USTRANSCOM
Integrated Product Team IPT Briefing
9 Feb 1999
Col Ray Hebert
New Environment
Electronic Commerce

• 10 Million Purchases via Internet in 97
• 17 Million estimated in 98
• Dell Computer sells $6 million a day on the Net
• Priceline is issuing 1000 Tickets a Day over Net
• eBay has over 900,000 Products available
Purpose

• Background
• Component Commands
• Systems - EDI/GTN
• Challenges - Strategy
• Future Outlook - Implications
Office of Under Secretary of Defense Acquisition and Technology

- USTRANSCOM is hereby Designated to lead the EDI Program for Defense Transportation

- This Assignment is Consistent with DOD Directive 5158.4, “USTRANSCOM Charter” and Recognizes EDI’s Importance to In-transit Visibility Efforts, Fielding Transportation Migration Systems, and Improving Business Practices
What Does it Mean for Transportation?

• Route Electronic Transactions between Industry Trading Partners, Government Contracting, Accounting, and Disbursing Systems.

• Translate Data into Standard Format in order to communicate with Different Systems.

• Information Bank for Analysis of Government Procurement Activity. Data can be used to Reconcile Contracts, Invoices, and Disbursements.

• Archive Transaction History, Improve Audit Trails
Big Change & Challenge

- 451 DoD and 146 Federal Sites (Locations)
- Plus Commercial Vendors
- 17 Federal and 11 DoD Gateways
- 36 VANS (Value Added Networks)
- Varying Degrees of Sophistication and Capability across the Spectrum
GTN ORD

ORD (Jan 98)

• Refines requirements set forth in previous versions
  - Further defines customization, interactive and electronic commerce
  - Further defines ITV and C2 requirements
• Solidifies GTN as the C2 tool for the Joint Mobility Control Group
  - One stop shop for transportation requirements
  - Receipt of movement requests
• Introduces GTN as the DTS Business Operations System
USTRANSCOM
EDI Baseline

* Organization for logistics EDI migration - USTRANSCOM
  - Interface between Global Transportation Network and commercial carriers (using TCNs-Transportation Control Numbers)
* Command logistics system modernization strategy & plans
  - Major System - Global Transportation Network
  - Modernization - Lessen gap in DOD cargo in-transit visibility
    - Timeline - First feed in May 98 - continued implementation in FY99
  - Source of modernization - DOD developed software
* Ongoing and/or planned ASC ANSI X112 logistics standards
  - Standards - Currently using 214 IC and 315 IC
  - Brief description of process being improved - ITV of cargo moved commercially
    - Current status - 25 Carriers providing data to GTN
    - Benefits - 60-80% Visibility of DOD Cargo
* Command issues/concerns
  - Funding concerns: continue programmed funding
USTRANSCOM Logistics
EDI Baseline

* Organization for logistics EDI migration - USTRANSCOM
  - Prototype - GTN, DLA (JECPO)
  - Direct Vendor Delivery (DVD) company, transportation company, and bank
* Command logistics system modernization strategy & plans
  - Major System - Global Transportation Network
  - Reduces gap in DOD in-transit visibility - DVD continued growth expected
  - Timeline - Prototype began in 1Q/FY99; anticipated conclusion 3Q/FY99
  - Source of modernization - DOD developed software/Contractor
* Ongoing and/or planned ASC ANSI X112 logistics standards
  - Standards - Developed new draft DOD 858 - Air Freight Bill of Lading
  - Brief description of process being improved - ITV of cargo moved commercially using DVD process
  - Current status - Prototype Effort
  - Benefits - Visibility of DOD cargo transported using non-military processes
* Command issues/concerns
  - Funding concerns: Prototype to determine associated future costs
Air Mobility Command
EDI Baseline

* Organization for logistics EDI migration
  - HQ AMC/SCT, Architectures and Integration Division, will incorporate logistics EDI implementation plan into AMC Enterprise Architecture Plan
  - AMC PMs for Defense Transportation Systems (DTS) migration systems will implement downward directed EDI initiatives and incorporate enterprise architecture EDI targets of opportunities
* Component logistics system modernization strategy & plans
  - AMC participates in the Defense Transportation EDI Working Group to define EDI transaction sets and standardize data in EDI transactions
  - Currently, no AMC-managed DTS migration systems use EDI
* Ongoing and/or planned ASC ANSI X.12 logistics initiatives
  - Global Air Transportation Execution Systems (GATES), and its predecessor Consolidated Aerial Port System II
* Ongoing and/or planned ASC ANSI X.12 logistics initiatives (Cont’d)
  - GATES addressed improving Commercial Movement Interface (CMI), a CAPS II interface, with commercial carriers (e.g., Federal Express)
    -- Increased cost to commercial carriers and government to convert
    -- Increased risk to GATES Build II implementation schedule
  - Target of opportunity may exist in MRM 15 and billing process
* Component issues/concerns
  - Migration systems already resource constrained by expanding architecture compliance (e.g., DII COE, JTA)
  - EDI implementation policy should enforce major tenet of electronic commerce--process improvements prior to incorporation of data transfer
    -- Targets of opportunity not blanket policy (cost/benefit)
  - Technologically, AMC is moving toward the shared data environment (SHADE), as prescribed by DII COE, reducing our reliance on message-based system interfaces and improving data quality and timeliness
    -- Database-to-database replication our first stepping stone
MTMC ELECTRONIC DATA INTERCHANGE (EDI)

CARRIERS

SHIPPERS

GSA

MTMC

DFAS

RECEIVERS
Current MTMC EDI Operating Concept

DISA or VAN

Legend
- Existing
- Planned

Carriers/Carrier Vans
- Motor Carrier
- PP Carrier
- Air
- Exp Carrier
- Rail Carrier
- Ocean Carriers

TOPS-H

DFAS

GSA

DTTS/FACTS

858Frt

820

858PP

858Frt

214Status

602 Vol

300,303

858Frt

602 Vol

858Frt

214Status

213Request

CLM

214Status

CLM

858Manifest

858Manifest

MTMC

IBS

Other Shippers

WPS

POE/POD

Clearance Auth

Shipper/Consignee

Note: Not all transaction exchanges are depicted, see slide notes.
PERSONAL PROPERTY

MTMC ELECTRONIC DATA INTERCHANGE (EDI)

SHIPPERS

MTMC

TOPS

CARRIERS

859 Invoices

EFT

DFAS

DTRS

820 Remittance

SHIPPERS

MTMC

TOPS

CARRIERS

859 Invoices

EFT

DFAS

DTRS

820 Remittance

858 (PP)

213R

214R
MTMC

EDI Operating Concept (Freight)

Carriers

210, 410, 110 (810)

DFAS-IN

GSA

Legend

Existing

Planned

Shipper

CFM

Air/Ocean Clearance Authority

Consignee

POE

DTTS

GTN

Legend

Existing

Planned

Note 1: Other Transactions will be added to meet operational requirements
Note 2: All transmissions invoke a 997, Functional
MSC Process (EC/EDI)

User
- Requisition - 511
- Request for Quotation - 840
- Response to Request for Quotation - 843
- Purchase Order - 850
- Response to Purchase Order Acknowledgement - 843
- Purchase Order Modification - 860
- Purchase Order Change Request Acknowledgement - 865
- Payment Order/Remittance Advice - 820
- Invoices - 810
- Remittance Advice - 820
- Electronic Funds Transfer - 820
- Remittance Advice - 820

Disbursement Office
- Request for Quotation - 840
- Purchase Order - 850
- Purchase Order Modification - 860
- Payment Order/Remittance Advice - 820
- Invoice - 810

Automated Clearing House
- Electronic Funds Transfer - 820

Vendor’s Bank
- Remittance Advice - 820

VAN
- Shipment Status - 870

MSC Acquisition
- Vendor
Overview

MSC
FCC

GENTRAN
WEB SUITE

INTERNET
TRADING PARTNER

Audits and Controls
Message Management
Data Transformation
Scheduling
Application Integration

INTERNET INFORMATION SERVER

FIREWALL
INTERNET
Secure Transport Web EDI Proprietary Files Electronic Forms

TRADING PARTNER

VAN

DIAL UP

Oracle

SPS

MSC Internal Systems
Architecture

MSC FACILITY
Washington, DC

LAB FACILITY (SRA, FAIRFAX)

Connect to MSC Using a VAN
Trading Partner

Dial In Connection to MSC
Trading Partner

MSC Internal Systems
Oracle

SPS

Application File Format

Modem

ECC Server
GENTRAN Web Suite 4.0

IIS 4.0

ECC Registration Site

Internet

SECURE TRANSPORT OF EDI

Automated and Secure Transport of Proprietary Files
Trading Partner

Web Based Forms
Trading Partner

MSC Public Web
IIS 4.0

ECC Lab
GENTRAN Web Suite 4.0 IIS 4.0 Visual Basic 5.0 Web Suite Staging Client (For Testing) ActiveX Control Pad ActiveX Manager SQL Server 6.5
Partnership Architecture
DLA / DISA / USTC = JECPO

451 DOD and 146 Application Sites

28 Gateways (11 DOD) (17 Federal)

36 VANs

In Transit Visibility

Commercial Vendors
80% of Defense Cargo moves in Commercial Sector

**EDI / GTN Data Interfaces**

- **LAND**
  - CFM
  - DTTS
  - GOPAX

- **FA**
  - WPS
  - IBS

- **UNIT**
  - TCACCIS
  - TCAIMS I
  - CMOS
  - TCAIMS II (Test)

- **SUPPLY**
  - DAAS
  - C2
  - GCCS

- **GTN Feeds**
  - JTAV
  - GCSS/COP
  - SALTS
  - NAVTRANS
  - MOD & SIM
  - ALP
  - ATAV/LIF
  - ETC

**Commercia I EDI**
- 24 Carriers (60% of Movements)

- **FY99**
  - 16-20
  - CEDI
  - IC3
  - MTMS
  - GCCS to GTN

- **FUTURE**
  - CAMPS
  - FACTS
  - TRAC2ES
  - TC AIMS II
  - ETC

DSB/9 Jun 98
EDI / GTN

DoD, Service, & Commercial Interfaces:

- AIR Ops
- LAND Ops
- SEA Ops
- UNIT
- SUPPLY
- COMMAND & CONTROL

WEB BASED

Classified - Secret
Unclassified - Sensitive/Protected

INTINTEGRATED DATABASE

DTS Customers
Deploying Units
Materiel Mgrs
TMOs/ITOs
Depots
Service HQs

Command Centers
Operators
Planners
Logisticians

ITV

C2

BUSINESS Ops

Command

Logisticians

Operators

Planners

Service HQs

Deploying Units

Materiel Mgrs

TMOs/ITOs

Depots

DTS Customers

Classified - Secret
Unclassified - Sensitive/Protected

WEB BASED
### Commercial Partners (Today)

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<tr>
<th><strong>AIR</strong></th>
<th><strong>MOTOR</strong></th>
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<tbody>
<tr>
<td>Burlington Air Express (BAX)</td>
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<td>Emery Worldwide</td>
<td>Overnight Transportation Co</td>
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<td>Old Dominion Freight</td>
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<td>ABF Freight Systems</td>
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<td>Nations Way Transport</td>
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<td>Green Valley Transportation Co.</td>
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<tr>
<td>Lykes Lines Limited</td>
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<tr>
<td>American President Lines</td>
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# Commercial Partners (Future)

**SEA**
- Merlin Shipholding
- Central Gulf Lines
- Double Eagle Marine
- Matson Navigation
- Van Ommeren Shipping
- Columbus
- Ambassador Services
- Alaska Cargo Transport
- Eimskipafelag Islands
- Fesco Intermodal
- Ambassador Services
- Trailer Bridge

**RAIL**
- Burlington Northern Santa Fe
- Canadian Pacific
- Union Pacific

**MOTOR**
- R & R Trucking
- American Road Lines
- Cardinal Transport Express Lines
- A-P-A Transport
- Central Freight Lines
- Dallas & Mavis Specialized
- Red Star Express
- Crossroads Carriers
- PFT Roberson
- Colonial Freight System

**AIR**
- Surf Air
DLA / DISA / JECPO Volume Estimates / Capability

Projected Traffic
Wartime/Crisis

Current Capacity

Potential Capacity

Projected Traffic
Peacetime

Traffic Volume

500 B KB

250 KB x 2 x 365 x 1.3 = .2 B KB

1.35 M KB x 1.3 x 2 x 365 = 1 B KB

650 M KB x 2 x 365 = 475 B KB

2.5 M KB

FY97 FY98 FY99 FY00 FY01 FY02 FY03

990 M KB

198 M KB

500% Surge
Defense Reform Initiative (DRID) 48 Standards

• Adoption of Commercial EDI Standards for DOD Logistics Business Transactions

• Migrate the Departments Logistics Transaction Formats with ANSI ASC X12 EDI Standards identified in Federal Information Processing Standard (FIPS) 161-2 as Appropriate
Partnership

DLA

/DISA/USTRANSCOM

• EDI Committee meets Quarterly
• DLA/USTRANSCOM working DATA
  Metrics and Communication
• Commercial Partners Joining the Global Transportation Network (GTN)
• JECPO IPT Initiatives
Progress

• DISA/DLA/USTC are Committed to Migrate the Electronic Commerce Infrastructure to Maintain Technical Currency
  - Simplify VAN Connection Process
• Respond to Current Requirements in Translation Services
• Metrics Reporting
• Security Needs
Future

• Complete Reengineering of Transportation Documentation, Billing, Collection, and Payment Processes

• Intentions/Implications:
  = Accuracy and Reliable Data
  = Quicker Reconciliation and Faster Payments