Strategic Weapons in the 21st Century: Rethinking Nuclear and Non-Nuclear Elements of the Deterrent

Implementation Strategy

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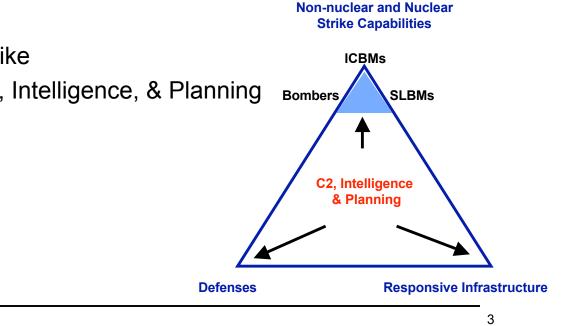
Within the new triad concept in the Nuclear Posture Review (NPR), what is required and what obstacles need to be overcome to transform <u>strategic capabilities</u> in order to optimize <u>readiness and responsiveness</u> in the 21st century?

- Strategic capabilities: ability to decisively alter an adversary's basic course of action
- Readiness: ability to promptly execute strategic missions with existing forces and capabilities
- Responsiveness: ability to augment existing forces with increased numbers and/or improved capability *more rapidly than evolving threats*



NPR defined a New Triad in a New Policy Context

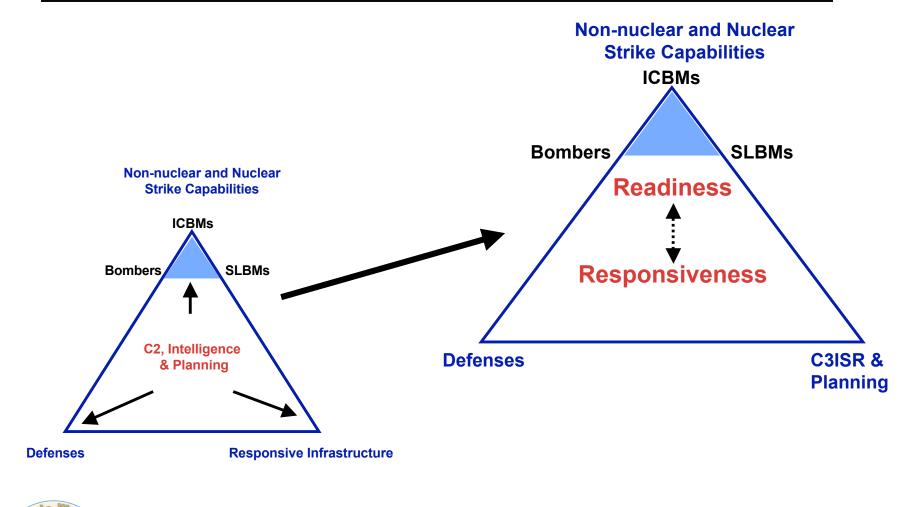
- Policy of Deterrence evolved to one of assurance-dissuasion-• deterrence-defeat (ADDD) to better call out specific goals and strategies
- The "New Triad" made explicit interplay among a number of • elements
 - Offense-defense
 - Readiness and response
 - Nuclear and non-nuclear strike
 - Command and Control (C2), Intelligence, & Planning Bombers





Rev. 14

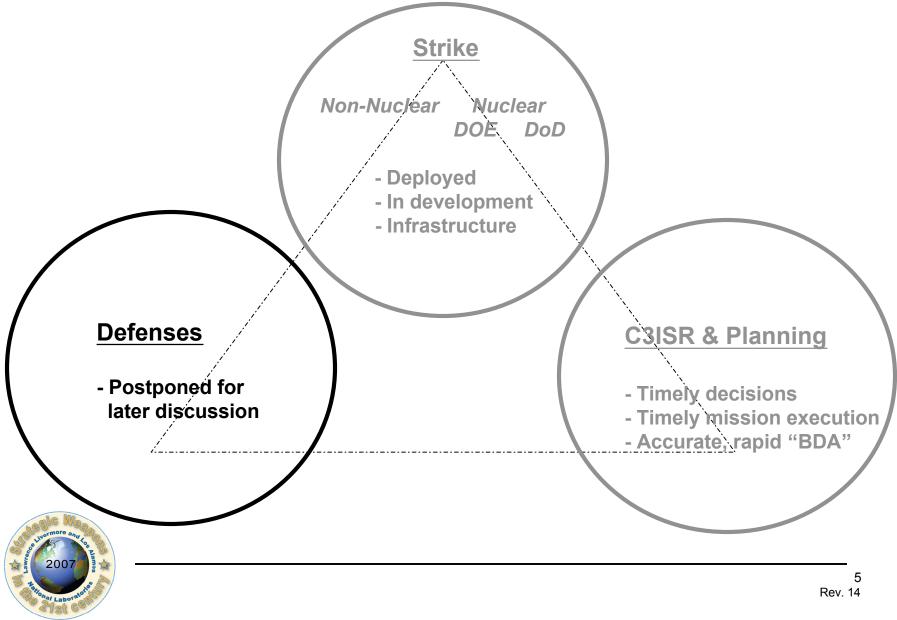
A Re-Interpretation of the New Triad Better Captures the Dynamics of ADDD



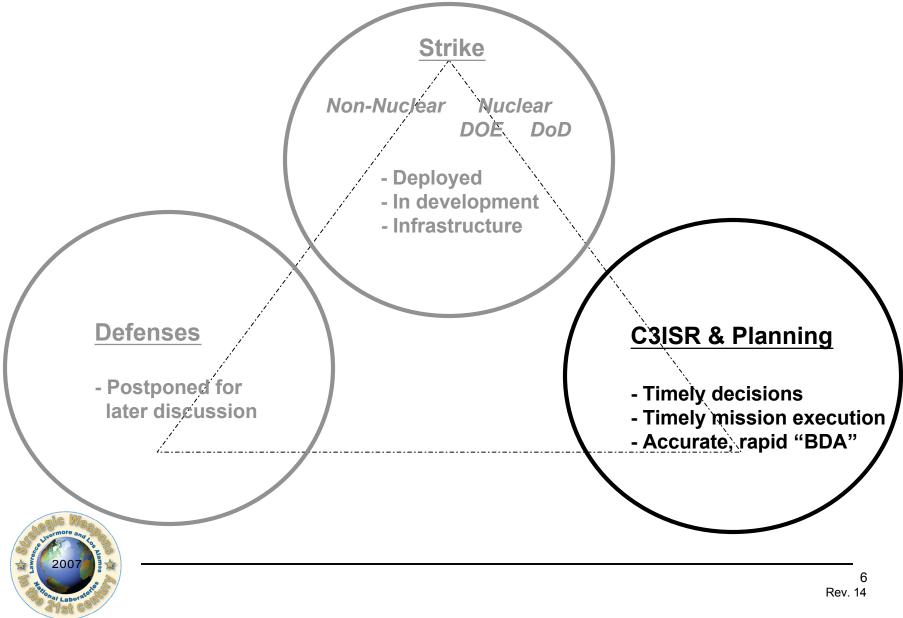


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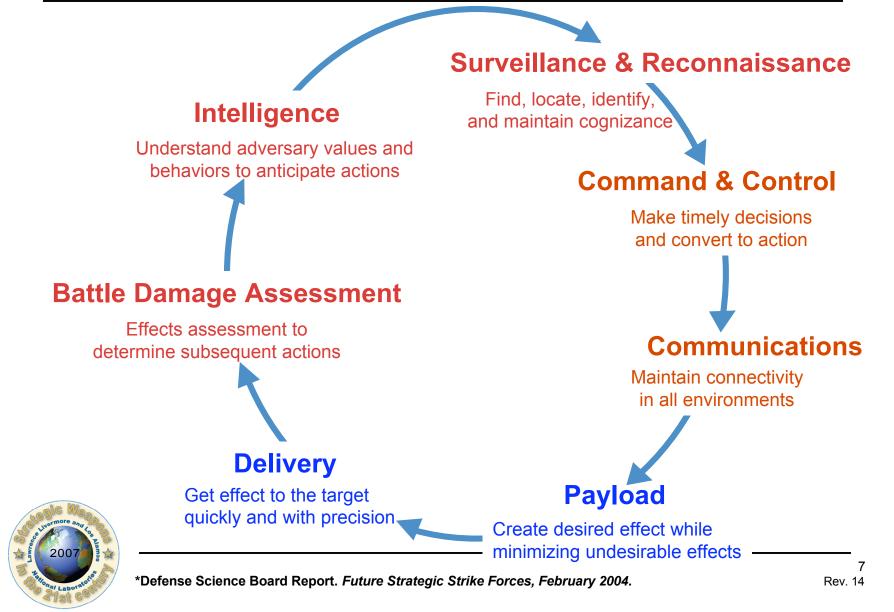
Key Issues for Strategic Capabilities in the Context of Readiness and Responsiveness

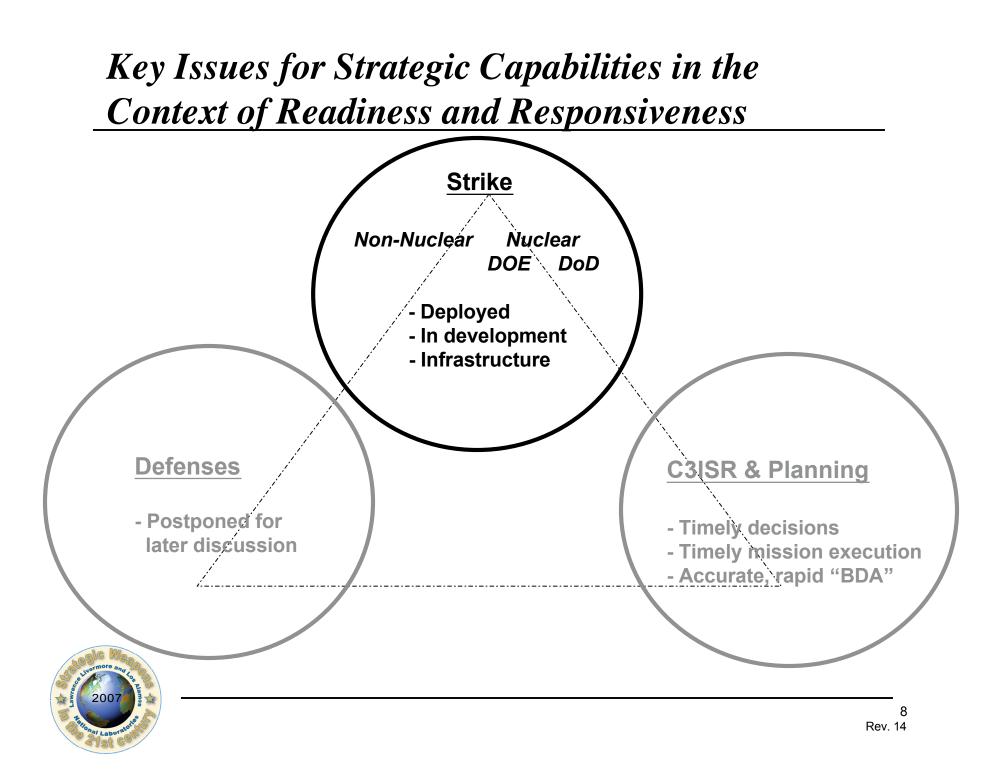


Key Issues for Strategic Capabilities in the Context of Readiness and Responsiveness



C3ISR & Planning to Support Strike Needs Improvement at Every Level*



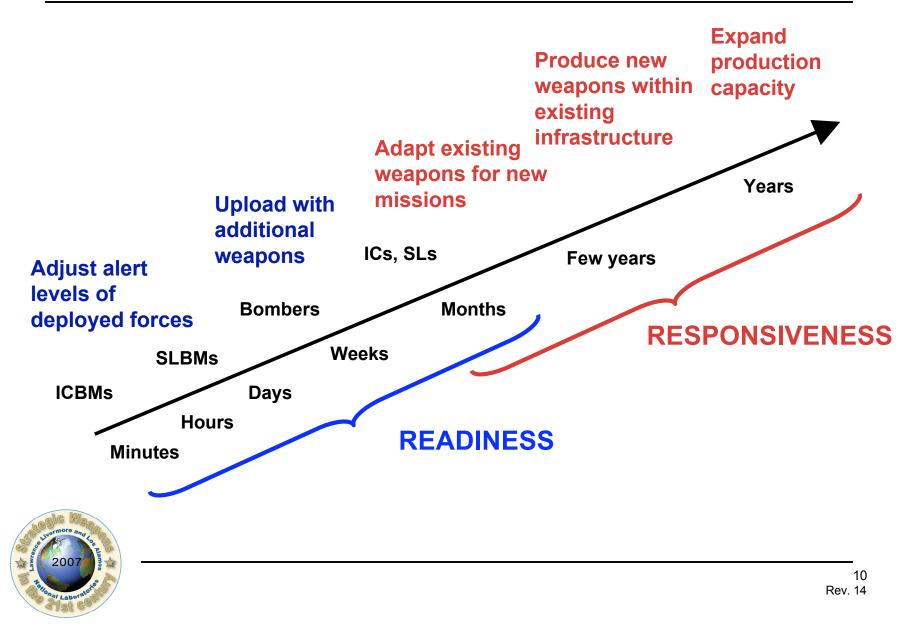


Non-Nuclear Strike Forces

- Deployed
 - Numerous
 - Tested in operations
 - Modern technology
 - Adaptable to multiple delivery platforms
 - Survivability in an adversary's nuclear environment?
- In development
 - Continuous pipeline of new capabilities
- Infrastructure
 - Fully exercised, easily expanded
 - Acquisition still not as agile as we might like



Nuclear Strike Forces: The Vision for Readiness and Responsiveness



Nuclear Strike: Department of Energy

- Deployed weapons
 - Life extensions of Cold War systems
- In development
 - Recent Nuclear Weapons Council approval of Reliable Replacement Warhead 1 (RRW1)
 - RRW will provide added safety and security, plus confidence through "replacement"
 - However, by law, the program introduces no new military capability
- Infrastructure
 - RRW to exercise infrastructure fully for first time in ~15 years
 - Current plans would assure continuous operation through gradual change-out of all legacy warheads
 - National Nuclear Security Administration Complex 2030 Plan provides roadmap for modernizing aging infrastructure
 - Capacity still uncertain: How much infrastructure vs. how many deployed and reserve weapons needed in 20 to 30 years?



- Deployed platforms
 - Life extensions of Cold War systems
- In development
 - Currently, none
 - RRW decision should lead to some change
- Infrastructure
 - Eroding rapidly with a single bright spot*



* Defense Science Board Report. Future Strategic Strike Skills, March 2006.

Threat Reduction Advisory Report, An Evaluation to DoD's Responsive Infrastructure for Strategic Strike, 2006, 2014

Key Issues – or Opportunities?

- Understanding of what deters our adversaries
 - To ensure that *strategic* strike capabilities achieve *strategic* goals
- Decision-making process that supports timely strike
 - Requires highest levels of leadership involvement
- Nuclear weapons on conventional delivery platforms
 - Introduces both technical and political questions, but offers a cost effective and timely path for modernizing nuclear strike <u>systems</u>
- Conventional weapons on nuclear delivery platforms
 - Much done already with bomber force and SSGN
 - Congressional resistance to conventional Trident missile (CTM)
- A roadmap for strategic strike
 - Currently lacking integration of nuclear and non-nuclear capabilities
 - Limited DoD leadership support prior to RRW
- A strong analytical base
 - The Nation needs answers to key questions, e.g.,
 - How do both nuclear and non-nuclear capabilities contribute to ADDD?
- A common vision on role of nuclear weapons in future strategic landscape
 - US Strategic Command and Department of Energy have created RRW, but only addresses warheads
 - Many disparate views within DoD and Congress
 - Legislative prohibition on new nuclear capabilities

