

Sustaining the Sea Base

26 October 2005

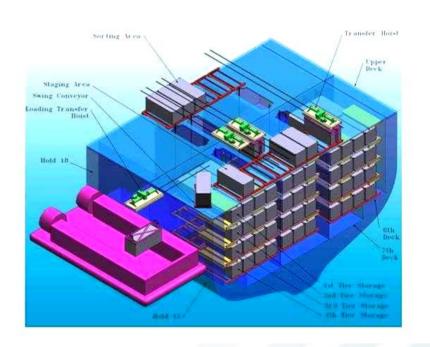


Current Commercial Resupply Network

- Optimized network of rail, truck, and ships
- Designed to move large volumes over a fixed route
- Relatively inflexible

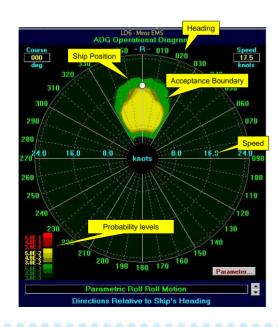
Logistical Challenges to Support the Sea Base

- Adapting the present liner vessel network to provide focused delivery of specific material for a specific purpose
 - Selective Retrieval & Discharge
 - In place on sea base, will likely not be available on commercial liner vessels
 - Cooperation between commercial and military planners is required



Physical Challenges to Support the Sea Base

- Mooring a Ship into a Sea Base
 - Skin to Skin
 - Fendering and Mooring
 - Relative Motion between Vessels





Physical Challenges to Support the Sea Base







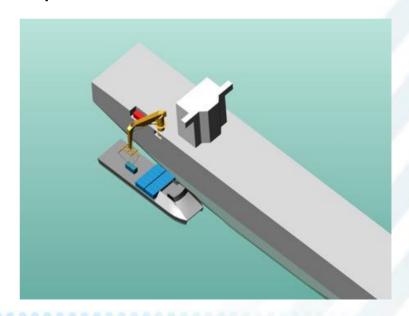
Moored to an HSV

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Physical Challenges to Support the Sea Base

- Discharging cargo to the sea base
 - Cargo handling equipment
 - Motion compensation
 - 6 degrees of freedom
 - Environmental sensing and predictive control







Meeting the Logistical Challenges

- Full visibility throughout the delivery process
 - Total Asset Visibility
 - RFID
 - Just in Time Delivery
 - > Requirement also exists with commercial customers



Total Asset Visibility

". . . it is perfectly useless to get a thousand tons of gasoline when you need five hundred tons of gasoline, two hundred tons of ammunition, and three hundred tons of bridging material."

Major General George S. Patton, <u>War as I Knew It</u>, 1947, Houghton Mifflin Company, pp. 144-145.



Total Asset Visibility

Mission-specific logistics design

Transportation Management

Detailed visibility to ensure that needed supplies reach the warfighter

Customized logistics services focus on in-theater logistics efficiency at any mission stage from preengagement design to planning for disengagement

Global distribution capabilities enable the right supplies delivered to the right hands at the right time for streamlined in-theater logistics



In Conclusion...

Research and development as well as extensive testing has already been done and continues to be performed to meet non-military customers' requirements.

The military must continue to tap into the sophistication of this commercial knowledge and partner with industry in the advancement of sea basing technology and logistics process development.