China and the 2021 US Nuclear Posture Review Brad Roberts

Testimony Before the U.S.-China Economic and Security Review Commission June 10, 2021

Secretary of Defense Lloyd Austin's February 2021 designation of China as the "pacing threat" invites important questions about how US nuclear policy and posture might have to adapt. These questions are given added salience by recent revelations about the accelerating growth of China's nuclear arsenal. What impact should China's nuclear policy and posture, and their modernization, have on US nuclear policy, deterrence strategy, and force planning?

To frame brief answers to these questions, my remarks will survey key issues in the Nuclear Posture Review (NPR) process, now just getting started by the Biden administration. But some context is needed to inform that survey, as provided here with three brief observations about the past, present, and future.

Setting the Context

First, since the end of the Cold War, there has been a great deal of continuity in US nuclear policy toward China. That continuity reflected some shared judgments across the Clinton, Bush, and. Obama administrations. Some of these carried into the Trump administration; some did not. To be sure, there were some other important discontinuities through this period. With some over-simplification, the shared judgments were that:

- the US-China relationship was not fundamentally adversarial and thus the two could benefit by putting their nuclear focus on strategic stability rather than deterrence
- significant problems in the strategic military relationship sat somewhere in the future, not in the present
- China's nuclear modernization was troubling largely for China's lack of transparency and uncertainty about its end-goal and not because new capabilities were reaching the field
- the two could keep nuclear weapons in the background of the political relationship and thereby avoid having to contend with them as an irritant in the political relationship, in contrast to the US-Russian relationship
- toward that end, high-level, substantive, and sustained dialogue focused on nuclear issues and/or strategic stability would be of interest and benefit to both sides
- the US and Russia could take another modest step or two in reducing nuclear arsenals without worrying too much about a Chinese "sprint to parity"
- the extended nuclear deterrent in Northeast Asia could be shaped with an eye primarily on deterring North Korea and assuring South Korea and Japan

All four administrations also praised the virtues of "tailored deterrence," meaning they rejected the idea that "one size fits all" in a world in which multiple potential adversaries must be deterred. During this period, policymakers hedged against a potential military flashpoint over

Taiwan and determined that the US should be ready to deter China in crisis and to attempt to restore deterrence if it were to fail.

Conspicuously today, few experts in the defense community adhere to these long-standing tenets. We stand at a potentially major turning point in US nuclear policy. The political and military relationships have shifted onto a new ground that is much more competitive and confrontational, at the same time that new information is emerging about China's modernization of its nuclear forces.

Second, China is not today the "pacing threat" for the U.S. nuclear posture—Russia is. Russia's nuclear force is significantly larger than China's. It is also significantly more diverse in the types of weapons and delivery systems it includes. Russia's nuclear weapons complex has a unique capacity for large-scale output. Moreover, Russia has gone much further than China in integrating nuclear weapons into all of its general-purpose military forces and has a capacity far superior to China's to dominate nuclear escalation at all levels of war. For decades the US has committed to maintain a nuclear deterrent that is "second to none." China's force does not drive that requirement the way Russia's does. With time, China's growing forces may change this calculus.

Third, China is not only modernizing its nuclear forces, it is diversifying them and increasing their numbers. Its envisioned end-state is unclear; perhaps it doesn't have one. In our thinking about China's nuclear future, it is important to clearly distinguish what we know from what we don't know. We know that China will be more capable, with a modern triad, modern warheads, and modern command and control. We know that China will be more competitive, with a modern design and production infrastructure for both warheads and delivery systems. We also know that it will be more confident in its ability to accept military risk. What we don't know is whether a more capable, competitive, and confident China will also be more assertive and aggressive. China's assertiveness in its maritime environs and use of force in "gray zone" strategies to try to settle territorial claims, in combination with its economic coercion of its trading and financial partners are troubling indicators of what may lie ahead.

We also know that China is building up its nuclear force; but we don't know whether the strategic balance with the United States will shift, as that depends in part on what the United States does in response. We know that China's no-first-use policy has been under pressure of various kinds; we don't know whether the traditions of nuclear minimalism will be overtaken by contemporary concerns. We don't know what President Xi meant when in 2016 he promised "a great rise in strategic capabilities" and in 2017 "breakthroughs...in strategic deterrence capability." Nor do we know what he meant when in 2020 he promised that by 2049 China would become "a leader in terms of composite national strength and national influence...at the center of the world stage" where it will have "the dominant position."

We can make many predictions about China's nuclear future but we must also recognize that the future is littered with uncertainties. We must also recognize the possibility that the United States may have little or no influence over the next choices China might make about its

strategic future. The Biden administration's review of defense strategy, and the associated integrated strategic review, will have to frame responses to these "knowns" and "unknowns" and to the general challenges of coping with uncertainties.

China in US Nuclear Policy

China in US nuclear declaratory policy. Each new president publicly declares the conditions under which he or she might consider employing nuclear weapons. Over the decades, there have been very few changes in first principles. But President Biden has introduced the possibility of one, which will be considered in the review process. Every prior president of the nuclear era has declared that the fundamental purpose of US nuclear weapons is to deter nuclear attack on the US or its allies. No president has been willing to take the extra step to declare that this is the sole purpose. In the case of President Obama, for example, he judged that there was a narrow range of plausible contingencies in which the vital interests of an ally or even the US could be put in jeopardy by non-nuclear means. So he rejected "sole purpose" while vowing to work to create the conditions that would enable it to be safely adopted at a future time. On the campaign trail, Joe Biden expressed his support for "sole purpose," stating that, "as president, I will work to put that belief into practice, in consultation with the US military and US allies."

China will not be the key driver of this decision. But it would welcome such a declaration, given its own no-first-use declaratory policy and its long-standing advocacy that the US adopt "no-first-use." ["Sole purpose" and "no first use" are similar but not identical promises of nuclear restraint; the differences vary with specific definitions.]. Such a declaration would be unlikely, however, to result in significant changes to China's nuclear policy or posture. While China would welcome such a US declaration, Japan would not. Its leaders believe that its vital interests can be put at risk by non-nuclear means; they strongly hope that the country that defends it (the US) will not foreswear its most powerful tool for contending with that threat. Japan, South Korea, and Australia are all anxious on this score as the balance of conventional forces in the region shifts in China's favor, thereby weakening the preferred strategy of deterrence by denial (that is, by having the means to prevent its military success).

China will factor in the US debate about "sole purpose" in at least one other respect. There will be a debate about whether such an unverifiable declaration would be accepted by others as credible—that is, as likely to be true in time of crisis and war. The credibility of such declarations is called into question by the fact that the Soviet Union long maintained a "no-first-use" policy publicly while in secret it planned and prepared for first use. Skepticism will be reinforced by the perception of many that China's rapid expansion of its force, and development of certain capabilities that make sense primarily if used first, signals that it retains its declaratory policy for public messaging but not as a guide to actual military plans and preparations.

China in the Biden administration's "strategy to put diplomacy first." The new administration's commitment to "elevate diplomacy as our tool of first resort" will be reflected in an ambitious

agenda of nuclear diplomacy encompassing arms control and nonproliferation. In this context, the administration has repeated the calls of its predecessors for China to join it in a dialogue about strategic stability and in the arms control process. The NPR will have to account for the fact that China has rejected such calls for decades. As its response to Trump diplomacy makes clear, it is unwilling to be coerced to the table. If the Biden administration is to be successful in engaging China in substantive, sustained, high-level dialogue, it must find arguments that persuade China rather than simply pressure it. Repeating standard US calls for Chinese transparency and restraint will do little to advance meaningful diplomacy.

China in US assurance strategy. NPRs also generally offer assurances of various kinds, including to US allies of its resolve to defend them, to nonproliferation partners of its commitment to the NPT, and to Russia and China of conditional strategic restraint. Prior administrations have assured China that US homeland missile defense "is not aimed at China;" none has been particularly troubled that China rejects these assurances as not credible. Moreover, China has regularly sought an assurance it has never received: that the US accepts mutual vulnerability as the basis of the strategic military relationship. The US has not contested mutual vulnerability and thus the condition exists de facto. But that is not the same thing as making a political statement. Prior administrations have refrained from accepting the condition as a political fact for multiple reasons, including the concern that it would be read in Beijing and Tokyo as appeasement. The 2021 NPR will have to consider whether or not to offer such an assurance. It may be that such a clarification would be reassuring to China and slow its pace of nuclear modernization. Or it may be that such a clarification would be irrelevant in China's calculus. Or it may be that it would be seen as a temporary development in US nuclear policy, given the decades of US ambivalence about answering the question—essentially "too little and too late."

China in US Deterrence Strategy

China and the commitment to take steps to reduce the role of US nuclear weapons. The Biden administration has clearly articulated this commitment but has not specified which steps it might or when it might take them. It hopes that by taking steps it will provide leadership by example, thereby encouraging others to do the same. Its NPR is highly likely to call on China to do the same. But China rebuffed similar efforts by the Obama and Trump administrations. China also made it clear that it was unwilling to follow the United States in seeking to substitute non-nuclear means for nuclear means to reduce the number of nuclear weapons. Little can be gained for the US by simply repeating the calls of prior administration. Given its ongoing nuclear modernization, China is likely to be an obstruction to the Biden administration's effort to further reduce the role of US nuclear weapons.

China in tailored deterrence. NPRs also generate presidential guidance on how to operationalize deterrence. As a factor in US deterrence planning, China is changing as it becomes more capable. China is well along in becoming a nuclear peer to the United States—in qualitative, not quantitative terms, with its completion of a nuclear triad, development of a theater-range force and early warning system, integration of non-nuclear strike and defensive capabilities, and development of conventional power projection capabilities for potentially

escalatory conflicts. It is also well along in becoming a multi-domain peer to the United States—with significant new cyber, spacer, and counter-space capabilities. Its theater deterrence and defense posture is also robust and still rapidly improving. As a quasi-peer, it puts new demands on US deterrence strategy. The 2021 NPR will have to identify those demands and tailor responses. The simultaneous deterrence of Russia, China, and North Korea will demand more planning capacity at US Strategic Command and close collaboration between STRATCOM and the relevant regional combatant commands.

China and US Force Planning

China and the US 'second to none' strategy. As noted above, the US has long maintained a "second to none" approach to sizing its nuclear force, as a signal that it will neither allow itself to slip into an inferior strategic position nor compete to try to gain superiority. [Note that this applies to its strategic forces, not the non-strategic forces in Europe, where Russian forces outnumber US forces by a ratio of approximately an order of magnitude.] In the 2021 NPR, the Biden administration will have to think through whether and how "second to none" fits a world in which both Russia and China are growing their nuclear forces and deepening their strategic cooperation. Numerous hard questions will have to be answered. Does a multipolar nuclear environment create new nuclear requirements for the US? Are the reductions so far made in US nuclear forces through arms control irreversible? Should future reductions be irreversible? And what might retirement of the US ICBM force imply for the desired balance with China? At the very least, it would substantially reduce the number of targets in the US that would have to be struck in an attempted preemptive strike, perhaps leading some in China to think that such a counterforce strike might be successful in crippling the US capability to respond militarily.

China and extended nuclear deterrence in Northeast Asia. Recent US administrations have explained the role of the US nuclear umbrella over Japan and South Korea in terms of the North Korean threat. As China deploys additional nuclear weapons and/or nuclear-capable delivery systems in the region, and as it projects power more widely, questions arise about the role of the umbrella vis-à-vis China. The 2021 NPR will have to consider what changes to the extended deterrent, and to strategic communications about it, are warranted by China's nuclear modernization, if any. China will deeply oppose any explicit US statement that US weapons might be brought into the region for potential attack on China. Such a statement would also result in intensified Chinese pressure on US allies not to support that role. In this circumstance, allies would seek stronger reassurance. Moreover, the emerging North Korean nuclear threat has generated new demands for "more NATO-like" nuclear deterrence arrangements in the region, which an administration committed to reducing nuclear roles might find difficult to pursue.

China and the nuclear hedge. Each NPR since the Cold War has reflected leadership concerns about possible sudden erosion in the security environment as well as concerns of the technical community about unwelcome surprises of a technical kind, whether in an aging US nuclear weapon or in an enemy's secret toolkit. Hence each NPR has brought renewed statements of intent to ensure that the capabilities and capacity remain in the weapons design and

production complex to enable timely responses to surprise. There has also been a rising focus on how to hedge against the programmatic risk in trying to precisely sequencing the rarely attempted simultaneous modernization of multiple warheads and delivery systems. But the necessary investments have proven politically challenging. The 2021 debate over the necessary nuclear hedge is likely to be intense, given both the expense and the opposition of those who believe that nuclear reductions should be irreversible and investments should not be made to enable the future production of new nuclear weapons. The open-ended expansion of China's nuclear force is likely to make it harder to argue against such investments. China's own success in developing its weapons complex and infrastructure and endowing it with the needed capabilities and capacities offers an object-lesson in focus and resolve.

China and the Integrated Strategic Review

This survey implies that all of the important questions about the impact of China's nuclear modernization on US national security will be dealt with by the NPR. That is incorrect. The nuclear issue is not separable from broader developments in China's military strategy and improving capabilities to engage in modern strategic warfare that is multi-domain and multi-dimensional in character. A sound answer to the China nuclear problem requires a sound answer to the integration problem.

China thinks in such broader terms. It sees the bilateral US-PRC nuclear relationship in the context of the broader relationship of the strategic military capabilities of the two countries. These include missile defenses and non-nuclear strategic strike capabilities and perhaps also the associated enabling capabilities in cyber space and outer space. Especially from China's perspective, the credibility of its threat to retaliate by nuclear means if attacked by the United States is undermined by the US deployment of long-range precision non-nuclear strike capabilities, other so-called "left of launch" capabilities, and homeland missile defenses. China's military planners fear that these capabilities may be used in combination to preemptively eliminate China's assured retaliation posture. They fear also that the simple presence of these US capabilities might embolden the US to try to coerce China. Having struggled with this problem since at least the early 1990s, China's military planners long ago recognized the need to integrate the strategic military toolkit for deterrence and defense purposes.

Today, the United States is playing catch up, conceptually and organizationally. From 9/11 to 2014 or so, its military focus was elsewhere. Catching up requires more complete and effective integration of multi-domain operations. This requires getting operational concepts right. At present, they are not. As the bipartisan National Defense Strategy Commission concluded in its 2018 report, the US military "could well lose" a war against China or Russia because it has not so far developed the concepts necessary to successfully counter an adversary's escalation strategies, nuclear and otherwise. Accordingly, the Biden administration's review of nuclear policy and posture is being conducted in the context of a broader "integrated strategic review." The aim is to produce an updated defense strategy that fully integrates strategic and non-strategic dimensions of war as well as nuclear and non-nuclear aspects.

That integrated review will also likely involve decisions about the further development and deployment of homeland missile defenses and of long-range, precision, prompt, non-nuclear strike capabilities (as well as space and counter-space capabilities as well as cyber and infrastructure resilience). The last administration set a "simple goal" for missile defense: "to destroy any missile launched against the US, anywhere, anytime, anyplace." Its pursuit of hypersonic strike capabilities was driven by a vision of "over-matching" strategic forces. The Biden administration will have to chart its own course. It is likely to reject these goals. But the alternatives are not as clear as they once were, when the threats were less sophisticated and numerous and the technical choices fewer. China can be expected to compete to maintain confidence in its threat of assured nuclear retaliation and is well hedged against the need to do so. Whether promises of US restraint would be met with reciprocal restraint is an open question today. The prospects of successfully responding to China's strategies for deterrence and competition are improved with a US policy and posture review process that sees the problem whole, rather than breaking it in pieces with stove-piped capability reviews.

The integrated strategic review is a good idea. It will help frame the right big China questions for US defense strategy. But as an ambitious innovation, it is likely to fall short in some respects. Expectations should be kept modest.

What Should Congress Do?

On a bipartisan basis wherever possible, Congress should:

- 1. Ensure that strategic issues in the China-US military relationship receive the necessary sustained leadership focus from the Biden administration. The Congress can do so by maintaining its own focus. And by highlighting serious concerns about China's nuclear modernization without sounding alarmist.
- 2. Set its expectation that:
 - a. The Biden National Defense Strategy will fully and effectively address the concerns raised in the 2018 report of the NDS Commission about the US lack of conceptual preparedness for regional wars against nuclear-armed adversaries.
 - b. The administration's integrated strategic review will produce a coherent answer that sets out the specific contributions of different deterrence capabilities (regional and strategic, offense and defense, kinetic and non-kinetic, nuclear and non-nuclear) and the approaches needed to contain the risks of strategic escalation in multi-domain warfare.
 - c. The administration's review of nuclear policy, deterrence strategy, and force planning accounts comprehensively and substantively for the China factor.
 - d. In doing so, the administration will take full account of allied views.
- 3. Oppose the adoption by the administration of minimum deterrence or analogous strategies. These are strategies built on the premises that nuclear weapons are so destructive that very few weapons are needed and that the threat to employ them in retaliation is always credible.

- 4. Continue to support the Program of Record for nuclear modernization as formed by the Obama administration and adopted with minor modifications by the Trump administration. This includes needed investments in warheads, delivery systems, and the associated infrastructure and expertise.
- 5. Invest to encourage the needed intellectual bandwidth on these issues. Toward this end, task the administration to report on what institutional capacity has been created at DoD and in its support elements to ensure a steady flow of new insights about China's approach to modern conflict, including its strategic dimensions. The last administration was right to emphasize the need to out-compete, out-innovate, and out-think US adversaries. After three decades of sharp atrophy in the institutions that generate strategic thought for the US government, more needs to be done to generate the needed focus and excellence for the long term.

Brad Roberts is the director of the Center for Global Security Research at Lawrence Livermore National Laboratory. The views expressed here are his personal views and should not be attributed to the laboratory or its sponsors. Dr. Roberts served as deputy assistant secretary of defense for nuclear and missile defense policy from 2009 to 2013. In that capacity, he served as co-director of the Obama administration's Nuclear Posture Review and Ballistic Missile Defense Review. Dr. Roberts also helped found and lead a DoD-sponsored unofficial US-China nuclear deterrence dialogue that spanned nearly 20 years. Key insights from that process are discussed in his edited monograph *Taking Stock: US-China Track 1.5 Nuclear Dialogue* (CGSR Occasional Paper 2020). His most recent publication is "Orienting the 2021 Nuclear Posture Review" in the summer 2021 issue of *The Washington Quarterly*.