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Conference Report by
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Issues & Insights
Vol. 14-No. 9

Beijing, People’s Republic of China
November 4-5, 2013

Pacific Forum CSIS

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**The Eighth China-US Dialogue on Strategic Nuclear Dynamics
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The commitment made by US President Barack Obama and Chinese leader Xi Jinping at the June 2013 Sunnylands Summit in California to forge a “new type of major country relations” between the United States and China has set a highly positive tone for the bilateral relationship. It has provided a useful framework to advance US-China cooperation (and better manage competition) on a range of issues, including in the strategic nuclear field where key disagreements persist and where there is still no official bilateral dialogue.

To foster greater bilateral understanding and cooperation between the United States and China and to prepare for/support eventual official dialogue on strategic nuclear issues, the Pacific Forum CSIS, with the China Foundation for International and Strategic Studies (CFISS), and with support from the Naval Postgraduate School’s Project on Advanced Systems and Concepts for Countering Weapons of Mass Destruction (NPS-PASCC) and the Defense Threat Reduction Agency (DTRA), held the 8th China-US Dialogue on Strategic Nuclear Dynamics in Beijing, China Nov. 4-5, 2013.

Some 85 Chinese and US experts, officials, military officers, observers, and Pacific Forum CSIS Young Leaders attended, all in their private capacity. Consistent with previous iterations of this dialogue, the level of the Chinese delegation was fairly senior, including several active duty officers and significant participation from the People’s Liberation Army’s (PLA) Second Artillery Corps. They joined two days of off-the-record discussions on strategic nuclear relations, current nonproliferation challenges, nuclear doctrines and force modernization, missile defense, space cooperation, and crisis management and confidence building measures, as well as in-depth sessions (conducted in small working groups) on the development of a space code of conduct and arms control verification.

On the margins of the dialogue, and for the first time in this process, the US delegation was also invited to a one-hour discussion with the Deputy Chief of the PLA General Staff, who expressed support for continued military-to-military dialogue given high-level political support for such activity.

The Strategic Environment

Our US speaker kicked off this session by looking at the geopolitical factors with potential strategic - and therefore nuclear - implications for the bilateral relationship. He explained that the strategic environment has changed much since the beginning of the century. The United States and China know that their relationship will be the dominant geopolitical fact in the foreseeable future. Both know that this relationship will include a mixture of cooperation and competition. They are aware that the rise of new major powers has often resulted in conflict and want to avoid

letting competition become confrontation or something like the Cold War. That is why both stress the importance and inevitability of China's peaceful rise, with the United States emphasizing "peaceful" and China stressing "rise."

Both the United States and China have concerns, however. China fears that Washington does not accept its rise and seeks to contain it. The United States fears that Beijing sees its rise as displacing the traditional US role and influence in the Pacific. As a result, China pursues anti-access and naval capabilities and the United States has developed the Air-Sea Battle (ASB) concept in response. Nuclear weapons loom in the background. Both countries believe that no interest is important enough to risk a nuclear exchange, but they are suspicious of each other. Chinese fears that US ballistic missile defense systems are aimed at China and Americans look at China's nuclear modernization and fear that Beijing intends to go beyond "minimum deterrence" to something that would alter the strategic environment in fundamental ways.

In this context, our US speaker argued that the strategic environment prioritizes two tasks. In the short-term, one task is to ensure that mutual suspicion and fear do not increase the chance of crises leading to military engagement. The maritime domain today and perhaps the cyber domain tomorrow seem to be the most logical areas where such crises might arise. This makes it imperative to discuss crisis management, confidence and security building measures, the role of US alliances in the Pacific, and the future of US-Russia arms control and China's role in it. The long-term task is to construct a future that will be biased toward cooperation rather than confrontation. This involves enhancing cooperation in various areas to build habits of working together. President Xi Jinping's call for a "new type of major country relations" is a hopeful step because it suggests a future based on cooperation, while recognizing inevitable competition. Of course, both the short-term and long-term tasks call for official dialogue between the United States and China.

After stating that the Sunnylands Summit provided a useful framework for the United States and China to enhance cooperation, including on strategic nuclear issues, our Chinese speaker focused on arms control. He explained that Beijing looks favorably at US-Russian progress on arms control and that Obama's Berlin speech (and his call for additional nuclear reductions) is a positive development; the absence of a Russian response should be attributed to US missile defense deployments and conventional prompt global strike plans. Other signs of progress are the P-5 diplomatic process and the recent preparatory committee meeting of the Nuclear Nonproliferation Treaty (NPT). China has been active in both processes. It has acted as the lead to develop a glossary of nuclear concepts and terms in four different languages, which will be presented at the 2015 NPT Review Conference. Finally, although the Conference on Disarmament remains deadlocked over the opening of negotiations for a fissile material cut-off treaty, new impetus toward nuclear disarmament has emerged with several civil society movements emphasizing the humanitarian consequences of nuclear use and the need to delegitimize nuclear weapons.

Our Chinese speaker also addressed nonproliferation and nuclear security issues. He noted that the North Korean and Iranian proliferation crises have not been solved. Although the stalemate was broken on the Iranian issue, a comprehensive solution remains elusive. The North Korean crisis has gone through ups and downs and there is no solution in sight. While China has tried to

push North Korea toward negotiations without accepting its nuclear-armed status, the US threshold for engaging Pyongyang in dialogue and negotiations is too high to allow any progress or to contemplate the reopening of the Six-Party Talks. Meanwhile, there are important proliferation threats from non-state actors. These threats are likely to increase as several Southeast Asian countries are investing in nuclear power programs. In this regard, the third Nuclear Security Summit, scheduled to take place in spring 2014, is a key event where progress to secure radioactive materials should be achieved.

The discussion focused on the meaning and implications of the goal of forging a “new type of major country relations.” All participants agreed that this commitment was a positive development, providing a useful framework to promote US-China cooperation (and better manage competition) in several areas, including in the strategic nuclear field. Chinese hailed “non-confrontation” and “mutual respect” as the key principles to govern the “new type” of US-China relations, stressing that it was essential to ensure that these relations differ from US-Soviet relations during the Cold War. Chinese also reminded their US counterparts that China is faced with a more volatile security environment than the United States, despite Chinese efforts to strengthen ties with its neighbors, making it more important to make “non-confrontation” and “mutual respect” with the United States underlying principles, particularly in the case of disputes with US allies and partners.

Americans agreed in theory with the “non-confrontation” and “mutual respect” principles, but stressed that this needs to be played out in the real world. In other words, to work properly, each country needs to be keenly aware of the other’s vital national interests, as was the case during the Cold War. This demands strong cooperation, which will build habits of working together and, in turn, help reduce mutual suspicions and fears. Given the ongoing issues in the East and South China Seas, the immediate focus should be the maritime domain and the foundations should be laid now to enhance cooperation in the space and cyber domains. Americans and Chinese agreed that the most serious challenges come from geographical and technological entanglement and that they should work together to strengthen their ability to deal with these problems. Significantly, there was general acceptance of the term “strategic stability” as a positive goal and foundational element. How to “operationalize” it, however, was left undefined.

As nuclear weapons loom large in the background of US-China interactions, Americans argued that a track-1 bilateral strategic nuclear dialogue, which Washington has long called for, should be a core component of a “new type” of relationship between the two countries. In a marked shift from past discussions, a number of Chinese participants embraced the idea; one senior PLA officer planned to “encourage” the Chinese government to take up the US offer. The possible form of such dialogue was even discussed, with most Americans favoring the US Strategic Command and Second Artillery as the principal interlocutors, rather dialogue within established frameworks such as the Strategic Security Dialogue (SSD) and the Defense Consultation Talks (DCT), which a few Chinese participants proposed. The Chinese remain hesitant to see the Second Artillery in a central role in such a dialogue, arguing that it does not make policy or policy recommendations, but merely implements decisions once by higher authority. They do not object to the Second Artillery being involved in the dialogue – in fact, they see these talks as helping to prepare them for such activity – but are cautious about the Second Artillery assuming a leading or central role.

Nonproliferation Cooperation

Our Chinese speaker focused on the North Korean nuclear issue. He explained that Pyongyang restarted its 5MW reactor, is building another one, and that it may be making headway on its uranium program. Moreover, North Korea has mastered the technical capability to weaponize its fissile material and may soon be able to miniaturize a nuclear device to fit on its missiles. China is concerned by these developments because it has historical, geopolitical, and economic interests in finding solutions to the current situation. That is why, in recent months, Beijing has increased pressure by endorsing UN Security Council Resolution 2094 and strengthening export controls toward North Korea, among other things.

Our Chinese speaker argued that China and the United States both want the current stalemate to end. Without policy change, however, the situation could worsen and, as he put it, “transform into a troublesome issue between China and the United States.” Plainly, China and the United States need to agree on a new framework to address the North Korean nuclear issue. Such a framework should be based on shared interests, understanding of and respect for the counterpart’s key concerns and policy preferences, and a clear end-goal to manage the problem. This requires the United States to conduct a complete review of its North Korea policy. A joint assessment of US and Chinese policies toward North Korea might also be helpful. Key questions include: Is it a proliferation issue or has it developed into a regional security issue? Is the goal the denuclearization of North Korea or of the whole Korean Peninsula? To what extent should North Korea’s concerns be taken into consideration when addressing the nuclear issue? Has US policy paid off?

Meanwhile, our speaker pointed out that China and the United States should help nurture an environment conducive to transform, as opposed to change, the North Korean regime. It might be timely to do so, as Pyongyang is getting prepared to conduct a series of important reforms. [Editor’s note: this meeting took place before the purge of Jang Song-Thaek, widely seen as the primary proponent of Chinese-style reform in North Korea.] China can help guide North Korea on how to open up while maintaining domestic stability, while the United States could help it shift from its emphasis on military forces to developing its economy. Of course, such engagement would not prevent China-US cooperation against North Korean provocations, if they occur.

Our US speaker stressed that the United States and China have different priorities and perspectives on many key nonproliferation issues but that they also have important shared interests. The challenge is to identify them and build habits of nonproliferation cooperation. Regarding North Korea, US-China cooperation should focus on creating a “South Africa moment,” with China making efforts to encourage regime evolution and the United States signaling its willingness to change its North Korea policy if there is denuclearization. The United States and China should also cooperate to avoid and contain North Korean provocations and to contain proliferation of materials and know-how from North Korea. Regarding Iran, despite divergent US and Chinese priorities and perspectives, namely on the role of sanctions and Iranian intentions, the United States and China have shared interests in avoiding greater regional instability resulting from Iran’s development of nuclear weapons or a “virtual” arsenal. US-China cooperation within the P-5+1 will be essential to achieve an outcome that provides

sufficient nonproliferation reassurance and ensures that there can be “no cheating at the margin” of a future deal.

More generally, our US speaker argued that the United States and China have shared interests in sustaining the legal, political, and institutional foundations of nonproliferation. There are opportunities for the United States and China to work together to ensure that the 2015 NPT Review Conference is successful and that the 2010 Action Plan is implemented, in addition to finding ways to better address noncompliance crises. China’s (self-described) role as an “intermediary” between nuclear weapons states and non-nuclear weapons developing states may prove useful in this regard. P-5 diplomatic engagement is also key to the success of the 2015 NPT Review Conference and it is important to enhance P-5 cooperation so that the “Nuclear Glossary” developed under Chinese leadership is concluded before 2015. More activities should be encouraged: a working group on nuclear disarmament should be established to bring the P-5 together with some non-nuclear weapon states, P-5 technical exchanges on verification and dismantlement issues should be developed, and honest discussions among the P-5 should take place on how nuclear disarmament actions can be advanced. Finally, US-China dialogue should be promoted to help address proliferation crises in Asia. Two potential crisis areas should be explored: how to deal with a nuclear terrorist incident and how to respond to an India-Pakistan military confrontation.

During the discussion, Chinese participants stressed that proliferation and nuclear terrorism are “one of China’s crucial concerns,” dismissing a claim that Beijing’s nonproliferation and nuclear security efforts are concessions to Washington. In sharp contrast with the last iteration of this dialogue, where Chinese participants criticized US “double standards” policy, discussions focused almost exclusively on how Washington and Beijing can work together to combat proliferation and nuclear terrorism threats. Participants identified UN Security Council Resolution 1540 implementation, the development of best practices to combat nuclear terrorism (bilaterally and under the auspices of the Global Initiative to Combat Nuclear Terrorism), and the establishment of a zone free of weapons of mass destruction in the Middle East as possible areas of cooperation. Moreover, while continuing to argue that China refuses to join the Proliferation Security Initiative (PSI) because of concerns it might be applied in a manner inconsistent with international law (despite President Obama’s Prague promise to turn it into a “durable international institution”), one Chinese participant noted that Beijing, nevertheless, supports the objectives of the initiative and is making related efforts to achieve them. More generally, Americans and Chinese participants agreed that strong US-China cooperation was important to ensure that the 2014 Nuclear Security Summit and the 2015 NPT Review Conference are successful and produce results.

On the North Korean nuclear issue, American participants insisted that Pyongyang cannot be allowed to have nuclear weapons *and* pursue economic development. There was little agreement between Americans and Chinese on how to present Pyongyang with a “stark choice.” Chinese participants explained that Beijing recently adjusted its policy, giving priority to denuclearization, and they insisted that this was an important and durable policy shift, not just a tactical move.

Meanwhile, Chinese insisted that they support North Korea to develop its economy and improve its people's living conditions. Chinese participants pointed out that Beijing remains reluctant to put "too much pressure" on Pyongyang and that it will continue to favor regime transformation primarily through negotiations, both because more combative approaches like sanctions are likely to be counterproductive and because the consequences of North Korea's collapse, which such approaches could trigger, would be dramatic for China. (While some Chinese spoke of the Six-Party Talks as the "only viable forum" for such negotiations, others suggested that a three or four party process should be envisioned.) Responding to claims that US policy toward North Korea had failed and needed to be reviewed to focus more on negotiations, Americans stressed that Washington has tried to negotiate with Pyongyang several times, but that the regime has continued to press on with nuclear and missile developments. They also pointed out that Chinese efforts to slowly transform North Korea had failed, which a few Chinese acknowledged.

When Americans explained that the US preferred end-result would be a unified and denuclearized Peninsula under the leadership of Seoul, Chinese participants appeared to understand that the "true" US goal is regime change, as opposed to denuclearization. They stressed that such an approach was not conducive to enhancing US-China cooperation on this issue. Americans insisted that this constituted the *preferred* US end-result and that Washington was not actively pursuing regime change but denuclearization. Meanwhile, Chinese participants generally ignored US calls to open policy planning discussions to deal with the possible collapse of North Korea, calling the topic "too sensitive."

Nuclear Doctrine and Force Modernization

Our US speaker explained that the Obama administration has two priorities with regard to nuclear doctrine and force modernization. The first priority is to implement the new presidential guidance on nuclear deterrence, which is classified but summarized in an unclassified report to Congress dating June 19, 2013 and which deals with updating military operational plans. The second priority is to ensure the needed funding for the planned modernization of US forces. This will involve replacing or extending the life of warheads, delivery systems, and command-and-control systems developed during the Cold War: the result will be a smaller deterrent posture, but it will come with large costs at a time of tight financial constraints from the United States.

The new US nuclear employment strategy establishes the president's requirements for the operation of the US nuclear force in peacetime, crisis, and war. It reflects the results of the 2010 Nuclear Posture Review. One important change for US deterrence strategy is the rise of regional actors newly armed with nuclear weapons and long-range missiles, a change that calls for the United States to strengthen deterrence of these actors (and reassure US allies that face these new threats). The second important change is in the relationships with Russia and China. US-Russia and US-China relationships have improved, making it unnecessary for the United States to make deterrence the core principle of these relationships, as was the case during the Cold War. Yet the fundamentals of America's deterrence strategy remain unchanged: Washington remains ready to put at risk by nuclear means the most valued assets of each if need be.

A key related function of the deterrence requirements review was to identify a possible pathway for additional reductions in nuclear forces in partnership with Russia. The review concluded that

additional reductions in deployed strategic forces are possible in the context of parallel reductions with Russia. Another bilateral step is possible without the participation of other P-5 members. Yet there is a strong view in Washington and Moscow that additional bilateral reductions require more confidence than now exists that China will not continue to increase its nuclear forces as the United States and Russia shrink theirs. This makes even more vital additional transparency from China about the current and planned future size of its nuclear arsenal; Beijing *has* made transparency efforts in recent years, but more is needed.

Our US speaker concluded by arguing that there are five major perception gaps between the United States and China. First, there is a gap regarding the implications of the rejection of no-first-use (NFU) by the United States. Chinese see this as confirmation that Washington intends to rely heavily on nuclear deterrence while Americans stress that nuclear weapons would only be used in extreme circumstances when the vital interests of the United States and/or an ally or partner are put in jeopardy by an aggressor. Second, there is a gap regarding the missile defense intentions of the United States: while Chinese tend to believe that such systems are meant to negate China's deterrent, Americans stress that they are solely directed at North Korean missiles. Third, there is a gap regarding understanding of strategic posture, with Chinese believing that Washington is developing a strategy of encirclement and containment and Americans fearing that Beijing could move away from a minimum deterrence posture. Fourth, there is a gap regarding the stability implications of mixed nuclear and conventional forces: the United States has exercised restraint in developing capabilities that could create confusion, but China does not seem to have such concerns, as it has proceeded with the deployment of conventional-armed ballistic missiles together with nuclear-armed ballistic missiles. Finally, there is a gap in how Chinese and Americans perceive the benefits, costs, and risks of establishing an official strategic dialogue, with Washington attaching a higher priority than does Beijing.

Our Chinese speaker began by outlining the features of China's nuclear strategy, stressing that its core purpose is - as it always has been - strategic deterrence of a nuclear attack. China only seeks a retaliatory capability. It does not want nuclear parity with the United States nor does it seek to engage in arms races. Beijing's goal is the development of a "lean and effective" force. It does not want to follow the US/Russian example, i.e., develop large forces and then proceed with nuclear reductions. Although some people in China have called for a policy and strategy change, the vast majority of the defense establishment is reluctant to do so.

China's force modernization is a response to the progress made over the past two decades to detect land-based forces and to develop and deploy missile defense systems. Still, Chinese efforts are carefully calibrated and will not trigger an arms race. As a result, the United States (and Russia) should not fear a Chinese "sprint to parity." The arguments put forward by some analysts, such as Phillip Karber, that China possesses large stockpiles of nuclear weapons in tunnels are groundless and inconsistent with Beijing's longstanding nuclear doctrine. The purpose of the Second Artillery's tunnels is not to hide additional weapons but to increase China's force survivability.

Our Chinese speaker went on to describe Beijing's assessment of US nuclear policy and strategy. With Obama in office, China at first had great expectations but quickly realized that these expectations fell far short of what the United States was prepared to or actually could deliver.

Despite some good developments, Washington has failed to tackle non-deployed nuclear warheads and tactical nuclear weapons and it maintains first-use, counterforce, and launch-under-attack strategies. Moreover, it is developing and deploying missile defense systems to complement strategic deterrence. Beijing is also troubled by the 2013 National Defense Authorization Act, which calls for a study of Karber's thesis, and a determination whether the United States has the ability to attack Chinese tunnels with conventional or nuclear weapons.

During the discussion, Chinese acknowledged and applauded Washington's willingness to further downsize its nuclear arsenal in tandem with Russia, but stressed that current Russian resistance to do so is logical given US missile defense policy and plans to develop conventional prompt global strike capabilities. Americans responded that Russian concerns are not solely focused on these issues. At the moment, Moscow does not see an advantage in engaging in another arms control round with Washington over strategic weapons. Another reason is that the next round may include tactical nuclear weapons, on which Russia is reluctant to negotiate. Americans also pointed out that Moscow has been adamant that deeper cuts require, at a minimum, some level of assurance against a Chinese "sprint to parity," which suggests that more efforts are needed by Beijing to provide evidence to Moscow as well as to Washington that it will not take advantage of the US-Russian nuclear reduction process.

Our Chinese speaker's disappointment with current US nuclear doctrine and achievements was echoed by other Chinese participants. Americans responded that the size and shape of US nuclear forces are intimately linked to those of Russian forces. Washington is determined to reduce its arsenal, but it will not do so unilaterally - only in tandem with Russia. Nevertheless, Americans reiterated that there have been significant shifts in US policy (and that the Obama administration has even been criticized for going too far). For instance, Washington has noted that the threat of global nuclear annihilation has receded considerably and, instead, now pays closer attention to regional conflicts where an adversary *may* cross a red line that would invoke US nuclear retaliation. At the same time, given that the odds of crossing such a red line are low, Washington increasingly relies on missile defense and conventional weapons systems because they are better suited to today's regional conflicts, not because it seeks to negate China's (and Russia's) arsenals. Finally, Americans stressed that Chinese should keep in mind that the 2013 National Defense Authorization Act's requirement to study the purpose of Chinese tunnels is a compromise that resulted from pressure by hardliners on the US political scene.

Chinese participants reiterated that the sole purpose of China's nuclear arsenal is deterrence of nuclear attacks. While acknowledging internal debates about revising its NFU policy, they insisted that China's doctrine remains unchanged.

Since China only has "a few hundreds" nuclear weapons, Chinese participants speculated that China would only join the arms control process after US and Russian "deep cuts." Significantly, one Chinese participant hinted at the number of 1,000 (deployed and non-deployed) warheads as a baseline for China's involvement. Even then, several preconditions would have to be met, including a treaty among the P-5 (based on appropriate ratios, as opposed to parity) and solutions to the offense-defense dynamics.

Breakout Sessions on “Space Code of Conduct and “Verification”

To provide in-depth analysis of two key issues, conference participants broke up into two groups. One focused on the need for and components of a space code of conduct and the role of such a code to complement other space negotiations; the other examined lessons from US-Soviet/Russian verification issues that might apply to US-China or broader multilateral verification efforts. In each group, one expert from each country gave brief opening remarks to stimulate discussion.

Space Code of Conduct

Our Chinese speaker began by stressing that there is no consensus between China and the United States on the need for bilateral space dialogue and that multilateral dialogue offers a more promising avenue. Progress toward bilateral dialogue is unlikely without “an appropriate political atmosphere,” i.e., if the United States ends its prohibition of bilateral cooperation between Chinese and US experts. China and the United States, however, should begin cooperation on non-sensitive topics before extending cooperation to other areas.

Our speaker also argued that space arms control and a ban on the use of force in outer space are important and that US reservations to such proposals are problematic (and suggest that Washington is unwilling to constrain its capabilities and prefers instead to better defend itself and its allies). China, for its part, should develop a transparency system that shares information with its domestic audience first and foreign audiences second. This would be a positive development laying the foundation for a space code of conduct.

Our US speaker explained that the need for a space code of conduct comes more from civilian and military operators than diplomats. The region of space near Earth has been transformed from a vast, empty frontier into a bustling, congested, and competitive zone of substantial and growing activity. As a result, some form of regulation, informal at first, is needed so that “near-space” does not become unusable. Of course, agreeing to an informal code of conduct to regulate this zone does not preclude the possibility of more formal arrangements. This code should include debris and other sustainability issues, physical and electromagnetic proximity issues, transparency/ notification issues, safety and safe passage issues, best practices and information/ technology exchanges, the establishment of regular lines of communication, and other areas of space cooperation.

Our speaker stressed that the non-binding nature of this code means it would not preclude work on other space diplomatic and security objectives. The code should be seen as a laboratory to demonstrate that voluntary rules are sufficient to ensure responsible space behavior or to suggest that more formalized agreements are necessary for compliance. It should be an essential precondition to discussions about maintaining stability in space, especially crisis stability.

During the discussion, both sides agreed on the importance of establishing dialogue on space and cooperative mechanisms, especially given the growing importance of this domain in strategic relations. However, while not rejecting the development of a code of conduct per se, Chinese participants argued for “a more comprehensive system of rules,” referring to the 2008 proposal

jointly made by China and Russia for a “Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects” (PPWT). As one Chinese put it, “PPWT is meant to ban tanks, while a code of conduct merely describes traffic lights; so why shouldn’t we cut to the chase and ban tanks right away?”

Americans insisted that Washington is not opposed to space arms control, but that US officials are skeptical that a treaty on the “demilitarization of outer space,” as outlined in the PPWT proposal, could be verified. One American questioned how a weapon put in space could be verified, bringing home the point that it is easier to witness an action than a weapon in the space domain. As a result, from a US perspective, the development of a code of conduct would be a more desirable first step. Chinese, however, saw no harm in opening *negotiations* for a verifiable treaty. They argued that similar seemingly intractable hurdles to effective verification existed at the dawn of the nuclear age and that dialogue and negotiations gradually brought solutions to these problems.

Verification

Our US speaker began by stressing that on-site inspections have made a critical contribution to the success of US-Russia arms control, that they are key components of several multilateral arms control and nonproliferation regimes, and that procedures can balance the need for timely and effective validation of treaty adherence against the need to protect sensitive national security information. Verification provisions are part of the Intermediate-Range Nuclear Forces (INF) Treaty, the Strategic Arms Reduction Treaty (START), and New START. They consist of communication among treaty parties (data exchanges, notifications, exhibitions), transparency (through national technical means), and validation of results (through on-site inspections). Multilateral organizations such as the International Atomic Energy Agency (IAEA), the Organization for the Prohibition of Chemical Weapons (OPCW), and the Comprehensive Test Ban Treaty (CTBT) also resort to on-site inspections.

Our speaker explained that the number of allowed inspections need only be a portion of the total number of inspectable facilities. One important lesson is that overlapping and layered inspection and verification provisions have greatly increased confidence in adherence to treaty provisions. Occasionally, disputes arise during the course of inspections. They may have to do with inspectors’ access rights, inspectable boundaries, the presence of undeclared items, or the procedures performed in observing or measuring treaty inspectable items. In general, disputes are resolved through consultations between the inspection team and their escorts. When they cannot be resolved on the ground, a report is made and the matter is referred to each sides’ national capital to be resolved through diplomatic channels, including the relevant compliance and implementation commissions.

Our Chinese speaker concurred that verification and on-site inspections play a key role in arms control and disarmament agreements. They are, as he put it, “the foundation of most treaties and help their implementation.” This is true both for bilateral (US-Russian) treaties and multilateral agreements. That is why China would like to know the specifics of New START implementation, which are reportedly proceeding well but remain under wraps.

Still, our speaker explained that “too much emphasis on verification can be harmful” and that inspections cannot be considered a silver bullet, as Iraq has demonstrated. Nevertheless, inspections and broader verification mechanisms are useful and can help address “emergency issues that might arise.” It is important, therefore, to create the conditions to increase acceptance of such mechanisms. In this regard, Beijing has played an active role. It has encouraged the inclusion of verification procedures in the CTBT and developed a national authority to verify its operation. Beijing has held seminars on issues related to CTBT on-site inspections. And while China is not prepared to join arms control and disarmament discussions, it has started research on disarmament techniques and is conducting work to verify a future fissile material cut-off treaty. Similarly, over the past decade, China has accumulated important knowledge on issues pertaining to OPCW verification, so much so that it now supports establishment of a verification regime for the Biological and Toxin Weapons Convention.

During the discussion, it quickly became clear that US and Chinese participants were in general agreement that verification-- which they all understood as being part of an interlocking set of exchanges and consultations at the core of which are on-site inspections-- is the foundation of arms control and nonproliferation agreements. Significantly, there was general acceptance that verification helps build trust and stability – an argument that Chinese put forward a week later at the Nuclear Energy Experts Group Meeting of the Council for Security Cooperation for the Asia Pacific, which took place in Da Lat, Vietnam on Nov. 11-12, 2013. Participants further concurred that the challenge is to find a proper balance between secrecy and reassurance and between effectiveness and intrusiveness. Chinese proved receptive to US explanations that the experiences of START and New START, in particular, have shown that a balance can be found and that disputes can be addressed, so long as interested parties are willing to work together.

In sharp contrast with previous discussions, Chinese participants were considerably less resistant to the concept of verification. While insisting that the United States has much more experience than China, they reminded that Beijing has been - and will continue to be - active in developing verification techniques and processes in a number of agreements. A few Chinese participants dismissed a claim that the Chinese military is not prepared to advance US-China cooperation in this field, pointing out that verification is now “popular” in China. Yet they stressed that Beijing is concerned because there is a strong anti-verification constituency in the United States and its effects have already been felt: Chinese participants noted that the United States, for instance, attached important reservations when it ratified the Chemical Weapons Convention and that its support for the CTBT’s International Monitoring System has been inconsistent.

Missile Defense

Our Chinese speaker presented the analysis and conclusions developed in the *Survival* article “China’s Anxiety about US Missile Defence: A Solution” (October-November 2013). Using his own calculations, he argued that current US ground-based midcourse defense systems, which are officially designed to counter North Korean intercontinental missiles, have the capability to engage China’s strategic missiles. Similarly, the US phased adaptive approach, which focuses on the European theater, could pose a threat to China if its mobile assets were deployed in East Asia. Moreover, although the United States has yet to clearly delineate its Asia-Pacific ballistic missile defense systems, several of its forward-based radars can detect China’s strategic missiles.

This is alarming because early detection gives the defensive side more warning to intercept missiles (and longer-term radar tracking can contribute to more effective decoy identification). Finally, the ballistic missile defense structure recommended by the National Research Council, if implemented, would considerably increase the odds of successfully engaging China's strategic missiles.

Our speaker pointed out that there are serious risks of a defense-offense arms race, with the United States developing and deploying ballistic missile defense systems unilaterally, regardless of other countries' concerns, and China responding by modernizing its nuclear forces. Given existing disputes over islands in the East and South China seas or over the Taiwan issue which could draw the US and China into direct conflict (with associated risks of nuclear escalation), it is urgent to resolve the ballistic missile defense dilemma. Finding a solution is difficult, however, because China only possesses a small and relatively vulnerable nuclear arsenal, and even a small ballistic missile defense system could absorb its low numbers of retaliatory nuclear warheads. Moreover, China operates both nuclear and conventional ballistic missiles, giving Washington a reasonable motivation to develop tactical ballistic missile defense systems; these systems are not destabilizing *per se* although some assets may be used for strategic purposes, undermining US-China strategic stability.

Still, our Chinese speaker stated that one solution would be for the United States to commit to a low level of ballistic missile defense effectiveness (enough to counter North Korea's unsophisticated intercontinental missiles) without threatening China's more advanced strategic missiles. In exchange, Beijing would agree to refrain from expanding its nuclear arsenal, confirming its longstanding policy in an explicit statement and via associated transparency measures that it does not seek nuclear parity with the United States. Such an arrangement would also require China to acknowledge Washington's concerns about theater ballistic missiles, including China's conventional ballistic missiles, so long as there is a clear distinction between tactical and strategic systems, as was the case during the presidency of Bill Clinton. It would also require that an arrangement be found regarding equipment such as forward-deployed radars: these systems are unacceptable to Beijing, which fears that they will be deployed close enough to China to register the decoy-deployment processes of strategic missiles, canceling the effectiveness of midcourse countermeasures.

Our US speaker explained that North Korea's missile developments, notably the Unha-3 SLV and Taepo Dong 2, pose a threat to the United States. So do its nuclear developments. The impact of these developments (and similar developments in Iran) on US ballistic missile defense plans has been substantial. North Korea's provocations and belligerent rhetoric have also solidified US public support for ballistic missile defense.

In 2009, the Perry-Schlesinger Strategic Posture Review Commission explained that US ballistic missile defense policy is guided by "the principles of (1) protecting against limited strikes while (2) taking into account the legitimate concerns of Russia and China about strategic stability." This remains true, even though North Korea's growing capabilities have left the United States no choice but to pursue deployment of additional interceptors. These deployments, however, remain modest. Nevertheless, the 2009 Commission also recognized that "China may already be increasing the size of its ICBM force in response to its assessment of the US missile defense

program” and US missile defense deployments, however modest they may be, may be influencing Chinese nuclear deployments. Unless the North Korean (and Iranian) threats can be capped, therefore, there is some prospect of a mini offense-defense cycle.

Our US speaker explained that the United States does not see missile defense as an attack shield (to mop up after a US first strike). Rather, it sees it as a tool to enhance deterrence of an adversary like North Korea. While Washington cannot count on missile defense working well enough, a small nuclear power cannot count on US missile defense *not* working well enough, which helps increase deterrence and risk aversion, particularly in a crisis situation. Of course, the deterrent effect of thin strategic ballistic missile defense can be undermined by large offense increases and technological changes.

Our US speaker argued that if handled correctly, missile defense need not be a contentious issue for the United States and China. Beijing should not worry about US ballistic missile defense plans because, as Washington has made clear, they do not have the potential to negate China’s deterrent. US plans could change, but China would be able to take steps to ensure the survivability of its deterrent. Equally important is for China to be more transparent about its own missile defense plans and objectives to avoid possibly destabilizing steps that either side might take as it hedges its security position; other confidence-building measures could include testing notifications or limited data exchanges, which could help build confidence.

During the discussion, despite a degree of reassurance to the contrary, Chinese participants expressed concern about the potential threat to its second-strike capability posed by US missile defense systems, conventional prompt global strike capabilities, and similar weapons systems. Chinese participants are concerned with missile defense numbers as well as with qualitative breakthroughs and systems integration with US allies and partners, especially the deployment of early warning radars in East Asia. As in previous meetings, Chinese did not always distinguish between US homeland and regional defenses.

Americans, for their part, went to great lengths to explain that missile defense “need not be such a great issue” for US-China relations. They stressed that it is important to look in more detail at the US missile defense architecture. There are US national missile defense systems that are solely designed to defend against North Korean and Iranian missiles. In addition, the United States deploys regional missile defense systems that target short-range missiles that might be used in a conventional conflict (and the best way to deal with such systems is for the United States and China to focus on conflict prevention). Americans insisted regional systems do not target China’s intercontinental missiles, that radars are not focused on China, and that, regardless, interceptors would not be fast enough against Chinese missiles. They added that the United States does not plan to deploy new interceptors in Southeast Asia or elsewhere and that a clear difference should be made between what US missile defense systems are and what they could be. In other words, US missile defense systems do not threaten China’s arsenal and US-China strategic stability. While understanding the tendency for worst-case assessments, Chinese planners were encouraged to envision the size and scope of a US missile defense force that could seriously threaten China’s second-strike capability and then attach a dollar figure and time estimate to developing such a theoretical force. This might set Chinese minds more at ease.

With regard to US plans to develop conventional prompt global strike capabilities, Americans argued that Chinese concerns are overblown given that, even if funded (which they are currently not), they would remain extremely limited in scope and not operational for years. Americans encouraged Chinese participants to read James Acton's comprehensive study on the topic, *Silver Bullet? Asking the Right Questions About Conventional Prompt Global Strike* (Carnegie Endowment for International Peace, 2013).

Space Cooperation

Our US speaker argued that US-China cooperation in space is essential because both countries have shared interests and problems in this domain and because international space rules and norms need to be expanded. When it began to be exploited in the mid-1950s, space was not governed by any rules. Steps toward the development of space governance mechanisms were only established in the early/mid-1960s, with the notable conclusion of the Outer Space Treaty (1967). No major space security agreement has been concluded since 1975, however. With the exception of the 2007 UN Debris Mitigation Guidelines, major powers have failed to close the gaps and limitations in existing treaties.

This is problematic because the space domain is becoming more important in strategic relations: new actors include the European Space Agency, Japan, Israel, India, Iran, North Korea, and South Korea. Several commercial actors are also becoming active, such as SpaceX or Virgin Galactic. Meanwhile, orbital debris and traffic are increasingly difficult to manage and positioning, navigation, and timing systems are more vulnerable. Actors are also expanding military activities in space: there is growing interest in kinetic/laser anti-satellite (ASAT) capabilities and jamming, growing concerns about the development of action-reaction dynamics, and no effective forum for negotiations. Finally, the legal framework governing the moon and celestial bodies does not include provisions on mining and could be a theater for future conflicts.

Our US speaker argued that it is in the interest of humankind to maintain safe access to space and promote its peaceful use. Also critical is preventing interference with critical space infrastructure such as navigation and communication systems, to improve international space situational awareness for safety, collision avoidance, and verification, and to reduce international military tensions, harmful weapons test, and arms race pressures. In recent years (even months), several space governance efforts have been initiated: Russia and China proposed the PPWT (2008), the Europeans crafted the "International Code of Conduct" for space (2012), the UN Group of Governmental Experts concluded its work, proposing that states adopt several transparency and confidence-building measures (2013), and the UN Committee on the Peaceful Uses of Outer Space (COPUOS) is conducting a sustainability initiative, which is expected to conclude in 2014.

US space policy is guided by the 2010 National Space Policy and the 2011 National Security Space Strategy, both of which strongly support international cooperation. In this spirit, the US departments of Defense and State have made outreach efforts to Beijing on space security since 2010. The hope is to increase transparency and confidence-building measures to encourage responsible behavior in space. A longer-term possibility is the conclusion of verifiable treaties that promote security and stability.

Our US speaker argued that there are numerous benefits to expanded US-China space talks: they would help reduce mistrust and promote better understanding of each other's space interests, create new rules/norms for safeguarding space utilities, provide a forum to defuse problems and avoid inadvertent military escalation, prevent further debris-producing events and other actions of mutual concern, and improve peacetime and crisis stability. Specific ideas for US-China space initiatives could include mutual noninterference pledges for space assets, exchanges of visits for space-launch observation, closer cooperation in debris-tracking and collision avoidance, discussions about further developing the Code of Conduct, bilateral/multilateral talks on kinetic ASAT tests (leading to a ban with international verification), and talks on concerns raised by space-based weapons (leading to a test ban, NFU, or no-first-deployment agreements). Of course, there are political obstacles to such developments. For starters, high-level attention to space issues remains limited. Hardliners in both capitals oppose greater cooperation and verification mechanisms to support new treaties are weak. Finally, China wants civil/commercial cooperation to come first, while the United States prioritizes military restraint and greater transparency.

Our Chinese speaker agreed that China and the United States have important shared interests and goals in space and that dialogue is important, especially as threats are increasing. The question is how to frame this dialogue. According to Beijing, it should be based on equality and mutual trust and take into account political considerations. In this regard, Washington needs to remember that Beijing's activities in space are essential. Progress in space cooperation is urgent because it has become a strategic issue but, as our speaker put it, "we need to find the right atmospherics now."

Beijing's principal focus is to promote the peaceful uses of space and, in particular, to prevent the weaponization of this domain. Since existing rules in outer space cannot address current problems, it is important to enhance multilateral cooperation to close gaps and limitations in the regime. Developing an international code of conduct would be a positive development, but it is not an end in itself. A more comprehensive system of rules is needed. A new outer space treaty would be ideal. In this regard, the 2008 PPWT proposal is critical. Many, including the United States, have criticized it on the basis that such a treaty would not be verifiable. Opening negotiations now, however, would be harmless and, with time, solutions can be found to its problems. Recent developments suggest that progress may be in the offing. The draft resolution on "Transparency and Confidence Building Measures in Outer Space Activities" jointly tabled by China, Russia, and the United States in the UN General Assembly First Committee Meeting in October 2013 suggests that greater cooperation among major powers is possible.

During the discussion, all participants agreed that differences over the desirability and feasibility of a space code of conduct and arms control treaty should not preclude cooperation in other areas, including collision avoidance, debris reduction, and improvement of Space Situational Awareness (SSA). Significantly, however, some Chinese continue to regard NASA restrictions as precluding most forms of space cooperation; they are, at a minimum, a sore point between the two countries.

Since the United States knows very little if anything about China's views about using or denying space during a conflict and vice-versa, and that there is the possibility of inadvertent escalation, one American suggested that transparency and cooperation in this domain would be a positive

development. This would require more understanding about what is technically possible and what remains impossible with Global Positioning Systems and military and imagery satellites. Another obstacle to progress is the lack of a clear definition of what constitutes space weaponization or a space attack.

Crisis Management and Confidence and Security-Building Measures

Our Chinese speaker emphasized the impact of cross-domain security issues, including in the space and cyber domains, on strategic nuclear relations and the problem that they could trigger in crisis situations. “Technological entanglement” should not be underestimated in drawing China and the United States into a serious conflict because each side’s ability to control escalation is uncertain. The possibility of a “domino effect” is real. In Chinese eyes, potential flash-points include Taiwan, North Korea, or the East China Sea. US extended deterrence poses another problem. Its extended deterrence relationships in Asia could prompt Washington to issues a nuclear or other type of threats to China. In such a scenario, it is unclear how Beijing would react.

Our speaker explained that it is critical that China and the United States have robust crisis management capabilities to provide reassurance messages. In addition, greater control over strategic weapons and an ability to “defuse” the use or threat of use of nuclear weapons would be a positive development. At the declaratory policy level, promises not to use nuclear weapons in a military confrontation and not to attack each other directly because of third parties would be helpful. (Our Chinese speaker expressed skepticism that the United States would be in a position to make the latter promise because of its alliance and extended deterrence relationships in Asia.) Several measures should also be developed to avoid escalation resulting from incidents or accidents: reconnaissance missions should be conducted, hotlines should be established, and exercises should take place on a regular basis to create habits of working together.

Our US speaker explained that basic approaches to crisis management are logical, but difficult to implement. Developed in part in *Managing Sino-American Crises: Case Studies and Analysis* (Carnegie Endowment for International Peace, 2006), they include the need to:

- Maintain direct channels of communication and send signals that are clear, specific, and detailed;
- Preserve limited objectives and limited means on behalf of such objectives (and sacrifice unlimited goals);
- Preserve military flexibility, escalate slowly, and respond symmetrically, i.e., in a “tit-for-tat” manner;
- Avoid “ideological” or “principled” lock-in positions that encourage zero-sum approaches to a crisis and limit options or bargaining room;
- Exercise self-restraint (and restrain from responding to all provocative moves);
- Avoid extreme pressure, ultimatums, or threats to the adversary’s core values, and preserve the adversary’s option to back down;
- Divide large, integrated, hard-to-resolve disputes into smaller, more manageable issues, thereby building trust and facilitating trade-offs; and
- Think ahead about the unintended consequences of one’s actions.

US-China crises present many obstacles to implement these guidelines because there are high levels of distrust, resentment, and negative “images” between the two countries. Moreover, both put a high emphasis on conveying resolve, both are influenced by strong state identities, and both have a tendency to define crises in moral or principled terms. It is unclear what types of interests/crises might involve threats or use of force, the level of relative commitment of each in specific situations, and the importance that each gives to uncertainty as a source of deterrence. Both countries also have different internal decision-making processes, which create different expectations. Avenues for authoritative crisis signaling remain unclear, and, from a capabilities’ perspective, there is a growing overlap between strategic and conventional forces, which creates significant confusion and makes more difficult the management of crises (and creates a security dilemma). Finally, the United States and China can be drawn into a crisis as a result of actions by third parties, such as Japan, North Korea, South Korea, Vietnam, or the Philippines.

Under these circumstances, clear understanding of stakes, escalation thresholds, deterrence/reassurance signals, and overall limits on use of force in general and in specific crisis situations are essential. Also essential is establishing clear procedures for interacting with allies in a political-military crisis, i.e., think through beforehand the impact of intra-alliance actions on the views of the other side, while guarding against manipulation by allies. Unofficial (yet government supported) work has been conducted that surveys crisis perceptions and signaling between the United States and China. Agreement has been found on the meaning of certain words and phrases used in crisis signaling. Yet more efforts are needed to address the crisis decision-making process within each government as well as problems of crisis signaling involving senior elite interactions, bureaucratic responsibilities, civilian-military relations, intelligence receipt and processing, and central-local linkages. Particular attention needs to be given to how standard operating procedures might influence crisis behavior. A joint governmental political-military working group on crisis management would be a positive development. This group would issue a set of working procedures that define the modalities of authoritative crisis communication between the two sides (e.g., specify the conditions under which the presidential hotline between the two governments would be activated), identify - and if possible rank - the most authoritative sources, other than the head of state, for the sending and receiving of messages outside the hotline to avoid the problem of “multiple” messages, and consider establishing direct lines of communication between subordinate civilian and military officials directly responsible for implementing crisis interactions.

During the discussion, American and Chinese participants acknowledged that the multiplication of “cross-domain strategic weapons” in the nuclear, space, and cyber domains creates serious challenges for both countries. In the same way, it was recognized that actions by third actors could drag both countries into a confrontation. As a result, all participants concurred that it was essential - even urgent - for Washington and Beijing to develop strong crisis management capabilities. While a few US participants pointed that a direct US-China military (or especially nuclear) confrontation over the Senkaku/Daiyou Islands in the East China Sea was unlikely, if not virtually inconceivable, others, including Chinese participants, insisted that it was nevertheless important that both countries think about worst-case scenarios.

Participants discussed the possibility of developing a crisis management glossary of key terms and concepts and of establishing a joint working group to develop “rules of the road.” A few

Chinese participants made a case for the establishment of a high-level working group. While acknowledging the value of hotlines and other similar mechanisms to enhance communication among key high-level decision-makers on both sides, Americans argued that “higher does not always mean better.” They explained that the experiences of the Cold War have shown the importance of working through regular, military-to-military channels to understand how things are done routinely and increase the chances that signals are not misinterpreted, particularly given that the odds of properly interpreting signals in crisis situations are generally low. In other words, it is preferable to deal with a crisis at the working level and not let political leaders drive the process. A few Americans also stressed that a joint working group on crisis management was, in theory, a good idea so long as it is working intimately with the people and organizations on each side that are involved in real-life crises.

More generally, in crisis situations, ambiguity should be avoided and signaling always clear, even if not explained at great lengths. In this regard, Americans pointed to the B-52/B-2 flights that took place over the Korean Peninsula in the spring of 2013, which was a carefully crafted operation meant to signal to North Korea (and to South Korea) that the United States would stand by its allies. At the same time, in an effort to ensure that there would be no mis-signaling, Washington cancelled the test of an intercontinental missile, which was scheduled to take place at that time.

General Observations, Concluding Remarks, and Next Steps

During this dialogue iteration, US and Chinese interlocutors made an obvious effort to look at each topic with an eye to positive signals that would be consistent with moving forward toward the “new type” relationship. The constructive, pragmatic tone was striking, especially in contrast to the more combative last session in January 2013. The “shirtsleeves” summit clearly set the tone for this meeting.

Discussion about opening an official strategic nuclear dialogue, the possibility of strengthened US-China cooperation to deal with the North Korea nuclear crisis and on nonproliferation and nuclear security more generally, as well as slow but increasingly robust space discussions were all encouraging signs. Also positive was the fact that a number of traditional “irritants” in the bilateral relationship - the US rebalance to Asia, extended deterrence, ASB, Taiwan arms sales, “core interests” concerns - were mentioned in a more rational way. The Cox Commission was initially mentioned in passing but US efforts to dismiss the report were met with an impassioned response. Chinese believe Americans underestimate its impact, which continue to preclude cooperation. Although Chinese participants no longer demand an apology, they sought acknowledgment that past cooperation was legal and beneficial was a prerequisite for resuming cooperation.

More consultations are needed on missile defense and conventional prompt global strike. The next discussion on missile defense should better distinguish between national systems meant to defend the US homeland and regional systems intended to defend US allies and forward deployed US forces. Moreover, it was argued that cooperation on arms control verification could be advanced if each side identified specific areas of potential agreement they would like verified. For instance, could inspections of Chinese fissile material facilities reassure the United States

(and Russia) that China does not intend to “sprint to parity”? Could we agree to confidence building measures on US missile defense and advanced conventional weapons to reassure China? An in-depth look at how escalation could unfold in crisis situations is also needed to understand the possible chain of events and identify how to enhance or regain control. A table-top exercise would be particularly helpful in this regard. More focused discussions on space issues, specific CBMs, and escalation risks that may be caused by conventional attacks against components of a nuclear system are also needed. Finally, this dialogue seems well suited to help define the nuclear and strategic elements of the “new type of major country relations” and could help develop the initial agenda of an eventual parallel track-1 dialogue.

APPENDIX A

The Eighth China-U.S. Dialogue on Strategic Nuclear Dynamics
A CFISS-Pacific Forum CSIS Workshop
Nov. 4-5, 2013, Beijing, China

CONFERENCE AGENDA

November 4, 2013

- 9:00 **Opening Remarks**
Chinese presenter: Zhang Yu
US presenter: Dennis Blair
- 9:10 **Session 1: The Strategic Environment**
What are Chinese and US perceptions of the current strategic environment? What are the primary trends and concerns? What are our shared objectives and concerns when it comes to halting the spread of nuclear and other weapons of mass destruction, and responding to noncompliance issues/crises in particular? What are the implications of President Obama's Berlin speech and overtures to Moscow for future arms reductions? Does President Xi's "China dream" have a nuclear dimension? What role will/should nuclear weapons play in the emerging "new major country relationship" between Beijing and Washington? How does this play out in dealing with denuclearization on the Korean Peninsula? In dealing with Iran's presumed nuclear ambitions?
Chinese Moderator: Yao Yunzhu
US presenter: Linton Brooks
Chinese presenter: Qian Lihua
- 10:45 **Coffee Break**
- 11:00 **Session 2: Nonproliferation Cooperation**
What are US and Chinese perceptions of and approaches to the DPRK and Iranian crises as they relate to noncompliance? What are the similarities and differences? What are the prospects for US-China cooperation to respond to the DPRK and Iranian challenges? How can the United States and China cooperate to strengthen the NPT and reduce the risks of noncompliance?
US Moderator: Ralph Cossa
Chinese presenter: Yang Xiyu
US presenter: Lewis Dunn
- 12:30 **Lunch**
- 14:00 **Session 3: Nuclear Doctrine and Force Modernization**
What are US and Chinese priorities in nuclear policy? What is the meaning and impact of the new US Nuclear Employment Strategy? While Chinese nuclear doctrine and commitment to NFU remain unchanged, how do Chinese characterize recent and ongoing changes in capabilities and nuclear force modernization? What evidence can Chinese present to counter controversial academic assessments of Chinese nuclear

capabilities (such as Phillip Karber)? How would US specialists characterize current Chinese nuclear doctrine? How do Chinese specialists characterize current US nuclear doctrine? What are the major perception gaps? How do force modernization plans impact policy?

Chinese Moderator: Fan Jishe

US presenter: Brad Roberts

Chinese presenter: Sun Xiangli

15:30 **Coffee Break**

15:45 **Session 4: Breakout Sessions**

Group I: Space code of conduct

What would be the components of a space code of conduct? How would a code of conduct complement other space negotiations?

Chinese chair: Hu Yumin

Chinese lead: Li Bin

US lead: Bruce MacDonald

Group II: Verification

Examination of the history of US-Soviet/Russian verification issues and lessons learned that might apply to Sino-US or broader multilateral verification efforts. What are Chinese views of the value and limitations of inspections in arms control agreements, drawing in part on the CWC and the CTBT experiences?

US chair: Jerry Taylor

Chinese lead: Wu Jun

US lead: Kerry Kartchner

17:00 **Session Adjourns**

18:30 **Dinner**

November 5, 2013

9:00 **Session 5: Plenary Reports on Breakout Sessions**

Chinese Moderator: Chen Zhou

US chair: Jerry Taylor

Chinese chair: Li Bin

10:15 **Coffee Break**

10:30 **Session 6: Missile defense**

What impact has North Korea's missile and nuclear programs had on US missile defense plans? How does this impact China's deterrence strategy? What are Chinese perceptions of current US missile defense capabilities and intentions? What are US views of Chinese missile defense policies and intentions? What forms of transparency would be valuable for/acceptable to both sides?

US Moderator: Christopher Twomey

Chinese presenter: Wu Riqiang
US presenter: Bruce MacDonald

11:30

Session 7: Space Cooperation

What are Chinese and US perceptions of space security? Do/can we have a common definition of the main threats in the space domain? What are our shared interests in ensuring space stability, sustainability, and development? Can space security cooperation facilitate renewed civil and commercial space ties? What would be the objectives of a treaty for the prevention of an arms race in outer space? Is such an effort verifiable? How can China and the United States work in concert and build toward a framework to prevent space weaponization, control escalation, and avoid armed conflict in space? [This session should incorporate the key findings from the breakout session on developing a space code of conduct.]

US presenter: James Clay Moltz

Chinese presenter: Song Danhui

12:30

Lunch

14:00

Session 8: Crises Management and Confidence and Security Building Measures

What mechanisms would be required to improve Sino-US coordination in the event of crisis? What is the relationship between crisis management and confidence and security building measures? What steps can the United States and China take (or avoid) in the area of nuclear arms reductions to ensure strategic stability is achieved/maintained and to build confidence? What are the core requirements and organizing principles for the United States and China to move toward greater strategic reassurance and to build mutual trust?

US Moderator: Michael Glosny

Chinese presenter: Ouyang Wei

US presenter: Michael Swaine

15:30

Coffee Break

15:45

Session 9: Wrap-Up

What are the meetings key findings and conclusions? What are the next steps for this dialogue and for the broader China-US strategic relationship?

Chinese Moderator: Zhang Tuosheng

US presenter: Dennis Blair

Chinese presenter: Hu Side

APPENDIX B

The Eighth China-U.S. Dialogue on Strategic Nuclear Dynamics
A CFISS-Pacific Forum CSIS Workshop
Nov. 4-5, 2013, Beijing, China

PARTICIPANT LIST

Chinese Participants

Hu Side

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Qian Lihua

Maj. Gen. Former Director of Foreign Affairs
Office, Ministry of National Defense

Li Ji

Maj. Gen. Deputy Director of Foreign Affairs
Office, Ministry of National Defense

Zong Jiahu

Sen. Col. Director General of Bureau of
Arms Control and Military Assistance Affairs,
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Ministry of National Defense

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Zhu Chenghu

Maj. Gen. Professor
National Defense University

Ouyang Wei

Sen. Col. Professor
National Defense University

Li Hong

Former Vice-President, China Association of
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Chen Kai

Secretary-General, China Association of
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Hu Yumin

Senior Research Fellow, China Institute for International and Strategic Studies

Zhang Yu

Secretary-General China Foundation for International & Strategic Studies

Zhang Tuosheng

Chairman of Academic Committee, China Foundation for International & Strategic Studies

Lu Dehong

Director of Department of Research China Foundation for International & Strategic Studies

Also present were representatives from:

National University of Defense Technology

The Department of Arms Control, Ministry of Foreign Affairs

Chinese PLA General Armament Department

The Second Artillery Force of the PLA

US Participants

Admiral Dennis Blair (USN Ret.)

Former Director, National Intelligence

Mr. Robert M. Blum

Office of Multilateral and Nuclear Affairs, US Dept. of State

Amb. Linton Brooks

Independent Consultant
Center for Strategic and International Studies

Mr. Ralph A. Cossa

President, Pacific Forum CSIS

Dr. Lewis A. Dunn

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Mr. Bruce W. MacDonald

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Dr. James Clay Moltz

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Dr. Brad Roberts

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Dr. Michael Swaine

Senior Associate, Asia Program
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Ms. Suhan Chen

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Mr. Joseph Lin

PhD Candidate, University of Pennsylvania

Mr. Michael Sullivan

Olmsted Scholar