### Nuclear Proliferation: One a Decade, Or One a Year?

And does it matter for U.S. "strategic" weapons programs?

Center for the Study of Weapons of Mass Destruction

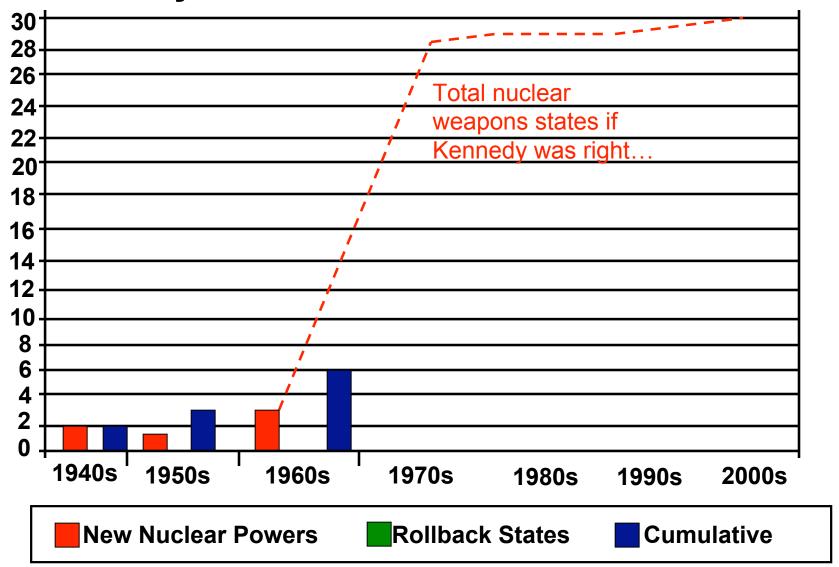
National Defense University

25 January 2007





### Yesterday's Fear...

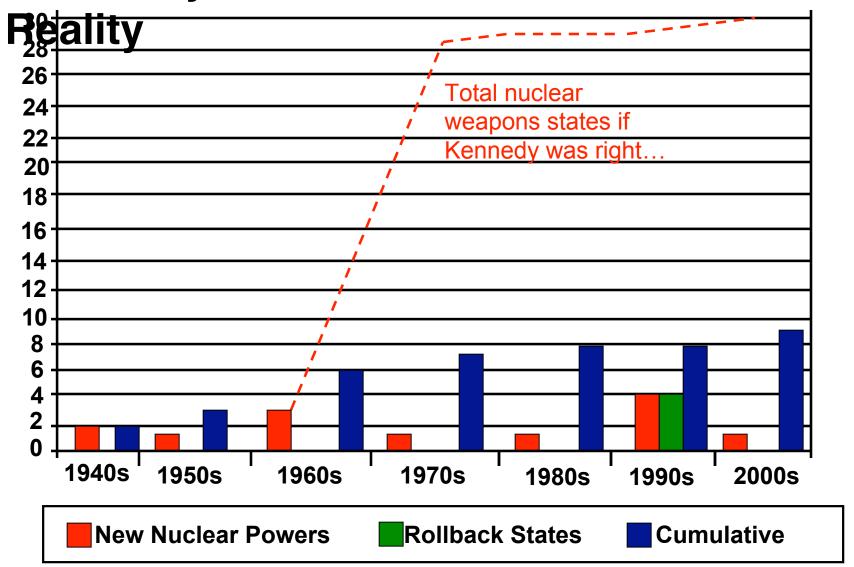






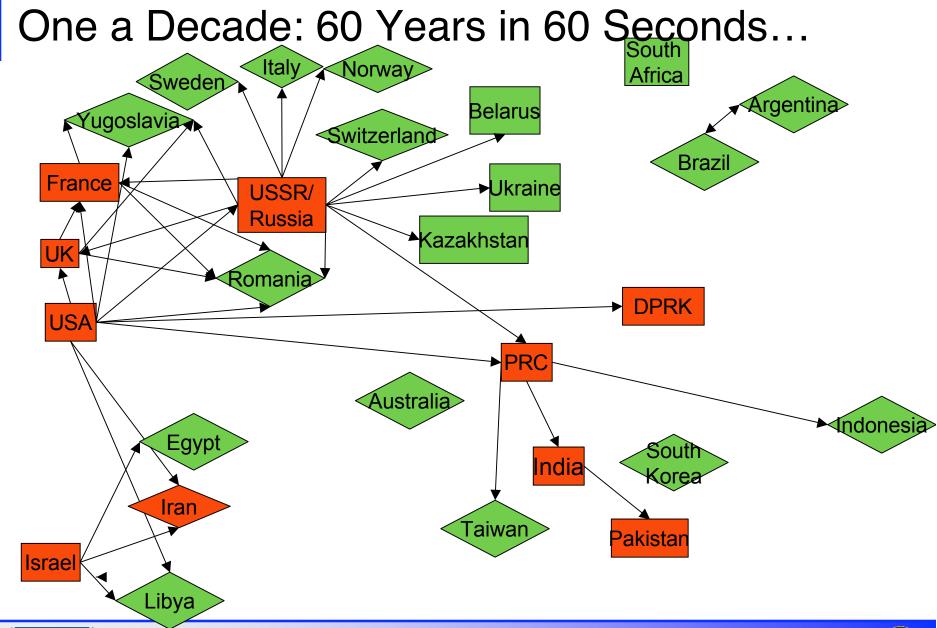
### Yesterday's Fear...

#### ...and the













### Why reality was different

- Kennedy nightmare was probably an exaggeration ab initio
  - Brutal period of Cold War
    - Berlin
    - Summit failures
    - Cuban Missile Crisis
  - U.S. political elites saw all international security problems through lens of atomic weapons
  - Desire for political initiative to address proliferation problem
- Most parties interested in proliferation probably needed technical help—U.S. and USSR concluded proliferation was harmful to their interests; so, the two powers most able to help wouldn't
- A period or decolonization/wars of national liberation
  - AK-47 was of more value than the A-bomb
- Above all, we worked very hard to make it not happen...
  - Created alliances
  - Extended deterrence
  - Created a non-proliferation regime
  - IAEA
  - Fought tech transfers
  - Coerced allies when needed...





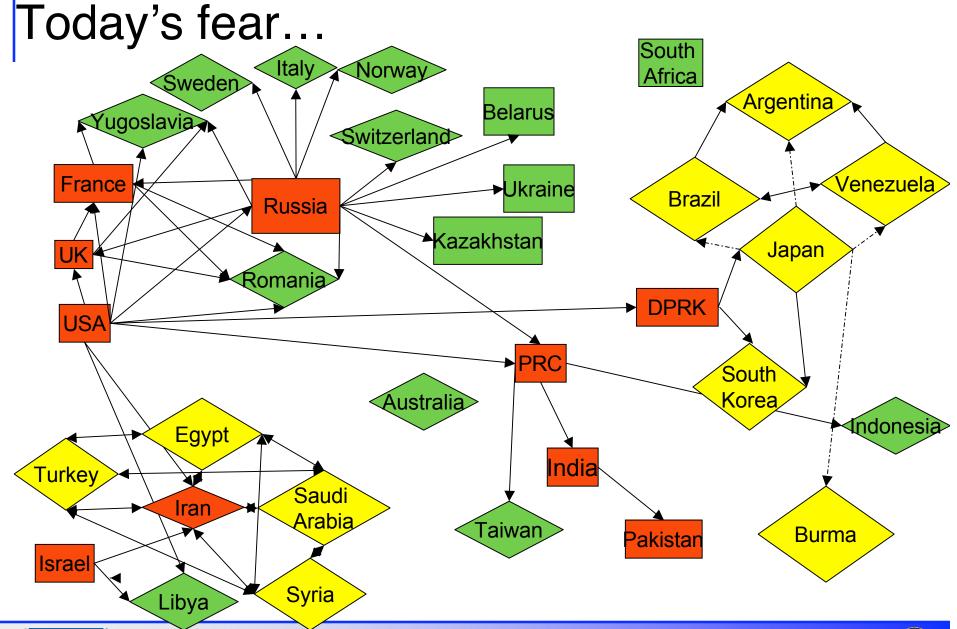
### Today's Trends:

#### [What We Know and What We Don't Know]

- "Inevitable march of technology"
  - More and more states have nuclear know-how and capability
    - Makes potential rapid shifts in intent inherently dangerous
  - Most are not NW risks today; but a few are, and some have increasing intent
- Policymakers like "surfers on the shore"
  - We tend to look only at the "most important" wave (that is, the nearest one), but waves (trends) farther out may in the long run be more important and more amenable to policy initiatives.
- Enduring American military dominance
  - Allies often prefer to rely on U.S.
  - Potential adversaries see need to balance conventional U.S. military power
- NPT Regime is under severe stress
- Increasing elite and popular support abroad for "things" nuclear
  - Spans everything from nuclear weapons to nuclear power as symbols of status and national pride and unity.
- Continuation of severe regional conflicts in developing world







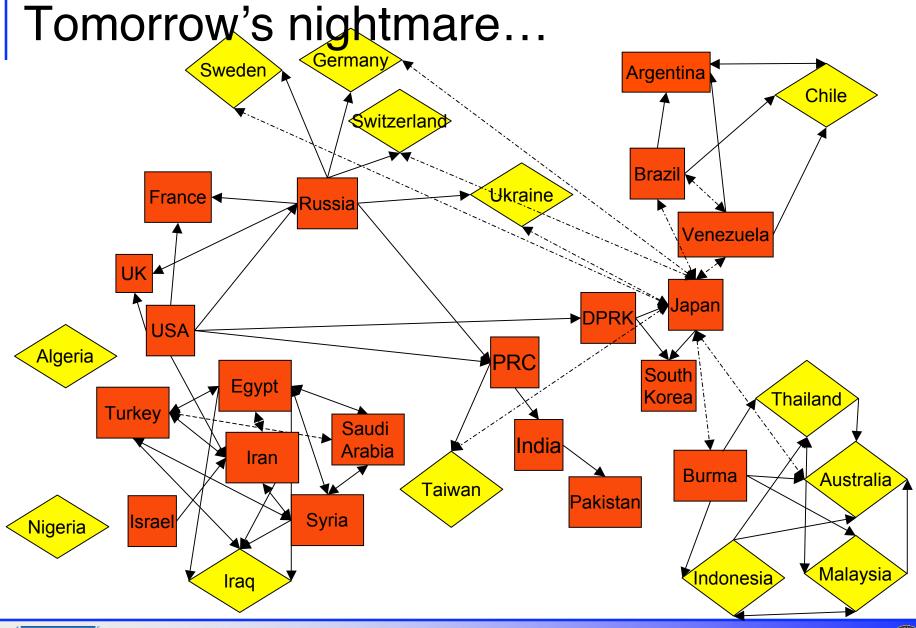


### Near term, the sky is not falling, but...

- Nuclear restraint "holding" today, but tenuously
- Other than North Korea and Iran, no new states believed in active pursuit of NW by 2011 – no near-term "hyperproliferated" world
- 10 countries deemed highly reactive to negative developments (in Iran, DPRK and the global nonproliferation regime) and are the "states most at risk" of "roll-forward"
  - Argentina, Brazil, Burma, Egypt, Japan, Saudi Arabia, South Korea, Syria, Turkey, and Venezuela
- Half of these "states most at risk" are US Friends/Allies, thus increasing the number of tools at our disposal
- Experts believe that countries' decision-making regarding nuclear weapons is subject to outside influence
  - Foreign Pressure, Impediment to Development, and International Standing consistently in the top 5 factors most likely to induce rollback
- Prospects for secondary reaction and nuclear competition deemed high in ME and EA









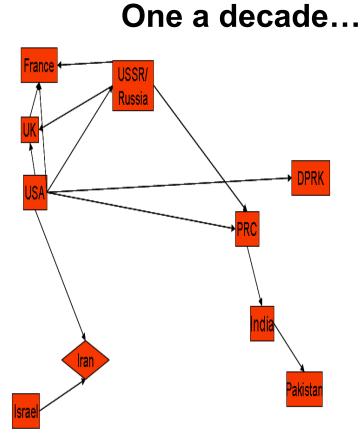
# Here's How to Guarantee Tomorrow's Nightmare

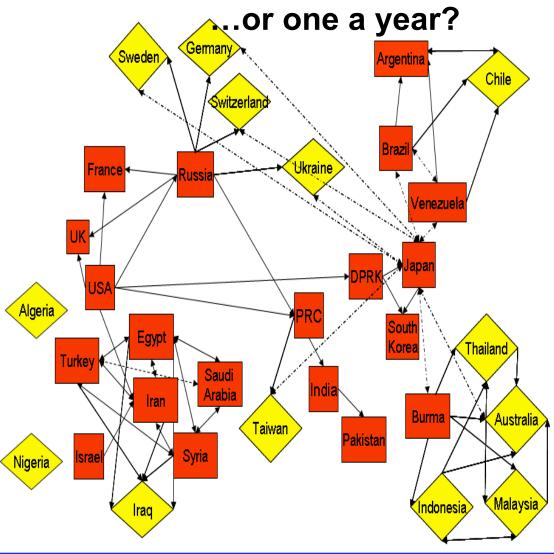
- Lose Japan
- Ignore the Second Wave
- Abandon Nonproliferation Efforts
- Let Nuclear Use Succeed
- Neglect Good Behavior
- Treat Strategic Weapons only as a Technical Matter





### So which reality will it be?





So does any of this matter for "Strategic" Weapons in the 21st Century?





# So does any of this matter for "Strategic" Weapons in the 21<sup>st</sup> Century?

- Does U.S. policy on strategic weapons facilitate the much more proliferated world or inhibit it?
- Does the nature of the U.S. stockpile make any difference whatsoever for the future of proliferation?



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# So does any of this matter for "Strategic" Weapons in the 21st Century?

It's your turn

- Does U.S. policy on strategic weapons (conventional and nuclear) facilitate the much more proliferated world or inhibit it?
- Does the nature of the U.S. nuclear stockpile make any difference whatsoever for the future of proliferation?
- How would a more proliferated or less proliferated world affect US strategic (conventional and nuclear) weapons programs, postures, and policies?
- Is the current nuclear stockpile sufficient to support U.S. interests in a much more proliferated world?
- Does a more proliferated world devalue non-nuclear strategic capability?

To answer these questions requires us to return to first principles about strategic weapons:

Why do we have them? What do we want to accomplish with them?

What characteristics do they need to have?





### Key questions/ideas from discussion

- Strategic Weapons: Why do we need them?
  - Refresh our thinking and rebuild consensus about the fundamental political and military role of nuclear weapons
  - Some obvious roles: deter/dissuade rivals; reassure allies
- What's new?
  - More diverse set of threats
    - Globalization: Does it matter?
  - Increasing use of asymmetric counters
  - Threat of terrorist acquisition and use of WMD constitutes new and tangible threat
  - Increasing ability of nonnuclear weapons to fulfill tasks once thought to require nuclear weapons
  - Larger number of states with higher intent and greater capability
- We reacted to proliferation nightmares
- US primacy (conventional and nuclear) cuts both ways
  - So, we need to be able to reassure allies and dissuade our rivals
- US capabilities, including nuclear guarantee, are essential for reassuring US allies and preventing the nightmare world
  - Characteristics of nuclear forces may be secondary, within broad limits
- Article VI matters...
  - Sustaining the legitimacy of the NPT regime
  - Shaping the psychology of potential proliferators and nonproliferators
  - For generating political support abroad and at home
- Game Changer
  - Nuclear use





### The Challenges We Face

- Real fear of runaway proliferation
  - New avenues of proliferation
  - Possible growth of regional, medium-sized nuclear powers
  - Nihilistic terrorists
  - States of concern with nuclear weapons
- Questions about established nuclear powers
- Increasing interests in "things" nuclear abroad... yet continuing nuclear allergy in the US and much of Europe
- Misperceptions about and disagreements with what we're doing with our strategic weapons
- Multiple complex strategic interactions





### Final Thoughts

- Numerous changes in the security environment since advent of nuclear weapons, an environment in which there was reasonable consensus on the role of nuclear weapons: primacy, deterrence, stockpile, etc.
- In the current multipolar environment, no consensus on the proper role for strategic weapons
- Strategic environment continues to evolve, but does this change the fundamental questions?



### Back up/former slides





# Remember why nuclear proliferation is bad... and what impact it had on force posture and planning

- The U.S. decided proliferation was a bad thing, because...
  - There was no defense against nuclear weapons
  - Proliferation among U.S. allies was bad, because U.S. might be drawn into nuclear war by ally acting hastily
  - Proliferation among Third World/WP/PRC/other communist powers was bad, because it potentially shifted nuclear balance and increased likelihood of nuclear war
  - Proliferation was bad generally, because risk of nuclear war increased with number of nuclear actors (game theorists)
- When U.S. strategic weapon inventories were large (that is, during most of this historical period) and the posture was focused on a superpower threat, proliferation had little impact on our strategic force posture thinking. Indeed, proliferants were lesser included cases. Now that inventories are smaller and posture more diffused, we need to ask if what impact proliferation might have on strategic force posture and planning.
- But...not all shared the conclusion that proliferation is a bad thing (Waltz, etc.)





### The Historical Record

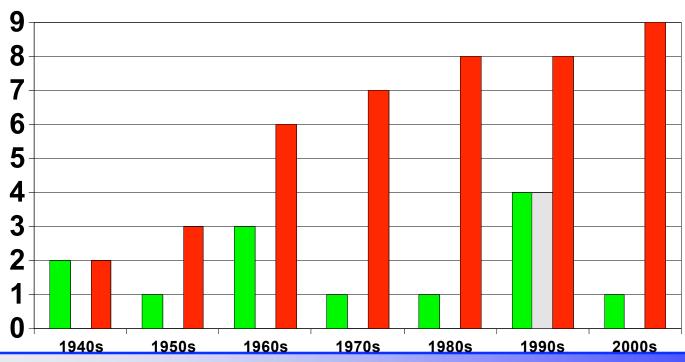
- 1940s: U.S. and USSR
- 1950s: UK
- 1960s: France, China, Israel
- 1970s: India
- 1980s: South Africa\*
- 1990s: Pakistan [FSU states\*]
- 2000s: DPRK
- 2010s: Iran?





# Rollback Matters: Cumulative Numbers

- New Nuclear Powers □ Rollback States
- Cumulative







#### "Below the Surface" Rollback

#### Successes

- Since 1958 there have been 18 cases of nuclear rollback (including 4 from states\* with constituted weapons).
- 1950s: Norway, Italy
- 1960s; Sweden, Egypt, Indonesia
- 1970s: Australia, Taiwan, Switzerland
- 1980s: Yugoslavia, South Korea, Argentina, Brazil, Romania
- 1990s: South Africa\*, Belarus\*, Kazakhstan\*, Ukraine\*
- 2000s: Libya

...and many that never "rolled forward."





# One a decade, or ten a year? Catalysts & Inhibitors

- The Japan Paradigm (high capability, ambiguous intent)
  - If it's a "Japan," who cares?
  - If its "legal," why not?
  - Create "Japans," win the war
- Triggers and safeties?
  - Triggers: Iran, Japan, Brazil, Nigeria
    - Safeties needed against cascade failure
  - Safeties: containment, deterrence, alliances, incentives for good behavior
  - US benign neglect: trigger, safety or both?
- Bolt-out-of-the-blue? (Paradigm shifting events)
  - Candidate: USE of nuclear weapons
    - More likely to tip balance wrong way: Schelling's winners/losers
  - Candidate: nuclear disarmament
    - More likely to tip status quo right way: no more haves, only have-nots
- More rollback (two or more)
  - India, Pakistan, DPRK, Iran, Israel
- Every Civilization Gets Its Bomb (Latin America? Africa?)
  - Iran paradigm or Japan paradigms?
  - What role for concert of Great Powers (P-5)?





#### Some questions that need to be answered

- What do we do if...
  - We're struck by a terrorist bomb and we can't attribute it?
  - We're struck by a terrorist bomb and we can attribute it...who do we nuke?
  - What happens if we know of a state sponsor, do we nuke them?
  - What happens if a terrorist group bombs an ally? We can't attribute? We can attribute?
  - Are we comfortable that our present strategic forces give us all the options we need?



### The Historical Record

40s: U.S. /USSR

■ 50s: UK

60s: France, China, Israel

■ 70s: India

80s: South Africa\*

90s: Pakistan [FSU states\*]

■ 00s: DPRK

■ 10s: Iran?

