Maintenance Center Albany
Cost Containment

Trent Blalock, Deputy Commander
Date: 29 October 2008
Marine Corps’ Operational Logistics Solution provider for fielded weapons systems, support services and supplies.

- Operational logistics solutions to satisfy the Warfighter’s tactical logistics requirements.
- Sustain weapon systems and equipment with supporting products and services.

**With a Warfighter focus, we provide competitive, comprehensive and integrated solutions by being “the best” or sourcing from The best commercial, organic and DOD providers.**

- Fulfill the Operating Forces’ logistics requirements with innovative, efficient and effective solutions.
- Best-value logistics support provider for strategic functions resource from best-value support providers for all other functions.

**Enhance the Marine Corps’ ability to execute and sustain its warfighting competency.**

- Logistics broker connecting strategic logistics resources to tactical logistics requirements.
- Take logistics burden off of the Warfighters’ shoulders allowing them to focus more on their core competency of warfighting.
Versatility and Capability
Multi-Commodity / 493 Lines
69 Trade Skills - Laborers to Engineers

National Guard Bureau
Marine Corps
Air Force
Private Industry
FBI
Foreign Military Assistance
Army
Homeland Security
Navy

ANNUAL REVENUE

FY01 FY02 FY03 FY04 FY05 FY06 FY07 FY08
0 50 100 150 200 250 300 350 400
104 103 115 184 311 313 295 351
Logistics Solutions for the Warfighter

It’s All About The People!

Current on Board: 1,788
Contractor: 571
Temp/Term: 417
Permanent: 791
Marines: 9

![Graph showing employment types over fiscal years FY01 to FY07]
Hourly Rate Without Material

2005: $75
2006: $70
2007: $60

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Net Operating Results

Logistics Solutions for the Warfighter
Cost Containment

- Leadership – Communications – Think Safety
- Focus on Throughput
- Control WIP/Inductions
- Material Management - Parts Availability
- “Right Size” the Workforce
- Manage Capacity – Shifts/overtime/equipment
- Facility improvements/Capital investment
- Continuous Process Improvement
- Remember the Lean years
“Radical” Approach

- Managers work for employees
- Supervisors exist to help employees create value
- Managers ensure employees have everything they need to do their jobs
- Manage by walking the floor, answers are not in an office or in meetings
- Managers get engaged with creating value for the customer
- Managers drive change with personal action

Talk the Talk, WALK the WALK
Increase throughput and make schedule without increasing operating expenses or sacrificing quality.

1. Identify the constraint
2. Exploit the constraint
3. Subordinate everything else to the constraint
4. Elevate the constraint
5. Go back to step one (avoid inertia)
## RCT VARIATION REDUCTION

<table>
<thead>
<tr>
<th>Weapon System</th>
<th>FY-04 (RCT Variation)</th>
<th>FY-07 (RCT Variation)</th>
<th>Reduction (Days) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-48</td>
<td>100 (138-38)</td>
<td>38 (68-30)</td>
<td>62 (62%)</td>
</tr>
<tr>
<td>MK-15 Trailer</td>
<td>71 (133-62)</td>
<td>5 (41-36)</td>
<td>66 (93%)</td>
</tr>
<tr>
<td>MK-17 Trailer</td>
<td>53 (105-52)</td>
<td>10 (47-37)</td>
<td>43 (81%)</td>
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<tr>
<td>M970 Refueler</td>
<td>86 (136-50)</td>
<td>4 (73-69)</td>
<td>82 (95%)</td>
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<tr>
<td>M149A2 Water Trailer</td>
<td>49 (65-16)</td>
<td>19 (38-19)</td>
<td>30 (62%)</td>
</tr>
<tr>
<td>M88 Tank Retriever</td>
<td>89 (235-146)</td>
<td>31 (129-98)</td>
<td>58 (65%)</td>
</tr>
</tbody>
</table>

*Note: MK-48 vehicle had 192 in FY-01.*
CONTROL OF WIP / INDUCTIONS

- One Piece Flow
- Pull System
- Critical Chain
- Simplified Drum-Buffer-Rope
Ensure Parts Availability
- Aggressively worked with DLA, OEMs and other vendors
- “It’s NOT a parts problem!”

Maximized Line-Side Stock
- High volume materials within arms reach of the artisan
- Automated the reorder process - Reduced from 5 to 1 day

Make/Buy Decisions
- Determine uneconomical repair processes
- Less inventory OH + less labor to complete + increased throughput = Reduced cost

• Increased Kitting
  • Develop kits to support/optimize production throughput
  • Purchase kits ready to use vs. making in house
“Right Size” the Workforce

- Right people, the right job, the right time
- Core Permanent Workforce
- Temps/Term Employees
- Augment with Contractors
- Develop the Workforce
Manage Capacity

- Expand First Shift Capacity
- Overtime – Voluntary/Mandatory
- 2nd Shift used for Constrained Shops
- Critical Plant Equipment Availability
- Outsource when Needed
- Monitor WIP
Facility Improvement & Capital Investments

- FY03: $4.8M
- FY04: $4.7M
- FY05: $5.9M
- FY06: $6.1M
- FY07: $3.5M
- FY08: $6.7M

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APPLYING THEORY OF CONSTRAINTS PRINCIPLES AND LEAN THINKING

Theory of Constraints principles can be used in conjunction with Lean thinking to leverage even more benefits for the enterprise.

Theory of Constraints & Lean enables growth strategy.
TOC primarily focuses on the bottleneck.
Lean is focused on reducing waste at all levels.
Lean uncovers additional capacity for further growth.
Lean thinking corporate implementation plan developed.
Set up Lean Team.
Lean 6-S efforts results:
- Reengineered supply warehouse,
- Significant increase in available shop floor space,
- Streamlined process flows,
- Cleaner workplace, less cluttered, and safer.

“The Center has become extremely flexible and better positioned to meet its responsibilities for regeneration and reconstitution of critical supplies.”
**METRICS/RESULTS IMPROVED**

- **Throughput** ↑
- **Employee Morale** ↑
- **Customer Satisfaction** ↑
- **Direct Labor Hours** ↓
- **Repair Cycle Time** ↓
- **Work in Process** ↓
- **Direct Labor Costs** ↓
- **Overhead Costs** ↓
- **Total Repair Cost** ↓

*Logistics Solutions for the Warfighter*
Remember the Lean Years

- Organizational Review
- Offsites
- Benchmarking
- Relationships w/ Industry
- Sustainment
- Market Share Expansion
The Maintenance Center Quality Policy

Through CONTINUOUS IMPROVEMENT, we work as a team to deliver quality products and services to all our customers.
Backup Slides
<table>
<thead>
<tr>
<th>Company/Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delta Airlines</td>
</tr>
<tr>
<td>GDLS</td>
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<tr>
<td>Toyota</td>
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<td>BAE Systems</td>
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<tr>
<td>Franklin Covey</td>
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<td>John Deere</td>
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<td>Booz Allen Hamilton</td>
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<td>Other DoD Depots ...</td>
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<tr>
<td>Joe Gibbs Racing</td>
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<td>BAE Foreign Military Sales (Taiwan)</td>
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<td>Lockheed Martin</td>
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<td>Force Protection</td>
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<tr>
<td>Oshkosh</td>
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<tr>
<td>W.W. Williams</td>
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<tr>
<td>International Military Group</td>
</tr>
</tbody>
</table>

*(Relationships) (Both) (Benchmarked)*
MARKET SHARE EXPANSION

Increasing Beyond Traditional Customer Base

MARSOC

NAVAIR

Private Industry

Seabees

National Guard Bureau

Homeland Security

Air Force

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