F-35 Supply Chain Management Overview Sustainment Industry Day

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Sustainment Principles

- Global Approach 羊single F-35 global sustainment solution for all Participants
- Output performance based contract from F-35 JPO (Product Support Manager - PSM) to both Product Support Integrators (PSI)
  - 'Full-Performance Based Logistics' anticipated 2017 timeframe
  - Use Low Rate Initial Product cycles to learn and develop processes
- Sustainment Assets will be 'centrally managed' by PSI
  - Includes all Air System Spares and Support Equipment
  - Management responsibility includes: location, configuration management, repair, sufficiency
  - Participants are 'buying access to' Sustainment Assets, not the asset itself - no badges!

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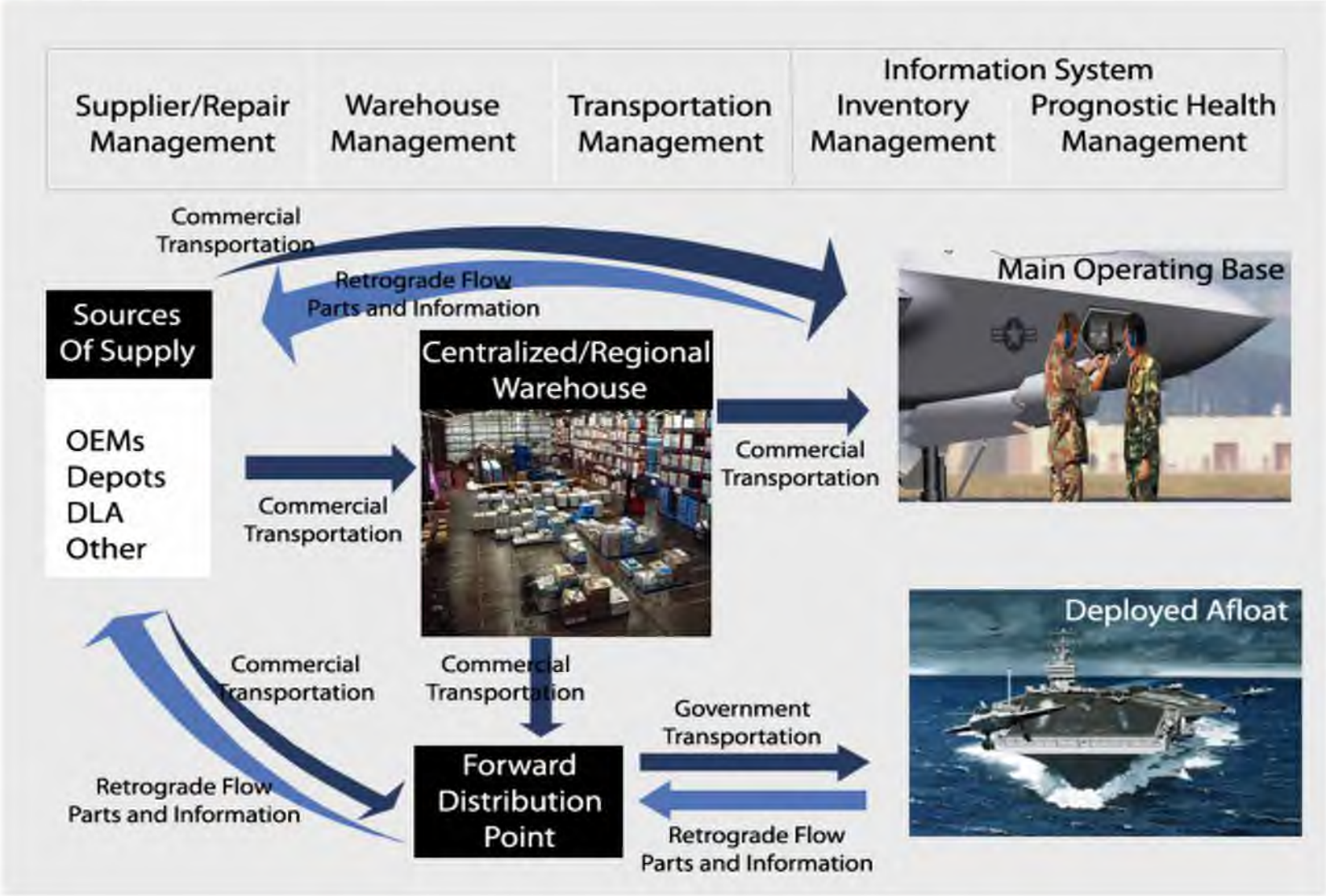
SCM Global Support Solution



Single 'Air System' Supply Chain

- **Fully Integrated Supply Chain Enterprise System (inventory management, transportation, distribution, and information technology)**
  - "Air System" Line Replaceable Components (LRC) And Consumables (Excluding Fuel, Munitions/ Weapons, Expendables) Including:
    - Air Vehicle
    - Propulsion
    - Support Equipment
    - Training Devices

- **Supply Chain Solution to support a Full Performance Based Logistics (PBL) Approach**

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F-35 Integrated Logistics Infrastructure

Main Operating Bases

USAF / USN / USMC / International

ALIS

Maintenance/Logistics Enhancements
- Reduced Manpower
- 2 + Level Maintenance
- Reduced Footprint
- Increased Reliability & Maintainability
- Direct Access to Contractor Support
- Engineering, Tech Data & Training

Technological Enablers
- Portable Maintenance Aid (PMA)
- Prognostic and Health Management (PHM)
- Autonomic Logistics Information System (ALIS)

Sustainment Management

ALIS

Management

R&M Data

Customer Support
- Program Management Activities
- Depot Partnering
- Performance Based Contract
- Sustaining Engineering
- Configuration Management
- Total Asset Visibility
- System Security

Best Value Repair Source

ALIS

Joint Depot Level Maintenance
- Best Value Source of Repair (Gov/OEM)
- Statutory Compliant
- No Scheduled Depot Maintenance
- Direct access to Sustaining Engineering, Tech Data & Training via ALIS
- Total Asset Visibility

Transportation

Forward Operating Locations/Ships

USAF / USN / USMC / International

ALIS

Network

Regional Warehousing

ALIS

- Replacement Spares to Main Operating Base
- Moves Replacement Spares onto FOL/Ship

Shipping
- Commercial
- Government
- Network Communication
- Contractor
- Government

Understanding Characteristics & Interdependencies

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PSI/Government Roles & Responsibilities

Product Support Integrator

- **Air System Supply Chain Performance**
- **Wholesale Supply**
  - Reparable Management
    - Inventory Modernization
    - Allowance Determination
    - Repair Source Mgmt
  - Material Management
    - Ranging & Scaling Of Spares Throughout The Supply Chain
    - Parts Data Management/Cataloguing
    - Provisioning Data
    - Information Provider To DLIS For NSN cataloging
  - Distribution Management
    - Wholesale Level Warehousing Responsibility
      - Distribution Network Analysis
      - Packaging
  - Transportation (Forward & Retrograde)
    - Fleet Re-supply Point
    - Battlefield Distribution Point
    - UID/RFID implementation
  - Repair Management
- **Disposal & Demilitarization**

Government/Customer

- **Local Supply Mgmt – Base/Afloat Supply**
  - Requisition Processing
  - Stock Issuance
  - Manage retrograde material
  - Local Procurement - GFM
- **Base Warehouse Mgmt**
  - Stock Receipt
  - Inventory Control
  - Packing & Shipping
- **Transportation**
  - Base Transportation
  - From Fleet Re-supply Point/Battlefield Distribution Point to/From User

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Potential Competition Areas

- SCM services in the following areas
  - Transportation (Forward and Retrograde)
    - Fleet Re-supply Point
    - Battlefield Distribution Point
  - Distribution Management
    - Distribution Networks
    - Wholesale Level Warehousing
    - Reusable Containers
  - Disposal & Demilitarization

Until we reach sustainment system maturity other SCM areas too tightly integrated to be effectively broken out

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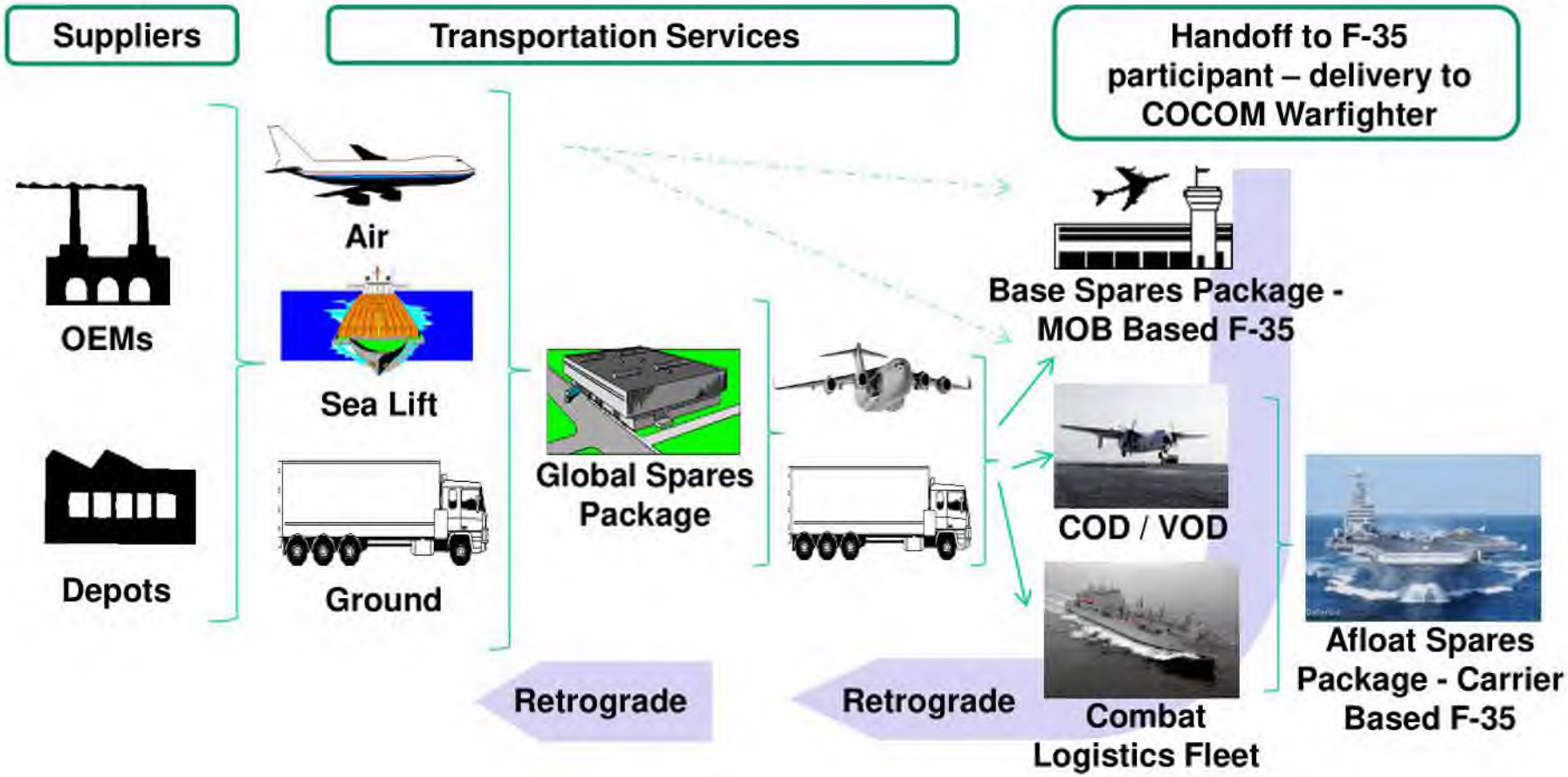
Distribution/Transportation Operations



Seamless Movement of Spares to the Point of Delivery

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Distribution/Transportation Services

- **Services Include (based on PBL):**
  - Door-to-door pick-up and delivery
  - Commercial/Government arranged transportation
  - In-transit Visibility (ITV)
  - Interface with ALIS & PSI's Enterprise Systems
  - Customs Processing and Clearance
  - Limited Hazardous Material (HAZMAT) Movement
  - Classified parts movement

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Wholesale Level Warehousing

- All functions associated with managing a large, international warehousing capability (oversight of the overall F-35 global spares)
- Distributing material in support of F-35 base/ship operations
- Receipt of incoming material from customers and suppliers
- Material Storage
- Packaging outbound shipments – labeling

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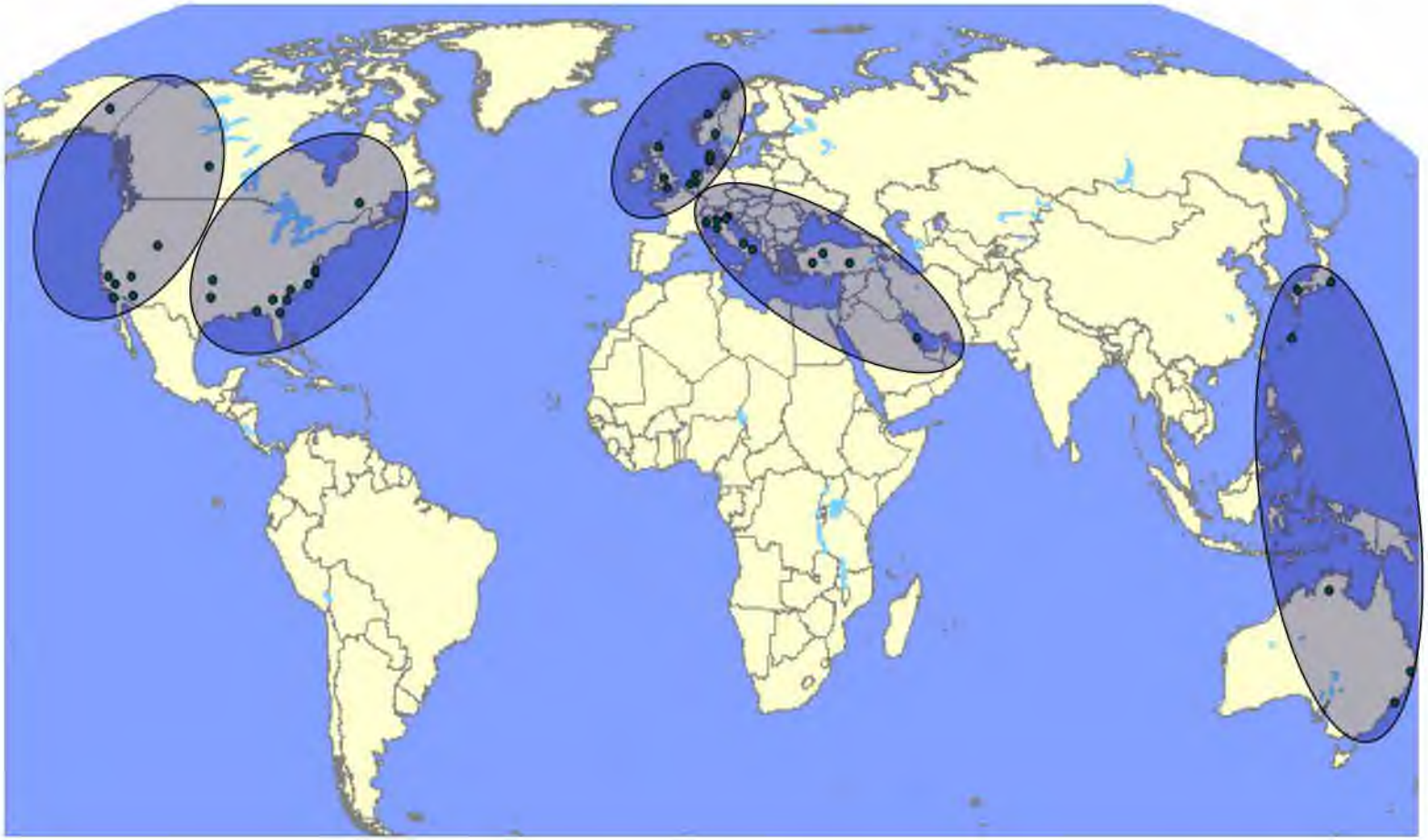
Notional Warehouse Locations



2x North America; 2x Europe; 1x Asia/Pacific

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Shipping Containers

- **Reuse and Limited Reuse containers:**
  - Special Type Containers (STC) / Dual Function Containers (DFC): hard plastic or aluminum will be designed and maintained by suppliers and the contractor. Excessive damage or lost STC / DFC containers at customer locations will need to be addressed in PBAs
  - Limited Reuse Containers: crates or pre-formed durable fiberboard may be used for repackaging at customer locations. Limited reuse containers may also expire at the customer site and will require replacement packaging to be provided by the customer
- **Additional criteria for the packaging for F-35 assets:**
  - Compliant with ASTM D 3951 or MIL-STD-2073-1E
  - To eliminate the need for unique handling equipment
  - To prevent unintentional deterioration
  - To prevent unintentional deterioration during distribution
  - Potential use for short term storage

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Disposition Services

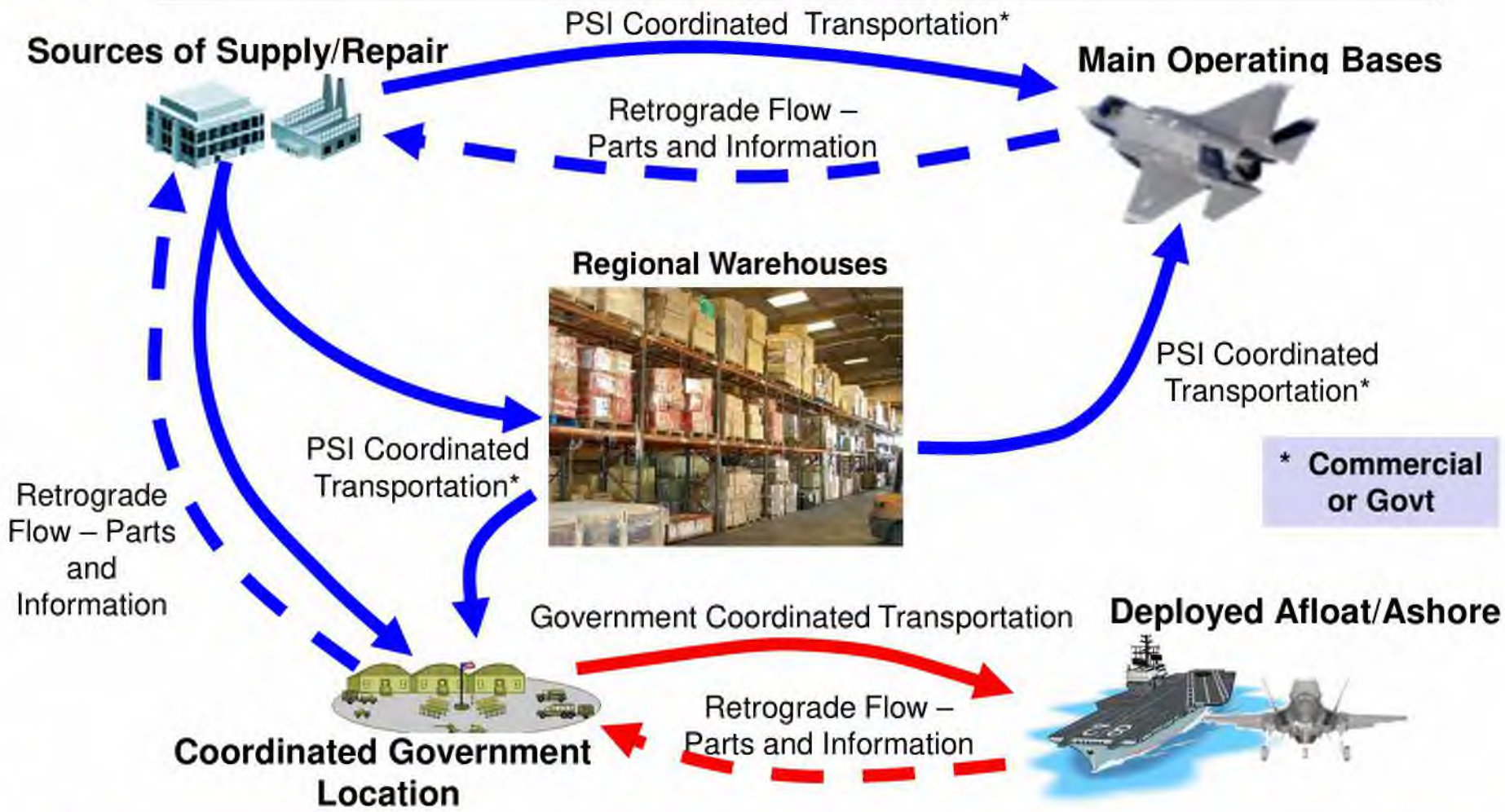
Disposal

Destruction

Hazardous waste & precious metals

Demilitarization

Summary



Part of a Seamless Supply Chain Environment

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