Nuclear Posture Review

Why We Have Nuclear Weapons

"Even with the Cold War over, our nation must maintain military forces that are sufficient to deter diverse threats."

"We will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests and to convince it that seeking a nuclear advantage would be futile. Therefore we will continue to maintain nuclear forces of sufficient size and capability to hold at risk a broad range of assets valued by such political and military leaders."

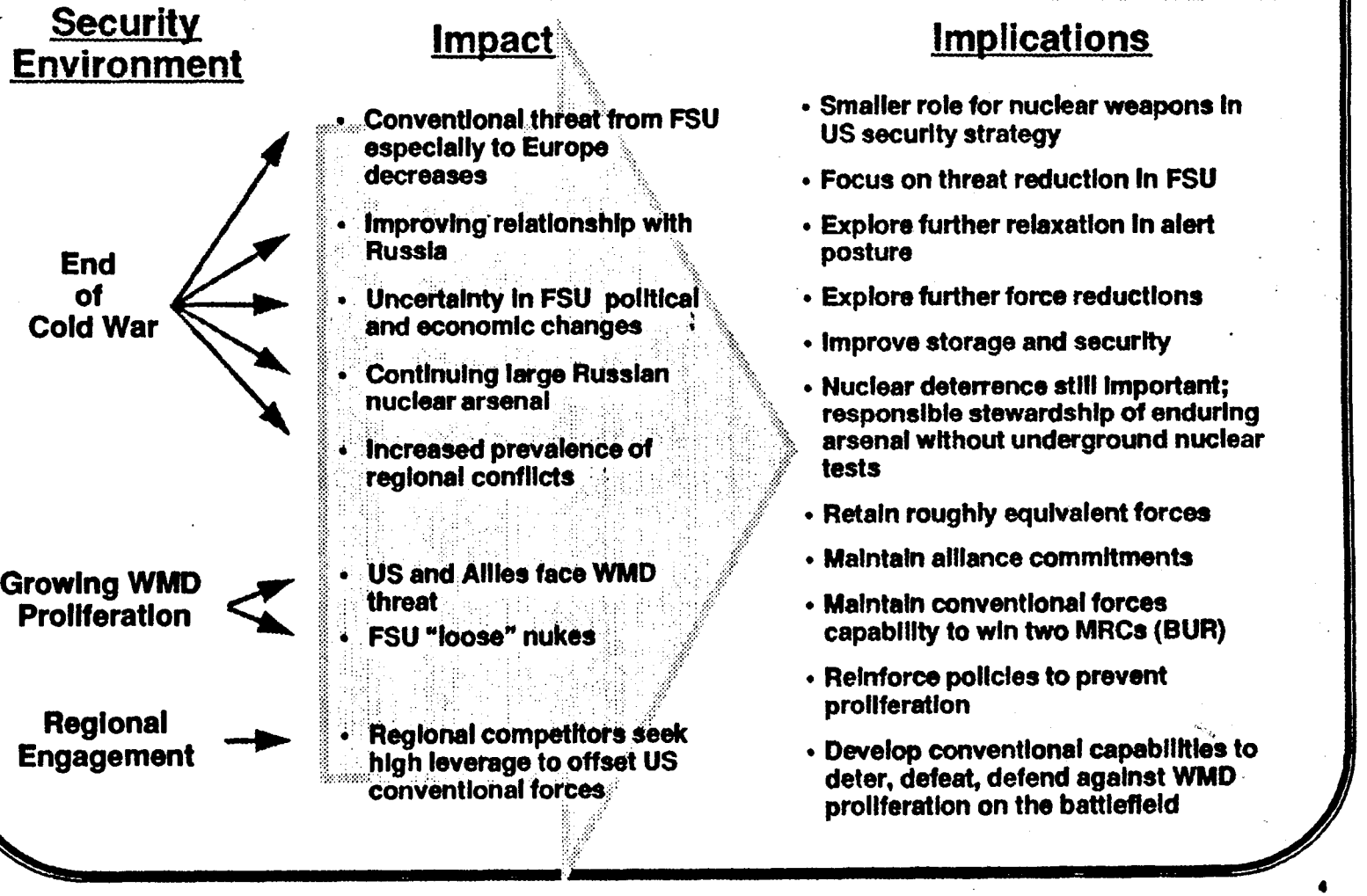
"A critical priority for the United States is to stem the proliferation of nuclear weapons and other weapons of mass destruction and their missile delivery systems."

President William J. Clinton
NSS July 1994

Why Review US Nuclear Posture?

- First comprehensive review in 15 years
- New security environment
  - Reduction in conventional threat in Europe
  - Threat posed by Russia reduced . . . different
  - Continuing political/economic reform in FSU
  - Regional threats more important than before
- DoD budget constraints
- Substantial reductions underway and planned
  - Stock-taking needed
  - Need to rebalance infrastructure, industrial and technology bases
  - Need to maintain quality people

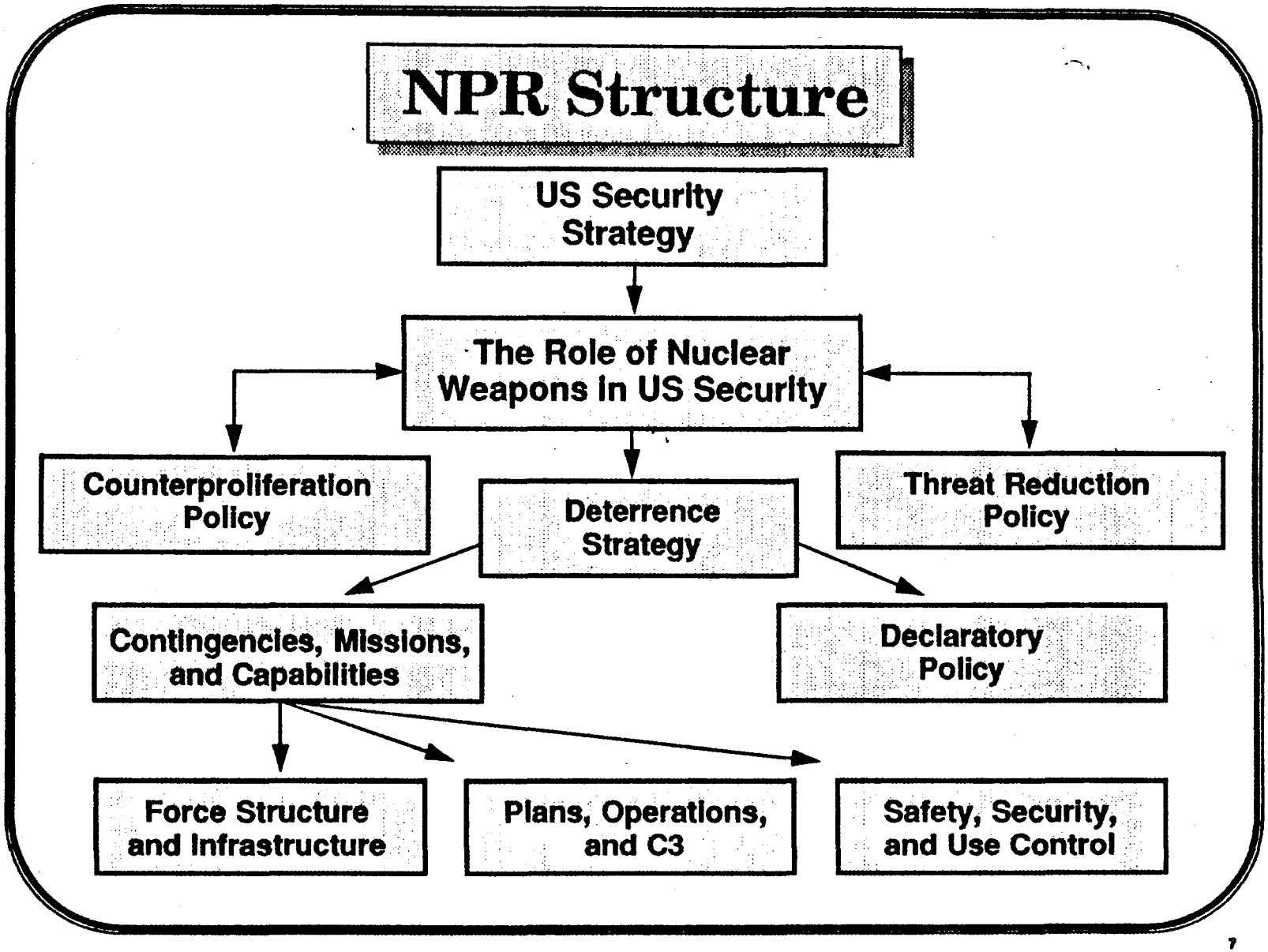
Effects of the Changing Security Environment



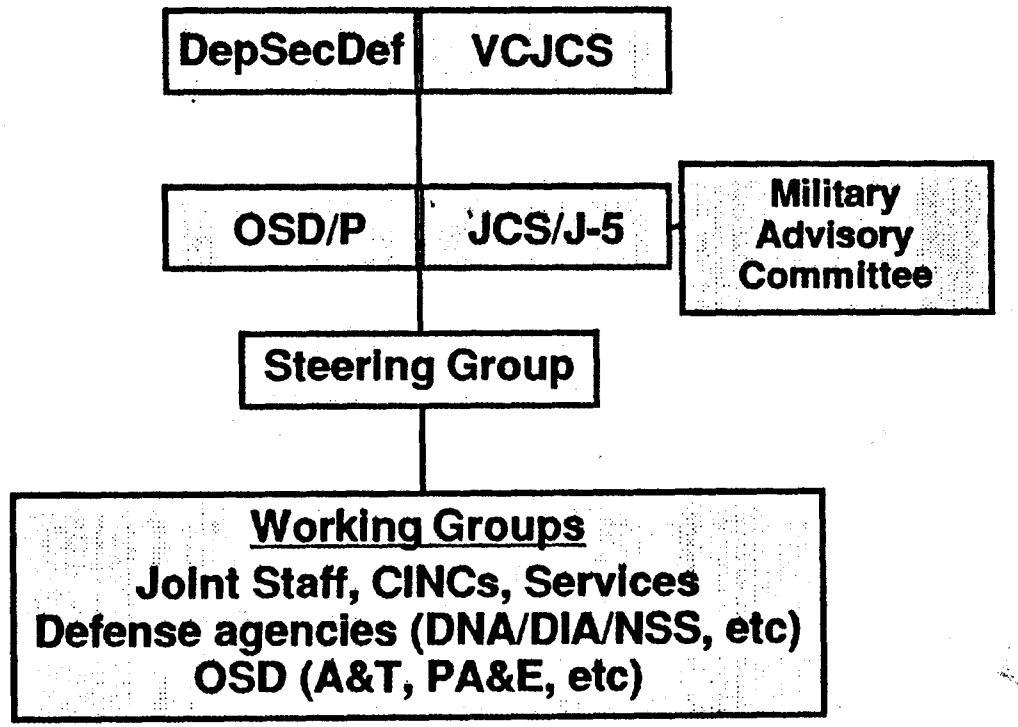
Overview

- ❒ NPR Process
- ❒ Perspective
- ❒ Strategic Forces
- ❒ Non-Strategic Forces
- ❒ C3I
- ❒ Infrastructure
- ❒ Safety, Security, and Use Control
- ❒ Initiatives
- ❒ Summary

Part I:
NPR Process


NPR Structure
US Security Strategy
The Role of Nuclear Weapons in US Security
Counterproliferation Policy
Deterrence Strategy
Threat Reduction Policy
Contingencies, Missions, and Capabilities
Declaratory Policy
Force Structure and Infrastructure
Plans, Operations, and C3
Safety, Security, and Use Control

DoD-Wide Collaborative Effort



Part II: Perspective

A Historical Perspective

- Significant reductions in US nuclear forces are underway
  - Weapons (since 1988)
    - Total active stockpile reduced by 59%
    - Strategic warheads reduced by 47%
    - Non-strategic nuclear force warheads reduced by 90%
    - No nuclear weapons remain in the custody of US ground forces
  - Operations
    - Strategic bombers taken off day-to-day alert
    - ICBMs and SLBMs detargeted
    - More SSBNs patrolling on "modified alert" rather than "alert"
    - Naval NSNF no longer routinely deployed at sea
    - Reduced airborne command and control operations tempo
  - Programmatic (1989-Present)

Program Terminations

- Small ICBM
- Peacekeeper Rail Garrison
- Lance Follow-on
- New Artillery Fired Atomic Projectile
- Tactical Air to Surface Missile
- Short Range Attack Missile II

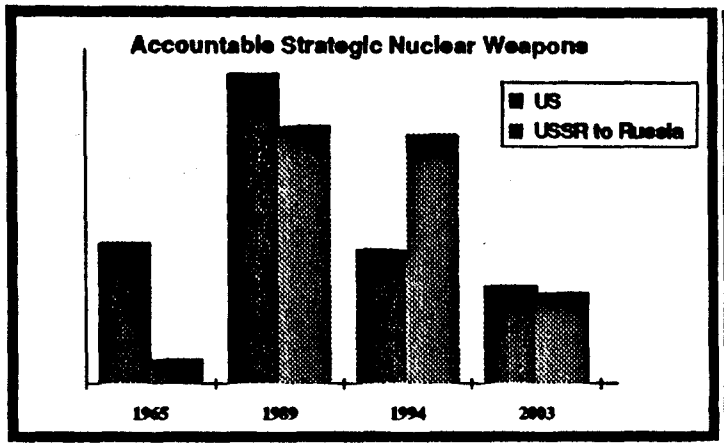
Program Truncations

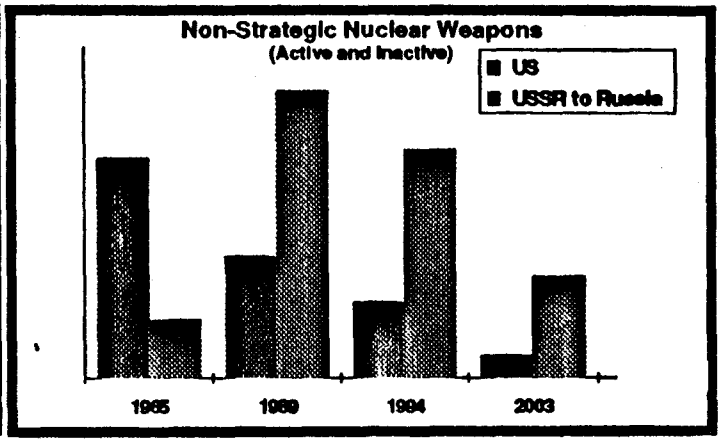
- Peacekeeper
- B-2
- B-1 Nuclear Role
- Advanced Cruise Missile
- W-88

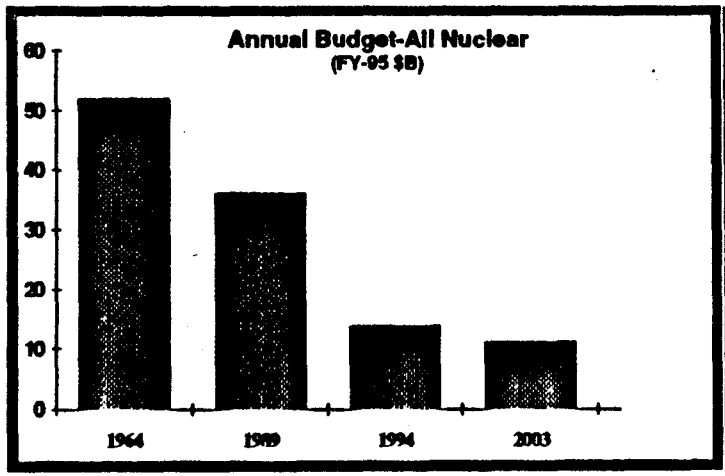
Systems Retired; No Replacement

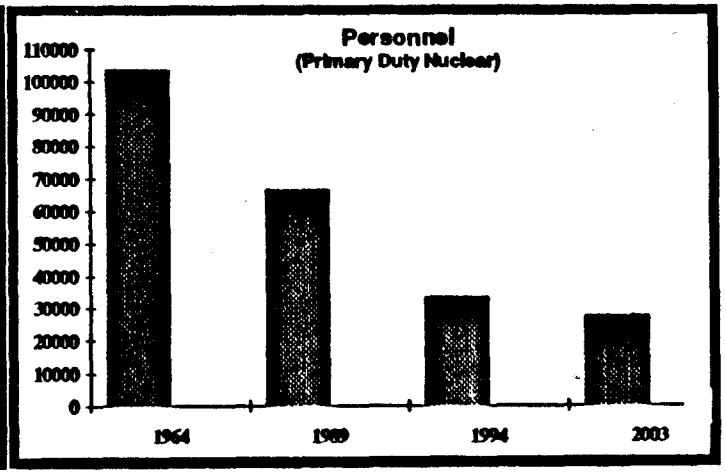
- Artillery Fired Atomic Projectile
- FB-111
- Minuteman II
- Lance
- Short Range Attack Missile-A
- Nuclear Depth Bomb
- C-3 SSBN

A Historical Perspective

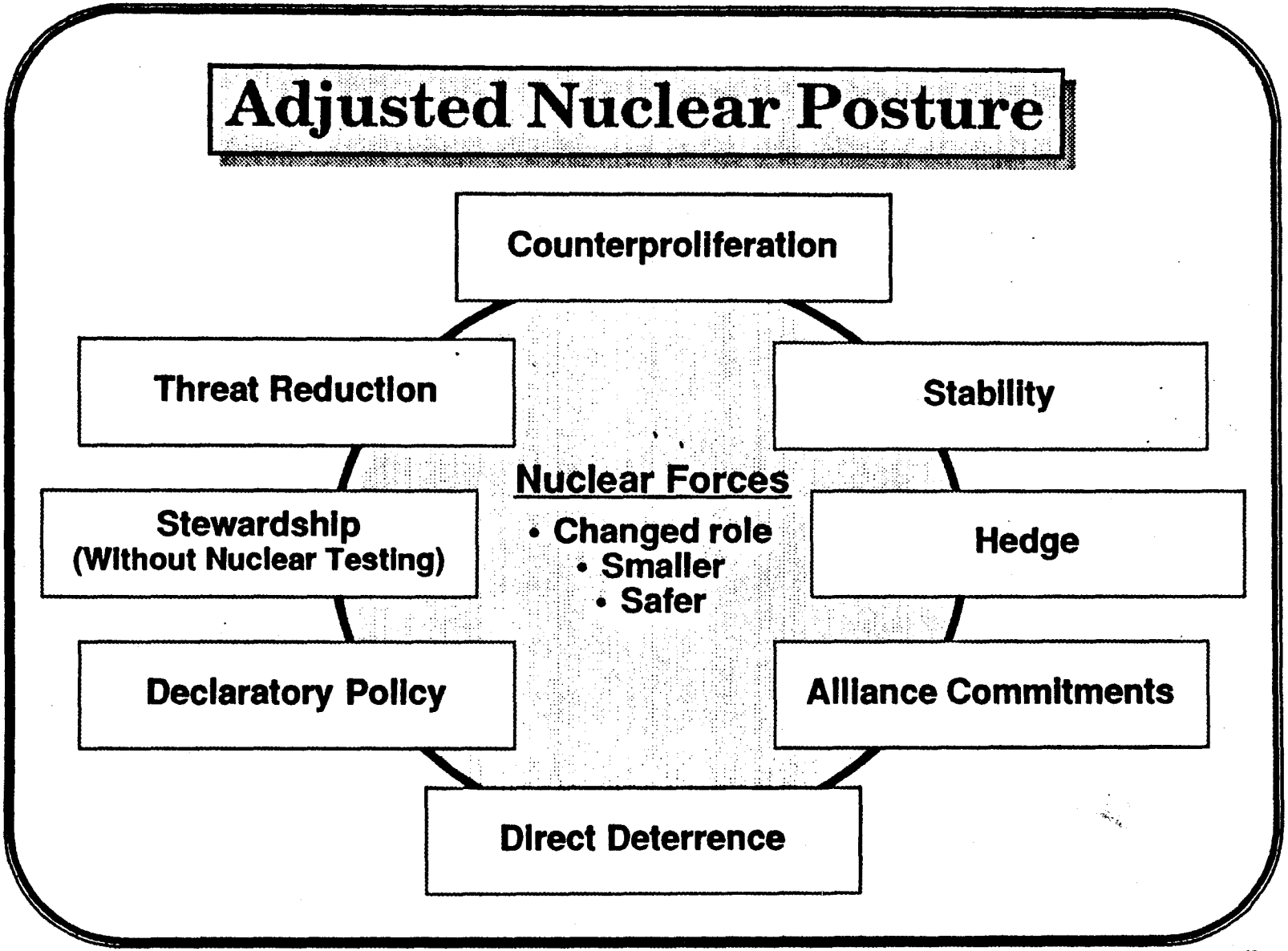






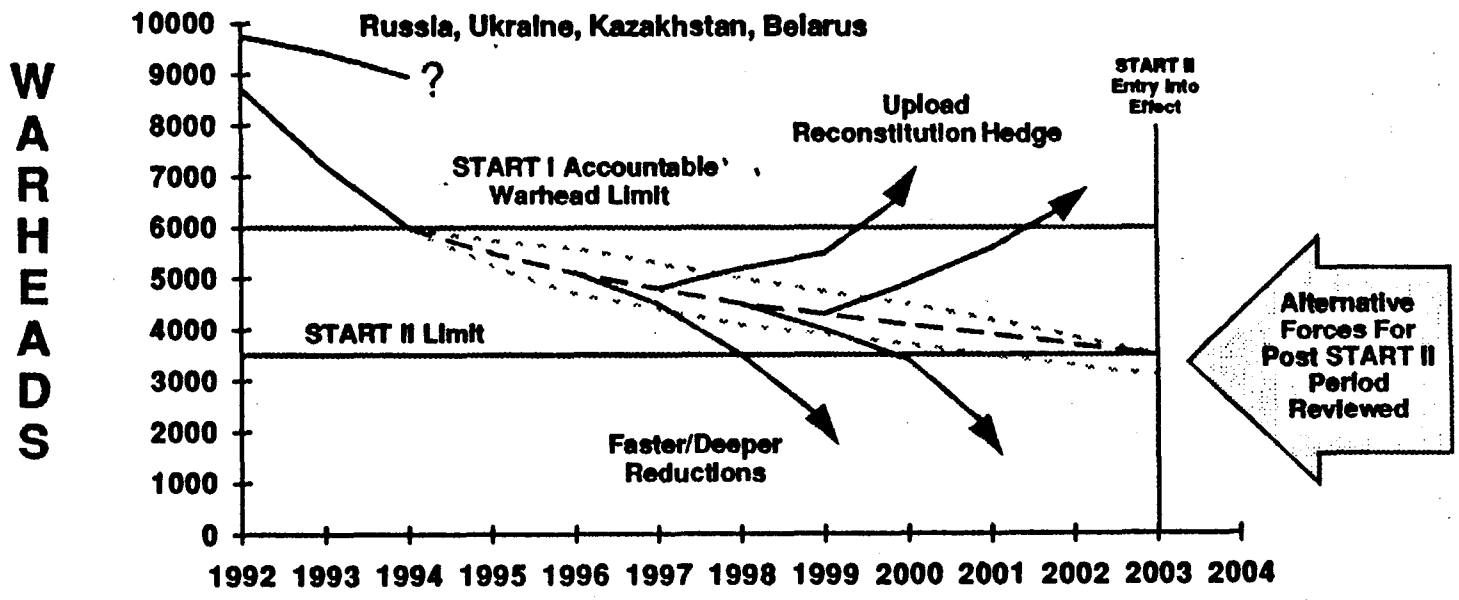


Adjusted Nuclear Posture



Part III:
Strategic Forces

Force Structure Paths:
Protecting Options In An Uncertain World



Military Requirement for US Strategic Nuclear Forces

- Force plans for 2003:
  - Based on projected military requirements
  - Assume implementation of START I and START II
- Capabilities of Former Soviet Union (FSU) remain primary concern
  - Do not target Russia (or anyone else) today, *but* . . .
  - Must be prepared for possible emergence of hostile government in Russia or failure of arms control process in the FSU

Platform Attributes

- Submarines
  - Survivable ➡ Stability
- Bombers
  - Survivable (when on alert) ➡ Stability
  - Hedge against catastrophic failure of SSBN leg
  - Dual capable--can help in conventional contingencies
- ICBMs
  - Significant upload hedge
  - Ability to strike selectively

Post-START II Force Structure 2003

- SSBNs
  - 14 SSBNs (retire 4)
  - All with D-5 missiles
  - Retain 2 bases (Kings Bay and Bangor)
- Bombers
  - 66 B-52s (28 fewer)
  - Non-nuclear role for B-1
  - No more than 20 B-2s required for nuclear mission
- ICBMs
  - Maintain three wings of Minuteman ICBMs (500/450 missiles)

Options Reviewed to Achieve Faster/Deeper Reductions

- Accelerate implementation of START I/II
  - Seek accelerated FSU warhead removals to START I levels
  - Early deactivation/acceleration of START II implementation with US assistance
- Negotiate new agreement for faster and deeper reductions
- Explore sufficiency of US forces below START II levels....Unilateral reduction

Warhead Upload Hedge

- Must preserve options for uploading/reconstituting US nuclear forces should . . .
  - Political relations with Russia change for the worse
  - START I and START II not be fully implemented
- NPR strategic force capable of providing necessary hedge through
  - START II declaratory RV loading
  - Where possible in near term, maintenance of platforms

Part IV:
Non-Strategic Forces

Non-Strategic Nuclear Force Structure

- USAF Dual Capable Aircraft (DCA)
  - Maintain Alliance commitment
  - Maintain current strength in CONUS and Europe
- USN Carrier DCA and nuclear TOMAHAWK (TLAM/N)
  - Eliminate carrier and surface ship nuclear weapons capability
  - Maintain capability to deploy TLAM/N on SSNs

Part V:
Command, Control, Communications and Intelligence (C3I)

Post-Cold War C3I and Operations

- Cold War nuclear force posture modified
  - Bombers off alert
  - More SSBNs patrolling on "Modified-Alert" rather than "Alert"
  - ICBMs and SLBMs detargeted
  - Reduced command post structure
  - Reduced Airborne Command & Control Ops Tempo (NEACP, TACAMO, ABNCP)
- Nevertheless, to maintain deterrence, must carry out key missions
  - Early warning
  - Threat assessment
  - Connectivity to national leadership
  - Message dissemination
  - Safe, secure force management

Strategic C3I Requirements

- ❒ Continue adequate funding of critical programs
- ❒ Correct existing/projected communication system and tactical warning/attack assessment deficiencies
- ❒ Support intelligence systems which provide timely information and threat characterization warning indicators

Part VI: Infrastructure

Infrastructure Requirements

- Replace guidance system and re-motor Minuteman III
- Continue D-5 production past 1995 to maintain missile industrial base
- Fund sustainment of guidance systems and maintain reentry vehicle industrial base
- No specific bomber infrastructure funding necessary for nuclear mission

Infrastructure Requirements (Cont)

- DoD requirements to DOE
  - Maintain nuclear weapon capability (without underground nuclear testing or fissile material production)
    - Develop stockpile surveillance engineering base
    - Demonstrate capability to refabricate and certify weapon types in enduring stockpile
    - Maintain capability to design, fabricate, and certify new warheads
    - Maintain science and technology base
  - Ensure tritium availability
  - No new-design nuclear warhead production

Part VII:
Safety, Security, and Use Control

US Nuclear Safety, Security, and Use Control

- No nuclear weapons remain in the custody of US ground forces
- Naval NSNF no longer deployed at sea
- Strategic bombers taken off day-to-day alert
- Since 1988, total active stockpile reduced by 59% (79% by 2003)
  - Strategic warheads reduced by 47% (71% by 2003)
  - NSNF warheads cut by 90%
    - NATO stockpile cut by 91%
- Storage locations reduced by over 75%
- Personnel with access to weapons or control cut by 70%

US Nuclear Safety, Security, and Use Control Recommendations

- ❒ Upgrade coded control device (CCD) components on the B-52 and Minuteman III
- ❒ Retire Minuteman W-62 warhead
- ❒ Optimize number of accident/incident teams
- ❒ Continue implementation of FARR recommendations by seeking alternatives for those recommendations that test moratorium may preclude
- ❒ Complete Trident CCD in 1997 (means system level coded control devices or PALs will be on all US nuclear weapons by 1997)
- ❒ Implement a regular and realistic nuclear procedures exercise program with participation by senior DoD civilian and military leadership

Part VIII: Initiatives

Counterproliferation Initiatives

- Develop effective theater defenses against ballistic missile and air-breathing threats
- Enhance conventional capabilities to counter the proliferation threat and support funding for principal Deutch Committee report recommendations
  - Improved real-time detection and characterization of BW/CW agents
  - Underground structures detection and characterization
  - Hard underground target defeat, including advanced non-nuclear weapons producing low collateral damage
- Provide DoD capabilities in support of UN and other international non-proliferation efforts
- Fully implement nuclear arms control agreements and support NPT, BWC, and CWC
- Continue assistance to FSU to enhance safety and security of nuclear weapons

Initiatives Considered for Improving Russian Safety, Security, and Use Control

Forces

- ❑ Further NSNF reductions
- ❑ Accelerating removal of warheads down to START II levels
- ❑ Further SNF reductions beyond START II
- ❑ Removing warheads from all ICBMs

Operational Practices

- ❑ Cooperative warning and verification of alert status
- ❑ Delaying ICBM/SLBM launch ability

Weapon Stockpile

- ❑ Stockpile data exchange
- ❑ Transparency/acceleration of warhead dismantlement
- ❑ Stockpile inventory cap
- ❑ Storing weapons/material under international custody

Part IX: Summary

Conclusions

- Post-Cold War environment requires nuclear deterrent
  - Rebalanced Triad
  - START II levels remain in US interest until START I implementation complete, Russia nears START II levels, and we're confident of Russia's future
- Major reductions and cost savings underway
  - US forces will be smaller, safer, more secure and maintained at lower alert rates
  - Reduce infrastructure, but maintain people and technical base
- US Nuclear Posture must help shape future
  - Create world in which role of nuclear weapons reduced
  - Stem proliferation
  - Preserve options if reform fails in Russia
  - Maintain good stewardship
- Difficult but vital challenge for US Posture is to both lead and hedge

Main Results of the NPR

- Strategic Forces
  - No more than 20 B-2 bombers required for nuclear role
  - Reduce B-52 bomber force (94 to 66)
  - Reduce Trident submarine fleet size from 18 to 14; but modernize SLBM force for very long service life by equipping all submarines with D-5 missiles
  - Maintain single warhead Minuteman III ICBMs (500/450)
  - Maintain flexibility to reduce further or reconstitute
- Non-Strategic Nuclear Forces
  - Maintain European NSNF commitment at current level (less than 10% of Cold War level)
  - Eliminate nuclear weapons capability from US Navy surface ships
    - Eliminate nuclear DCA capability from aircraft carriers
    - Eliminate nuclear cruise missile capability from surface combatants
  - Retain nuclear cruise missile capability on submarines
  - Retain land-based dual-capable nuclear aircraft capability

Main Results of the NPR (Cont)

- Safety, Security, and Use Control
  - Equip all US nuclear weapons systems, including submarines, with coded control devices or PAL by 1997
  - Upgrade coded control locking devices on Minuteman III ICBMs and B-52 bombers
  - Conduct regular NCA procedural exercises
- Infrastructure
  - Stockpile stewardship "customer plan" for DoE
  - Sustain ballistic missile industrial base by Minuteman III sustainment and D-5 production
  - Sustain reentry vehicle and guidance system industrial base
- Command, Control, Communications, & Intelligence and Operations
  - Continue adjustments to post-Cold War alert/operational requirements
  - Support selected C3I programs for assured NCA survivability and continuity
- Threat Reduction and Proliferation
  - Support Cooperative Threat Reduction program to promote steps to prevent unauthorized/accidental use or diversion of weapons or materials from/within the FSU
  - Support counterproliferation initiative to provide conventional responses to use of WMD in regional conflict