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TOGETHER, WE DELIVER.

USTRANSCOM

UNITED STATES TRANSPORTATION COMMAND



USTRANSCOM Challenges & Innovation Overview

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Distribution Statement A: Approved for Public Release

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MISSION AND PRIORITIES

TOGETHER, WE DELIVER.

MISSION

USTRANSCOM CONDUCTS GLOBALLY INTEGRATED MOBILITY OPERATIONS, LEADS THE BROADER JOINT DEPLOYMENT AND DISTRIBUTION ENTERPRISE (JDE), AND PROVIDES ENABLING CAPABILITIES IN ORDER TO PROJECT AND SUSTAIN THE JOINT FORCE IN SUPPORT OF NATIONAL OBJECTIVES

"WE WILL REMAIN READY...TO FIGHT, DELIVER, AND WIN!"
GEN JACKIE VAN OVOST



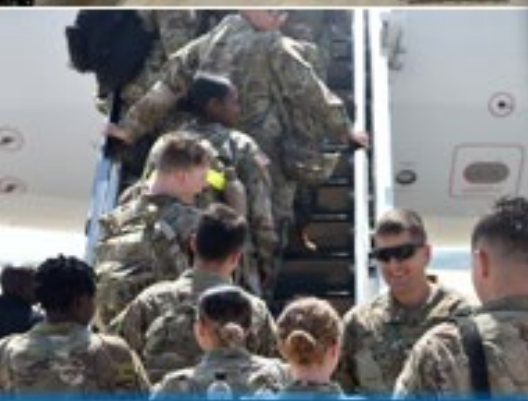
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MANEUVERING & SUSTAINING THE FORCE

TOGETHER, WE DELIVER.



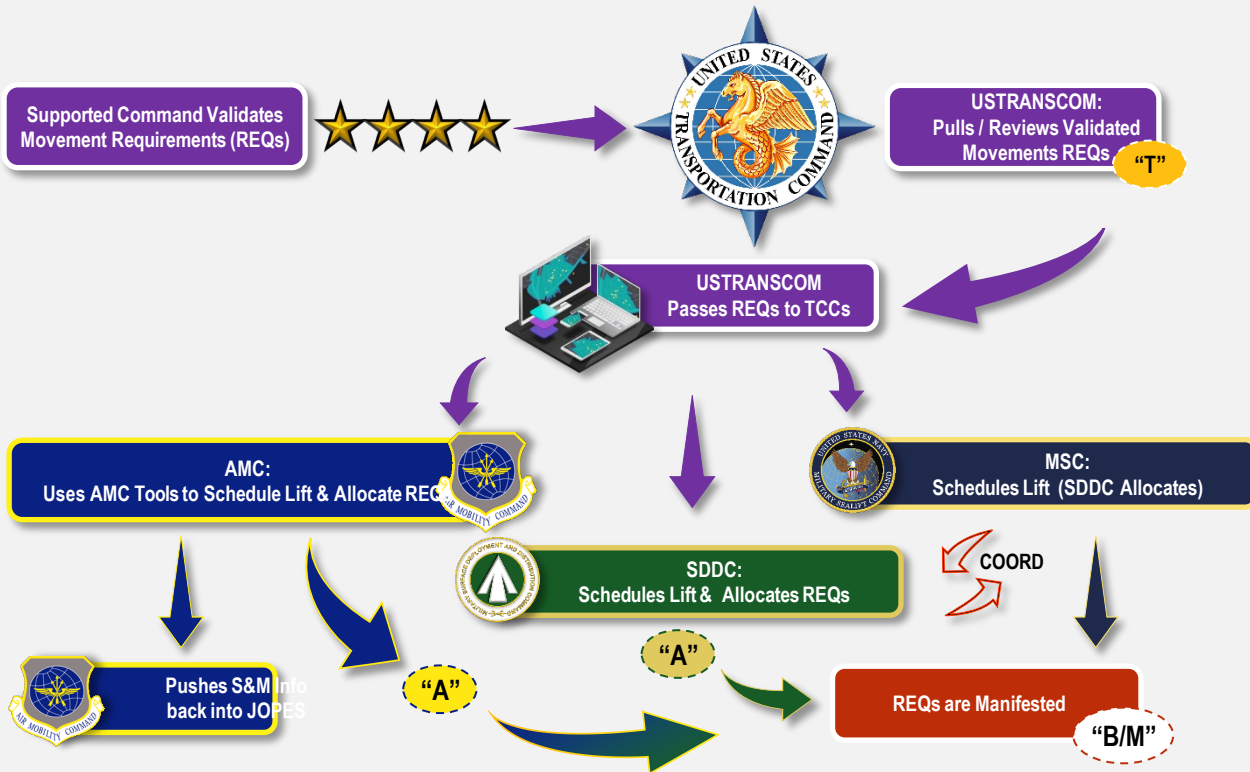
Creating Multiple Cognitive Dilemmas for our Adversaries

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REQUIREMENT-TO-EXECUTION FLOW

Scheduling Process



Key Points

Pre-work already done

- Geographic CCMD validates REQ/TPFDD
- Force Flow Conference has a role

GCCs validate mode/source

- REQ/timing often determines mode

USTC synchronizes global priorities IAW JCS Priorities via GOC

- JCS may adjudicate

USTC has the global fight

- Remains ISO other GCCs executing JCS priorities



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ON ANY GIVEN DAY

- 230 Railcars *En route*
- 33 Chartered/Organic Ships *Underway*
- 1500 Truck Cargo Shipments
- 1200 Household Goods Shipments
- 455 Airlift Sorties
- 47 Air Refueling Sorties
- 14 Patients in Air Evacuation
- 25 Defense Couriers *En route*
- Aircraft Take Off and Land Every 2.8 Minutes



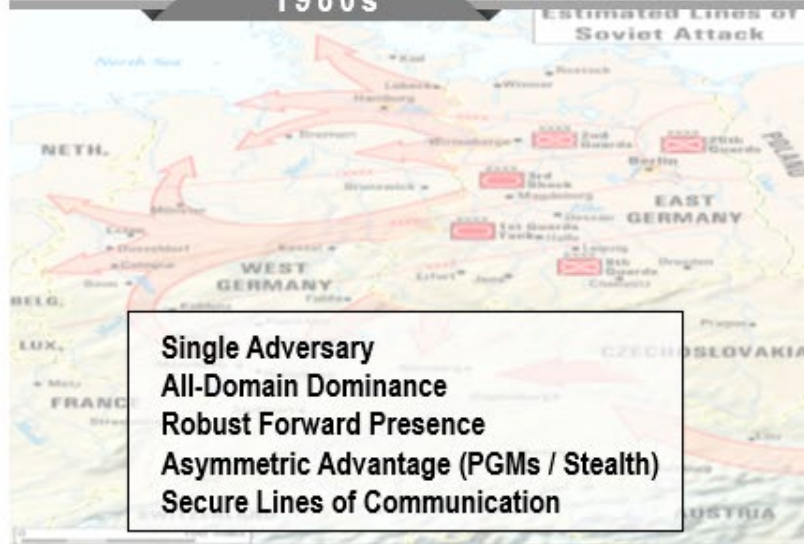
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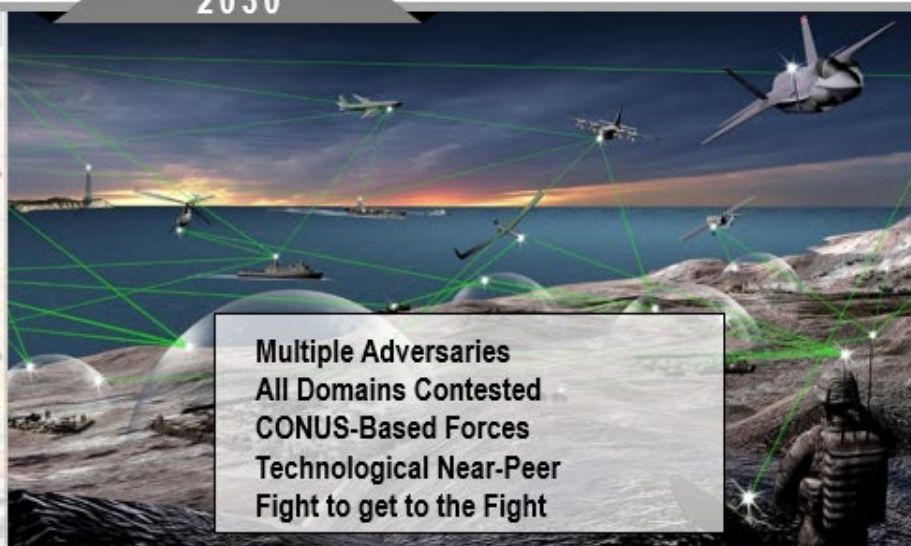
EVOLVING FUTURE – MULTI-DOMAIN LOGISTICS TRENDS

1980s



Single Adversary
All-Domain Dominance
Robust Forward Presence
Asymmetric Advantage (PGMs / Stealth)
Secure Lines of Communication

2030



Multiple Adversaries
All Domains Contested
CONUS-Based Forces
Technological Near-Peer
Fight to get to the Fight

LOGISTICS DRIVERS

↑ Time / Distance

↑ Dynamic Basing

↑ Rapid Aggregation / Deaggregation

↑ Challenges to Access, Basing, Overflight

↑ Positional Disadvantage

↑ Degrades C2

↑ Consumption (Fuel, Ammo, Food, H2O...)

↑ Damage (Repair Parts & Technicians)

↑ Destruction / Attrition (Reconstitution)

Evolving global OPLANs, force design, and weapon systems investments are leading to increasing demands on military logistics

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JOINT DEPLOYMENT & DISTRIBUTION ENTERPRISE CHALLENGES

Ready Now and in the Future

- Scalable End-to-End Patient Movement
- Rapid Construction for Ports of Debarkation
- Convoy Security
- Delivery Technologies
- Rapid Distribution Technologies
- Energy Generation/Efficiencies and Power Distribution
- Advanced Mobility Aircraft
- Aircraft/Ship Survivability
- Opportune Landing Site Identification
- Autonomous Approach and Landing Guidance
- Force Protection
- Sea Basing Technologies/Logistics-Over-The-Shore/Connectors
- Standardized Intermodal Containers/Pallets
- Mobility Aircraft
- Entry Control Facilities/Control Point Access

Drive Cyber Domain Mission Assurance

- Cyber and Electronic Resilience
- Secure Collaboration with Commercial Partners
- Resilient Communications

Create Decision Advantage

- End-to-End Visibility
- Integrated Common Intelligence Picture
- Supply Chain Sustainment Simulation Tools
- Process Management and Business Rules
- Information Visualization
- Deployment/Distribution Modeling, Simulation and Optimization
- Predictive Logistics, Maintenance Forecasting and Damage Repair
- Distribution Planning
- Automatic Identification Technology
- Human System Interface
- All Domain Maneuver Warfare Planning and Execution
- Transportation Node Optimization
- Knowledge Management
- Information Science and Technology
- Big Data
- Risk Assessment
- Distributed Global Mobility C4

Detailed description available at
<https://www.ustranscom.mil/cmd/associated/rdte/>



SAMPLE INNOVATIONS

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Threat Mitigation Alternatives at Military Entry Control Facilities



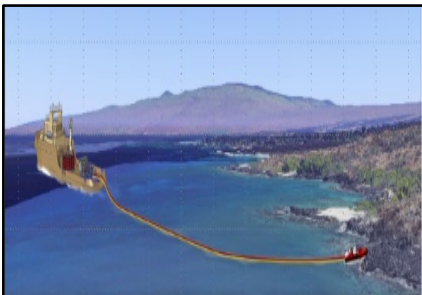
Rapidly Available Interface for trans-Loading



Rapid Assessment and Improvement of Damaged Lines of Communication



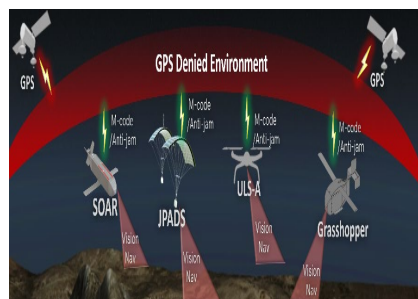
Buoyant Roll-on/Roll-off Interface Platform



Petroleum Undersea Sustainment Hose



Aerial Delivery & Autonomous Deployment of Unmanned Vehicles



Aerial Delivery Low-Cost Modular GPS Denied



Large Area Repair Gone Expeditionary

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QUESTIONS

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<https://www.ustranscom.mil/cmd/associated/rdte/>



USTRANSCOM
United States Transportation Command

Doing Business with
USTRANSCOM

Moving Passengers
and Cargo

Defense Transportation
Regulations

Defense Personal
Property Program

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Research Development Test & Evaluation

The USTRANSCOM Research Development Test & Evaluation program explores innovative joint technologies that address Distribution Process Owner (DPO) and Defense Transportation System (DTS) capability gaps.

Our History

On 16 September 2003, the Secretary of Defense designated United States Transportation Command (USTRANSCOM) as the Department of Defense (DOD) Distribution Process Owner (DPO), responsible for the overall efficiency and interoperability of distribution-related activities supporting the deployment, sustainment, and redeployment of forces conducting the full range of military operations. The paramount goal of the DPO Science and Technology program is to enhance support to USTRANSCOM's customers in peace and war through exploration of transformational distribution technologies. The S&T program fosters development of new bodies of knowledge on distribution, then enables evaluation and integration of the resulting transformational approaches.

As the DOD's DPO, USTRANSCOM's business enterprise stretches from the point at which warfighting materiel has been procured to their point of use in a theater of operations--anywhere in the world. This "global supply chain" requires close synchronization between operational planners and the materiel, personnel, and facilities that support the warfighting customer. Often the system must respond with only a few hours' notice. For capital assets like aircraft and tanks, the supply chain also has a retrograde requirement--to return items for employment in future operations. Movement and sustainment of personnel are also missions USTRANSCOM executes.

USTRANSCOM's mission is unique in the fact that it does not direct all the organizations and agencies that accomplish the missions of mobilization, deployment, sustainment, employment, and redeployment. Rather, as an orchestrator, USTRANSCOM must collaborate rapidly, with many partners, to ensure the supply chain operates effectively and efficiently.

In recognition of the vastly complex business of DOD distribution, USTRANSCOM received its first increment of Research, Development, Test and Evaluation (RDT&E) funds in fiscal year 2006 to foster the development and fielding of new technologies and techniques that may facilitate the operation of the Joint Deployment and Distribution Enterprise (JDDE). Prior efforts in the command to exploit new ways of filling capability gaps (with existing Transportation Working Capital Funds (TWCF)) were greatly constrained by law, mostly limited to bolting on "off the shelf" applications. Now, for the first time, the Joint owner of distribution processes can explore wholly new and innovative ways of achieving capability needs--creating new bodies of knowledge within Service and National laboratories and industry--to directly benefit the Joint distribution process.

A primary focus of USTRANSCOM RDT&E is the exploration of new capabilities which help bridge the gaps between the distribution agencies' functions. USTRANSCOM RDT&E explorations therefore may include new "intermodal" packaging and cargo handling equipment, command and control systems which can work across the many Service and commercial domains; tools to optimize the assignment and scheduling of lift assets; advanced cargo tracking technologies; methods of moving materiel more quickly through nodes in the distribution system; and other transformational innovations to ensure effectiveness while promoting efficiency in the DOD supply chain.

Navigation

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