



# **Enabling the Continuous Improvement of our Surface Navy Fleet Post Shakedown Availability (PSA) by Standardizing Execution Processes**

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## Report Documentation Page

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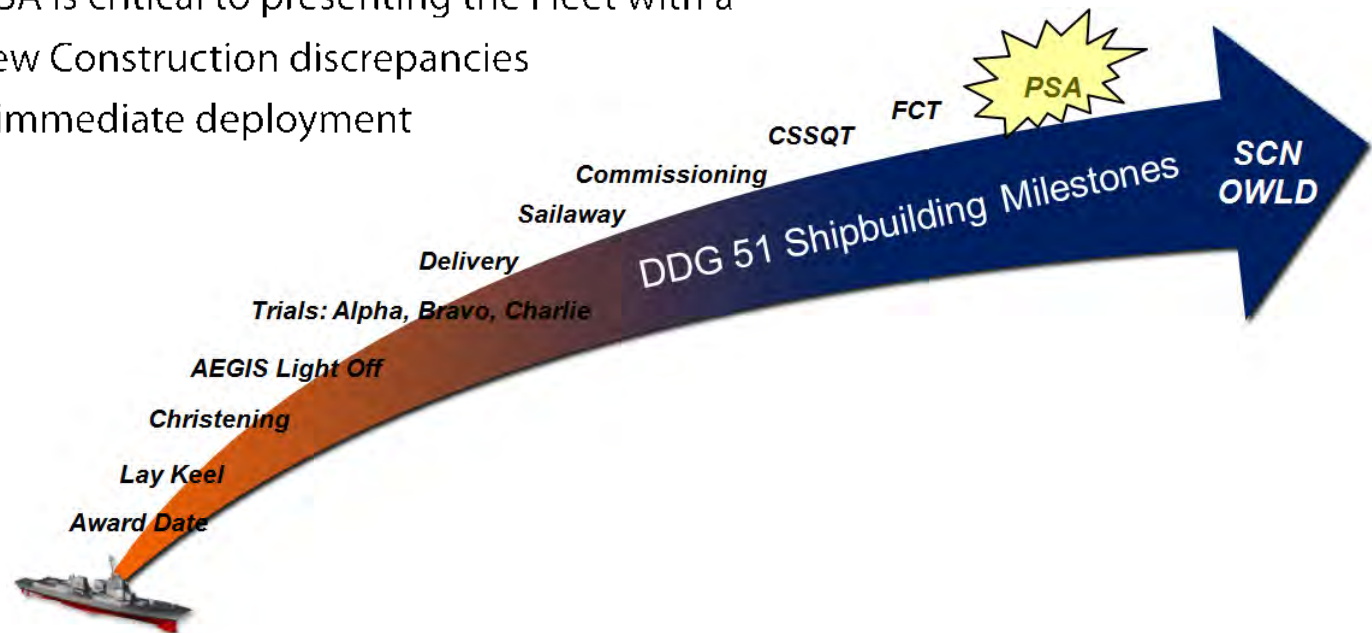
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# Objective

- Identify, Document and Standardize PSA processes
  - Retain expert knowledge regarding PSA processes
  - Assist new employees in executing processes with minimal training / experience
  - Improve awareness of roles and responsibilities of all stakeholders

# Introduction

- Post Shakedown Availability (PSA) is the final industrial opportunity to correct ship deficiencies and accomplish authorized work prior to Ship Conversion, Navy (SCN) Obligating Work Limiting Date (OWLD)
  - Before a PSA, many months are allotted for planning and the PSA Work Package is developed
  - During a PSA, deficiencies are corrected and engineering changes are implemented
  - A successful PSA is critical to presenting the Fleet with a Ship free of New Construction discrepancies and ready for immediate deployment

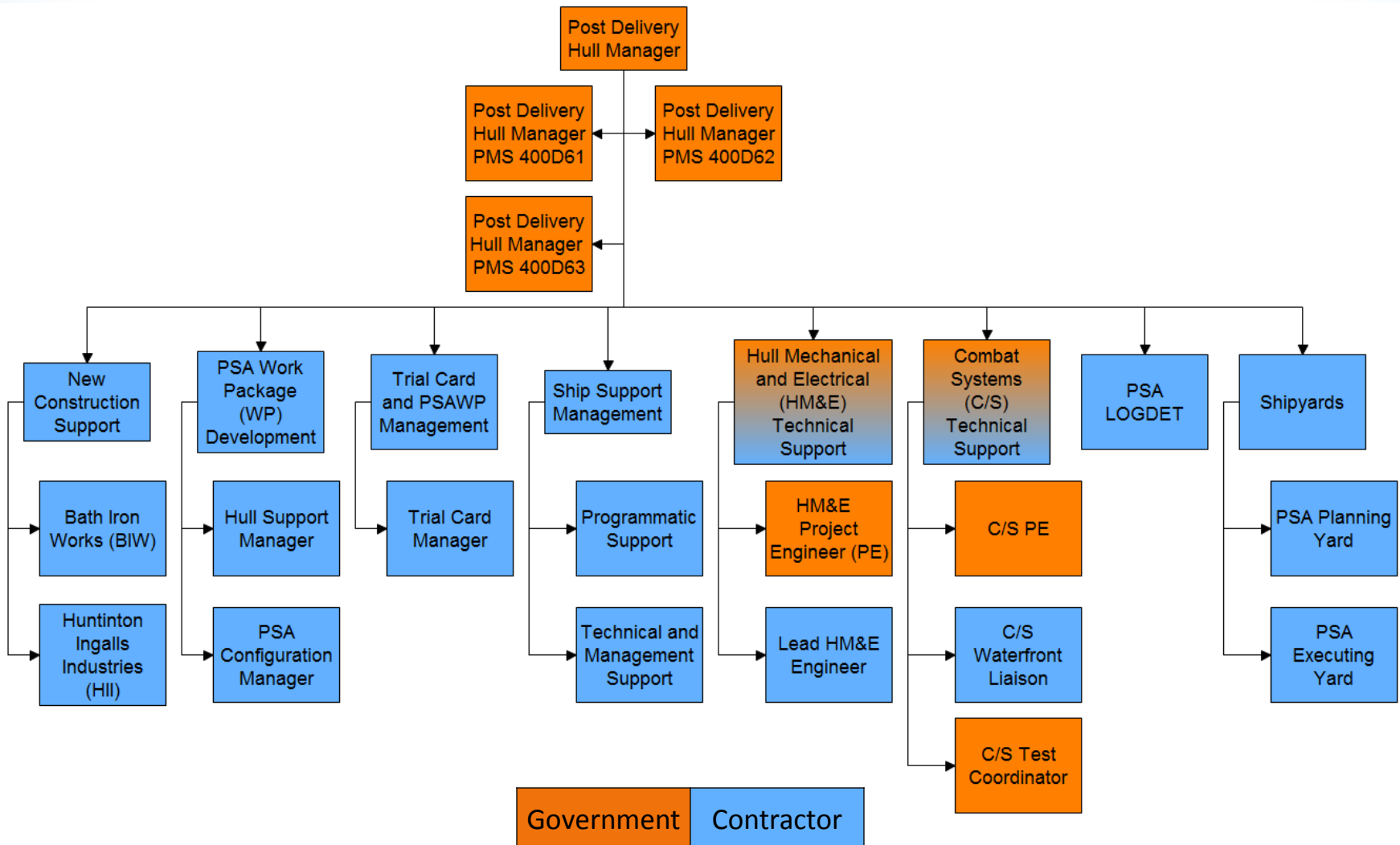


# Background

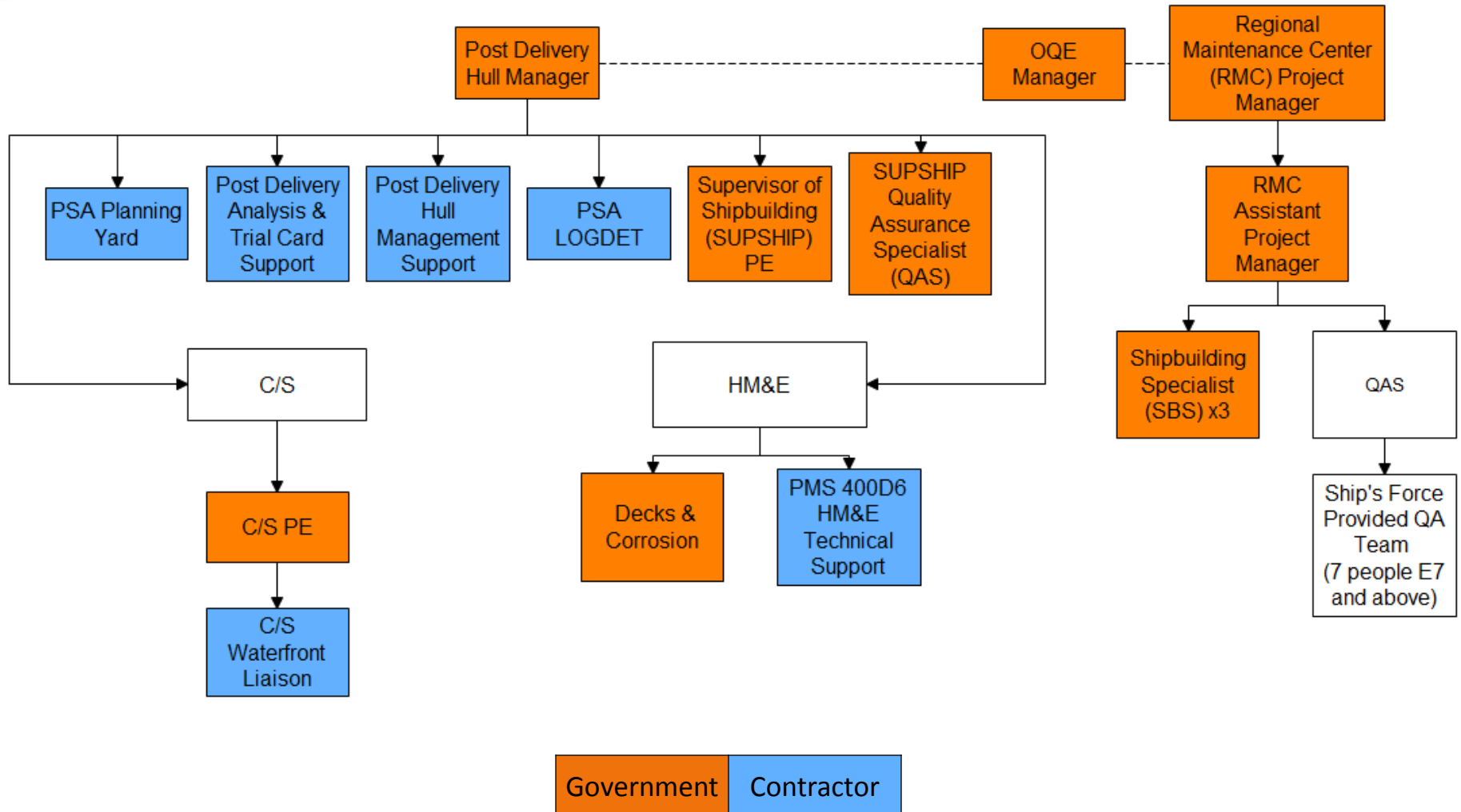
- The Post Delivery period commences with Delivery, continues with PSA, and culminates with a War Ready ship
- The Navy has planned, scheduled, and executed 59 PSAs for Arleigh Burke-class Destroyers (DDG 51 class)
  - The first ship in the class was commissioned in July 1991
  - DDG 51 class is the longest production run of any US Navy surface combatant



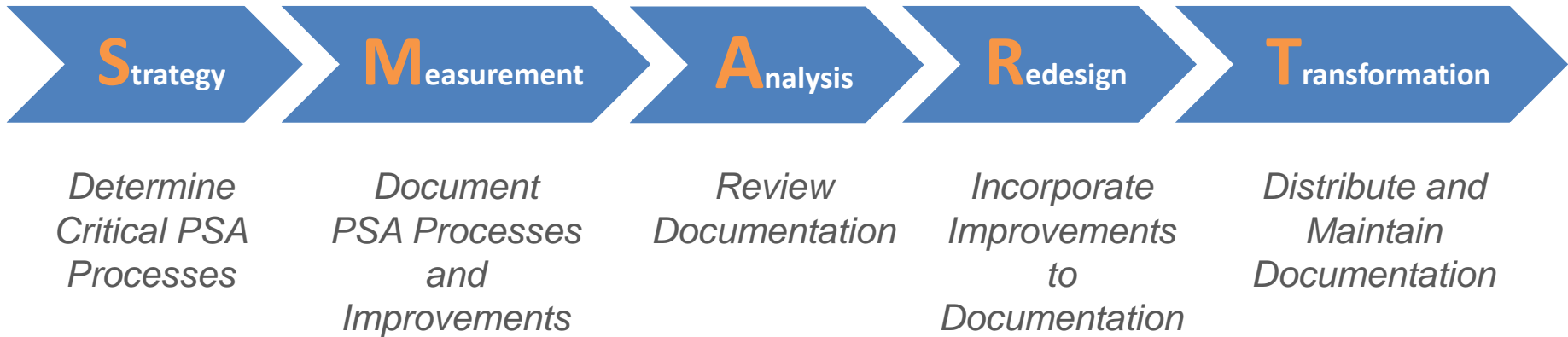
# PSA Organizational Chart



# On Site Organizational Chart



# Project Approach



***Proven industry model was applied to PSA process documentation and standardization***





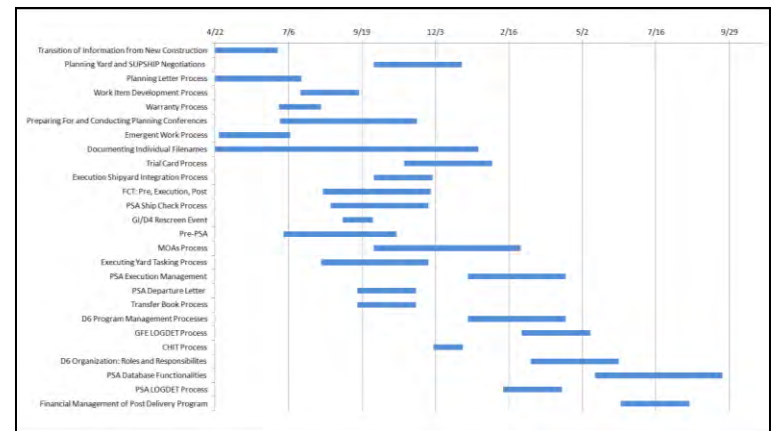
- A Kickoff Event was held Spring 2010 to determine the PSA processes for documentation
- ~30 Stakeholders participated from Government and Industry
- 25 PSA processes were identified for documentation, some of which include:

- |  |   |
|--|---|
| <input type="checkbox"/> D6 Program Management Processes                 | <input type="checkbox"/> Planning Letter Process            |
| <input type="checkbox"/> D6 Organization: Roles & Responsibilities       | <input type="checkbox"/> Work Item Development Process      |
| <input type="checkbox"/> Transition of Information from New Construction | <input type="checkbox"/> Trial Card Process                 |
| <input type="checkbox"/> Financial Management of Post Delivery Program   | <input type="checkbox"/> PSA Execution Management Processes |
|  | <input type="checkbox"/> Managing the PSA Schedule          |
|  | <input type="checkbox"/> PSA Departure Letter               |
|  | <input type="checkbox"/> Transfer Book Process              |

***Strategy: Define strategy to identify and achieve the objectives critical to success***



- Created and maintained a Plan of Action and Milestones (POA&M) for events to be held to synchronize a geographically diverse team
- Met with stakeholders to develop process maps and Standard Operating Procedures (SOPs) for each PSA process
- Constructed checklists and report templates for PSA processes to support strategic objectives



**Measurement: Identify operational metrics and measure performance against strategic objectives**



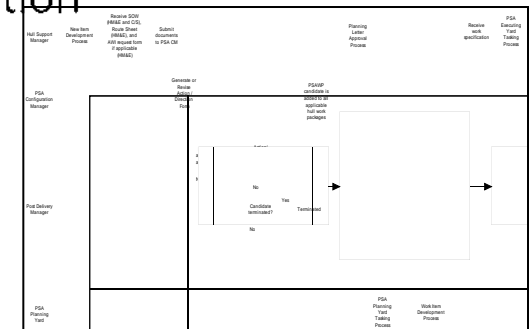
- After process mapping events, stakeholders reviewed and refined process documentation
  - Allowed for verification and validation of captured process
  - Ensured processes were aligned with PSA mission and objectives
  - Provided insight into true execution of processes, fostering improvement ideas
- Once finalized, the documentation became the basis for standardized PSA execution
  - Agreement amongst all stakeholders

***Analysis : Objective analysis in support of operational and strategic decisions***



- Stakeholders verified processes real time during PSA execution
  - Using standardized documentation, ensured accuracy of process maps and SOPs and refined as necessary
- Communicated process documentation to broader stakeholder audience
  - Waterfront personnel aided in verification and validation
- Adjudicated feedback and redesigned documentation to create final product

Planning Conference Checklist					
Time	Owner	Step	Action	Complete ?	
6-10 Weeks Before	HSM	1	Finalize potential PC dates		<input type="checkbox"/>
			Reference plan schedule, master control schedule, PDM schedule, and prior PC design history data may have been determined at previous PC to determine selected dates		
	HSM	2	Select PC site		<input type="checkbox"/>
8 Weeks Before	HSM	3	Select site as close to ship as possible so that SR doesn't have to travel		<input type="checkbox"/>
			Arrange for PC site, including catering and media arrangements		<input type="checkbox"/>
	HSM	4	Arrange for hotel rooms (if required by PC site characteristics)		<input type="checkbox"/>
8 Weeks Before	HSM	5	Obtain a block of 15 rooms at PC site (notify hotel at the Government Per Diem rate)		<input type="checkbox"/>
			Create Planning Letter and give to SUPSHIP		<input type="checkbox"/>
	HSM	6	SUPSHIP will take PSAWP to the PC site		<input type="checkbox"/>
8 Weeks Before	HSM	7	Update Action Items list with responses to Action Items		<input type="checkbox"/>
			Only issues for PC II and PC III		
	HSM	8	Prepare the PC Agenda		<input type="checkbox"/>
			Agenda will include review presentation: PC I - PDM, PSAWP, CEPE, ASW/CDSSE, PSAPY; PC II - those from PC I, and provide the PSAB; PC III - those from PC I, and PSA LOSDET and SUPSHIP or RMC include hotel and security - visit request information		
4 Weeks Before	HSM	9	Submit PC Agenda to PDM for approval		<input type="checkbox"/>
			Distribute PC Agenda to PC attendees		
2 Weeks Before	HSM	10	Obtain electronic sign-off of the PC Agenda from the PC Agenda is agreed by PDM should be at least 4 weeks before PC		<input type="checkbox"/>
			Develop PC Presentation		<input type="checkbox"/>
2 Weeks Before	HSM	11	PC Presentation to PDM		<input type="checkbox"/>
			Submit PC Presentation to supervisor for approval		
2 Weeks Before	HSM	12	Allow one week for review/revision and comments before approval		<input type="checkbox"/>
			Submit PC Presentation to PDM for approval		<input type="checkbox"/>
2 Weeks Before	HSM	13	Submit PC Presentation to PDM for approval		<input type="checkbox"/>
			Arrange for and facilitate PSAWP Review with key personnel		
	HSM	14	Finalize PSAWP with TCM		<input type="checkbox"/>



**Redesign: Identify the key actions, projects, and programs required to achieve objectives**



- Two deliverables were created for the standardized PSA processes:
  - “PSA Processes Handbook”
    - Compiled of chapters corresponding to each PSA process
    - Each chapter contains the knowledge and instructions required to understand and perform the process without further documentation
  - “DDG PSA Executive Summary”
    - High level guide defining processes and procedures governing PSA
    - Verbally documents PSA from Delivery through SCN OWLD
- These products were shared with other ship classes and organizations throughout NAVSEA



***Transformation: Maintain results by integrating changes into the management process***

# Deliverables

- All inclusive “PSA Processes Handbook”; 25 documented and standardized PSA processes
  - Deliverables enable PSA team to successfully plan for and execute PSAs
  - Allows for the DDG PSA Program to be leveraged for other ship classes within NAVSEA
- Benefits have included:
  - Aiding in the on-boarding of Government and Contractor personnel
  - Improved awareness of roles and responsibilities of all stakeholders

***Proven “SMART” model can be reapplied to promote continuous improvement of PSA Processes***

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**Back-Up**



# PSA Processes

- Transition of Information from New Construction
- PSAPY & SUPSHIP Negotiations
- Planning Letter Process
- Work Item Development Process
- Warranty Process
- Preparing For & Conducting Planning Conferences
- Emergent Work Process
- Documenting Individual Filenames
- Trial Card Process (and GI/D4 Rescreen)
- Managing the PSA Schedule
- FCT: Pre, Execution, Post
- PSA Ship Check Process
- Pre-PSA
- MOAs
- Executing Yard Tasking Process
- PSA Execution Management
- PSA Departure Letter
- D6 Program Management Processes
- GFE LOGDET Process
- CHIT Process
- D6 Organization: Roles & Responsibilities
- PSA Database Functionalities
- PSA LOGDET Process
- Financial Management of Post Delivery Program
- Transfer Book Process