

Equipment Sight/Site Validation Tool



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Sustainment Panel Meeting
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GENERAL DYNAMICS
Bath Iron Works



NATIONAL SHIPBUILDING RESEARCH PROGRAM™
Taking Shipbuilding and Repair to the Next Level

Problem Statement

- Timely and accurate reporting of the as-built configuration is imperative throughout the ship's life
 - Sight validation is used to verify ship's configuration at any stage
- Current shipyard sight validation data collection processes are designed to interface with Configuration Data Managers Database – Open Architecture (CDMD-OA) system
 - Navy is transitioning to Model-Based Product Support (MBPS) as the Configuration Status Account (CSA) tool of record
 - Current digital tools will be obsolete
 - Paper-based sight validation data collection increases cost

Goals and Long-Term Objective

- Goals:

- 1) Explore current capabilities of existing electronic tools and software that could meet shipyard sight validation requirements
- 2) Develop software and hardware requirements for a digital sight validation tool that interfaces with MBPS

- Long-term objective:

- 1) Deploy the digital sight validation tool that provides data to MBPS at reasonable cost without use of paper validation aids

Project Team

- HII Ingalls Shipbuilding
 - Project lead
 - Paula Lacharite, Becky Sparkman, Joann Sullivan, Randy Gurley, David Furr, John Walks
- General Dynamics Bath Iron Works
 - Collaborating shipyard
 - Andy Blackman, Michael Goodine, Daniel LaPointe
- ATI (NSRP Program Administrator)
 - Jim House, Project Manager
- Kakou Professional Development
 - Kaipo Crowell, Program Technical Representative

Team Responsibilities

Task	HII Ingalls	GD BIW
Task 1: Develop Shipbuilder and CDM requirements for software	Lead	Collaborate
Task 2: Develop Shipbuilder and CDM requirements for hardware	Lead	Collaborate
Task 3: Identify and Assess Existing Tools	Lead	Collaborate
Task 4: Determine if Market Tools Work	Lead	Collaborate
Task 5: Final Report	Lead	Collaborate

Project Tasks

Task 1: Develop Shipbuilder and Configuration Data Manager (CDM) requirements for software – Completed

- Conduct a Kick-Off Meeting
- Develop software requirements based on stakeholder needs

Task 2: Develop Shipbuilder and CDM requirements for hardware – Completed

- Develop hardware requirements based on stakeholder needs

Task 3: Identify and Assess Existing Tools – Completed

- Perform a market survey of existing hardware and software options

Task 4: Determine if Market Tools Work – (3/22/24)

- Determine if one or more of the existing tools on the market can support the above requirements

Task 5: Final Report – (3/28/24)

- Prepare final report with conclusions and recommendations

Hardware Options

Handheld computer



Rugged Laptop (shown without optional strap)



Collaboration with NAVSEA

- MBPS data input needs formed a significant part of the system requirements effort in Tasks 1 and 2
- Project team benefitted from MBPS pilot activity (funded by the Navy) to understand data input requirements
- Project team has pursued dialogue with NAVSEA throughout project execution, but they have been busy with MBPS software changes

Summary

- Status: Project nearing completion
 - Software requirements are well-defined from MBPS pilot testing
 - Two primary hardware options are established (handheld computer or rugged tablet with optional strap)
 - No market tool is a perfect fit “out of the box” to meet shipyard needs
 - Task 4 report and final report will be completed this month
- Next steps
 - Follow-on funding for software development will be sought

Questions?



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