FFG 36 Underwood [Perry Class] - 1998 Long Hull

United States



Type: FFG - Guided Missile Frigate
Max Speed: 33 kt
Commissioned: 1998
Length: 138.1 m
Beam: 13.5 m
Draft: 7.5 m
Crew: 176
Displacement: 3500 t
Displacement Full: 4100 t
Propulsion: 2x General Electric LM-2500 Gas Turbines, COGAG

Sensors / EW:
- AN/SLQ-32(V)5 Sidekick [ECM] - (Group, 1989) ECM, OECM & DECM, Offensive & Defensive ECM, Max range: 0 km
- AN/SLQ-32(V)5 [ESM] - (Group, 1989) ESM, ELINT, Max range: 926 km
- AN/SQS-56 - (1978, DE 1160C) Hull Sonar, Active/Passive, Hull Sonar, Active/Passive Search & Track, Max range: 9.3 km
- AN/SQR-19(V)2 TACTAS - (198x, Perry) TASS, Passive-Only Towed Array Sonar System, TASS, Passive-Only Towed Array Sonar System, Max range: 129.6 km
- AN/SPG-60 STIR [Mk86 FCS, Radar] - (SM-1MR, Mk92 Mod 2/6) Radar, Radar, FCR, Surface-to-Air & Surface-to-Surface, Short-Range, Max range: 88.9 km
- Furuno - (Generic) Radar, Radar, Surface Search & Navigation, Max range: 37 km
- AN/SPS-55 - (Generic) Radar, Radar, Surface Search & Navigation, Max range: 64.8 km
- AN/SPS-49(V)5 NTU - (Generic) Radar, Radar, Air Search, 2D Long-Range, Max range: 463 km
- Mk92 Mod 6 CAS - (GFCS, WM.28, CORT) Radar, Radar, FCR, Weapon Director, Max range: 237.1 km
- AN/SSQ-119 NMMS [CCD-1] - (GFCS, WM.28, CORT) Visual, LLTV, Surveillance Camera, Max range: 55.6 km
- AN/SSQ-119 NMMS [IR] - (GFCS, WM.28, CORT) Infrared, Infrared, Surveillance Camera, Max range: 55.6 km
- AN/SSQ-119 NMMS [Laser Rangefinder] - (GFCS, WM.28, CORT) Laser Rangefinder, Laser Rangefinder, Max range: 9.3 km
- Kingfisher - (GFCS, WM.28, CORT) Hull Sonar, Active-Only, Hull Sonar, Active-Only Mine & Obstacle Avoidance, Max range: 1.1 km

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Weapons / Loadouts:
- Mk46 NEARTIP Mod 5A(S) - (1997) Torpedo. Subsurface Max: 7.4 km.
- Mk50 Barracuda Mod 0 ALWT - (1991) Torpedo. Subsurface Max: 7.4 km.
- 25mm/75 Bushmaster Mod 1 Burst [12 rnds] - Gun. Air Max: 1.5 km. Surface Max: 2.8 km. Land Max: 2.8 km.
- 76mm/62 Compact HE Burst [4 rnds] - Gun. Air Max: 2.8 km. Surface Max: 11.1 km. Land Max: 11.1 km.

- 20mm/85 Mk15 Phalanx Blk 0 Burst [200 rnds] - Gun. Air Max: 1.5 km.
- Generic GMTR [Guided Missile Training Round] - (Aka Drill Round) Training Round.
- RGM-84G Harpoon ICR - (1998) Guided Weapon. Surface Max: 138.9 km.
- RIM-66E6 SM-1MR Blk VIB - (1994) Guided Weapon. Air Max: 46.3 km. Surface Max: 46.3 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-25 Nixie - Decoy (Towed). Surface Max: 1.9 km.

OVERVIEW: The Oliver Hazard Perry class is a class of frigates named after the American Commodore Oliver Hazard Perry, the hero of the naval Battle of Lake Erie. Also known as the Perry or FFG-7 class, the warships were designed in the United States in the mid-1970s as general-purpose escort vessels inexpensive enough to be bought in large quantities to replace World War II-era destroyers and 1960s-era Knox class frigates. Intended to protect amphibious landing forces, supply and replenishment groups, and merchant convoys from submarines, they also later were part of battleship-centric surface action groups and aircraft carrier battle groups/strike groups. Fifty-five ships were built in the United States: 51 for the United States Navy and four for the Royal Australian Navy (RAN). In addition, eight were built in Taiwan, six in Spain, and two in Australia for their navies. Former U.S. Navy warships of this class have been sold or donated to the navies of Bahrain, Egypt, Poland, Pakistan, and Turkey.

DETAILS: The Oliver Hazard Perry-class ships were produced in 445-foot (136 meter) long "short-hull" (Flight I) and 453-foot (138 meter) long "long-hull" (Flight III) variants. The long-hull ships (FFG 8, 28, 29, 32, 33, and 36-61) carry the larger SH-60 Seahawk LAMPS III helicopters, while the short-hulled warships carry the smaller and less-capable SH-2 Seasprite LAMPS I. Aside from the lengths of their hulls, the principal difference between the versions is the location of the aft capstan: on long-hull ships, it sits a step below the level of the flight deck in order to provide clearance for the tail rotor of the longer Seahawk helicopters. The long-hull ships also carry the RAST (Recovery Assist Securing and Traversing) system for the Seahawk, a hook, cable, and winch system that can reel in a Seahawk from a hovering flight, expanding the ship's pitch-and-roll range in which flight operations are permitted. The FFG 8, 29, 32, and 33 were built as "short-hull" warships but were later modified into "long-hull" warships. Oliver Hazard Perry-class Frigates were the second class of surface ship (after the Spruance-class destroyers) in the US Navy to be built with gas turbine propulsion. The gas turbine propulsion plant was more automated than other Navy propulsion plants at the time and could be centrally monitored and controlled from a remote engineering control center away from the engines. The gas turbine propulsion plants also allowed the ship's speed to be controlled directly from the bridge via a throttle control, a first for the US Navy.

The Oliver Hazard Perry-class frigates were designed primarily as anti-aircraft and anti-submarine warfare guided-missile warships intended to provide open-ocean escort of amphibious warfare ships and merchant ship convoys in moderate threat environments in a potential war with the Soviet Union and the Warsaw Pact countries. They could also provide air defense against 1970s- and 1980s-era aircraft and anti-ship missiles. These warships are equipped to escort and protect aircraft carrier battle groups, amphibious landing groups, underway replenishment groups, and merchant ship convoys. They can conduct independent operations to perform such tasks as surveillance of illegal drug smugglers, maritime interception operations, and exercises with other nations.

The addition of the Naval Tactical Data System, LAMPS helicopters, and the Tactical Towed Array System (TACTAS) gave these warships a combat capability far beyond the original expectations. They are well-suited for the littoral regions and most war-at-sea scenarios.

TYPE: Guided Missle Frigate (FFG).

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SPECIFICATIONS: Displacement: 4,100 long tons (4,200 t) full load || Length: 445 ft (136 m), 453 ft (138 m) for "long-hull" frigates || Beam: 45 ft (14 m) || Draft: 22 ft (6.7 m) || Propulsion: (2) General Electric LM2500-30 gas turbines generating 41,000 shp (31 MW) through a single shaft and variable pitch propeller
(2) Auxiliary Propulsion Units, 350 hp (260 kW) retractable electric azimuth thrusters for maneuvering and docking || Complement: 176.

PERFORMANCE: Speed: over 29 knots (54 km/h) || Range: 4,500 nmi (8,300 km; 5,200 mi) at 20 knots (37 km/h; 23 mph).

SENSORS: AN/SPS-49 Radar || AN/SPS-55 Radar || Mk 92 fire control system || SQS-56 Sonar || SQR-19 Towed Array || SLQ-32(V)2, Flight III with sidekick || Mark 36 SRBOC || AN/SLQ-25 Nixie.

ARMAMENT: (1) single-arm Mk 13 Missile Launcher with a 40-missile magazine that contains SM-1MR anti-aircraft guided missiles and Harpoon anti-ship missiles (Note: Removed from the U.S. Navy ships starting in 2003, due to the retirement of the SM-1 missile from American service || Mk 38 Mod 2 Naval Gun Systems installed on platforms over the removed MK 13 launchers || (2) triple Mark 32 Anti-submarine warfare torpedo tubes with Mark 46 or Mark 50 anti-submarine warfare torpedoes || (1) OTO Melara 76 mm/62 caliber naval gun || (1) 20 mm Phalanx CIWS rapid-fire cannon || (8) Hsiung Feng II SSM or (4) HF-2 and 4 HF-3 supersonic AShM, plus (2) Bofors 40mm/L70 guns (on Taiwanese vessels only).

AIRCRAFT: (2) LAMPS multi-purpose helicopters (the SH-2 Seasprite LAMPS I on the short-hulled ships or the SH-60 Seahawk LAMPS III on the long-hulled ships).

SHIPS BUILT: Oliver Hazard Perry (FFG-7) || McInerney (FFG-8) || Wadsworth (FFG-9) || Duncan (FFG-10) || Clark (FFG-11) || George Philip (FFG-12) || Samuel Eliot Morison (FFG-13) || Sides (FFG-14) || Estocin (FFG-15) || Clifton Sprague (FFG-16) || HMAS Adelaide (FFG-17) || HMAS Canberra (FFG-18) || John A. Moore (FFG-19) || Antrim (FFG-20) || TCG Giresun (F 491) || Flatley (FFG-21) || Fahrion (FFG-22) || Lewis B. Puller (FFG-23) || Jack Williams (FFG-24) || Copeland (FFG-25) || Gallery (FFG-26) || Mahlon S. Tisdale (FFG-27) || Boone (FFG-28) || Stephen W. Groves (FFG-29) || Reid (FFG-30) || Stark (FFG-31) || John L. Hall (FFG-32) || Jarrett (FFG-33) || Aubrey Fitch (FFG-34) || HMAS Sydney (FFG-35) || Underwood (FFG-36) || Crommelin (FFG-37) || Curts (FFG-38) || Doyle (FFG-39) || Halyburton (FFG-40) || McClusky (FFG-41) || Klakring (FFG-42) || Thach (FFG-43) || HMAS Darwin (FFG-44) || De Wert (FFG-45) || Rentz (FFG-46) || Nicholas (FFG-47) || Vandegrift (FFG-48) || Robert G. Bradley (FFG-49) || Taylor (FFG-50) || Gary (FFG-51) || Carr (FFG-52) || Hawes (FFG-53) || Ford (FFG-54) || Elrod (FFG-55) || Simpson (FFG-56) || Reuben James (FFG-57) || Samuel B. Roberts (FFG-58) || Kauffman (FFG-59) || Rodney M. Davis (FFG-60) || Ingraham (FFG-61).

SPANISH BUILT: Santa Maria (F81) || Victoria (F82) || Numancia (F83) || Reina Sofia (F84) || Navarra (F85) || Canarias (F86).

TAIWAN BUILT: Cheng Kung (PFG-1101) || Cheng Ho (PFG-1103) || Chi Kuang (PFG-1105) || Yueh Fei (PFG-1106) || Tzu I (PFG-1107) || Pan Chao (PFG-1108) || Chang Chien (PFG-1109) || Tian Dan (PFG-1110).

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