

**The National Defense Industrial Association
36th Atlanta Executive Seminar**

Challenges & Opportunities in a New and Changing Environment

Soldiers as the Decisive Edge



The Honorable Malcolm Ross O'Neill

Assistant Secretary of the Army
(Acquisition, Logistics and Technology)
and Army Acquisition Executive

April 5, 2011



A “Transforming” Challenge to the Army





Agenda

- **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





Army Acquisition Vision

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!



DESIGN • DEVELOP • DELIVER • DOMINATE
SOLDIERS AS THE DECISIVE EDGE



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



2011



The individual Soldier as the decisive edge



DESIGN • DEVELOP • DELIVER • DOMINATE
SOLDIERS AS THE DECISIVE EDGE



Evolutionary vs. Revolutionary

WWII Era

Approx. 1941 - 1946



36lbs
\$2K

Measures of Effectiveness

35.83 Lbs

\$2,146



M4A2 Sherman Tank

\$50.9K



P51 Mustang

\$51K
(Cost in 1945)

Viet Nam Era

Approx. 1961 - 1973



35lbs
\$1.6K

Load Carrying Equipment

* Item not shown

Measures of Effectiveness

35.06 Lbs

\$1,586



M60 Patton Tank

\$297K



UH-1H Huey

\$1.9M



F-4 Phantom

\$2.4M

OEF/OIF/OND Era

Approx. 2001 - 2008



75lbs
\$19.5K

Measures of Effectiveness

75.31 Lbs

\$19,454



M1A2 Abrams Tank

\$6.2M



AH-64D Apache

\$15.4M



F35 Lightning

\$60.0M



Time for a Paradigm Shift



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



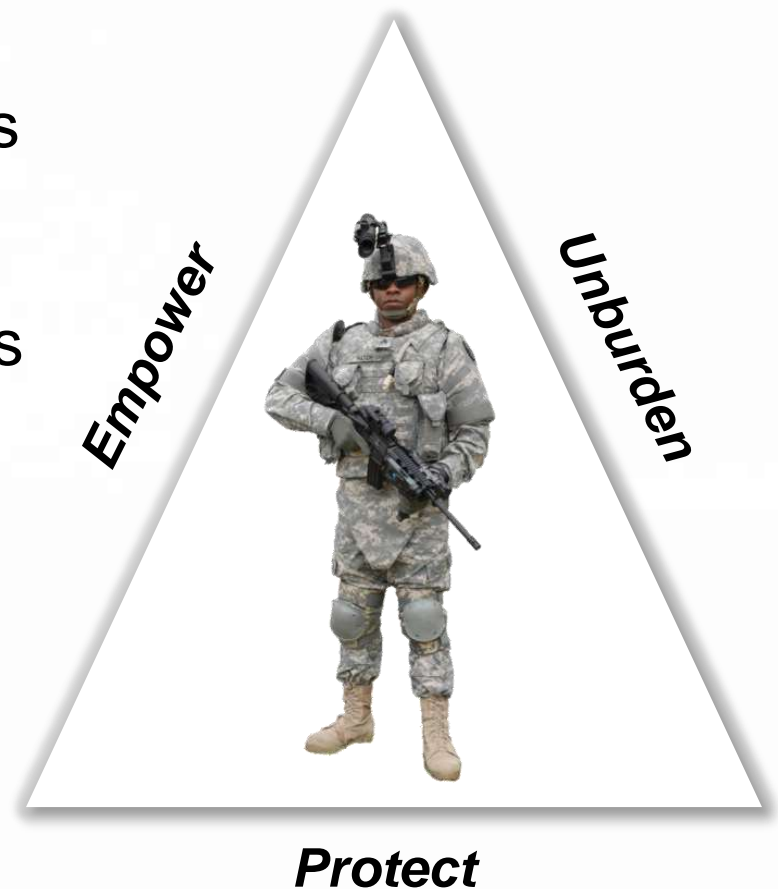


Soldier as a Decisive Weapon

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.

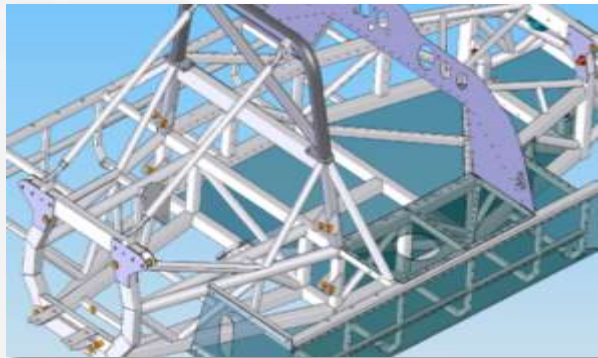




A Tale of Two Platforms: Vehicles vs. Humans

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

Fire Resistant Uniform

Body Armor

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”

Real time situational awareness integrated into COP

“Right info at right time to right people”

Scalable, ergonomic ballistic and blast protection
Adaptive Camouflage

“Protection and concealment on demand”

Robotic cart

“Unburden the Soldier”



Augmented human physical capabilities

- Robotic enhancements
- Bioengineering

“Super human capability”

Enhanced cognitive and sociocultural skills

“Every Soldier is an individual – maximize potential”

Pervasive Power

“Batteries not needed”



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

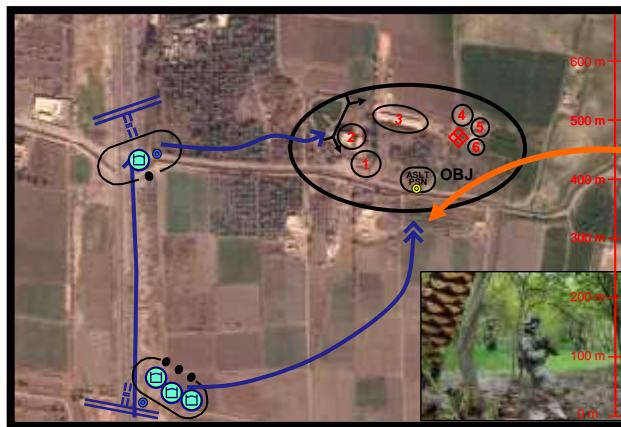




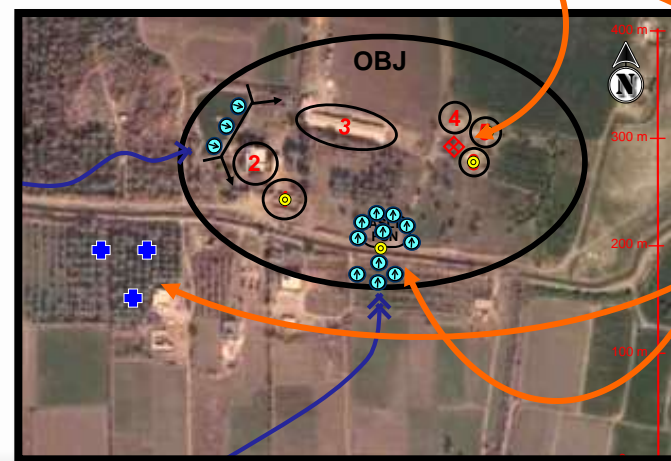
The Dismounted Situational Awareness Advantage



Leader Connected to the Secure Tactical Network



- ✓ Where are you
- ✓ Where are my friends
- ✓ Where is the enemy
- ✓ Where are non-combatants





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!!!



THE ASSISTANT SECRETARY
THIS WILL DRIFT

Questions



**The National Defense Industrial Association
36th Atlanta Executive Seminar**

Challenges & Opportunities in a New and Changing Environment

Soldiers as the Decisive Edge



The Honorable Malcolm Ross O'Neill

Assistant Secretary of the Army
(Acquisition, Logistics and Technology)
and Army Acquisition Executive

April 5, 2011