

## **Implemented CNST Projects at Work: An Update**

The Center for Naval Shipbuilding Technology (CNST) – through its partnership with the Office of Naval Research and Navy ManTech – has provided a number of key shipbuilding technologies to US shipyards in support of cost reduction/affordability initiatives. Two examples of successfully completed projects and the benefits that have been realized since project completion are listed below:

Re-Engineering the Internal Supply Chain/Material Delivery Process. Led by Northrop Grumman Ship Systems (NGSS), this 16-month project was completed in March 2006. Its objective was to improve material movement between production tasks and also improve material sequencing requirements and material lead times by applying elements of Best Practice Lean technologies. NGSS used Six Sigma techniques to analyze their entire shipyard supply chain operation and the project team was able to achieve savings/efficiencies in several areas, including:

- Manpower reduction – seven positions were deleted
- Manpower reassigned to more critically needed positions
- Reduced cycle times for material movement
- Space optimization as laydown area inventories were reduced
- Reduction in warehousing inventories as material is now received Just-In-Time
- Material costs reduction due to less damage/loss issues
- Reduced vendor delivery times.

A Technical Training and Data Collection Program for Structural Welders and Fitters. Northrop Grumman Ship Systems (NGSS) led this 19-month project that was completed in May 2006. Its objective was to create and implement innovative processes to improve welding productivity and quality. A handheld system was developed that gives foremen an efficient daily planning tool. Originally planned for implementation on the NGSS panel line, the lessons learned convinced NGSS to provide hand-held units to all foremen for use at both of the Ingalls & Avondale yards. They'll also be used on the panel line when it returns to full operation this year.

### **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).

