Prompt Global Strike (PGS) Information Brief

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Prompt Global Strike (PGS)

PGS addresses the capability gap to:

- Strike globally
- Precisely
- Rapidly
- With kinetic effects
- Against high-payoff time-sensitive targets
- Regardless anti-access threats
- With a Conventional Weapon

The capability gap is identified in the PGS Initial Capability Document:

- Only option today: Pre-positioned forces or nuclear response (ICBMs and SLBMs)
- It is not “weapons from space”

PGS is a USSTRATCOM priority that provides rapid conventional strike capability for anti-access and high value targets worldwide.
Nuclear Posture Review

“...I see a great need for a capability that can reach anywhere in the world under an hour...with precise effects.”

CDRUSSTRATCOM Feb 05
PGS Capability Gap

Gap identified by:

- USSTRATCOM Integrated Priorities List
- 2006 Air Force Capabilities Review and Risk Assessment
- Air Force and Joint studies and directives reflected in JROC-approved PGS mission needs statement, May 2003 & JROC-approved PGS ICD, Jul 2006

The Air Force is working closely w/ USSTRATCOM to fill the PGS capability gap
Critical Capabilities Identified in the PGS

Initial Capabilities Document

(1) **Global** - The capability to strike any target set in the world; simultaneously in multiple theaters

(2) **Prompt** - The capability to strike any target set in minutes to hours with no or unambiguous warning

(3) **Precise** - The capability to accurately strike the target and achieve the desired effects

(4) **Range of Effects** – Provide full spectrum effects to influence, dissuade, disrupt or defeat without resorting to nuclear fission or fusion weapons

(5) **Counter Anti-Access** - The ability to penetrate or circumvent anti-access capabilities (military and political), as necessary
AF is currently working two interrelated initiatives to address the PGS capability gap

1. AFSPC engaged in a PGS technology demo program
   - Designed to evolve, mature, and integrate critical PGS technologies
   - Supports the Command’s vision for fielding a mid-term (FY14/15) Conventional Strike Missile (CSM) capability
   - As envisioned, CSM will use existing commercial/excess rocket motors to boost a medium-lift to drag hypersonic glide vehicle
   - Capable of dispensing requalified off-the-shelf munitions at global ranges from the CONUS

2. PGS Analysis of Alternatives (AoA) is a joint study led by AFSPC
   - Scheduled for completion in Mar 08
   - Examines long-term (FY2020 and beyond) materiel solutions

Two phased approach addressing the mid and far term
Conventional Strike Missile (CSM)

- CSM is AFSPC/CC’s vision to deliver a limited PGS capability
  - AFSPC Demonstration Program
  - Uses commercial/excess rocket motors with proven avionics, transitions to a “family of motors” derived launch platform
  - Leverage demo technologies from hypersonic flight tests
  - Utilize existing off-the-shelf weapons
  - Potential for residual capability
- CDR/USSTRATCOM, “very excited…do it faster…keep it simple…integrate CSM into testimony and posture statements.”

CSM is AFSPC/CC’s vision (material solution) to fill the USSTRATCOM JROC validated PGS gap by 2014
Nuclear vs Conventional Signatures

- Geographically separate basing (Coastal vs Northern tier)
- On-site inspections
- Nuclear-conventional firewalls -- unique/separate C2
- Non-provocative mission planning
- Unique trajectories

Packaging a suite of mitigating measures
Flight differences between the Hypersonic Glide Vehicle (HGV) and a Ballistic Reentry Vehicle

- The HGV has a completely different flight profile than a ballistic reentry vehicle (RV).
- HGV flies a depressed trajectory compared to a ballistics RVs high trajectory.
- HGV maneuverable (2 to 1 lift to drag) over 50% of flight time; ballistic RVs not maneuverable.
- RV’s located at Northern Tier bases; CSM’s to be located at geographically separate coastal bases.

The HGV has a completely different profile and trajectory then a RV.