

THE DOCKYARD PORT OF PORTSMOUTH ANNUAL REPORT 2022



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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

In June 2022 I assumed command of His Majesty's Naval Base Portsmouth and took on the role as the Duty Holder 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 with other traffic. 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, led by the aircraft carriers *HMS Queen Elizabeth* and *HMS Prince Of Wales*, together with the Type 45 Destroyers, 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 careful 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 2022, 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, and after addressing some identified non-compliances, 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 2022 activity.

Introduction and Aim

1. The 2022 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) with regard to 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. While the impact of COVID-19 has significantly reduced, some staff members have contracted the disease in the period. Thankfully, their symptoms have been relatively mild and disruption to rosters was managed. A number of KHM staff members have left the MOD this year; work on filling gaps is ongoing, and some new members of staff have joined.
4. Despite several 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 and an increase in the number of foreign naval vessels visiting the port as the impact of COVID has reduced.

Marine Safety Plan

5. The KHM Portsmouth Marine Safety Plan was reviewed in 2022 and sets out how the port aims to develop its Safety and Environmental Management System (SEMS) over the next three years. Much of the work achieved in 2022 was in response to the 2PAA conducted in May, together with ongoing reviews of individual risk assessments, with the assistance of appropriate stakeholders. A key aim of the Marine Safety Plan is to refresh the hazard identification process last completed in 2016. This was initially planned for 2020 but was postponed due to COVID. This will be conducted in 2023³ and will be used to verify the currently identified hazards in the port and also to identify any areas that need more attention.
6. Risk management processes are well-developed in the port, with a mature and well-understood 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.

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.

³ This event was conducted in February 2023.

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 1100 individual marine events were shared in 2022.

8. At the routine 2PAA in May 2022, four non-conformances to the PMSC were identified, leading to an assessment that the port was substantially compliant. All non-conformances have since been addressed and the port is currently assessed as fully compliant with the PMSC. The next 2PAA is planned for November 2023.

Dockyard Port Headlines

9. **Change from QHM to KHM.** With the sad passing of Her Majesty Queen Elizabeth II and the accession to the throne of His Majesty King Charles III, the post of Queen's Harbour Master formally changed title to King's Harbour Master with the proclamation of King Charles III on 10 September. Although the change in title was a relatively minor matter, it has required changes to a large number of documents and revisions to the KHM website. The majority of this is now complete, including a re-issue of General Directions at the turn of the year. Some changes to physical badges and signs remain to be completed and will be addressed as opportunities allow.

10. **New port Duty Holder.** Commodore John Voyce OBE ADC Royal Navy relieved Commodore Jeremy Bailey ADC Royal Navy as Naval Base Commander (NBC) and Duty Holder for the Dockyard Port in June. Commodore Voyce was Commanding Officer of HMS SULTAN before taking up his current post. PMSC training was conducted in July for both NBC and his deputy, the Captain of the Base.

11. **Oil spill response.** KHM's oil spill response plan was updated and validated by the Maritime and Coastguard Agency, and elements of the Tier 1 and Tier 2 response were exercised. In addition, the port's Tier 2 response contract was re-competed and awarded to specialist response company Adler and Allan.

12. **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 Port Safety Officer, who was promoted from within the team and a new Chief Admiralty Pilot and further Admiralty Pilot joined. Three recruitment campaigns were underway at the end of 2022, with new staff to join in 2023.

13. **New Marine Services Contract.** In December, the MOD signed a new contract with the existing Marine Services provider, Serco. The new contract is for two years and bridges between the old contract and the longer-term replacement, currently in procurement. To the end user, there will be little apparent change as the same vessels are delivering very similar services. The main change is that the vessels are now owned by the government, but operated and maintained by Serco, rather than owned by Serco.

Legislation

14. There were no significant changes to Dockyard Port legislation in 2022, but KHM staff progressed 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.

Naval Base and wider MOD infrastructure

15. Planning for a number of projects to upgrade Naval Base infrastructure are underway, together with planning for 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

16. In line with the port's Marine Safety Management System, the following assurance activity took place in 2022:

- a. Trinity House Navigation Aids inspection. Our Trinity House inspection of Aids to Navigation was carried out in November (all areas). This was successfully passed with only seven defects, three of which are owned and maintained by a third party (but sit on our register as the Local Lighthouse Authority) and four which we own and maintain. Of those four, two have been restored and the last two are waiting for a suitable weather opportunity (they require a repaint only).
- b. Internal PMSC audit. An internal Port Marine Safety Code Audit is planned to take place in May 2023. The last was undertaken between 18 and 22 October 2021.
- c. External PMSC audit. The last external Designated Person (DP) 2PAA to the requirements of the Port Marine Safety Code 2016 (PMSC) and Guide to Good Practice on Port Marine Operations 2018 (GtGP, the Guide) was undertaken in May of 2022 by Captain Port Operations, who is the Ministry of Defence (MOD) DP. The next is planned for 7-9 November 2023.

During this audit, the port was found to be substantially compliant, four non-compliances (NC) identified and five observations.

The NCs were as follows:

- The alternate Duty Holder had not received PMSC Duty Holder training, this was closed out on completion of training on 11 July.
- The SEMS was identified as having a commitment statement by QHM rather than the Duty Holder. This was closed out after the new Duty Holder took up post.
- Training records were found to be out of date, although personnel were all in date for training. Records were updated after the audit.
- Some discrepancies were found indicating issues with document control processes. Again, these were rectified shortly after the audit.

Of the five observations, three have already been closed out. Outstanding observations concern the ongoing review of the DPPO 2005 and a training issue. Both are currently being addressed.

At the port's mid 2PAA periodic review, the DP assessed the port to now be fully compliant with the PMSC.

Processes and Risk Management

17. Procedure (PRO) and policy documents have been reviewed continuously throughout the year with each being reviewed once in 12 months by the document owner (prior to republication by KHM).

- a. Risk Assessment Reviews. The department currently holds 49 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 34 were reviewed during 2022. Reviews are generally carried out online using Microsoft Teams, but there is a gradual return to face-to-face reviews. Participants include relevant KHM team members along with suitable internal and external stakeholders to ensure as broad a view as possible is taken.
- b. Commercial Pilotage Exemption Certificate (PEC) Board involvement. KHM staff sit on Portsmouth International Port's (PIP) PEC board and in 2022 examined 13 candidates, all of which 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 a PEC involves visits to Semaphore Tower. This 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. Due to COVID precautions, these visits remained in abeyance during 2021. As restrictions eased in 2022, this decision was reviewed and PEC visits to Semaphore recommenced.

- c. Personal Watercraft (PWC) Licences increase. In 2022 82 licenses were issued, which is a similar number to the pre-pandemic years. However, during 2021 176 licences were issued. It is believed that the rising costs of fuel may be a driver behind the reduction.
- d. DPP Emergency Contingency Plan. The Dockyard Port of Portsmouth Emergency Contingency Plan underwent a review in January 2022 to take account of the change from SOLFIRE to the Solent Maritime Framework plan. That review is now complete, and the plan is currently being re-written with the new version due for publication in 2023. The existing plan remains extant until the new one is published.
- e. Oil Spill Response Plan. Our Oil Spill Response Plan was subject to its five-yearly MCA revalidation during 2022. This was completed in March and tested with a Tier 2 exercise being carried out successfully in October.



Oil Protection Boom deployed at Fountain Lake in October 2022

Enforcement

18. Patrol duties were undertaken by the Port Safety Officer Assistant (PSOA) and other members of the department during 2022 using KHM's Rigid-hulled Inflatable Boat (RIB). Most interventions involved education and warning for minor breaches of the DPPO 2005.

19. KHM issued official warning letters on four occasions to both vessels' masters and owners highlighting their dangerous behaviour and consideration of prosecution for further breaches of the DPPO or General Directions.

Berthing, Movements and Events

20. In 2022 there were 192,473 vessel movements within Portsmouth Harbour; a marked increase from 143,158 in 2021. This figure is a combination of commercial, military, and ferry movements and also includes an estimate of 60,000 leisure moves. The total represents a return to levels of activity close to that seen before the pandemic.

21. With COVID restrictions easing, foreign naval vessel visits increased in 2022, with a total of 28 visits spread across the year. The majority of visits were from European navies, but there were also seven visits by United States Navy vessels, a visit from the Omani training vessel *Shabab Oman II* and the Japanese vessel *JS Shimakaze*. The highest profile visit was undoubtedly the visit of the aircraft carrier *USS Gerald R Ford* and its accompanying Air Group and escorts in November. This was the first US carrier visit to the Solent for several years. All visits were warmly welcomed.

22. During 2022 KHM's team recorded 1102 leisure events, ranging from cross-Solent swims to powerboat races and major regattas. This was a slight decrease on the previous year when 1222 events were recorded. A new event to Portsmouth was the Sea Angling Classic competition, which took place in June and was based in the Historic Dockyard. The event included a parade of participating vessels followed by two days of contest. The event is planned to return in 2023.

KHM Volunteer Harbour Patrol

23. With activity modified again by the need to take COVID precautions, the KHM Volunteer Harbour Patrol (VHP) nevertheless continued to provide advice and assistance in the harbour entrance during peak times in the warmer months, and this was once again key

to 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 and assisting Harbour Control with traffic management. As always, we are extremely grateful to all the volunteers for giving their time to this highly valued service.

Autonomous Vessel Operations

24. 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. In early 2022, KHM issued a Local Notice to Mariners setting out the port's requirements for the operation of such craft. These require operators to detail their plans in advance and share full risk assessments of their operations. KHM's team then discuss these plans, modifying them as necessary to ensure that the operations are safe for all mariners. Local Notices are issued to ensure mariners are 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.



Autonomous vessels

Southsea Coastal Protection Works

25. Throughout the year, works continued on the Southsea Coastal Protection project. The marine aspects of this mainly involved the delivery of around 100,000 tonnes of rock armour, including transshipment from a sea-going vessel to a barge for delivery to the shore. 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 to continue throughout 2023.



Delivery of rock armour to Southsea

Incidents and Near Misses

26. In 2022, 125 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.

Close Quarters Situations (CQS)	20
Collisions	4
Equipment failures	14
Contact with structure	12
Fire/Explosion	8
Ranging	4
Pollution	18
Flooding/Foundering	4
Grounding	9
Excessive speed	9
Persons in the water	7
Other	15

27. Of the 18 Oil Pollution incidents in 2022, the majority were relatively minor with the small quantities of released oil naturally dispersing. For all incidents, the source was detected, and action was taken to prevent reoccurrence. One incident was recorded as a Tier 2 response, involving the deployment of the Tier 2 contractor to deal with a spill from a damaged pipeline. Released oil was either contained or dispersed with very limited environmental impact.

28. Notable was the impact of Storm Eustice on 18 February, which saw five recorded incidents, together with significant deployment of tug assets to safeguard vessels in the harbour in the extremely high winds experienced. The most significant incident was the breaking free from moorings of the crane barge *Canute* in Tipner Lake. It then drifted to the

east, blown by the strong winds. This resulted in the crane barge hard aground at high water on the eastern shore of Tipner Lake, with the crane hook close to the M275. KHM worked closely with the crane owner, the assigned salvage team and local authorities and emergency services. As a precaution, a section of the M275 was shut over the next high-water period, and close monitoring of the crane was then put in place. The salvors worked to develop a recovery plan and at the next spring tides, with the road again shut, the crane barge was successfully recovered to its usual berth. Unfortunately, it was not possible to recover a smaller vessel also aground in Tipner Lake. This does not currently constitute a danger to navigation and KHM remains in contact with representatives of the owner of this vessel and awaits detailed recovery plans.



Crane Barge aground near M275

29. In April, a tug struck Pile 98 South Cardinal Mark in Portsmouth Harbour, causing significant damage to the navigation mark. A Navigation Warning was immediately issued, and a temporary mark deployed to mark the southern edge of the mud flats marked by Pile 98. Investigations determined that the master of the tug had failed to keep or ensure a good lookout. After reviews, the master undertook significant additional training before being permitted to return to full duties. After four months procurement and manufacture, Pile 98 was replaced, and a new light installed.



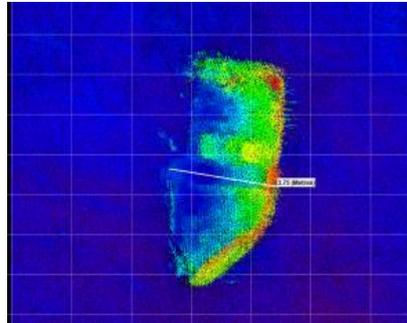
Damaged Pile 98

30. A small motor cruiser suffered an engine fire in June, which quickly engulfed the vessel. The persons on board were safely recovered by the Gosport and Fareham Inshore Rescue lifeboat, but the vessel remained ablaze and drifting close to the main shipping channel near Horse Sand Fort. After consultation with the Duty KHM, the Naval Base Duty Tug, equipped with a fire monitor, was dispatched to the scene. On arrival, the tug quickly

extinguished the fire, and the remains of the vessel sank close to the channel. KHM issued a Navigation Warning to warn mariners of this. Subsequently, KHM arranged a survey to locate the wreck; this showed the remains standing clear of the seabed, potentially presenting a hazard to shipping. After contacting the vessel owners, the wreck was recovered by the owner's insurance company and safely disposed of.



Motor cruiser on fire



Survey of wreck on seabed

31. A standard port metric to measure safety performance is to look at a ratio of recorded incidents to total vessel moves. For 2022, 125 incidents and near misses were recorded. 106 of those incidents were related to safety of navigation which equates to 1.8 incidents per 1000 moves.

Conservancy and Environmental Compliance.

32. Provision of Aids to Navigation. During 2022 there were 23 failures of Aids to Navigation with two failures of category 1 equipment. Category 1 availability was 99.85% which is slightly higher than Trinity House target availability requirement of 99.80%.

33. Hydrographic Survey Activity. There were three hydrographic surveys undertaken during 2022 which focussed on the maintained channels within Portsmouth Harbour, berths within the Naval Base and the main Portsmouth approach channel from Saddle Buoy inwards. Additionally, a bathymetric assurance survey was conducted by the RN Mobile Hydrographic team.

34. UKHO Consultation and Chart Publication. No new editions of UKHO charts covering DPP waters were published during 2022.

35. Environmental Monitoring. KHM staff have again contributed to the Solent European Marine Site annual monitoring of activities and their impact on the environment and attended the subsequent working group meeting.

36. Information Publication. Throughout the year, KHM's team made full use of the KHM website to keep mariners up to date with events and to inform mariners of new hazards to navigation. 99 Navigation Warnings and 115 Local Notices to Mariners were issued.

Top 10 Risks held by KHM

37. 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 2022, the top 10 risks held by KHM Portsmouth on its safety management software MARNIS, were as shown below. All were assessed as Low Risks.

Rank Hazard	Risk Reference	Hazard Theme	Hazard Category	Title	Risk Score	Risk Level
1	POR-11-6	Nautical Safety	Collision	Vessels Collide in Fog	3.75	Low Risk
2	POR-44-6	Environmental Protection	Pollution - Water	Sullage/Bilge Spill	3.75	Low Risk
3	POR-6-5	Nautical Safety	Collision	Large Vessel vs Large Vessel - Wider Solent	3.60	Low Risk
4	POR-54-2	Environmental Protection	Illegal waste discharge	Bunkering at anchor	3.56	Low Risk
5	POR-7-5	Nautical Safety	Collision	Large Vessel vs Small Vessel - Wider Solent	3.44	Low Risk
6	POR-0-5	Nautical Safety	Flooding/Foundering	Large Vessel	3.17	Low Risk
7	POR-42-5	Nautical Safety	Other	Aircraft Ditch - Outside the Harbour	3.15	Low Risk
8	POR-20-6	Nautical Safety	Equipment failure (port)	Reduction in / Loss of Ability to Provide Vessel Traffic Management	3.15	Low Risk
9	POR-17-7	Nautical Safety	Contact with structure	Vessel Collides with Navigation Mark/Buoy	3.15	Low Risk
10	POR-4-7	Nautical Safety	Collision	Large Vessel vs Small Vessel - Within VTS Direction Area	3.06	Low Risk

Stakeholder Meetings

38. KHM's team chaired or attended eleven stakeholder engagement meetings throughout the year:

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