



# DDG 1000 Class Destroyer



## DDG 1000 Overview

*10 January 2018*

*Surface Navy Association (SNA)  
30<sup>th</sup> National Symposium*



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*CAPT Kevin Smith*



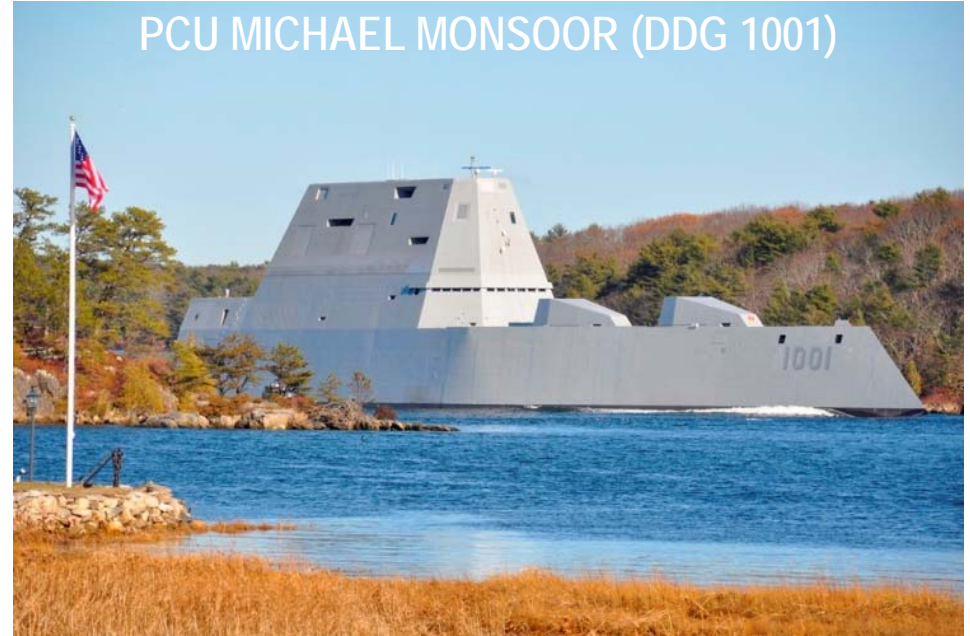
# DDG 1000 CLASS



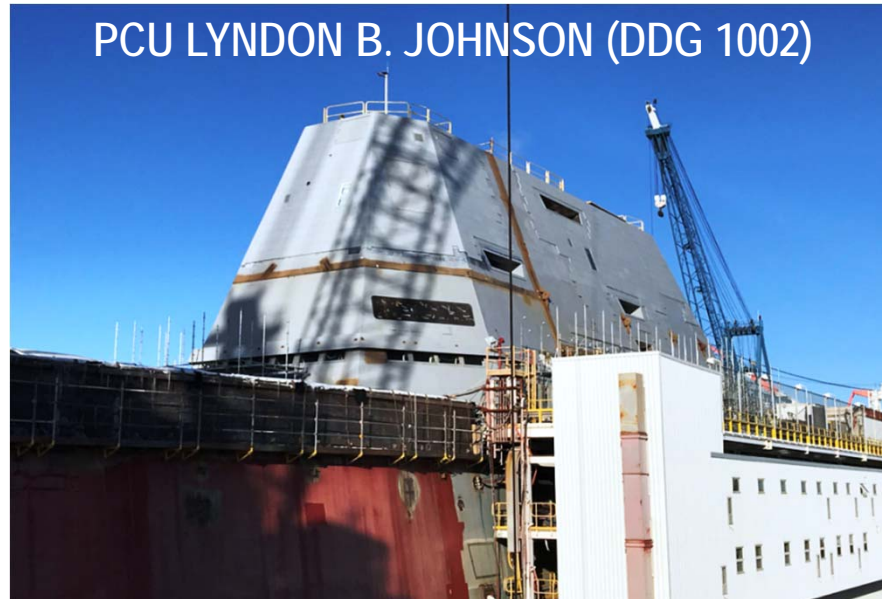
USS ZUMWALT (DDG 1000)



PCU MICHAEL MONSOOR (DDG 1001)



PCU LYNDON B. JOHNSON (DDG 1002)







# USS ZUMWALT (DDG 1000)

## San Diego Homeport



- **Nearing completion of industrial work in preparation to activate combat systems (weapons, sensors and communications)**
- **Operational Test & Evaluation to commence in FY18 prior to Initial Operational Capability (IOC) in FY20**





# PCU MICHAEL MONSOOR (DDG 1001)

## Bath, ME Building Yard



- **Started DDG 1001 fabrication March 2010 – 98% complete (as of 01 Dec 2017)**
  - Christening completed 18 June 2016, Float Off completed 20 June 2016
  - Generator Light Off achieved one month early on 01 March 2017
  - Commenced Builder's Trials 04 December 2017 with a follow-up BT in mid January 2018
  - Acceptance Trials to commence in January 2018 followed by HM&E delivery planned for March 2018







# PCU LYNDON B. JOHNSON (DDG 1002) Bath, ME Building Yard



- **Started DDG 1002 fabrication April 2012 – 71% complete (as of 01 Dec 2017)**
  - Lay Keel milestone achieved on 30 Jan 2017
  - DDG 1002 Hull Integration achieved December 2017
  - Christening/Float-off planned for November 2018
  - Delivery scheduled for March 2020





# Air Warfare Detect–Track– Engage Testing Self Defense Test Ship (SDTS)



- **Wallops Island / Self Defense Test Ship (SDTS)**
  - Successfully completed sixth TRACKEX June 2017
  - Completed Integration and Test August 2017
  - Commenced preparations for SDTS Firings 2018







# DDG 1000 Zumwalt Class Destroyer System Description



## Hull

Wave-Piercing Tumblehome

## Sensors

- SPY-3 X-Band Multi-Function Radar (MFR)
- Volume Search Radar (VSR) (Space & Weight Reservation)
- HF & MF Bow Sonar Arrays
- Multi-Function Towed Array
- EO/IR System
- ES System
- EXCOMMS – Alternative Navy C4I POR

## Weapons

- (80) Advanced Vertical Launch (AVLS) cells for Tomahawk, ESSM, Standard Missile
- (2) Advanced Gun System (AGS) 155 mm guns
- (600) 155 mm rounds
- (2) MK 46 Close In Guns Systems (CIGS)
- Torpedo Defense (Space Reservation)
- Anti-Terrorism

## Characteristics

Overall Length	610 ft	Displacement Full Load	15,612 LT
Maximum Beam	80.7 ft	Installed Power	78 MW
Navigational Draft	27.6 ft	Crew Size	147
Speed	30 kts	(plus 28 person aviation detachment)	

## Integrated Power System (IPS)

- (2) Main Turbine Generators (MTG)
- (2) Auxiliary Turbine Generators (ATG)
- (2) 34.6 MW Advanced Induction Motors

## Superstructure

- Composite Structure
  - DDG 1000 / 1001
- Steel
  - DDG 1002

## Aviation

- (1) MH60R and (3) VTUAVs /
- (2) MH 60Rs

## Boats

- (2) RHIBs
- (sized for (2) 7m or (2) 11m RHIBs)



# Summary



- **DDG 1000 is a multi-mission surface combatant**
  - Signature reduction, active and passive self-defense systems, and enhanced survivability features
  - Provides credible forward naval presence while operating independently or as an integral part of Naval, Joint, or Combined Expeditionary Strike Forces
  - Reduced Life Cycle Cost
- **DDG 1000 in Homeport San Diego, CA**
  - Arrived San Diego, CA 8 Dec 2016
  - Nearing completion of industrial work in preparation to activate combat systems (weapons, sensors and communications)
  - Combat System Test and Activation will continue through 2018
  - Planning to commence Operational Evaluation and Combat System Qualification Testing in 2018, culminating in Initial Operation Capability in 2020
- **DDG 1001,1002 under contract and significant production underway**
  - DDG 1001/1002 completion 98% / 71% as of 1 December 2017
  - Commenced Builder's Trials 04 December 2017 with a follow-up BT in mid-January 2018
  - Acceptance Trials to commence in January 2018 followed by HM&E delivery planned for March 2018
  - DDG 1002 Hull Integration achieved December 2017