



Center for Strategic and Budgetary Assessments

STUDIES

Naval Transformation and the Littoral Combat Ship

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Resources: Forces & Capabilities

A thorough review of the forces impelling current naval transformation efforts, the arguments for and against small combatants made during the Streetfighter debates, the Navy's broader transformation plans, the potential role of small combatants in the 21st century "Assured Access Navy," as well as the design goals for the Navy's new Littoral Combat Ship leads to the following proposition: small network combatants have an important role to play in 21st century naval warfare, and the reconfigurable Littoral Combat Ship may make important warfighting contributions as part of the Navy's 21st century "Total Force Battle Network" (TFBN).

SMALL COMBATANTS IN THE 21ST CENTURY TOTAL FORCE BATTLE NETWORK

A small combatant is any warship with a displacement of 3,000 tons or less. Small combatants have consistently performed ten broad missions vital to battle fleet operations: battle force screening; mine warfare; protection of shipping; battle fleet scouting; anti-surface warfare/offensive maritime interdiction; amphibious/sea base support; close-in fire support; riverine warfare; support of naval special operations forces; and maritime domain awareness and maritime patrol and security. A special variant of this last mission is US maritime domain awareness and defensive maritime interdiction, a key responsibility of the US Coast Guard. An eleventh mission, highlighted repeatedly during the Streetfighter concept development process, must be added: battle network sensor emplacement.

When considering whether or not it should include the small Littoral Combat Ship in its 21st century TFBN, the two key questions confronting Navy planners are: Is there any evidence to suggest that any of the aforementioned small combatant missions will be less important in the 21st century, or that intermediate and large combatants would better perform them? The answers to both these questions would seem to be no, for three key reasons:

- First, precedence. Whenever a fleet battle network or enhanced networked sea base closes on a defended enemy coastline, its intermediate and large combatants focus on enemy threats to the landward side of the littoral. While doing so, they rely upon smaller combatants to protect them from mines and attacks mounted by the enemy's littoral screening forces, and to conduct offensive interdiction of enemy coastal traffic. These roles are among the oldest missions assigned to US small combatants, and they assume increasing importance whenever the fleet operates close to shore. As in the past, when performing this role, future small network combatants would themselves rely on the larger combatants for protection against over-matching threats.
- Second, utility. For the foreseeable future, the Navy will likely operate most often in unimpeded and guarded access scenarios. In these conditions, small combatants capable of conducting the

missions of offensive maritime interdiction; protection of shipping; battle force scouting; amphibious/sea base support; support to naval special operations; and maritime domain awareness and maritime patrol and security tasks (e.g., sanctions enforcement, patrolling choke points, conducting anti-piracy, drug, and terrorism patrols, and participating in humanitarian assistance and disaster relief operations) will be in extremely high demand. Since small combatants can be afforded in much greater numbers than larger and more capable combatants, they also allow the Navy to expand its global battle network coverage, even if defense budgets remain flat.

- Third, efficiency. Because so many traditional small combatant missions will be performed in unimpeded and guarded scenarios, a force of small warships should allow the Navy to free up its fewer, more expensive and more capable combatants for more pressing duties without appreciably increasing either overall operational risk or individual ship risk—provided the small combatants built are capable of sensing over-matching threats and carry a capable self-defense suite.

Although small crewed combatants themselves appear to be ill-suited for missions where access is vigorously contested, should they be capable of employing unmanned systems, they may be able to make a valuable contribution in such contingencies by operating from stand-off ranges. This is the preliminary conclusion reached by naval planners; it must be proven through fleet experimentation.