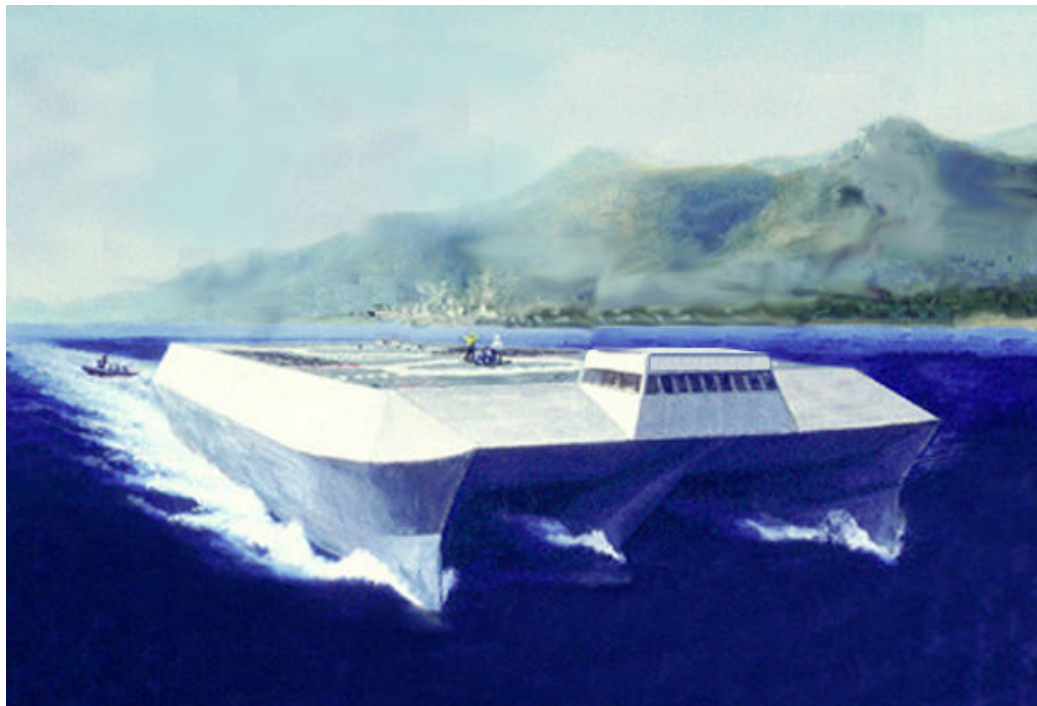


PROVIDING OPTIONS FOR ADVANCED SHIP DESIGNS

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Roles for Small Vessels in the Littoral

Mine Counter Measures

Alternative to organic MCM
Low speed sea keeping

Rapid repositioning

Communications Node

Endurance in theater
Low observability

Rapid repositioning

Helicopter Pad

Fuel and stores payload
Operations and refuel

Personnel transfer
Rapid repositioning

Logistics Vessel

Re-supply near shore
Shuttle from sea base
Stable platform

Increased helo efficiency
Interface with sea base

Roles for Small Vessels in the Littoral

Fire Support

Canister launch
Coordination with CEC

Rapid repositioning

ROV Support

Mine hunting
Launch/Recovery

Surveillance

AUV Support

Wind over deck

Stable deck

Special Ops

Small boat ops
Launch/recovery

Low observable
Rapid repositioning

CAPABILITIES FOR SMALLER VESSELS

Speed

Rapid transit to theater
Increased logistics efficiency
Attack more difficult

Rapid Repositioning in theater
Reduced counter fire accuracy

Payload/Range

Independent transit to theater
Helo refueling
Multi-role capabilities

Reserve fuel for high speed bursts
Logistics efficiency

Seakeeping

On-station in adverse weather
Interface with large sea base
Rough water ROV/AUV recovery

Helo ops in small vessel
Extended crew endurance

Low Observables

Enhances all other functions
Enhances survivability

Enables near -shore ops

TECHNOLOGY CHALLENGES

Speed

Low Drag (viscous, form, wave)
High propulsive efficiency

Seakeeping

Minimize free surface coupling
Capable at all speeds, zero to max

Payload/Range

High Payload /Weight
Flexibility for cargo/mission payload

Low Observables

Shape for RCS
Low Wake

VEHICLES

