Forward Resuscitative Surgery Afloat

Filling the Doctrinal Gap Through Deliberate Maritime Experimentation

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The Problem

Survivability gains were built on rapid evacuation and uncontested airspace.

MINUTES | **HOURS** | **DAYS**

Evacuation timelines in a contested Indo-Pacific may stretch far beyond the Golden Hour.

The Doctrinal Gap

Army doctrine addresses ground and air evacuation extensively. Maritime employment of forward surgical capability is largely unaddressed.

- No framework for FRSD integration aboard watercraft
- No maritime medical regulation architecture
- No doctrinal approach for CASEVAC conversion aboard vessels
- No established TTPs for prolonged maritime surgical operations

Deliberate Experimentation

A crawl-walk-run methodology, iterating from combat scenarios to humanitarian response.

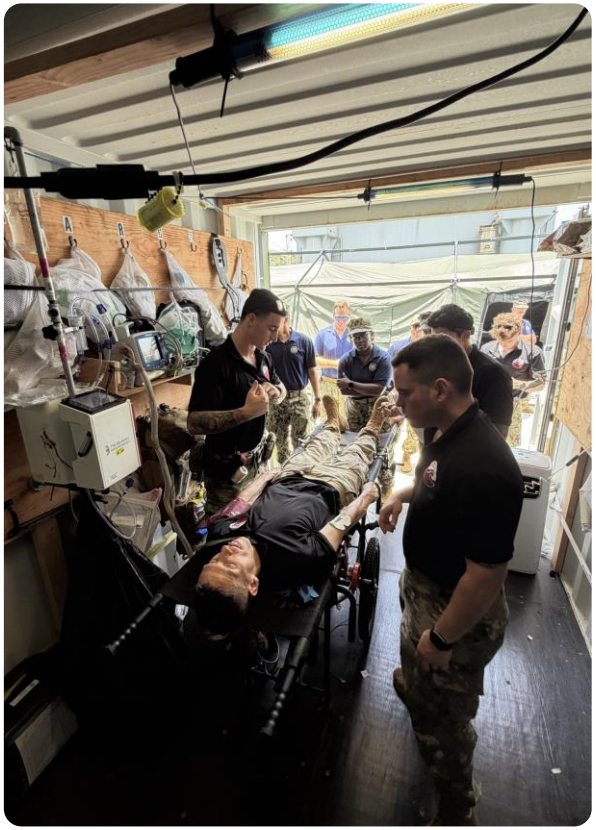
Island Assault Support • Distributed Maritime Operations • Sea-Based Medical Node • Mobility-Focused Operations

Eight Domains

Critical areas of investigation across every experimentation cycle.

Surgical Concept Afloat

At its core, this is a patient movement problem: receive, resuscitate, hold, evacuate.



The watercraft becomes a maneuver medical capability, not just a transportation asset.

Platform Integration

Capability matters more than platform.

Power • Environmental Control • Sterility • Blood Storage • Communications • Casualty Flow

Operational Challenges

- Sea state affects transfer operations
- The 72-hour resupply assumption may not hold in contested environments
- Communications architectures remain immature
- Fatigue, endurance, and vestibular adaptation affect the surgical team
- Survivability without assured protection

Lessons Learned

Experimentation can precede doctrine.

EXPERIMENT → **TTP** → **DOCTRINE**

Beyond LSCO

Maritime medical capability has applications across the competition continuum.

Humanitarian Assistance • Disaster Response • Theater Security Cooperation • Partner Force Development

Strategic Implications

Extending surgical reach in environments where evacuation assumptions no longer hold.

Conclusions

1

A maritime doctrinal gap exists in Army medical doctrine.

2

Deliberate experimentation can successfully generate TTPs where doctrine is absent.

3

Expanding maritime medical experimentation is essential before operational demand exceeds capability.

The future operating environment is already here. Our doctrine simply has not caught up yet.

Questions?

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