SUPPLY CHAIN MANAGEMENT

The Ground Pounder’s Perspective

“That Last Tactical Mile is Really Tough”
A Well Integrated Supply Chain Will Efficiently Provide Good Readiness

- Adequate national inventory
- ASL/theater replenishment:
  - Air: expensive, small, initially big bulky
  - Surface: big, heavy
- Low density critical items
- Non-critical items

- Stock positioned at scheduled nodes
- Configured loads—no break bulk along the way
- Synchronized, scheduled distribution

- High demand
  - NMC items
  - Service items
- High demand
  - Shoot-move-communicate items

Sustaining a Campaign Quality Army

Source: RAND
From a standing start to fully operational in days

- Organic to maintenance or supply companies.
- SSA vary in size based on lines stocked and workforce.
- Largest carry 8,000 lines and have up to 40 personnel.
- Normally deploy equipment & parts by sea and troops arrive in time to unload and move forward.
- Normally Parts stored in mobility containers in permanent locations.
- Many OIF SSAs directed to leave parts stocks behind.
- Started war with new issues requiring location work and new computers.
- Each manages business with automated tools.
- Led by Lieutenants or Warrant Officers.
- Normally follow combat forces by 1-2 days. Some elements may move early.
- Set up in buildings if available, but in OIF often in tents or in the open.

Currently there are 25 Army SSAs in Iraq.
The ASL Structure

- ASLs support 1,000 end items and 16 critical weapon systems (SORTS)
- Average size/value for Active Army ASL – 1470 lines/$8 million dollars
- The length of the distribution pipeline directly impacts depth of stock
- Rapid deployment SSA ASLs normally limited in breadth and depth; constrained by mobility
- Centralized financial management - (Army Working Capital Fund – AWCF)
- Active Army ASLs - 255; ARNG and USAR normally don’t have ASLs
- DLA managed vs. Army managed 80%-20% stock ratio; value ratio reversed
- ASL stockage criteria based on cost, priority, essentiality and 24 months of demand data
- Current metric to measure performance is the ASL Fill Rate – a product of Demand Accommodation (breadth) X Demand Satisfaction (depth)
Supply Chain Management in Support of Deployed Operations is Challenging Business
- Integrating Numerous Channels into Military Distribution System
- Widely Distributed, Fast-Moving, Rapidly Changing Demands
- Unrelenting, High Volume, Continuous, Predictable Demands
- Piles of Serviceable and Unserviceable Materiel Awaiting Processing
- Bad Guys with IEDs and Weapons

Solutions Aplenty
- Tough Job Is Picking the Right Mix to Meet the Mission
- Working Cooperatively and Collaboratively Is Not Easy
Battle Command Sustainment Support System (BCS3) Provides the Joint Commander a View of Current TAV / ITV

BCS3 in use today by Army and USMC

Deployment/Redeployment/RSOI Tracking
through RFITV technology

LOGSTAT Reporting Process
simplified through an automated process from maneuver BN level

Convoy Tracking
through the use of satellite-based tracking devices (MTS, etc.)

Commodity Management
by querying any RIC/supply point

Simplifying Report Process
by briefing directly from the system and the ability to share /interface with higher HQ

LOGISTICS COMMAND AND CONTROL

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LOGISTICS COMMAND AND CONTROL
Providing Joint Battle Command information across the Spectrum of operations in any environment...

BCS3 provides actionable logistics information to Joint commanders at all echelons Brigade and above.

**Course of Action**

“Can I logistically support this course of action?”

BCS3 has a simulation tool that allows the user to project supply consumption for a given COA by event or across time. This feature assists in training, planning, and execution.

**In-Transit Visibility**

“Where are my parts?”

BCS3 provides a map-centric view of inbound vehicles/cargo that are equipped with movement tracking devices.

**Logistics Reporting**

BCS3 gives the commander the latest available status of critical weapon systems, fuel, ammunition, and personnel.

**BATTLE COMMAND SUSTAINMENT SUPPORT SYSTEM**

LOGISTICS COMMAND AND CONTROL
RFID ITV Operational Architecture

CURRENTLY IN USE BY GREAT BRITAIN, CANADA, AUSTRALIA. EXPANDING TO NATO

LEGEND
- RF Tag Interface (FOUO)
- STS Tag Interface (FOUO)
- Classified Interface
- Field Data Unit
- Radio Frequency (RF) Tag
- Military User
- Electronic Data
- DoD Carrier with MTS
- Interrogator
- Commercial Carrier with Satellite Tracking Device
- Satellite Tracking System Control Station

Note: Satellite Tracking Systems STSs are interfaces, not part of RF-ITV System

Sustaining a Campaign Quality Army

Unclassified
Sustaining a Campaign Quality Army

Currently Over 2,600 Read and Write Sites Worldwide

NORTHCOM
186 Tag Writes
1,678 Tag Reads

PACOM
2,384 Tag Writes
9,985 Tag Reads

CENTCOM
8,986 Tag Writes
38,491 Tag Reads

SOUTHCOM
10,558 Tag Writes
108,028 Tag Reads

EUROCENTCOM
108,028 Tag Reads

1 Week Activity:
Tags Written – 22,114
Tags Read – 158,182

Last week of Dec 06
All roads lead to Tikrit: Using RFID to track inbound Shipments

Class IX via Air from CONUS:
- DDSP: 30 Nov
- CHAS AFB: 1 Dec
- Incirlik: 5 Dec
- Tikrit: 8 Dec

Class II via Surface from EUCOM:
- DDDE GM: 21 Sep
- Habur Gate: 2 Oct
- QWest: 7 Oct
- Tikrit: 11 Oct

Class IX from Balad SSA via Air:
- Balad SSA: 27 Nov
- Balad APOE: 27 Nov
- Tikrit AB: 2 Dec
- Tikrit: 3 Dec

Class IX from DLA in Kuwait via Air:
- DDKS: 25 Nov
- Al Mub AB: 26 Nov
- Tikrit AB: 1 Dec
- Tikrit: 2 Dec

TIKRIT IZ GROUND SSA (WQ6) SARSS
RFID use in intra-theater movements

23,000+ RFID tags used with intra-theater shipments during Dec 2006...
DOD HAS CREATED A JOINT TAV / ITV ARCHITECTURE FOR AIT

NATO AND COALITION ALLIES ARE ADOPTING THIS ARCHITECTURE

EFFORTS CONTINUE TO DEPLOY THIS ARCHITECTURE WORLDWIDE

AIT IS INTEGRATED IN OUR SUPPLY AND TRANSPORTATION PROCESSES

WORK IS ONGOING TO INTEGRATE NEW AND EMERGING TECHNOLOGIES