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New START Expired: What Now?

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New START – what's gone?

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- ❑ Reductions to 1,550 deployed strategic warheads, 700 launchers
- ❑ Data exchanges, on-site inspections
- ❑ Joint commission for resolving disputes
- ❑ Ban on interfering with NTM
- ❑ Definitions, counting rules
- ❑ Various specific limitations
 - E.g., ban on converting ICBMs or SLBMs to BMD interceptors
- ❑ Preamble: “interrelationship” between offensive and defensive strategic arms
- ❑ No limits on non-strategic weapons or on buildup of BMD



Source: U.S. Department of Defense

What happens next?

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- ❑ Likely (not yet inevitable) U.S. buildup
 - ⌘ Could “upload” warheads in storage onto existing missiles
 - ⌘ Few hundred would make possible 2-1 targeting of BOTH Russian and Chinese ICBM silos, other nuclear targets, in “damage-limiting” strategy
 - ⌘ Nuclear SLCMs planned (probably <100)
 - ⌘ Discussion of other new weapons – stand-off missiles for DCA, possible nuclear hypersonics, intermediate-range ground-based weapons...
 - ⌘ U.S. not well-positioned to build more ICBMs, SLBMs, bombers, warheads
- ❑ Russia likely to respond to U.S. buildup
 - ⌘ Exotic new weapons are already a response to U.S. missile defense (and symbolism of technical strength)
- ❑ China may further expand its buildup
 - ⌘ Response to U.S. BMD, other damage limitation efforts
 - ⌘ Also perceived political value, and more flexibility

Meanwhile... nuclear testing?

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- ❑ CTBT reached 1996, never entered into force
 - ⌘ Rejected by U.S. Senate, 1999
 - ⌘ Moratorium on nuclear tests – everyone but North Korea
- ❑ U.S. charges China and Russia have been violating moratorium
 - ⌘ New charge of Chinese “yield-producing” test in 2020, preparations for tests involving yields of “hundreds of tons”
 - ⌘ Long-standing charge Russia conducting small “supercritical” tests
 - ⌘ Little public evidence
 - ⌘ Trump says U.S. will carry out tests on “equal basis”
- ❑ China and Russia would carry out full-scale tests if U.S. does; would make opposing North Korean testing more difficult
 - ⌘ China, North Korea would be major beneficiaries – have conducted far fewer tests than U.S. and Russia
 - ⌘ India, Pakistan might resume testing...

Why care? Nuclear arms control has offered key security benefits

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- ❑ For >50 years, arms control has provided:
 - ⌘ Strategic force predictability
 - ⌘ Transparency
 - ⌘ Ability to discuss key strategic concerns
 - ⌘ Reduced perceptions of threat
 - ⌘ Likely reduced the risk of nuclear war
 - ⌘ Numbers alone not the most important aspect
- ❑ Refusal to engage in arms control increases perception of threat, perception of hostility – thereby increases risk of crises



Source: U.S. Air Force

Criticisms of arms control

- ❑ From a hawkish view
 - ⌘ Limits U.S. freedom of action
 - ⌘ Creates sense of complacency that undermines needed arms efforts
 - ⌘ Russia always cheats
 - ⌘ Chinese forces, Russian non-strategic forces not limited
- ❑ From a dovish view
 - ⌘ Used to get votes for larger arms programs, justify “everything allowed”
 - ⌘ Never achieved really deep, irreversible reductions



A Soviet inspector examines a U.S. cruise missile

Source: U.S. Department of Defense

New START history

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- ❑ 2010: signature, ratification
- ❑ 2011: Entry into force – 10-yr term
 - ⌘ Option for one 5-yr extension
- ❑ 1st Trump term: brief discussions of follow-ons, no action on extension
- ❑ 1/21: Biden, Putin agree on 5-year extension, stability talks
- ❑ 2022: Talks cut off after Russian full-scale invasion of Ukraine
- ❑ 2023: Russia “suspends” participation, rejects inspections, data exchanges, stability talks



Source: *The Economist*

- ❑ 2025: Putin proposes both sides remain in central limits, resume talks; no formal US response
- ❑ 2026: Treaty expires, US says bilateral restraint no longer possible

Strong incentives to avoid an unlimited three-way nuclear arms race

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- ❑ Would make all parties poorer, no more secure
- ❑ With no limits on adversary forces, "worst-case" planning drives buildups further – likely worse in 3-way competition
 - ⌘ Makes planning strategic forces much more difficult
 - ⌘ New weapons could destabilize balances
- ❑ U.S.:
 - ⌘ Struggling to implement current modernization
 - ⌘ Limited ability to "race" beyond limited upload (add'l subs would go to sea in late 2040s...)
- ❑ Russia: likely to respond to U.S. buildup
 - ⌘ Economy on war footing, able to produce missiles, warheads – but 1/10th U.S. economy, needs for conventional forces
- ❑ China:
 - ⌘ Strong manufacturing ability, but limited value of unrestrained buildup

But huge challenges in meeting the common interest in nuclear restraint

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- ❑ Intense competition, hostility, makes talks, accords difficult
- ❑ Chinese buildup ongoing – unlikely to limit before “completion”
- ❑ 3-way (or more) competition, talks, far more difficult to manage
 - ⌘ Russia says “if China included, UK and France also”
- ❑ US insists on damage limitation, rejects limits on BMD
 - ⌘ Russia and China want survivable, penetrating deterrents
- ❑ Wide range of non-nuclear technologies complicating balances
 - ⌘ BMD, precision conventional, space/counterspace, AI, cyber, hypersonics...
- ❑ U.S. wants limits on Chinese forces, limits on Russian non-strategic forces and new types, not offering much in return
- ❑ Elite support for arms control undermined by years of critiques, noncompliance, lack of concern over nuclear dangers

Trump administration arms control policy – just announced

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- ❑ DO seek “fewer nuclear weapons” in the world
- ❑ BUT, China’s buildup renders bilateral agreements “obsolete”
 - ⌘ “would be irresponsible and short-sighted to extend limits with the Russian Federation bilaterally and not account for these realities”
- ❑ Seek new agreement that limits US, Russia, China (at least)
- ❑ Seek limits on both strategic weapons and Russia’s large non-strategic stockpile -- also limit Russia’s new delivery systems
- ❑ Start with accusations of cheating
 - ⌘ Assert Russian violations of New START, PNIs, test ban (previous violations led to U.S. pullouts from INF, Open Skies in Trump’s 1st term)
 - ⌘ New accusation of Chinese “yield-producing” test in 2020
- ❑ No discussion of willingness to negotiate on Russian, Chinese areas of concern

From Putin's perspective: next steps in arms control?

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- ❑ Imagine: it's 2027, talks on a new arms control agreement are underway
- ❑ The U.S. wants
 - ⌘ Continued cap on strategic forces
 - ⌘ An accord that limits all warheads – including Russian tactical weapons
 - ⌘ On-site inspections at warhead sites
 - ⌘ Inclusion of new Russian weapon types in the treaty's limits
 - ⌘ But the U.S. refuses any serious limits on missile defenses (including space-based ones) or precision conventional strike capabilities
- ❑ Should Russia agree?

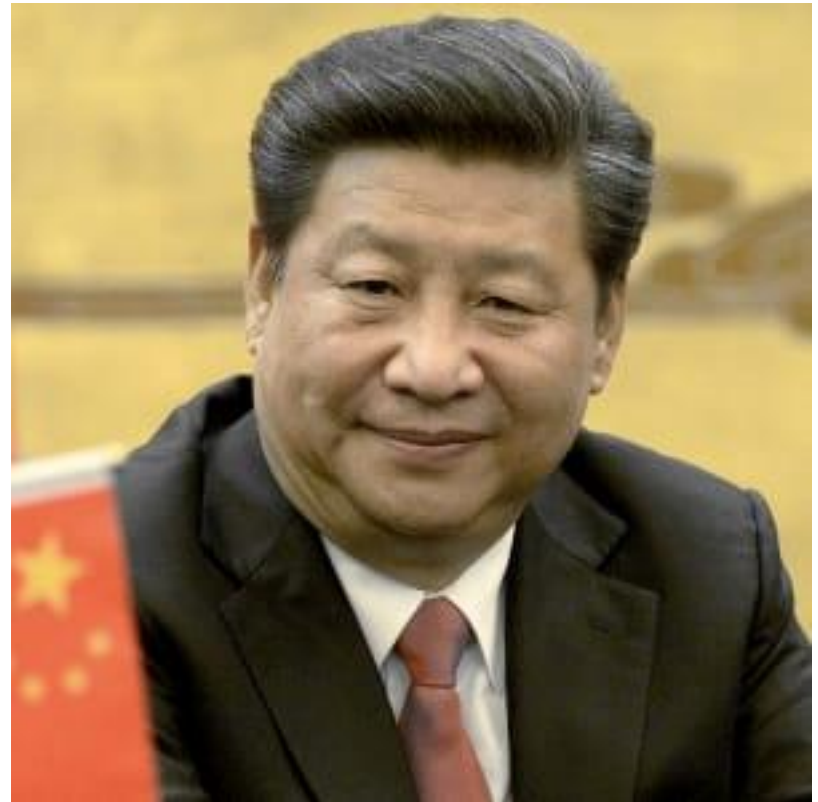


Source: kremlin.ru

From Xi's perspective: participate in arms control?

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- ❑ Imagine: it's 2027
- ❑ The U.S., concerned about China's growing (but still small) arsenal, wants China to agree to limits
 - ⌘ China doesn't want to be formally locked into an inferior position
 - ⌘ But China wants to be seen as an advocate of disarmament, and would like limits on U.S. defenses
 - ⌘ U.S. is unwilling to constrain missile defenses that China sees as threatening its deterrent
- ❑ What limits, if any, should China agree to?
 - ⌘ Formal, informal possibilities



Source: Muneyoshi Someya/Getty Images

Why deal with Putin's Russia?

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- ❑ Arms control has not prevented Russia from invading Ukraine, committing a long list of war crimes, drone intrusions/sabotage/murder in Europe – shouldn't they be isolated?
- ❑ Moreover, Putin's Russia has violated many arms control accords
- ❑ Arms control is something you do with countries you fear – to limit the forces pointed at you
 - ⌘ US never bothered with arms control limits on UK, France
 - ⌘ Arms control ideas invented just after Soviets seized Eastern Europe, crushed democratic dreams there; SALT I just after invasion of Czechoslovakia, while U.S. troops being killed by Soviet-supplied forces in Vietnam; START as Soviet troops were being killed by U.S.-supplied forces in Afghanistan...
 - ⌘ Long-standing tension – punish adversary states for bad behavior, or try to reduce hostility, limit arms, reduce danger of conflict
 - ⌘ Despite all else, common interest in survival

The case for a "strategic pause" to explore options before a buildup

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- ❑ Putin, 9/25: we'll stay in central limits for 1 year if you will
 - ⌘ No verification, no data exchange included
- ❑ Not great: one year doesn't provide much predictability, without verification, growing uncertainty on warheads on missiles
- ❑ BUT: Provides time to explore alternatives before buildup is "locked in" – pursue talks with Russia, and with China
 - ⌘ Possible, but more difficult, to reverse buildup after it's underway
 - ⌘ Could push for 2-3 years, voluntary visits to reduce uncertainties
 - ⌘ Use time to explore future restraints, risk-reduction measures
 - ⌘ Doesn't constrain US long-term security options
- ❑ Such an accord may still be possible
 - ⌘ Reports Witkoff, Kushner discussing – though DiNanno clearly rejects
 - ⌘ Likely Trump-Putin summit this year

Nuclear arms treaties may be difficult to achieve in the future

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- ❑ U.S. Constitution requires approval by 2/3 of the Senate
- ❑ Decades of ratification difficulty
 - ⌘ SALT II never ratified
 - ⌘ CTBT rejected, never brought up for another vote
 - ⌘ Most NWFZ protocols never ratified...
 - ⌘ Increased polarization making ratification more difficult
- ❑ Ironically, only Trump might get a nuclear arms treaty Vladimir Putin and 2/3 of the U.S. Senate would both agree to



Source: kremlin.ru

But there are many alternatives to treaties for nuclear restraint

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❑ Executive agreements

- ⌘ Some legally binding, some politically binding
- ⌘ Can provide detailed restraints, or outline broad principles
- ⌘ E.g., SALT I “Interim Agreement”; JCPOA; launch notification accords...

❑ Political commitments

- ⌘ Not legally binding, but some tied to treaties
- ⌘ E.g., START I letters, unilateral statements; NSG guidelines...

❑ Unilateral-reciprocal initiatives

- ⌘ Typically not negotiated in detail in advance
- ⌘ E.g., Kennedy-era test moratorium, 1991-1992 Presidential Nuclear Initiatives, recent commitment not to test direct-ascent ASATs

What approaches to pursue?

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❑ Nuclear risk-reduction agenda

- ⌘ Better crisis communications, mil-mil contacts, test + exercise notifications...
- ⌘ But with no limits on nuclear forces, not likely to prevent a buildup

❑ “Behavioral arms control”

- ⌘ Commitments not to take certain actions, not limits on weapons
- ⌘ May be more applicable to evolving technologies
- ⌘ But Russia (especially) and China often ignore norms – and actions may still be taken in crisis

❑ Nuclear force limits

- ⌘ Offer predictability, help limit arms racing
- ⌘ China says not interested – but arguably in their interest, too
- ⌘ How to balance 3?

What roles for Managing the Atom?

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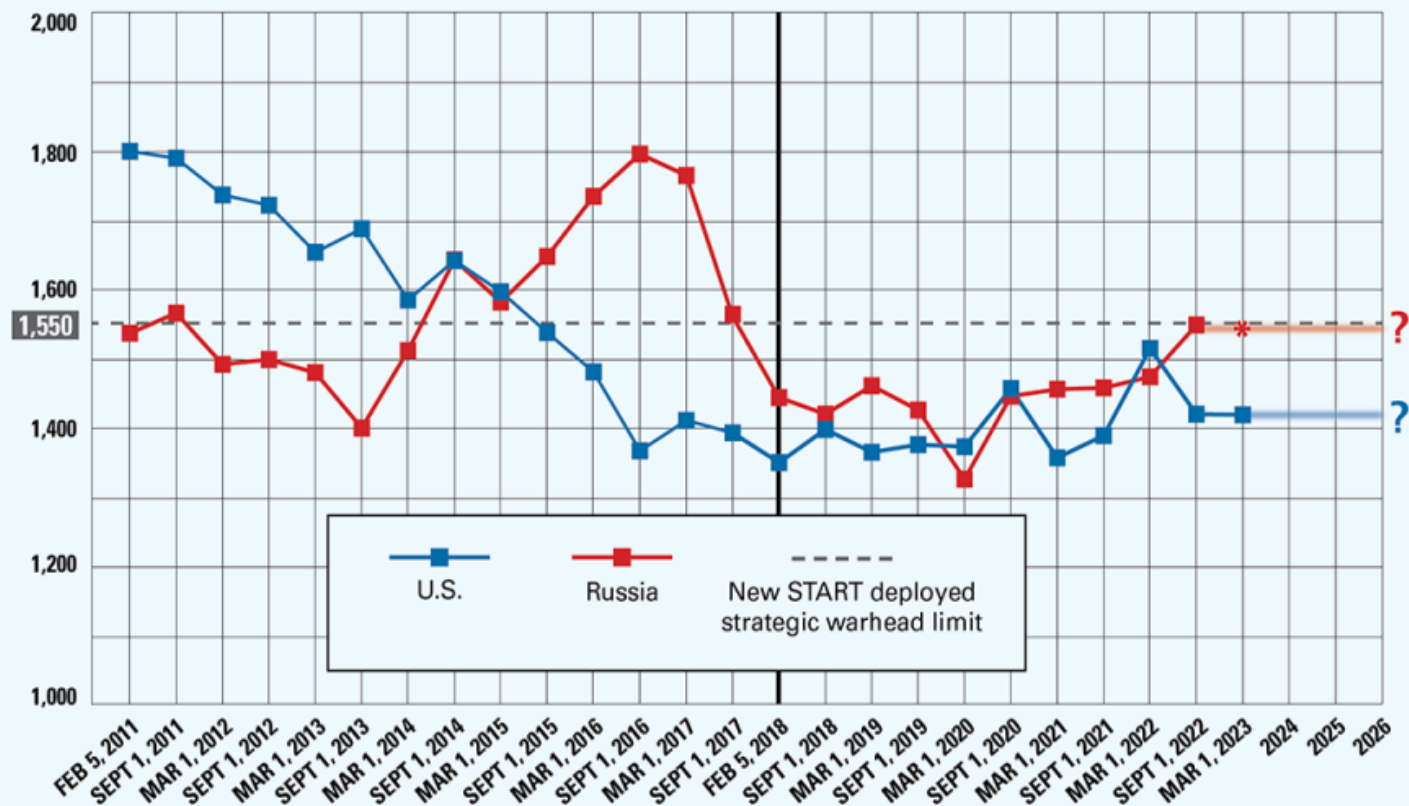
- ❑ Research exploring benefits, risks of nuclear restraint
 - ⌘ What accords accomplished in past, could do in future
 - ⌘ “Applied history” analysis of past accords and talks, lessons for future
 - ⌘ Rebuild, reconsider the case for negotiated restraint
- ❑ Research developing proposals for next steps
 - ⌘ Particular kinds of limits – how they might reduce risk
 - ⌘ Particular formats and approaches
 - ⌘ Exploring obstacles, approaches to overcoming them
- ❑ Fostering dialogue and understanding
 - ⌘ Track II, Track 1.5 dialogues
 - ⌘ Research on approaches, concerns in Russia and China
- ❑ Outreach to policymakers, the press

Backup slides if needed...

New START 2011-2026

The New Strategic Arms Reduction Treaty started a countdown to deployment limits that took effect February 5, 2018. The uneven path toward the limits reflects the nuclear weapons modernization programs implemented by both nuclear powers.

The treaty permits each side to have no more than 1,550 warheads on deployed intercontinental ballistic missiles (ICBMs), deployed submarine-launched ballistic missiles (SLBMs), and deployed heavy bombers assigned to nuclear missions (each heavy bomber is counted as one warhead).



*On Feb. 21, 2023, Russia suspended implementation of New START and stopped bilateral semiannual data exchanges. The United States made public its deployed warhead figures for March 2023 unilaterally.

The advantages of treaties are real, but not overwhelming

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❑ Agreed specifics

- ⌘ Useful to avoid, manage disagreements
- ⌘ Provided in some treaties (not all), also in some executive agreements, political commitments

❑ Longevity in the face of political change

- ⌘ "Legally binding" accords help – but states still withdraw, or violate, when they perceive that accords do not serve their national interest
- ⌘ Example: Reagan administration abandoned unratified SALT II, but not the ABM Treaty – but then 2nd Bush administration abandoned ABM Treaty

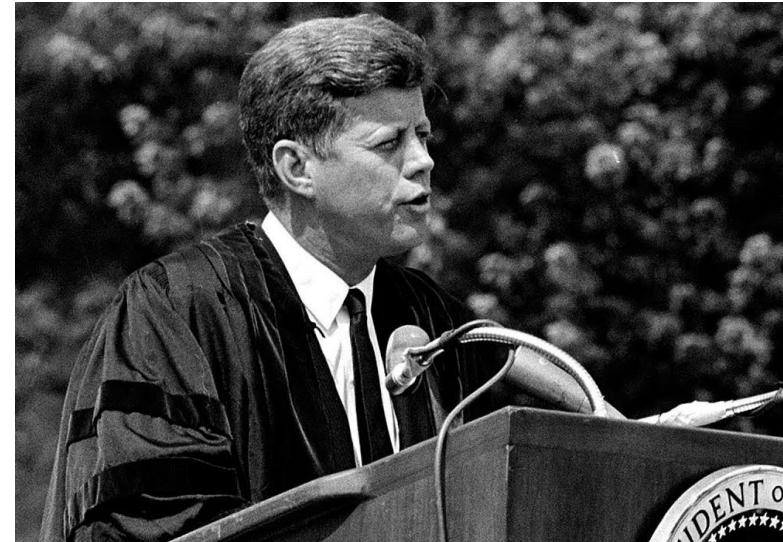
❑ Verification, dispute resolution provisions

- ⌘ Present in some treaties (not all)
- ⌘ Provides specifics for on-site inspections, other verification mechanisms
- ⌘ Some executive agreements could also provide similar provisions

Graduated Reciprocation in Tension-Reduction (GRIT)

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- ❑ Idea: “run the arms race in reverse”
- ❑ One side takes a tension-reducing step unilaterally
 - ⌘ Big enough to be noticed, but small enough not to endanger security
- ❑ Invites the other side to reciprocate – but without specific demands, which might be misperceived
- ❑ Dramatic success for Kennedy after Cuban Missile Crisis – test moratorium, fissile material production cuts, troop pullbacks in Central Europe...
 - ⌘ Similar success with 1991-1992 PNIs



Source: Science/Cristina Albdehuela

Complication 1: Verification

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- ❑ Recent nuclear arms control treaties include detailed verification arrangements
 - ⌘ Numbers, types, procedures for inspections
 - ⌘ Access, legal protections for inspectors
- ❑ Could non-treaty approaches provide similar confidence?
 - ⌘ Include inspection provisions in legally binding executive agreements?
 - ⌘ Rely on limiting items that can be verified without inspections – particularly with ubiquitous satellite sensing, social media...?
 - ⌘ Carry out voluntary “visits,” with agreed procedures, to build confidence?
 - E.g., during Nunn-Lugar era, visits to major fissile material production, processing sites, nuclear weapon sites, more...
 - One proposal: rapid, confirmed disablement of warheads pending dismantlement:
<https://doi.org/10.1080/00963402.1998.11456817>

Complication 2: The U.S. Senate defending its treaty powers

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- ❑ Any non-treaty approach could be seen as undermining the U.S. Senate's exclusive power over treaties
 - ⌘ Senate tends to act to protect its power
 - ⌘ Senate declaration as part of New START ratification: further accords reducing or limiting U.S. forces “in any military significant manner may be made only pursuant to the treaty-making power” in the Constitution
- ❑ Whether Senate will really try to block a non-treaty initiative will depend on the politics of the time
- ❑ U.S. administrations should:
 - ⌘ Brief, work with Senators on both sides of the aisle on arms control issues
 - ⌘ Involve Senators in development of ideas from early on
 - ⌘ Develop, emphasize arguments as to why particular initiatives do not undermine the Senate's constitutional powers

But – good news about nuclear weapons

- ❑ No nuclear attacks for 79 years – remarkable success
- ❑ ~80% of the world's nuclear weapons have been dismantled
- ❑ <5% of world's states have nuclear weapons – same as 35 years ago
 - ⌘ No net increase in 3.5 turbulent decades – amazing success
- ❑ >50% of the states that started nuclear weapons programs gave them up
 - ⌘ Efforts to prevent proliferation succeed more often than they fail
- ❑ >50% of the states that once had potential nuclear bomb material on their soil have eliminated it
- ❑ Nuclear material around the world is far more secure than it was 25 years ago
 - ⌘ Most egregious weaknesses fixed – but more to be done

Helping Russia and China understand the virtues of nuclear restraint

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- ❑ Currently, Russia and China both refusing any arms control talks
 - ⌘ Russia says it won't resume unless the United States abandons Ukraine
 - ⌘ China has never participated, sees no reason to constrain itself
- ❑ Arms control has always been something you do with hostile countries – to increase chance of mutual survival
 - ⌘ Continued while Soviet-backed forces were killing Americans in Vietnam, while U.S.-backed rebels were killing Soviets in Afghanistan...
- ❑ An unrestrained nuclear arms competition is dangerous for all
 - ⌘ High costs, instabilities of new weapons, worst-case planning...
- ❑ United States can:
 - ⌘ Make offers that Russia and China see as serving THEIR national interests
 - ⌘ Use Track 2, Track 1.5 dialogues to explore ideas, build understanding how how restraint could serve Russian and Chinese security interests
 - ⌘ Use unilateral initiatives to bring down the temperature

Multiple stages where “provocation” is an important factor in overall security

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□ Peacetime:

- ⌘ Will particular foreign policy initiatives, weapons deployments, or targeting policies, increase adversaries' incentives to build up their forces or adopt dangerous policies?
- ⌘ Example 1: Fear of U.S. counterforce and BMD capabilities part of the driver for:
 - New Russian weapons;
 - Russian reliance on LOW/LUA;
 - Chinese buildup;
 - possible Chinese shift to LOW/LUA
- ⌘ Example 2: German fears that war was inevitable and enemy capabilities were growing were a key contributor to World War I
- ⌘ Example 3: Russian security and loss-of-status fears from NATO expansion and Ukraine's westward trajectory may have contributed to Russia's brutal aggression against Ukraine

Multiple stages where “provocation” is an important factor in overall security (II)

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❑ Crisis:

- ⌘ Will particular preparations or force deployments be seen as signals of intent to launch a strike? Could they provoke an adversary attack?
- ⌘ Examples:
 - Flying bombers right to the edge of the DMZ
 - Threatening attacks on DPRK leadership
 - Reinforcements sufficient to pose an invasion threat

❑ Conflict:

- ⌘ Actions to destroy, defend against adversary forces may provoke desperation, fear – and perhaps escalation
- ⌘ Example: U.S. drive into North Korea in Korean War, and toward Yalu River, provoked Chinese fears that led to their entry into the war

Decisions need to include broad context – other countries, other national interests...

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- ❑ Example: Decisions about Korea affect security in China, Japan, Russia as well – and reverberate globally
 - ⌘ Example: Will China react to increased ROK-U.S. nuclear cooperation? Will Japan pursue similar nuclear consultations with the United States?
 - ⌘ Example: Future agreements on INF missiles in Asia would have to take ROK, Japanese, Indian, Pakistani missiles into account
- ❑ U.S. decisions – and the reactions of others – may affect not just security, but other aspects of national well-being as well
 - ⌘ Example: Chinese economic sanctions in response to deployment of THAAD
- ❑ Domestic politics will also affect decisions – including risks of crisis escalation – in all relevant parties (even dictatorships)
- ❑ Alliance dynamics will have their effect, too
 - ⌘ Sometimes one side wants the other to be tougher, sometimes not as tough
 - ⌘ Example: 2017 “fire and fury” crisis

Efforts to deter small provocations may increase risks of larger conflicts

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- ❑ The DPRK likely knows that all-out war would be disastrous for the country and the regime
 - ⌘ Initially unintended escalation is the most likely path to nuclear use
- ❑ ROK seeks to deter smaller outrages, such as sinking of the *Cheonan*, or the shelling of Yeongpyong
- ❑ Imposing high costs in retaliation may lead to counter-retaliation – and step-by-step escalation
 - ⌘ Hatred, fear, hostile mis-readings of intentions, time pressure, domestic pressures can all contribute to escalation
 - ⌘ But, globally, most crises do not lead to conflict, most conflicts end without total war
 - ⌘ Maximizing security requires careful attention to escalation risk of each proposed action

Should U.S. nuclear weapons be deployed to the Republic of Korea?

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- ❑ May be seen as adding to credibility of U.S. nuclear threats
- ❑ Unlikely to be an effective deterrent:
 - ⌘ Vulnerable to attack at small number of bases
 - ⌘ Existing forces more effective
- ❑ Likely to provoke extremely hostile DPRK reactions, increase risk of crisis
- ❑ Likely to provoke hostility, pressure from China as well



Source: U.S. Air Force

Are new U.S. nuclear SLCMs needed?

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- ❑ Biden administration opposed; bipartisan support in Congress
- ❑ Targets they could destroy already covered by other weapons
 - ∞ ALCMs, bombs from bombers
 - ∞ Low-yield SLBM warheads
- ❑ Not clear that “non-ballistic” trajectory matters substantially
- ❑ Might increase the risk of DPRK misperception when conventional SLCMs were used



Source: U.S. Navy

How much does the security dilemma drive arms competition?

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❑ One view: “apes on a treadmill”

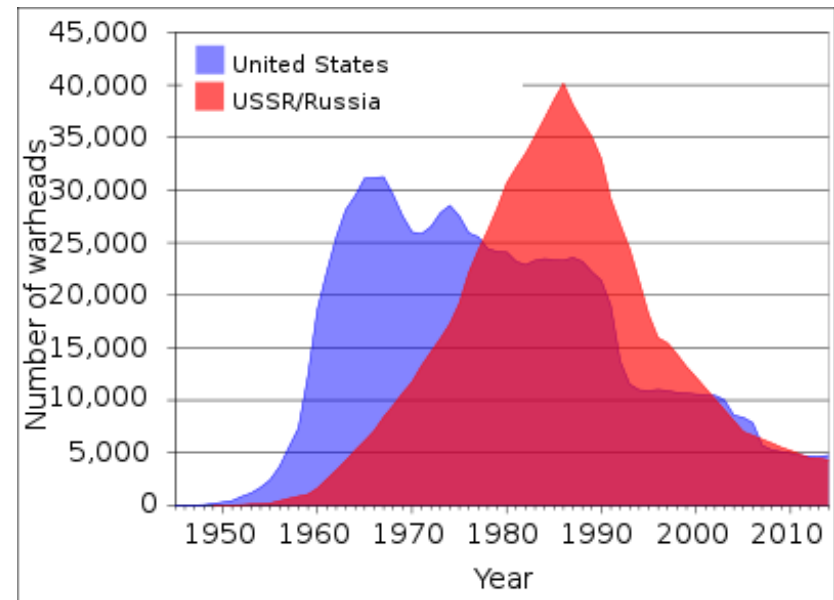
- ⌘ Most arms racing behavior driven by reacting to adversary actions
- ⌘ Crisis and conflict behavior driven in substantial part by fear created by the other side’s actions

❑ An opposing view:

- ⌘ U.S. actions have little effect. Internal drivers – intra-elite politics, industrial interests, etc. –or regime’s innate aggressiveness drive behavior

❑ An intermediate view:

- ⌘ Both are important: Internal actors use adversary actions to make their case



Source: Wikipedia

Considering provocation risks is already a key part of decision-making

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- ❑ Issue of “what will our adversary do in response” is a key element of decisions
 - ⌘ Especially in crises, conflicts
 - ⌘ Each combatant command, for example, carefully considers provocation risks
- ❑ But do such issues receive sufficient focus?
 - ⌘ 1st consideration almost always immediate defense/deterrence impact
 - ⌘ Evidence that military leaders tend to emphasize the offense, and strengthening their forces



Source: White House/Reuters

Proposal II: be prepared to discuss some constraints on missile defense

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- ❑ Russia, China still resent U.S. unilateral withdrawal from the ABM Treaty in 2002
- ❑ Clear that fear of unlimited future U.S. missile defenses is contributing to Russian and Chinese nuclear buildups
 - ⌘ To maximize its own security, U.S. should try to limit that effect
- ❑ Possible to have defenses sufficient for North Korean threat which pose little threat to Russian and Chinese forces
- ❑ U.S. should be prepared to agree to:
 - ⌘ Exchange 10-year plans for missile defenses, agree they won't be expanded without extensive warning, discussion
 - ⌘ 10-year rolling ban on space-based interceptors, beam weapons
 - ⌘ Some limits on number of strategic interceptors such as GBI

Deterrence and reassurance

- ❑ Schelling: “Stop or I’ll shoot” only deters if it includes “if you stop, I won’t shoot”
 - ⌘ Hence, *reassurance* is fundamental to successful deterrence
- ❑ How to reassure an adversary it’s in no real danger unless it attacks?
 - ⌘ Statements not likely to be enough
 - ⌘ Need reassuring behavior as well – e.g., forces, exercises structured only for defense
- ❑ How to send credibly reassuring messages in crisis or conflict?



Source: KCNA

The difficulties of de-escalation

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- ❑ Clausewitz: Conflict tends to escalate
 - ⌘ Winning: victories create new opportunities, can lead a party to escalate
 - ⌘ Losing: Defeats may lead a party to escalate to defend its interests
 - ⌘ Stalemate: This may also lead a party to escalate to break the deadlock
- ❑ Offering reassurance, compromise may be seen as a sign of weakness
 - ⌘ Adversaries may exploit, escalate their demands or their steadfastness
 - ⌘ Domestic audiences may oppose
 - ⌘ Allies and others may adjust view of a country's strength, determination
- ❑ De-escalation efforts will happen in an environment of fear, hatred, misperception, disinformation, time pressure...
 - ⌘ And in democracies, there will be many voices calling for blood

The difficulties of de-escalation (II)

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- ❑ How to credibly reassure – signal that you do not intend to challenge an adversary's vital interests
 - ⌘ Hostility, mistrust, vulnerability to attack, pace of events, environment of disinformation, make it difficult for reassurance to be believed
- ❑ How to reach credible accords that permit an end to fighting?
- ❑ Between nuclear-armed states with survivable forces:
 - ⌘ Total victory – one path to war termination – is not an option
 - ⌘ Greater fear of catastrophe may intensify search for ways out
- ❑ Despite the obstacles to de-escalation, many militarized crises end without war, many wars end with some form of compromise
- ❑ What approaches can maximize the chance of de-escalation?
What preparatory steps in peacetime are important? Can “peace games” – exercises to explore de-escalation – help?
 - ⌘ Rich area for research – understudied

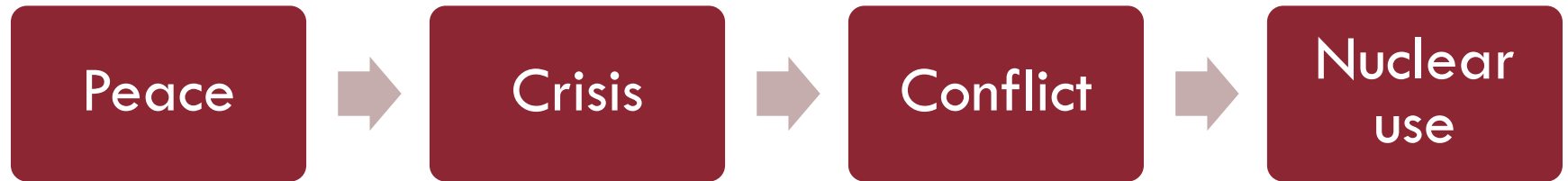
Reducing the risks of both deliberate and inadvertent escalation

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- ❑ Deliberate escalation: “a combatant deliberately increases the intensity or scope of an operation to achieve advantage or avoid defeat” (RAND 2008)
 - ⌘ Deter (by threat of punishment, by denial)
 - ⌘ Reassure: Seek to reduce the perceived cost of not escalating
- ❑ Inadvertent escalation: “a combatant deliberately takes actions that it does not perceive to be escalatory but are interpreted that way by an enemy.” (RAND 2008)
 - ⌘ Limit provocation: By considering provocation/escalation risks of each proposed military action, can decrease the chance U.S. will unintentionally take actions that lead adversaries to escalate
 - ⌘ Clarify U.S. red lines: communicate what steps U.S. would consider to be major escalations
 - ⌘ Deter (by threat of punishment, by denial)

We need risk-reduction action on each step on the pathway to nuclear war

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- ❑ Key step: preventing crises. Any militarized crisis between nuclear-armed states is dangerous – “fog of crisis” raises risks
 - ⌘ Avoiding crises is partly deterrence – but mainly foreign policy
 - ⌘ A more modest foreign policy for a dangerous nuclear era?
- ❑ Preventing escalation from crisis to conflict
 - ⌘ Partly deterrence – partly de-escalation, reassurance
- ❑ Preventing escalation to nuclear use
 - ⌘ Similar issues – but heavier emphasis on deterrence
- ❑ How to reassure, reach resolutions, in the midst of crisis or conflict?

Steps to mitigate the dilemmas

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❑ Reducing the temperature

- ⌘ Are there ways to reduce current intense hostility?
- ⌘ Are there offers that would convince China, Russia, or the DPRK it was in THEIR interest to resume serious talks?

❑ Systematically include provocation risk in planning

- ⌘ Set up focused group to ask: “How will others in the region react to this?”
- ⌘ Apply to foreign policy initiatives, weapons purchases, military plans, actions in crisis or conflict

❑ Confidence-building measures

- ⌘ Can some past measures (e.g., limits on, transparency for, major military exercises, mil-mil contacts, real use of hotlines) be rebuilt?

❑ Nuclear restraints

- ⌘ Can we find ways to convince adversaries to begin discussions on next steps in some form of nuclear arms control?

Nuclear dangers are changing...

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❑ Geopolitics:

- ⌘ Radically increased U.S.-Russian and U.S.-Chinese hostility
- ⌘ Dramatic worsening from the war in Ukraine
- ⌘ Substantially increased Chinese power – including nuclear forces
- ⌘ Increased doubts over U.S. leadership, constancy → increased allied anxiety
- ⌘ Weakened arms control regime, uncertain future prospects
- ⌘ Dramatic expansions of North Korean nuclear, missile capabilities
- ⌘ Expanded Iranian nuclear bomb material production capacity

❑ Technology:

- ⌘ Missile defense, precision conventional, cyber, counter-space, hypersonics, artificial intelligence, disinformation, weapons autonomy...

Russia's war on Ukraine has upended much of the international order

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- ❑ A UNSC member – charged with ensuring international peace and security – is waging large-scale aggressive war
 - ⌘ Russia using nuclear threats to protect its offensive war
 - ⌘ Weakened conventional forces likely to increase Russia's nuclear reliance
- ❑ A state that gave up the nuclear weapons on its soil in return for security assurances is being torn apart
- ❑ Impacts on security, food, energy are reverberating around the world



Source: Reuters