



Navy Increases On-Board Ship Maintenance

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The [Navy](#) plans to add more maintenance personnel to ship crews and perform more maintenance activities on-board ships as they are deployed in order to reduce the costs and time needed at the shipyard upon their return, service leaders said.

Naval Sea Systems Command leader Vice Adm. Willy Hilarides pointed out that 78-percent of the Navy's 289 ships will still be in the water in ten years, a circumstance which underscores the importance of maintenance and modernization. The demand for Navy ships is expected to increase and budgets are likely to remain challenged, making ship maintenance even more important, he said.

Adding maintenance personnel to ship crews helps reverse the impacts of a decade-old plan called "optimal manning" which sought to reduce crew sizes with a sharper warfighting focus and improved on-board technology.

"We went through a period where we said we are going to downsize the size of the crews, saying we're really going to tighten that up and make them just about warfighting. I would say we probably went a little too far — so we're putting back into the engineering departments of those ships," said Hilarides.

The idea is to man ships with enough personnel so that sailors can learn how to maintain their own ship to a large degree, Hilarides explained.

For example, sailors on board a ship would be able to repair a broken fire pump by replacing the bearings, seals and properly aligning the pump, he added.

Placing more maintenance personnel aboard ships helps the Navy by better sustaining ships and further refining technical skills and training for sailors who are engineers and mechanics, Hilarides explained. In addition, performing maintenance work at sea greatly reduces the shipyard maintenance costs.

The Navy is still building and upgrading ships with a mind to increasing efficiency of personnel on board and lowering costs, meaning there are instances where next-generation technology or improved automation will reduce the need for personnel on-board certain ships.

This is the case with the Ford-class aircraft carriers and Zumwalt-class destroyers, both of which are engineered with new technology including much more automation compared to their predecessor vessels; more automation translates into a reduced crew size which lowers operational and sustainment costs for the ship.

The Ford-class aircraft carriers are slated to carry a crew of about 5,200 sailors if you include the air wing, a number that is about 800 sailors less than Nimitz-class carriers which preceded them. Even though there may be fewer sailors on-board a Ford-class carrier, the mixture of sailors assigned to the ship is likely to ensure that there are sufficient engineers and mechanics on-board to perform the requisite maintenance functions.

As a result, lowering costs by having more maintenance personnel on board and making ships more efficient in terms of their crew size are mutually-reinforcing efforts, Navy officials said.

One analyst said adding engineers to ship crews could help the Navy get through a time of strained budgets.

“It stands to reason that there is a category of things that are reasonably easy to fix if you have mechanics on the ships. There’s a lot of pressure on the Navy right now due to flat budgets and rising personnel costs,” said Benjamin Friedman, research fellow in defense and homeland security studies at the Cato Institute, a Washington D.C.-based think tank.