



S2980: Temporary Services Call Board

NSRP All Panel Meeting 2025

Presenter: Jamie Breakfield

Ingalls Shipbuilding

February, 2025



Agenda

- Overview
- Objectives
- Project Team
- Technical Goals
- Benefits/Pay Off
- Project Schedule
- Technical Approach
- Technical Content and Status
- Transition/Implementation Plan
- Next Steps
- Q & A

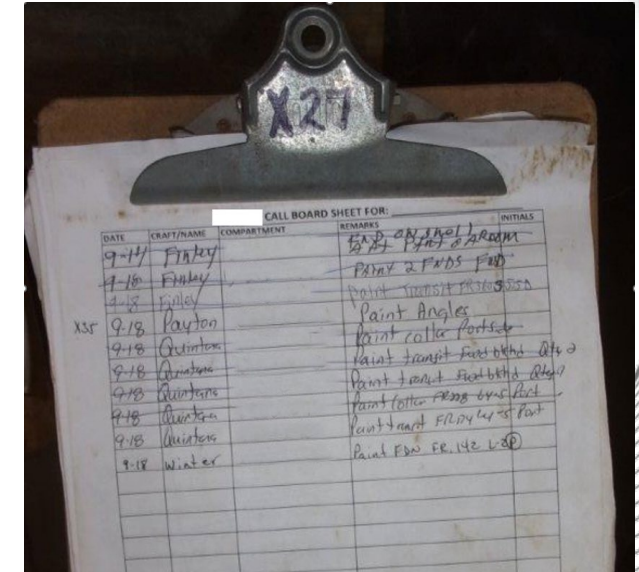
Overview

- Platform: DDG51
- Issue Description:
 - Temporary (and other) services (i.e. hot work, combination welding, fire watch, ventilation, welding lines, electric lighting, power, compressed air, scaffolding, etc.) are essential in construction of Navy ship platforms.
 - Scheduling services at Ingalls is a manual process where shipboard requests are tracked with a pen and clipboard. This manual, paper process is slow, inconsistent, and enables user error, inserting inefficiencies in planning and scheduling which can impact timely execution of work packages and adherence to the construction schedule.



Objectives

- The objective of the project is to create an automated management toolset to provide immediate visibility of the location and performance of key services resources, thus reducing labor costs through increased process efficiency. The project will enhance the existing process by creating a central data management tool for service management activities.



Project Organizational Structure



Paul Huang – ManTech Program Officer

Dan Reed – Executive Director
Bobby Mashburn – Technical Director
Scott Truitt – Project Manager
Tim Macon – Project Technical Representative



David Clark PMS 400D



INGALLS
SHIPBUILDING
A Division of HII

ManTech Project Manager – Jamie Breakfield
R&D – Christen Leggett
R&D – Scott Robbins

ManTech Metrics



Goal 1: Reduce time associated with Services planning/coordination								
Parameter	Baseline Value	Requirement Threshold Value	Requirement Objective Value	How to Measure	Timeframe (i.e. Subtask X.X) to Verify	Achievement Value	Achievement Date	Demonstration Method
Reduction in man hours needed to coordinate and plan Services	Current process time	1.25 % reduction in man hours	2.5% reduction in man hours	Metric will be measured through monitoring of man hours needed for relevant processes	Completion of Task 5	TBD	TBD	This will be demonstrated through comparisons with historical data/information
Exit Criteria: Temporary Services Call Board Optimization Tool Evaluation								
Activity	Requirements		Pass/Fail	How it will be Measured		Achievement Date	Demonstration Method	
Services planning and management activities	The new system should allow for more automated planning and management of Services.		System produces the expected and enhanced outputs	Comparison of the manual process and new automated process		TBD	Demonstrate that the tool is meeting the optimal outcomes as defined in the Task 2.	

Goal 1: Labor ↓

Benefits / Payoff / Business Case Update

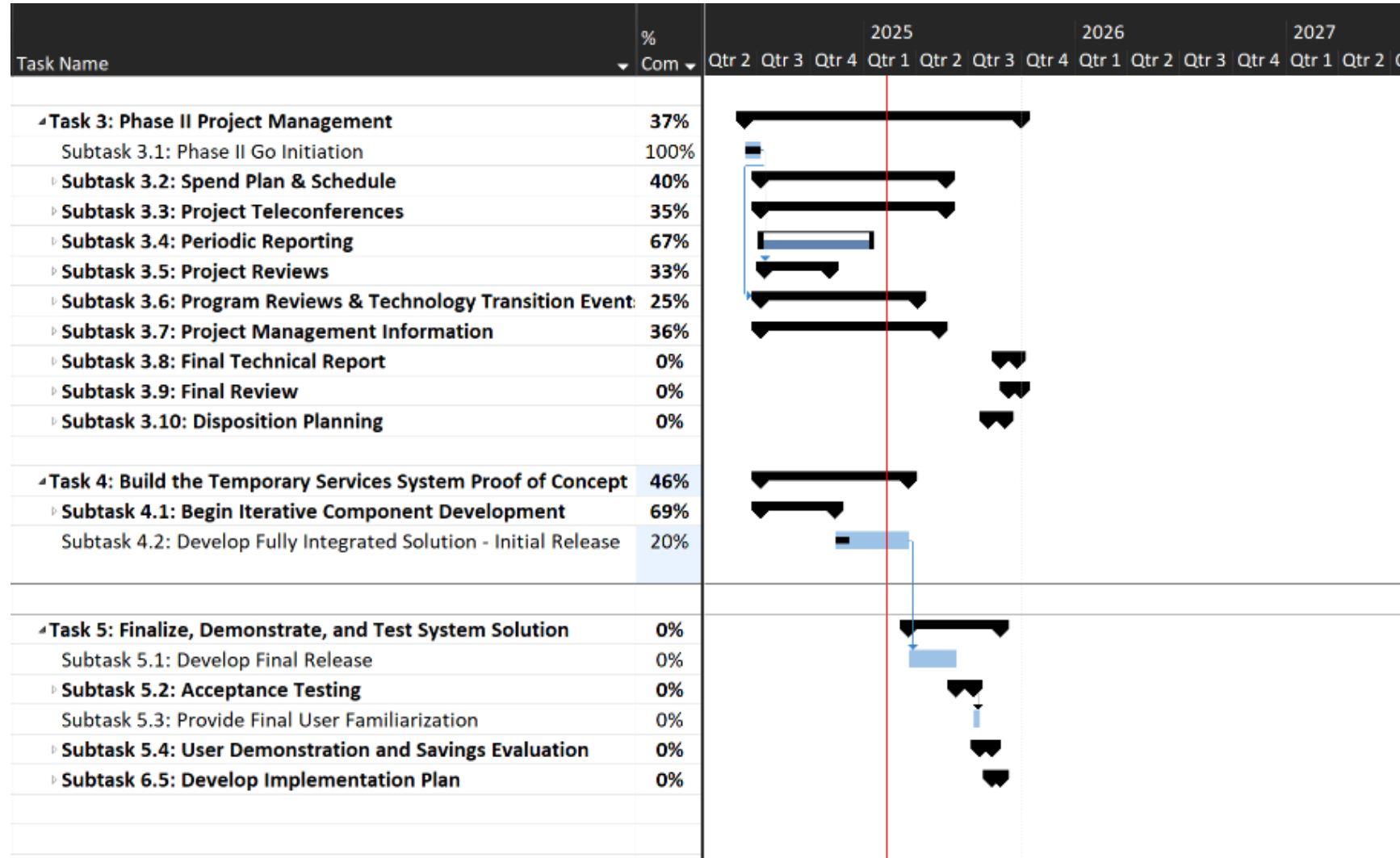


- Major Benefit: Reduced time associated with Services planning/coordination: There are very specific costs associated with these activities and any savings can reap large benefits for cost and schedule. It is anticipated that this system will reduce the Services planning and coordination effort by 1.25% (threshold value).
 - Acquisition Affordability: Savings: \$529K annual; \$2.65M total;
 - ManTech Investment: \$850K; Ingalls Implementation: \$100K
 - $ROI = \frac{(\$2,650K) - (\$850K + \$100K)}{(\$850K + \$100K)}$
 - $ROI = 1.79$

Project Schedule



- ONR Period of Performance: 3rd Quarter of FY2023 through 3rd Quarter of FY2025





Technical Approach

- Phase I
 - Task 1 – Project Management
 - Task 2 – Envision the Temporary Services System
- Phase II
 - Task 3 – Project Management
 - Task 4 – Build the Temporary Services System Proof of Concept
 - Task 5 – Finalize, Demonstrate, and Test System Solution

Task 2 Envision the Temporary Service System

- Selected Use Cases
 - Hot Work Chit
 - Service Paint
 - Insulation Releases
 - Combination Welding
- Identification and evaluation of Potential Technology Solutions
 - Service Now (Service Delivery platform)
 - IFS
 - Jira (Platform for Project Management of software creation/release)
 - ShipyardAI
 - Aras
- User Experience Assessment
 - Task Success Rate
 - User Experience KPI's
 - Average Completion Time
 - Mean Time to Failure
 - Average Time on Task
 - Retention Rate
 - Conversion Rate
 - Error Rate
 - Satisfaction
 - Heuristic Evaluation (empirical rules of thumb, standards, and conventions)

Category	Criterion	DoG	Weight	Jira		Shipyard AI	
				Raw	Result	Raw	Result
Relative Cost	Support and Maintenance	-1	0.25	5	-1.25	3	-0.75
	Hardware	-1	0.15	1	-0.15	2	-0.30
	Software	-1	0.15	5	-0.75	3	-0.45
	Cloud Services	-1	0.20	5	-1.00	1	-0.20
	Backup and Recovery	-1	0.25	1	-0.25	3	-0.75
Totals:			1.00	-3.40		-2.45	
Feasibility	Achievability	1	0.20	9	1.8	9	1.8
	Manageability	1	0.20	8	1.6	8	1.6
	Technical Risk	-1	0.30	4	-1.2	4	-1.2
	Partnering Risk	-1	0.30	6	-1.8	4	-1.2
	Totals:			1.00	0.40		1.00

- Identification and evaluation of Potential Technology Solutions
 - Service Now (Service Delivery platform)
 - IFS
 - Jira (Platform for Project Management of software creation/release)
 - ShipyardAI
 - Aras

Availability	Competitive Pressure	1	0.20	2	0.4	3	0.6
	Economic Incentives	1	0.10	4	0.4	4	0.4
	Current Infrastructure	1	0.30	9	2.7	9	2.7
	User Expectations	1	0.40	5	2	8	3.2
	Totals:			1.00	5.50	6.90	
Applicability	Sustainability	1	0.35	8	2.8	8	2.8
	Scalability	1	0.35	8	2.8	8	2.8
	Corporate Synergy	1	0.30	2	0.6	5	1.5
	Totals:			1.00	6.20	7.10	

Core Assessment Final Result

Table 17. Final Outcome

	Jira	Shipyard AI
Overall Result	5.395	6.022

As the reader can see, Shipyard AI has the highest score of the two technology alternatives and will be selected as the technology of choice for further development and integration into the Ingalls digital environment.

Task 4 Build The Temporary Service System PoC

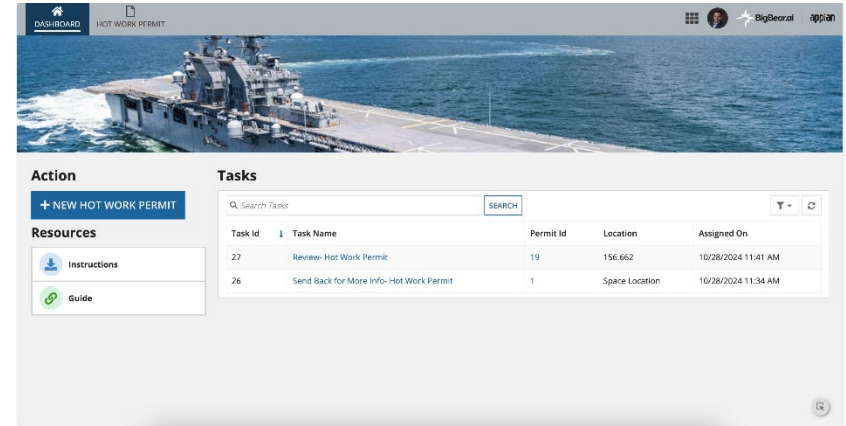


• Accomplishments

- Received ROM from BigBear.ai
- Executed PO with BigBear.ai
- On site kick off with Big Bear.ai completed
- Proof of concept complete for first use case (hot work chits)
- Demonstrated concept to end users and management
 - Generated good feedback, Q&A, and additional process information
- Team is now working on next use case (service paint)

• Challenges/Issues

- Purchase order for subcontractor (BigBear.ai) delayed
- IT Resources were initially late to be engaged with project team



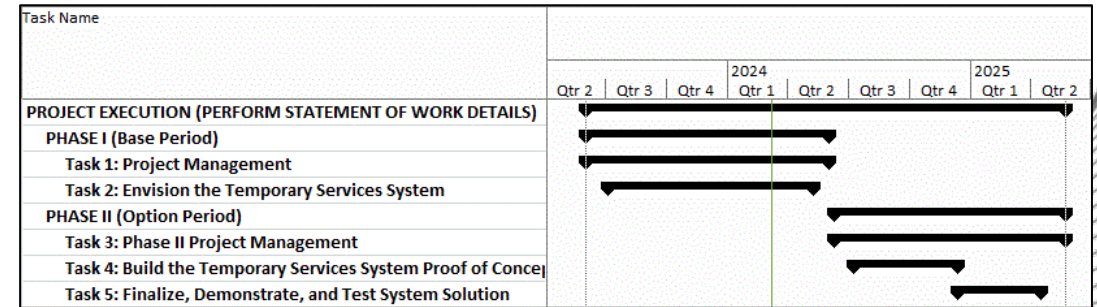


Transition/Implementation

- Transition Event:
 - Implementation is expected to begin in Q4 FY26 on DDG 135. Ingalls shall deploy the digital callboard solution in its target environment, after initial acceptance tests are complete. The team will also engage affected individuals/groups/organizations to ensure the solution satisfies documented needs and expectations

- Implementation / Implementation Funding:

- Target: DDG 135
- Time Period: Q4 FY26
- Implementation Funding Estimate, Source(s), and Status:



Requirement	Organization Responsible for Requirement / POC	Resource Commitment
Equipment/Material		
Supporting Software	Ingalls Shipbuilding IT	\$80k / Internal funding
Supporting Hardware (Production Server, Storage, etc.)	Ingalls Shipbuilding IT	
Technical Support	Ingalls Shipbuilding IT	
Training		
User Training	Ingalls Shipbuilding Operations	< 100 Man Hours
Business Process		
Identify which Command Media processes are affected by change and update	Ingalls Shipbuilding Operations	< 80 Man Hours

Next Steps



- Continue iterative concept development
- Continue engaging stakeholders to demonstrate progress
- Develop Fully Integrated Solution - Initial Release

