Maintaining Competition in Defense Sustainment

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**Maintaining Competition in Defense Sustainment**

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**Abstract**
Agenda

• Current Market Dynamics

• Emerging Trends

• Recent Competitive Examples

• Potential Next Steps
Current Market Dynamics

- Significant Increase in DoD Logistics Spend Since 2001
  - 10% annual growth
  - FY08 spend estimated at $80B
  - 4% projected growth across FYDP

- 80% of Spend Related to Defense System Sustainment

- Approximately 20,000 Suppliers

- 45% of Aviation Supply Spend Competitively Awarded

- 80% of Land/Maritime Supply Spend Competitively Awarded

- Greatest “Degree” of Competition Attained for Distinct Functions or Products
  - Supply
  - Maintenance
  - Transportation Services
  - Combat Support
Emerging Trends

- Organic Depots Pulling Work Back In-House
- DLA Moving to Prime Vendor Supply Chain Models
- Military Services Continuing to Implement Performance Based Logistics
- USTRANSCOM Implementing Defense Transportation Coordination Initiative
- Contractor Augmentation Programs Moving to Multiple Awards
- FY08 NDAA Requirements for Multiple Awards on IDIQ Contracts
Recent Competitive Examples

Product Support
Integration

Depot Maintenance

Prime Vendor
T-45 Case Study

Aircraft

• Originally Produced by Boeing Beginning in Mid 1970’s

• PBL Competitively Awarded in July 2003 to Vertex Aerospace
  – 200 aircraft
  – $450M total value
  – 5 year: 1 Year & 4 one year options
**T-45 Trainer**

**Propulsion**

- Rolls-Royce $65M Sole Source Power by the Hour Contract to Support T-45 Training Aircraft.

- Government & Contractor Goals Aligned
  - Increased Time on Wing
  - Increased Reliability

- Engine Availability Contractual Requirements
  - FY04 = 80% of Engine Inventory
  - FY05 – FY08 = 85% of Engine Inventory

- MTBF Contract Metric is 580-640 Hours MTBF;
  - Currently Over 900 Hours
  - Plans to Approach 2000 Hours
A-10 Case Study

- Competitively Awarded Product Support Integrator (PSI)
- Competitively Awarded Re-Winging in 2007
  - Different than PSI
- PSI Role Re-Competed in 2008
  - Subject to requirement of NDAA
- “Jury” Still Out on Results
C-130 Case Study

- Robust Industrial Capability for Depot Maintenance
  - WR-ALC; Ogden ALC;
  - Lockheed Martin; L3; Temco

- Industry PDM Competitively Awarded

- C-130 AMP Competitively Awarded

- Government Workload Based on CORE
KC-135 Case Study

- In FY2000, 32% of Fleet Unavailable Due to Depot Maintenance

- Robust Industrial Capability for KC-135 Depot Maintenance
  - OK ALC
  - Boeing

- Government Workload Determined by CORE

- Industrial Work Competitively Awarded

- Reduced Maintenance days by 19%, Cost by 15% per Aircraft
Way Forward

• Foster Continued Competition for Depot Maintenance of Legacy Systems

• Continue 5+5 Strategy on System Level PBLs
  – Ensure DoD has access to all appropriate data
  – Ensure appropriate “off ramps”

• Continue Competitively Solicitation of Prime Vendors

• Assemble Competitive Sustainment Data to Enable More Robust Assessment
Back Up
T-45 Trainer

- **Primary User:** US Navy
- **Manufacturer:** Boeing / BAE Systems

- **T-45 Goshawk aircraft:**
  - Service life of considerably more than 14,400 required flight hours
  - Latest upgrade: T-45C (digital cockpit)
  - 2,100 aviators have earned their wings in the T-45

- **T-45 Training System (T45TS):**
  - Training task accomplished with 25% fewer flying hours, using 42% fewer aircraft and 46% fewer personnel
  - Enabled Navy to reduce student flight time by 13% and average training time by 17 weeks per student pilot
  - Navy averaging more than 60 hours per month per airframe – one of the highest utilization rates in the world

- **7/29/03:** Vertex Aerospace (formerly Raytheon Aerospace) awarded 1-year, $85.7M contract to provide Contract Logistics Support for 200 T-45 aircrafts. Total contract value: $450M (four 1-year option periods)


- Boeing recently rolled out its 207th T-45 Goshawk aircraft (with a total of 221 currently under contract) with the Navy.
  - Improvements: Better low-speed performance, safer taxiing on crowded flight decks, better pitch control
C-130 Maintenance

• **Primary Users: USAF, USMC**

• **Manufacturer: Lockheed Martin**

• 09/07: Lockheed Martin C-130J Long Term Sustainment Program received top honors for Outstanding Achievement in Military Logistics Strategy from the Institute for Defense and Government Advancement (IDGA)
  – Recognized as a leading, visionary effort for its strategic PBL Public Private Partnership

• Boeing offering C-130 Total Life Extension Program (apart of Aircraft Modernization Program) – extends service life of aircraft up to 30 years, also reduces total ownership cost significantly. Provides upgrades and 1/7th the cost of a new aircraft ($10 – $15M vs. $65 – $75M)
  – Boeing C-130 AMP – reduce total cost of ownership. First flight Sept 2006
    • “Clearly, C-130 AMP is a solid program, has excellent leadership, and is something we all need to continue to support.” --Gen Handy
    • “The C-130 AMP is the only viable solution to our cockpit modernization, navigation safety, and Global Air Traffic Management requirements.” -- Gen Brown

• C-130 PDM: Began July 2001, 80% improvement in 2003 vs. 2002:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>A/C Prod Goal</th>
<th>Goal % Change</th>
<th>A/C Production</th>
<th>Production % Change</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>38</td>
<td>---</td>
<td>32</td>
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<td></td>
</tr>
<tr>
<td>2002</td>
<td>44</td>
<td>15.8%</td>
<td>38</td>
<td>18.8%</td>
<td>Full lean implementation begun in April; ALC level turbulence adds to difficulty</td>
</tr>
<tr>
<td>2003</td>
<td>48</td>
<td>9.1%</td>
<td>46</td>
<td>21.1%</td>
<td>First full year of lean, $2M overall savings</td>
</tr>
<tr>
<td>2004</td>
<td>54/64</td>
<td>12.5% / 33.3%</td>
<td>53</td>
<td>15.2%</td>
<td>Production requirement increased after beginning of first fiscal year</td>
</tr>
</tbody>
</table>
KC-135 Maintenance

• **Primary Customer:** US Air Force
• **Manufacturer:** Boeing

• 2/29/08: EADS/Northrop Grumman wins contract over Boeing to replace the KC-135 fleet (Initial contract valued at $35B – 179 planes to be delivered over the next 15 years). Should be ready to enter the inventory by 2013. New tanker will be KC-45A
  – Northrop tanker will provide significantly greater air refueling capabilities – best value

• 9/11/07: Boeing/Pemco win $1.1B 10-year KC-135 maintenance contract – to continue providing Programmed Depot Maintenance (PDM) on 200+ aircraft (Tinker AFB)
  – Typically PDM required for KC-135 every 5 years
  – Boeing KC-135 PDM program has solid track record - reduced the number of days aircraft is out of service for maintenance by 19%, cut costs by 15% per aircraft

• 9/8/06: KC-135 Programmed Depot Maintenance (PDM) program won 2006 Support Systems Lean Excellence Award

• By 2000, 32% of KC-135 fleet (29% of the entire USAF refueling fleet) was unavailable due to depot level maintenance. This reduced the refueling capability to the warfighter and caused a backlog at depot facilities, increasing the average number of days in depot level maintenance to over 400 (LT. GENERAL ZETTLER DEPUTY CHIEF OF STAFF FOR INSTALLATIONS AND LOGISTICS, June 2003)