



Surface Maintenance Engineering Planning Program (SURFMEPP)

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PRESENTED TO:
Surface Navy Association

PRESENTED BY:
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SURFMEPP Deputy Director



SURFMEPP Mission & Vision



Our Mission

To enable the Surface Fleet to meet its Expected Service Life by providing centralized Lifecycle Engineering, Class Maintenance and Modernization Planning.

Guiding Vision

Provide planning excellence to support ship readiness and expected service life

Guiding Values

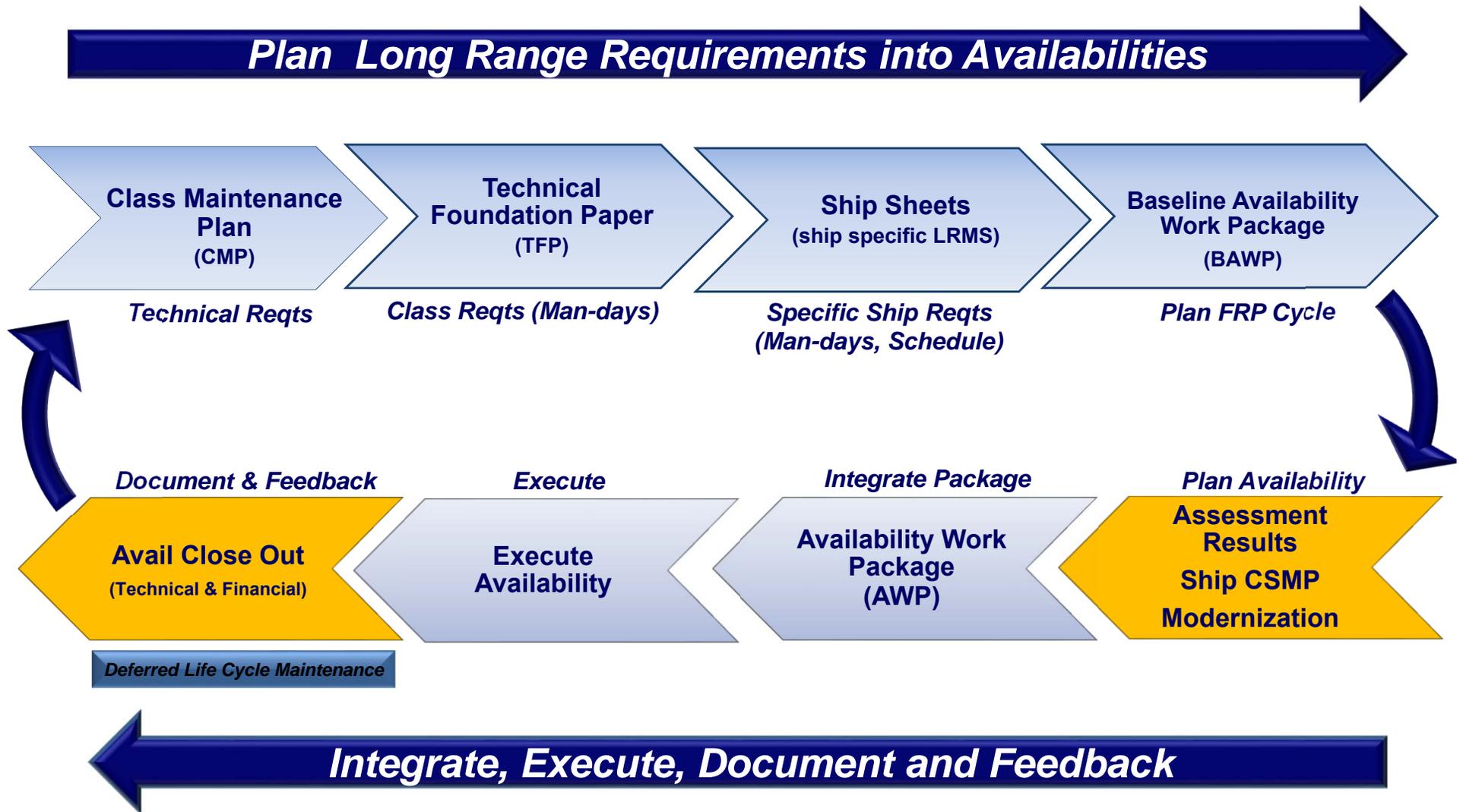
- Persistence – Supporting the War Fighter
- Innovation – Challenging the status quo
- Accountability – Owning what we do
- Respect – Treating others the way we want to be treated
- Excellence – Pursuing with rigor

Strategic Focus Area Pillars

- Optimize organizational structure, policies and processes
- Leverage best practices, employee feedback, and knowledge transfer to encourage and sustain a creative work environment
- Improve maintenance and modernization planning products
- Impact the judicious resourcing and execution of life cycle maintenance requirements
- Enhance surface maintenance enterprise coordination and alignment to efficiently execute the End to End Process



SURFMEPP Product Value Stream

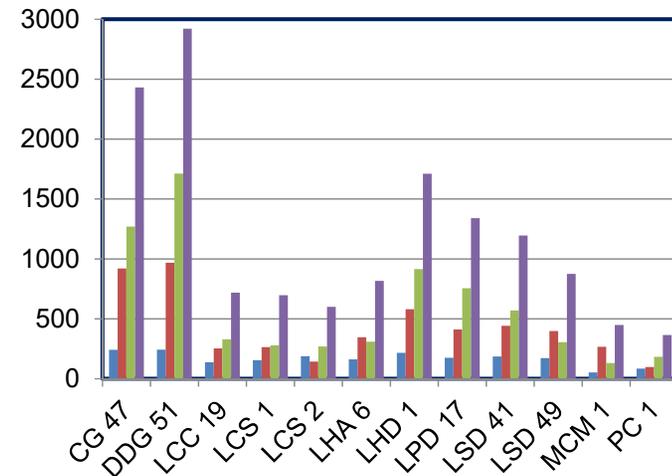




Surface Ship Class Maintenance Plans



- **Required by OPNAVINST 4700L**
- **Developed by Shipbuilders**
- **Approved by SEA05**
- **Depot/Intermediate Level Tasks**
 - **Condition Based Assessments**
 - **Directive Repairs**
 - **Depot Availability Routines**
 - **Mandatory Safety Alterations**
 - **Alterations Equivalent to Repairs**
 - **Actionable Class Advisories**
- **12 Class Maintenance Plans executed across 157 ships**
- **Supports CNO availability planning and TYCOM readiness assessments**



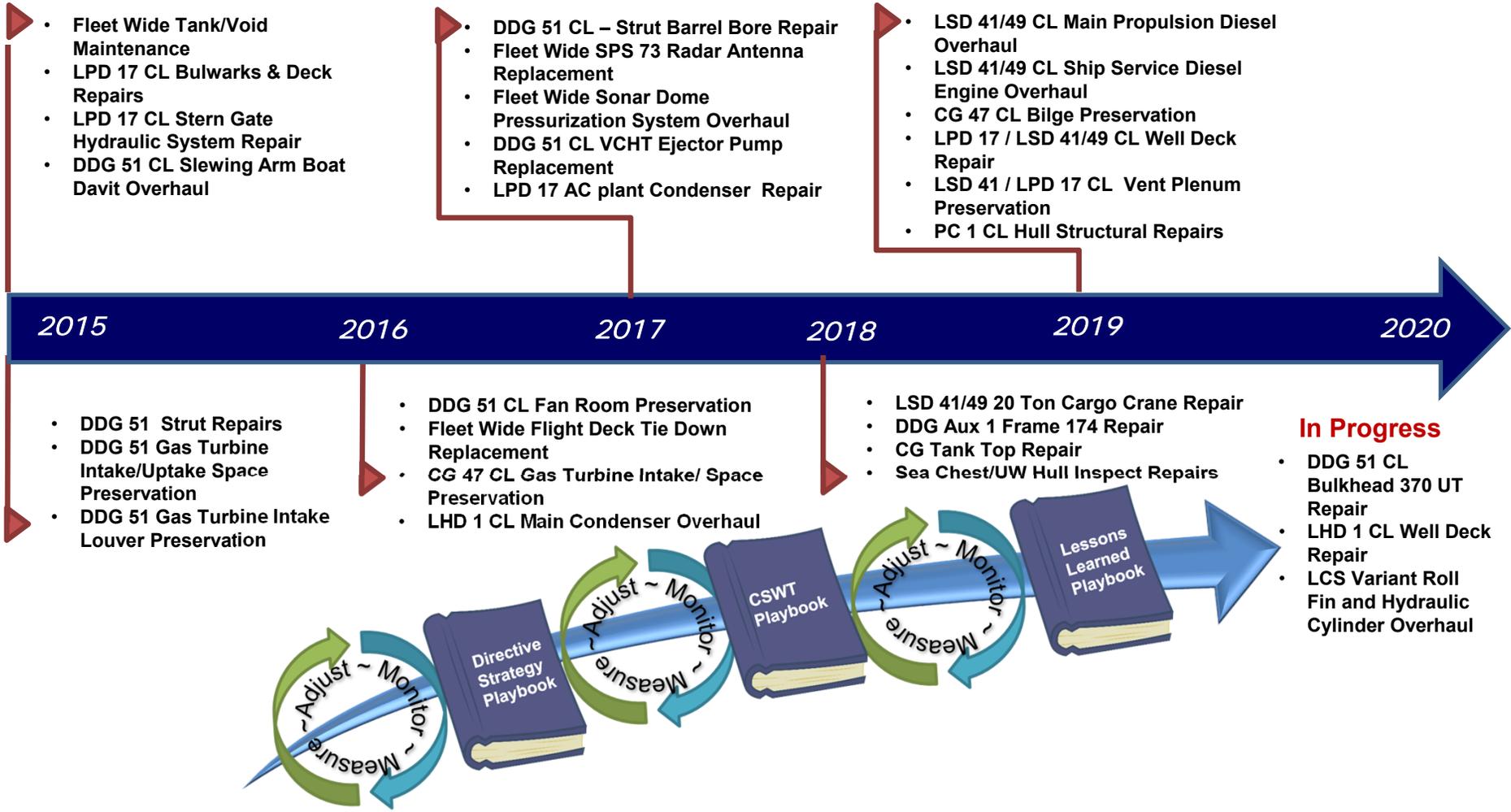
Recurring assessment and directive maintenance tasks for all surface ships



Maturing Directed Maintenance & Associated Assessments



Over 100 Directive Maintenance Strategies Developed Since 2015



Scope defined in planning process versus open and inspect during execution



Hull Structure – Tank/Void Maintenance Strategy



• Issue:

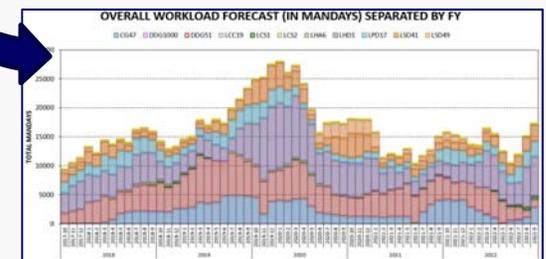
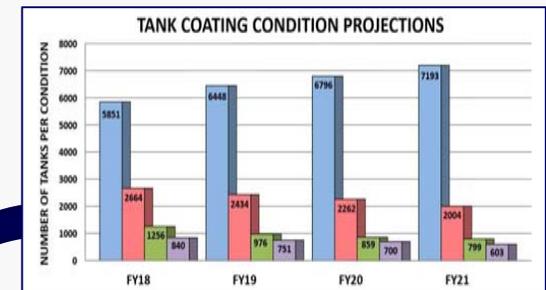
- Conducting tank/void surveys without planned repair work items during shipyard maintenance periods resulted in incremental discovery
- Negatively impacted shipyard ability to remediate coating failures and structural repairs within production schedule
- Increased level of deferred tank/void maintenance as ships are operated throughout expected service life

• Class Maintenance Plan:

- Programs both CBM surveys and projected repairs into CNO availabilities using statistical analysis of tank/void inspection data

• Way Ahead:

- Promotes effective budgeting and planning of maintenance prior to entering shipyard
- Reduces risk of new work and subsequent negative cost/schedule impacts by using frontloaded work items for preservation and repair
- Allows forecasting of tank/void preservation efforts across US Navy ship maintenance and industrial bases



Strategy implemented for shipyard maintenance periods starting in FY18



Corrosion Management



FUEL OIL SERVICE TANKS

- Originally not required to be coated, but multiple hulls that had pitting at margin plates in tanks
- Worked with SEA05D to change requirement to now coat with UHS
- Coating will mitigate pitting and holing risk



COMPOSITE MATERIALS

- Successful corrosion control can be realized through the use of fiber reinforced composite materials
- Examples include: deck drains, composite electrical enclosure and conduit terminals, vent screens, pipe hangers and deck grating



ULTRA HIGH SOLID "SINGLE COAT"



- Single coat paint improves on the traditional three-coat process by eliminating the time it takes each successive coat to dry
- Provides corrosion-resistance, durability, and an improved appearance to each space in which it is applied

GAS TURBINE INTAKES/UPTAKES

- Minor coating remediation and repair scheduled every CNO availability.
- Major space repair and preservation scheduled for dry-docking availabilities
- Front loaded structural repairs and directs the use of UHS coatings

DDG COLLECTIVE PROTECTION SYSTEM FAN ROOMS



- Full remediation every dry-docking availability
- Front loaded structural repairs and directs the use of UHS coatings
- Includes replacement of standard deck drains/sockets with composite material





Summary



- **SURFMEPP is the US Navy surface ship central planning activity**
- **Our focus is surface Navy enterprise depot level planning excellence that supports both ship operational readiness and achievement of expected service life through the execution of class maintenance plans**
- **We are seeking industry feedback on class maintenance plan content and planning process improvement/best practices**



Questions

