Rockwell Collins
Services

Performance Based Support:
An Industry at a Turning Point

Aerospace and Defense Industry
Supply Chain Management
Performance Based Service Support

Industry’s Call to Serve Our Customers and Shareholders

“SCM = Removing, Repairing, and Replacing Critical Parts Using a Comprehensive Logistics Network to Support Commercial and Military Operations.”

“Providing Our Customers with Complete Services Solutions for both Collins and ‘Non-Collins” Equipment.”

“Always with a Performance Guarantee.”

“Industry Can Be Incentivized to Improve Reliability and Availability Of Product.”

“Keeping Product On-Wing Longer Means Greater Mission Availability And a Reasonable Rate of Return for Industry.”
Performance Based Service Support Customers

**Commercial**
- Aircraft OEM’s
- U.S. and International Airlines
- Air Freight Carriers
- Regional Operators
- Fractional Jet Operators
- Corporate & Business Jet Owners
- Training Suppliers
- Simulator Manufacturers

**Defense**
- U.S. Department of Defense
  - Depots and Bases
  - Air Force
  - Navy
  - Coast Guard
  - Army
  - Defense Logistics Agency
- International
  - Ministries of Defense and Militaries
- Platform OEM’s and Primes

**Commercial = Normal Business**
**Military = Emerging Trend**
Turning Point for Industry

Every Day We Fulfill Service Support Responsibilities

• Absolute Responsibility to Our Customers
  • Provide Total Life Cycle Solution for all Avionics Products & Systems Sold
  • Improved Reliability Keeps Equipment on Platforms Longer
    • Greater Mission Availability
    • Fixed Price Per Usage Hour

• Fiduciary Responsibility to Our Shareholders
  • Reasonable Rate of Return on Investments
    • Growth / Profitability
      • Operational Excellence

• Achieve Both Goals through Performance Based Contracting
  • Paid for Success – Not Failure
  • With Performance Guarantees
Employing Performance Based Service Support

Guarantees

- Improved reliability, availability, and readiness
- Effective and timely training and logistics
- Cost commensurate with usage
- Ease of Administration
- Electronic Interface

CUSTOMER

Avionics Service Performance Management

- Configuration Management
- Total Training Solutions
- Reliability Analysis
- Field Services
- Warranty Administration
- Spares Planning
- Repair Management

Prime Collins

FUNCTIONS

Tools | Specs | Processes | Requirements

Collins Execution |

Collins Leadership

C C C C C C C C C

Supplier Functions

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Prime Collins

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C C C C C C C C S

Supplier Functions
## Transitioning Services Business Model

<table>
<thead>
<tr>
<th>Past</th>
<th>Today</th>
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<tbody>
<tr>
<td>Failure Response</td>
<td>Operational Availability</td>
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<tr>
<td>Reactive</td>
<td>Proactive</td>
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<tr>
<td>Inconsistent</td>
<td>Zero Variability</td>
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<tr>
<td>Rigid, Inflexible</td>
<td>Agile, Reconfigurable, Customized</td>
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<tr>
<td>Unresponsive, Unavailable</td>
<td>Responsive, Available, Customer-Centered</td>
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<tr>
<td>Price</td>
<td>Value</td>
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Commercial Performance Based Contracts

- CRJ Dispatch 100 Program:
  - Mission readiness improved to 99+%  
  - Reliability improved by 16%  
  - Total supply chain time reduced by 36% (from 14 days to 9 days)  
  - Repair turn around time reduced by 30% (from 10 days to 7 days)  
  - Administrative / transaction costs reduced by $150,000/year

- Boeing and Airbus Programs:

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Customers</th>
<th>Number of Aircraft</th>
<th>Dispatch Target</th>
<th>Dispatch Actual</th>
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<tbody>
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<td>98%</td>
<td>99.5%</td>
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Military Benefits from Performance Based Contracts

Platform
- Operations
- Screening

Depot
- Staging
189 Days

Serviceable

Platform
- Operations
- Screening

<45 Days

- Fixed Price Repair Contract
- Repair to Meet Minimums
- 75+ AOG per year

- Performance Based Logistics Contract
- 30% Increase in MTBUR (Reliability)
- Less Than 10 AOG Per Year
Coast Guard “Power by the Hour” Support

- **USCG Performance Based Logistics Program:**
  - Mission readiness improved from customer requirement of 85% to 99+%
  - Reliability improved by 30% based on Mean Time Between Unscheduled Removals (MTBUR)
  - Total supply chain time reduced by 76% (from 189 days to <45 days)
  - Administrative / transaction costs reduced by $320,000/year – 1 Monthly Invoice
  - 96 HH-65s (30 LRU’s) and 28 Falcon Jets (45 LRU’s)
  - Monthly invoicing based on A/C Flight Hours

- **More than ‘just’ Repair Services**
  - Spares Management (USCG Owns Spares)
  - Field Service Engineering (RC Determines Need)
  - Reliability Improvements (If Cost Effective)
  - Performance Incentives (Reliability and Availability)
Navy ARC-210 PBL

- **USN ARC-210 PBL Program:**
  - Program size
    - Supports 1,859 Aircraft
    - 572,000 Estimated Annual Flight Hours
    - FFP per Hour

- **Flight-Hour Based Payment:**
  - Transfers Significant Responsibility to Supplier
    - Reliability Guaranteed
    - Parts Obsolescence Monitored
    - Cost Variability Managed

*A Partnership For Success*
ARC-210 PBL - The Warfighter Benefits

- Mission readiness improved from customer requirement of 85% to 97%
- Total cost savings expressed by customer in first year is $5.4 million

- Availability to Support the Fleet
  - 90% Fill Rate Guaranteed
  - 2 Day OST (Order Ship Time) For Class 1 Requisitions
  - 5 Day OST for Class 2 Requisitions

- Reliability
  - Assures Adequate NAVICP Sparing

- Technical Support / Obsolescence Management

A Partnership For Success
Military Service Support Customers

• **Performance Based Contracts with DoD and OEM’s**
  - HH-65 / Falcon Jet Performance Based Logistics (PBL) Contract
  - NAVICP ARC-210 PBL Contract
  - F-22 Repair Services Contract
  - Navy E-6B Contractor Logistics Support (CLS)
  - Air Force C-21 CLS
  - Integrated Logistics Support for Armed Reconnaissance Helicopter
  - SCAMP National Maintenance Contract
  - 160th Task Force Helicopter Avionics

  U.S. Coast Guard
  U.S. Navy
  Lockheed Martin
  L-3 Vertex
  Dyncorp/CSC
  Bell
  U.S. Army
  U.S. Army

• **International Customers**
  - Italian Air Force Aircraft Avionics Service Agency Agreement
  - C-130 Aircraft Integration Support
  - 5 Year Training & Simulation Contract for C-130
  - Logistics Support for Canadian Maritime Helicopter
  - Logistics Services for Malaysia Air Force

  Avionica
  Egypt Air Force
  Egypt Air Force
  Sikorsky
  Zetro
Challenges

• Longer Term Contracts are Necessary
  • Industry Incentivized to Invest in Reliability Enhancements
    • Reasonable Return on Investments Required
  • Military Saves as they Rely on Reliable Suppliers
    • And Keep Equipment “On-Wing” Longer = Greater Mission Availability

• Partnering with Military Organic Depots Frustrating
  • But Efficiencies in Military “Support Economy” Will Benefit Warfighter
    • Goal Alignment
    • Profit Motive versus Maintenance of Core Capabilities

• Business Case Analysis Development a Customer & Contractor Responsibility

• Commercial Model for Performance Based Support Contracting is Standard

• Military Performance Contracting is Emerging Trend
  • Customers Support Contracting with Performance Guarantees - Trust
    • Both Military and Contractor Can Win
      • Takes Cooperation!
• Performance Based Support Contracting Leverages Best Commercial Practices  
  • Improved Reliability and Mission Readiness  
  • Guarantees for Performance  
  • Predictable Costs  
  • Risk Transfer  
  • Reasonable Rate of Return for Industry

• Customers and Industry Must Work Together  
  • Program Planning and Execution

• Win / Win / Win