



DDG 51 Program



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DDG 51 Program Highlights

- **DDG 51 new construction shipyards in serial DDG 51 production**
 - 4 Ships delivered since restart (FY10-12 Ships)
 - Huntington Ingalls Industries - Ingalls Shipbuilding (HII Ingalls): DDG 113 and DDG 114
 - General Dynamics - Bath Iron Works (GD BIW): DDG 115 and DDG 116
 - 22 ships on contract with 10 ships currently under construction
 - Multiyear Procurement (MYP) contracts for FY18-22 ships awarded 27 Sep 2018
 - 6 ships awarded to HII Ingalls
 - 4 ships awarded to GD BIW
 - FY19 Option ship awarded to GD BIW 21 Dec 2018
- **Flight III on Track (FY17 and Follow ships)**
 - DDG 125 (HII Ingalls) Start Fab achieved 07 May 2018
 - First DDG 51 Flight III delivery planned in FY23
 - 13 DDG 51 Flight III ships now under contract

FY18-22 DDG 51 MYP contract awards allow for the investment and sustainment of the industrial base, helping to ensure stability and more affordable acquisitions



DDG 114, 117, 119, 121, 123, 125

Status (HII Ingalls)



DDG 114



DDG 114 (Delivered)

- Delivered 15 Nov 2017
- Commissioned in Charleston, SC 24 Mar 2018

DDG 117



DDG 117 (98% complete)

- Christened 08 Apr 2017
- Acceptance Trials completed 17 Dec 2018

DDG 119



DDG 119 (89% complete)

- Christened 04 Nov 2017
- ALO completed 07 Sep 2018

First Flight III Ship

DDG 121



DDG 121 (73% complete)

- Launched 13 Jul 2018
- Christened 06 Oct 2018

DDG 123



DDG 123 (52% complete)

- Lay Keel completed 06 Nov 2017
- Launch planned Jun 2019

DDG 125



DDG 125 (7% complete)

- Start Fab achieved 07 May 2018
- Lay Keel planned summer 2019

As of 28 Dec 2018



DDG 116, 118, 120, 122, 124, 127

Status (GD BIW)



DDG 116

DDG 116 (Delivered)

- Delivered 15 Jun 2018
- Commissioned in Boston, MA 01 Dec 2018



DDG 118

DDG 118 (68% complete)

- Lay Keel achieved 20 Mar 2018
- Launch planned June 2019



DDG 120

DDG 120 (41% complete)

- Start Fab achieved 11 Sep 2016
- Lay Keel planned 18 Jan 2019



DDG 122

DDG 122 (13% complete)

- Start Fab achieved 29 Sep 2017
- Lay Keel planned fall 2019



DDG 124

DDG 124 (1% complete)

- Start Fab 17 May 2018
- Lay Keel planned May 2020



DDG 127

DDG 127 (0% complete)

- Start of construction 09 Nov 2018

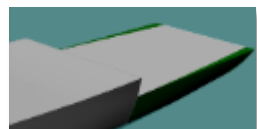


DDG 117 Missile Shoot





Flight III Changes



Enclosures

- Added starboard enclosure and stacked RHIBs

Full Load Operational Displacement Enhancement System (FLODES)

AN/SPY-6(V)1; AMDR-S SPY+15dB

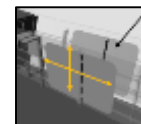
- 14.1 ft x 13.6 ft x 5 ft Array Structure
- Replaces AN/SPY-1D(V)

BL 10 / TI 16 for Flight III Upgrade to AWS

- Added 3 Warfare Commander consoles

Rapid Removal Routes

- Incorporates reservations for depot level structural cuts to facilitate future Combat Systems equipment upgrades



Water Mist

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



AC Plant

- 5 x 350 Ton HES-C AC Plants
Replacing 5 x 200 Ton AC Plants



4160VAC Electric Plant

- 3 x 4MW, 4160 VAC SSGTGs replacing 3 x 3MW, 450 VAC SSGTGs
- Add ship service transformers, PCMs, modified switchgear
- Modified controls for MCS and MFMs



Heptafluoropropane (HFP)

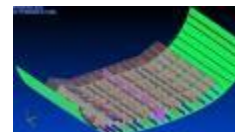
- HFP in Gas Turbine Modules & Flammable Liquid Storerooms replaces Halon 1301



- **Capability Increase**
- **Enabling Changes**
- **Other Changes**

Increased Innerbottom Scantlings

- Adds 90 LT to improve KG



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



DDG 51 MYP 2018-2022 Update



- **Navy competitively awarded DDG 51 FY18-22 MYP Contracts on 27 September 2018**
 - GD BIW awarded a contract for four firm ships in FY19-22
 - HII Ingalls awarded a contract for six firm ships in FY18-22
 - Each contract includes five option ships, one each in FY18/19/20/21/22, providing the Navy and/or Congress flexibility to increase DDG 51 build rates above the 10 Flight III MYP ships
- **FY18-22 MYP ensures a stable industrial base while delivering on the Navy's plan to continue procurement of the DDG 51 production line and deliver critical Flight III capability**
 - Contracts resulted in significant cost savings and improved production efficiencies
- **FY19 NDAA and Consolidated Appropriations Act included funding for three (3) FY19 DDG 51 class ships**
 - GD BIW awarded the FY19 Option ship on 21 Dec 2018



Summary

- DDG 51 program remains one the most successful shipbuilding programs with 66 ships delivered to the Fleet.
- Shipyards have established serial DDG 51 production with 22 ships on contract through FY22.
- Flight III will keep pace with Integrated Air and Missile Defense (IAMD) threats. Thirteen Flight III ships are currently on contract.



Delivering capability to the fleet for current and future missions.



Back Up



Flight III Capability

- **Delivers advances in Integrated Air and Missile Defense, including ballistic missile defense, with incorporation of the SPY-6/Air and Missile Defense Radar, and the latest advancements in the AEGIS combat system**
- **Improved radar sensitivity enabling longer range detection of increasingly complex threats**
- **Flight III upgrades electrical power and cooling capacity plus additional associated changes**

