



General Dynamics Bath Iron Works is Enabling a Higher Level of Configuration Control and Data Integrity

Project Snapshot



Photo courtesy of General Dynamics Electric Boat

Project Lead:

General Dynamics Bath Iron Works

Project Dates:

Nov 2019 – Nov 2021

Objectives:

- Develop an integrated tool that will enable multiple organizations within the shipyard to quickly find VFI related documents, data and data attributes from multiple user.

Estimated Savings:

- Reduce time spent looking for VFI (Design and Engineering)
- Reduce production planning and production rework
- Reduce administrative cost associated with maintaining VFI data
- Savings:
 - \$ 1.09M per DDG hull
 - \$6.54M over five years
 - ROI 1.75

S2843 Vendor Furnished Information Data Consolidation Rev A (1219)
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Vendor Furnished Information (VFI) is the document and data information that the shipyards need as input to engineering and design products. VFI is used for creating library part models for the 3D design and is also used as input to Contract Data Requirements List (CDRL) data item submissions to the Navy.

Currently, VFI is stored in multiple locations using different data formats. The process for receiving, researching, and managing VFI is cumbersome and inefficient. In addition, Engineers and Designers often have to rely on “experts” to ensure the proper VFI is being used. If incorrect VFI is used, the downstream impact to production can become costly. Tools currently exist to capture some of the VFI related data however, these tools are not very user-friendly and lack the ability to efficiently provide access to VFI data.

The *Vendor Furnished Information Data Consolidation* project solution includes establishing an integrated tool that will be developed to host links to (rather than store) approved VFI documents and drawings as well as provide storage and access for the most frequently used VFI related data extracted from the VFI documents and drawings or other sources. Hosting links allows approved VFI documents and drawings to remain stored in only one location. Providing storage and access for data and attributes extracted from other documents allows this data to be configuration managed and stored in a common repository.

The integrated tool will enable multiple organizations within the shipyard to quickly find VFI related documents, data and data attributes from multiple user perspectives. The VFI-DC tool will leverage other existing tools (e.g., NIIP-SPARS, CPC and CDMS), to provide a new approach for rapidly accessing the data VFI related data, and lay the foundation as other tools evolve.

The project has two phases and the first phase will focus on assessing the current state process, tools and data. The project team will also investigate the current methods for finding correct VFI documents and data and identify the requirements for consolidating this VFI information into a single tool. Based on the shipyard input, current and future state process maps will be developed to identify where the process, tools, data and data management can be improved. The second phase will focus on tool development and configuration, testing and demonstration.

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