“The Policy and Politics of Long Range and Time Critical Conventional Strike…”

Presented by Peter Huessy, President of GeoStrategic Analysis

Precision Strike Association,

Springfield, Virginia

March 19, 2014

What Capability?

- When deployed, a Conventional Strike Missile would pair space boosters with a prompt "payload delivery vehicle“ [holds the weapon] on the front end with a high speed warhead. Could be a single projectile, blast frag or many thousands of lethal fragments.
- Top U.S. strategic commanders have repeatedly assessed the need for a fast-flying conventional capability against an imminent missile threat or other time-urgent target in instances where no other strike assets are within range (see*GSN*, May 28, 2008).

Previous Policy Studies

- 1997 DSB: DoD Responses to Transnational Threats
- 2004 DSB: Future Strategic Strike Forces
- 2008 NRC: *U.S. Conventional Prompt Global Strike: Issues for 2008 and Beyond*.
- 2009 DSB: Time Critical Conventional Strike from Strategic Standoff
- 2013 CRS: Conventional Prompt Global Strike and Long Range Ballistic Missiles

What Did They Find?

- 1997: Treat transnational threats as major DOD mission; use existing security structure; need to define an operational concept and SoS structure; interactive global info system; address “too hard” to do; leverage force protection
- Key: “Render safe” rogue state or terrorist group possession of nuclear devices
- Deliver “rods from heaven” with remote surveillance, early warning, clandestine ops
- ***New capability enabled by key ISR technology***

What Did They Find?

- 2004: Command and control identified as "major need area inn order to support "netted, collaborative strategic strike network"
- ISR as a system including damage assessment
- Need for quick global delivery capability w/ sophisticated payload

2004 Study Findings

- 300 vs. limited targets
- Accuracy needs to increase per the 2001 DSB Study on Precision Targeting
- The strike options are limited and may appear unusable by command authorities
- Improved ISR the single most important factor
- BDA does not provide info for strategic strike assessment

2009 Study: Parameters

- Looking for near term action
- Seeking Minimum cost and development risk
- Need Operational flexibility
- Go after both soft and hard/defended targets
- Seek < 1 meter to 10 meter accuracy
- Deployed: Conus; Oconus; air, space, surface and subsurface
- Use Kinetic or directed energy/reload
- Key issue is time to strike/ISR/warning time
- Is 24/7 availability required?

2009 Updated Requirement

- This DSB report highlights need for US to have option to strike conventionally with precision and rapid response along with prompt and accurate damage assessment in very restricted areas and/or when US local forces not present
- Conventional capability characterized by rapid response, high precision and execution from afar does not now exist

2009 DSB Policy Findings

- WMD use of first resort is threat—requires time critical capability
- Need top quality ISR, warning, target ID/Location and C# as key enabler
- 5 scenarios examined: attack on US space asset; shipment of nuke material; wmd weapon transferred; terrorist meeting; rogue state missile blackmail
- Key is how decision makers use data and have practical familiarity with recognizable scenarios in order to make “prompt decisions”

2009 DSB Eight Findings

- The solution to time critical is not necessarily weapon speed
- No scenario required “one hour global delivery”
- Long range overt attack against fixed targets not usually mission effective
- Robust ISR target and tracking, C3 and fire control---with covert, loitering would revolutionize global strike
- SOF preferred over kinetic strike
- Most cost-effective enhancements: strike against mobile targets; enhance ISR; adaptive global C2; deliver and extract SOF from long distances
- Planning and decision time may “swamp” weapon delivery time
- Focus on time critical strike for delivery platform must be balanced with focus on ISR, munitions, C3, SOF

Key Requirement

- ONGOING YEARLY COMPARATIVE ANALYSIS WITH OTHER ALTERNATIVES—A “ROLLING AND UPDATED AOA”

Recommendations DSB March 2009:”Time Critical Conventional Strike from Strategic Standoff”

- Lead Agency Need for ISR-Sec Def
- Plan/Rehearse scenarios—ATL
- Munitions counter WMD-DTRA/DARPA
- Hardened target defeat capability
- Need SOF Lifter
- Real time data linkage for fire control
- Include air breathing penetrating unmanned

Issues: As Russia Sees Things

- Notably, in 2007, Anatoly Antonov, who was then director of the Security and Disarmament Department at the Russian Ministry of Foreign Affairs and is now a deputy defense minister, stated that prompt global strike (as CPGS was then known), “when combined with global missile defense, becomes a means of seeking to dominate the world politically and strategically…”

Issues 2: A Russia Sees Things

- On June 19, 2013—Russian President Vladimir Putin stated in anticipation of US proposals for further reductions in nuclear weapons:
- *"We see that work is active around the world on developing high-precision conventional weapons systems that in their strike capabilities come close to strategic nuclear weapons. Countries that have such weapons substantially increase their offensive capability". (I thank James Acton's October 4, 2013 report for this)*

Congressional Concerns

- #1 Concern: How to Distinguish mixed weapons platform—nuke/non-nuke; warhead ambiguity
- What pathway best: 3 Options: rocket boosted hypersonic vehicle; sea based ballistic missiles; or air launched hypersonic cruise missiles.
- What expected counter measures including bmd; mobility; early warning
- Role of stealth or forward deployed weapons
- Target ambiguity/crisis stability

Mission Statement

- Demonstrate technologies that advance conventional Prompt Global Strike capabilities. Team to pursue integrated objectives acquire a CPGS system… including boosters, payload delivery vehicles,, guidance systems, and enabling capabilities.
- The program procures modeling and simulation capabilities, command and control interfaces, test range support, and launch system infrastructure.
- Will address strategic policy and treaty issues.
- Demonstrate component technology w/ risk reduction initiatives.
- NOT A SUBSTITUTE FOR NUCLEAR WEAPONS

Goals: 2005-2019

- Seek Up to 10 Mach speed
- Determine Launched platform
- Determine what ballistic and non-ballistic Rockets, delivery vehicle, & warheads
- Keep flight tests going to successfully demonstrate capabilities
- 05/09: Technology development with flight and ground tests and modeling
- 10-11: DARPA 2 flights—learned valuable info

Focus 2014-19

- Late 2011 flew Army Test Hawaii toward Kwaj- successfully demonstrated AHW payload delivery vehicle on STARS launch vehcile
- Second flight scheduled for 8/2014; from Kodiak to Kwaj 3,500 miles
- Goal is to test PGS technologies including advanced hypersonics with increasingly tougher tests

Four Pillars: Future Ability to…..

- Locate and Find Perishable Target—How Prompt?
- Achieve right range to target—How Far?
- Get Access to Target—How defended?
- Have C3 and C2 work elegantly for decision makers—What Battle Management?