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China-US Nuclear Dynamics: Competition and Confrontation versus Dialogue and Cooperation?

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Against the backdrop of increasing competition between China and the United States and their deteriorating relations in recent years, the China-US nuclear dynamics has attracted wide attention in both the two countries and the international community at large. This paper focuses on new developments in China-US nuclear interactions, the prospect of dialogue, the likelihood of resumed non-proliferation cooperation, the mil-to-mil relations, and the influence of emerging technologies on the nuclear dynamics, with the author's preliminary judgments and policy recommendations.

I. Is the China-US nuclear dynamics entering a competitive and confrontational state?

China successfully conducted its first nuclear test in 1964. However, it was not until the 1980s that China's nuclear strength began to become a topic of concern in the American strategic research community. In the late 1990s, as China stepped up its preparations for military struggles vis-a-vis Taiwan and its military modernization drive, the US increased its attention to China's nuclear force development, with growing security concerns over the latter's nuclear modernization effort. Nonetheless, according to researches by Chinese scholars, until 2019, the US strategic research community had generally accepted that the modernization of China's nuclear arsenal arose primarily from the country's concern over survivability, believing that the modernization drive was designed to enhance the credibility of China's

strategic deterrence in response to increased American precision strike capability and missile defense technologies, and that the size of China's nuclear force was stable and matched the country's "minimum deterrence" strategy and "no first use" policy (DOD 2017, 2018, 2019).

Since 2019, however, driven by the US intelligence agencies, suspicions about China expanding its nuclear arsenal increased, with ever larger size estimations. In 2021, the head of U.S. Strategic Command (STRATCOM) Charles Richard proposed that China would triple or quadruple its nuclear arsenal over the next decade (Richard 2021). But the doubts then were based more on calculations than evidence.

From June to August 2021, American media released satellite images allegedly revealing massive construction of nuclear missile silo fields at three sites in China, with a total of more than 300 silos. The reports immediately caused an uproar in the US, with major media outlets and academic websites joining the hype, and experts and politicians airing their opinions. The American view on China's nuclear posture seemed poised to change fundamentally. Three ideas have been prominent:

First, the construction represents China's largest nuclear force expansion in history, with an alarming speed. The US-China nuclear dynamics is now a competitive one as China becomes one of the biggest nuclear threats to the US. In its annual report to congress on China's military power published in November 2021, the Pentagon made a new judgement on China's nuclear power, claiming that the latter's "accelerating pace" of nuclear expansion will enable it to have up to 700 deliverable nuclear warheads by 2027, with the stockpile touching 1,000 by 2030.

Second, China's nuclear posture has changed greatly, and the country may shift its doctrine from "minimum deterrence" to "medium deterrence". In addition, upon completion of those new missile silos, China may consider upgrading its peacetime alert status to "launch on warning (LOW)" as the silos could be readily targeted.

Third, the development will deal a blow to the international nuclear arms control and disarmament process, weaken the confidence of non-nuclear-weapon states in nuclear disarmament and thus endanger the international nuclear non-proliferation regime,

undermine the credibility of the extended deterrence provided by the US to its allies and thus stimulate China's neighboring countries to go nuclear, or trigger a new round of international nuclear arms race and increase the risk of a nuclear conflict.

To a certain extent, it is understandable that the US has reacted with horror and nervousness to the rapid increase of missile silos in China. Since the signing of the new START with Russia, some people in the US have been concerned that China will use the American and Russian reductions as an opportunity to expand its nuclear arsenal towards parity with the other two powers. The additional missile silos seem to have offered a reliable basis for this concern. However, the American responses have been one-sided, irrational, and even unfounded.

First of all, it is neither scientific nor reliable to determine the likely increase in the number of Chinese nuclear warheads based on the increase in the number of missile silos. Moreover, some estimates are made from the assumption that each missile to be deployed in those silos will carry multiple warheads. The US itself adopted the Shell Game strategy in deceptive ICBM deployment during the Cold War. It even built 23 silos for one Peacekeeper missile (Warrick 2021). The quantities of nuclear warheads and materials China possesses, and the sites of its nuclear force deployment are not made public, which is essential for China to protect its nuclear survivability since the scale of its nuclear force is very limited.¹

Secondly, missile silo increase is far from being a conclusive piece of evidence pointing to China abandoning its minimum deterrence strategy. The scale of silo increase is not equal to the scale of increase in nuclear strength. Even a comparable increase in nuclear strength someday still cannot be equaled to such an abandonment. The basic meaning of China's minimum nuclear deterrence strategy is to maintain an arsenal at the smallest size needed to safeguard national security. However, this does not mean that the size will remain unchanged. China must constantly adjust the structure and scale of its nuclear forces and

¹ According to SIPRI Yearbook 2023: Armaments, Disarmament and International Security, as of January 2023 China maintained an estimated total stockpile of about 410 nuclear warheads—around 60 more than SIPRI's estimate for the previous year.

modernize them based on survivability evaluations considering the ever-changing international environment.

Thirdly, since the very first day it came into possession of nuclear weapons, China vowed not to be the first to use nuclear weapons. The commitment was based on a soberminded view of the country's first-generation national leaders on the particularity of nuclear weapons. China regards nuclear weapons as a means of strategic deterrence to safeguard national security rather than a means of combat or war. Only in the event of a nuclear attack will China launch a nuclear counterattack. Correspondingly, the LOW concept does not exist in its nuclear strategic theories. In recent years, China has continuously strengthened its early warning capability to strengthen its nuclear survivability and ensure its secondary strike capability. The no-first-use policy has never been changed and is not to be changed for the more missile silos this time. China believes that LOW is too risky and prone to false alarms or accidental launches and that no nuclear-weapon state should adopt such a policy.

Fourthly, the view that China's rapid nuclear expansion has had a serious impact on the global nuclear non-proliferation regime is also erroneous. The developments that did have negative impacts on the regime are the changes in American and Russian nuclear policies caused by their confrontation in recent years, the serious retrogression of the nuclear arms control policies of the United States and Russia, the interruption of the US-Russian nuclear disarmament process, and the much lower motivation of the international community to cooperate on the DPRK and Iranian nuclear issues as a result of rising geopolitical competition among major powers.

Fifthly, the moderate expansion of China's nuclear Arsenal is not aimed at a nuclear competition with the United States, but a response to a series of policies and measures adopted in the nuclear field by the US² since the latter took on China as its main strategic

² Those policies and measures include: the withdrawal from Intermediate-Range Nuclear Forces Treaty and increased INF deployment in East Asia; the termination of cooperation with Russia on the new START ; the increased role of nuclear weapons in national security and the development and deployment of low-yield nuclear weapons; continuing to strengthen anti-missile capabilities and deployment; the continuous

competitor in 2017. It is an inevitable choice for China to increase its own nuclear survivability and ensure its secondary nuclear strike capability. Anyone with some nuclear common sense will see this clearly.

In short, the current views in the US about large-scale nuclear expansion in China and a state of nuclear competition with China are unfounded. China has absolutely no intention to repeat the historical mistake in the cold war when the US and the Soviet Union first engaged in a large-scale nuclear arms race and then had to carry out nuclear arms control and disarmament. If the US does not want China's nuclear arsenal to grow further or the two to go into nuclear competition, the only right way is to adjust and change its series of wrong policies and measures in the nuclear field adopted in recent years.

II. Possibility and prospect of bilateral nuclear talk and arms control

Since the start of the new century, conducting a nuclear dialogue with China began to appear on the American agenda. In 2005, President George W. Bush proposed to his Chinese counterpart Hu Jintao to invite the commander of the PLA Second Artillery Force to visit the US, sending an important signal. In 2008, at the invitation of the US, the two militaries held their first nuclear dialogue in Washington DC. It was then discontinued due to US arms sales to Taiwan.

The Obama administration proposed to pursue 'a world without nuclear weapons.' It also talked about the need to have a strategic stability dialogue with China in the 2010 Nuclear Posture Review report, which immediately became an important topic in the then ongoing tracks 2 and 1.5 dialogues. In the conversations conducted in the following years, despite many remaining differences on various topics, the two sides gradually developed some important common understanding on a strategic stability dialogue. At the same time, as the US and Russia agreed on a New START, the US began to consider when China might

improvement of missile defense capabilities and deployment; and the vigorous enhancement of detection, positioning, tracking and long-range precision strike capabilities.

participate in nuclear disarmament, but the general view in the US was that the conditions were not ripe yet.

The Trump administration, however, demanded China to join the US-Russia nuclear disarmament negotiation in 2019, and then withdrew from it on ground of the Chinese rejection. At that time, the unreasonable American demand was opposed not only by both China and Russia, but also by American arms control experts and scholars. They believed that the demand not only was unachievable but also would lead to the end of the US-Russia nuclear disarmament negotiations. The Chinese government expressed its willingness to consider a bilateral strategic security and arms control dialogue instead, to which the US did not give a positive response.

After taking office in 2021, President Biden basically inherited Trump's China policy of strategic competition and comprehensive suppression. China-US relations further deteriorated. House Speaker Nancy Pelosi's visit to Taiwan in summer 2022 triggered a crisis in the Taiwan Strait, and all dialogues between the two countries came to a stop. At the end of last year, the two heads of states met in Bali and agreed to stabilize and improve bilateral relations. However, the unexpected 'airship incident' at the beginning of this year again seriously frustrated the two countries' efforts to ease their relations. It was not until last June when US Secretary of State Blinken finally paid a much-delayed visit to China that the two sides resumed the process of striving for easing and stabilizing relations.

If high-level communications between the two sides can be maintained in the second half of this year, especially if President Xi Jinping meets President Biden again when he attends the APEC meeting in the US in November and if the two heads of states agree to gradually restore or re-build dialogue mechanisms, the possibility of holding bilateral nuclear dialogue will resurface.

At present, China and the US should first resume their track 2 and track 1.5 nuclear dialogues (held in Hawaii and Beijing respectively), which went on for over a decade and achieved many important results. These can make positive preparations for a timely start of a nuclear arms control dialogue between the two governments. In fact, after years of research

and discussion, experts and scholars in China basically agree the following four points with regard to the development of a China-US nuclear dialogue.

First, the main goal of such a dialogue should be to achieve and maintain strategic stability between China and the US.

Second, China-US strategic stability should be quite different from US-Soviet/Russia strategic stability. China and the US achieve strategic stability by ensuring mutual vulnerability (with both possessing reliable secondary strike capability), given the obvious asymmetry of nuclear forces between them, while the US and Russia, both with huge nuclear arsenals and a rough force parity between them, achieve strategic stability by Mutual Assured Destruction.

Third, China-US strategic stability will involve nuclear arms control and crisis stability, but not nuclear disarmament for a long time. China will only join the nuclear disarmament process after the US and Russia take the lead to reduce nuclear weapons on a large scale. In comparison, the US-Soviet/Russia strategic stability mainly pursues arms race stability and crisis stability, with the former manifested as bilateral nuclear disarmament through treaties and agreements.

Fourth, with great changes in the international situation and landscape and in science and technology, China-US strategic stability should have broader and deeper connotations. Their dialogue therefore should cover not only nuclear policies, strategies, and force development, but also related topics such as cyber security, outer space security, weaponization of artificial intelligence, development and deployment of missile defense systems, and development of long-range conventional precision strike capabilities (CPGS).³ At the same time, nuclear non-proliferation, nuclear security and nuclear safety cooperation, and CBMs in the nuclear field should also be taken up.

³ Most of these topics are of interest to both sides. However, the Chinese side is mainly concerned with the American missile defense systems deployment and CPGS capability development as they directly threaten its second strike capability and are the potential primary drivers for China to expand its nuclear arsenal.

As a matter of fact, since the end of the Cold War, China has been taking an increasingly active part in international nuclear arms control processes with a constructive attitude. It joined the Treaty on the Non-proliferation of nuclear weapons and participates in NPT reviews; signed the Comprehensive Nuclear-Test-Ban Treaty and has honored its moratorium on nuclear testing; supports the Geneva Conference on Disarmament to negotiate a Fissile Material CUT-OFF Treaty; actively participates in P-5 coordination, dialogue and cooperation on nuclear policy, strategy, disarmament and non-proliferation. In the future, China will continue to play a constructive role in the aforementioned multilateral mechanisms and make even greater efforts to promote progress in nuclear arms control.

In the near future, it will be a new and important step by China in the international nuclear arms control process if China can conduct and maintain an official nuclear dialogue with the US. It will be of great significance not only for the two countries to carry out arms control cooperation and maintain strategic stability, but also for maintaining the stability of their overall relations.

Finally, I would also like to answer a question often asked in dialogues with the US: How does China perceive the conditions and timing required for joining the nuclear disarmament? As I read our policies, the answer at least includes the following three points:

1. China will absolutely not make an upward pursuit of nuclear parity a condition for joining nuclear disarmament. The participation must take place after the US and Russia achieve deep cuts. As to the exact depth of the cuts China sees as necessary, that can be an item for discussion during the nuclear dialogue.

2. The reduction of the size and quantity of the American and Russian nuclear arsenals is not the only condition for China to consider whether to participate in nuclear disarmament. Other asymmetric factors in the nuclear power structure between both sides are also very important. In addition, the relative stability of political and security relations between China and the US and the establishment and improvement of bilateral crisis management mechanisms are also important conditions.

3. That the five nuclear weapon states reach a common understanding and issue a joint statement or sign an agreement on “unconditional mutual no first use” or “nuclear deterrence as the sole purpose”, or China and the US reach an agreement on “unconditional mutual no first use” will be an important condition for China to participate in nuclear disarmament while its nuclear force is still relatively weak.

Undoubtedly, the conditions for China to join the nuclear disarmament process are far from being met. Nonetheless, China is willing to work with other countries to make positive efforts and contributions to facilitate the emergence and improvement of these conditions for global multilateral nuclear disarmament to start at an early date.

III. What should China and the US do to resume and strengthen cooperation in safeguarding the global nuclear non-proliferation regime?

Maintaining and strengthening the global nuclear non-proliferation regime is in the interest of both China and the US. To this end, it is essential to comprehensively and in a balanced manner promote the three pillars of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT): non-proliferation, nuclear disarmament and peaceful uses of nuclear energy.

What is pressing now is that China, the US, and relevant countries should resume as soon as possible cooperation on the DPRK nuclear issue, the Iranian nuclear issue and global nuclear security issue. The right of all countries to peaceful uses of nuclear energy must be respected and protected while nuclear proliferation by both state and non-state actors must be resolutely opposed.⁴ In addition, all countries, including China and the US, should strictly abide by the Comprehensive Nuclear-Test-Ban Treaty (CTBT) before completing their respective ratification procedures.

⁴ The recent US-UK-Australia nuclear submarine cooperation, which involves the transfer of large quantities of weapons-grade highly enriched uranium from nuclear weapon states to non-nuclear states, carries serious proliferation risks and violates the objectives and purposes of the NPT. China is firmly opposed to such a move.

Another important and urgent task is that the US and Russia should earnestly fulfill their special responsibilities for nuclear disarmament, resume the implementation of the New START, and further substantially reduce their nuclear arsenals, thus creating conditions for the ultimate realization of comprehensive and thorough nuclear disarmament. China has a firm position on this.

In addition, in order to promote nuclear non-proliferation and disarmament, China believes that the US and other nuclear-weapon states should, like China, adopt the policy of not being the first to use nuclear weapons at any time and under any circumstances, and unconditionally undertake not to use or threaten to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones.

Let me now focus on how China, the US and other relevant countries should resume cooperation to denuclearize the Korean Peninsula.

In 2018, with the active support of China, major progress was made in addressing the DPRK nuclear issue as the inter-Korean and US-DPRK summit meetings were held. However, the US-DPRK summit in Hanoi in 2019 ended without results. After that, the US-DPRK dialogue and the North-South dialogue first went into great difficulties again and came to a full stop in 2020.

In this situation, the DPRK resumed missile tests and actively developed tactical nuclear weapons as it became determined to gain the nuclear war-fighting capability. The effort reached its peak in 2022, with the launches of more than 90 missiles, including ICBM, and the announcement of a new nuclear policy decree describing five scenarios in which the DPRK can be the first to use nuclear weapons.

The US, ROK and Japan on the other hand fully resumed large-scale joint military exercises in 2022, with American strategic assets brought back to the peninsula and its adjacent waters after four years. In the face of strong calls from Japan and South Korea for nuclear sharing, the extended deterrence that the US provides for the two countries has been further strengthened. All three countries are also stepping up preparations for preemptive strikes against the DPRK.

At the same time, due to the serious deterioration of China-US and US-Russia relations in recent years, the cooperation between the three major powers towards the denuclearization of the peninsula has stagnated. As the countries concerned choose sides either overtly or quietly, the peninsula is entering a grim situation similar to the confrontation between the North Triangle and the South Triangle in the first half of the Cold War.

The situation on the Korean peninsula has once again reached a critical point: the DPRK no longer restrains its nuclear weapon development effort; the island faces a major risk of a military conflict or even a nuclear one and the strategic stability in Northeast Asia is seriously challenged⁵. In this situation, it is already an extremely urgent task for China, the US and other countries concerned to resume cooperation on the peninsula.

Nonetheless, the ongoing Russia-Ukraine war and the tense situation across the Taiwan Strait have become big obstacles for China, the US, Russia, and other relevant parties to resume cooperation on the peninsula. Still, in order to avoid a military conflict or even a nuclear one on the Korean peninsula, those countries should act as soon as possible and make joint efforts to avoid the worst scenario for the peninsula and Northeast Asia. The desired actions should include:

1. Resuming and maintaining dialogue and engagement with the DPRK as soon as possible.⁶ Give top priority to strengthening crisis management and make every effort to prevent the nuclear crisis or another contingency from triggering a military conflict on the peninsula.

2. Dialogue between China, the US and Russia on maintaining regional strategic stability and avoiding misunderstanding and miscalculation on the peninsula.

⁵ Whether it is the US redeployment of tactical nuclear weapons on the Peninsula or the strengthening of intermediate-range missile and anti-missile deployment and the presence of strategic assets on and around the Peninsula, it will disrupt the regional strategic stability and force China and Russia to take countermeasures, thus intensifying the nuclear competition in the region.

⁶ Among them, the US should give up its demand for the DPRK to unconditionally resume dialogue and take positive measures towards an early resumption of communication and dialogue with the DPRK.

3. Declaration by all countries concerned that the goal of denuclearizing the peninsula and establishing a permanent peace mechanism has not changed and will not change.

4. Supporting and assisting the US and the DPRK to reach a new agreement or tacit understanding on returning to double suspension.

5. China, the US and Russia engaging in consultations at the Security Council on humanitarian assistance to the DPRK and striving for an early agreement. It is worth trying to pursue this objective by removing some of the sanctions on the DPRK.

6. Joint efforts to establish nuclear safety and security mechanisms on the peninsula.

Only when progress is made in the above-mentioned crisis management efforts, the tension on the peninsula is eased and military conflicts are avoided can we open a window of hope for restarting the denuclearization process on the peninsula. Of course, in order to further strengthen cooperation between China, the US and Russia on the peninsula in the future, ceasefire or truce between Russia and Ukraine, and relaxed tension across the Taiwan Strait will be two indispensable conditions.

Finally, three points on nuclear arms control on the peninsula and in Northeast Asia, which is closely related to peninsular denuclearization.

First, the DPRK has repeatedly stated in recent years that it is already a nuclear-weapon state, that it will never discuss about giving up its nuclear weapons in the future, and that instead it will only hold nuclear arms control negotiations with the US. The Chinese government has not made a direct comment on this position. However, according to the position declared by Chinese leaders and relevant departments on the peninsular question, it has always emphasized that China's basic policies on the Korean Peninsula and the DPRK nuclear issue have not changed and will not change.⁷ Obviously, China is not in favor of replacing denuclearization with nuclear arms control.

⁷ Since the outbreak of the Korean nuclear crisis, China has always adhered to the three major policies of "maintaining peace and stability on the Peninsula, adhering to the denuclearization of the Peninsula, and resolving the issue through dialogue". Later, China further proposed that the Peninsula problem should be

Second, China supports nuclear arms control in the process of denuclearization. The “double suspension” initiated by China in 2017 is such a measure. The DPRK’s proposal in 2018 to close Yongbyon nuclear facility in exchange for the US to make a corresponding compromise is also along this line of thinking, which was affirmed then by China. In the future, if the US and its allies are willing to reduce military deterrence, especially the nuclear deterrence, in exchange for North Korea’s nuclear freeze or even phased closure of the nuclear facilities, China will definitely support it. In the longer term, China will also support and commit itself to the complete abandonment of its nuclear weapon program by the DPRK and the removal of nuclear umbrella for the ROK so that eventually the Korean Peninsula will become a nuclear-weapon-free zone. In that case, China, the US, and Russia may jointly provide negative and positive security assurances to both the north and the south sides of the peninsula. American troops should be gradually withdrawn from the peninsula, although the US and ROK may choose to sustain their alliance. In short, China will support all arms control measures conducive to the denuclearization of the peninsula.

The third important topic is nuclear arms control in Northeast Asia, which bears on the strategic stability of China, the US and Russia in this region. As discussed, the problem has become increasingly prominent. I will not repeat the discussion here but will only suggest the following: if the US-Russia strategic stability dialogue can be resumed in the future, and if the China-US nuclear dialogue can be held, nuclear arms control in Northeast Asia should become an important topic in these two dialogues. In addition, the three countries can also carry out relevant dialogues and consultations in the P-5 process.

In short, it is in the interests of both sides to resume cooperation between China and the US in maintaining the global nuclear non-proliferation regime. In recent years, the cooperation between the two sides has been seriously weakened, fundamentally because of changes in the American nuclear policy, especially its comprehensive suppression of China. In the foreseeable future, it will not be easy for China and the US to fully resume the

resolved through a dual-track, synchronous and phased approach with the pursuit of denuclearization and the development of a lasting peace mechanism advanced in parallel.

cooperation, but partial recovery is still possible. The Recent signs of a moderate thaw in Sino-American relations have brought hope for this.

IV. The trend of military-to-military relations between China and the United States

Relations between the Chinese and American armed forces have an important influence on China-US nuclear dynamics. A healthy and stable mil-to-mil relationship underpins China-US strategic stability. On the other hand, if the relationship worsens seriously and there is a military conflict or even war, the risk of nuclear conflict will appear.

The mil-to-mil relationship does not exist in isolation, but depends on overall bilateral relations, especially the political relationship. At the beginning of the Cold War, China and the US were hostile to each other, and their militaries were in a war and many crises. When the two countries jointly responded to Soviet hegemonism, their military cooperation reached a very high level.

For a long time after the Cold War ended, with the gradual increase of differences between China and the US, frictions between the two armed forces have also increased. However, as the two countries maintained engagement and cooperation, mil-to-mil relations still registered certain progress despite the several crises and the impact of US arms sales to Taiwan. Not only the worst prospect of confrontation was avoided but also dialogues and exchanges were institutionalized, with increased bilateral and international cooperation.

Since 2017, with the Trump and Biden administrations successively adopting a China policy of strategic competition, bilateral relations have deteriorated continuously and mil-to-mil ties have also been tense in all aspects, with various dialogues and cooperation interrupted one after another. The Taiwan Strait crisis in August 2022 drove the mil-to-mil relationship to the lowest point since the establishment of diplomatic relations. The PLA conducted massive joint drills around Taiwan and canceled the last three dialogue

mechanisms.⁸ The US, on the other hand, took the opportunity to hype up China's "reunification with Taiwan by force" in the near future, and together with its allies vigorously increased preparations for a military conflict across the Taiwan Strait. In this situation, the two militaries regard each other as the main operational target, leading to drastically increased risk of a military conflict.

In order to reverse the serious deterioration of overall and military relations and avoid a military conflict, as early as during the two online conversations in autumn and winter 2021, the two heads of state clearly expressed their desire to stabilize and ease China-US relations as soon as possible and strive to bring them back to the normal development track at an early date. In June 2022, when both countries' defense ministers held talks during the Shangri-La Dialogue after two and a half years, they also agreed that the armed forces should implement the important common understanding reached by the two heads of state, maintain high-level strategic communication, and manage and control contradictions and differences to prevent them from developing into a conflict or confrontation.

After the Taiwan Strait crisis, at the Bali meeting towards the end of 2022, the two heads of state further agreed to strive for stabilizing and easing China-US relations, and more clearly expressed their desire to avoid a conflict. However, the unexpected airship incident in early 2023 and Tsai Ing-Wen's visit to the US soon after that led again to a high-level tension, and Secretary of State Blinken's visit to China was postponed for four months to June this year.

After Blinken's visit, US Treasury Secretary Yellen and the President's Special Envoy for Climate Change Kerry visited China. The two commerce ministers also met in the US. There are signs of a gradual recovery of high-level contacts between China and the US.⁹ If the Chinese Foreign Minister pays a reciprocal visit to the US, especially if the two heads of state meet again during the November APEC meeting in the US, those will be considered a

⁸ The three dialogues are the Defense Policy Coordination Talk, Military Maritime Consultative Agreement dialogue and the proposed communication mechanism at the theater level.

⁹ Regrettably due to continued American sanctions of the Chinese Minister of Defense, a meeting between the two defense ministers was not realized during the Shangri-La Dialogue in June 2023.

real step forward towards stabilization and relaxation of bilateral relations. Even in that case, there will still be a long way to go and long-term joint efforts to be made before the relations could be steered back to the normal development track.

It is necessary to specially point out that to promote stability and relaxation of China-US relations, China has in recent years repeatedly proposed that the two countries should develop their relations according to the principles of “mutual respect, peaceful coexistence and win-win cooperation”. Among these three principles, China regards peaceful coexistence as the bottom line that must be secured; the other two are higher objectives that China hopes to achieve. The Chinese side also pointed out that the most important protection and security net for China-US relations is to abide by the basic norms of international relations and the three Joint Communiqués, which is the key for both sides to manage their contradictions and differences and prevent confrontation or conflict.

The Biden administration’s China policy has also been adjusted, with modifications from the original competition-cooperation-confrontation construct to such as the five and then nine nos.¹⁰ More and more frequently, the US proposes to build guardrails for competition between the two countries, and establish and strengthen a crisis communication mechanism with the PLA to prevent via enhanced crisis management a military conflict or war caused by miscalculations or a contingent event.

It is not difficult to see that both China and the US want to avoid conflict or war, but the two sides still have major difference with regard to the path to take towards peaceful coexistence and conflict avoidance, which is highlighted in their understanding and policy of military crisis management.

With its experience of fierce competition and avoidance of a direct military conflict with the Soviet Union during the Cold War, the US hopes to maintain crisis communication

¹⁰ The former includes no pursuit of a new Cold War; no effort to change China’s system; no revitalization of alliances against China; no support for “Taiwan independence”; and no intention for a conflict with China. The latter is with additional no support for “one China, one Taiwan” or “two Chinas”, no pursuit of decoupling with China, no obstruction of economic development of China and no intention to encircle China.

with the Chinese military, strengthen crisis management and avoid a military conflict while continuing its military encirclement and deterrence against China. However, China's experience in the Cold War was very different from that of the US, and it has neither a strong sense nor much experience of crisis management. At present, the main task for China is to resolutely fight against the American suppression. In this situation, the PLA is very worried that the establishment of a technical crisis management mechanism with the US will grant the green light to and legalize the latter's increasingly strengthened military activities around China. It is believed that if the US really wants to avoid a crisis or conflict, the fundamental way should be to stop or at least reduce its military actions around China that are harmful to China's national security.

It is these differences that lead to the serious retrogression instead of strengthening of mil-to-mil crisis management at a time when the risks of a crisis or conflict are rising. This is obviously not conducive to avoiding a military conflict and achieving peaceful coexistence between China and the US.

How will mil-to-mil relations develop in the foreseeable future? I think, first of all, it will depend on whether the political relations will steadily improve in the second half of this year with some positive results. If so, it can be expected that the mil-to-mil relationship will gradually pick up in the near future, including some dialogues and exchanges. Secondly, it will also depend on whether the differences on "protection and security net" and "guardrails", especially on how to manage a military crisis, can be gradually narrowed. If the two sides manage to move towards each other and take the other's suggestions and propositions into account, it will be positive for mil-to-mil relations to stabilize and improve.

A review of history in the first two decades after the end of the Cold War suggests that the speed and degree of the recovery and development of mil-to-mil relations are usually slower than those of political and economic ties. This may still be the case in the future. However, under new circumstances, we should not completely rule out the possibility of a faster recovery and improvement than in the past. This is urgently needed given the extremely deteriorated mil-to-mil relations. In the past, it didn't matter much if the pace was slower,

since the two militaries wouldn't have a conflict, let alone a war. Is this still the case now? The leaders of the two countries and the two militaries must regard the mil-to-mil relationship as a "stabilizer" in bilateral relations; such is the common understanding reached in 2019. China and the US should come back to this agreement.

If the relationship between the Chinese and American armed forces can be steadily improved in the future, the risk of a military conflict between the two sides will decrease, and arms control will be gradually put on their agenda, with the aim of changing the military security dilemma and the tendency of arms race that have already emerged between the two countries. This will be of great significance to maintaining China-US strategic stability.

V. New technologies' impact on China-US nuclear relations

Finally, with only limited research, I would like to briefly talk about the important issue of the possible impact of new technologies on China-US nuclear dynamics.

In the first decade of the new century, outer space and cyber technologies developed rapidly in the absence of common international rules, intensifying security concerns and competition between China and the US, and bringing about new challenges and negative effects to their nuclear dynamics and mil-to-mil relations. In these two emerging security fields, the US not only refused to conclude an agreement against militarization,¹¹ but also took the lead to set up the space force and the cyber force, leading to an intensifying military competition in the two fields.

¹¹ Since 2008, China and Russia have submitted several drafts of a Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT). However, no progress has been made due to the opposition of the US and some other countries. The US has also maintained that the armed conflict law should be applicable to the cyberspace while China believes that the world community should consider make a new treaty for the cyberspace.

In the second decade, the US formulated the so-called “cross-domain deterrence” strategy, proposing to retaliate with nuclear weapons when its outer space or cyber facilities are militarily attacked. This policy greatly aggravated risks in China-US nuclear and mil-to-mil relations. In the then Track 2 and Track 1.5 dialogues, Chinese experts clearly stated that the outer space and the cyberspace are to a certain extent global commons like the sea lanes and therefore it is in the common interest of both sides to safeguard their security. Militarization and arms race should be resolutely opposed in these two fields, which should never be turned into the battlefield of a nuclear conflict. China and the US should reach an agreement on not attacking each other’s outer space and cyber facilities.

It is a serious concern that the severe challenges brought by the rapid development of outer space and cyber technologies to the relations between the Chinese and American armed forces and their nuclear dynamics have not been effectively addressed, the negative impact of hyper-sonic missile technology and AI weaponization has been rising day by day in recent years, fueling new competition between China and the US. Among them, if the command, control, and communication system of nuclear weapons (NC3) is AI-enabled, once the use of nuclear weapons is not under the control of human beings, it may bring unpredictable, huge security risks and even devastating consequences to the whole world. It is in the common interest of China and the US to formulate an international convention as soon as possible to regulate AI and its military application, especially to restrict its application in NC3. The two sides should bear in mind their international responsibility as two major powers and step up consultation, coordination and cooperation in this regard in multilateral and bilateral dialogues.¹²

¹² In December 2021, at the Sixth Review Conference on the UN Convention on Certain Conventional Weapons, the Chinese Ambassador for Disarmament Affairs submitted for the first time China’s Position Paper on Regulating the Military Application of Artificial Intelligence, calling on all countries to seek consensus on how to regulate the military application of AI through dialogue and cooperation, build an effective international governance mechanism with universal participation, and prevent the military application of AI from causing major damage or even disaster to mankind.

To sum up, a few brief conclusions can be drawn.

First, due to the US strategic competition targeting China and its growing threat to China's nuclear survivability, the Sino-US nuclear relationship has entered a new era, albeit short of being competitive as the US has alarmed. Whether the two sides can avoid nuclear competition or confrontation in the future will depend on their interactions, but first of all it will depend on the policy of the US with its largest nuclear strength on Earth.

Second, in order to avoid nuclear competition and confrontation, China and the US should strive to have a bilateral nuclear dialogue at an early date, carry out nuclear arms control on the basis that is quite different from the US-Soviet strategic stability dialogue, maintain strategic stability, and create conditions for multilateral nuclear disarmament in the future. This is in the interest of both sides.

Third, it is the responsibility of both China and the US to resume cooperation on global nuclear non-proliferation mechanisms. The Korean peninsula can be the first place for the two sides to resume non-proliferation cooperation. At present, they must prioritize crisis management, military conflict prevention and arms control, but in the end, they must make concerted efforts towards denuclearization of the peninsula.

Fourth, the mil-to-mil relationship has an important impact on China-US nuclear dynamics. The current tension between the two sides is extremely risky. If the recent process of resuming high-level communication and contact continues, and if differences between the two sides in crisis management can be reduced, this relationship will hopefully gradually stabilize and improve. This is of great significance for China and the US to avoid a military conflict and maintain strategic stability.

Fifth, the negative impacts that new technologies may bring to China-US nuclear dynamics must be given enough attention. Dialogue must be conducted, and new laws made to regulate and control them and avoid a new arms race. This question must be put on the agenda of the two countries and armed forces as soon as possible.

It is hoped that the governments and leaders of the two countries will make correct choices, start dialogue, and resume cooperation in the nuclear field at an early date, and

resolutely avoid the prospect of nuclear competition or confrontation. This is conducive to not only the stability and development of China-US relations but also world peace, security, and development. ■

References

Richard, Charles A. 2021. “Forging 21st Century Strategic-Deterrence.” US Naval Institute Proceedings, February.

U.S. Department of Defense. 2017. “Military and Security Developments involving The People’s Republic of China.”

_____. 2018. “Military and Security Developments involving The People’s Republic of China.”

_____. 2019. “Military and Security Developments involving The People’s Republic of China.”

Warrick, Joby. 2021. “China is building more than 100 new missile silos in its western desert, analysis says.” *The Washington Post*, June 30.

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