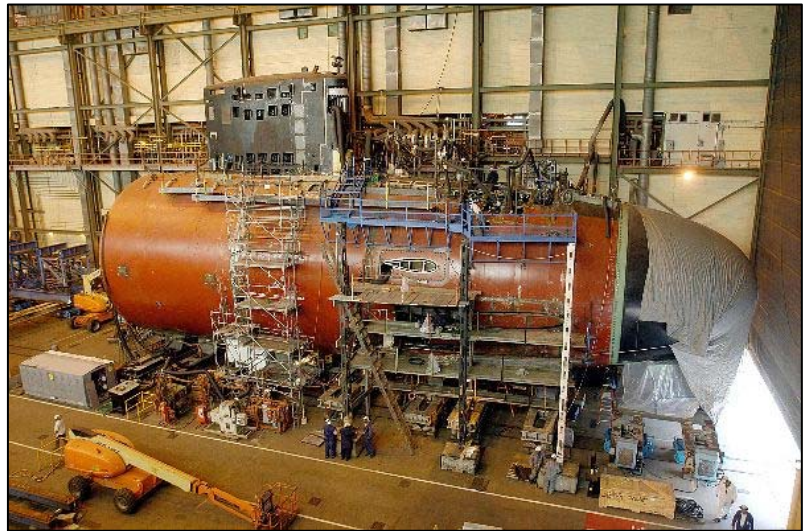


## CNST Awards Outfitting Process Improvement Project in Support of VIRGINIA-Class Submarines

The Center for Naval Shipbuilding Technology (CNST) – through its partnership with the Office of Naval Research and Navy ManTech – recently awarded an \$800K project to Electric Boat Corporation (EB) in an effort to improve outfitting processes and ultimately to reduce the cost and time associated with the construction of VIRGINIA-Class submarines (VCS).

Reducing VCS construction costs to \$2B per submarine and cycle time from over 80 months to 60 months are critical to achieving the Navy’s goal of procuring two submarines per year by the year 2012. With the VCS design essentially complete and the bulk of the construction work ahead, one of the greatest opportunities for cost savings and cycle time reduction lies in the outfitting realm. To this end, the project team will conduct a detailed analysis of the major processes employed during the outfitting stage, including foreman time constraints, scheduling methods and techniques, and work/information/material hand-offs. Improvements yielding the greatest cost-benefit and risk-reward ratios will be evaluated and implemented. Results will be measured throughout the evaluation to substantiate assumptions and quantify savings.



**The forward section and sail unit of the SSN 777, under construction at Northrop Grumman Newport News shipyard.**

Outfitting process improvements resulting from this two-phase effort are expected to reduce labor costs by \$15M per hull and decrease early outfitting time by approximately 30%. Implementation activities could begin as early as 12 months into this two-year project. Although the VCS construction yards will benefit directly from this effort, the process/tool improvements could apply to construction activities at other major shipyards as well.

### **About CNST**

CNST is a Navy ManTech Center of Excellence, chartered by the Office of Naval Research (ONR) to identify, develop and deploy, in U.S. shipyards, advanced manufacturing technologies that will reduce the cost and time to build and repair Navy ships. For additional information on this and other CNST projects, please visit [www.cnst.us](http://www.cnst.us).