

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



Timothy A. Walton Ryan Boone Harrison Schramm



Center for Strategic and Budgetary Assessments





- 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.

Eras of Navy Fleet Support Logistics





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

Battan





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



A. Cyber network attack or other nited exploitation slows lift effort or tates cues Russian responses

> B. Russian UUVs, mines, and/or subs attempt to attack sealift and combatants as they leave port for surge

E. Bombers, cued by overhead sensors, strike at transiting ships F. Tactical aviation attacks theater sea ports of debarkation with stand-off weapons I. Russian surface combatants equipped with long-range cruise missiles provide deep theater strike from distance

> J. Russian INF-violating GLCM or IRBMs threaten theater sea ports and ground movement

G. Mining, UUVs, or sabotage disrupt port offloading

H. Russian information campaigns seek to stir opposition against NATO movements, impose friction

C. Submarines slipping past NATO ASW screens threaten convoys with torpedoes and cruise missiles

> D. Critical chokepoints provide opportunities for ambush and operational friction

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









Meeting Fleet Refueling Requirements





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. <u>commercial tankers</u> could rapidly and economically meet requirements.

Meeting Strategic Sealift Dry Cargo and Munitions Requirements





MSC, MARAD, and U.S.-flag commercial shipping all essential to meeting sealift requirements—and all face challenges.

Meeting Strategic Sealift Requirements: Government Shipping



20

- 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



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









- 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.

Discussion

