STATUS OF MISSILE DEFENSE

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Views are those of author
Outline

• Past
• Present
• Future

• http://www.heritage.org/research/nationalsecurity/missiledefense.cfm
**WWII (Pr. Roosevelt)**

- Radar-pointed gun successful against VI
  - Terminal
  - Midcourse
- Backtrack V2
  - Boost
  - Interdiction
- Eisenhower on D day
’50-60s: Bombers → Missiles (Pr. Eisenhower, Kennedy)

• ‘50s: Whirlwind: defense against bombers
  – missiles arrive earlier

• ‘60s: Army Nike → Sentinel → Safeguard
  – Midcourse (Spartan) long time, but all objects ballistic
    • cannot discriminate
    • blackout midcourse radars by self or precursor attacks
  – Terminal (Sprint): atmospheric discrimination
    • short range → close to cities → NIMBY
  – Boost phase not technically feasible (Bambi)
‘70s (early): Safeguard Debates (Pr. Johnson & Nixon)

• Physics precluded effectiveness
• Advocated strongly anyway
• Pyrrhic victory—activated for few months
  – Taken to indicate missile defenses impossible
  – ABM Treaty & MAD doctrine
  – Continuing mistrust—No change since ’72
‘70s (late) Systems ➔ Technology (Pr. Carter)

• Meant to kill missile defense—saved it
  – Hit to Kill by Army
    • no nuclear release
    • x-band radars to reduce blackout
  – Space based
    • Laser (SBL) by DARPA
    • Neutral particle beam (NPB) discrimination by AF
    • Satellite sensors to cover globe (technically)

• Missile accuracy
‘80s: Strategic Defense Initiative (Pr. Reagan & Bush)

• WHSC screen options to Soviet buildup
  – “We build, they build. We don’t build, they build”—Brown
  – Little beyond Force Modernization in offensive systems
  – Defensive systems immature, but promising

• 2 years until Brilliant Pebble
  – survive & address Soviet missile threat
  – GBI underlay for 2 layer system—not critical

• BP dropped for deployment: political > technical

• Uncertain GBI layer face full attack

• Defense or bargaining chip? Got S.U.s’ attention
Theater Missile Defense ➔ National Missile Defense (Pr. Clinton)

- Gulf War deficiencies recognized Pr. Bush
- Killed BP
- GBI—proposals returned unopened
  - GBI remained alive in Army GBX at Huntsville
- NK No Dong forced national missile defense
  - resurrected GBI only
- IRT: GBI assumed more threat knowledge
  - than Intel could provide
National Policy on Ballistic Missile Defense

• Deploy as soon as technically feasible
  – NMD Act 1999

• Withdraw from ABM Treaty
  – Pr. Bush 14 Dec 2001

• Begin deploy 2004
  – White House Fact Sheet, 20 May 2003
  – No fixed architecture
  – Cooperation with close, long-standing allies
### Ballistic Missile Defense Block 04 (Pr. Bush)

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MDA Summary Self Assessment

- Goals established by President being met
- Readiness is #1 priority
- Aggressive RDT&E program
- Proposed program balance development & fielding efforts w/ $ constraints
IRT Summary

- GMD needs to enter Performance & Reliability Verification Phase
- Recommendations
  - Rigorous flight readiness certification process
  - Strengthen systems engineering
  - Additional ground-based qualification testing
  - Contractors functionally accountable
  - Assure that GMD program is executable
Issues

- GMD failed field tests  Q&A should fix
- GMD discrimination    adequate rogues
- Boost phase immature   rebalance $
- Political opposition   delayed timescale
- Terminal vs ICBM       accelerate develop
- Command & Control      extend C2BMC
- Global conflict        missile defense key