GERALD R. FORD Class
CVN 78 Class Program Office

SEA-AIR-SPACE 2022

GERALD R. FORD

 JOHN F. KENNEDY

 ENTERPRISE

 DORIS MILLER

CAPT BRIAN METCALF
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

DISTRIBUTION STATEMENT A. Approved for public release: distribution unlimited.
Carrier Class Comparison
Increased Capability – Lower Life Cycle Cost

<table>
<thead>
<tr>
<th>NIMITZ Class</th>
<th>FORD Class</th>
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<tbody>
<tr>
<td>4 - Steam Catapults</td>
<td>4 - Electric</td>
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<tr>
<td>4 / 3 Arresting Gear &amp; Barricade</td>
<td>3</td>
</tr>
<tr>
<td>4x 200,000 lbs Aircraft Elevators</td>
<td>3x 200,000 lbs</td>
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<tr>
<td>120 Sustained Sortie Generation Rate</td>
<td>160</td>
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<tr>
<td>4.5 acres Flight Deck</td>
<td>5 acres</td>
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<tr>
<td>3 Bays Hangar Deck</td>
<td>2 Bays</td>
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<tr>
<td>9 x 10,500 lbs. Weapons Elevators</td>
<td>11 x 24,000 lbs.</td>
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<tr>
<td>~ 1500 ft. Horizontal Weapons Movement Distance</td>
<td>~390 ft.</td>
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<tr>
<td>5,922 Accommodations</td>
<td>4,660</td>
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<tr>
<td>70 Air Wing Size (aircraft)</td>
<td>75</td>
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<tr>
<td>2 Store Elevators</td>
<td>10</td>
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<tr>
<td>6-800 tons Air Conditioning Plants</td>
<td>9-1100 tons</td>
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<tr>
<td>400,000 Gallons Per Day Fresh Water Generation</td>
<td>500,000 Gallons Per Day</td>
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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
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

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<th>Fiscal Year</th>
<th>24</th>
<th>25</th>
<th>26</th>
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▲ 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