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Today's nuclear dangers and the implications for long-term disarmament

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Nuclear weapons: some good news

2

- ❑ Global nuclear weapons stockpiles down ~80%
- ❑ Only 9 states with nuclear weapons – same as 30 years ago
- ❑ Almost all other states have pledged not to acquire nuclear weapons, and to accept verification
- ❑ More states have started nuclear weapons programs and given them up than have nuclear weapons – efforts to dissuade countries succeed more often than they fail
- ❑ Nonproliferation regime has proved resilient in the face of multiple challenges over 5 decades
- ❑ >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

Potential nuclear flashpoints

3

❑ U.S.-North Korea

- Collapse of current process could lead to return to "maximum pressure," threats of "fire and fury" (more later)
- Miscalculation, inadvertent escalation could lead to conflict – which could escalate rapidly to nuclear use
- Other nuclear dangers from North Korea: nuclear transfers; pressures on others to match DPRK capability; "loose nukes" in the event of regime collapse; also chemical and biological weapons

❑ India-Pakistan

- Ongoing nuclear arms race, with shift toward tactical nuclear weapons that increase risks of seizure, early use in conflict
- Nuclear doctrines which, if deterrence fails, could lead to rapid escalation to nuclear war

Potential nuclear flashpoints (II)

4

❑ U.S.-Russia

- Intense hostility, mistrust, "grey area" actions could lead to conflict
- Some conflicts – e.g., in Baltics – could lead to fears of rapid defeat, pressures to use nuclear weapons to prevent
- Russian nuclear forces and command and control highly vulnerable, likely pressures to "use them or lose them" – launch on warning

❑ U.S.-China

- Long-term tensions between rising, declining powers could lead to conflict – Taiwan, S. China Sea, E. China sea...

❑ U.S. or Israel – Iran

- U.S. pullout from JCPOA, threats of military strikes could strengthen Iran's nuclear bomb advocates
- Many scenarios could lead to conflict – a few to nuclear use

Dangers to existing nonproliferation, arms reduction efforts

5

- ❑ U.S. pullout from the JCPOA, Iran's ongoing programs
 - Little chance unilateral U.S. sanctions will lead to better agreement
 - Increases risk of proliferation, conflict in the Middle East
 - Decreases credibility of U.S. promises, int'l diplomacy
- ❑ North Korea's ongoing nuclear and missile programs
 - Current process could collapse (more later)
- ❑ Intense U.S.-Russian hostility
 - Breakdown of cooperation on many fronts, potential risk of conflict (more later)
- ❑ Ongoing India-Pakistan arms race
 - In addition to direct dangers, risks of theft of nuclear material, leakage of technology, blockage of fissile cutoff, likely blockage of CTBT entry into force, near-term restraint unlikely...

Dangers to existing nonproliferation, arms reduction efforts (II)

6

- ❑ Nuclear powers modernizing their forces, no negotiations toward further arms reductions or disarmament under way
 - Russia introducing whole new classes of strategic nuclear weapons
 - U.S. planning \$1.2 trillion modernization with little serious debate
 - China also modernizing its much smaller forces
 - No talks on follow-on to New START, or limits on others' forces
- ❑ Nuclear powers utterly rejecting the ban treaty
 - Could further inflame NPT politics between the nuclear "haves" and "have nots"
 - Ban treaty will enter into force for many developing countries, be a feature of the international system for decades to come

Dangers to existing nonproliferation, arms reduction efforts (III)

7

- ❑ No progress on key items on the NPT agenda
 - No disarmament progress (ban treaty will highlight)
 - FMCT blocked; little near-term prospect for CTBT entry into force
 - No progress on Middle East WMDFZ
 - No new initiatives on peaceful uses, security assurances
- ❑ Nuclear security efforts losing momentum after the summits
 - Five “action plans” led to little action
 - Political constraints limit IAEA as forum for decisions, actions
 - U.S.-Russian cooperation at a standstill, other bilateral cooperation slow
- ❑ Long term growth, spread of nuclear energy could create additional risks if not appropriately managed

North Korea talks: will lack of the best be the enemy of the good?

8

- ❑ Highly unlikely any achievable set of incentives and pressures would lead to near-term N. Korean total nuclear disarmament
 - Nuclear weapons seen as central to regime survival, prestige
- ❑ Churchill: “Jaw, jaw” better than “war, war”
 - Recent process has offered months of reduced risk of war
- ❑ Many types of intermediate steps would serve U.S., world security interests
 - Freezes on further testing, production; reductions in some aspects of capabilities; military confidence-building measures
- ❑ Danger: disappointment over lack of total disarmament could lead to return to “maximum pressure,” “fire and fury”
 - Volatile situation could lead to military conflict
 - Intermediate opportunities may be missed

The whole structure of U.S.-Russian nuclear arms control is in danger

9

- ❑ For nearly 5 decades, U.S.-Russian nuclear arms treaties offered
 - Limits on, reductions in, nuclear forces
 - Predictability
 - Transparency
- ❑ New START is working – but expires soon
 - Both sides have met key limits
 - Inspections are almost the only remaining nuclear cooperation
 - Expires early 2021; 1-time extension possible to early 2026
- ❑ Intense U.S.-Russian hostility, mutual charges of INF Treaty violations, make it very difficult to reach a new treaty:
 - That Russia will accept, and
 - That 2/3 of the U.S. Senate will accept

U.S.-Russian hostility is poisoning the atmosphere for progress

10

- ❑ United States and Russia, each see the other as aggressive, hostile powers, threats to their national security
- ❑ In the U.S. view, Russia:
 - Violated longstanding norms by seizing Crimea, effectively invading eastern Ukraine
 - Illegitimately interfered in U.S. elections, and plans to do so again
 - Is protecting Assad from consequences of brutality, chemical use, thereby undermining chemical weapons regime – constant lies
 - Is murdering opponents (including with banned chemical weapons)
 - Is building new classes of nuclear weapons, planning nuclear use early in nuclear conflicts, rattling the nuclear saber in a way not seen since Khrushchev, violating arms control treaties
 - Democrats, Republicans (except for Trump) united in anti-Russian hatred in a way not seen for decades

U.S.-Russian hostility is poisoning the atmosphere for progress (II)

11

- ❑ In the Russian view, the United States and NATO:
 - Violated promises by extending NATO toward Russia's borders
 - Violated international law by bombing Serbia, invading Iraq, overthrowing Qaddafi without UN authorization
 - Organized the "color revolutions" and had one planned to overthrow Putin – routinely interferes in other countries' elections
 - Organized the ouster of the Ukrainian government and planned to draw Ukraine (and Georgia) into the EU and NATO
 - Threw out the ABM Treaty and is now building missile defenses to threaten Russia's deterrent
 - In essence, conducts more aggressive behavior than Russia – but more cynically, claiming to support a rules-based order
 - Remarkably widespread anti-American hostility

U.S.-Russian hostility is poisoning the atmosphere for progress (III)

12

- ❑ Even when locked in a global Cold War, the United States and the Soviet Union cooperated on mutual interests:
 - Built the arms control structure
 - Built the global nonproliferation regime
 - In-depth military-to-military, scientist-to-scientist contacts
 - Cooperated on security in Europe – from Austrian State Treaty to OSCE
- ❑ Today, even this Cold War cooperation is largely blocked
 - Except for JCPOA, little nonproliferation cooperation
 - No arms control talks
 - Military-to-military, scientist-to-scientist contacts mostly cut off
 - No effective cooperation on security in Europe
 - Mostly looking for ways to undermine each other

The INF issues could derail arms control

13

- ❑ U.S. charge focuses on the SS-C-8 cruise missile, arguing:
 - Tested from ground-based launcher
 - Prohibited range capability
 - Now being deployed
 - Russian response: permitted SLCM; similar GLCM does not have prohibited range; U.S. provides too little info to discuss
 - In Congress, seen as clear evidence arms control with Russia doesn't work – creating opposition to New START extension, further accords
- ❑ 3 Russian charges, one with substantial merit
 - ABM test targets intermediate-range; drones similar to cruise missiles (1st already has treaty provision; 2nd readily addressed)
 - AEGIS Ashore: Ground-based launcher whose sea-based version regularly fires cruise missiles of prohibited range

Are INF compromises possible?

14

- ❑ For the SS-C-8:
 - Russia could eliminate prohibited system
 - Complication: reportedly tested from Iskandr launcher (Russia unlikely to be willing to eliminate all of those)
 - If SS-C-8 really does not have prohibited range capability (unlikely) Russia could offer inspections to demonstrate that
- ❑ For the Russian charges
 - AEGIS ashore:
 - U.S. offer of inspections for absence of cruise missiles likely inadequate
 - Possibly add “functionally related observable difference”
 - Build new, purpose-built launcher if needed
 - Others: reach agreed interpretations
 - But may not be enough if real Russian concerns are elsewhere

Complications for the next stage of arms control – even if we can get there

15

- ❑ Many strategic issues beyond numbers of nuclear weapons:
 - Russia concerned about:
 - U.S. missile defenses
 - U.S. conventional precision strike capabilities
 - Increased U.S. counterforce capabilities
 - U.S. concerned about:
 - Russian new types of nuclear weapons
 - Russian tactical nuclear weapons
 - Both sides concerned about:
 - Strategic implications of cyber
 - All of these harder to define, limit, verify than strategic launchers
- ❑ When should other countries participate in arms reductions?
 - Multipolar deterrence and arms control inevitably more complex

Implications for long-term disarmament

16

- ❑ Getting to zero nuclear weapons likely to be a long and winding path
- ❑ The final step of zero will require building many foundations:
 - Robust verification (including the difficult problem of confirming a few hundred are not hidden away)
 - System to provide international security without nuclear deterrence
 - In particular, resolution of conflicts that drive some states' perceived need for nuclear weapons
 - Mutual confidence among former nuclear weapon states
- ❑ Need to maintain, build from existing regimes, resolve current dangers, to make progress