



Technology Transition

Challenges From An Industry Perspective

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The Challenges

- Transformation is Changing the Way of Doing Business
 - *Transition to a Capability verses Program/Platform Focus*
 - *Institute Streamlined Acquisition/Spiral Development*
 - *Accelerate Delivery of Technology to the Warfighter*
 - *Move Towards a Network-Centric Warfare Construct*



Operational Goals for Transformation

- Protect Homeland and Bases
- Project Power
- Deny Sanctuary
- Protect Information Networks
- C4ISR Interoperability
- Unhindered Access to Space

- *Secretary of Defense Donald H. Rumsfeld*



Implications for Industry: Responding to Military Transformation

- Develop Greater Understanding of Military's CONOPS
 - *Get Involved Early*
- Actively Participate in Requirements Definition
 - *Not Only Understanding How the System Must Operate But Also . . .*
 - *The Environment in Which the System Must Operate*



Implications for Industry: Responding to Military Transformation

- Design Today's Systems to Meet Evolving Future Requirements
 - *Open Architectures: Quicker Upgrades*
 - *Commercial-Off-The-Shelf: Cheaper*
 - *Flexible: Accommodates Growth*
 - *Network-Enabled: Interoperability*
 - *Security: At Multiple Levels*



Cultural Considerations

- Old Paradigm: Program/Platform Centric
 - *Military*
 - Defines Requirements
 - Develops Detailed Specs
 - *Industry*
 - Responds to Specs
 - *Results*
 - Single-Point Solutions



Cultural Considerations

- Transformation Paradigm: Capabilities Centric
 - *Military and Industry Team to Define Operational Effects and Capabilities to Achieve Them*
 - Dynamic Specifications Accommodate Future System Growth
 - *Results*
 - Open, Flexible Solutions

*Military and Industry Must Change
Our Thinking and Behavior*



Joint Tactical Radio System (JTRS): A Transformational Program

- Army Held an Extensive Dialogue With Industry
 - *Described Program Requirements*
 - *Sought Feedback to Shape the Procurement*
- Army Established the Procurement on “Performance-Based Requirements”
 - *Allowed Industry Freedom to Define the Solution*
- Rockwell Collins, as Part of the Boeing Team, Proposed an Innovative, Modular Solution
 - *Will Save the Army Several Billion Dollars in Life Cycle Costs*



JTRS: A Transformational Program

✓ Awarded

Vehicular & Rotary
Wing Cluster
(U.S. Army)



- Open Architecture
- Programmable/Reprogrammable
- Dynamic Specifications
- Flexible Design
- Network Centric (WNW)
- Reduced Life-Cycle Cost

Follow-On Applications

Airborne Cluster
(U.S. Air Force)

Maritime Cluster
(U.S. Navy)

Handheld Cluster
(All U.S. Forces)



Questions?

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