## CV 64 Constellation [Kitty Hawk Class] - 2001

#### **United States**

Type: CVA - Attack Carrier

Max Speed: 32 kt Commissioned: 2001

Decommissioned: 2003

Length: 326.0 m Beam: 39.5 m Draft: 10.9 m

Crew: 5380

Displacement: 60935 t

Displacement Full: 81780 t

Propulsion: 8x Boilers, 4x Steam Turbines



### Sensors / EW:

- AN/WLR-1H(V)5 ESM, ELINT, Max range: 926 km
- AN/SLQ-32(V)4 [ECM] (Group) ECM, OECM & DECM, Offensive & Defensive ECM, Max range: 0 km
- AN/SLQ-32(V)4 [ESM] (Group) ESM, ELINT, Max range: 926 km
- Mk23 TAS (1982, Mk91 FCS, SWY-1) Radar, Radar, Target Indicator, 2D Surface-to-Air & Surface-to-Surface, Max range: 203.7 km
- AN/SPS-67(V)1 (1982) Radar, Radar, Surface Search & Navigation, Max range: 64.8 km
- AN/SPS-49(V)5 NTU (1982) Radar, Radar, Air Search, 2D Long-Range, Max range: 463 km
- AN/SPS-48E NTU (1988) Radar, Radar, Air Search, 3D Long-Range, Max range: 407.4 km
- AN/SPS-64(V)9 [RM 1220 6X] (20kW, USN, 1x antenna) Radar, Radar, Surface Search & Navigation, Max range: 37 km
- AN/SPN-43C (1994) Radar, Radar, Shipboard Air Traffic Control (SATC), Max range: 129.6 km
- Mk95 [EO] (Mk6 Mod 0, Mk91 FCS) Visual, Visual, Target Tracking and Identification TV Camera, Max range: 148.2 km
- Mk95 [Radar] (MFCR, Mk91 FCS) Radar, Radar Illuminator, Medium-Range, Max range: 118.5 km

#### Weapons / Loadouts:

- RIM-7P Sea Sparrow (1994) Guided Weapon. Air Max: 25.9 km. Surface Max: 25.9 km.
- 20mm/85 Mk15 Phalanx Blk 1 Burst [300 rnds] Gun. Air Max: 1.5 km.
- Mk214 Sea Gnat Chaff [Seduction] (1987) Decoy (Expendable). Surface Max: 1.9 km.
- Mk216 Sea Gnat Chaff [Distraction] (1988) Decoy (Expendable). Surface Max: 1.9 km.
- Mk245 GIANT Flare (1997, DM19A1) Decoy (Expendable). Surface Max: 1.9 km.
- AN/SLQ-25A Nixie Decoy (Towed). Surface Max: 1.9 km.
- 12.7mm/50 MG Burst [10 rnds] (Facility/Ship, No Anti-Air Capability) Gun. Surface Max: 1.9 km. Land Max: 1.9 km.

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OVERVIEW: The Kitty Hawk class supercarriers of the United States Navy were an incremental improvement on the Forrestal-class vessels. The biggest differences from the Forrestals are greater length, and a different placement of elevators; two are forward of the island, one is aft of the island and another on the portside stern.

DETAILS: Three different shipyards were used to construct the ships. Kitty Hawk was built at New York Shipbuilding Corporation, Constellation at New York Naval Shipyard, America and John F. Kennedy at Newport News Shipbuilding. John F. Kennedy is similar to the earlier units in flightdeck arrangement and propulsion, but has enough differences that she is often placed in her own class. Propulsion consisted of four Westinghouse geared turbines, 280,000 shp, four shafts with eight 1,200 pounds per square inch (8,300 kPa) Foster Wheeler boilers.

The first three units were constructed with a Terrier surface to air missile system. The supporting missile launchers and AN/SPG-55 radars consumed a large amount of space, while at the same time duplicating the capabilities of the air defence escorts, and were later removed. John F. Kennedy did not have Terrier and was built with the shorter ranged Sea Sparrow, Basic Point Defense Missile System (BPDMS). All were eventually equipped with NATO Sea Sparrow (NSSM) and Phalanx CIWS for self-defense. In 2001, Kitty Hawk received two Rolling Airframe Missile launchers replacing the forward Sea Sparrow and Phalanx CIWS equipment. The SLQ-32 Electronic Warfare Suite was added as part of the Service Life Extension Program (SLEP) on Kitty Hawk and Constellation.

America had several differences from the lead units of the class. Instead of two forward anchors, one on each side, America had no starboard anchor and an additional anchor astern, a change made to accommodate the AN/SQS-23 sonar. America was the only post-World War II U.S. carrier to be built with sonar, though it was removed in the early 1980s. She also had a narrow smokestack compared to prior units.

John F. Kennedy (CV-67) was originally scheduled to be the fourth Kitty Hawk-class carrier, but because she received so many modifications during construction, she formed her own ship class and is often listed as a single-vessel class. Kennedy had similar design changes regarding the anchors to accommodate a sonar array, but the sonar was never installed. There were also plans to make her nuclear powered, but since Congress would not authorize it, Kennedy was constructed as a conventionally powered carrier. Her smokestack is also different and tilts outboard to send stack gas away from the flight deck. The angled end of the waist is also different from the other Kitty Hawks, bearing a closer resemblance to that of the Nimitz class. Kennedy is also 17 feet (5.2 m) shorter in length than the other Kitty Hawk-class carriers.

TYPE: Aircraft Carrier (CV).

SPECIFICATIONS: Displacement: 81,780 tons full load || Length: 1,069 ft (326 m) || Beam: 282 ft (86 m) || Draft: 38 ft (12 m) || Installed power: 280,000 shaft horsepower || Propulsion: Westinghouse geared steam turbines, (8) steam boilers, (4) shafts; 280,000 shp || Crew: 3,150 || Air Wing Crew: 2,480.

PERFORMANCE: Speed: 32 knots (59 km/h) || Range: 12,000 miles (19,300 km)

SENSORS: AN/SPN-43A Shipboard ATC || AN/SPS-10B Surface Search Radar || AN/SPS-48C Long Range 3D Air Search Radar || AN/SPS-49 Long Range 2D Air Search Radar || Furuno Radar || AN/WLR-11 Radar Warning Receiver || AN/WLR-1G ESM || AN/SLQ-17 Offensive/Defensive ECM || MK-95 Electo Optic.

ARMAMENT: (24) Sea Sparrows and RIM-116 Rolling Airframe Missiles || (3-4) Phalanx CIWS.

AIRCRAFT: Up to 90 aircraft.

SHIPS BUILT: Kitty Hawk (CV-63) || Constellation (CV-64) || America (CV-66) || John F. Kennedy (CV-67).

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SOURCE: [SCO] Wikipedia http://en.wikipedia.org