

# CUSTOMER KEYNOTE



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Supply Chain Director  
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Hal Buddenbohm is the Supply Chain Director at ITT Force Protection Systems in Thousand Oaks, CA. Prior to joining ITT, Hal held executive level positions in Materials Management at Solectron and CTS Electronics Manufacturing.

He also has over a decade of experience at The Boeing Company where he held positions in Engineering, Operations and Purchasing. He's a certified LEAN/Six Sigma Greenbelt and graduate of Pepperdine University and University of Illinois.





16 June 2010

# ITT Supply Chain Perspectives for the Supplier Excellence Alliance

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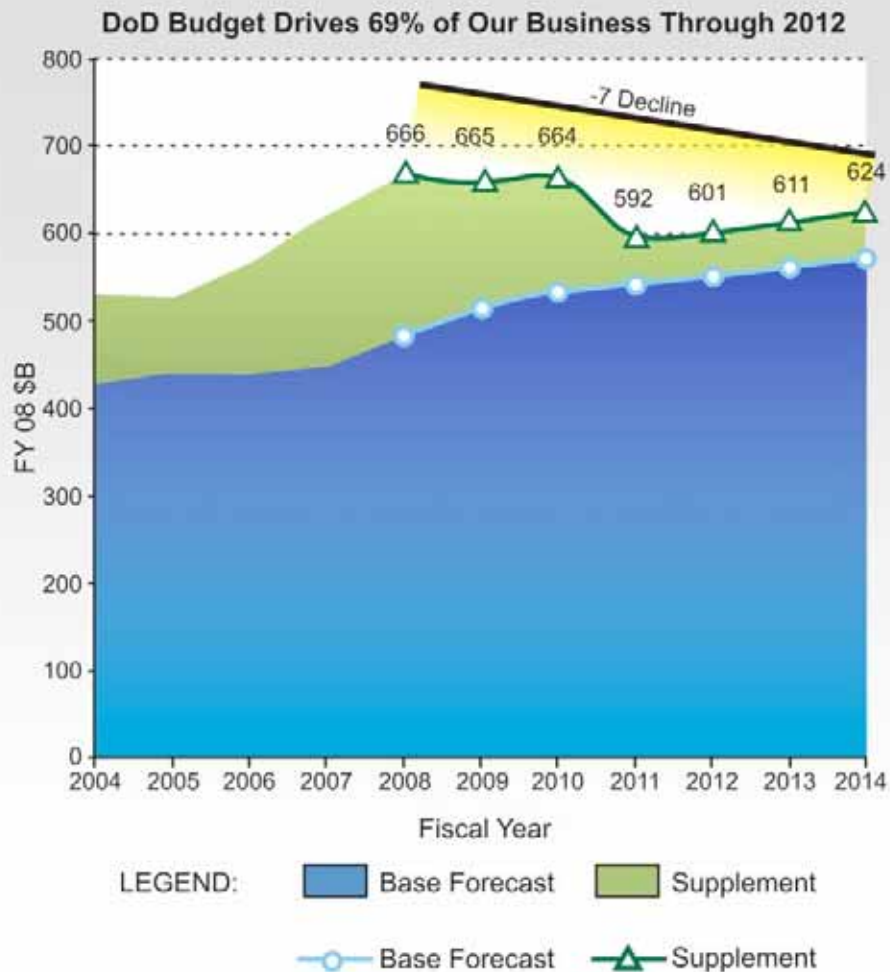
# ITT Overview

- \$10.9 billion sales
- 35,000+ Employees in 55 Countries
- Fortune 300 Company
- Close to 50-50 balance between commercial and defense businesses
- Top-10 U.S. Defense Contractor



# Confronting Reality in Defense Businesses

## •DoD Market Outlook



## •Implications

- New Program Funding Cuts or Cancellations
- Technology Insertions as Opposed to “New-New”
- Reduced Research, Development, Test & Evaluation (RDT&E) Based Backlog
- Primes Likely to reorganize to align to new market realities
- DO MORE WITH LESS

# Recent Restructuring at ITT Defense

- On Jan 5, 2010, ITT Defense Electronics and Services became ITT Defense and Information Solutions
  - ITT Consolidated seven defense divisions into three value centers to align systems businesses, rather than separate products
    - Electronic Systems
    - Geospatial Systems
    - Information Systems

"It is a little bit of a maturation of thinking within the company from just simply being product-centric to being systems-centric"

- Dave Melcher, President

# ITT Defense: A Defense Organization for the 21<sup>st</sup> Century

## •Electronic Systems



### •Combining These Technologies:

- Integrated Electronic Warfare
- Networked Communications
- Force Protection
- Radar
- Integrated Structures
- Reconnaissance / Surveillance
- Under Sea Systems

### •Providing Customers With:

•Networks for tactical communications and data exchange, and countermeasures to sense and deny threats to aircraft, ships, ground vehicles and personnel

## •Geospatial Systems



### •Combining These Technologies:

- Night Vision
- Space-Based Satellite Imaging
- Airborne Situational Awareness
- Weather / Climate Monitoring
- Positioning, Navigation and Timing
- Information and Data Exploitation

### •Providing Customers With:

•Next-generation imaging that integrates space, airborne, ground and soldier sensors into broader, coordinated systems.

## •Information Systems



### •Combining These Technologies:

- Large System Operation and Maintenance
- Information Sharing / Integration / Security
- Engineering and Professional Services
- NextGen Air Traffic Control
- CBRNE Detection Technologies
- Communications Infrastructure

### •Providing Customers With:

•Data fusion, network integration and critical decision support services.





# Force Protection Systems

## Technology Products, Systems and Services

### Ground Countermeasures



- Counter RCIED
- Expanded Frequency Coverage
- Protection against Proximity Fused Rockets, Mortars and Artillery

### Interference Mitigation Cancellation



- Co-Site Interference Mitigation / Cancellation
- GPS Anti-Jam for guided projectiles
- CREW Communications Compatibility

### Special Projects

- *Classified*

### Test & Support Systems



- Laboratory, Ground, Flight Line and Airborne Threat Simulators
- Automatic End to End Test
- Rack and Stack Systems
- Computer Support Help Desk Services



# ITT Electronic Systems

## Force Protection Systems

- ITT is a world leader in force protection systems including electronic countermeasures, interference mitigation technology, secure voice, data link and command and control systems and products.
- ITT is the world's largest producer of Counter-IED systems, deployed in Iraq and Afghanistan to neutralize RF controlled Improvised Explosive Devices.
- ITT has produced more than 21,000 RF jamming systems, now in use for all U.S. armed forces.





# Thousand Oaks, California



- 110,000 square foot facility
- 325 employees
- 96 engineering staff
- \$759M FY08 Sales
- \$688M FY09 Sales
- ISO-9001 certified
- AS-9100 certified



# ITT FPS Supply Chain Challenges

- As a top level system integrator, ITT FPS is highly dependent on the supply chain
  - Subsystems outsourced at “build to specification” and “build to print” levels
- Our Customers are trending toward very aggressive delivery schedules with ramps into full scale production 3-4 months ARO
- Affordability is a key requirement to all foreseeable acquisitions
- IDIQ (Indefinite delivery, indefinite quantity) orders are the norm for our business

# Lead Time and Integrated Supply Chains

- Lead time is critically important to ITT's mission for protecting our war fighters from Improvised Explosive Devices (IEDs)
  - Due to lead times, ITT must invest prior to contract awards to enable response to deliver ARO needs from Customers
- ITT has extensively deployed LEAN in Operations to reduce internal lead times
  - Most significant contributors to our Product lead times are the lead times from our suppliers
- ITT is participating with SEA to support LEAN deployment in the supply base and achieve a more integrated supply chain
- ITT is exposing ITT suppliers to SEA as a resource to accelerate LEAN deployment and supply chain integration

# June 7<sup>th</sup>, 2010 News

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## US: 5 American troops die in Afghanistan blast; 2 others killed in separate attacks

THE ASSOCIATED PRESS

Monday, June 7th 2010, 2:01 PM



Khan/APNATO soldiers secure an area after at least three suicide bombers attacked a police training center in Kandahar, Afghanistan, Monday.

separate attacks Monday — one a bombing in the south and the other by small arms fire in the south.

Three other [NATO](#) soldiers from other countries were also killed in attacks Monday, bringing the day's death toll for the alliance to 10. No further details on any of the attacks were released.

In addition, the [U.S. Embassy in Kabul](#) says an American contractor died in a suicide attack against the police training center in the southern city of [Kandahar](#).

[KABUL, Afghanistan](#) - The [U.S.](#) command says five American soldiers have been killed in a roadside bomb in eastern Afghanistan.

Two more U.S. soldiers were killed in

# Lead Time Reduction benefits ITT Customers

- Every day of lead time is another day our war fighters, comprised of our families, relatives & friends, are at risk for IED attacks while they perform their missions in hostile areas
- Every day of lead time is added cost for ITT, our Customers and Us, as taxpayers, to pay for the ongoing infrastructures that execute & support Programs



# Lead Time Reduction and integrated supply chains benefits to ITT & ITT Suppliers

- Lower cost/risk/liability
- Quicker reaction to opportunities
- Material received when it's needed
- Balanced inventory
- Improved responsiveness and reduced cost for changes
- Faster realization of revenue

The "Road to Cash" requires integrated supply chains that have the shortest lead times

# Barriers to lead time reduction and supply chain integration

- Suppliers waiting for Customer prompt &/or resources to start LEAN initiatives
- Attitudes/beliefs that lead times are an independent variable and not workable
  - ITT continually receives notices that “lead times are going out” and requests for better forecasting & increased financial commitments
  - Significant resources spent expediting material within lead time
- Perceptions that LEAN is a shop floor initiative or “is already implemented”
  - Most significant lead time reduction opportunities are in the internal infrastructures that support the shop floor, including the supply chain
- Suppliers not embracing pull systems
- Suppliers who are not working together to improve supply chain wide value streams

# Supply chain integration examples

- Machining supplier acquired capability for vacuum brazing
  - Lead time reduced 14% with fewer outside processing steps
- Machined parts quoted as a bundle vs. individual pieces
  - Cost reduced 30-40% by aggregating spend with fewer suppliers
- Sub tier component supplier negotiation to position material to projected requirements
  - 18+ week lead time reduced to 6-8 weeks
  - As requirements date get closer, commitments would need to be made for final configuration at 4 weeks
- Sub tier suppliers engaged to improve delivery & price based on overall ITT spend
  - Lead time reduced 30% and cost reduced 15%

# How we can achieve lead time reduction

- Implement SEA roadmap –“*WALK THE WALK, TALK THE TALK*”
  - Stage 1: Process characterization & standard work
    - Opportunities: quoting, negotiations, order acceptance/entry, planning, queue, waiting, packing, unpacking
  - Stage 2: Integrate Supply Chain
    - Not just 1<sup>st</sup> tier, but 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, etc. all need to be integrated to achieve desired results
    - After mastering Stage 1, SEA members need to promote roadmap and engage their suppliers
    - Suppliers engaging other suppliers & Customers to increase leverage

## Other areas we can improve

- Better collaboration between suppliers for each value stream
  - Communication linkages between all tiers of the supply chain
- Fewer supply chain tiers
- Projects that focus on a particular value stream with all suppliers involved
- Senior manager or executive assigned to supply chain integrations (roadmap process 1.2.3) in each supplier company





**ITT**

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# Questions

