

# **Progress Continues, but Disagreements Remain**

The Seventh China-US Strategic Dialogue on Strategic Nuclear Dynamics

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The Inaugural China-US Dialogue on Space Security

A Conference Report by Ralph Cossa, Brad Glosserman, and David Santoro

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## **China Foundation for International and Strategic Studies (CFISS)**

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## Key Findings 7th China-US Dialogue on Strategic Nuclear Dynamics

The Pacific Forum CSIS, with the China Foundation for International and Strategic Studies, and with support from NPS PASCC and DTRA, held the 7th China-US Strategic Nuclear Dynamics Dialogue on Jan. 28-29, 2013. Some 80 Chinese and US experts, officials, military officers, and observers along with eight Pacific Forum Young Leaders attended, all in their private capacity. The level of the Chinese delegation was relatively senior, consistent with last year's meeting, and included several active duty "two-star" officers, and significant participation from the Second Artillery. They joined two days of off-the-record discussion of nuclear policies, current proliferation challenges, cross-domain deterrence, crisis management, and prospects for bilateral cooperation. Key findings from this meeting include:

There is a certain edge, both in the room and in the overall bilateral relationship, caused by increased Chinese assertiveness toward its neighbors (US view) and/or the US 'rebalance' toward Asia and its impact: an increased willingness by China's neighbors (especially US allies) to challenge its territorial sovereignty (Chinese view). Some Chinese argued this increasingly competitive environment made it more difficult to discuss sensitive nuclear issues.

Nonetheless, mutual familiarity generated by past meetings allowed for a generally positive, cooperative dialogue, especially when examining areas of potential future cooperation, common concerns, or definitions and/or protection of "common goods." Both Chinese and US participants see value in track 1.5 and track 2 discussions of strategic nuclear and related policy issues as a means of laying the foundation for discussions at the official level and of reinforcing progress at track 1, if and when it gets started.

Chinese participants did not emphasize traditional concerns. There was almost no mention of Taiwan, no calls for the US to adopt a No First Use policy, and few complaints about US intrusions into China's EEZ. The AirSea Battle, hotly debated at our last meeting, never came up at all. Instead, The 2013 Defense Authorization Act has become the latest US policy action cited as "proof" of American hostile intent. Chinese participants cited specific provisions that "target" China, in particular the call for a study of tunnels allegedly hiding large numbers of Chinese nuclear weapons. Since President Obama signed this legislation into law, it is viewed as his policy as well. In a carefully crafted statement, one very senior retired Chinese official with long experience in nuclear weapons development flatly and publicly denied that China is concealing nuclear weapons in tunnels.

Chinese participants acknowledge progress on nuclear arms control and security during the Obama administration's first term and appeared optimistic about greater progress – additional US-Russia reductions, CTBT ratification – in a second term. Americans seemed less optimistic, citing domestic political constraints in Russia and the US.

Chinese and US participants agree on the value of a wider dialogue rather than a narrow focus on nuclear dynamics. Discussions of missile defense, space, cyber, and conventional weapon dynamics are worthwhile, as well as a discussion of interactions between them. Beyond that, Chinese participants – consistent with previous engagements – worried that discussing "deterrence" or focusing on the bilateral nuclear arena reinforced competitive elements in the relationship.

Chinese participants seemed to understand and acknowledge that American policy tacitly accepts mutual nuclear vulnerability between the US and China, but expressed concerns that the US was moving toward acquiring the capability to neutralize China's deterrent (through advanced long range conventional munitions and "multilayered" missile defense). There was occasional reference to the US desire for 'absolute security' at the expense of China and others.

China continues to attach the highest priority to maintaining a credible second strike capability. While committed to maintaining a modest minimum deterrent force, the size of the force will ultimately be determined by US capabilities to neutralize China's second strike.

Chinese participants continue to insist that the US and Russia have special responsibilities for advancing nuclear arms control and disarmament agendas given the size of their arsenals. US participants did not challenge Chinese views that it is "premature" for China to join such a dialogue but did stress the negative impact Chinese policies and lack of transparency have on the prospects for further US-Russia reductions, given concerns in both nations about a Chinese 'sprint to parity."

Chinese participants seemed reluctant to accept that Chinese nuclear policies, lack of transparency, and their continued buildup (which they feel is justified) play an important role in discouraging the next round of US-Russia cuts. They acknowledged that it would be appropriate for China (and the other nuclear weapons states) to join arms control talks "after one or two more rounds of US and Russian reductions."

Some Chinese participants still argue that US nonproliferation policy is based on double standards by focusing on nuclear developments in Iran and the DPRK, while ignoring Israel and India. (The Chinese seldom mention Pakistan.) North Korea was acknowledged as a problem for both sides. Unlike in the past, there were few if any references to the Six-Party Talks as the solution.

Chinese and US participants agree on the overall goal of nonproliferation; they disagree on how to achieve it or its priority; Chinese acknowledge it is a lower priority for China than for the US. China endorses engagement, dialogue, and peaceful means, while the US is prepared to use a broader range of tools, including sanctions. There was little discussion about how to judge what actions count as noncompliance or how to respond to such instances.

A few Chinese participants emphasized the destabilizing effects of extended deterrence (ED), and noted that United States has sought to strengthen ED through its rebalancing policy. US participants stressed that ED has stabilizing effects and nonproliferation benefits for the Asia Pacific. As usual, Chinese participants were generally critical of US alliances in Asia, although more than in the past, they acknowledged ED's role in keeping Japan (among others) non-nuclear. China prefers a more inclusive cooperative Asia-Pacific security framework.

There is great suspicion in China about US rebalancing. It is widely thought to be directed against China. It is seen by many, especially among the general public and academic/military communities, as a cover for containment, an aggressive US posture in Asia, and (especially when combined with ED) the empowerment of allies to challenge China. Chinese elite are more inclined to make the distinction between rebalancing "being about China" and "being opposed to China," and thus see both challenges and opportunities in the US approach. Despite its stated focus on the three "Ds" (diplomacy, development, and defense), most Chinese participants view the rebalance primarily through a military lens; several suggested that the US needed to "rebalance the rebalancing" (i.e. make adjustments and concessions to Chinese complaints).

One constant theme was concern about the potential for third parties to drag the US and China into conflict. Chinese acknowledged this applied to North Korea on their end, but focused on Japan and the Senkaku/Diaoyu issue; the Philippines and Vietnam were occasionally identified as well. There was little worry that these potential conflicts would escalate to the nuclear level, however.

Chinese participants are particularly unhappy with the US position on the Senkaku/Daioyutai dispute and consider the US to be siding with and encouraging Japan. They were particularly critical of Secretary Clinton but have expressed higher hope for incoming Secretary of State Kerry, citing his confirmation remarks as more balanced and sympathetic to Chinese concerns.

Chinese participants provided strong rhetorical endorsement of mil-mil exchanges, including on nuclear issues, but cautioned about identifying "appropriate topics" for such a dialogue, underscoring the need for joint agenda development. Consistent with past discussions, they offered no insights as to how to get such talks started.

According to some Chinese participants, China still resists an official bilateral nuclear dialogue for fear that it could be modeled on the 'adversarial' approach of US-Soviet talks. There are also concerns that opening a strategic dialogue with the US would require China to make immediate concessions on transparency. Fresh discussions and fresh approaches on transparency and each other's expectations and fears regarding this concept are needed.

As in previous seminars, Chinese participants, both privately, and even in the open discussions, stated that the Second Artillery is only an operational organization,

stressing that it plays no role in developing China's nuclear policies. While this did not preclude it from participating in bilateral nuclear dialogue, its focus would be more on operational and procedural issues.

Chinese and US participants recognize the dangers of cyber-attacks on critical infrastructure. This could be one area of discussions on reassurance and a code of conduct. Some Chinese consider the Stuxnet attack on Iranian nuclear facilities an example of the use of offensive cyber-capabilities. They characterized it as an attack on Iran's nuclear complex and worry that it has set a dangerous precedent for such attacks.

Chinese participants expressed a willingness to further study crisis management and are looking for specific CM scenarios. It was suggested that we study a nuclear crisis between two other nuclear powers – India-Pakistan – rather than ones involving the US or China more directly.

There was strong support for a continuation of the dialogue, including a willingness to include a nuclear scenario table top exercise, perhaps focused on India and Pakistan. Future topics for this dialogue could include a deeper dive into options for multilateral arms control, especially within the P5; cross-domain deterrence and protection of "common goods"; crisis management (especially the identification of potential nuclear crises); greater understanding of key military capabilities based on technology rather than rumors or suspicions; an examination of the dangers of cyber-attacks; how signaling does and doesn't work (perhaps using the Korean and Vietnam Wars as examples); and the development of Joint Principles for Mutual Strategic Reassurance. Discussion on just what is meant by Xi Jinping's desire for a "new type of great power relationship" would also be beneficial; the Chinese made frequent reference to the term but could not adequately define it. The Chinese also continue to express interest in deepening their understanding of a range of nuclear arms control verification practices.

The main US messages were: let's stay focused on common interests; let's get going at track 1; let's explore common challenges together at the conceptual level (e.g., offense/defense stability, cross-domain escalation, etc.); let's focus on future cooperation rather than past grievances and examine what can be done rather than dwell on what can't be done.

General observations: Chinese participants could be divided into two categories: an inner core of veterans who were pragmatic and forward thinking, and an outer tier who seemed to still be rehearsing superficial talking points. Among the inner core, there was a clear sense of progress and cautious optimism for broader and deeper dialogue both at track 1.5/2 and track 1, despite some mild disappointment over the current state of strategic relations. While some old themes keep stubbornly returning (absolute security, double standards, etc.), they stimulated discussion on both sides about what progress has been made and many inner core interlocutors joined their American colleagues in offering explanations and counter-arguments.

## Key Findings Inaugural China-US Dialogue on Space Security

The Pacific Forum CSIS, with support from NPS PASCC and DTRA, held the inaugural US-China Dialogue on Space Security on Jan. 30, 2013. Some 40 Chinese and US experts, officials, and observers along with eight Pacific Forum Young Leaders joined a half day of discussion of space policy; all attended in their private capacity. Key findings from this meeting include:

The tone of the meeting was very positive and both sides made a number of suggestions regarding enhanced bilateral cooperation on space issues.

Nonetheless, the first Chinese speaker stressed that Chinese feel "repeatedly humiliated" by US legal and administrative restrictions on space cooperation and this feeling is a powerful obstacle that must be addressed before formal discussions can move forward. US participants emphasized that these Congressional restrictions involve NASA activities and do not prevent the opening of dialogue and cooperation with other US governmental agencies dealing with space issues.

Chinese participants acknowledged "generally positive" changes in US space policy from the Bush administration to the Obama administration. They stressed that unlike the United States, China is still a "student" when it comes to space. They also insisted that there is no question that Beijing is determined to act responsibly. Chinese expressed appreciation for the space debris data and conjunction/collision warnings provided by the USAF.

Chinese participants believed that, in principle, Beijing is now willing to engage in bilateral dialogue on space cooperation (previously it had stated an interest in multilateral dialogue only). Topics of discussion could include the identification of shared perceptions and objectives, mutual assurance, and an understanding of each sides primary interests and concerns, along with more specific issues like space debris, cooperation to avoid collision in space, and scientific and technological cooperation. When US proposals begin with or focus on space debris, Chinese tend to see this as an attack on their ASAT test or capabilities.

Chinese participants played down concerns about ASAT tests, arguing that they have low-level technology and that the issue should be addressed via multilateral talks. One Chinese also highlighted that the United States only expressed a willingness to engage in a space dialogue after China's ASAT test, suggesting that the US goal may be to limit Chinese capabilities. The USAF X-37B was again cited as a Chinese concern, due to its alleged ability to "catch and cripple" satellites.

A Chinese expert cited concerns about the security of China's limited deterrent and suggested that the US make a unilateral pledge not to deploy space-based weapons. Some Americans dismissed space based weapons as very unlikely, both for technological and financial reasons. Chinese participants suggested that the United States is resisting the Russian and Chinese proposal for a space arms control treaty because it seeks dominance in and the weaponization of space, despite the shift in US policy with the Obama administration. They also indicated a Chinese willingness to discuss the contents of their proposal in Geneva, including the possible addition of a ban on tests of ground-based systems. The recognition that outer space security includes ground elements [e.g., ground stations] as well as space, and that there should be discussions on constraining offensive activities in space, such as ASATs was another welcome note as China has in the past been rather cool toward restrictions on activities vs. on deployments.

US participants explained that Washington's concerns about a space treaty are primarily linked to the impossibility of verifying compliance, and to doubts that Russia and China would enforce compliance, given their failure to do so in the nonproliferation realm. The Chinese sought to finesse the issue by saying that if scientists really tried, they could come up with an answer. They also asserted that space verification is "important but not indispensable," pointing out that other treaties like the Outer Space Treaty were also not verifiable, and the United States could always withdraw from the Treaty if it felt it had to.

Escalation control is critical in space. Several participants suggested that more thought be given to a No First Use pledge regarding space weapons and, in the interim, other forms of control or regulation should be adopted.

While Chinese participants listed several specific objections to the EU's international code of conduct – lack of formal mandate, too much emphasis on space debris while ignoring other issues – they generally agreed that the process should move forward with other efforts (including those aimed at a treaty). They stated more than once that China is "open" to a space code of conduct, one calling it "of great importance," and acknowledged that they are discussing with the EU its code of conduct proposal. This is a noticeable shift in the Chinese posture from a few years ago.

Chinese participants highlighted that a number of countries in Asia are investing in space programs, notably India and Japan. As a result, multilateral discussions are also important. Our biggest common interest, globally, is avoidance of armed conflict in space.

There was general agreement that this space dialogue was useful and should be continued.

## **Conference Report** 7th China-US Dialogue on Strategic Nuclear Dynamics

US-China strategic nuclear relations have been traditionally difficult. Although they have slowly improved over the years, key disagreements persist. Yet the two countries still do not have any official bilateral dialogue in place to discuss these issues. This is concerning because strategic nuclear dynamics are undergoing major transformations throughout Asia: the United States and Russia are reducing the roles and numbers of their nuclear weapons, China is building up its arsenal, new nuclear-armed states are establishing themselves (India and Pakistan), others are emerging (North Korea), and a range of new capabilities are becoming strategically relevant, namely missile defense and long-range conventional strike forces.

In an attempt to put these issues in perspective, foster greater bilateral understanding between China and the United States, and prepare for/support eventual official bilateral and/or multilateral official arms control talks involving Beijing, the Pacific Forum CSIS, with the China Foundation for International and Strategic Studies (CFISS), and with support from NPS PASCC and DTRA, held the Seventh China-US Dialogue on Strategic Nuclear Dynamics on Jan. 28-29, 2013.

Our dialogue took place shortly after US President Barack Obama's reelection and Xi Jinping's appointment as chief of the Chinese Communist Party, offering the added opportunity to take stock of the state of the bilateral relationship at this critical juncture. Some 80 Chinese and US experts, officials, military officers, and observers along with eight Pacific Forum CSIS Young Leaders attended, all in their private capacity. The level of the Chinese delegation was relatively senior, consistent with last year's meeting, and included several active duty "two-star" officers, and significant participation from the Second Artillery. They joined two days of off-the-record discussion of nuclear policies, current proliferation challenges, cross domain deterrence, crisis management, and prospects for bilateral cooperation and, for some, an additional half day of dialogue on space cooperation.

### The Strategic Set-Up and Nonproliferation Environment

To put our discussions in context, we opened with Chinese and US assessments of the global strategic and nonproliferation environments. Our US speaker stressed that Asia and China are increasingly significant foci of international attention. While the Middle East continues to occupy much of the immediate attention of US policymakers, Asia is increasingly the central arena of world affairs. And within Asia, China is undoubtedly the crucial country.

Nevertheless, US policy toward Asia remains unclear to many. The United States has core interests in Asia, notably the defense of the US position in the region and its allies and ensuring open access to trade. Yet there is a sense that the contours of the Asian strategic environment are still being formed and, as a result, that US policy on Asia is more malleable than in other regions. The US rebalance to Asia is the best expression of that policy, which signals US intentions to pay more attention to Asia, but says little concrete about what Washington should be doing.

Our speaker argued that the central reason for this lack of clarity is uncertainty about the region's future strategic environment and the role that China will play in it. This uncertainty extends both to capabilities and intensions. There are questions about whether China's growth will continue on its current trajectory and whether Beijing will continue to invest in its already impressive military capabilities. In terms of intentions, it is unclear if Beijing will continue the largely restrained and status quo-accepting policy of Deng Xiaoping or if it will opt for a more expansive, assertive policy that challenges the existing order.

This uncertainty, our speaker explained, has direct implications for US national security (and nuclear) policy, which is at a critical juncture as the wars in the Middle East conclude and as the United States deals with a new budget pressures. The central debate in US national security focuses on whether the United States needs to prepare for strategic competition with China. Some argue that strategic competition among major powers is a thing of the past and that the United States should refocus its military investments on other programs; in terms of nuclear policy, this translates into favoring nuclear reductions and prioritizing nonproliferation and nuclear security efforts. Others believe that major power conflicts can reemerge and Washington needs to prepare for them and modernize its nuclear arsenal. The Obama administration appears to want to straddle this divide, seeking to prune US nuclear weapon totals without altering the fundamentals of nuclear policy.

While there are important constants in US policy (such as US engagement in Asia and support to allies), there remains a spectrum of possible futures for US policy, which will be determined largely by Chinese decisions. Since US interests favor the status quo, it is China's decisions that will determine whether the future will be primarily competitive or cooperative.

Our speaker concluded by focusing on two additional sets of dynamics: the impact of Iran's and North Korea's nuclear programs and debate over the move toward a world free of nuclear weapons. The United States and China have a mutual interest in preventing Tehran and Pyongyang from developing nuclear weapons, but they do not agree on how to do so. It will also be essential for both countries to coordinate policies if the two countries develop mature nuclear weapon capabilities. In terms of the debate about a nuclear-weapon-free world, our speaker argued that if this push ceases to be the main lightening rod of international debate (and divisions), it will be important for the United States and China (and others) to think about an alternative principle to organize their relations.

Our Chinese speaker began by stressing that the Obama administration "did its homework" and obtained good scores during its first term. He pointed to the conclusion of the US-Russian New START agreement and its subsequent implementation, discussions about additional nuclear reductions, reduction of the roles of nuclear weapons, preliminary discussions about the need for a no-first use policy, and strong emphasis on nuclear security. While China looks forward to Obama's second term, our speaker identified numerous challenges: nuclear proliferation crises involving Iran and North Korea, the nuclear build-up in South Asia, and the continued threat of nuclear terrorism. And while there is new momentum supporting nuclear disarmament, major power relations continue to be based of mutual assured destruction, which is of concern to Chinese.

Our speaker identified two key strategic trends. One is the development by the United States of missile defense (MD) capabilities, long-range conventional weapons (including cruise missiles), and the growing use of the space and cyber domains. These developments help Washington prevent other countries from conducting counterstrikes. Another trend is the growing significance of regional issues. This includes the potential of MD capabilities to change the strategic balance, both in Europe and in the Asia-Pacific, the implications of US extended deterrence for regional security, and (from a Chinese perspective) the constant US need and search for "absolute security."

Our Chinese speaker concluded by pointing out that China does not want to join an arms race, but that it cannot stand still as other countries build up their own arsenals. Nonetheless, China remains committed to the principle of no-first use, which is based on maintaining a small nuclear arsenal.

During the discussion, Chinese acknowledged the progress the United States had made over the past four years and were generally optimistic about additional progress during President Obama's second term, be it on additional US-Russian nuclear reductions or ratification of the Comprehensive Nuclear-Test Ban Treaty (CTBT). In contrast, Americans seemed less optimistic, citing domestic political constraints both in the United States and Russia. In fact, now even the most enthusiastic arms control experts are discussing what the United States and Russia can do now outside a traditional treaty framework. A few Americans, however, argued that President Obama would want to push the arms control agenda during his second term and administration officials are considering their options.

In general, Chinese participants seemed to understand and acknowledge that the US acceptance of "strategic stability" with China tacitly accepts mutual nuclear vulnerability between the two nations. At the same time, they repeated longstanding concern that the United States sought to acquire the capability to neutralize China's nuclear and conventional forces (through advanced long-range conventional weapons and "multilayered" missile defense capabilities). This was most evident in the periodic reference by some Chinese participants to the US willingness to achieve "absolute security" at the expense of China and others. As one participant put it, "the United States wants overriding advantage and squeeze the options of other parties: you want to break the bridge after crossing the river". Americans countered by stressing that United States' capabilities are directed against North Korea and Iran, not against China (and Russia); as one example, they pointed to the self-imposed limitations the United States has put on its ground based missile defense interceptors. Americans also stressed the unachievable

nature of "absolute security" and rejected it as a US strategic goal. A number of Chinese specialists (mostly veterans of this dialogue process) reinforced this argument.

As always, Chinese participants stressed the high priority Beijing attaches to a credible second strike nuclear capability. They insisted that China remains committed to maintaining a modest minimum nuclear deterrent, although the size of this arsenal will ultimately be determined by US capabilities to neutralize China's second strike.

## Iranian and North Korean Nuclear Issues

In session two, we dove into the two most significant nuclear proliferation challenges: Iran and North Korea. Turning to Iran, our first Chinese speaker reiterated China's preference for a Middle East free of nuclear weapons and the peaceful, diplomatic resolution of this dispute. China supports establishment of a Middle East WMD-free zone.

Our speaker identified positive developments that encourage optimism. Iran has neither withdrawn from the Nuclear Nonproliferation Treaty (NPT) nor from the International Atomic Energy Agency (IAEA). It continues to negotiate with IAEA officials. Negotiations have not been fruitful, but all parties have agreed to keep talking. Significantly, Iran has publicly declared that it has no intention to develop nuclear weapons, arguing that it would be incompatible with its religion.

Both China and the United States have common goals: nonproliferation and peace and security in the Middle East. Yet our speaker suggested that there are important differences between China and the United States. Unlike Washington, Beijing has normal relations with Iran, which it considers a friendly country, in large part because it is reliant on oil imports. China does not want regime change in Iran. Moreover, China's basic position is that Iran should be allowed to use nuclear technology for peaceful purposes. Finally, China has normal relations with Israel (while remaining prepared to criticize Tel Aviv if need be), whereas the United States has a *special* relationship with Israel.

Our speaker argued that Iran does not want to develop nuclear weapons. Rather, at least for the time being, Iran wants to develop a nuclear weapon capability. Our speaker suggested that Iran may want to find itself in a similar position as Japan, i.e. be able to develop nuclear weapons in a short period of time.

Our first Chinese speaker insisted that it was unclear if sanctions could prevent Iran from going nuclear. Worse, they could encourage Iran to develop nuclear weapons. That is the reason for China's reluctance to endorse international sanctions, and its strong disapproval of unilateral US sanctions. Our speaker concluded by stressing that the removal of uranium and reprocessing facilities was now a lost cause, particularly because others like Japan have such capabilities. The United States and Iran should be more flexible and show readiness to talk; Washington, in particular, needs to rein in Israel and prevent it from using force against Iran.

Our second Chinese speaker focused on North Korea. He observed that North Korea's significant advances in nuclear and missile technology are a major security challenge for Northeast Asia as well as for China and the United States. There is a danger of military crisis and conflict on the Korean Peninsula, as well as a proliferation cascade or arms race. Our speaker insisted that China and the United States have many shared and common interests on the Korean Peninsula, including denuclearization. Moreover, the North Korean nuclear issue offers an opportunity for the two countries to enhance bilateral cooperation. Our speaker acknowledged that the two countries also have fundamentally different approaches to the North Korean nuclear issue. China presses "an integrated approach" that addresses both "the symptoms and the root causes" of proliferation. China does not believe that sanctions or pressure will work if the root causes are not addressed. Washington, by contrast, seeks to address the proliferation problem first, independent of any associated political issues. Moreover, our speaker asserted that Washington favors sanctions and pressure over diplomacy and dialogue, refuses to engage Pyongyang directly, no longer believes that the Six Party Talks are a viable negotiating process, and argues that its own nuclear weapons are essential to peace and security on the Korean Peninsula. Our speaker also suggested that US policy is aimed at consequence management: its goal is to limit North Korea's nuclear weapon and missile capabilities using sanctions, deter military provocations from Pyongyang (and prepare to deal with any regional conflict by enhancing its alliances with South Korea and Japan), and prevent proliferation from North Korea using a variety of tools, such as the Proliferation Security Initiative.

Our speaker argued that China and the United States have such different approaches to North Korea because they do not seek the same end-state. China wants regime transformation, while the United States seeks regime change. But our speaker argued that regime change will not work. As in Iraq, regime change would bring chaos to the Korean Peninsula. Sanctions and pressure will not bring North Korea down. And if Pyongyang believes that it faces existential threats, it will be impossible to prevent it from going nuclear; our speaker referenced Pakistan's President Zulfikar Ali Bhutto, who once said that the Pakistanis would "even if [they] have to eat grass" to develop nuclear weapons".

Thus, regime transformation was the best option. If North Korea is brought into the international community, the incentive to keep its nuclear weapons could be reduced greatly. To do so, more attention must been given to political considerations, i.e., recognizing North Korea as a normal country. Pyongyang has expressed a willingness to change its relations with the outside world, notably with the United States. In a long memo released by its foreign ministry in August 2012, North Korea complained that it is still identified as an enemy country, is not recognized as a sovereign state, and it is not treated as an equal member of the international community. Our speaker charged that the United States refuses to recognize North Korea as a sovereign state with which it could coexist and Washington favors sanctions and pressure. Yet our speaker explained that North Korea responds well to diplomacy and dialogue: Pyongyang largely observed the Agreed Framework and, when there was hope to normalize its relations with the United States, it froze its plutonium program in Yongbyon. Our speaker argued there is a window of opportunity to transform the regime in North Korea. Kim Jung-un has tried to project a different image from his father and seems willing to prioritize economic issues. The leadership transitions in South Korea and Japan also provide an opportunity to rethink our approach to North Korea. China and the United States, our speaker explained, could cooperate: China should help guide North Korea toward opening and reform while maintaining domestic stability, and the United States should help North Korea improve its economy. This would help pave the way toward denuclearization. In this equation, the Six-Party Talks would be an important platform, although a number of key issues could also be negotiated through bilateral, trilateral, or four-party talks.

Our US speaker argued that China's approach to the North Korean and Iranian nuclear issues prioritizes regional peace and stability for economic growth, prefers mediated negotiations, and an aversion to force, interdiction, isolation, and sanctions. A lack of mutual interests, not mutual trust, drives miscommunication between Washington and Beijing. In essence, China sees proliferation less of a threat to its interests than the United States does. Beijing also often sees proliferation threats as excuses that the United States and its allies use to justify provocative actions that compromise China's larger security interests and contain its growth. Thus, China's engagement is largely a function of the US response (or anticipated response) to proliferation, rather than the direct threat that proliferation might pose to China.

Our speaker also stressed that China's self-identification as both a P-5 country and as a developing country allows it to play the role of go-between, or intermediary between nuclear weapon states and non-nuclear weapon states. Prominent examples include China's role as a host of the Six-Party Talks and its shuttle diplomacy in the case of Iran. Meanwhile, Beijing has tended to portray the United States as in "excessive pursuit of absolute security." With regard to North Korea, the problem is Washington's refusal to give Pyongyang security guarantees; regarding Iran, US threats and willingness to look the other way with Israel's nuclear program spur proliferation.

As a result, the United States is going to be dissatisfied with China's assistance to resolve a proliferation problem. After all, Beijing sees the United States as being a major source of problem, if not *the* problem itself. Beijing also complains that Washington wants China to act without taking into consideration whether US and Chinese interests align. Another disincentive is the fact that many US proliferation-related sanctions have been targeted at China and Chinese worry that accepting sanctions against one country could legitimate sanctions against China sometime in the future.

Our speaker concluded that Washington must better factor Chinese interests into the discussion. The United States must make a better case why it is in China's best interests to back nonproliferation efforts. The more extreme the US call (e.g. imposition of sanctions or conduct of military action), the more likely China will seek to check such an effort. Discussion revealed Chinese and US agreement on the overall goal of nonproliferation but that they disagreed on its priority and how to achieve it. Chinese acknowledged it is a lower priority for China than for the United States. Moreover, China endorses engagement, dialogue, and peaceful means. By contrast, the United States is prepared to use a much broader set of tools, including sanctions and, if necessary, military action.

Some Chinese participants continued to argue, although not as strongly as in the past, that US nonproliferation policy is based on double standards: it focuses on nuclear developments in Iran and North Korea but ignores those of Israel and India. Several Chinese participants also included Japan, arguing that the latter has the capability to manufacture nuclear weapons with its stockpile of reactor-grade plutonium for its breeder reactor program. Significantly, the Chinese seldom mentioned Pakistan.

Americans countered that the charge of double standards is unfounded since Israel and India, unlike Iran and North Korea, never joined the NPT. They also indicated that comparing Iran and Japan is shortsighted because Tokyo has not enriched uranium to 20 percent, has never had a clandestine nuclear program, and never conducted missile tests in violation of UN resolutions. Unlike Iran, Japan also has an impeccable record of cooperation with the IAEA and has never threatened to annihilate one of its neighbors.

Some Chinese agreed with the US assessment that Iran was trying to acquire the capability to build nuclear weapons, but they believed that Iran would stop short of deploying assembled weapons. That was not enough to win their acquiescence to the imposition of additional sanctions against Iran, however. While Chinese and US participants characterized North Korea as a problem, they split over the ultimate goal of regime transformation (Chinese preference) or denuclearization and Korean reunification (US preference); Americans rejected he view that Washington's current policy was aimed at forcing regime change. Unlike the past, there were fewer references to the Six Party Talks as a solution. Finally, there was little discussion about how to judge what actions count as noncompliance or how to respond to such instances, although a few Americans sought to understand Chinese views about NPT noncompliance.

### The Future of P-5 Arms Control

Our third session focused on the future of multilateral arms control. Our US presenter explored three types of nuclear agreements: those that aim to limit or reduce nuclear forces (akin to those by the United States and Russia that limit strategic offensive weapons), those that do not reduce nuclear weapons directly but have the long-term effect of preventing nuclear arms races (such as the CTBT), and those that improve stability and international security yet are not formal agreements.

In regard to agreements that aim to limit or reduce nuclear forces, our speaker conceded that it is too early for China (let alone others) to formally join the US-Russian nuclear arms control process. This makes sense given Beijing's refusal to engage in such negotiations until the United States and Russia have reduced their nuclear forces to levels

much closer to China's nuclear stockpile. Since the United States and Russia each possess at least 10 times the total number of warheads that China does, and nuclear arms control agreements have been reached in approximately 10-year intervals, it will be close to 2030 before China is in a position to join US-Russian arms control negotiations.

Other approaches can be envisioned, however. The Working Group on US-China Nuclear Dynamics of the Center for Strategic and International Studies (CSIS) suggested that the United States, China, and if possible Russia and others (namely India and Pakistan) ban fixed intercontinental ballistic missiles with multiple independently targetable reentry vehicles, a step that would improve crisis stability. Alternatively, China could negotiate an agreement with India and Pakistan to limit total numbers of nuclear-armed ballistic missiles with ranges above some agreed value, which would dampen any arms race between India and Pakistan and could set an example of restraint consistent with China's announced nuclear policy.

Our speaker explained that US ratification of the CTBT is unlikely any time soon given the composition of the current Senate. Still, it would be useful for the United States and China to reflect on what happens after both of them have ratified the treaty. (Conventional wisdom is that Chinese ratification would automatically follow US ratification.) Washington and Beijing could work together to encourage the six other states – Egypt, India, Iran, Israel, North Korea, and Pakistan – whose ratification is required for the CTBT to enter into force. He also urged the United States and China to work together (and with others) to persuade Pakistan to allow the Conference on Disarmament to move forward with negotiations on a fissile material cut-off treaty (FMCT).

Finally, our speaker addressed the possibility of progress through less traditional forms of multilateral arms control. The most obvious initial step, according to him, is to build upon the ongoing P-5 process, where China is taking the lead on developing a nuclear glossary. Another area on which the P-5 have focused is verification: Beijing could consider encouraging the P-5 to expand their efforts to work toward a broad shared P-5 understanding of the techniques and challenges of verification. It would also be helpful if China participated in multilateral confidence-building measures, which could range from a multilateral agreement for notification of ballistic missile launches to exchanging observers for nuclear accident or emergency response exercises, for instance.

Our Chinese speaker explained that a nuclear-weapon-free world is a lofty goal which requires efforts by all, but the P-5 have special responsibilities. The Five have met regularly in recent years to discuss "next steps" in a range of arms control issues, but this process has just started and depends on major power relations remaining stable, preservation of global strategic stability, and more work by the P-5 on verification technology.

Our speaker applauded the glossary effort conducted under Chinese leadership as a good first step. Once again, however, our speaker insisted that it was essential that no party seeks "absolute security" and, instead, that they all exercise restraint, as well as prevent/control arms races and prevent proliferation.

While China is developing its nuclear forces, it is prepared to discuss arms control and disarmament. Our speaker suggested that China, along with the United Kingdom and France, be invited to observe US-Russia arms control negotiations. Our speaker also suggested that the P-5 work together to initiate negotiations for the conclusion of an FMCT, exchange technology information to promote the CTBT, and hold regular discussions among technical experts on verification technologies. The P-5 should also discuss in depth the path toward a world free of nuclear weapons: they could develop a road map that would include discussions about nuclear reductions, the prohibition of the use of nuclear weapons, and, ways to get to the complete elimination of such weapons. Our speaker stressed that it will be critical to eventually include all nuclear-armed states in these discussions, namely India, Pakistan, and Israel.

Throughout the discussion, Chinese participants insisted that the United States and Russia have special responsibilities for advancing nuclear arms control and disarmament agendas. US participants did not challenge Chinese views that it is premature for China to join such efforts. They stressed, however, the negative impact Chinese policies and lack of transparency have on the prospects for future US-Russia nuclear reductions, citing concerns in Washington and Moscow about a Chinese "sprint to parity." One US participant emphasized that the United States does not want "a number" from China (or a commitment from Beijing to not cross a specific ceiling); rather, Washington would like to *understand* "what is enough" for Beijing. He stressed that Republicans in Congress are looking for anything to prove that China has a larger arsenal than commonly believed, making greater transparency from Beijing all the more essential.

Chinese participants seemed reluctant to accept that Chinese policies, lack of transparency, and their continued nuclear and conventional build-up, undermine prospects for future US-Russia nuclear reductions. When Americans challenge China's implementation of NPT Article VI, they pointed to their minimum deterrence posture and promotion of the start of FMCT negotiations as evidence that China honors its obligations. More generally, and significantly, the Chinese no longer stressed that China would join nuclear arms control talks "at the appropriate time" and acknowledged that China would join such talks "after one or two more rounds of US and Russian nuclear reductions".

As will be discussed in more detail later, Chinese participants were also more accepting of the need for transparency in general and more open to the idea of learning more about the concept and its application, especially in the US-Russian context. This included discussion of a mock inspection exercise to demonstrate how transparency operations are carried out.

#### US Rebalance to Asia and its Implications for US-China Strategic Stability

Our fourth session examined the US rebalance to Asia and its implications for US-China strategic stability. Our Chinese speaker explained that China links the US rebalance to Asia to China's rise, the need for the United States to readjust its forces as the wars in Afghanistan and Iraq are winding down, and the desire to connect the US economy closer to the most dynamic region of the world. Initially, Beijing concluded that the rebalance was directed *against* China. That formulation gave way to the conclusion, at least among elite decision-makers and security specialists that the rebalance was only *about* China. Yet it remains unclear what the US policy toward China is and implies and many remain suspicious. Is Washington seeking to contain China? Is it trying to "counter the negative" impacts of China's rise? These questions remain unanswered.

China began to pay serious attention to the rebalance when the decision was made to send US troops to Darwin, Australia. This move, along with the US commitment to strengthen its alliances in Asia (and extended deterrence in particular), was perceived as a direct affront to China. Moreover, China has been especially concerned about growing military cooperation between the United States and countries with which China has territorial disputes, i.e., Japan, Vietnam and the Philippines.

Despite US National Security Advisor Thomas Donilon's November 2012 speech at CSIS, which emphasized that the United States wants to work in partnership with China, our Chinese speaker explained that the US rebalance presents more challenges than opportunities as "it makes it more difficult for China to deal with the United States". In most disputes, and the dispute over the Daioyu/Senkaku Islands in particular, the United States has sided with regional states against China: Washington is not seen by Chinese as neutral. Moreover, China has been excluded from most US initiatives in the region, notably the Trans-Pacific Partnership (TPP). Our speaker concluded that the rebalance has made China more insecure and has increased mutual suspicious between China and the United States.

Our US speaker countered that the "rebalance to Asia" is badly understood, arguing that the rebalance is a shift of US attention to the Asia-Pacific as the wars in Afghanistan and Iraq are ending. Drawing on the logic of the National Security Strategy, the rebalance aims to tie the US more closely to Asia, the most dynamic region of the world. Referencing Secretary of State Hillary Clinton's article in *Foreign Policy* (2011), he noted that the policy has three pillars: forward-based diplomacy, economic and trade deals, and military forces. Unfortunately, the first policy document on the "rebalance" was the January 2012 Defense Guidance, leaving the (wrong) impression that the refocus on Asia is first and foremost military in nature.

Our speaker emphasized that the rebalance is not a *return* to Asia because the United States never *left* Asia. The rebalance has its roots in the late 1980s, when the George H. W. Bush administration insisted on the need to enhance US involvement in Asia as the Cold War was coming to an end. Our speaker also insisted that the rebalance is not aimed at China; after all, it predates China's rise. Of course, since the US-China

relationship is based on cooperation and competition, the rebalance may not be aimed against China, but is unavoidably *about* China.

Our speaker added that the rebalance is a response to US allies, which have requested growing support from the United States. Japanese have expressed deep concerns about China, with an overwhelming majority (80 percent) characterizing the Japan-China relationship as bad. Just as Tokyo has called on the United States to reaffirm its commitment to Japan's defense, so has South Korea, driven by North Korea's nuclear and missile developments and its increasingly bellicose rhetoric. Significantly, a growing number of South Koreans have called for the United States to reintroduce tactical nuclear weapons to the Korean Peninsula, and some have even argued that Seoul should possess indigenous nuclear weapon capabilities. Despite the presence of a lively academic debate in Australia about its strategic future, Canberra has worked to maintain and even strengthen its alliance with the United States. The same is true for the Philippines and Thailand: while Manila has sought to strengthen ties with the United States (driven in no small part by the territorial disputes in the South China Sea), Bangkok has been the most skeptical about the rebalance but, it has decided to join the TPP.

Our speaker concluded by stressing that US extended deterrence, complemented by missile defense, is a powerful nonproliferation tool. Indeed, it is the main reason why Japan and South Korea are not developing nuclear weapons.

The discussion revealed a certain edge, both in the room and in the overall bilateral relationship, caused by increased Chinese assertiveness toward its neighbors (according to US participants) and/or the US rebalance toward Asia and its impact—an increased willingness by China's neighbors (especially US allies) to challenge its territorial sovereignty (according to Chinese participants).

The Chinese expressed great suspicion about the rebalance, but there were discernible differences among Chinese participants. While skepticism bordering on hostility dominated Chinese thinking, some Chinese participants acknowledged that many blanks remain to be filled in. Beijing wants "more explanations about the concept", particularly since there is no official document that describes the rebalance. A more nuanced perspective was voiced by a Chinese participant who admitted that "we are worried, and what matters to us is less what you say than what you do" and that the prevailing view in China is that the rebalance is directed against Beijing. It is seen by many, especially among the general public and academic/military communities, as a cover for containment, an aggressive US posture in Asia, and the empowerment of allies to challenge China, especially when combined with extended deterrence. Chinese elites, however, are more inclined to make the distinction between the rebalance being *about* China rather than being opposed to China. Despite its stated focus on the three "Ds" (diplomacy, development, and defense), most Chinese participants view the rebalance primarily through a military lens; several suggested that the United States needed to "rebalance the rebalancing", i.e., make adjustments and concessions to Chinese complaints.

A recurring theme was the potential for third parties to drag the United States and China into conflict. Of primary concern was North Korea, but Chinese participants also focused on Japan and the Senkaku/Diaoyu issue in the East China Sea. The Philippines and Vietnam (given territorial disputes in the South China Sea) were also occasionally identified as well. There was little fear among US and Chinese participants that these conflicts would escalate to the nuclear level, however.

When discussing the Senkaku/Diaoyu issue, Chinese participants were particularly unhappy with the US position, considering that the United States was siding with and encouraging Japan. They were very critical of Secretary of State Hillary Clinton and expressed hope that incoming Secretary of State John Kerry would change course, citing his confirmation remarks as more balanced and sympathetic to Chinese concerns.

Chinese participants continue to be critical of US alliances in Asia, emphasizing the destabilizing effects of extended deterrence and noted that the United States has sought to strengthen extended deterrence in recent years. US participants countered that extended deterrence has stabilizing effects and nonproliferation benefits for the Asia-Pacific region. More than in the past, however, Chinese participants acknowledged that extended deterrence is key to preventing Japan (among others) from developing nuclear weapon capabilities. One Chinese participant, however, pointed out that although extended deterrence may have positive effects, Washington would be wise not to rely too heavily on it because "an overdose of good things can be bad".

#### **Cross Domain Deterrence**

As past meetings have increasingly referred to the problems caused by threats from and in cyberspace as well as space capabilities, our meeting this year took up for the first time the concept of "cross domain deterrence." It is noteworthy that Chinese preferred that Americans lead this discussion; it was the only session (and the only in recent years) in which only one side provided a speaker and the other offered only a discussant. This was at the request of our partners in Beijing. The US speaker began by explaining the general dissatisfaction with this concept. In fact, deterrence and operational doctrine have long been exercised across domains: ground, sea, and air. Today, however most US (and Chinese) military forces on land, in air, and at sea use cyber and space domains as well. As our speaker explained, "cross-domain" merely refers to the effects of attacks in one domain (especially newer ones like cyber and space) on other domains in the physical world, as well as to the potential responses to such attacks and the implications for deterrence, escalation, and crisis management.

The novelty today, our speaker argued, is the escalation potential of actions in cyber and space. There may be times when a country consciously decides in a crisis or conflict that it *wants* to escalate. However, at issue is the risk of stumbling into an escalatory chain reaction, especially when there is no clear sense of how the other side may respond. During the Cold War, the escalation ladder was never as coherent, communicable, and universally recognized as it was in Thomas Schelling's writings. Yet there was a broad common understanding that crossing the nuclear threshold was

significant. Today, the United States and China (and others) lack a shared framework for interpreting how cyber-attacks and counter space fit into an escalation ladder, and where the thresholds are.

Our speaker stressed that a shared framework would not (and could not) prescribe actions for every scenario. Rather, it would describe a generic escalation ladder, a tacit or loosely-defined code of conduct that would give decision-makers a better sense of which actions and responses are expected in real-world scenarios and which ones would cross thresholds that result in escalation. The basis for assessing attacks in cyber space or outer space is not clear. Can the two sides agree on a framework? For instance, must responses to kinetic attacks also be kinetic to be proportional? Is a kinetic response to a non-kinetic attack always escalatory? Can a cyber-attack be proportional to a cruise missile strike? How do officials compare attacks that strike targets in some domains and affect capabilities and events in other domains?

Developing a shared framework is difficult regardless of how many domains are involved because of the need to take into account effects and possible responses. But US and Chinese officials often interpret events through different prisms – ideological, political, doctrinal, historical, etc. Numerous questions need to be addressed. For instance, what would happen if a Chinese ASAT attack is kinetic? Would the United States, its allies, and Chinese officials perceive a non-kinetic response against China's space tracking capability to be weak even if it succeeded in protecting US satellites? Would kinetic attacks on ASAT weapons China is employing be considered proportional? Would crossing a geographical threshold (assuming the targets are on mainland China) make this response escalatory?

Our speaker also suggested that the perceptions of attacks in cyberspace and space would depend on context. For example, attacks on military satellites and computer networks might be expected and accepted once a conventional war has started, but not in peacetime. Nonetheless, and significantly, our speaker noted that actions that affect nuclear capabilities would fall in a special category: the United States and presumably China are likely to consider any attack against nuclear capabilities as particularly worrisome.

With these considerations in mind, our speaker discussed what the United States and China could do to address the risk created by miscalculation and escalation across domains. Here, *The Paradox of Power* (2011) by David Gompert and Phillip Saunders is very helpful. Plainly, absolute security no longer exists, if it ever did. As their relationship is both interdependent and potentially adversarial, the United States and China are increasingly vulnerable to each other, particularly in the nuclear, cyber space, and space domains. The futility of defense and the dim prospects for arms control in these domains is likely to lead both countries to develop strong offensive capabilities to deter the other. The United States and China, therefore, should deal with these vulnerabilities by pursuing mutual restraint in the use of strategic offensive capabilities in all three domains, building on a foundation of mutual deterrence based on the threat of retaliation. A strategic restraint agreement should include reciprocal pledges not to be the first to use nuclear or anti-satellite weapons against the other or the first to attack the other's critical computer networks. Such mutual restraint pledges should be reinforced by regular high-level communications about capabilities, doctrines, and plans, as well as concrete confidence-building measures to avoid misperceptions, provide reassurance, and engender trust.

Our Chinese discussant offered that the term "cross domain deterrence" is not helpful, and is even dangerous, because it suggests that China and the United States are in a state of cold war, which is an inaccurate characterization of their relationship.. It would be more helpful to talk about "cross-domain threats", which have become a reality and is of concern both to China and the United States. Cyber threats, for instance, could undermine the operation of nuclear facilities: both Beijing and Washington have an interest in preventing such developments.

At the same time, our discussant asserted that the United States has developed cross-domain capabilities and is using its alliance network in ways that could directly undermine China's interests. Beijing has exercised considerable restraint, but could respond in kind and this could threaten strategic stability. Our discussant insisted that mutual trust is the answer and the United States is not doing enough to accomplish this. Although it will take time to agree on a code of conduct, it is important to begin working through multilateral frameworks, as China has argued. In the meantime, China and the United States should enhance mutual exchanges to build confidence. Track-2 or track-1.5 discussions on this topic would also pay dividends.

US and Chinese participants are in general agreement on the value of a wider dialogue rather than a narrow focus on strategic nuclear dynamics. Discussions of missile defense, space, cyber, and even conventional weapon dynamics are worthwhile, as are a discussion of interactions between them. For example, the idea of a "no-first use" policy for anti-satellite weapons was tabled at our meeting. But moving beyond that was stymied by the Chinese fear that discussing "deterrence" or focusing on the bilateral nuclear arena reinforced competitive elements in the bilateral relationship. In response, Americans stressed the importance of discussing and distinguishing "deterrence in peacetime," "deterrence by denial," and "deterrence by punishment." Clarity about these terms is essential to reducing chances of a failure of deterrence and of conflict escalating.

Some Chinese pointed to the Stuxnet attack on Iranian nuclear facilities as a use of offensive cyber capabilities. They characterized it as an attack on Iran's nuclear complex and argued that it set a dangerous precedent. US and Chinese participants agreed that discussing cyber-attacks on critical infrastructure could be one area of discussions on reassurance and a code of conduct. One Chinese even suggested that we refer to "crossdomain reassurance" instead of "cross-domain deterrence."

#### **Crisis Management**

From cross-domain deterrence we moved to how China and the United States manage strategic crises, the focus of our sixth session. Our Chinese speaker argued that this discussion is long overdue. Consensus on key definitions and efforts to resolve differences will help prevent conflict. Crisis management mechanisms are directed by various groups in China. While they are based on core principles and codes of conduct developed during the Mao era, these mechanisms have improved significantly in recent years. Today, they include warning signals, confidence-building measures, and special envoys. Hotlines and track-2 and track-1.5 forums serve as important instruments to manage crises.

Our Chinese speaker explained that Taiwan no longer tops the list of potential crises. Rather, they are likely to emerge as a result of maritime conflicts in the East China Sea (with Japan) and the South China Sea (with the Philippines). A crisis on the Korean Peninsula is another possibility. Most likely, these crises will take place across domains and may reach the nuclear level.

Our speaker urged China and the United States to make crisis management a priority and seek mutual understanding of key operating principles, which appear to be fundamentally different. Both countries must build bilateral crisis management mechanisms to improve communication before and during a crisis. Finally, cautionary measures to prevent crises should be promoted and prioritized.

While the United States and China have common interests, significant sources of tension will inevitably produce countervailing pressure toward confrontation and conflict. Thus, both sides must recognize and manage the potential for, and consequences of, destabilizing crises.

Our US speaker explained that the US approach to crisis management is grounded in the Western tradition in general and the American Cold War experiences in particular. It is focused on political-military causes of, and solutions to, crises. The ideological competition at the heart of Cold War dynamics drove US policymakers and scholars to emphasize the need for pragmatic, non-ideological steps intended to deescalate tension and avoid hostilities. Similarly, the ever-present danger that a misunderstanding could rapidly escalate into a nuclear confrontation established a preference for mechanisms and agreements that directly mitigated the immediate causes of a crisis and enhanced arms race stability over the long term by deepening transparency and encourage dialogue.

The Cuban Missile Crisis, our US speaker argued, was especially powerful in shaping this perspective. The Cuban Missile Crisis also shaped US perceptions on the need for clear, credible, and calculated signaling. The need for stability and predictability during the Cold War reinforced US conceptions of crises as anomalous events that disturb an otherwise stable international order. The result in the United States was a highly efficient and centralized decision-making process, including mechanisms for the US president to learn about an incident, consult advisors, make a decision, and implement it throughout the bureaucracy and chain of command.

In contrast, Chinese discussions of lessons learnt from past crises tend to be more deductive. One authoritative study (*Understanding Foreign Policy Decisions: The* 

*Chinese Case* (1979)), identifies six key attributes of China's thinking about crises: 1) they differ from other situations only in the level and intensity of actions and signals; 2) they present opportunities to advance one's interests as well as cause stresses and dangers; 3) they result from long-term processes and reflect the normal competitive, unstable, fragile, turbulent, antagonistic, and perpetually changing nature of international relations; 4) they stem primarily from domestic, not foreign, phenomena (at least in the initial stages); 5) they entail the controlled use of confrontation and compromise across all elements of national power; and 6) they extend over a long period of time. Another analysis (*Managing Sino-American Crises* (2006)), identifies attributes that are regular features of disputes between the United States and China. Such crises generally 1) occur when overall bilateral relations are antagonistic; 2) involve third parties; 3) occur in areas peripheral to US core interests but within or near Chinese borders; 4) exhibit asymmetry of national and military power; and 5) involve domestic challenges.

Noting that the Chinese literature generally treats the concept of crisis management as a foreign term, our speaker explained that it seems to have received significant attention in recent years. In *Managing Sino-American Crises*, for instance, Wang Jisi and Xu Hui describe a four-step process that China uses to understand and manage crises: 1) identify the interests and objectives pursued; 2) collect and analyze information; 3) provide scenarios and predict their possible outcomes; and 4) choose the preferred scenario, and implement it. Our US speaker contended that this analysis leaves no room for dialogue with an adversary within this process. Nor does there seem to be any consideration that actions may have unintended consequences. Rather, this process seems to be fairly hermetic: analysis is presumed to be infallible, dialogue is an end not a means, and prediction is assumed to be unerring.

According to Chinese scholars, China's conceptual approach to crisis management can be ascribed to two guidelines used by Chairman Mao to instruct his forces in their struggle against Japan during the Second World War. The first one signals the need to act according to political and strategic principles while remaining tactically flexible. The second recommends that China not attack unless it is attacked, to not fight decisive actions unless it is sure of victory, and to not be carried away with success. This logic suggests that China's fundamental motivation for crisis management is to maximize political or strategic advantages. Yet, while conflict is to be avoided if possible, our speaker argued that Beijing's willingness to use force if necessary strongly suggests that hostilities may be deemed acceptable if they enhance the political and strategic benefits that China can gain from a given crisis. Although China's willingness to use force in a crisis has declined markedly since the Mao and Deng eras, the changing relative balance of military power in favor of China presents interesting questions about the possibility of Beijing using force.

Equally troubling is China's approach to crisis signaling, which often appear unclear to foreign (including American) observers. Also worrying is China's reluctance to utilize credible, private, and consistent lines of communication during crises with the United States: China's continued hesitance to embrace robust military-to-military exchanges, especially during times of tension, suggests that Beijing remains unconvinced about the value of crisis dialogue. Finally, the need for Chinese policymakers to build consensus among top leaders means that decisions and engagement with the outside world will be delayed and highly scripted, which fundamentally challenges the ability of the concerned parties to engage in effective communication.

From a US perspective, five interrelated divergences are particularly troubling for US-China strategic stability. First, the United States generally sees the use of force as an option of last resort that could have significant unintended consequences and lead to a larger conflict, while China seems to see it as an effective tool to signal resolve, achieve objectives, and even reduce the potential for a larger and more devastating conflict. Second, while the United States tends to favor formal, explicit, and permanent agreements that address the underlying causes of a crisis and reduce the possibility that a crisis may occur, China seems to prefer informal, implicit, and temporary agreements that enable the immediate crisis to dissipate but allow for future flexibility. Third, while the United States values consistent dialogue and in-crisis communication, China appears reluctant to establish dialogue mechanisms. Fourth, and related to the previous point, China's decision-making process, unlike that of the United States, is mostly inwardfocused and emphasizes the collection of information, the building of consensus, and implementation of a comprehensive plan, making it difficult for communication to influence and inform this process. Finally, and again related to concerns about in-crisis communication, it is difficult for the concerned parties to ignore provocations that may occur even if they are not instigated by the Chinese government, particularly given Beijing's record of utilizing indirect and easily deniable methods of signaling.

In these circumstances, our US speaker recommended that the United States and China develop a comprehensive strategy for crisis management that goes beyond political-military dynamics (especially given the increasing complexity of US-China relations, notably the economic and societal dimensions). Effective crisis management mechanisms (such as hotlines) that can survive moments of tension are particularly critical. Also on his list of recommendations was the streamlining of crisis decisionmaking processes. Finally, our speaker explained that to the two countries must enhance transparency and dialogue on strategic signaling, decision-making, and crisis scenarios.

During the discussion, US and Chinese participants agreed that improved communication is a prerequisite to the successful management of crises. Americans, however, noted that improved communication alone does not guarantee successful crisis management and the prevention of conflict: indeed, the potential for mis-signaling is real. Significantly, today, the Internet and instant media have changed the way governments do business, further complicating crisis management. One participant pointed out that military drills that got no attention in the past have become heavily politicized in part because of the growing media attention. Hotlines *can* help with this problem, but they have their limits: communication is filtered through staff and hotlines are generally not used by senior leaders. This highlights the importance of uninterrupted military-to-military exchanges.

Americans suggested a common glossary on crisis management would be helpful. One critical point is the agreement by both sides on what constitutes a crisis because, as one Chinese participant pointed out, "the United States worries about a North Korean nuclear test but does not seem to care much about what is going on the East and South China Seas." This observation fueled the Chinese argument that "the two sides need to pay closer attention to the other." A Chinese participant underscored the importance of this topic, noting that as the United States and China move toward new major power relations, our ability to successfully manage crises will become increasingly critical.

Both sides agreed that it was time for the two countries to establish "rules of the road" to manage crises. Scenario and simulation exercises may also be helpful, although several participants insisted that crises are difficult to predict. This demands an emphasis on capacity-building and the development of know-how.

#### **US-China Bilateral Confidence and Cooperation in the Nuclear Realm**

The seventh session explored what the United States and China could do to enhance bilateral confidence and cooperation. Our US speaker delivered the results of a track-2 US-China expert study on "Building toward a Stable and Cooperative Long-Term US-China Strategic Relationship". This study was carried out by US and Chinese experts under the auspices of the Science Applications International Corporation (SAIC), the Pacific Forum CSIS, and the China Arms Control and Disarmament Association (CACDA); the final study is available at:

http://csis.org/files/publication/issuesinsights\_vol13no2.pdf

Central to this study is the need to enhance mutual strategic reassurance between the United States and China, i.e., building a stable and cooperative "win-win" relationship that serves both countries' interests. Since the relationship between the United States and China will shape the 21st century, a cooperative strategic relationship would not only help avoid dangerous military competition, confrontation, or even conflict between the two countries, but it will also provide a foundation for action to address global political, security, and economic challenges. It would allow scare leadership attention, political capital, and economic resources in both countries to be used to address pressing domestic, economic, social, and other priorities.

The challenges that the United States and China face in pursuing greater strategic cooperation are well known. They range from the longstanding political disagreements over Taiwan to mutual uncertainties about each other's military intentions, plans, programs, and activities, both at the strategic level and in Asia. There are also foundations for building greater cooperation, however: they include growing economic interdependence between the two countries and the recognition by both countries' leadership of the importance of this relationship. Our speaker identified five areas for possible future dialogue and action:

• A top priority should be a robust and continuing set of exchanges and other types of official interactions between US and Chinese military forces and defense

establishments. Insofar as possible, such exchanges should be insulated from the ups and downs of the overall relationship.

- A process of mutual strategic reassurance to reduce misunderstandings and lessen mutual uncertainties is needed between the United States and China. As a start, experts and officials should have a frank discussion of the "why" of mutual reassurance. Agreement at the official level could next be sought on principles or guidelines to govern a process of US-China mutual strategic reassurance. At the same time, possible confidence-building initiatives for mutual reassurance should be explored at the track-1.5 and official levels, including strengthened dialogue, joint analysis, table-top exercises, reciprocal visits, and joint military operations.
- Despite differences between the United States and China on transparency, the time appears ripe for new efforts in this area. A first step could be a sustained dialogue among experts on each country's perspectives on the benefits, risks, possibilities, and limits of transparency. The United States and China still do not understand each other's thinking on this issue. Improved understanding could be followed by an evolutionary approach to greater transparency that would recognize the mutually reinforcing relationship between greater trust and greater transparency. Chinese suggestions to focus initially on transparency of intentions, rather than transparency of capabilities, are another building block. There is also a need to rethink reciprocity, moving from matching reciprocity of one-for-one activities to a new approach. Our speaker suggested that "asymmetric reciprocity" would accept possible differences in the amount, type, timing, and detail of information released by China and the United States.
- Traditional treaty-based arms control between the United States and China remains premature. Even so, the two countries could begin a dialogue on arms control verification technology, practice, and experience as part of their overall commitment to the NPT. A low-key discussion of the concept of less formal mutual strategic restraint across the offenses-defenses, space, and cyber areas would also be useful. Mutual strategic restraint would build on the unilateral restraint evident in both countries' strategic postures. The goal would be to lessen mutual uncertainties and build habits of strategic cooperation.
- Finally, more focused dialogue is needed to better understand differences in nonproliferation policy and, more importantly, to identify areas of cooperation as well as ways to bridge or reduce those differences. Both countries have an important stake in enhanced cooperation to strengthen nuclear safety and security in Northeast Asia, as well as globally. China's oft-described role as an intermediary between nuclear weapon states and non-nuclear weapon states could offer opportunities to strengthen global nonproliferation efforts, e.g. in gaining universal adherence to the Additional Protocol, in encouraging implementation of United Nations Security Council Resolution (UNSC) 1540, and in achieving success at the upcoming 2015 NPT Review Conference.

Our Chinese speaker emphasized the asymmetrical relationship between the two countries. The United States has a much larger arsenal than China. Yet, China's minimum deterrence strategy means that mutual vulnerability exists. Today, as during the Cold War, both China and the United States seek to prevent war.

Our Chinese speaker highlighted three challenges. First, while US missile defense capabilities and developments are of concern to China, the United States is worried about China's force modernization. Second, our speaker explained that Washington and Beijing do not seem to understand each other's nuclear strategies; he pointed to allegations made in the United States about China's "Nuclear Great Wall" as evidence. Finally, our speaker deplored the trust deficit between China and the United States, which, as he put it, causes us to "often demonize each other."

To remedy this situation, track-2 and track 1.5 dialogues should be deepened. While track 1 discussions are the ultimate goal, it was best to proceed via unofficial tracks to discuss nuclear strategies. Meanwhile, both sides should strengthen cooperation and dialogue on nuclear security.

During the discussion, Chinese participants provided strong rhetorical endorsement of military-to-military exchanges, including on nuclear issues. They cautioned, however, about identifying "appropriate topics" for such a dialogue, underscoring the need for joint agenda development. Consistent with past discussions, they offered no insights as to how to get such talks restarted.

Some Chinese participants conceded that their government resists an official bilateral nuclear dialogue for fear that it could be modeled on the "adversarial" approach of US-Soviet talks. There are also concerns that a strategic dialogue with the United States would require China to make immediate concessions on transparency. New approaches on transparency, as well as US and Chinese expectations and fears of this concept are needed.

While calling for a new type of major power relations, Chinese participants explained that Beijing favors relations that are based on mutual vulnerability and mutual restraint. They expressed concern that the United States does not seem to be on the same wavelength.

As in previous iterations of this dialogue, Chinese participants, both privately and even in the open discussions, stated that the Second Artillery is only an operational organization. They stressed that it plays no role in developing China's nuclear policies. While this did not preclude it from participating in a bilateral nuclear dialogue, its focus would be more on operational and procedural issues.

#### **General Observations and Next Steps**

What became quickly apparent is that the mutual familiarity generated by past meetings allowed for a generally positive, cooperative dialogue. This proved especially true when examining areas of potential future cooperation, common concerns, or definitions and/or protection of "common goods". Both Chinese and US participants see value in track 1.5 and track 2 discussions of strategic nuclear and related policy issues as a means of laying the foundations for discussions at the official level and of reinforcing progress at track 1, if and when it gets started.

Significantly, this year, Chinese participants did not emphasize traditional concerns. There was almost no mention of Taiwan, no calls for the United States to adopt a no-first use policy, and few complaints about US intrusions into China's exclusive economic zones. The AirSea Battle, which was hotly debated at our last meeting, was not mentioned once.

Instead, however, the 2013 Defense Authorization Act has become the latest US policy action cited as "proof" of American hostile intent. Chinese participants cited specific provisions that "target" China, in particular, the call for a study of tunnels allegedly hiding large numbers of Chinese nuclear weapons. Since President Obama signed the legislation into law, it is viewed as his policy as well. In a carefully crafted statement, one very senior retired Chinese official with long experience in nuclear weapon development flatly and publicly denied that China is concealing nuclear weapons in tunnels.

More generally, Chinese participants could be divided into two categories: an inner core of veterans who were pragmatic and forward-thinking, and an outer tier who seemed to be still rehearsing superficial talking points. Among the inner core, there was a clear sense of progress and cautious optimism for broader and deeper dialogue both at the track 1.5/2 and track 1, despite some mild disappointment over the current state of strategic relations. While some old themes keep stubbornly returning (namely the issue of "absolute security" and "double standards"), they stimulated discussion on both sides about what progress has been made and many inner core interlocutors joined their American colleagues in offering explanations and counter-arguments.

All along the dialogue, the main US messages were: "let's stay focused on common interests"; "let's get going at track 1"; "let's explore common challenges together at the conceptual level" (e.g., offense/defense stability or cross domain escalation); and "let's focus on future cooperation rather than past grievances and examine what can be done rather than dwell on what can't be done."

Not surprisingly, in the wrap-up session, there was strong support for a continuation of the dialogue, including a willingness to include a nuclear scenario table top exercise, possibly focused on an India-Pakistan crisis that degenerated into the employment of nuclear weapons. Based on our observations and assessments, we believe that future topics for this dialogue could also include a deeper dive into options for multilateral arms control, especially within the P-5; cross domain deterrence and protection of "common goods"; crisis management, especially the identification of potential nuclear crises; greater understanding of key military capabilities based on technology rather than rumors or suspicions; an examination of the dangers of cyber-

attacks; how signaling does and does not work, possibly using the Korean and Vietnam Wars as examples); and the development of Joint Principles for Mutual Strategic Reassurance. Discussion on what is meant by Xi Jinping's desire for a "new type of great power relationship" would also be beneficial because the Chinese made frequent reference to the phrase but could not adequately explain it. The Chinese also continue to express interest in deepening their understanding of a range of nuclear arms control verification practices.

## Conference Report Inaugural China-US Dialogue on Space Security

In an attempt to address the growing strategic relevance of the space domain for the US-China relationship, the Pacific Forum CSIS hosted the inaugural China-US Dialogue on Space Security, with support from NPS PASCC and DTRA, on Jan. 30, immediately after our dialogue on strategic nuclear dynamics. Some 40 Chinese and US experts, officials, and observers along with eight Pacific Forum CSIS Young Leaders joined a half-day of discussion of space policy; all attended in their private capacity.

#### **Space Security**

The first session focused on definitions as well as on comparing Chinese and US perceptions of space security. Our US speaker defined space security as "the ability to place and operate assets outside the Earth's atmosphere without external interference, damage, or destruction." He explained that the problem of space security is not new, reminding that in the early years of the Cold War (1958-1962), electromagnetic pulse generated by US and Soviet nuclear tests in space damaged satellites. This led to the Limited Test Ban Treaty (1963), which prohibited all test detonations of nuclear weapons except underground. That later led to agreements such as the UN Liability Convention (1972) and the UN Registration Convention (1975), among others. Significantly, during the Cold War, there was always a clear linkage between the safety of space assets and bilateral nuclear stability.

Since the collapse of the Soviet Union and the end of the Cold War, there has been rapid growth in the number of space-faring countries and satellites in orbit. There has also been an expansion in the number of military space programs. All have expanded hazards from orbital space debris; it is estimated that there are now approximately 17,000 large objects in orbit, a source of no small concern given the weakness of notification systems and the inability to track smaller debris.

Our speaker then turned to US concerns about China's space policy. The US Congress complains about Chinese espionage against the US aerospace industry and the 2007 Chinese ASAT test triggered great concern in Washington. Beijing seems to be sending mixed messages: while the Foreign Ministry released "peaceful use" statements, the People's Liberation Army depicted the test as part of its counter-space activities. Moreover, there was only a limited response to the US offer to hold bilateral military space talks.

More recent examples of space cooperation include NASA Administrator Michael Griffin's 2006 trip to China, which led to the establishment of joint working groups on Earth observation and space science. Griffin's successor, Charles Bolden, also visited China in 2010. At the political level, US-China space cooperation was mentioned in the final document of the Obama-Hu summit of 2009. Two years later, the Obama administration proposed the establishment of a bilateral space security dialogue.

The 2010 US Space National Policy emphasizes "shared and common interests" as well as "openness" when it comes to space security. Equally important are "the rights of passage through, and the conduct of operations in, space without interference." Moreover, the document stresses that the United States will seek to enhance capabilities in cooperation with foreign partners to identify, locate, and attribute sources of radio frequency interference to deal with jamming. Significantly, the 2011 US National Security Space Strategy underscores that the United States seeks "a secure space environment in which responsible nations have access to space [...] without [the] need to exercise their inherent right to self-defense." The 2012 DoD Space Policy, for its part, raises concerns about "purposeful interference" with US space assets, stressing that it is "irresponsible in peacetime and may be escalatory during a crisis." The document also notes that the United States "will retain the capabilities to respond at the time and place of our choosing," simultaneously emphasizing the need to build coalitions, to reduce vulnerabilities, and to preserve the ability to use commercial and non-space assets.

The United States and China, our speaker argued, should engage in bilateral diplomatic talks on space security with the goal of making non-interference pledges, increasing data exchanges, and concluding a weapon test moratorium. Discussions for the adoption of an international code of conduct should be enhanced, and joint studies should be conducted. Washington and Beijing should cooperate on monitoring of orbital debris. Finally, bilateral military confidence-building should be enhanced via talks, visits, and other crisis avoidance mechanisms.

Our speaker concluded by stressing that the United States and China have *shared* interests in ensuring space stability, sustainability, and development. Current mutual isolation serves neither side. But progress will require high-level attention: military/diplomatic talks could help identify common grounds, mutual restraint with regard to space weapons and possible joint monitoring could help build trust, and space security cooperation might facilitate renewed civil and commercial space ties.

Prefacing his presentation by noting that he spoke strictly in a personal capacity, our Chinese speaker agreed that major powers such as China and the United States have a shared interest in maintaining stability in space. The problem, however, is that frequently China's perceptions of the main threats in the space domain are not those identified by the United States. And, unlike the United States, China favors adoption of a treaty for the prevention of an arms race in outer space (PAROS).

Nonetheless, our speaker identified areas where China and the United States can cooperate, such as space debris. He too pointed to the November 2009 Hu-Obama Joint Agreement on cooperation in outer space as a positive sign for US-China dialogue on space. Yet, our Chinese speaker highlighted the mixed signals China is receiving from the United States, pointing to a clause included in a US spending bill passed in April 2011 that bans communication between NASA and China's relevant agencies, and prevents NASA officials from visiting Chinese facilities as well as the high-tech exports to China banned by Congress. Our Chinese speaker explained that these are not properly understood in China and constitute a serious barrier to developing bilateral dialogue. Chinese feel "humiliated" by the way they are being treated by US laws and regulations on space.

The tone of our discussion was positive and both sides made a number of suggestions on how to enhance bilateral cooperation on space issues. However, Chinese participants echoed the Chinese speaker's insistence that China feels "repeatedly humiliated" by US legal and administrative restrictions on space cooperation: this feeling is a powerful obstacle that must be addressed before formal discussions can be initiated. US participants, in response, emphasized that these Congressional restrictions involve NASA activities and do not prevent dialogue and cooperation with other governmental agencies dealing with space issues.

Chinese participants acknowledged "generally positive" changes in US space policy from the Bush administration to the Obama administration, although some dismissed the policy shift as minimal at best. Significantly, Chinese participants stressed that China remains a "student" when it comes to space, but they insisted that Beijing is determined to act responsibly. Chinese participants, for instance, expressed appreciation for the space debris data and conjunction/collision warnings provided by the US Air Force.

In principle, despite numerous questions about US motivations and interests, Chinese participants believed that Beijing is willing to engage in bilateral dialogue on space cooperation. (Previously, Beijing had stated an interest in multilateral dialogue only.) Topics of discussion could include the identification of shared perceptions and objectives, mutual reassurance, and an understanding of each side's primary interests and concerns, along with more specific issues such as space debris, cooperation to avoid collision in space, and scientific and technological cooperation. Care must be taken when constructing the agenda: when US proposals begin with or focus on space debris, Chinese tend to see this as an attack on their ASAT test or capabilities.

Chinese participants played down concerns about ASAT tests, arguing that they have low-level technology and that the issue should be addressed via multilateral talks. One Chinese also note that the United States expressed a willingness to engage in a space dialogue only after China's ASAT test, suggesting that the US goal may be to limit Chinese capabilities. Again, the US Air Force X-37B was cited as a Chinese concern due to its alleged ability to "catch and cripple" satellites.

A Chinese expert also cited concerns about the security of China's limited deterrent and suggested that the United States make a unilateral pledge not to deploy space-based weapons. Americans dismissed space-based weapons as very unlikely, both for technological and financial reasons.

#### **Space Codes of Conduct and Arms Control**

Our second session explored how China and the United States could enhance space security. Our US speaker began by stressing that the "ASAT Rubicon" has been crossed. Capabilities cannot be un-invented. Missile defense, with inherent ASAT capabilities, is here to stay. But the United States and China depend heavily on space and this dependency will continue to grow. Thus, access to space-enabled information services must be preserved, especially in conflict.

Defending/protecting space-based assets is difficult, however. As in the nuclear domain, offense has an advantage over defense in space. The technical challenges and costs associated with the development of credible ASAT and offensive counter space capabilities are not unreasonable given their military impact. As a result, there is an inherent risk of strategic instability when relatively modest defense investments can disproportionately threaten or hurt an adversary. For space peers (or even near-peers), a disabling first strike against an adversary's space assets is better and easier to execute than retaliating against the space assets of the side that struck first. This is the essence of crisis instability – preemptive strikes have greater benefits than retaliatory strikes. Technology will provide greater capabilities, risking greater instability in the future.

Our US speaker outlined three space conditions of interest: peacetime situations, crisis situations, and conflict situations. A stable space environment in peacetime promotes behavior that maximizes the ability to utilize space and minimizes operational and other problems. Measures that contribute to this include codes of conduct and other agreements that set "rules of the road," enforceable debris-genesis mitigation regulations, joint approaches to debris remediation/clean-up, space traffic management systems, confidence-building measures, transparency, agreements that constrain the most destabilizing dimensions of offensive space capabilities, and of creative approaches to enforcement issues.

A stable space environment in crisis situations reduces incentives to strike or negate space assets or take other destabilizing actions, and gives countries time to discourage crisis escalation. Our US speaker pointed out that misperceptions and miscalculations are among the biggest threats faced. The best way to address these problems is channels of communication, agencies to resolve problems, and trusted relationships among professionals. This will not prevent crisis escalation, but is likely to reduce its potential.

Our speaker suggested that it was best to begin with modest steps on space arms control. The history of arms control is – and always has been – a history of modest steps. Especially in new domains, transparency and confidence-building measures should come first. This does not mean that China and Russia should abandon their proposals; they should be willing to postpone them. Our speaker argued space arms control should first include codes of conduct, then targeted steps addressing specific issues (e.g., a ban on ASAT testing, "keep out zones" around satellites), and finally, if verification permits, actual space arms control measures.

Our Chinese speaker began by explaining that codes of conduct are probably better than formal arms control agreements. He stressed that China and the United States need to move in the direction of a code of conduct because, as he put it, "we desperately need it." He then reminded that China conducted an ASAT test in 2007 and a few other midcourse tests subsequently, adding that China wants to have outer space defense capabilities and technology reserve capacity.

Our speaker made clear that China "wants to join the club" and that if the United States has ASAT capabilities, China needs to have them too. He explained that Beijing is in the process of developing a complete space program with numerous satellite applications, launch vehicles, manned space missions, and a lunar exploration program, to quote just a few examples. He expressed skepticism that China would expand its military space program, but was confident that it would continue to engage aggressively in space-related development for civilian purposes. Under these circumstances, there is a need for defining regulations in space to govern both military and civilian uses, and Beijing is currently exploring how to best do so, be it through transparency or confidence-building measures.

During the discussion, Chinese participants suggested that the United States is resisting the Chinese and Russian proposal for a space arms control treaty because it seeks dominance in and the weaponization of space. They also indicated a Chinese willingness to discuss the contents of their proposal in Geneva, including the possible addition of a ban on tests of ground-based systems. The recognition that outer space security includes ground elements, such as ground stations, as well as space, and that there should be discussions on constraining offensive activities in space, such as ASAT was another welcome note as China has been cool toward restrictions on such activities and deployments.

US participants explained that Washington's concerns about a space treaty are linked to the impossibility of verifying compliance, and to doubts that China (and Russia) would enforce compliance, given their failure to do so in the nonproliferation realm. The Chinese countered, saying that the problem is not insolvable, while asserting that space verification is "important but not indispensable." After all, other treaties like the Outer Space Treaty were not verifiable, and the United States could always withdraw from the Treaty if it felt it had to.

Our discussion again highlighted the importance of escalation control, this time in space. Several participants suggested that more thought be given to a no-first use pledge regarding space weapons. In the interim, other forms of control or regulation should be adopted.

Chinese participants listed objections to the European Union's international code of conduct: lack of mandate and too much emphasis on space debris while ignoring other issues. They generally agreed, however, that the process should move forward with other efforts, including those aimed at a formal treaty. They repeated that China is "open" to a space code of conduct, with one calling it "of great importance," and acknowledged that they are discussing with the European Union its code of conduct proposal. This is a noticeable shift in the Chinese posture. Finally, Chinese participants highlighted that a number of countries in Asia are investing in space programs, notably India and Japan, suggesting that multilateral discussions are also important. All participants concurred that the biggest common interest, globally, was avoidance of armed conflict in space.

#### **General Observations and Next Steps**

For a first iteration, this dialogue showed a lot of potential. In fact, many participants characterized it as an "outright success" and there was general agreement that it should be continued. Both Chinese and US participants engaged in open, honest, and very substantive discussions, and the atmosphere throughout the dialogue was overwhelmingly positive. This confirms the importance of holding this dialogue immediately after or, in the future, more integrated into our dialogue on strategic nuclear dynamics, which has successfully laid strong foundations for productive policy discussions over the years.

There are, of course, numerous unresolved issues at stake, important roadblocks to progress, and many lingering misunderstandings and misperceptions on both sides when it comes to space security. Future discussions need to make a much deeper dive into Chinese and US shared perceptions and objectives in the space domain and how each side can effectively enhance mutual reassurance, be it via space debris management, cooperation to avoid collision of space assets, and scientific and technological cooperation. The next iteration of this dialogue will also need to address in more depth how China and the United States can work in concert and build toward a framework to prevent space weaponization, control escalation, and avoid armed conflict in space.

# Appendix A

# The Seventh China-US Dialogue on Strategic Nuclear Dynamics A CFISS-Pacific Forum CSIS Workshop January 28-30, 2013, Beijing, China

## **Conference Agenda**

#### January 28, 2013

#### 9:00 **Opening Remarks**

Chinese presenter: Chen Zhiya US presenter: Admiral Dennis Blair

#### 9:15 Session 1: The Strategic Set-Up and Nonproliferation Environment

What are the Chinese and US perceptions of the current strategic nuclear and nonproliferation environments? What are the primary trends and concerns? What are US and Chinese priorities in nuclear policy? What are the nonproliferation challenges? What are Chinese and US perceptions of these challenges? What are the implications of an Iranian nuclear, or near-nuclear capability on inspiring further proliferation and on Mid-East political stability?

US presenter: Elbridge Colby Chinese presenter: Hu Yumin

10:45 Coffee Break

#### 11:00 Session 2: Iran and DPRK Nuclear Issues

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? Are Chinese views on US counterproliferation efforts like the Proliferation Security Initiative (PSI) evolving?

Chinese presenters: Hu Xiaodi / Fan Jishe US presenter: Lora Saalman

12:30 Lunch

#### 13:45 Session 3: The Future of P-5 Arms Control

What is the appropriate framework to engage in multilateral arms control? What are the alternate structures and goals for future multilateral arms control? What actions should the P-5 (or P-5 plus India and Pakistan) be taking now to improve international nuclear stability? At what level of US/Russian arsenals would China be interested in participating in arms control talks? What specific arms control steps can China undertake in the short and medium terms as negotiations proceed? What is the role of the United States? What is the status of the P-5 nuclear glossary? Can the United States and China cooperate in a P-5 framework on other issues, such as verification? Is global zero practical? Achievable?

US presenter: Linton Brooks Chinese presenter: Li Hong

- 15:15 Coffee Break
- 15:30 <u>Session 4: US Rebalance to Asia and its Implications to US-China Strategic Stability</u> What are the implications of the US rebalance to Asia for the US nuclear umbrella, notably on missile defense? What are the implications for US-China strategic stability? What is China's perception of Japan's ABM efforts vis-à-vis the DPRK?

Chinese presenter: Yao Yunzhu US presenter: Brad Glosserman

- 17:00 Session Adjourns
- 18:30 Dinner

### January 29, 2013

#### 9:00 Session 5: Cross-Domain Deterrence

What is cross-domain deterrence? How does it work? What does it include? How does it fit into existing institutional frameworks? How could it fail? How do incidents in one domain instigate incentives for escalating in another domain? What are the implications for US-China strategic stability? How can the United States and China cooperate to enhance mutual understanding of cross-domain deterrence?

US presenter: Elaine Bunn Chinese discussant: Guo Xiabing (for Yang Mingjie)

10:30 Coffee Break

#### 10:45 Session 6: Crisis Management

What are US and Chinese theories of crisis management approaches? How do these theories translate in practice? What are the similarities and differences? What lessons has each side learned from its experiences with acute international crises? What are the implications for US-China strategic stability?

Chinese presenter: Zhang Tuosheng US presenter: Abraham Denmark

#### 12:15 Lunch

#### 13:45 Session 7: US-China Bilateral Confidence and Cooperation in the Nuclear Realm

What are the core requirements and organizing principles for the United States and China to move toward greater strategic reassurance and build mutual trust? What are the next steps that both countries could take to enhance strategic reassurance? Specifically, what nuclear-related confidence-building measures could the United States and China promote? What forms of missile defense transparency would be valuable for China? What sorts of warhead build end state declaration by China would be valuable for the US? Short of negotiated inspection regimes, what concerns about verification might each side have, and how can those be addressed?

US presenter: Lewis Dunn Chinese presenter: Sun Xiangli

15:15 Coffee Break

#### 15:30 Session 8: Wrap-Up

What are the meeting's key findings? What are the next steps for the United States and China? How will the leadership transition in China and the introduction of a new foreign policy and security team in the US impact bilateral nuclear dialogue?

- 16:30 Closing Remarks
- 18:30 Dinner

## The Seventh China-US Dialogue on Strategic Nuclear Dynamics A CFISS-Pacific Forum CSIS Workshop January 28-30, 2013, Beijing, China

## Participant List

## Chinese Participants

Hu Side is Academician, Former President, China Academy of Engineering Physics

Chen Zhiya is Secretary-General, China Foundation for International & Strategic Studies

**Fan Gaoyue** is Sen. Col. Senior Research Fellow, Department of World Military Studies, Academy of Military Science of PLA

**Fan Jishe** is Deputy Director, Center for Arms Control and Non-proliferation, Institute of American Studies of Chinese Academy of Social Sciences

Guo Xiaobing is Associate Researcher, Chinese Institutes of Contemporary International Relations

**Huang Xueping** is Sen. Col. Director General of Bureau of North American and Oceanian, Foreign Affairs Office, Ministry of National Defense

Hu Xiaodi is Ambassador, Department of Arms Control, Ministry of Foreign Affairs.

Hu Yumin is Senior Research Fellow, China Institute for International and Strategic Studies

Li Hong is Secretary-General, China Association of Arms Control and Disarmament

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

Lu Dehong is Director of Department of Research, China Foundation for International & Strategic Studies

Sun Haiyang is Sen. Col. Professor, Second Artillery Commanding College, PLA

**Sun Xiangli** is Director of the Arms Control Research Division, Center for Strategic Studies, China Academy of Engineering Physics

**Teng Jianqun** is Senior Researcher, Department of International Strategic Studies, China Institute of International Studies

Wang Xiaodong is Maj. Gen. Professor, Second Artillery Commanding College, PLA

Wu Jun is Deputy Director, Center for Strategic Studies, China Academy of Engineering Physics

Xu Weidi is Sen. Col. Senior Researcher, Institute of Strategic Studies, National Defense University

Yang Mingjie is Vice President, Chinese Institutes of Contemporary International Relations

**Yao Yunzhu** is Maj. Gen. Senior Research Fellow, Department of World Military Studies, Academy of Military Science of PLA

**Zhang Tuosheng** is Chairman of Academic Committee, China Foundation for International & Strategic Studies

Zhu Chenghu is Maj. Gen. Professor, National Defense University

Zhu Feng is Professor, School of International Studies, Peking University

**Zong Jiahu** is Sen. Col. Director General of Bureau of Arms Control and Military Assistance Affairs, Foreign Affairs Office, Ministry of National Defense

## **US Participants**

Admiral Dennis Blair (USN Ret.) served as Director of National Intelligence from January 2009 to May 2010. He led 16 national intelligence agencies, administering a budget of \$50 billion and providing integrated intelligence support to the President, Congress and operations in the field.

Mr. Robert M. Blum is with the Office of Multilateral Nuclear Affairs, Department of State.

**Ms. Jennifer Bradley** is an analyst at the National Institute for Public Policy USSTRATCOM/J55.

**Amb. Linton Brooks** served from July 2002 to January 2007 as Administrator of the US Department of Energy's National Nuclear Security Administration. He is now an independent consultant on national security.

**Dr. M. Elaine Bunn** is a Distinguished Research Fellow in the Center for Strategic Research at National Defense University's Institute for National Strategic Studies.

**Mr. Elbridge Colby** is a research analyst at CNA. He previously served in a number of government positions, including on the New START negotiation and ratification effort for the Department of Defense and as an expert advisor to the Congressional Strategic Posture Commission.

Mr. Ralph A. Cossa is President of the Pacific Forum CSIS in Honolulu.

**Mr. Abraham Denmark** is Vice President for Political and Security Affairs at The National Bureau of Asian Research.

**Dr. Lewis A. Dunn** is Senior Vice President at the Science Applications International Corporation.

Mr. William Flens is First Secretary, Political Section at the US Embassy Beijing.

Mr Brad Glosserman is executive director at the Pacific Forum CSIS.

Dr. Michael Glosny is an Assistant Professor at the Naval Postgraduate School.

**Dr. Robert H. Gromoll** is Director of the US Department of State's Bureau of International Security and Nonproliferation, Office of Regional Affairs.

Mr. Paul Hedge is US Defense Attaché Office in Beijing.

**Dr. Dana Johnson** is Deputy Director, National Security Space Policy, Office of Missile Defense and Space Policy (AVC/MDSP) Bureau of Arms Control, Verification and Compliance (AVC) at the US Department of State.

**Dr. Kerry Kartchner** is Senior Foreign Policy Advisor in the Office of Strategic Research and Dialogues, Strategy and Plans Directorate of the Defense Threat Reduction Agency.

**Mr. Bruce W. MacDonald** is Senior Director, Nonproliferation and Arms Control Program at the United States Institute of Peace.

**Dr. James Clay Moltz** is a Professor at the Department of National Security Affairs, Naval Postgraduate School

Mr. Erik Quam is a Foreign Affairs Officer, ISN/RA, US Department of State.

**Dr. Brad Roberts** is Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy, US Department of Defense.

**Dr. Lora Saalman** is a Beijing-based associate in at the Carnegie-Tsinghua Center for Global Policy.

**Dr. David Santoro** is Senior Fellow for Nonproliferation and Disarmament at the Pacific Forum CSIS.

**Mr. Robert Swartz** serves as the Senior Advisor in the Department of Energy National Nuclear Security Administration's Office of Nonproliferation and International Security.

**Mr. Jerry Taylor** is the Director of the Office of Strategic Affairs, Bureau of Arms Control, Verification and Compliance, US Department of State.

**Mr. Drew Thompson** the Defense Department's director for China, Taiwan and Mongolia in the Office of Asian and Pacific Affairs.

**Dr. Christopher P. Twomey** is an Associate Professor of National Security Affairs (with tenure) at the US Naval Postgraduate School in Monterey, Calif.

**Dr. Edward L. (Ted) Warner III** is the Secretary of Defense representative to New START and senior advisor to the USD (policy) for Arms Control and Strategic Stability.

**Dr. Dean Wilkening** is a senior research scientist at the Center for International Security and Cooperation, Stanford University.

## <u>Next-Generation Scholars</u>

**Dr. Liu Chong** is an Assistant Research Professor at the China Institute of Contemporary International Relations.

Mr. Patrick Disney is a Nonproliferation Graduate Fellow at the US Department of Energy.

Ms. Yun (Claudia) He is a PhD Candidate at Tsinghua University.

**Mr. Philippe de Koning** is a consultant at the Nuclear Threat Initiative, and an MA Candidate and Mitchell Scholar, Dublin City University.

Mr. Adam Liff is a PhD Candidate at Princeton University.

Ms. Yuan (Maggie) Ma is a Researcher at National Defense University.

Mr. Tong Zhao is a PhD Candidate at Georgia Tech.

# Appendix **B**

## The Inaugural China-US Dialogue on Space Security

Pacific Forum CSIS January 30, 2013 – Four Seasons Hotel, Beijing

# <u>Agenda</u>

9:00 <u>Session 1: Space Security</u> What is space security? How important is it? Why? What are US and Chinese perceptions of how much space security matters? What are US and Chinese perceptions on the current space security environment? Do the United States and China agree on what the main space threats and risks are? What are US and Chinese priorities in addressing space security?

> US presenter: James Clay Moltz Chinese presenter: Li Hong

10:30 Coffee Break

## 10:45 Session 2: Space Codes of Conduct and Arms Control

What is the best way to enhance space security? Are codes of conduct better suited than formal arms control processes? What are the US and Chinese positions on these questions? What are the similarities and differences? What can the United States and China do together to strengthen space security?

US presenter: Bruce MacDonald Chinese presenter: Teng Jianqun

- 12:15 Closing Comments
- 12:30 Lunch

## The Inaugural China-US Dialogue on Space Security

Pacific Forum CSIS January 30, 2013 – Four Seasons Hotel, Beijing

# **Participant List**

## Chinese Participants

**Col. Gaoyue Fan** is Senior Colonel and Research Fellow at the PLA Academy of Military Science.

Maj. Gen. Xianfu Gong (Ret.) is Vice Chairman at the China Institute for International Strategic Studies.

**Ms. Hua Han** is Associate Professor at the Center for Arms Control & Disarmament Peking University, School of International Studies.

**Dr. Hu Yumin** is a Research Fellow at the China Institute for International and Strategic Studies.

Li Hong is Secretary General at the China Arms Control and Disarmament Association.

**Mr. Jianqun Teng** is Director of American Studies Department, and Director of the Centre for Arms Control and International Security Research, China Institute for International Strategic Studies.

**Mr. Zhang Ze** is Deputy Director at the Department of Arms Control and Disarmament, Ministry of Foreign Affairs, China.

## US Participants

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**Dr. Kerry Kartchner** is Senior Foreign Policy Advisor in the Office of Strategic Research and Dialogues, Strategy and Plans Directorate of the Defense Threat Reduction Agency.

**Mr. Bruce W. MacDonald** is Senior Director, Nonproliferation and Arms Control Program at the United States Institute of Peace.

**Dr. James Clay Moltz** is a Professor at the Department of National Security Affairs, Naval Postgraduate School

Mr. Erik Quam is a Foreign Affairs Officer, ISN/RA, US Department of State.

**Dr. Brad Roberts** is Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy, US Department of Defense.

**Dr. Lora Saalman** is a Beijing-based associate in at the Carnegie-Tsinghua Center for Global Policy.

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**Dr. Dean Wilkening** is a senior research scientist at the Center for International Security and Cooperation, Stanford University.

### <u>Next-Generation Scholars</u>

**Dr. Liu Chong** is an Assistant Research Professor at the China Institute of Contemporary International Relations.

Mr. Patrick Disney is a Nonproliferation Graduate Fellow at the US Department of Energy.

Ms. Yun (Claudia) He is a PhD Candidate at Tsinghua University.

**Mr. Philippe de Koning** is a consultant at the Nuclear Threat Initiative, and an MA Candidate and Mitchell Scholar, Dublin City University.

Mr. Adam Liff is a PhD Candidate at Princeton University.

Ms. Yuan (Maggie) Ma is a Researcher at National Defense University.

Mr. Tong Zhao is a PhD Candidate at Georgia Tech.