United States Transportation Command

(USTRANSCOM)

Challenges & Opportunities

Improving Operational Effectiveness, Achieving Efficiencies, & Shaping Future Capabilities

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Approved for Public Release

UNCLASSIFIED
Overview

• USTRANSCOM 101

• Research, Development, Test & Evaluation (RDT&E) Program

• RDT&E Process

• RDT&E Focus Areas / Collaboration Opportunities

• Select Current Initiatives
USTRANSCOM Provides Full-Spectrum Global Mobility Solutions & Related Enabling Capabilities for Supported Customers’ Requirements in Peace and War
The Global Distribution Network

TOGETHER, WE DELIVER.

GDN is a Multi-Dimensional Network of...

- Routes
  - Lines of Communication
- Modes
  - Air, Land, & Sea
- Nodes
  - Enroute Infrastructure
- Providers
  - Comm Industry / Services
- Access
  - Host Nation Agreements
- Information Network
  - IT, Comms
- Distribution C2
  - Globally Position

...that Provides the National Command Authorities with Global REACH in Support of US National Security Objectives.
USTRANSCOM Headquarters

Together, we deliver.

Staff Total: 2162 Military, Civilians & Contractors

Based on FY 15 military and civilian authorizations
Bottomline

Together, we deliver.

Get the Warfighter to the Fight

Sustain the Warfighter During the Fight

Support Rapid Force Maneuver & Patient Movement

Bring the Warfighter Home

An Immediate Force Tonight...A Decisive Force When Needed
Together, we deliver.

RDT&E Program Foundation

**UCP:** “Coordinating and overseeing the DoD distribution...to provide... DoD-wide, end-to-end distribution.”

**PBD 703:** “…a centralized R&D program...to enhance the efficiency and effectiveness of Defense distribution and transportation systems.”

**DoDI 5158.06:** “Enhance the DoD global distribution system by engaging in innovative and transformational distribution-related research”

- As the Distribution Process Owner, USTRANSCOM actively pursues collaborative partnerships to:
  - Rapidly integrate end-to-end deployment and distribution capabilities to improve Joint Deployment & Distribution Enterprise (JDDE) logistics effectiveness & efficiency
  - Provide tangible cost savings to be passed back to the DoD

- **Goals:**
  - Develop and deploy joint, relevant technologies to improve Warfighter support
  - Improve precision, reliability, visibility and efficiency of the DoD supply chain
  - Assure superior strategic, operational and tactical mobility support

>$500M Services/Agency/OSD leveraged;
>90% Transition Rate (DoD metric is 30%)
# RDT&E Process

## ~$30M/yr Budget Activity 4 (BA4) funding joint TRL 4 -7 innovation

<table>
<thead>
<tr>
<th>DEC-JAN</th>
<th>FEB</th>
<th>MAR - AUG</th>
<th>SEP - OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S&amp;T COI INPUT</strong></td>
<td><strong>ID/Validate Technical Challenges</strong></td>
<td><strong>Proposal Submission &amp; Prioritization</strong></td>
<td><strong>RDT&amp;E Annual Plan Review</strong></td>
</tr>
<tr>
<td>2. CCMDs</td>
<td>2. TCB Approve</td>
<td>2. Prioritization</td>
<td>2. CIO Review</td>
</tr>
<tr>
<td>4. Service Labs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Joint Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. DPO Partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. CP-GD 9033</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Gov’t Agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CCMDs** - Combatant Commands  
**CIO** - Chief Information Officer  
**CP-GD** - Campaign Plan-Global Distribution  
**DPO** - Distribution Process Owner  
**MAM** - Mission Area Manager  
**TCB** - TRANSCOM Corporate Board  
**TCC** - Transportation Component Commands  
**TRL** - Technology Readiness Level

Together, we deliver.
RDT&E Focus Areas (total 38)

GLOBAL ACCESS
- Rapid Distribution & Delivery Technologies
- Force Protection (cargo/lift assets/personnel)
- Sea Basing/Logistics-Over-The-Shell (LOTS)
- Rapid Construction for Ports (Air/Sea) Debarkation
- Precision Airdrop/Aerial Delivery
- Opportune Landing Site Identification
- Autonomous Aircraft Approach & Landing

C2/OPTIMIZATION/MODELING & SIMULATION
- Deployment/Distribution Planning & Execution
- Distributed Global Mobility Command & Control
- Survivable Communications
- Human System Interface
- Information Visualization
- Modeling
- Knowledge Management
- Information Science and Technology
- Manipulation of Large Data Sets

CYBER/OTHER
- Cyber Security
- Information Assurance
- Identity Access & Management
- Secure Collaboration with Commercial Partners
- Multi-modal Patient Movement
- Risk Assessment
- End-to-End Visibility

http://www.transcom.mil/cmd/associated/rdte/
Leveraged DoD Research & Engineering

Research and Engineering (# USTC Projects)

Joint Test and Evaluation (JT&E) (5)
Coalition Warfare Program (CWP) (1)
Rapid Innovation Fund (RIF) (3)
Warfighting Lab Incentive Fund
Joint Interagency Field Experiment

Joint Capability Technology Demonstration (21)
Research, Development, Test & Evaluation (RDT&E) (129)

Together, we deliver.
Select Current Initiatives

**Precision On-Demand Air Drop**
Provide the Nett Warrior equipped Army Small Unit the ability to call and/or direct resupply

**Enhanced Vision for Joint Precision Air Drop**
Precision guidance/delivery of airdrop bundles in Global Positioning System (GPS) denied environments

**Dropsonde Optimization**
Pursue single pass airdrop capability to enhance delivery aircraft/crew safety

**Expeditionary End-to-End Fueling Concept**
Prototype modular pumping system to address over-the-shore & inland distribution needs while informing future Service fuel system Programs of Record

**Preamble Initial Look Leading to Accelerated Results/Port Improvement via Exigent Repair**
Rapid repair capability to fix a damaged pier

**Mini-Robotic Dredge**
Expeditionary dredging capability to support improved access to the shore

Together, we deliver.
Select Current Initiatives Cont...

- **Global Mission Scheduling**
  - Pairing air movement requirements and resources

- **Support Planning for Aerial Refueling**
  - Optimize air refueling, planning and scheduling

- **Sustain Plan & Optimized Resupply in Theater**
  - Theater-wide bulk fluid rapid planning capability supporting conveyance (ground/air) and non-conveyance (pipeline/hoseline) delivery

- **Map Based Planning System**
  - Collaborative geospatially enabled capability for Combatant Command planners to rapidly develop multiple COAs and conduct deliberate planning

- **End-to-End (E2E) Distribution Modeling**
  - Enhance E2E modeling and sensitivity analysis to optimize force projection, distribution and redeployment capabilities

- **Analytics Driven Command Decision Support**
  - Enhance organizational decision making by providing a holistic methodology

Together, we deliver.
Questions

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