Operators and two new VTS Supervisors, who were promoted from within the team. A new Deputy KHM and further VTS team members will be recruited in 2024.

10. **Legislation.** There were no significant changes to Dockyard Port legislation in 2023, but KHM staff continued with a major review of the Dockyard Port of Portsmouth Order (DPPO) 2005, the main legal instrument that empowers KHM and establishes the Dockyard Port and its regulations and rules. The review seeks to incorporate a number of long-standing General Directions, and update regulations to reflect changes in the marine tapestry, including the increase in the numbers of autonomous and remotely controlled vessels operating in the port. Changes are also being considered to reflect the operations of the Queen Elizabeth Class aircraft carriers, notably a proposal to add a reserved deep-water anchorage within the Dockyard Port. KHM's proposals are currently with MOD legal advisers and stakeholders will be consulted in due course. This is a long-term project, with incorporation into law likely to take several years.

11. **Naval Base and wider MOD infrastructure.** Planning for a number of projects to maintain and improve Naval Base infrastructure are underway, together with planning for the Defence Munitions Gosport's Bedenham Pier Explosives Handling Jetty and the Oil and Pipeline Agency's Oil Fuel Jetty at Gosport. KHM is engaged in the planning process for all of these projects, which are all following government guidelines to ensure the environmental and operational impacts are understood and where necessary, mitigated.

Compliance and assurance

12. In line with the port's Marine Safety Management System, the following assurance activity took place in 2023:

- a. <u>Trinity House Navigation Aids inspection.</u> Our Trinity House inspection of Aids to Navigation was carried out in November (all areas). This was successfully passed with only two defects, one of which has been restored and a Portsmouth Navigation Warning (Navwarn) published to notify mariners of the other which is waiting a replacement top mark.
- b. <u>Internal PMSC audit.</u> An internal Port Marine Safety Code (PMSC) Audit took place in June 2023, identifying areas needing minor attention ahead of the external 2PAA.
- c. <u>External PMSC audit (2PAA).</u> Our external Designated Person (DP) audit to the requirements of the PMSC and Guide to Good Practice on Port Marine Operations 2018 (GtGP, the Guide) was undertaken in November of 2023 by Captain Port Operations, who is the Ministry of Defence (MOD) DP. During this audit, the port was assessed to be Fully Compliant with the PMSC. The next audit is planned for April 2025.

Processes and Risk Management

16. Procedure (PRO) and policy documents have been reviewed continuously throughout the year with each being reviewed at least once in 12 months by the document owner (prior to re-publication by KHM).

- a. <u>Risk Assessment Reviews.</u> The department currently holds 50 risk assessments on its risk register. The risk assessments are reviewed either annually or bi-annually. Relevant risk assessments are also reviewed after an incident. A total of 35 were reviewed during 2023. Reviews are generally carried out online using Microsoft Teams with participants including relevant KHM team members along with suitable internal and external stakeholders to ensure as broad a view as possible is taken.
- b. <u>Commercial Pilotage Exemption Certificate (PEC) Board involvement.</u> KHM staff sit on Portsmouth International Port's (PIP) PEC board and in 2023 examined 17 candidates, all of whom were successful. The board (following a standard agreed approach to PEC examinations) continues to drive high standards of local knowledge from PEC holders operating in the DPP. Part of the process of gaining and maintaining a PEC involves annual visits to Semaphore Tower. The PEC process allows KHM and PIP to ensure that mariners exempted from taking a Portsmouth Pilot are safe to operate the vessels for which they hold exemptions while in the DPP.
- c. <u>Personal Watercraft (PWC) Licence</u>s increase. In 2023, 141 PWC licenses were issued, a significant increase over the 82 licences issued during 2022.

Enforcement

17. Patrol duties were undertaken by the Port Safety Officer Assistant (PSOA) and other members of the department during 2023 using KHM's Rigid-hulled Inflatable Boat (RHIB). Most interventions involved education and warning for minor breaches of the DPPO 2005.

18. KHM issued official warning letters on eight occasions to both vessels' masters and owners highlighting their dangerous behaviour. All were warned that further breaches of the DPPO or General Directions would result in consideration of prosecution.

Berthing, Movements and Events

19. In 2023 there were 196,057 vessel movements within Portsmouth Harbour; a small increase from 192,473 in 2022. This figure is a combination of commercial, military, and ferry movements and also includes an estimate of 60,000 leisure moves.

20. Foreign naval vessel visits increased in 2023, with a total of 30 visits spread across the year. The majority of visits were from European navies, but notably included a visit of two Korean vessels in November.

21. Movements of Royal Navy vessels continued at similar levels to recent years, with an increase in Queen Elizabeth Class aircraft carrier movements in the second half of the year.

22. During 2023, KHM's team recorded 829 leisure events, ranging from cross-Solent swims to powerboat races and major regattas. This was a decrease on the previous year when 1102 events were recorded. High-profile events included the return of the Sea Angling Classic competition, and an air display to mark Armed Forces Day. Both these events took place in June.

23. Portsmouth hosted the start for the 2023/2024 Clipper Round the World Race, with the fleet starting off Southsea Castle in September. The Race is planned to return to its home in Portsmouth in July 2024.

KHM Volunteer Harbour Patrol

24. The KHM Volunteer Harbour Patrol (VHP) has continued to provide advice and assistance in the harbour entrance during peak times in the warmer months, and this was once again a key control measure in reducing risk in the most congested area of the DPP. Throughout the year, the VHP provided many hours on patrol, giving support to water users, including a number of tows. They also assisted Harbour Control with traffic management of small craft in the southern part of the harbour. As always, we are extremely grateful to all the volunteers for giving their time to this highly valued service.

Autonomous Vessel Operations

25. Autonomous vessels are developing quickly, with missions from surveying, surveillance and security at one end of the scale, through to fully automated large vessels under development at the other end of the scale. To date, such vessels operating in the DPP have been relatively small and have been mainly undergoing trials and experimentation. Some of these craft are operated by the Royal Navy, and others by commercial organisations. KHM has re-issued a Local Notice to Mariners setting out the port's requirements for the operation of such craft. We require operators to detail their plans in advance and share full risk assessments of their operations. We then discuss these plans, modifying them as necessary to ensure that the operations are safe for all mariners. Eight Local Notices were issued in 2023 to ensure mariners were aware of trials and other operations. This is a growth area that will see an increase in numbers and sizes of such vessels. KHM will remain closely engaged with all autonomous vessel operators wishing to use the DPP and is firmly focussed on ensuring safe operation of these craft, particularly with regard to other water users.



Autonomous vessels

Southsea Coastal Protection Works

26. Throughout the year, works continued on the Southsea Coastal Protection project. While these works were largely conducted by the contractor, Boskalis, Portsmouth International Port and KHM Admiralty Pilots were also engaged in the project. Further works, including delivery of beach material, are expected in 2024.



Delivery of rock armour to Southsea

Emergency Seawall Repair Works at Fort Blockhouse

27. A notable impact from Storm Ciaran in early November was damage to the sea wall at Fort Blockhouse. This undermined the foundations of the KHM Vessel Traffic Management System (VTMS) equipment site. The radar tower was dismantled as a precaution, resulting in the temporary unavailability of the equipment sited there. The redundancy that is built in to the wider VTMS system means that there has been limited impact on harbour operations. Works to repair and strengthen the sea defences are progressing well, and when complete, the radar and associated equipment will be reinstated. This is expected by mid-2024.

Incidents and Near Misses

28. In 2023, 114 incidents and near misses were reported to KHM and recorded in the department's safety management software MARNIS, and these are summarised in the table below. The vast majority of incidents and near misses were relatively minor, with the majority being from commercial and recreational vessels.

| Close Quarters Situations (CQS) Contact with Floating Object | 16 6 |
|---|---------|
| Collisions | 10 |
| Equipment failures | 14 |
| Contact with structure | 8 |
| Fire/Explosion | 3 |
| Ranging | 0 |
| Pollution | 12 |
| Flooding/Foundering | 2 |
| Grounding | 12 |
| Excessive speed | 2 |
| Persons in the water | 6 |
| Other | 17 |

29. Of the 12 Oil Pollution incidents in 2023, the majority were relatively minor, with the small quantities of accidently released oil being recovered by absorbent materials or naturally dispersing. For all incidents, the source was detected, and action was taken to prevent reoccurrence.

30. One notable incident was the recovery of a vehicle that in entered the water at D Lock entrance in the Naval Base with the driver inside after an error by the driver. He was quickly recovered with no significant injuries and the vehicle was later recovered by Naval Base contractors, utilising divers and a mobile crane. A small amount of oil was released, but the fuel in the tank was contained.

31. A standard port metric to measure port safety performance is to look at a ratio of recorded incidents to total vessel moves. For 2023, 114 incidents and near misses were recorded. 90 of those incidents are assessed as being related to safety of navigation which equates to 0.58 incidents per 1000 moves. The total number of incidents is a slight reduction on the 2022 total of 125.

Conservancy and Environmental Compliance

32. <u>Provision of Aids to Navigation.</u> During 2023 there were 23 failures of Aids to Navigation, with two failures of Category 1 equipment. Additionally, in March a Risk Assessment workshop was hosted by KHM where relevant stakeholders were invited to attend and evaluate every MOD supported Aid to Navigation within the DPP, be they floating or fixed, for their respective suitability and practicality. All Aids to Navigation were verified as appropriate to the needs of the Port.

33. <u>Hydrographic Survey Activity.</u> There were three MOD-driven hydrographic surveys undertaken during 2023. These focussed on the depth-maintained channels within Portsmouth Harbour, berths in the Naval Base and the main Portsmouth approach channel from Saddle Buoy inwards.

34. <u>Environmental Monitoring.</u> During 2023, KHM staff contributed to the Solent European Marine Site annual monitoring of activities, including their impact on the environment. This included attending the associated working group.

35. <u>UKHO Consultation and Chart Publication.</u> No new editions of UKHO charts covering DPP waters were published during 2023.

36. <u>Information Publication.</u> Throughout 2023, KHM's team made full use of the KHM website to keep mariners updated with events and to inform mariners of new hazards to navigation. 72 Navigation Warnings and 135 Local Notices to Mariners were issued.

Capital and Maintenance Dredge Operations

37. As a result of observations made during the harbour survey works, four maintenance dredge campaigns were carried out in 2023, covering the approach channel, the main harbour, Naval Base berths, the Bedenham Pier area and elements of its approach channel. Works were also conducted to prepare for a Capital Dredge in the vicinity of Fountain Lake Jetty berths 1 and 2, which included the removal of three disused cables that ran from the jetty across the dredge areas to the north and west. The Fountain Lake Capital Dredge is scheduled for early 2024.

Top 10 Risks held by KHM

38. In terms of Risk assessment, and ensuring an activity is as safe as it can be to complete, the generated risk scores should be in the ALARP (As Low As Reasonably Practicable) score range or below.

At the end of 2023, the top 10 risks held by KHM Portsmouth on its safety management software MARNIS, were as shown below. The risk scores shown are relative, but scores below 4 are judged to be "Low Risk", and all current risks are scored below this level.

| Rank Hazard | Risk Reference | Risk Score | | Risk Level | | |
|----------------|----------------|-----------------------------|----------------------------|---|------|-------------|
| 1 | POR-36-6 | Nautical Safety | Collision | Large Vessel vs Large Vessel - Wider Solent | 3.6 | Low Risk |
| 2 | POR-41-8 | Nautical Safety | Collision | Vessels Collide in Fog | 3.6 | Low Risk |
| 3 | POR-99-4 | Environmental Protection | Illegal waste discharge | Bunkering at anchor | 3.56 | Low Risk |
| 4 | POR-45-7 | Nautical Safety | Contact with structure | Contact with Port Infrastructure | 3.45 | Low Risk |
| 5 | POR-102-2 | Nautical Safety | Person in the water | Pilot embarkation and disembarkation. | 3.17 | Low Risk |
| 6 | POR-69-6 | Nautical Safety | Flooding/Foundering | Large Vessel | 3.17 | Low Risk |
| 7 | POR-82-5 | Nautical Safety | Other | Aircraft Ditch - Outside the Harbour | 3.15 | Low Risk |
| 8 | POR-52-9 | Nautical Safety | Other | Loss of Tug Control During Hot Move | 3.10 | Low Risk |
| 9 | POR-33-10 | Nautical Safety | Collision | Large Vessel vs Large Vessel - Within VTS Direction Area | 3.05 | Low Risk |
| 10 | POR-64-11 | Nautical Safety | Fire/Explosion | Large Vessel at Sea | 3.05 | Low Risk |

Stakeholder Meetings

39. KHM's team chaired or attended a number of stakeholder engagement meetings throughout the year:

| Dockyard Port Forum | January |
|---|---------------------|
| Solent Navigation and Pilotage Coordination Committee | May |
| Solent Operational Group | January |
| Port Authority Working Group | Monthly |
| Nab Vessel Traffic Service User Group | April and September |
| Southampton Port Marine User Group | May |
| Solent Area Safety Advisory Committee | November |
| Solent Forum | February, September |
| Southern Area Harbour Masters Association | January, June |
| Southern District Marine Safety Committee | June, November |
| | |

Harbour Safety Plan – Key Performance indicators (KPI's) – 2023

| Performance indicator | Requirements | Achieved (or not) during 2023 | Comments |
|---|--|-------------------------------------|--|
| 1. Incident Reporting | All reported incidents and near misses to be noted on the MARNIS database. 80% of incidents to be investigated and closed out within 2 months of report. | YES | 95% of all incidents closed out within 2 months of report. Some major incidents may remain open longer owing to major investigations being undertaken by Marine Accident Investigation Branch, the Health and Safety Executive or the MOD's equivalent bodies. |
| 2. Port Risk Assessments | All Port Risk Assessments to be reviewed annually | YES | All required Port Risk Assessments reviewed 2023. |
| 3. HAZID Workshop | Reviews all marine hazards within the DPP. | YES | Completed June 2023. |
| 4. Review DPP Emergency plan in light of revised Solent Maritime Framework. | Review existing plan and make necessary changes. | YES | Plan re-write and successfully tested November 2023. |