SUSTAINING THE FIGHT: Resilient Maritime Logistics for a New Era

with Richard V. Spencer, Secretary of the U.S. Navy
Sustaining the Fight
Resilient Maritime Logistics for a New Era

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Key Findings

• Current and programmed defense maritime logistics force is inadequate to support U.S. strategy, particularly against China or Russia.

• The United States needs new logistics concepts and capabilities to allow the National Fleet to fight in a more effective, distributed, and sustained manner, while supporting Joint Force power projection.

• A new, operationally resilient fleet would be numerically larger, more differentiated, and only moderately more expensive than the programmed force.

A resilient maritime logistics force is essential and achievable.
Anchorage Era
< 1917
Ships reliant on fixed shore facilities, and on coaling stations in particular. Expeditionary logistics, to the extent it existed, relied on seized or secure anchorages for unstable ship-to-ship transfers.

Expeditionary Era
1917-1957
Experimentation leads to the birth of reliable underway replenishment during WW I. Post-war progress stalled, with only minor Interwar improvement. U.S. Navy rapidly innovates during WW II and enters the Cold War with mature expeditionary logistics concepts and forces.

Fast Logistics Era
1957-1991
Cold War operational and technological demands lead to next-generation improvements in fleet support, including Fast Combat Support Ships (AOEs), STREAM and FAST transfer systems, VERTREP, and nuclear propulsion.

Forward Presence Era
1992-2018
Peace dividend and perceived lack of threat to forward U.S. support facilities leads to dramatic downsizing of logistics fleet, especially expeditionary logistics forces, and cancellation of new logistics capabilities. Cost efficiency, not resiliency, becomes the prime metric.

Agile Logistics Era?
Growing awareness of renewed great power competition may drive shift to a National Fleet approach for a resilient logistics architecture. Diversification of fleet support assets grants Navy options for agile and scalable support in contested areas.
Naval logistics and Strategic Sealift operate efficiently in peacetime.
Challenges to Current Strategic and Operational Approach to Logistics
China focused on counter-logistics

Long-range sensors and weapons protect Chinese forces conducting “gray zone” warfare and threaten logistics at different levels of escalation.
Russia can threaten logistics both near and far.
New Assumptions and Operational Concepts and Implications for Logistics
Assumptions and Concepts

• New threat-driven assumptions
  – From secure, proximate resupply facilities to distant and/or contested basing
  – From assumed rear theater sanctuary to global conflict
  – From gradual force buildup to forward deterrence and rapid response
  – From short-duration to potentially protracted conflicts
  – From low attrition to high attrition planning

• New Navy and Other Service operational concepts levy considerable logistics demands.

Changes in the threat environment and emerging Joint Force concepts have changed the demand for maritime logistics forces.
Proposed Maritime Logistics Architecture
Elements of Proposed Maritime Logistics Architecture

• **At-Sea Fleet Logistics**
  – Fuel
  – Dry Cargo and Munitions
  – Towing and Salvage
  – Expeditionary Maintenance and Repair
  – SAR (to include CSAR) and Medical Support Afloat

• **Strategic Sealift**
  – Fuel
  – Dry Cargo and Munitions

• **Other Areas**
  – Hardening the Force
  – Incorporating Logistics in Navy System Design
  – Improving Logistics Coordination
Proposed Maritime Logistics Employment

- **Strategic Sealift** transports forces and supplies to theater
  - T-AKE, T-AKR, and T-AKM reload in rear-area ports or more distant CONSOL locations

- **Strategic Sealift** transports forces and supplies to theater
  - T-AOs refuel transiting surge forces

- **Logistics assets** support deterrence operations against opportunistic Russian aggression
  - T-AOT, T-AKER, and T-AKM resupply forward logistics forces and combatants at intermediate points; CMV-22B (and possibly other aircraft) provide distributed aviation logistics support

- **Shore-based resupply**

- **T-AO/E and T-AKE support** Maneuver Force groups
  - T-AO, T-AOL, and T-AKE support Deterrence Force groups forward

- T-ATS tow damaged ships to safer intermediate points for repairs with AS/D and FLO/FLO; CMV-22B, amphibious aircraft, and other assets rescue personnel; T-AHL stabilize and transport wounded personnel to intermediate evacuation points

- **Highly contested ports, either unavailable or available for limited resupply**
  - Ports in use
  - Afloat Resupply Locations (T-AOT, T-AKRE, T-AKM)
  - Contact Force Operating Area
  - Blunt Force Operating Area

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- **Afloat Resupply Locations (T-AOT, T-AKRE, T-AKM)**
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Meeting Fleet Refueling Requirements

Current AO/E fleet

1. Go Big: CONSOL Tankers (T-AOTs)
2. Go Small: T-AOLs (OSVs)
3. Go Fast: Oilers (T-AO 205s)
4. Go Different: Dracones, Pipefish, and Barges
Cargo and Munitions
Munitions Rearmament

- Increase and harden munitions stocks and infrastructure
- Field new weapons technologies and concepts
- Develop new ways to distribute munitions
  - T-AKER ships
  - Reload at anchor
  - VLS Rearming at Sea (RAS) on a Missile Reload Ship (T-AKM)
Joint Force Maritime Logistics: Strategic Sealift
Institute financial incentives to grow U.S. tanker fleet

A National Fleet approach to securing access to U.S. Government and U.S. commercial tankers could rapidly and economically meet requirements.

Increase U.S. preference cargo
- Increase purchase of DLA Energy fuel from U.S. refineries
- Mandate energy export requirement
MSC, MARAD, and U.S.-flag commercial shipping all essential to meeting sealift requirements—and all face challenges.
Meeting Strategic Sealift Requirements: Government Shipping

- **SLEP of Select Government Ships**
  - Necessary to buy time for other components of plan

- **Acquire Ships**
  - Foreign-constructed ships to meet RO/RO Surge and Sustainment (from open market or from U.S.-flag)
  - U.S-constructed to meet specialty sealift, other sealift RO/RO, and novel auxiliaries

*Proposed steady acquisition approach provides stability, reduces cost, and avoids “boom and bust” cycles.*
Meeting Strategic Sealift Requirements: Merchant Marine

- Improve financial incentives
- Tax and policy reforms
- Merchant Marine labor reforms

**Strengthen U.S.-flag commercial merchant marine; pursue options to expand MSP and offset acquisition of foreign-built sealift ships with CO/CO surge shipping.**
Recommendations and Implementation
Proposed Logistics Fleet

Additional SCN, Sealift, MSC charter, and MSP costs of $47.8 billion over 30 years
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Discussion