The National Defense Industrial Association
36th Atlanta Executive Seminar
Challenges & Opportunities in a New and Changing Environment

Soldiers as the Decisive Edge

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(Acquisition, Logistics and Technology)
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A “Transforming” Challenge to the Army
• Strategic Environment
• Decisive Soldier
• Cost Efficiencies
• Partnering for Success

“To maintain the kind of military needed for America’s leadership role requires not only adequate levels of funding, but also fundamentally changing the way our defense establishment spends money and does business. That is why it is so important to follow through on the program of reform and overhead reduction . . .”

Secretary of Defense Robert M. Gates
A highly innovative organization of dedicated professionals transforming the Army with integrated Acquisition, Logistics, and Technology capabilities to *provide Soldiers a decisive advantage* and win our Nation’s wars!

**Acquisition is a Team Effort!**
Acquisition, Logistics and Technology
Strategic Environment

• Support the War
• Develop Materiel and Decisive Edge
• Affordability and Productivity
• Match Acquisition to Evolution
• Rebuild/Rebalance Workforce
• Align Program Management with Portfolio
• Restore World-Class Science & Technology
• Improve Services Acquisition

Requires a very strong, positive relationship with industry
Progress Towards Decisiveness?

WW I

The individual Soldier as the decisive edge

2011
## Evolutionary vs. Revolutionary

### WWII Era
**Approx. 1941 - 1946**

- **Measures of Effectiveness**
  - 36 lbs
  - $2K

- **Equipment**
  - Steel Helmet
  - M1
  - Combat Belt w/Equipment
  - Uniform
  - Spats
  - Combat Boots

- **Cost**
  - M4A2 Sherman Tank: $50.9K
  - P51 Mustang: $51K (Cost in 1945)

### Viet Nam Era
**Approx. 1961 - 1973**

- **Measures of Effectiveness**
  - 35 lbs
  - $1.6K

- **Equipment**
  - Steel Helmet
  - Flak Vest*
  - M16A1
  - Uniform
  - Combat Boots
  - Load Carrying Equipment

- **Cost**
  - M60 Patton Tank: $297K
  - UH-1H Huey: $1.9M

* Item not shown

### OEF/OIF/OND Era
**Approx. 2001 - 2008**

- **Measures of Effectiveness**
  - 75 lbs
  - $19.5K

- **Equipment**
  - Night Vision
  - Army Combat Helmet
  - Protective Eyewear
  - Body Armor
  - Gloves
  - Close Combat Optic
  - M4 Carbine
  - Fire Resistant Combat Uniform
  - Knee & Elbow Pads
  - Infantry Combat Boot
  - Thermal Weapons Sight

- **Cost**
  - M1A2 Abrams Tank: $6.2M
  - AH-64D Apache: $15.4M
  - F35 Lightning: $60.0M

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In the past, the Soldier was an appendage to the fighting system. Today – and for the future – the fighting system must be built around the Soldier individually and as part of a Tactical Small Unit.
Soldiers as a System…

- with overwhelming force and capabilities that adversaries fear:
  - protected to the maximum extent allowed by equipment, tactics, and joint support while accomplishing their missions;
  - just as decisive when mounted or dismounted.

The acquisition focus is to maintain high quality Army end items which prove decisive for mounted or dismounted Soldiers.
Empower the Soldier to preemptively influence the enemy’s will, power, and ability to act.

Unburden the Soldier of influences that inhibit ability to perform the mission.

Protect the Soldier by enabling operation in all environments and against all emerging threats.
CHASSIS 101: Any good chassis must be structurally sound in every way over the expected life of the platform (and beyond).

Vehicle

- Constant chassis
- Electro-mechanical system
- Extrinsic motherboard
- Externally developed crew (mounted Soldier)

Human

- Variable chassis
- Biological, physiological, psychological, etc. system
- Intrinsic motherboard (brain)
- Inherent, embedded yet variable human operating system

*Power of the soldier is the integrating function of the system!*
Current State of the Art

- Monocular Night Vision Device & Accs.
- Close Combat Optic
- Army Combat Helmet & Accs. /NAPE
- M4 Carbine (Modular) Infrared Light
- Protective Eyewear
- Body Armor
- Fire Resistant Uniform
- Thermal Weapons Sight II
- Knee & Elbow Pads
- Infantry Combat Boot Type II (Tan)

Can be improved with new technology advancements
Capability Visions for Decisive Dismounted Soldier

Integrated Intuitive Variable Effects Weapon system
“Look/shoot”

Scalable, ergonomic ballistic and blast protection
Adaptive Camouflage
“Protection and concealment on demand”

Augmented human physical capabilities
• Robotic enhancements
• Bioengineering
“Super human capability”

Pervasive Power
“Batteries not needed”

Real time situational awareness integrated into COP
“Right info at right time to right people”

Robotic cart
“Unburden the Soldier”

Enhanced cognitive and sociocultural skills
“Every Soldier is an individual – maximize potential”

Still able to show a “human side” for interaction with Friendly Population
Need for Engagement

• Stimulate Industry Engagement Program
• Program Goals and Objectives
• Identify Opportunities and Forums
• Open Dialog…Answer Questions

There is a contract and an Industry Partner behind every building, system, piece of equipment, clothing item, and service our Soldiers Use!
Two Worlds…Same Issues (?)

America’s Army faces:

• Increased Need to Provide Soldiers the best equipment and support
• Do More Without More
• New Products/New Technology
• Environmental
• Risk Management

Defense Industry faces:

• Increased Demand for Speed and Reliability
• Downward Fiscal Pressure
• New Products/ Capabilities and Technology Evolution
• Environmental
• Risk Management
What are we going to do differently

- Designing systems “around” the Soldier
- Decisive Soldier and Small Units
- Reinvent S&T around the Soldier
- Strengthen partnerships
Your Challenge

- Assist in making the American Soldier decisive
- Engage in the discussions at this conference
- Strengthen your partnership with the Army
- See where you can help Army
Focus: Key Customers and Stakeholders

- Soldiers
- American Citizens
- Industry and Academia
- Congress

Provide Warfighters the right capability at the right time and place
Army Ethos

- Honor
- Integrity
- Moral Courage

Always do what is right!!!
Questions