



Defense Research and Engineering The Way Ahead

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DDR&E Priorities

- **Integrate DoD S&T and Focus on “Transformation”**
- **Enhance Technology Transition**
- **Address National Security S&E Workforce**
- **Expand Outreach to Combatant Commands and Intelligence Community**
- **Accelerate Support to the War on Terrorism**

DDR&E Priorities Expanded



- **Focus and Integrate DoD S&T on “Transformation”**
 - Aligned Investment in Six Transformational Operational Capabilities
 - Specific Gaps Identified in “Linking S&T Study”—being Addressed
 - Initiated Three Cross-Cutting Initiatives
 - Enhanced Emphasis on Transformation Initiatives
- **Enhance Technology Transition Efforts**
 - Enhanced Primary Transition Efforts under DUSD (Advanced Systems and Concepts)
 - Increase Investment in Technology Transition Efforts (Quick Reaction Special Projects and Advanced Concept Technology Demonstrations)
 - Expanded Use of Technology Readiness Assessments as Part of Defense Acquisition Board Major Program Reviews

DDR&E Priorities Expanded -- Continued



- **Address National Security S&E Workforce**
 - Started Secondary School Initiative – Rekindling S&E interest
 - Initiated a University Freshman Science Program
 - Joined NASA in University Consortia
- **Expand Outreach to Combatant Commands and Intelligence Community**
 - DDR&E Representative Identified for Each Combatant Commander
 - Outreach to Collection Management Staff S&T Planning
- **Accelerate Support to the War on Terrorism**
 - DoD Combating Terrorism Technology Task Force
 - Several Accelerated Efforts Heading to, or in Theater
 - Task Force Continues to Identify Opportunities for Follow-on Operations

Definition of Transformation



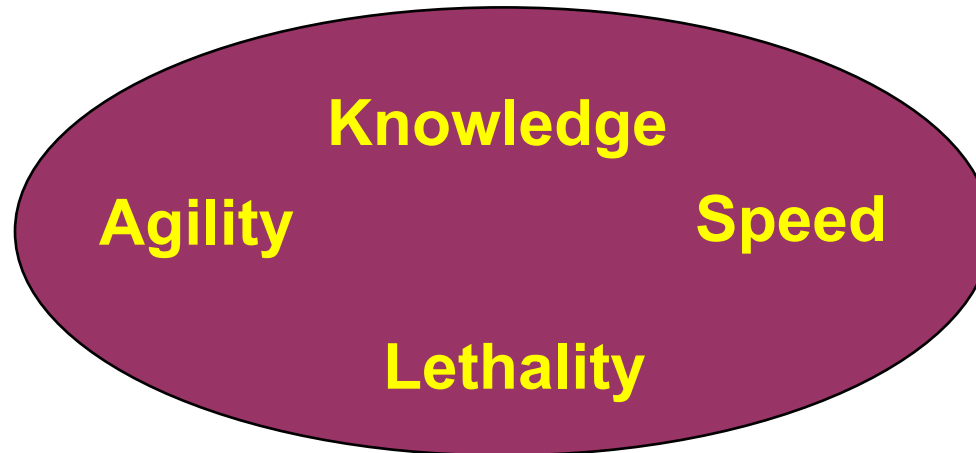
*“The Evolution and Deployment of Combat Capabilities
That Provide Revolutionary or Asymmetric
Advantages to Our Forces”*

- QDR (Sep 30, 2001)

Technology and Transformation



- Transformation Attributes



- Transformation Occurs With Leaps In Capabilities:
 - Manhattan Project—Lethality
 - Reconnaissance Satellites—Knowledge
 - Stealth—Agility
 - Ballistic Missiles—Speed

What Technologies Bring About Tomorrow's Operational Advantage?

Quadrennial Defense Review

--Critical Operational Goals--

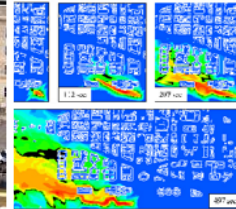


- **Critical Transformational Capabilities**
 - **Protect Bases of Operations**
 - **Conduct Information Operations**
 - **Project and Sustain US Forces**
 - **Deny Enemy Sanctuary**
 - **Conduct Space Operations**
 - **Leverage Information Technologies**



Protect Bases of Operations

- **Combating Terrorism**
- **Chemical/Biological Defense**
- **Missile Defense**
- **Consequence Management**





Conduct Information Operations

- *Defensive IO and Information Assurance*
- *Offensive IO*

