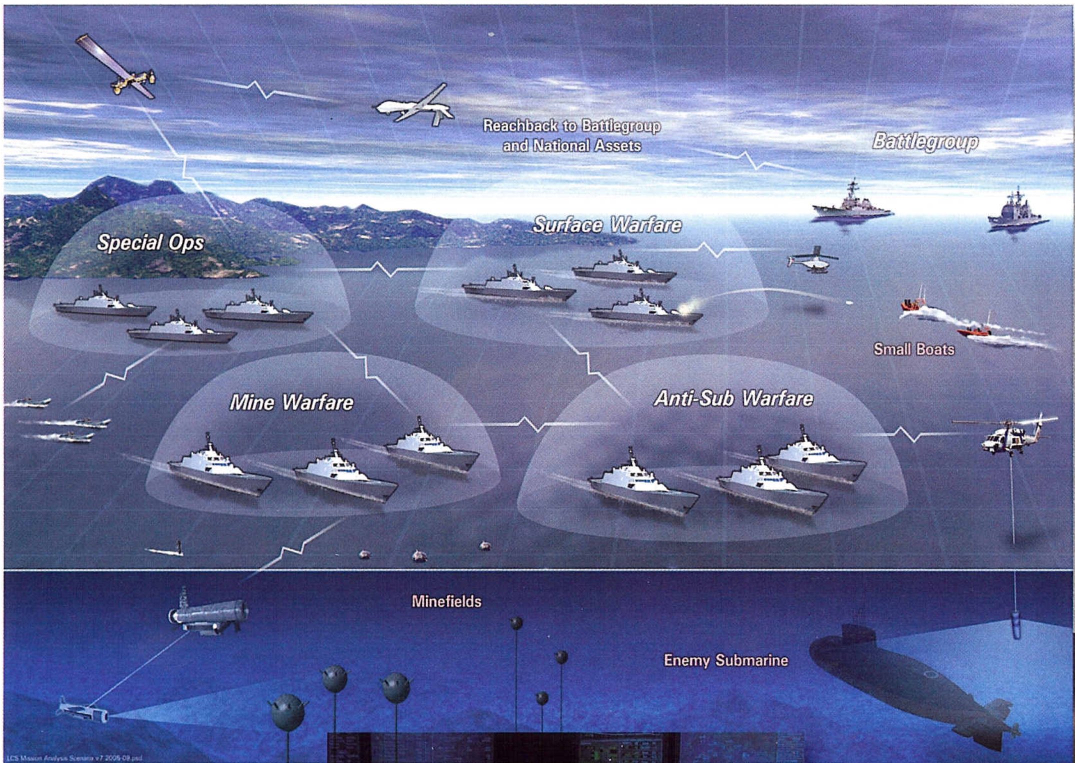
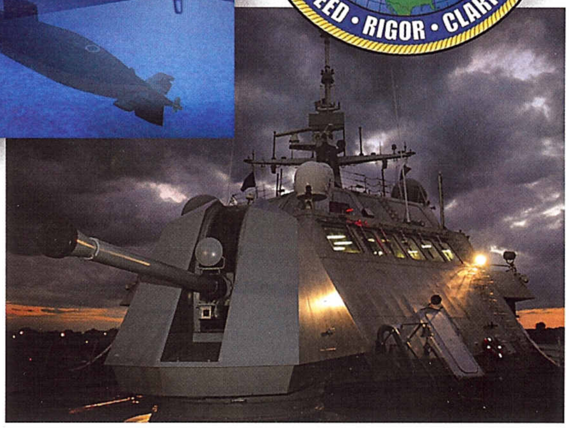

USS FREEDOM

ABOUT THE LITTORAL COMBAT SHIP >> The Littoral Combat Ship (LCS) is designed to defeat growing littoral threats and provide access and dominance in the coastal water battlespace. A fast, maneuverable and networked surface combatant, LCS provides the required warfighting capabilities and operational flexibility to execute focused missions close to the shore such as mine warfare, anti-submarine warfare and surface warfare.

LCS delivers combat capability from core self-defense systems in concert with rapidly interchangeable, modular mission packages and an open architecture command and control system. Modularity maximizes the flexibility of LCS and enables commanders to meet changing warfare needs, while also supporting faster, easier technological updates. LCS will be networked to share tactical information with aircraft, ships, submarines, joint and coalition units both at sea and shore, and with LCS operating groups.





USS FREEDOM (LCS 1)

SHIP >> FREEDOM (LCS 1) is the first of her class and the first of her kind. A fast, agile, and networked surface ship, FREEDOM will employ focused-mission packages outfitted with both manned and unmanned air, surface, and sub-surface vehicles.

NAMESAKE >> The name FREEDOM honors and acknowledges the enduring foundation of our nation and American communities from coast to coast which bear the name Freedom. Towns named Freedom range from New York to California, and include Indiana, Maine, New Hampshire, Oklahoma, Pennsylvania, Wisconsin, and Wyoming.

FREEDOM's Sponsor is Mrs. Birgit Smith, the wife of U.S. Army Sergeant First Class Paul Ray Smith who was posthumously awarded the Medal of Honor for his heroic actions in Operation Iraqi Freedom. Sergeant Smith, in the opening days of Operation Iraqi Freedom, exposed himself to devastating fire holding off the enemy to allow wounded soldiers to be evacuated from the battlefield. Sergeant First Class Smith's actions represented the highest ideals that our country was founded upon and it is fitting that his legacy is integral to the Navy's newest class of warship.

OTHER SHIPS NAMED "FREEDOM" >>

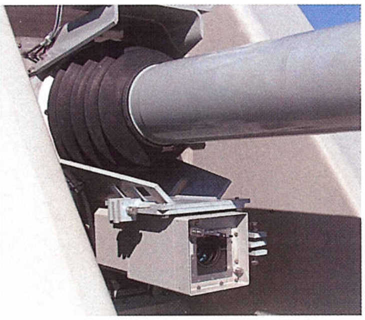
LCS 1 is only the second ship in the U.S. Navy to be named FREEDOM.

The first USS FREEDOM (ID 3024) was a 5,640 ton troop transport built in 1894 at Hamburg, Germany. Seized by the United States Government in 1917, she was renamed IROQUOIS and operated under charter to the U.S. Army during the rest of World War I. The ship was renamed FREEDOM in mid-1918 and, in January 1919, was commissioned into the Navy and assigned to the Cruiser and Transport Force. For the next seven months she engaged in returning American servicemen from France, making three round-trip Atlantic voyages. USS FREEDOM (ID 3024) was decommissioned in September 1919.

LCS 1: FROM THE GROUND UP

USS FREEDOM has...

- >> Over 100 miles of electrical and fiber optic cable.
- >> 1,000 tons of aluminum, 2,000 tons of steel.
- >> 4 waterjets, each with a 153cm (5 foot) diameter that together pump over 12,000,000 gallons of water per minute (the equivalent of draining an Olympic size swimming pool in 3 seconds) at full power, producing a 25 foot "rooster tail" rising above the flight deck.
- >> Two Rolls-Royce MT30 gas turbine engines producing a total of 96,000 horsepower. A direct derivation of the Trent 800 engines that power a Boeing 777, they produce more horsepower than 223 Chevrolet Corvettes or 457 Ford Mustangs!
- >> Two 16-cylinder Morse Fairbanks propulsion diesel engines, each displacing 5,200 liters (317,952 cubic inches) for a combined 17,370 horsepower. Derived from railroad locomotives, these engines together produce more power than 35 semi trucks!
- >> LCS 1 Class power-to-weight ratio: 38 horsepower per ton
  DDG 51 Class power-to-weight ratio: 11 horsepower per ton
  CVN 68 Class power-to-weight ratio: approximately 3 horsepower per ton
- >> Unique maneuverability to:
  - accelerate from 0 to 40+ knots in under two minutes
  - decelerate from 40+ to 0 knots in approximately 3 ship lengths
  - move directly sideways at 1 knot
  - rotate 360° while standing still in 3 minutes
- >> A flight deck and hangar twice as large as a TICONDEROGA class cruiser.
- >> 40% of her internal volume that is completely reconfigurable -- equivalent to 5 basketball courts.
- >> Ability to change Mission Packages in under 24 hours.
- >> Nine Sailors operating the ship in normal underway conditions.
  An ARLEIGH BURKE Class destroyer requires 30-40 Sailors in the same conditions.
- >> Over 9,000 networked components.
  An ARLEIGH BURKE Class destroyer has approximately 200-300 networked components.
- >> Advanced, automated systems -- stem to stern, affecting every aspect of life onboard. 40 Sailors can take LCS 1 to sea, and a total complement of 75 Sailors will be onboard to execute combat missions using modular mission packages.



USS FREEDOM [LCS 1] FACTS:

DISPLACEMENT >>	Approximately 3,100 tons (full load)
DIMENSIONS >>	377 feet in length 59 foot beam 13-14 foot draft
MAIN MACHINERY >>	Combined Diesel & Gas Turbine: Two Rolls Royce MT-30 gas turbines (96,550 hp) Two Fairbanks Morse Colt-Pielstick diesels (17,160 hp) Four Rolls Royce Kamewa 153SII Waterjets (153cm diameter)
SPEED >>	40+ knots
RANGE >>	3,500 nautical miles @ 18 knots
COMPLEMENT >>	Core Crew: 40 Sailors Aviation Detachment: 20 Sailors Mission Module Detachment: 15 Sailors
WEAPONS >>	MK 31 Rolling Airframe Missile System BAE MK 110 57mm gun Modular weapons systems tailored by mission Multiple crew-served & minor caliber guns
COUNTERMEASURES >>	Terma Soft Kill Weapons System Decoy Launching System WBR-2000 Electronic Surveillance System
COMBAT DATA SYSTEM >>	COMBATSS 21
RADAR >>	EADS TRS-3D Air & Surface Search RADAR Bridgemaster E S & X Band Navigation RADARs
FIRE CONTROL >>	DORNA Electro-optical & Infra-red System with LASER designator
HELICOPTERS >>	Two MH-60R or S Seahawk helicopters or one MH-60 Seahawk & three Firescout Vertical Takeoff & Landing Unmanned Aerial Vehicles