

PORTSMOUTH NAVAL SHIPYARD

Question from Chairman Principi: I've heard that several subs that are/were home ported in Pearl have been overhauled in Portsmouth because of the quality and efficiency of the work at Portsmouth as opposed to Pearl. Is that an accurate statement?

Answer:

- Although Portsmouth has consistently delivered Los Angeles class overhauls faster and more efficiently than Pearl Harbor Naval Shipyard, it is not apparent that this fact has ever been considered in assignment of overhaul work.
- When more than one Pearl Harbor home ported submarine requires a major overhaul, that overflow work is reassigned to another naval shipyard because it cannot be accomplished at Pearl Harbor. The decision on which shipyard is used is typically made by the Navy in Washington D.C.

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PORTSMOUTH NAVAL SHIPYARD

Question from Chairman Principi: The justification for closing Portsmouth and retaining Pearl is that Pearl is strategically placed. If Pearl was realigned to be a repair facility, it gets downgraded somewhat. What would be the impact on our capability, future capability to repair subs, and in the same vein, in the event there was an emergency, could teams be sent to Pearl from Portsmouth/Norfolk to man that repair facility if needed?

Answer:

- Realignment of Pearl Harbor to be a repair facility could increase our current and future capabilities to repair submarines by enabling the Navy to maintain four shipyards and save money.
- The Navy needs all four public shipyards to support the fleet because there is no excess capacity in the submarine maintenance industrial base.
- An efficient option for the Navy could be to keep Portsmouth open as the dedicated shipyard for longer-term depot-level submarine overhauls, and transform Pearl Harbor into a submarine ship repair facility, with a focus on shorter-term depot-level and intermediate level maintenance work to better support the Pacific Fleet.
- This option best minimizes operational risk by ensuring that submarines are returned to the fleet sooner by having longer-term depot overhaul work done at Portsmouth, the most efficient Shipyard, and enabling Pearl Harbor, the forward-located Shipyard, to handle shorter-term depot restricted availabilities and emergent repair work.
- Teams can be sent to Pearl Harbor from Portsmouth/Norfolk/Puget Sound to assist Pearl Harbor as required during heavier workload periods.

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Question from Chairman Principi (at the site visit): What Other Work Can Portsmouth Naval Shipyard Perform Besides Attack Submarines?

Answer: Portsmouth Naval Shipyard can conduct maintenance on 62 percent of the Navy's current inventory of 290 ships. Portsmouth can homeport a squadron of attack submarines or medium size surface ships. Teams from Portsmouth work on all classes of Navy ships and submarines at home ports and deployed sites.

- Portsmouth can maintain and home port the DDG-51 destroyer, as well as its planned successor, the DD(X).
- Portsmouth can maintain and home port CG-47 class Aegis cruisers.
- Portsmouth can maintain and home port the FFG-7 Perry Class Frigate.
- Portsmouth can maintain and home port the Navy's planned Littoral Combat Ship.
- Portsmouth can modernize, maintain, and repair the 14 ballistic missile SSBNs.
- Portsmouth can maintain the 4 cruise missile-equipped SSGNs.
- Portsmouth can build and maintain deep submersible vehicles and SEAL special delivery vehicles.
- Portsmouth can modernize, maintain, and home port all US Coast Guard maritime platforms, and is currently home port to three US Coast Guard cutters.

PORTSMOUTH NAVAL SHIPYARD

Question: If Portsmouth is closed, would the Navy have adequate industrial capacity to maintain, modernize and repair the fleet?

Answer: No, with the closure of Portsmouth, current workload will be more than current capacity. There is no margin for workload growth, inefficiency, surge, or emergent repairs.

- The Navy typically underestimates their shipyards' future annual workload by at least 14 percent. The capacity data show that without Portsmouth, the total capacity is already consumed. Once the workload grows by 14 percent, the Navy will have a capacity shortfall of 9.5 percent above maximum capacity and 14 percent above the reported current capacity.
- The conclusion that no excess capacity exists is validated by the Navy's decision not to assign Portsmouth's 13 Selected Restricted Availabilities to a naval shipyard. Additionally, even with four shipyards, the Navy is still evaluating where to assign future Depot Modernization Periods. If excess capacity existed, assignment would be more simply made.

PORTSMOUTH NAVAL SHIPYARD

Question: Would there be a dry-dock conflict if Portsmouth were to close?

Answer: Yes. Depot work cannot be accomplished at the remaining three naval shipyards based on several dry-dock conflicts that prevent execution of assigned depot work.

- Pearl Harbor Naval Shipyard future dry-dock periods for submarine availabilities are understated by approximately 30 percent, due to performance.
- Pearl Harbor Naval Shipyard's workload does not reflect unplanned (emergent) dockings at Pearl Harbor which occur every year.
- Puget Sound Naval Shipyard future dry-dock periods for submarine availabilities are understated by approximately 25 percent, due to performance.
- Norfolk Naval Shipyard's workload does not include capacity for the six unplanned yearly (emergent) dockings of Atlantic home ported submarines.
- Navy plans do not account for caisson overhauls which are approximately three months in duration. This equates to 48 months of unavailable dry-dock capacity due to caisson maintenance alone across the remaining shipyards.
- Navy plans do not include:
 - Unplanned dry-dock outages due to structural and operational equipment failures such as Puget Sound's dry-dock sinking floor repair.
 - Planned dry-dock outages for repairs in addition to caisson overhauls.
 - Military construction projects such as the Norfolk's dry-dock modernization.
 - Dry-dock preparation and restoration from docking/undocking.

PORTSMOUTH NAVAL SHIPYARD

Question: When the SSN688 Engineered Refueling Overhauls are finished, is there anything left for Portsmouth to do?

Answer: Yes, and much of it is already assigned to Portsmouth. Significant work is required for the improved SSN688I class, the Trident Class, and the Virginia Class submarines.

- Improved SSN688I class submarines will require 31 Engineered Overhauls to be executed through the next decade. Portsmouth is performing the Navy's first two Engineered Overhauls on the *USS Providence*, and the *USS Pittsburgh*. Engineered Overhauls are estimated to take 18 months each to execute. Other depot availabilities in the life cycle of SSN688Is are a Depot Modernization Period at about the 10 year point, Selected Restricted Availabilities throughout life cycle, and in some cases a Pre-Inactivation Availability very late in life cycle.
- Trident Class refueling overhauls and potentially additional SSGN conversion work continues through the next decade. A significant amount of maintenance work is executed at the Trident Refit Facilities during the life of these submarines.
- Virginia Class submarines are expected to require several Extended Selected Restricted Availabilities and Selected Restricted Availabilities to accomplish predicted life of the submarine maintenance with the first availabilities starting early in the next decade.
- In addition to submarines, Portsmouth Naval Shipyard can maintain and homeport 62 percent of the Navy's current inventory of 290 ships including the DDG-51 destroyer, Aegis cruisers, Perry Class Frigates, and the Navy's planned Littoral Combat Ship.

PORTSMOUTH NAVAL SHIPYARD

Question: Is there any danger in concentrating all East Coast nuclear ship maintenance capability at Norfolk Naval Shipyard?

Answer: Yes, significant danger.

- If Portsmouth Naval Shipyard is closed and its workforce therefore eliminated, Norfolk Naval Shipyard would be the only nuclear naval shipyard on the east coast with the demonstrated ability to maintain the nuclear Navy. The ability to provide surge capability to meet emergent operational and maintenance requirements would be lost.
- Catastrophic events at or near the Norfolk Naval Shipyard, such as chemical, biological or radiological terrorist strikes, violent weather such as hurricanes, and industrial accidents could disable or destroy the infrastructure of Norfolk Naval Shipyard, incapacitate or kill some or all of the skilled workforce at Norfolk, or otherwise disrupt work at Norfolk Naval Shipyard.
- Portsmouth has 3 dry-docks. Norfolk has 4 dry-docks. It would cost roughly \$400 million and take at least 4 years to reconstitute one dry-dock. Without Portsmouth and with the current dock loading at Norfolk and Trident Refit Facility, Kings Bay, the east coast would have only one Navy dry-dock available to accommodate all Virginia and Los Angeles Class maintenance on the east coast. The remaining Norfolk dry-docks will be filled with aircraft carriers, large deck surface ships, and SSBNs.
- It is impossible to calculate the cost to reconstitute the workforce of a naval shipyard and it could take a decade to regenerate the skills needed to effectively maintain the fleet.
- Should Norfolk Naval Shipyard be unable to function, there would be no naval shipyard on the east coast with a Portsmouth closure. Although Navy could utilize private sector nuclear shipyards, the private sector nuclear shipyards are historically more expensive and inefficient. They deliver their depot availabilities late, as their skills are geared toward new construction.
- With Portsmouth closed and Norfolk inoperable, Puget Sound Naval Shipyard would be the only nuclear shipyard in the continental United States geared to maintaining the nuclear Navy. Pearl Harbor Naval Shipyard would be the only other naval shipyard in service. Both facilities are unable to efficiently execute their current workload.
- The impact of having to absorb the workload of one or both of the east coast naval shipyards would cripple the Navy's industrial base. The result would be dry-dock conflicts, maintenance backlogs, performance inefficiencies, increased cost, and lost operational time for an aging fleet, as we see today at Puget Sound.
- As with Puget Sound today, the problems with an overloaded Norfolk would be further exacerbated by aircraft carrier maintenance, as carrier work takes priority over other vessels.

PORTSMOUTH NAVAL SHIPYARD

Question from Commissioner Skinner: How will potential changes in Navy crewing concepts affect some of the deployment issues and specifically Portsmouth Naval Shipyard?

Answer:

- Crew swapping on attack submarines is a transformational concept not yet approved by the Navy.
- Navy concepts for getting more operational time out of ships by, e.g., swapping crews, will not hurt Portsmouth's viability as a depot-level maintenance facility. If anything, it will further enhance the need for Portsmouth.
- If crew swapping becomes policy, ships will be run harder, thereby shortening the period between major overhauls. In addition, increased operating tempo could produce the need for Engineered Refueling Overhauls to be performed on 688I class submarines, which are not currently planned.