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Agenda

• DDG 51 Shipbuilding Profile

• DDG 113-116 Status
  – Baseline (BL) 9 New Construction (NC) IAMD
  – Increasing DDG 51 Capabilities While Holding Cost

• Flight III Update

• DDG 51 Program Office Status

• Summary
DDG 51 Class Shipbuilding Profile

**ACQUISITION STRATEGIES**

<table>
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**FUTURE AWARD**

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**2012 Long Range Shipbuilding Plan**

- 51 Ships in Current APB
- 62 Delivered to Fleet
- 75 Ships in Current APB
- 13 Under Contract
- 21 Flight I Ships
- 7 Flight II Ships
- 44 Flight IIA Ships
- 13 Flight III Ships

**DDG 51 Class Shipbuilding Profile**

- **FY98-01 MYP**
- **FY02-05 MYP**
- **FY13-17 MYP**

**Distribution Statement A:**
Approved for public release, distribution is unlimited.
DDG 113-116 Status
(Through August 2013)

• DDG 113 (HII) Lay Keel scheduled for 04 Nov 13 (13% complete)

• DDG 114 (HII) Start Fab completed 09 Sep 13 (1% complete)

• DDG 115 (BIW) Lay Keel scheduled for 18 May 14 (31% complete)

• DDG 116 (BIW) Start Fab completed 15 Feb 13 (8% complete)
Baseline (BL) 9 New Construction (NC) IAMD (DDG 113-118)

• BL 9 NC IAMD DDG computer program
  – Developed from AEGIS Common Source Library (CSL)
    ▪ Supports all Baselines associated with IAMD
    ▪ Being developed from AEGIS Modernization, BL 9 IAMD DDG
      o BL 9 IAMD DDG certification date scheduled for Mar 2015
    ▪ Small delta in software to address configuration differences
      between AMOD & NC destroyers
      o DDG AWS software is estimated in excess of 98% common between
        AMOD & NC destroyers
      o Approximately 30% of BL 9 NC IAMD DDG AWS unique software development completed
  ▪ Incorporation of BMD 5.0 CU
    o Approximately 58% of BMD 5.0 CU software development completed

– BL 9 NC IAMD DDG certification scheduled for FY17

• DDG 113 AWS completed testing in June 2013 at Production Test Center
  – DDG 114-118 to follow
Increasing DDG 51 Capabilities While Holding Cost

- **Average Unit Cost (AUC)**

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<td>10</td>
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**Diagram:**

- **4I** DDG 54-58
  - AN/SPY-1D
  - MK 34 GWS
  - SP5-67(V)3
  - ADS MK II
  - WRN-6 GPS
  - SM-2 BLK II
  - AN/SQQ-89(V)6
  - TWS SWG-8A 8K(II)
  - DMS
  - SYD-7(V)5/4 (NAV/MACS)
  - ECPs
  - LLSI
  - SQG-89 DS
  - SQR/AC

- **5I** DDG 55-57
  - OJ-663 Consoles
  - SM-2 BLK III
  - SPY Computer Program
  - Upgrades
  - Training Upgrades
  - CASS Upgrades
  - ECPs
  - NTDS
  - NTDS Serial Controller
  - Improvement
  - CIWS
  - U/S-32 Recorder/Reproducer

- **5III** DDG 65-88
  - RLGN
  - JTIDS/CPLINK 16
  - TACDS/FT/RE
  - ATDCS
  - SLQ-32(V)3
  - OJ-663(TOG)
  - Computing Suite
  - Upgrade
  - SPY-1D w/TIP
  - RCS TURUKEY
  - ECPs
  - MK-162 Mod 0
  - (S3) Common
  - U/S-32 Recorder
  - Reproductor

- **6I** DDG 77-84
  - CEC
  - (CP Only)
  - SQQ-89(V)10
  - Kingfisher
  - VLS Baseline 5
  - FOMDS
  - Raised SPY Arrays
  - BFTT (ACTS Rehost)
  - ORTS Upgrade (TAC-44)
  - AWS Improvements
  - ATDCS
  - FDS
  - ADS MK6 CLSD
  - DSVL
  - Digital Wind System
  - MK 45 Mod 4MK 160 Mod 3
  - BGCs (DDG 81+)
  - Dual Helo Haven
  - Armed Helo
  - Q-70 (DDG 81+)
  - Link 16
  - Certified
  - Consolidate
  - Peripherals
  - Optical Disk ACD
  - (Emulate Mode)
  - "A" Scope Synthetic Display
  - Screen
  - TURUKEY (DDG 79+)
  - Delete TACTAS
  - Harpoon
  - Delete VLS Crane

- **7I** DDG 91-102
  - COTS Architecture
  - SPY-1D(V) w/ORTS
  - Mod. Adv Surface and Air Defense,
  - Large Area Clutter Avoidance,
  - Enhanced-Ray Management,
  - Integrated VLS
  - ACTS Superset
  - BFTT 3.3.1
  - ADS MK 7
  - MK 34 Mod 1 GWS
  - MK 160 Mod 9 GCS
  - w/Integrated OSS,
  - GUNS Prelim
  - STACAST Graphics
  - COTS MK 16
  - w/ Fracrice Protection
  - SQG-89 (V)15 w/ OBT
  - Fill 5 Upgrade
  - Integrated DFCI for MK 54 Torpedo
  - CEC
  - OL-19: Replacement
  - SLQ-32 w/NULKA
  - MORAH Wind System
  - (DDG 102+)
  - NAVSIS Block IV
  - RMRS (DDG 91+)
  - TTDCS (DDG 99+)
  - COBLU (DDG 96+)
  - VLS 8LBL 8 Upgraded to
  - BL 7 (DDG 96+)
  - IBS (DDG 94+)
  - w/ ECOIS-N
  - DSVL Replacement
  - (DDG 96+)
  - STC-2 (VII) (DDG 98+)
  - Digital Modulated Radio
  - (DDG 93+)

- **7IIR**
  - DDG 103-112
  - COTS Architecture
  - SPY-1D(V) w/ORTS
  - Mod. Adv Surface and Air Defense,
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Flight III Update

• Completed 2\textsuperscript{nd} year of Flight III Study on 17 Sep 12
• Preliminary Design development started May 2012; completion planned for Apr 2014
• Gate 2 completed 24 Jul 12
• Gate 3 completed 26 Oct 12
  – CDD and CONOPS Joint staffing underway
• Total Ship Design Review planned for May 2014
• Engineering Change Proposals (ECPs) will be developed to reflect Flight III modifications
  – ECPs notionally planned for initial implementation on 2\textsuperscript{nd} FY16 Ship
• Gate 4-5 / Configuration Steering Board (CSB) planned for 2\textsuperscript{nd}Q FY14
• DAB-PR planned for 3\textsuperscript{rd}Q FY14 to support Flight III ECP RFP release
Primary FY16 and Follow Changes (Flight III)

**Enclosures**
- Added starboard enclosures and stacked boats for displaced equip & stores

**AMDR-S**
- Replacing AN/SPY-1D(V)

**ACB Next / TI Next Upgrade to AWS**
- Obsolescence and roll-down impact changes as required

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

**Electric Plant**
- 3 x 4MW, 4160 VAC SSGTGs replacing 3 x 3MW, 450 VAC SSGTGs
- Add transformers, PCM, modified switchgear
- Modified controls for MCS and MFM
FY10 Flt IIA – FY16* Flt III
Service Life Allowance (SLA) Comparison

**Weight SLA**

FY14 Flt IIA with SPQ-9B; FY16 Flt III with AMDR-S

**Electric Power SLA**

FY16 Flt III with change to 3x4MW GTGS & 4160 VAC

**KG SLA (ft)**

FY14 Flt IIA with SPQ-9B; FY16 Flt III with AMDR-S

**Cooling SLA - Connected Loads**

FY16 Flt III with change to 5x300T HES-C AC Units

Notes:
1. * Indicates that second ship in FY16 is designated as the DDG 51 Flight III. FY16 values as of PD1C
2. FY10 values are calculated, out year values are projections based on Not to Exceed Design Budget Estimates
3. Power & Cooling SLAs calculated relative to Connected Load

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DDG 51 Program Office Status

• All PMS 400D personnel temporarily relocated into BAE Systems and Alion Science and Technology spaces
• Anticipate at least one year before Building 197 will be renovated
• Currently planning to make interim move to recently vacated Coast Guard Headquarters at Buzzard Point (Transpoint Building)
  - Transpoint Building similar in size to Building 197; plan is to accommodate majority, if not all, Building 197 personnel
  - Transition to Transpoint Building will be conducted in phases
    ▪ Anticipate PMS 400D will relocate in Nov / Dec 2013 time frame
  - Existing shuttle runs from L’Enfant Plaza to Transpoint Building
    ▪ Evaluating potential shuttle from WNY to Transpoint Building and an M Street shuttle for Contractors
  - Plan is to have Building 197 phone numbers to transfer to Transpoint Building
Summary

• Subsequent to DDG 51 Program Restart, 13 ships under contract; DDG 113-116 in construction

• FY13-17 MYP Contract Awarded for 9 ships with option for potential 10th ship

• Flight III Preliminary Design development underway; ECPs to be developed for Flight III Upgrade

• Based on current plans, DDG 51 Program Office will be fully operational at Buzzard Point late 2013