



UNCLASSIFIED

Potential JLEnt Research Areas



- **Precepts of Globally Integrated Logistics (GIL)**
 - Prepositioned stocks
 - Appropriately resourced JLEnt
 - Rapid and flexible transportation system
 - Capability for agile allocation and adjudication of logistics resources
 - Resilient and comprehensive information network
 - Flexible worldwide network of logistics nodes
 - Modularized & interoperable logistics capabilities
- **Required Capabilities**
 - Logistics information network
 - Agile allocation and adjudication
 - Logistics considerations in deliberate and contingency planning
 - Maximize access to overseas logistics support
 - Asset visibility across JLEnt
 - Continuity of logistics when cyber degraded



UNCLASSIFIED

Potential JLEnt Research Areas (cont.)



- Cyber Challenges to DoD Logistics
- Supply Chain Resilience
- DoD Logistics Visibility & Control



DASD (SCI)

Life-Cycle Sustainment

Academic Research Opportunities

UNCLASSIFIED

- Improving procurement lead time forecasting
 - Can industrial base measures be used to improve planning for vendor delivery times?
 - Is there a role for big data analysis in predicting procurement lead times?
 - What are the economics of segmenting items into 3 basic approaches to resupply – (1) traditional procurements using EOQs, (2) long term contract with regularly scheduled deliveries, and (3) vendor managed government inventory?
- Improving component repair
 - Assessment and improvement recommendations of DoD maintenance scheduling practices
 - Analysis of expanded / improved repair parts kitting to reduce awaiting parts delays
- Attacking DMSMS problems with 3D printing
 - Assessment of current DoD 3D printing initiatives, identifying gaps and potential areas for further application
- Assessing delivery performance
 - Compare and contrast time-definite delivery in the commercial world and in the Department of Defense
 - What are the alternatives to a 85% goal for on-time delivery
- Assessing reverse pipeline performance
 - How to measure and improve the effectiveness and efficiency of the pipeline for returning failed components for repair



DASD (SCI)

Supply Chain Risk Management Academic Research Opportunities

UNCLASSIFIED

- Improved stakeholder planning for end-to-end disruptions
 - Assess military services and DLA planning
 - Analysis of available risk management tools – DoD and commercial
- Early detection of counterfeit parts
 - Assessment of quality checks performed by suppliers and by DoD storage activities
 - Evaluation of counterfeit detection tools – DoD and commercial
- Comprehensive identification of intellectual property within DoD supply chain
 - Stakeholder review and case law analysis of intellectual property rights and application
 - Assessment of DoD and commercial safeguards against loss of intellectual property
- Early detection of industrial base problems
 - Recommendations on early identification of DMSMS problems before they disrupt the procurement of replenishment stocks
- Improved parts support to depots
 - Review and analysis of interaction between maintenance depots and parts suppliers (DoD and commercial)
 - Recommendations on improving depot forecasting of repair parts requirements for component repair (i.e., maintenance bills of materials)



Potential Research Topics 2017

UNCLASSIFIED

- Sea Basing and Expeditionary Logistics
- Distributed Operations Logistics
- Ground Program Modernization
- Aviation Modernization
- How to Lighten the MAGTF While Preserving Force protections, Fires, and Maneuver
- How to Better Realign Logistics Capability Throughout Deployed forces
- Enterprise Approaches to Readiness that Encompass the Entire logistics Chain
- How to Better Work with Industry to Look for Ways to Make Our Equipment Lighter, Easier to Maintain, and More Energy Efficient
- How to Improve and Optimize the Total Life Cycle Management Process to Optimize Equipment Readiness.
- How to Improve Contingency Contracting as a Force Multiplier
- The Future of Unmanned Logistics Delivery Systems and How to Integrate These Into Expeditionary Operations
- Knowledge Driven Logistics – How to Improve C2 for Logistics, Logistics Chain Management, Decision Support Tools, and Logistics Management Information
- How to Improve Science and Technology Initiatives that are Critical to Modernization of Military Logistics Capabilities
- In transit visibility, push vs pull for ordering supplies
- Divestiture/excess management,
- Optimizing service disposal processes
- Successful redistribution of supplies

UNCLASSIFIED



U.S. AIR FORCE

UNCLASSIFIED

AF/A4 Proposed Topics

- **“Define the Force; Core Competencies”**
- **“Engage the Force”**
- **“Enable the Force”**
- **“Training Course Updates”**
- **“Multi-Skilling”**



UNCLASSIFIED

Proposed Research Topics



- DA/G4:
 - Future Joint Force Maneuver
- HQMC/I&L:
 - Household Good Storage vs. Shipment to Okinawa: Cost vs. Quality of Life
 - Alternative Models for Non-Tactical Vehicle Use
 - Personnel Administration Processes and Standardization Analysis
 - Expeditionary Force 21 (EF-21) Logistics Concept of Operations
 - Innovation in Military Logistics: Models to Harness Innovation from External Sources
 - Feasibility of Conditions Based Maintenance for USMC B, C, and D TAMCNs
 - Evaluation of Feasibility of the Wartime Reserve System-Performance Analysis
 - Modernization Of Marine Corps Terminal Operations



UNCLASSIFIED

Proposed Research Topics (cont.)



- AF/A4:
 - Long Term Impacts of Reduction of Operations and Military Drawdown/Reductions in Annual Budgets on the Industrial Base
 - Centralization of Individual Protective Equipment (IPE)
- DLA:
 - Counterfeit Parts Mitigation
 - Supply Chain Exploitation
 - Warehouse Automation (Automation and Advancement of Information Technology Strategies at Defense Distribution locations)



UNCLASSIFIED

Proposed Research Topics (cont.)



- ASD (L&MR)/JS J4:
 - Globally Integrated Logistics
 - Agile global logistics resource allocation and adjudication capability
 - Resilient and comprehensive information environment
 - Reconcile constrained logistics resources with competing operational demands
 - Rapid and flexible transportation system able to move forces and supplies quickly between and within theaters
 - Prepositioned capabilities and stocks that can be shifted between theaters
 - Flexible worldwide network of logistics nodes
 - Planning, Executing & Controlling Logistics in a Cyber-Degraded Environment
 - DoD Logistics Visibility & Control
 - Active Component/Reserve Component Mix for Logistics Enabling Capabilities
 - Leveraging & Maximizing Partner Logistics Capacity



UNCLASSIFIED

U.S. Special Operations Command (USSOCOM)

- **USSOCOM's expanding roles are changing how it sustains the SOF operator**

http://jsou.libguides.com/ld.php?content_id=22254105



U.S. Transportation Command (USTRANSCOM)

UNCLASSIFIED

- What impact might additive manufacturing have on the distribution enterprise in the next 15 years?
- Should aerial refueling tankers be globally commanded and controlled rather than chopped to theaters (in order to accommodate competing global and trans-regional threats)?
- Are US flagged ships the guarantee we think they are?
 - We often cite the importance of US flagged ships, but since many US flagged ships are subsidiaries of foreign companies, could those companies reflag when we need them most?

UNCLASSIFIED