

HQ USINDOPACOM

Logistical Innovation in the Indo-Pacific



MAY 2024

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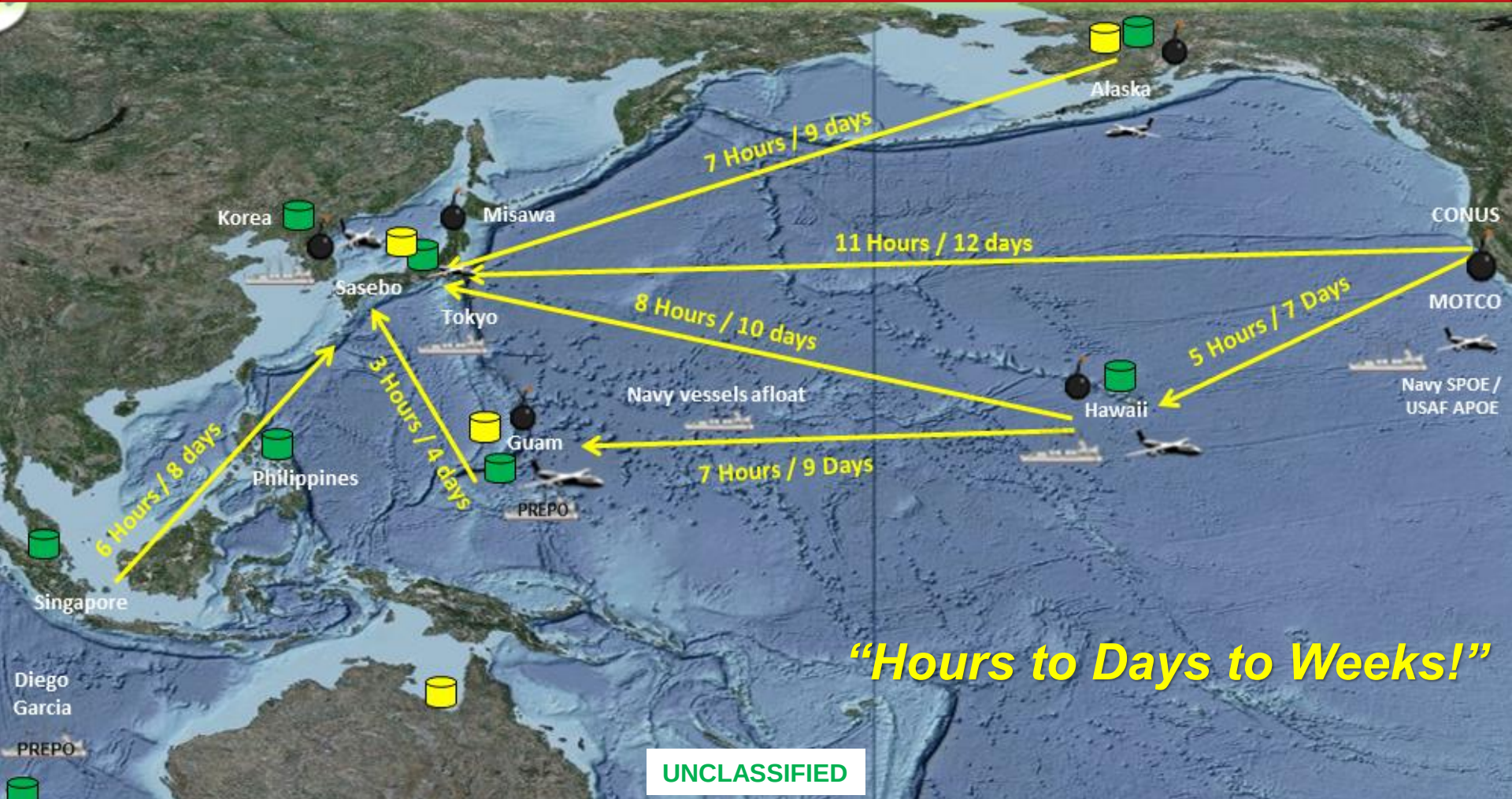


ENSURING A FREE AND OPEN INDO-PACIFIC

Contested Logistics in the Indo-Pacific

Tyranny of Distance X Reduced Capability X Reduced Capacity X Reduced Access =

Wicked Logistics Problem



“Hours to Days to Weeks!”



The Changing Landscape

From three domains...

...to five (or six)!



AIR



LAND



SEA



AIR



CYBERSPACE



SPACE



LAND

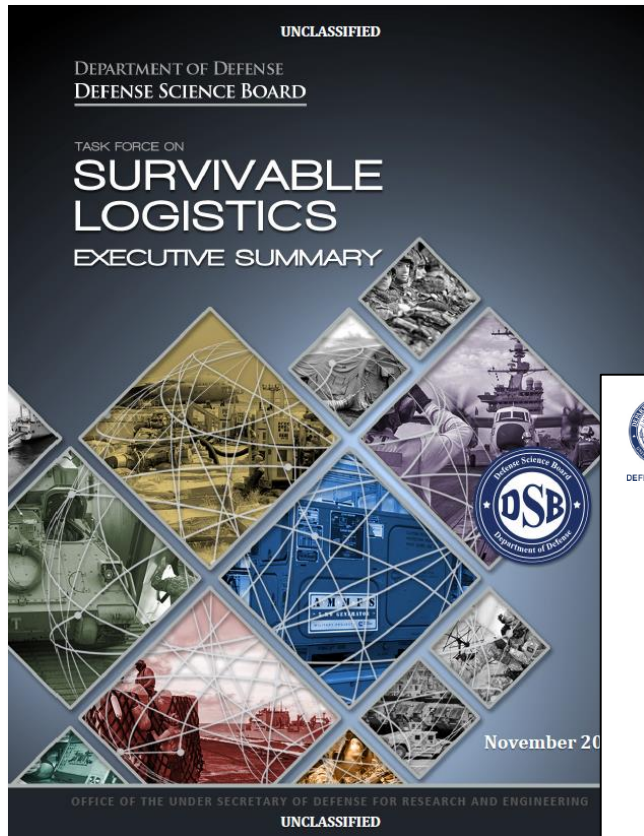


SEA



Why should I care?

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“Survivable logistics is the key enabler underpinning all U.S. military power. Without the ability to provide our soldiers, sailors, airmen, and Marines with the resources needed to win on the battlefield, the development of advanced tactics and technologies will not have the opportunity to matter.”

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WASHINGTON DC 20301-3140

DEFENSE SCIENCE BOARD

MEMORANDUM FOR THE UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

SUBJECT: Final Report of the Defense Science Board (DSB) Task Force on Survivable Logistics – Executive Summary

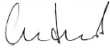
I am pleased to forward the final report of the Defense Science Board Task Force on Survivable Logistics, co-chaired by General Paul Kern, USA (Ret.) and General Duncan McNabb, USAF (Ret.).

For decades, the ability of the Department of Defense (DoD) to transport, supply, and resupply our soldiers, sailors, airmen, and marines anywhere in the world has been assumed. The United States maintained such superiority over its competitors that strategic threats to DoD logistics were rarely considered by military planners. However, though in the past we have been relatively unchallenged in this regard, it is now time to evaluate our abilities to project forward and freely operate in contested environments. Our logistics capabilities need improvement, underpinned by stable funding streams dedicated to logistics.

This study examines the threats posed by strategic competitors to U.S. military logistics and provides recommendations for remedying the challenges that could be exploited in a strategic competition. The future of warfare is rapidly changing, and the DoD will need to adapt quickly to prepare for conditions less favorable to the United States than existed in the past. Modernizing the joint logistics enterprise is a necessary and critical first step toward that goal.

Survivable logistics is the key enabler underpinning all U.S. military power. Without the ability to provide our soldiers, sailors, airmen, and marines with the resources needed to win on the battlefield, the development of advanced tactics and technologies will not have the opportunity to matter.

I agree with the recommendations detailed in this report and urge the DoD to move quickly towards their adoption.


Craig Fields
Chairman, Defense Science Board

Attachment:
As stated

Logistics can benefit from the same **innovation** and RDT&E investment as other systems



So what does it all mean?

- **Our force posture is a legacy of WWII and our “island-hopping” campaign, with logistics network depending on antiquated infrastructure on geographically distributed islands that are difficult to defend.**
- **We are challenged by peer competitors**
 - Our logistics hubs have been in place for years (in some cases decades), the location is well-known to our adversaries
 - The modes we transport classes of supply and the equipment we do that with are limited



So what are the challenges?

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➤ **Tyranny of Distance**

- Tremendous distances separated by open ocean with few stops along the way

➤ **Limited Multi-Capable Connectors**

- Limited air, ground, and sea delivery platforms

➤ **“Last Tactical Mile” Deliveries**

- Right things, at the right place, at the right time, in the right quantities

➤ **Assured Communications**

- Communication is the lifeblood of logistics

➤ **Interoperability**

- Joint compatibility amongst the services (fuel, energy, equipment, etc.)



Bumper Stickers

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“Shrinking the Pacific” (1 of 2)

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Characteristics & Considerations

1

Be There Ahead of Time!

Prepositioning / Shelf-Stability / Corrosion

2

***If you Need to Build It,
Build it Closer***

Allies & Partners / Advanced Manufacturing

3

***If you Need to Move It,
Pack it Full***

Maximizing Legacy Lift / Prioritization

4

***Every Avenue of
Approach***

**Multi-Capable Distribution Platforms /
Autonomy / Robotics / Swarming**



“Shrinking the Pacific” (2 of 2)

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Characteristics & Considerations

5

**Decision Making at the
Speed of Relevance**

Common Operating Pictures / AI / ML

6

Good to the Last Drop!

**Demand Reduction / Foraging / Alternative
Sources**

7

Plan Now, this goes South Quick!

Access & Agreements / Contracting

8

End-to-End, Consider It!

Any Sensor, Any Shooter, Any Sustainer



What are some potential solutions?

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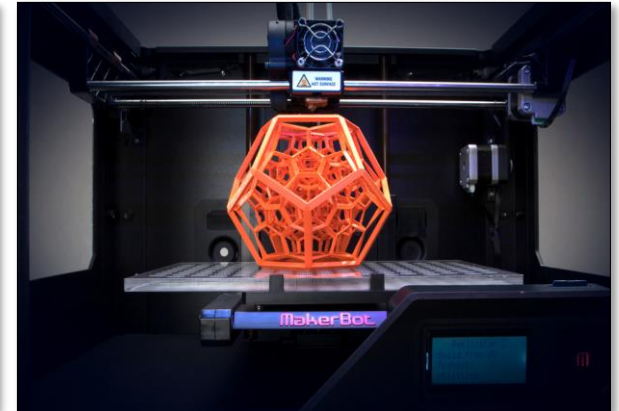
FLEXIBLE FUEL STORAGE/DELIVERY



MICRO DELIVERY SYSTEMS



ADVANCED MANUFACTURING



OPERATIONAL ENERGY



AI/ML



RAPID REPAIR CAPABILITIES





Questions?

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“Aut viam inveniam aut faciam”