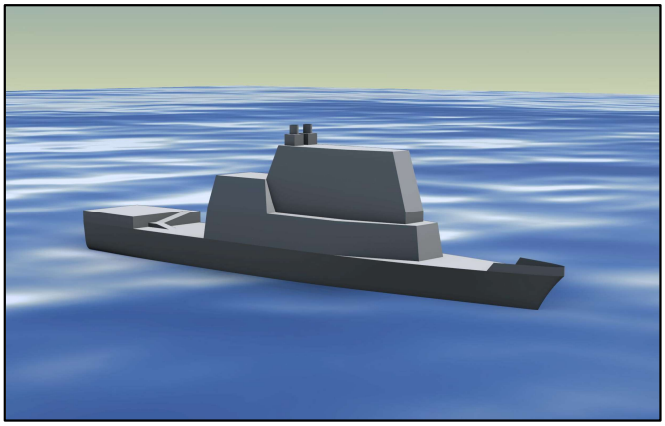
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USS Chicago (AFS M/R – 1) Combatant Craft Mothership

Description

USS Chicago is a Bureau Veritas classed, diesel and methanol fueled Afloat Forward Staging Manned/Remote (AFS M/R) platform. Its mission is to rapidly deploy and recover 16 combatant craft in open ocean and littoral waters. It provides support for the launch and return of UAVs and a Black Hawk helicopter.



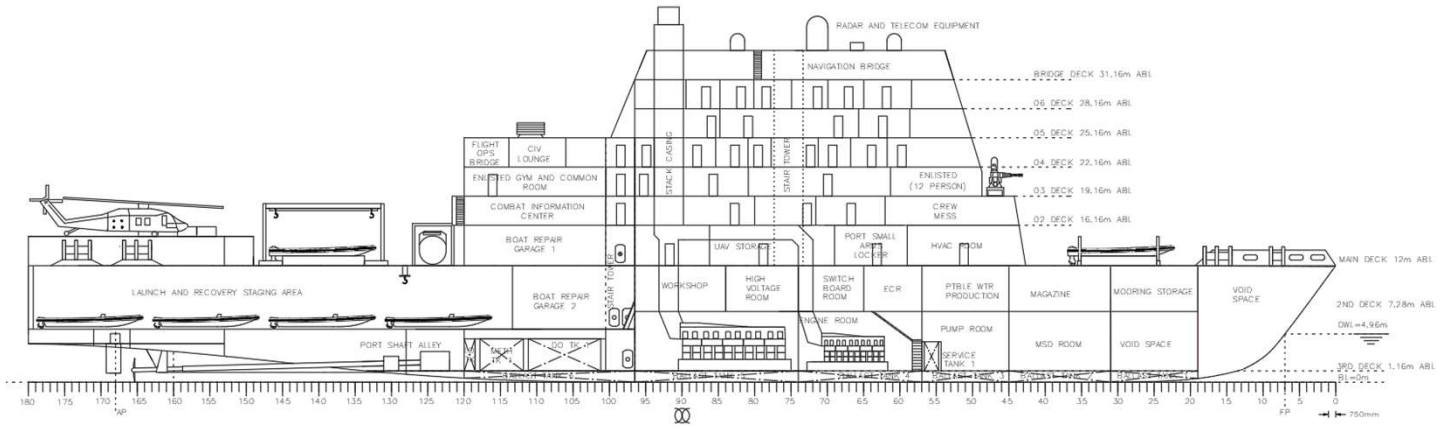
Specifications	
LOA (m)	135.0
LBP (m)	120.8
Beam (m)	20.0
Depth (m)	12.0
Draft (m)	4.76
Service Speed (knts)	15
Maximum Speed (knts)	25
Complement	94
Generating Capacity (kW)	19820
Endurance (days)	30
Range (nm)	6000

Mission Systems

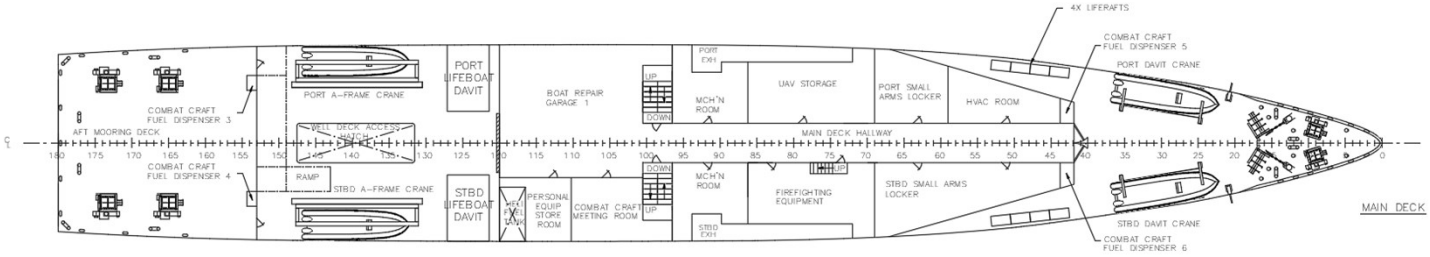
- Stern ramp and side launch davits for craft launch and recovery
- Aft helipad to accommodate a Sikorsky Black Hawk helicopter
- RAM missile system, CIWS, MK38 and 50 caliber deck guns for 360° self defense
- Combat information center and flight operations bridge
- Accommodations for 94 crew
- Communications, technical, and logistics support including VHF radio, GPS, depth sounder, satellite phone/data, and broadband WiFi

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Outboard Profile



Main Deck

Propulsion

- Twin screw diesel electric
- Powered by four dual-fuel Wartsila generating sets
- 7835kW per shaft at 25knts

Hull Form

- Designed to resemble the Freedom-class LCS and Arleigh Burke-class destroyer
- Streamlined hull and destroyer-like bow
- Comfortably achieves 25knt maximum speed requirement

Dual-Fueled Capability

- Capable of running in diesel or full methanol modes
- Can operate in a zero fossil fuels mode for 24 hours
- Ensures a 25% or greater reduction in emissions compared to a traditional diesel ship
- Combatant craft can be refueled using the ship's diesel stores

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Meet the Team



Annabel Bornebusch, Island Heights, NJ

Work Experience:
Combatant Craft Division Carderock, Naval Architecture Intern
Military Sealift Command, Engine and Deck Cadet
United States Marine Inc, Shipyard Intern
Career Plans: Defense Industry Naval Architect



Everett Botwinick, Toms River, NJ

Work Experience:
Metal Shark Boats Croatia, Naval Architecture Intern
Stolt Tankers, Deck and Engine Cadet
General Dynamics Electric Boat, Shipyard Worker
Career Plans: Defense Industry Ship Design



Ethan DesJardins, Boulder, CO

Work Experience:
RESOLVE Marine Group, Naval Architecture Intern
Delaware River Bay Authority, Operations Cadet
General Dynamics NASSCO, Engineering Intern
Career Plans: Defense Contractor Naval Architect-Engineer



Brian Kealey, Cranford, NJ

Work Experience:
Draper Lab, Material Science and Chemistry Intern
Brookhaven National Lab, Mechanical Design Intern
Military Sealift Command, Engine Department Intern
Career Plans: Graduate Program, Defense Industry R&D