



# GERALD R. FORD Class

## CVN 78 Class Program Office



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**PROGRAM MANAGER**  
**5 APRIL 2022**



# Future Aircraft Carriers

## FORD-Class: The Next Generation



### Increased Flexibility

- Nearly 3 times the electric plant capacity of NIM class
- Restored weight and stability service life allowances

### Increased Capability

- Increased Sortie Generation Rate
- Increased space for flight deck operations and aircraft maintenance

### Increased Affordability

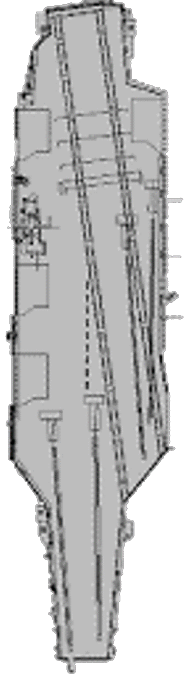
- Reduced manning and 20% reduction in maintenance costs
- Designed for 12-year docking intervals/43-month maint. cycle
- ~\$4.0B TOC reduction/ship





# Carrier Class Comparison

Increased Capability – Lower Life Cycle Cost



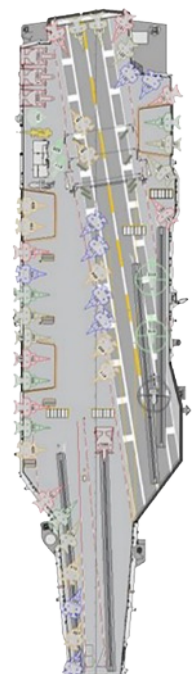
## NIMITZ Class

4 - Steam
4 / 3
4x 200,000 lbs
120
4.5 acres
3 Bays
9 x 10,500 lbs.
~ 1500 ft.
5,922
70
2
6-800 tons
400,000 Gallons Per Day

Catapults
Arresting Gear & Barricade
Aircraft Elevators
Sustained Sortie Generation Rate
Flight Deck
Hangar Deck
Weapons Elevators
Horizontal Weapons Movement Distance
Accommodations
Air Wing Size (aircraft)
Store Elevators
Air Conditioning Plants
Fresh Water Generation

## FORD Class

4 - Electric
3
3x 200,000 lbs
160
5 acres
2 Bays
11 x 24,000 lbs.
~390 ft.
4,660
75
10
9-1100 tons
500,000 Gallons Per Day



**Shift from steam to electric auxiliaries reduces maintenance requirements, lowering Life Cycle cost.**



# Gerald R. Ford Class

## Achieving Sustained Affordability for the Class

### Driving Down Construction Costs

#### GERALD R. FORD (CVN 78)

Christened Nov 2013  
Delivered May 2017  
Commissioned Jul 2017



- First new CVN design in 40 years
- New design specifications
- Design / build
- Digital manufacturing of pipe, steel
- New facilities

#### JOHN F. KENNEDY (CVN 79)

Christened 7 Dec 2019



- Modified repeat of CVN 78
  - Enterprise Radar Suite
  - Electric Aircraft Elevators
- Complete Bill of Material at start
- >60,000 lessons learned
- Build strategy improvements
- Increased use of digital data

#### ENTERPRISE (CVN 80) / DORIS MILLER (CVN 81)

CVN 80 Planning Contract Awarded May 2016  
CVN 80 / CVN 81 Construction began 2019



- Rollover of CVN 79 design
- Lessons learned from both CVN 78 and CVN 79
- More build strategy improvements
- Integrated Digital Shipbuilding

### Two-Ship FPIF contract



# CVN 78 GERALD R. FORD

## ➤ Full Ship Shock Trials (FSST)

- Conducted three explosive events using live ordnance on 18 June, 16 July, and 8 August

## ➤ CVN 78 First Planned Incremental Availability Aug 2021 – Feb 2022

- Modernization and maintenance
- FSST Repairs
- Successfully completed Post PIA Sea Trials

## ➤ Transition to PMS 312 In Service Carriers program office

- Training and certification in preparation for the ship's first deployment Fall '22







# CVN 78 GERALD R. FORD Advanced Weapons Elevators (AWE)



## ➤ Advanced Weapons Elevators (AWE)

- 11 of 11 AWEs turned over to Ship's Crew
- Over 17,000 elevator cycles performed by the crew in port and at sea, including operations in high sea states





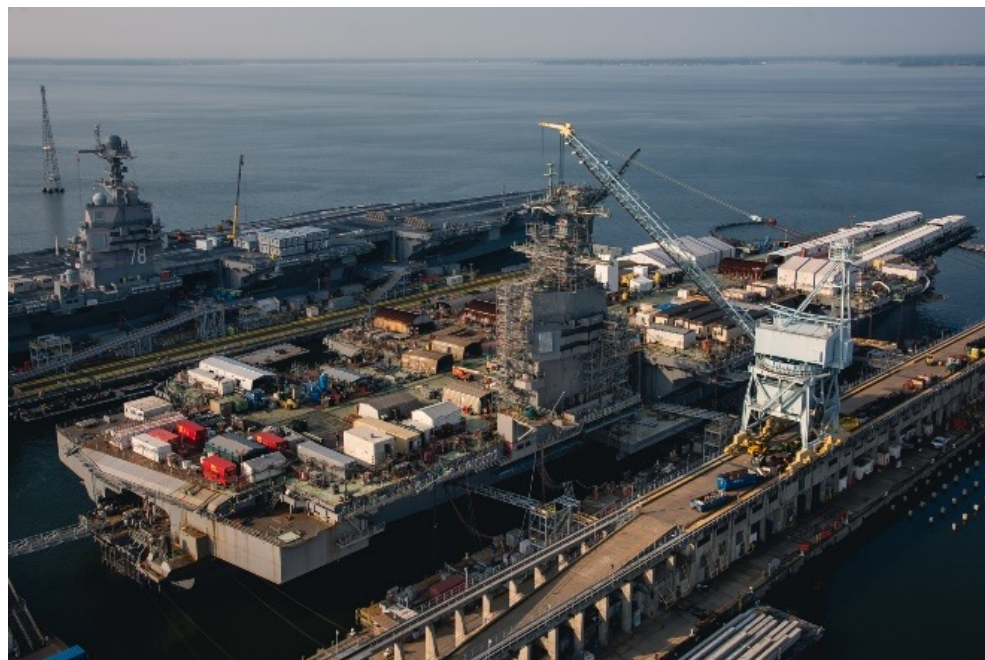
# CVN 79 JOHN F. KENNEDY



- ~ 85% Complete
- 2024 Delivery
  - EASR and JSF
- Single Phase Acquisition Strategy
- Applying lessons learned from CVN 78

	Fiscal Year									
	24	25	26	27	28	29	30	31	32	
CVN 79 JOHN F. KENNEDY	▲									
CVN 80 ENTERPRISE					▲					
CVN 81 DORIS MILLER									▲	

▲ Delivery







# CVN 80 ENTERPRISE / CVN 81 DORIS MILLER



## ➤ CVN 80

- ~ 15% Complete
- 2028 Delivery
  - 2022 Keel Laying
  - First use of Integrated Digital Shipbuilding (iDS)



## ➤ CVN 81

- 2032 Delivery
- First Steel Cut August 2021
- Ms. Charlene Austin and Ms. Taya Miller announced as Ship Sponsors







# Questions

