DDG 51 Program

Sea, Air, Space Exposition
Washington, DC – 10 April 2018

Presented by:
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Agenda

• Overview

• DDG 113-123 Production Status

• DDG 51 Shipbuilding Profile

• Flight III Update

• Summary
Highlights

• First restart ships delivered at each shipyard
  – Huntington Ingalls Industries - Ingalls Shipbuilding (HII)
    » USS JOHN FINN (DDG 113) delivered Dec 2016
    » RALPH JOHNSON (DDG 114) delivered Nov 2017
  – General Dynamics - Bath Iron Works (BIW)
    » RAFAEL PERALTA (DDG 115) delivered Feb 2017
  – 12 additional ships on contract (FY12-17 ships)
    • 8 ships currently under construction at HII and BIW
    • 4 more ships under contract

• Flight III on Track (FY17 And Follow ships)
  – Flight III contract modifications awarded on FY17 ships, one at each shipbuilder
    • DDG 125 (HII) awarded 27 Jun 2017
    • DDG 126 (BIW) awarded 28 Sep 2017
  – Detail Design on track to support start of construction for DDG 125 in May 2018

• Navy planning Multi-Year Procurement for FY18-22 ships

Both shipyards in serial DDG 51 production and under contract for first Flight III ships
DDG 115, 116, 118, 120, 122 Status (BIW)

- **DDG 115 (Delivered)**
  - Delivered 03 Feb 2017
  - Commissioned 29 Jul 2017
  - PSA begun 26 Feb 2018

- **DDG 116 (98% complete)**
  - Trials ALPHA/BRAVO 26 Mar 2018
  - Trial CHARLIE planned 30 Apr 2018
  - Delivery planned Jun 2018

- **DDG 118 (48% complete)**
  - Start Fab achieved 02 Aug 2015
  - Lay Keel achieved 25 Mar 2018;
    ceremony planned May 2018

- **DDG 120 (19% complete)**
  - Start Fab achieved 11 Sep 16

- **DDG 122 (1% complete)**
  - Start Fab achieved 29 Sep 17

As of 22 Mar 18
DDG 113, 114, 117, 119, 121, 123
Status (HII)

DDG 113
- Delivered 07 Dec 2016
- Commissioned 15 Jul 2017
- PSA started 22 Jan 2018

DDG 114
- Delivered 15 Nov 2017
- Commissioned 24 Mar 2018
- PSA start planned Fall 2018

DDG 119 (71% complete)
- Launch completed 08 Sep 2017
- Christening completed 04 Nov 2017
- ALO planned Spring 2018

DDG 121 (49% complete)
- Start Fab achieved 27 Apr 2016
- Lay Keel completed 13 Feb 2017

DDG 123 (31% complete)
- Start Fab achieved 25 Jan 2017
- Lay Keel completed 06 Nov 2017

• DDG 117 (89% complete)
  - Christening completed 08 Apr 2017
  - ALO achieved 10 Jul 2017
  - Trials planned Summer 2018

As of 22 Mar 18
Flight III Configuration

**AN/SPY-6(V)1; AMDR-S SPY+15dB**
- 14.1 ft x 13.6 ft x 5 ft Array Structure
- Replaces AN/SPY-1D(V)

**BL 10 / TI 16 for Flight III Upgrade to AWS**

**Water Mist**
- Baseline change to install Water Mist in Machinery Spaces to replace Halon 1301

**4160VAC Electric Plant**
- 3 x 4MW, 4160 VAC SSGTGs replacing 3 x 3MW, 450 VAC SSGTGs
- Add transformers, PCMs, modified switchgear
- Modified controls for MCS and MFM

**Heptafluoropropane (HFP)**
- HFP in Gas Turbine Modules & Flammable Liquid Storerooms

**Increased Innerbottom Scantlings**
- Adds 90 LT to improve KG

**Full Load Operational Displacement Enhancement System (FLODES)**

**Enclosures**
- Added starboard enclosure and stacked RHBs

**AC Plant**
- 5 x 300 Ton HES-C AC Plants
  - Replacing 5 x 200 Ton AC Plants

**BL 10 / TI 16 for Flight III Upgrade to AWS**

**Habitability Changes and roll-down impacts to incorporate AN/SPY-6(V)1 and equipment**

**Capability Increase**
**Enabling Changes**
**Other Changes**
Summary

• DDG 51 program remains one the most successful shipbuilding programs with 65 ships delivered to the Fleet

• Initial Restart Ships at each shipyard have completed successful trials and delivery

• Shipyards have established serial DDG 51 production with 12 more ships on contract through FY17

• Flight III Detail Design will be complete in support of start of construction

• First Flight III Ship at each shipyard awarded in 2017

• PB19 increases build rate (3 ships in FY19, FY21, FY22, and FY23)

• MYP FY18-22 RFP released and planned contract award summer FY18

Delivering capability to the fleet for current and future missions