



**Modernization & Upgrades**



**Spares & Technical Data**



**767 Tanker Programs**



**Maintenance & Modifications**



**Life Cycle Customer Support**



**Training Systems & Services**



**Contractor Logistics Support & Services**



# LOGISTICS CHALLENGES AND CONCEPTS

- Where I come from
- Sustainment Data System
- Industry and Government Depot Partnerships
- Spiral Logistics
- Derivative Aircraft Programs
- TSPR or a Similar Acronym
- Where does/should industry support stop?

# Global Presence

Military Aerospace Support

## PLATFORMS

- ✦ F-15
- ✦ AV-8B
- ✦ F/A-18
- ✦ C-17
- ✦ AH-64
- ✦ WAH-64
- ✦ RAH-66
- ✦ CH-47 ( )
- ✦ CH-46
- ✦ V-22
- ✦ B-1B
- ✦ B-52
- ✦ KC-10
- ✦ KC-135
- ✦ 767 TT
- ✦ C-130
- ✦ T-45
- ✦ T-38
- ✦ E-6
- ✦ E-4B
- ✦ C-32
- ✦ C-40
- ✦ F-111
- ✦ F-4
- ✦ X-XX
- ✦ JDAM
- ✦ Missiles



★ Major A&M Facilities

*Design Anywhere, Build Anywhere, and Strategically  
Positioned to  
Support Anywhere!*

# LCCS/SDS Linkages to Future Logistics Enterprise

Weapon System Support

## 1. Depot Maintenance Partnerships

- Increase Public-Private Partnerships
- Private Sector Investment
- Workforce Integration
- Improved Processes

LCCS ↪

## 2. Condition Based Maintenance +

- Enhanced Prognosis/Diagnostics Techniques
- Integrate Maintenance, Supply, Tech Data, etc.
- Technology Enhancements

SDS ↪

## 3. Total Life Cycle System Management

- WSM has RAA for Program Sustainment
- Buy Availability, Not Parts

LCCS ↪

Enterprise Integration

## 6. Enterprise Integration

- Enabler of the Other Five Initiatives
- Shared Data Environment

SDS ↪

Meet War Fighter Requirements

Customer Service

## 4. Executive Agents

- EA has RAA for Synchronizing Delivery of Logistics Resources to Joint Force Operations

## 5. End-to-End Distribution

- Manage/Synchronize Multiple Supply Chains Flowing into Theater

# Sustainment Data Systems



**Providing Integrated  
Customer Focused Support Solutions**

# Why Partner?

**Ensure a Ready and Controlled  
Sustainment Source Capable of  
Providing Combat Capability  
Anytime and Anywhere, Efficiently  
and Effectively.**

**Our Collective Goal Is to Support Our Fighting  
Men and Woman Worldwide**

# Why Partner?

- **Perform Work Related to Core Competencies**
- **Improve Utilization of Capacity**
- **Reduce Cost of Ownership**
- **Leverage Public and Private Sector Investments**
- **Share best practices**

# Partnerships

## Centers of Excellence

- *C-17 Analytical Condition Inspections*
- F/A-18 Depot CSAs

## Capacity Optimization

- *Boeing-San Antonio*
- Cecil Field
- Williams Gateway
- RAAF Amberly

## Process Optimization

- *F/A-18 Performance-Based Logistics*
- C-17 Flexible Sustainment
- AH-64D CRAD Partnership
- DLA Strategic Alliance

# Partnership Opportunities

## Supply Mgmt

- Wholesale Supply
- Retail Supply
- Transportation
- Data Systems

## Product Support

- Modification Management
- Tech Data Management
- Configuration Management
- Training
- Data Systems

## Maintenance

- Depot-Level Maintenance
- Intermediate Maintenance
- Maintenance Planning & Execution
- Data Systems

# Partnership Challenges

- **Declining Workload**
- **Aging Weapon Systems and Work Force**
  - **Recruiting an issue in highly specialized skills**
- **Lack of standard cost accounting methods**
- **Need to Maintain a viable Industrial Base**
  - **Both Public and Private**
- **Incessant drive to revert to status quo**

# Requirements

- **We need –**
  - Real time, higher fidelity cost data to perform cost trade offs and measure gains
  - Good templates for application on new partnering ventures
    - Guidance on
      - Risk
      - Disputes language
      - Warranties
      - Payments
- **We are on the right path – Partnerships are working and we are seeing tangible benefits**

**Partnering Can be a Winning Alternative for All**

# SPIRAL LOGISTICS?

Ship #2

## Spiral Development

Engineer and Test  
Configuration Changes  
Constant Development  
Be able to deploy

## Spiral Logistics

React to changes  
Cycle Time  
Cost  
Support the fleet

Ship #1

We have to create a new system to deal with “Spiral”

# Derivative Aircraft Programs

## Aircraft that DAP Purchase from BCA



**757-200**



**BBJ**



**BBJ**



**737-700C**

### DAP Provided via STC

- VIP Interior
- Auxiliary Fuel Tanks
- Secure Communications

### DAP Provided via STC

- VIP Interior
- Auxiliary Fuel Tanks
- Secure Communications
- Connexion by Boeing

### DAP Provided via STC

- Custom Interior
- Auxiliary Fuel Tanks
- Secure Communications

### DAP Provided via STC

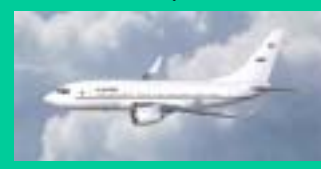
- Forward Smoke barrier
- Mid Cabin Smoke barrier
- Halon Fire Suppression
- Redundant Communications
- Fire stop liners



**C-32A**



**C-40B**



**C-40C**



**C-40A**

## Aircraft that DAP Sells to Government Customers

**USAF**

**USAF**

**USAF**

**USN**

# Small Fleet Operator Challenges

## Desires

- Reduce total ownership costs
- Operate at costs like that of a commercial operator
- Achieve performance levels like a commercial operator
- Ensure support system integrity and integration for optimum performance and cost-effectiveness

## *But*

Independent, low utilization fleets cannot achieve the unit cost of ownership of large commercial operators.



***The goal is to provide an enterprise that can deliver support at prices comparative to the large commercial operators.***

# Support Approach Drives Costs

## Support Cost Drivers

- Maintenance and Modifications
- Spares
- Configuration and Technical Data

OR

## Military Style Support Approach

- Uses military regulations, processes and procedures
- Requires infrastructure investment

## Commercial Style Support Approach

- Uses commercial regulations, processes and procedures
- Uses existing commercial infrastructure

# How to Leverage Commercial Infrastructure

**Operator's  
Specification**

**Commercial  
Industry**

- Regulations
- Processes
- Procedures

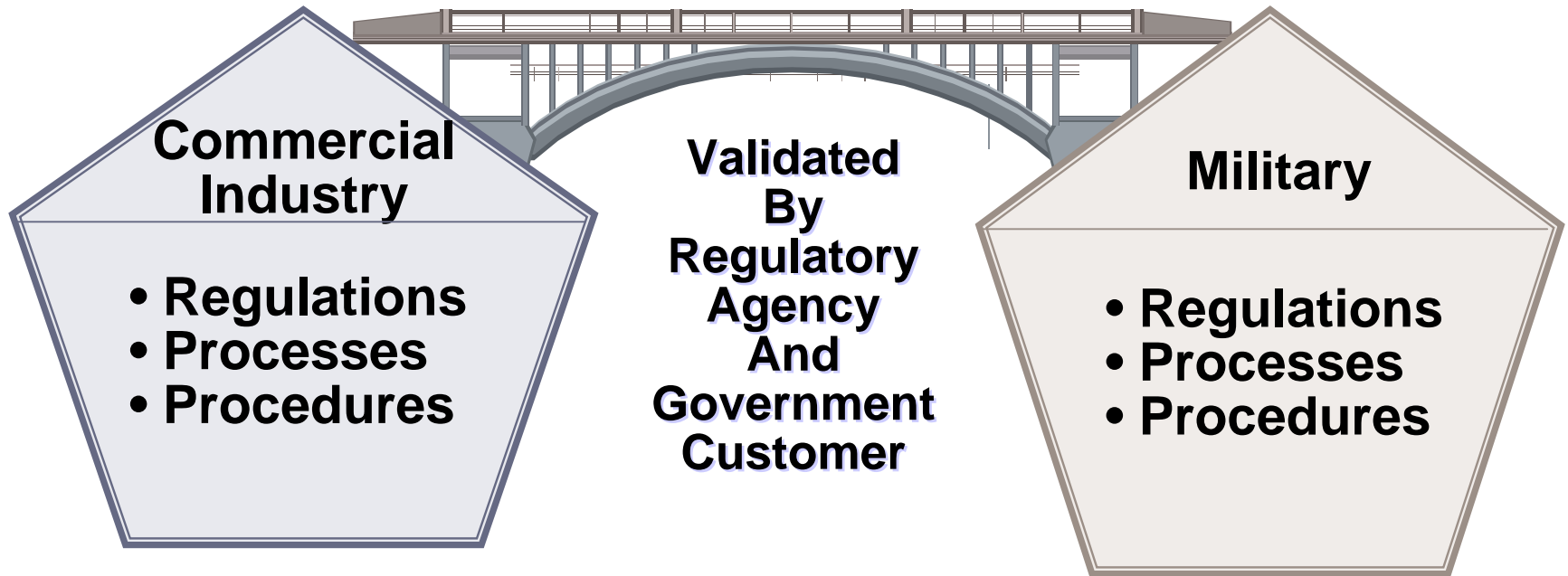
**Not  
Tailored**

**Validated  
By  
Regulatory  
Agency  
And  
Government  
Customer**

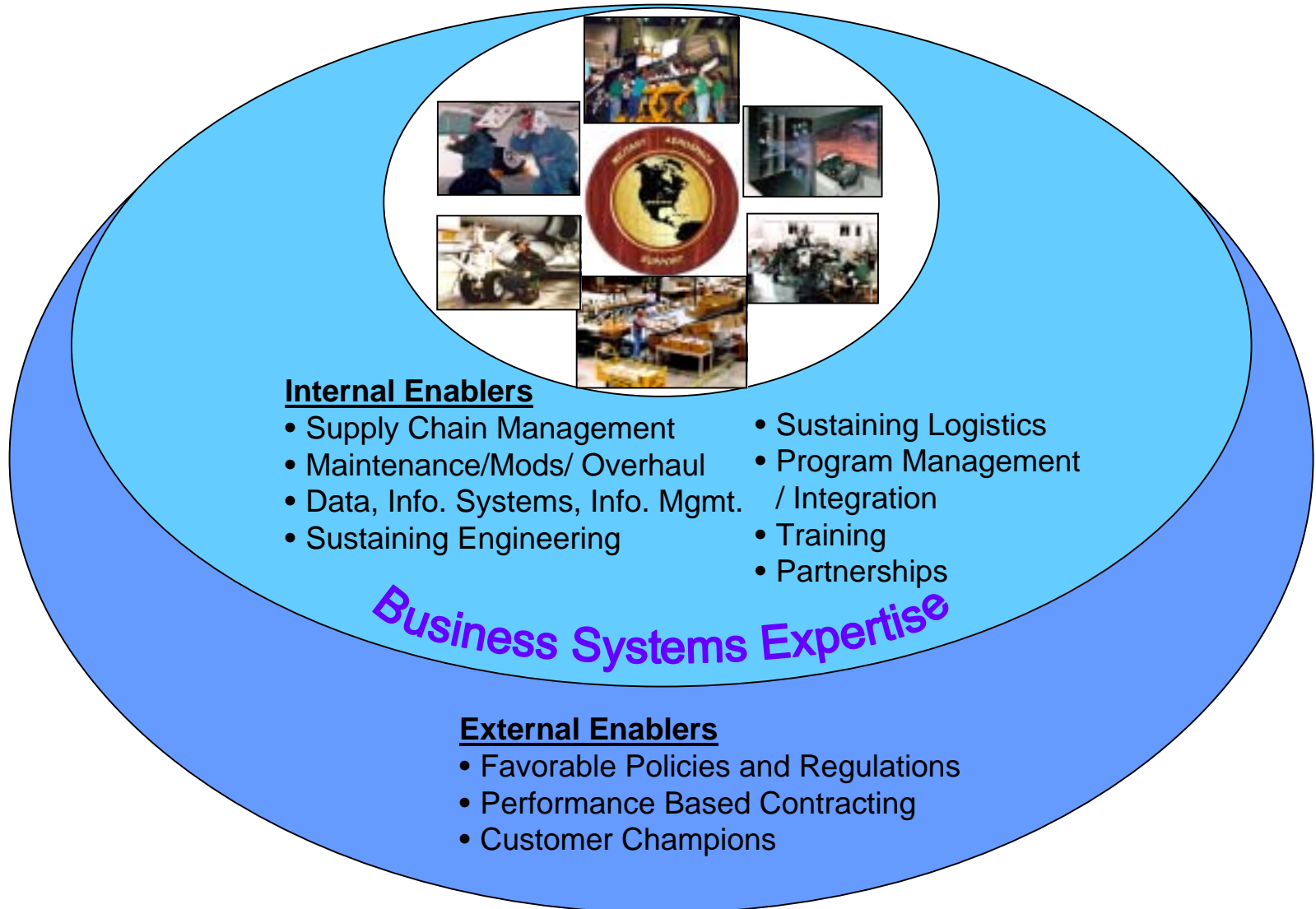
**Military**

- Regulations
- Processes
- Procedures

**Tailored**



# Life Cycle Customer Support Enablers



## WHERE TO DRAW THE LINE?

### Away from the battlefield

Depot MX

Some Flight line MX

SCM

Engineering

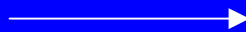
Tech Data

Support Equip.

FSRs

Software MX

Component Repair



### On the battlefield

Battle Repair

Flight line/Field MX

Field level supply

Tech Data Refresh

FSRs

**Minimize Contractor Presence on the Battlefield  
Obtain Rapid Contractor Support to the Battlefield.**