

## **United States**

Type: FF - Frigate

Max Speed: 27 kt

Commissioned: 1977

Length: 133.5 m

Beam: 14.4 m

Draft: 7.6 m

Crew: 285

Displacement: 3800 t

Displacement Full: 4260 t

Propulsion: 2x Combustion Engineering V2M

Boilers, 1x Westinghouse Steam Turbine



### **Sensors / EW:**

- AN/WLR-3 - (RWR for AN/WLR-1) ESM, RWR, Radar Warning Receiver, Max range: 222.2 km
- Mk51 [Mk115 MFCS] - (RWR for AN/WLR-1) Radar, Radar Illuminator, Medium-Range, Max range: 37 km
- AN/SQS-35 - (RWR for AN/WLR-1) VDS, Active Only Sonar, VDS, Active-Only Variable Depth Sonar, Max range: 11.1 km
- AN/SQS-26CX - (1969, California, Knox) Hull Sonar, Active/Passive, Hull Sonar, Active/Passive Search & Track, Max range: 64.8 km
- AN/SPG-53F [Mk68 GFCS, Radar] - (Group) Radar, Radar, FCR, Weapon Director, Max range: 111.1 km
- AN/SPG-53F [Mk68 GFCS, Visual] - (Group) Visual, Visual, Weapon Director TV Camera, Max range: 74.1 km
- AN/SPS-53 - (1967, AN/SPS-60) Radar, Radar, Surface Search & Navigation, Max range: 37 km
- AN/SPS-40 - (1963) Radar, Radar, Air Search, 2D Long-Range, Max range: 407.4 km
- AN/ULQ-6C - (AN/SLQ-26) ECM, OECM & DECM, Offensive & Defensive ECM, Max range: 0 km
- AN/WLR-1C - (AN/SLQ-26) ESM, ELINT, Max range: 926 km

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### **Weapons / Loadouts:**

- RIM-7E Sea Sparrow - (1967, Mk25) Guided Weapon. Air Max: 11.1 km. Surface Max: 11.1 km.
  - 127mm/54 HE-CVT [HiFrag] - (USN) Gun. Air Max: 2.8 km. Surface Max: 20.4 km. Land Max: 20.4 km.
  - 127mm/54 HE-PD [HiCap] - (USN) Gun. Air Max: 2.8 km. Surface Max: 20.4 km. Land Max: 20.4 km.
  - 127mm/54 WP - (USN) Gun. Surface Max: 20.4 km. Land Max: 20.4 km.
  - RUR-5A Mod 4 ASROC RTT [Mk46 Mod 2] - Guided Weapon. Subsurface Max: 18.5 km.
  - RUR-5A Mod 3 ASROC RTD [10kT Nuclear DC] - (196x-89) Guided Weapon. Subsurface Max: 18.5 km.
  - RGM-84A Harpoon IP - (1977) Guided Weapon. Surface Max: 120.4 km.
  - Mk46 LWT Mod 2 - (1972) Torpedo. Subsurface Max: 5.6 km.
  - AN/SLQ-25 Nixie - Decoy (Towed). Surface Max: 1.9 km.
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## **Knox - 1977 BPDMS, AN/SQS-35, Harpoon, FF 1052, 1056, 1066, 1067, 1069, 1071, 1073, 1074, 1075**

**OVERVIEW:** Knox-class frigates were United States Navy warships, originally laid down as ocean escorts (formerly called destroyer escorts), but were all re-designated as frigates on 30 June 1975 in the USN 1975 ship reclassification and their hull designation changed from DE to FF.

**DETAILS:** These ships were designed primarily as antisubmarine warfare (ASW) platforms. They each had AN/SQS-26 hull-mounted sonar manufactured by General Electric and capable of active echo ranging in the 3.2 kHz range. The active modes of operation included omni-directional, phased directional, bottom bounce, and convergence zone. The battle displays included A and B scans. There was also a "Unit 31" chart readout display capable of long-distance passive detection, often well beyond the ranges capable of the surface search radar. The frigates were also equipped with an AN/AQS-35V Independent Variable Depth Sonar (IVDS) manufactured by EDO Corporation of College Point, NY, operating actively in the 13 kHz range with dual Planned Position Indicator (PPI) battle displays. The IVDS' sonar transducers were packaged within a 2 ton fiberglass-enclosed "fish" containing the sonar array and a gyro-compass/sensor package launched by the massive 13V Hoist from a stern compartment, located just beneath the main deck, to depths of up to 600 feet (180 m). The IVDS could take advantage of water layer temperature conditions in close-range (less than 20,000 yards (18,290 m) submarine detection, tracking and fire-control.

At 4,200 metric tons (4,130 tons), with a length of 438 feet (133.5 m) and a beam of 47 feet (14.3 m), they are driven by a single screw geared turbine developing 35,000 shaft horsepower (26 MW), giving them a speed of 27 knots (50 km/h). The steam plant for these ships consists of two Combustion Engineering or Babcock & Wilcox "D" type boilers, each equipped with a high-pressure (supercharger) forced draught air supply system, allowing a plant working pressure of 1,200 psi and 1000 degrees superheat.

**TYPE:** Frigate (FF).

**SPECIFICATIONS:** Displacement: 4,260 tons (full load) || Length: 438 ft (134 m) || Beam: 46 ft 9 in (14.25 m) || Draft: 24 ft 9 in (7.54 m) || Propulsion: (1) shaft, (1) Westinghouse steam turbine, (2) V2M boilers. total 35,000 shp (maximum) || Complement: 17 officers, 240 enlisted.

**PERFORMANCE:** Speed: 27+ knots (50 km/h).

**SENSORS:** AN/SPS-10 Surface Search Radar || AN/SPS-40 Air Search Radar || AN/SPS-67 Surface Search Radar || AN/SQS-26 Sonar || AN/SQR-18 Towed array sonar system || AN/SPG-53 Mk68 Gun Fire Control System || AN/WLR-1C - AN/ULQ-6C and AN/SLA-15 (Comprising AN/SLQ-26 System) || AN/SLQ-32 Electronics Warfare System and Mark 36 SRBOC.

**ARMAMENT:** They were equipped with one 5 in (127 mm) 54 caliber Mark 42 gun forward, an ASROC abaft the gun and forward of the bridge. Since they were single purpose platforms their surface defense capability was nominal; however they did mount Harpoon missiles and Mk-44/46 torpedoes. The aft weapons point was originally outfitted with Mk 25 basic point defense missile systems (BPDMS) for launching Sea Sparrow missiles. These were eventually refitted with a 20 millimetre Phalanx CIWS. They were equipped with a helicopter hangar aft.

**AIRCRAFT:** (1) SH-2 Seasprite (LAMPS I) helicopter.

**SHIPS BUILT:** Knox (FF-1052), Roark (FF-1053), Gray (FF-1054), Hepburn (FF-1055), Connole (FF-1056), Rathburne (FF-1057), Meyerkord (FF-1058), W. S. Sims (FF-1059), Lang (FF-1060), Patterson (FF-1061), Whipple (FF-1062), Reasoner (FF-1063), Lockwood (FF-1064), Stein (FF-1065), Marvin Shields (FF-1066), Francis Hammond (FF-1067), Vreeland (FF-1068), Bagley (FF-1069), Downes (FF-1070), Badger (FF-1071), Blakely (FF-1072), Robert E. Peary (FF-1073), Harold E. Holt (FF-1074), Trippe (FF-1075), Fanning (FF-1076), Ouellet (FF-1077), Joseph Hewes (FF-1078), Bowen (FF-1079), Paul (FF-1080), Aylwin (FF-1081), Elmer Montgomery (FF-1082), Cook (FF-1083),

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McCandless (FF-1084), Donald B. Beary (FF-1085), Brewton (FF-1086), Kirk (FF-1087), Barbey (FF-1088), Jesse L. Brown (FF-1089), Ainsworth (FF-1090), Miller (FF-1091), Thomas C. Hart (FF-1092), Capodanno (FF-1093), Pharris (FF-1094), Truett (FF-1095), Valdez (FF-1096), Moinester (FF-1097).

SOURCE: Wikipedia <http://en.wikipedia.org>