Building a Giant: *Gerald R. Ford* (CVN 78)

- About 5,000 American shipbuilders are participating in the building of aircraft carrier *Gerald R. Ford* (CVN 78).
- At completion, *Ford* will weigh nearly 100,000 tons—as much as 400 Statues of Liberty.
- 200,000 gallons of Haze Gray paint cover CVN 78—enough to give the White House 350 coats of paint.
- *Ford* has been called a “floating city,” holding 4,660 personnel and 75 aircraft.
- The carrier has a 5-acre flight deck.
- *Ford* produces 400,000 gallons of fresh water per day.
- The ship produces 15,000 meals a day.
- *Ford* can reach speeds in excess of 30+ knots.

**Powering the Future**

CVN 78 is the first aircraft carrier to make a significant leap to electrical power, replacing many legacy steam-powered systems and preparing the ship for future technologies.

- The new electrical distribution system increases electrical capacity by 250 percent.
- An Electromagnetic aircraft launch system (EMALS), similar to the system that powers many of today’s roller coasters, replaces steam catapults, enabling a smoother launch for the airwing of the future.
- Ten million feet of electrical cable is installed on *Ford*, enough cable to span the distance from Washington, DC to Albuquerque, NM.
- Four million feet of fiber optic cable is installed on *Ford*, the length of more than 7,200 Washington Monuments stacked on top of each other.
Designed for Efficiency

CVN 78 is the most efficient aircraft carrier ever designed, reducing necessary maintenance by 30 percent.

- The ship’s design enables the Navy to operate the ship with less manpower, saving the Navy more than $4 billion over the ship’s 50-year life.
- 9,900 tons of air conditioning reduces maintenance caused by humidity and reduces required manning in hot spaces.
- About 44,000 high-efficiency fluorescent T-8 light bulbs will be used, which produce more light and last nearly twice as long.

Future Readiness

- CVN 78 is a flexible platform, ready to meet the operational needs of the 21st century.
- CVN 78 is capable of generating 25 percent more sorties (flight missions) per day than Nimitz-class carriers.
- CVN 78 is designed with flexible infrastructure to quickly adapt interior spaces for new missions.
- The island is smaller and farther aft than the Nimitz-class, increasing space for flight deck operations and aircraft maintenance.
- Software-controlled advanced arresting gear increases the ability to recover smaller aircraft with reduced wear.