# **CG 16 Leahy - 1977 SM-1ER**

#### **United States**

Type: CG - Guided Missile Cruiser

Max Speed: 33 kt

Commissioned: 1977

Length: 163.0 m

Beam: 16.1 m

Draft: 7.9 m Crew: 377

Displacement: 7000 t

Displacement Full: 7800 t

Propulsion: 4x Boilers, 2x Steam Turbines



### Sensors / EW:

- AN/WLR-1 (Generic) ESM, ELINT, Max range: 926 km
- AN/SQQ-23A PAIR (1974, AN/SQS-23 with Second Transducer) Hull Sonar, Active/Passive, Hull Sonar,

Active/Passive Search & Attack, Max range: 37 km

- AN/SPS-39 (1961) Radar, Radar, Air Search, 3D Long-Range, Max range: 296.3 km
- AN/SPS-37 (1961) Radar, Radar, Air Search, 2D Long-Range, Max range: 370.4 km
- AN/SPS-10B (1961) Radar, Radar, Surface Search & Navigation, Max range: 74.1 km
- AN/SPG-55B [Mk76 Mod 8 FCS] (1961) Radar, Radar, FCR, Surface-to-Air, Medium-Range, Max range: 277.8 km
- AN/ULQ-6B (1970) ECM, OECM & DECM, Offensive & Defensive ECM, Max range: 0 km

#### Weapons / Loadouts:

- 12.7mm/50 MG Burst [10 rnds] (Facility/Ship, No Anti-Air Capability) Gun. Surface Max: 1.9 km. Land Max: 1.9 km.
- Generic Chaff Rocket (Ship-only) Decoy (Expendable). Surface Max: 1.9 km.
- Generic GMTR [Guided Missile Training Round] (Aka Drill Round) Training Round.
- RIM-67A SM-1ER (19xx-1990) Guided Weapon. Air Max: 74.1 km. Surface Max: 46.3 km.
- RUR-5A Mod 3 ASROC RTD [10kT Nuclear DC] (196x-89) Guided Weapon. Subsurface Max: 18.5 km.
- RUR-5A Mod 4 ASROC RTT [Mk46 Mod 2] Guided Weapon. Subsurface Max: 18.5 km.
- Mk46 LWT Mod 2 (1972) Torpedo. Subsurface Max: 5.6 km.
- AN/SLQ-25 Nixie Decoy (Towed). Surface Max: 1.9 km.

OVERVIEW: Leahy class cruisers were a class of guided missile cruisers built for the United States Navy. They were originally designated as Destroyer Leaders (DLG), but in the 1975 cruiser realignment, they were reclassified as guided missile cruisers (CG).

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They were a new "double-ender" class fitted with Terrier (later Standard ER) missile launchers fore and aft, and the first and only frigate class designed without a main gun battery for shore bombardment or ship-vs-ship engagements - the gun armament was reduced in order to carry a larger missile load. One of the principal missions of these ships, like their predecessors the Farragut class, was to form part of the anti-air and antisubmarine screen for carrier task forces, while also controlling aircraft from the carrier by providing vectors to assigned targets.

The ships carried over the propulsion plant of the Farragut class, fitted into a longer hull designed with a knuckled "hurricane" bow that reduced plunging in a rough sea, thus keeping the forecastle dry as needed to operate the forward missile launcher. Other features included an expanded electrical plant and increased endurance. A major design innovation was the use of "macks" - a combined masts and stacks - on which the radars could be mounted without smoke interference.

DETAILS: Modernizations were accomplished between 1967 and 1972, upgrading air warfare capabilities. Nearly all modernizations were completed at Bath Iron Works, but Leahy received the modernization at Philadelphia Naval Shipyard at a cost of \$36.1 million.

All Leahy class ships were modernized again in the late 1980s New Threat Upgrade program. This program added advanced air search and track radars (AN/SPS-49 and AN/SPS-48E), updated targeting radars (AN/SPG-55), and combat direction systems. The upgrade included massive remodeling of the ship from food service space rehabilitation to a main propulsion system overhaul.[3] Entire systems were removed and replaced, for example the AN/SPS-40 air-search radar was replaced with the AN/SPS-49 air-search radar. The upgrade was also quite expensive and the ships didn't serve much longer after the modification. For example, USS Gridley (CG-21) received NTU in 1991 at a cost of \$55 million, but was decommissioned in early 1994.

TYPE: Guided Missile Cruiser (CG).

SPECIFICATIONS: Displacement: 7,800 tons (full load) || Propulsion: (2) steam turbines providing 85,000 shp (63 MW), (2) shafts, (4) boilers.

PERFORMANCE: Speed: 32 knots || Range: 8,000 nm @ 20 knots.

SENSORS: AN/SPS-39 followed by AN/SPS-48 3D air search radar || AN/SPS-43 followed by AN/SPS-49 2D air search radar || AN/SPS-10 surface search radar || AN/SPG-55 missile fire control radar || AN/SQS-23 bow mounted sonar || AN/SLQ-32 and Mark 36 SRBOC.

ARMAMENT: (2) Mark 10 Terrier SAM || (1) ASROC ASW system || (4) 3 in(76 mm)guns (replaced by Harpoon missiles during 1980s) || (6) 12.75 in(324 mm)ASW TT || (2) Phalanx CIWS.

SHIPS BUILT: Leahy (CG-16) || Harry E. Yarnell (CG-17) || Worden (CG-18) || Dale (CG-19) || Richmond K. Turner (CG-20) || Gridley (CG-21) || England (CG-22) || Halsey (CG-23) || Reeves (CG-24).

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