



Progress Despite Disagreements

The Sixth China-US Strategic Dialogue on Strategic Nuclear Dynamics

A Conference Report
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China Foundation for International and Strategic Studies (CFISS)

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Key Findings

The sixth round of the US-China Strategic Dialogue was held in Beijing, Nov. 10-11, 2011. This meeting, co-organized by the Pacific Forum CSIS and the China Foundation for International and Strategic Studies and sponsored by the Defense Threat Reduction Agency, gathered some 80 experts and officials in a track 1.5 setting to discuss security perspectives and assessments of the US-China strategic relationship. Chinese participants included three Major Generals including one from the Second Artillery who was very interactive throughout the dialogue. There were also a large number of observers from the Second Artillery, MND, the PLA General Staff, and the General Armaments Bureau. Key findings include:

The overall tone in the relationship is positive. Even when disagreeing with US policy, Chinese participants stressed cooperation and common interests.

Chinese continue to look favorably on the 2010 Nuclear Posture Review (NPR). In Chinese eyes, US use of the term “strategic stability” is a key indicator of readiness to concede mutual vulnerability. The Chinese recognize that this position is contested in the US and may not be permanent. They acknowledge the shift in focus from threats posed by states (Russia, China) to threats primarily from nonstate actors, the reduction in the role of nuclear weapons in US national security strategy and posture, and the raising of the threshold for their use, but remain concerned the moves are too slow, don’t go far enough, and (most frequently cited) might be reversed by a new US administration.

Nonetheless, the NPR provides an opportunity for cooperation and does not drive a negative China reaction like the “contingency” discussions in previous NPRs. One Second Artillery speaker suggested that some changes (“enrichments”) in Chinese nuclear strategy were underway, driven in part by the NPR. Although not specific, he referenced a new nuclear environment, with implications for the construction of nuclear capabilities and measures to prevent nuclear proliferation. Several participants stressed that the positive signals in the NPR allowed China to adjust its modernization plans and focus on qualitative rather than quantitative increases.

Chinese understand and accept the value of US extended deterrence (ED) in preventing a North Korean attack or dissuading Japan (or South Korea) from developing nuclear weapons, but there is growing concern about tactical or low-level applications of ED i.e., toward Japan (or the Philippines) in small territorial disputes or a nuclear reaction (deployment of US nuclear weapons to the ROK) in response to low-level North Korean provocation.

Some Chinese still equate the lack of a US No First Use (NFU) policy as a “first use” policy and believe the US would use nuclear forces first in a crisis, especially in Korea. Others reiterated the allegation that ED threatens potential adversaries, such as North Korea, prompting their desire for nuclear weapons.

While Chinese continue to see NFU as a panacea for many ills in US strategic policy, there was a more flexible discussion of US policy variants (bilateral “sole use” commitments, multi-domain no-first-use pledges in the nuclear, space and cyber realms) that might also make constructive improvements in the relationship.

Chinese maintain that their commitment to NFU is absolute. Yet, when Americans argue that ballistic missile defense (BMD) is not aimed at China, they argue that intentions can change; thus only capabilities matter. The contradiction in logic is obvious but not acknowledged.

Chinese technical engagement on US BMD was the most productive and detailed thus far, including a formal presentation on Chinese views on US BMD policy and capabilities. They remain unconvinced that MD is designed exclusively to counter a small state threat; a view they said was shared by the Russians. US entreaties that Chinese help in eliminating threats posed by the North Korean and Iranian missile programs which would reduce the US need to deploy missile defense were not persuasive.

While recognizing some changes in US posture and pronouncements, Chinese conclude that the US remains heavily committed to BMD and note that under certain circumstances, sea-based MD (SM-3 block II variants) can be as threatening as ground-based systems (GBI). Additionally, they remain concerned about a breakout or expansion of current programs once the infrastructure is put in place. While acknowledging the dangers created by worst-case scenario planning, Chinese thinking about missile defense is dominated by concern about survivable weapons after a US first strike.

Chinese worry about Taiwan’s integration into any regional or global MD architecture. Sharing data from Taiwanese radars would indicate an elevation of Taiwan’s status among US defense partners. Chinese remain convinced of their benign intentions. When asked about the January 2010 antimissile test, the only response was that it was intended to understand technology so China could defeat a US system.

There is a debate in China – including among the Second Artillery – about transparency, but no decisions have been made. There are concerns about being too transparent, especially given fears that Obama nuclear policies will not be sustained by a future administration.

Chinese strategists are focused on maintaining a secure second-strike retaliatory capability. When asked about ambiguity regarding Chinese conventional and nuclear missiles, a Chinese participant said that Second Artillery units had either nuclear or conventional munitions, not both, even though there were some IRBMs capable of carrying both. There were no conventional ICBMs. Absent a nuclear attack on China, it should be assumed that any Chinese missile being fired was conventionally armed. Because the Chinese arsenal is so small, there is no need for any integrated strike plan. (If

true, this could explain the apparent Chinese failure to have considered integrating their land based systems with the soon-to-be deployed submarine launched JL-2.)

While insisting that they will join arms control talks “when the time is right,” Chinese argue that the best vehicle is a “P5 + 3” forum. Chinese resist any distinction between NPT signatories and non-signatories (India, Pakistan, and Israel) when discussing proliferation challenges. There were references to Israeli nuclear weapons as an example of the need for universal standards. This is a new argument, building upon old complaints about US “double standards” (although it was not clear if China would commit to the same standards when dealing with Pakistan and North Korea).

The Chinese seem increasingly aware of the challenge proliferation poses to their regional environment. India was mentioned a number of times; it was studiously ignored in previous dialogues. Additionally, one military participant noted that China has four nuclear neighbors, complicating their calculus.

While some Chinese understand that the US never left the region, many portray US rhetoric asserting that “America is back” in Asia as an aggressive direct response to China’s rise which entails a stronger effort to contain China through deployments of military forces to the region and stronger relations with allies and partners.

There was continued refusal to acknowledge any potential arms race (or even an arms stroll) in Sino-American relations. Even if this was cast in more benign “action-reaction” terms, Chinese denied that such a dynamic was at play in the strategic or conventional (A2/AD-AirSea Battle) arenas.

In a new wrinkle, one scientist argued that China hasn’t joined PSI because it was not clear the US really want China in. (Previously they argued that it was illegal or would antagonize Pyongyang or both.) One American noted that, in the event of indications of another North Korean nuclear test, China should follow the ROK example and state in advance that a third test would result in China joining PSI.

While not on the agenda, Chinese participants frequently raised the issue of cyber security. They see themselves as victims of hackers, not perpetrators. Attributing blame to China was dismissed as unhelpful and counterproductive. The fact that attacks originate from within China does not mean they are sanctioned by the government; Taiwanese visitors could originate the attacks, for example. All countries were urged to pass national cybersecurity legislation so we could then cooperate on law enforcement.

A number of topics were put forth as subjects for joint research or cooperation including: a long-term study of the desirable long-term US-China strategic relationship and how to get there; joint assessments of the North Korean ballistic missile threat (at the track two level), or North Korean demands for security assurances; scenario-based joint exploration or table-top exercises on the implications of the collapse of governments in Pakistan and/or North Korea (including dealing with the “loose nucs” issue) or on MD requirements to counter a nuclear-armed Iran, or on how to jointly respond to advanced

detection of fissile material being transferred, advanced warning of a potential terrorist nuclear attack, or if an attack occurs; a joint technical assessment and presentation on US BMD capabilities (drawing from the individual presentations made at this meeting which had many common elements); or joint PLAN-US Navy discussion on security and weapons release procedures for ballistic missile submarines.

The two countries should carry out joint research projects as a way to maintain communications among strategic communities throughout the year; this would also be a confidence building measure. Several Chinese (military and civilian) suggest that a military-to-military dialogue to create a glossary on strategic policy terms would be useful. Given the mistrust that dominates relations, both sides should consider reciprocal unilateral gestures of restraint of deployments, programs, and declaratory postures.

The emphasis from the Chinese (and American) side was clearly on cooperation and enhanced mutual understanding but old suspicions die hard. Many of the above concerns have been repeated (and addressed) in previous meetings, including concerns about US extended deterrence, NPR reversal, a US breakout in terms of BMD or CPGS. Absent from the dialogue was any discussion of Taiwan arms sales (beyond concerns about PAC 2/3 integration into a regional early warning network) or disagreements over “core interests.” The US “AirSea Battle” concept that occupied a lot of discussion last year was mentioned only in passing. Recognition and appreciation for the positive steps in the NPR and elsewhere in providing China reassurance were noted.

The meeting also featured two breakout groups where of terms were discussed by both sides. The objective was not necessarily to come to a common definition but to understand what each side means when it uses these terms. Terms discussed included: national technical means, survivability, multilateral nuclear stability [originally multipolar but changed since this is loaded term], action-reaction arms races, nonproliferation vs. counter-proliferation, security assurance (negative assurances vs. positive assurances), credibility of deterrent posture and declaratory policies, and security dilemma. Of note, “Security Assurances” and “Security Guarantees” have different meanings in English but are the same term (*anquan baozheng*) in Chinese.

Chinese participation in preparing for this dialogue was the most involved seen to date: they proposed agenda drafts, made substantive comments on it as it evolved, and brought to the table the largest and most senior delegation at these DTRA-funded dialogues. Several key Chinese participants stressed the importance of the back-benchers who were being exposed to this type of give-and-take dialogue for the first time. One suggested that this would increase the probability of a visit by the head of the Second Artillery to the US in the not-too-distant future and urged us to “keep the invitation open.”

Conference Report

Strategic dynamics in East Asia are being transformed. This process is driven by changes in the number of weapons involved – the United States and Russia are reducing arsenals, China is increasing its weapons, and new nuclear weapon possessing states are or may soon be emerging – as well as qualitative shifts in strategic capabilities, ranging from the development of missile defense, long-range conventional strike capabilities, and increasingly mobile and survivable systems. A discussion that once focused on the US-Russia strategic relationship must now take into account other nuclear powers. One of the most important strategic relationships is between the US and China.

Yet these two countries have no official strategic nuclear dialogue. To remedy that gap, the Defense Threat Reduction Agency (DTRA) has sponsored two parallel discussions between US and Chinese experts and officials: one, organized by the Pacific Forum CSIS and the Naval Postgraduate School (NPS), is held at the track-2 level every year in Honolulu, Hawaii. The second is a semi-official track-1.5 meeting that convenes in Beijing, China and is co-organized by the Pacific Forum CSIS and the China Foundation for International and Strategic Studies (CFISS). Coordination among the principal organizers (the Pacific Forum CSIS and NPS) as well as substantial overlap between the participants, both official and researchers, ensures continuity, consistency and an iterative discussion that exploits unique opportunities afforded by two separate venues.

The sixth round of the Pacific Forum CSIS-CFISS US-China Strategic Dialogue on Strategic Nuclear Dynamics was held in Beijing, Nov. 10-11, 2011; more than 70 officials and experts discussed security perspectives and the US-China strategic relationship. This discussion was candid and frank, with little evidence of talking points or rehearsed replies. The give and take was substantial, with differences of opinion evident among Chinese participants and the admission that research is ongoing on several issues. The overall tenor of the meeting suggests that China is grappling with important strategic issues and there may be opportunities for the US to influence Chinese debates on critical concerns.

The atmosphere

Holding a series of meetings over several years gives us a baseline to assess each discussion and its worth. One important finding is that this dialogue seems to be increasing in importance to the Chinese. (The value the US attaches to it is self-evident from the number of US government departments and agencies in attendance, as well as the fact that the US funds it.) The Chinese side seems to be recognizing its value as well. First, our meeting was held a couple of months after the US announced the resumption of arms sales to Taiwan. Such decisions are invariably contentious and bilateral military and strategic discussions have often been cut off in response, especially those involving senior US defense officials. We went ahead on schedule, however. The decision to proceed testifies to the worth the Chinese attach to this dialogue, as well as the wisdom of

doing it at the track-1.5 or track-2 level, where it seems to be insulated from political pressure.¹

A second indicator is the steadily expanding number of Chinese who join each year (on either the front or back bench) and the diversity of institutions represented. This year, Chinese participants included three two-star Major Generals, including one from the Second Artillery and three one star-equivalent “Senior Colonels.” All were very involved throughout the dialogue. There were also a large number of observers, including some from the Second Artillery, the Ministry of National Defense, the People’s Liberation Army (PLA) General Staff Department, and the General Armaments Department. (A list of participants and the conference agenda is available at Appendix B and C.) Chinese participants stressed the importance of back-benchers and especially Second Artillery officials who were being exposed to this type of dialogue for the first time. One Chinese participant suggested that this would increase the probability of an official visit by the head of the Second Artillery to the US in the not-too-distant future and urged the US to “keep the invitation open.”

The dialogue has deepened over time to allow this high level of participation. In 2006, the Second Artillery only attended anonymously in the back bench. In 2008, for the first time, a named participant holding senior colonel rank attended. The next two years, another senior colonel from the Second Artillery presented on the agenda. This year, both that senior colonel and a major general (thus a one star and two star) both attended. This slow steady progress in engagement is notable.

Chinese interest is also reflected in their efforts to organize the dialogue. CFISS has become more deeply engaged in preparations. This year, they were the most active yet, proposing agenda drafts, making substantive comments as the agenda evolved, and bringing to the table the largest and most senior delegation ever. It was clear that the Chinese had met prior to our first bilateral planning meeting to select topics and help define the initial agenda (which they had not done in the past). As has been the case in both dialogues for several years, they also acknowledged meeting as a group prior to the actual meeting to review positions and better prepare for deliberations. In the past, interlocutors have noted that is one of the few opportunities their side has for such “interagency” discussions of these issues.

The spirit and tone of the dialogue was generally positive. Even when disagreeing with US policy, several Chinese participants advocated cooperation and common interests. Chinese participants repeatedly affirmed the value of the dialogue itself and set forth numerous ideas for follow-on discussions and meetings, which we detail later in this paper. One Chinese official said that continuing these track-2 and track-1.5 dialogues was “conducive” to the eventual occurrence of official track-1 meetings, which China has so far resisted for a number of reasons. The Chinese are not sure what will transpire at official “track one” events and are concerned about what might be on the agenda or how transparent they will be required to be. In that sense, these

¹ This does not mean that these discussions can or should substitute for government-level strategic talks, a point that is made at each meeting.

meetings serve as useful “dress rehearsals” or confidence building measures for the real thing.

At the same time, the discussions were a reminder of how deeply embedded mutual suspicions are between the two sides. While our Chinese colleagues agreed that worst case assessments were generally unhelpful and made it difficult for us to find common ground on matters such as US extended deterrence, ballistic missile defense, and Washington’s rhetoric about a “return to Asia,” Chinese participants expressed their worst fears about US capabilities and intentions. US participants tried with limited success to soothe those concerns by providing a context for US policy and capabilities that aimed to deflate worst-case scenarios with limited, if any, success. In general, each side regards its own military modernization programs as justified and defensive, and the other side’s as offensive, destabilizing, and unwarranted by external threats.

Absent from the dialogue was much discussion of Taiwan arms sales; it was one of the “dogs that didn’t bark.” In fact, with one notable exception, Taiwan did not come up at all at the meeting. Chinese interlocutors emphasized that Taiwan’s PAC 2 and PAC 3 systems and US sold long-range radars could be integrated into a regional early warning network, which would signal some elevation of Taiwan’s status as a US security partner. US reassurance that the systems were discrete, i.e., not linked to regional networks, made little impact. Chinese also noted that such deployments go to the heart of Taiwan’s security capabilities, which makes them doubly disagreeable to Beijing. Disagreements over China’s “core interests” were put aside this year; the US “AirSea Battle” concept, which occupied much of the discussion last year, was mentioned only in passing – and this despite a press conference on the “standing up” of the ASB office in the Pentagon on the eve of our meeting.

Favorable reviews, with some reservations, of the 2010 Nuclear Posture Review

Chinese continue to look favorably on the 2010 Nuclear Posture Review (NPR). As in the past, Chinese participants viewed some acknowledgment of mutual vulnerability as an acceptance of China’s status as a major power, an equal of the US (using the strategic relationship with the Soviet Union as a benchmark), as well as a bottom line for national defense planning. In Chinese eyes, US use of the term “strategic stability” is a key indicator of its readiness to concede something approaching mutual vulnerability. This is a major step for China, and is one that has gradually developed over the course of the last three meetings that DTRA has funded. This point was reiterated by multiple members of the Chinese delegation. In contrast to last year, Chinese participants this year highlighted the possibility of change in US planning, conceding that the language of the NPR is positive with regard to reducing the role of nuclear weapons in war plans. However, surrounding all these “improvements” that Chinese participants noted, they often recognized that these positions are contested and may not be permanent. They acknowledged the NPR’s shift in focus from defending against threats posed by states (Russia, China) to threats primarily from nonstate actors. They also acknowledged the reduction in the role of nuclear weapons in US national security strategy and posture, and the raising of the threshold for their use. But they remain concerned that US moves

in this direction are too slow, do not go far enough, and (most frequently cited) might be reversed by a new US administration. They also expressed worries about US plans to modernize components of its arsenal, such as introducing a new strategic bomber and submarine.

Nonetheless, the NPR provides an opportunity for cooperation and did not produce a negative Chinese reaction as did the mention of “contingency” discussions in purportedly leaked portions of the previous NPR. One Second Artillery speaker suggested that some changes (“enrichments”) in Chinese nuclear strategy were underway, driven in part by the NPR. Although not specific, he referenced a new nuclear environment, with implications for the construction of nuclear capabilities and measures to prevent nuclear proliferation. Several participants stressed that the positive signals in the NPR allowed China to adjust its modernization plans and focus on qualitative rather than quantitative increases.

US participants emphasized that strategic arsenal modernization was inevitable – and a good thing – and this process would occur in the context of a shrinking overall arsenal. Modernization of delivery systems is designed to replace aging systems. The next-generation US submarine, for example, would come into service in the late 2020s, replacing the *Ohio*-class which will be more than 40 years of age. A new ICBM would replace the Minuteman (at the earliest in 2030). And a new heavy bomber would be added in the mid-2020s to replace aging bombers – the last B-52s was built in 1962.

In contrast to previous years, there did not seem to be any great concern about the vulnerability of China’s arsenal. In part due to the structure of the agenda, in the past issues such as the role of conventional prompt global strike (CPGS) raised concerns in the Chinese side. This time, there did not seem to be any great concern regarding such vulnerability.

Extended deterrence is still a concern

While some Chinese participants reiterated the charge that US extended deterrence (ED) prompts North Korea’s desire for nuclear weapons, there was also acknowledgement of the value of ED in preventing a North Korean invasion of South Korea and in dissuading Japan and South Korea from developing strategic arsenals. “We understand and can put up with it to an extent, because it maintains a military balance, and prevents others from developing their own nuclear weapons,” a Chinese military officer stated. This emphasis on the positive contribution by keeping the “cork in the bottle” with regard to Japan is consistent with statements we have heard from Chinese military leaders going back to 2005. However, the emphasis on the positive contribution with regard to *detering North Korea* is new and important.

There is, however, growing concern that US allies do not understand the appropriate use of the extended deterrent and the US would be forced into a position at which it would threaten nuclear retaliation to deter tactical or low-level conflicts in the region. Chinese concerns have been heightened by reports that South Korea and Japan

recently asked the US “to deal with small aggressions using flexible responses, including nuclear weapons,” as one Chinese speaker put it. Chinese participants cited the following “concrete worries” with regard to extended nuclear deterrence:

- US extended deterrence could “embolden” Japan or the Philippines or others to more openly and aggressively challenge China, especially over conflicting territorial claims (or make them less susceptible to Chinese bullying).
- the US would use it to deter North Korean military attacks that fall short of an invasion.
- the US would deploy nuclear weapons or related components to South Korea.
- there is a “Taiwan factor” in extended deterrence over Japan. “What role would extended deterrence play in a Taiwan conflict? And if China and Japan in the East Sea have an armed conflict, what is the US extended deterrence policy for Japan and its implications for China?” a military participant asked.
- the US would include the Philippines under its nuclear umbrella, and this would affect China in a conflict between Beijing and Manila.

US participants gave reassurances that there has been, and will continue to be, great continuity in extended deterrence policy. They stated that the US has no intention of placing nuclear weapons on the Korean Peninsula. Two US participants stated that the bar is so high for the use of nuclear weapons that the US might refrain from using nuclear weapons even if North Korea launched a nuclear attack first; conventional arms remain the first choice in any conflict and US conventional superiority provides Washington with many alternative options short of nuclear weapons to respond during crises. A number of other US participants emphasized, however, that it remains US policy under the 2010 NPR that the United States reserves the right to use nuclear weapons first against nations either possessing nuclear weapons or not in compliance with their nonproliferation obligations and that North Korea fell into this category.

US participants sought to draw attention to the way North Korea’s behavior has triggered regional angst about ED. South Korea, in response to North Korea’s artillery attack and sinking of the *Cheonan*, has pressured the US to stress the nuclear component of US extended deterrence. A growing number of South Koreans believe their country should have its own nuclear arsenal, and the US is concerned that this reflects a lack of faith in US extended deterrence. One US participant explained that another reason the South Koreans are stressing nuclear capabilities is to send a deliberate message to China to exert greater deterrence pressure on North Korea. (Interestingly, despite the prevalence of quite belligerent rhetoric in contemporary official Chinese releases regarding the US response to these North Korean provocations, there was no such bluster on this issue in this meeting.)

Two US participants said that in the case of Japan (more so than South Korea), the desire for strong US statements about ED are fueled not only by North Korea but in part by China’s nuclear modernization. One Chinese academic dismissed such concerns as unwarranted and, in any case, inconsequential to China’s plans to modernize its

nuclear arsenal. “I speak with South Korean and Japanese colleagues a lot, and I get the sense they never ask about any *specific* concerns about China. It’s just *general*.” He said China would not curtail its programs to soothe the amorphous anxieties of its neighbors.

There seems to be a fundamental misunderstanding among Chinese about renewed US interest in extended deterrence. US participants argue that these discussions are attempts to reassure allies as those governments worry about rising Chinese (and North Korean) capability and shifts in US policy that could be unnerving. In other words, the US is trying to better understand allied concerns and accommodate them. China sees the US as using these discussions as ways of elevating the significance of ED and thereby *driving* allied concerns. Cause and effect are reversed.

No first use is still a panacea, but only in a pro-forma sense

While most Chinese understand that the opposite of a “No First Use” (NFU) policy is not a “First Use” policy, many Chinese continue to believe that the US is determined to use nuclear forces first in some crisis scenarios, especially in Korea. A US participant called this Chinese perception “completely wrong,” stating that the US to use nuclear arms in response to a conventional North Korean invasion of South Korea, though it remains US policy to reserve the right to do so.

As in the past, Chinese participants urged the US to adopt a NFU policy, saying it “would be a positive step.” As one put it: “You have such a strong force, why are you so afraid to make this NFU obligation? Taking such a step would create more trust, and help us build a favorable international environment.” Indeed, the Chinese continue to see NFU as a panacea for many ills in US strategic policy, but, unlike in prior years, they did not dwell on this point alone. In addition, there was a more flexible discussion of potential US policy variants – such as bilateral “sole use” commitments and multi-domain no-first-use pledges in the nuclear, space, and cyber realms – that might make constructive improvements in the relationship.

Many Chinese maintain that their commitment to NFU is absolute. An officer with the Second Artillery said “we will stick with it. NFU is for self-defense and the idea behind it is anti-nuclear-weapons and in favor of the ultimate destruction of nuclear weapons. We think China’s policy is a good policy. It’s static, not dynamic, and will remain so. I want to emphasize that.” One Chinese participant suggested joint US-China research on NFU to convince the US of Beijing’s certainty and of the value of such a policy. (One Chinese general, known for his contrarian ways, did opine that he thought China would use nuclear weapons first in the event of a Taiwan contingency, but he was quickly admonished by his colleagues.)

Chinese strategists insist that NFU is proof of their strategic intentions (benign), a key confidence building mechanism, and a vital transparency measure. Yet Chinese participants did not see or admit the irony when they insisted, during the missile defense discussion, that US plans and intentions can change: declarations were not important, only capabilities mattered.

Transparency remains a bridge too (but not as) far

There is a debate in China – including among the Second Artillery – about increasing nuclear transparency, but no decisions have been made to advance this policy with concrete steps. “We’re discussing this in China,” said a senior officer with the Second Artillery. “The Second Artillery has done a lot to increase transparency. In my headquarters, we’re trying to raise the level of transparency, but we can’t change this in one day. It’s a process.” There are concerns about being too transparent, especially given fears that Obama’s nuclear policies will not be sustained by a future administration. While insisting that they will join arms control talks “when the time is right,” Chinese argue that the best vehicle is a “Permanent 5 + 3” forum. They make little distinction between the five recognized nuclear weapons states under the Nuclear Non-Proliferation Treaty (NPT) and the self-declared (India, Pakistan) and suspected (Israel) nuclear weapon states and think that all must be involved once the dialogue moves beyond Russia and the US. India was singled out as particularly important, a shift from previous years. China is clearly concerned, and articulates this explicitly, that it not find itself “capped” in arsenal size while India “races to parity.”

Differences of opinion in China about increasing transparency came to the fore when a couple of military officers signaled their preference for opacity. “How can China be transparent to you on all cases when the US is so developed, so advanced, and you’re not always fully transparent yourselves?” said a general officer. Another general suggested that opacity is the tradeoff for China’s maintaining a relatively small nuclear arsenal. “You seem to want us to increase the numbers of our weapons in order to increase transparency. Or do you want us to have fewer weapons, but without transparency?”

This led to a particularly detailed and at times confusing discussion about deployments within units of Chinese conventional and nuclear missiles. A military officer said each Second Artillery unit had either nuclear or conventional munitions, not both, while conceding some Intermediate Range Ballistic Missiles (IRBMs) are capable of carrying both. This officer also asserted that China has no conventional ICBMs. Absent a nuclear attack on China, it should be assumed that any Chinese missile being fired was conventionally armed. “All the ICBM missile units are nuclear-armed in China. I’d like to add, conventionally armed forces are all armed conventionally. And the nuclear units have only nuclear weapons. We can’t mix the arms of a unit.”²

When pressed on the issue of Chinese missile targeting, one general acknowledged that the political leadership was responsible for target selection, not the military. When further pressed, it was argued that the small size of the Chinese arsenal and the assumption that any US first strike would be massive means there is no need for an integrated strike plan; what few weapons that would remain would be employed against high-value targets. (Given the lack of ISR assets to conduct damage assessments and ensure counterforce targets are still relevant, this has some plausibility.) If true, this could explain the apparent Chinese failure to have considered integrating their land-based

² It is important to remember that the Chinese separate warheads and missiles during peacetime.

systems with the soon-to-be deployed submarine-launched JL-2. Our interlocutors appeared to know little about planned submarine operations. While this could reflect a hesitancy to talk about this sensitive subject, it seems reasonable to believe that the Second Artillery, which controls ground-based forces, may not be privy to navy planning details.

The ‘return to Asia’ is a fig leaf

The US rhetoric about the US “return to Asia” has confused many Chinese. (This confusion was evident in discussions elsewhere in China and with security officials and experts elsewhere in the region.) The more sophisticated of China’s “America watchers” understand that the US never “left” the region. But they, along with those who accept such a formulation as accurate, see the new language as a way to justify a more muscular and aggressive response to China’s rise. No matter what the reality of the current US presence and posture, Chinese participants believe it is being modernized to check China’s growing power and influence. This is the prism through which all US Asia policy developments are interpreted – force redeployments, the upgrading or revitalization of relations with allies and partners, trade deals, and diplomatic initiatives.

There was continued refusal to acknowledge any potential arms race in US-China relations. Even if this was cast in more benign terms (e.g., an “action-reaction cycle” or a “military competition”), several Chinese denied that such a dynamic was at play in the strategic or even conventional arena (e.g., China’s Anti-Access/Area Denial capabilities and the US response of AirSea Battle). Chinese participants described their country’s military modernization as “minimal” and purely defensive; one even characterized the DF-21 Anti-Ship Ballistic Missile as being directed at unnamed adversaries, “strongly reject[ing]” the notion that it “is directed primarily at the US.” Another participant described China as a stabilizing force that has been helpful to the US on matters such as Afghanistan, Pakistan, and North Korea. “China has undertaken, in our view, the responsibility of keeping this continent stable,” the participant said. “China has been acting as a stabilizing force on behalf of the United States, and we’re not seeking to challenge the role of the US in East Asia.”

In contrast, US movements and statements in Asia are viewed as aggressive. One participant cited the deployment of US nuclear submarines to Guam (it is unclear if this participant believed that *Ohio* boats had been moved, or was referring to attack boats alone) as evidence of US hostility to China’s rise. The US claim that US forces in the region have been reduced (on net) over the past several years was not accepted.

Increasingly complicated regional nuclear dynamics

The Chinese seem increasingly aware of the challenge proliferation poses to the regional security environment. Historically, this meeting has had a bilateral focus with little mention of other nuclear powers in the region; when other nations have come up, it has usually been a stale exchange, with Americans entreating China to do more to halt proliferation and Chinese countering that they are doing a lot (or as much as possible)

and that the real objective of governments threatening to proliferate is the realization of a new relationship with the US (effectively minimizing any Chinese role.) India was mentioned a number of times; it was studiously ignored in previous dialogues. One military participant noted that China has four nuclear neighbors, a fact that complicates its strategic calculus.

“Nuclear proliferation in Asia in any sense is a bad thing,” said a military participant. “This has complicated China’s relations with her neighbors... It has complicated our relations with India and Pakistan. And it has made our US relations more difficult to handle.” (This same participant, in a sidebar during a coffee break, downplayed Chinese concerns about India’s nuclear arsenal. “China is not worried about India at all from a nuclear standpoint,” adding that India’s nuclear capability has required “almost” no change at all in China’s configuration of its arsenal. The treatment of India by other participants emphasized that this view was not universally shared.)

Intriguingly, Vietnam was for the first time in these discussions raised in the context of regional proliferation. A participant from a Chinese think tank said “we should also look at future problems,” and suggested that Vietnam (which recently began a civilian nuclear program with Russian and Japanese [and potentially US] technological and financial assistance) may have long-term aspirations for a weapon. They expressed no such concerns about Burma, despite rumors of North Korean involvement with the government there.

Nonproliferation ‘double standards’

As noted earlier, our Chinese interlocutors resisted any distinction between Non-Proliferation Treaty signatories (Iran and, formerly, North Korea) and non-signatories (India, Pakistan, and Israel) when discussing proliferation challenges. There were multiple references to Israeli nuclear weapons as an example of the need for universal standards. This is a new argument from the Chinese, building upon old complaints about US “double standards,” which had focused on Washington’s readiness to build a new strategic relationship with India despite its failure to adhere to the NPT. “What has disappointed me so far [in these discussions] is I’ve heard nothing about the nuclear proliferation activities of Israel,” said one of several participants to raise Israel in this context. (It was unclear what was meant by Israel’s alleged “proliferation activities.” It was more likely a reference to the proliferation of nuclear weapon states than an accusation that Israel is a proliferator, although there are Chinese suspicions about Israeli links to other nuclear weapons programs, such as South Africa in the past.) “We hear a double standard, and we’re opposed to the double standard. The reasons given [by the US] for the double standard are ‘they are an ally’ or ‘they are not a member of NPT.’” Another said: “We should focus globally in the nuclear field; no country should be exempted from such obligations” regardless of whether they signed the NPT or not.”

This objection serves several purposes. It attempts to counter charges that China’s relations with Pakistan, North Korea, and Iran have facilitated proliferation by refocusing attention on US acquiescence to proliferation by its allies and partners. It eases pressure

on China to join arms control discussions by raising the bar for arms control talks to include all states possessing nuclear weapons. And it ensures that a strategic rival, India, is not outside any agreement that limits China's strategic capabilities.

Nevertheless, Chinese participants argue their government has an interest in maintaining the NPT mechanism. As one military participant explained, "We, the Chinese, do not want to see this mechanism weakened."

US participants argued the distinction between NPT and non-NPT signatories is an important one, pointing out that North Korea and Iran had joined the NPT and accepted IAEA safeguards and various legal commitments, but carried out secret activities for more than a decade in violation of those pledges. In the case of Israel, the US would welcome participation in the NPT framework. But that is not likely to happen without regional peace and the abandonment of nuclear aspirations by Iran.

Little common ground on proliferation challenges

Chinese participants signaled opposition to military strikes against Iran, instead backing an approach that uses carrots rather than sticks, similar to what they advocate in dealing with North Korea's nuclear threat. "We want to emphasize cooperation and dialogue to solve the North Korea and Iran nuclear issues," said one participant. "Our goals are in common with the US. The difference is in what's the best way to solve" these problems, said another.

IRAN. Chinese participants acknowledged that there would be serious negative consequences if Iran were to achieve nuclear weapon status, including the possibility it would provoke Saudi Arabia and others to develop their own arsenals. While Chinese participants recognized such an outcome is not in China's interest, they indicated that using military force to slow Iran's nuclear program would be even more destabilizing to the Middle East than an Iranian bomb. Participants were curious to know the likelihood of military strikes against Iran, and raised these questions repeatedly.

One participant, in a rarely heard statement in China, suggested there was merit in the Israeli military strike that destroyed Iraq's nascent nuclear capability in the 1980s. "But this doesn't apply to North Korea or Iran because the consequences would be disastrous," the speaker said. "We must work creatively and flexibly to guide these two countries to a right track and to contain their capabilities. We must emphasize the positive side."

NORTH KOREA. The Chinese reiterated their shared goal with the US of achieving a nuclear-weapon-free Korean peninsula, but blamed US actions – particularly its extended deterrence policy – for provoking North Korea's nuclear weapons program and belligerent behavior. "Many experts in the West and here believe the [2010] Korean Peninsula crisis was caused by the North Koreans. I disagree. I think it was caused by US extended deterrence," said one Chinese military participant.

One participant, responding to charges by US participants that China defended Pyongyang in the 2010 crisis, summarized the Chinese approach to North Korea. “I know it seems to you that the Chinese side changed, but you must be aware of the crisis. North and South Korea were on the verge of having a war. China put the emphasis on facilitating talks. Also, it was the 60th anniversary of the [Korean] war and North Korea and China had a series of [commemorative] programs that weren’t in line with the current situation, but that’s the reality. Also, North Korea has made changes to strengthen the role of the Party and its focus on productivity and the people’s livelihood. And China wants to engage and play a positive role in that and to have them start a ‘reform and opening.’”

In a new wrinkle, one participant asserted that China hasn’t joined the Proliferation Security Initiative (PSI) because it was not clear whether the US really wants China in. Previously, the Chinese argued that it was illegal or would antagonize Pyongyang or both. No such opinions were articulated at this meeting, suggesting a possible shift. One American noted that in the event of indications of another North Korean nuclear test China should follow South Korea’s example and state in advance that a third test would result in China joining PSI.

Asked again whether China viewed North Korea’s Highly Enriched Uranium (HEU) program as illegal, the Chinese would say only that they are opposed to the program.

Lots to discuss on ballistic missile defense

Chinese technical engagement on US ballistic missile defense (BMD) was the most productive and detailed thus far, including a formal presentation on Chinese views on US BMD policy and capabilities (attached). The Chinese remain unconvinced that missile defense is designed exclusively to counter a small-state threat – a view they noted was shared by the Russians. US entreaties that China should help eliminate threats posed by the North Korean and Iranian missile programs – which in turn would reduce the US need to deploy missile defenses – were not persuasive.

While recognizing some changes in US posture and pronouncements, the Chinese have concluded that the US remains heavily committed to BMD and note that under certain circumstances (extremely unlikely, as noted by several US participants), sea-based missile defense (SM-3 block II variants) can be as threatening as ground-based interceptors (GBI). Additionally, they remain concerned about a breakout or expansion of current programs once infrastructure is in place. While acknowledging the dangers created by worst-case scenario planning, Chinese thinking about missile defense is dominated by their concern about survivable weapons after a US first strike, which they assume would be massive.

“When we have technical exchanges with Russian experts, they think the US is exaggerating the threat of missiles launched from North Korea and Iran, and in fact the trajectories [of US missile interceptors] seem to be designed for Russia and China,” said

a Chinese technical expert. When told that “China needn’t worry about BMD,” he explained that “For military decision makers the main consideration is an opponent’s *capability*, not his *intention*.” He portrayed US capabilities as sufficient to pose a significant potential threat to China’s deterrent, noting that sea-based AEGIS SM-3 block IIb was at least as worrisome to China as land-based interceptors. Central to this analysis would be a deployment of *AEGIS* ships near the US coastline, rather than their normal forward deployment in Asia and the Middle East.

The US side made a detailed technical presentation demonstrating how US BMD is inadequate, qualitatively and quantitatively, to stop the vast majority of missiles in China’s arsenal. If China were to “loft” their submarine-launched ballistic missiles, for example, they would fly above the reach of US interceptors, which are designed to stop shorter-range threats, not ICBM trajectories. While conceding the US has 30 GBIs (in Alaska and California) that could pose a threat to Chinese ICBMs, US participants stated that the number of those interceptors has been capped by the Obama administration. Increasing the number of interceptors would, in any case, be prohibitively expensive. Furthermore, these GBIs are designed to stop simple ballistic missiles, not sophisticated ones. Were China to deploy decoys and chaff, along with multiple independent reentry vehicles and/or maneuverable warheads, China’s ICBMs (which a US participant forecast would grow from 150 to 250 over the next decade) would easily overwhelm US BMD, as would Russia’s much larger missile force.

US participants also explained that US-Japan BMD has limited impact on Chinese ICBMs and SLBMs. US participants stressed that the North Korean ballistic missile threat drives US-Japan cooperation on Ballistic Missile Defense, and that the Chinese need to focus on restricting North Korea if they are worried about BMD.

Chinese participants were unconvinced. “We’re not idiots in China who think you are transparent in your BMD intentions,” said one military participant. “We can’t believe” US claims that BMD only targets North Korea in East Asia. Three other Chinese participants also worried out loud that the US could easily expand the number of interceptors once it has command and control and early-warning radar systems in place. “In the future, you might have 300 interceptors instead of 30.”

As noted, Chinese participants are especially concerned about Taiwan’s integration into a regional or global missile defense architecture. Sharing data from Taiwan-based radars would indicate an elevation of Taiwan’s status among US defense partners and serve as “forward deployment of US early warning,” as one Chinese participant put it. He cited sales of Patriot Advanced Capability (PAC) 2 and 3 to Taiwan, and noted that the US provided radar systems that “can see 5,000-6,000 kilometers, which is far beyond the Taiwan Strait.” This apparent reference to the system in Hsinchu – that according to press reports is about to come online – was unprecedented in the eight years these dialogues have gone on (although the arms deal has percolated around US-Taiwan circles since it was approved in 2000).

Another participant said he worried that Japan's ship-borne mobile missile defenses could be used to protect Taiwan from Chinese missiles. A US participant responded that, as a practical matter, Japan's *AEGIS* ships cannot defend Taiwan because they cannot shoot down short- and medium-range missiles, which never reach above 100 km in altitude and, thus, fly underneath *AEGIS*. "The worst system to defend Taiwan against conventional Chinese missiles is *AEGIS*," he explained.

The US side also said China needs to recognize that development of conventional ballistic missiles capable of striking US ships as far away as Guam would spark a reaction from the US in the form of new US missile defense applications. "In this case, China isn't a 'bystander.' There's the potential for a very serious arms race in this arena," a US participant said.

When asked about China's January 2010 antimissile test, the only response was that it was intended to understand technology so China could defeat a US system. "China does not have the capability to do missile defense," said one participant, emphasizing that no operational system had been deployed.

Ever the good guy: asymmetry in Chinese self-perceptions

The Chinese remain convinced of their benign intentions. They insist that their commitment to NFU is absolute; that their intentions in the South China Sea are peaceful and stabilizing; and that their Anti-Ship Ballistic Missile program is "primarily" aimed at potential adversaries other than the US. Yet, when Americans argued that ballistic missile defense is not aimed at China, the Chinese countered that intentions can change, and thus only capabilities matter. The contradiction in logic is obvious but not acknowledged by the Chinese.

US participants pressed to demonstrate how Chinese actions fuel an action-reaction cycle. "You are deploying submarine-based, and new road-mobile systems, with apparent increases in quantity, where new ones aren't met by reductions in old ones," a US participant said. "If our nuclear modernization is destabilizing, yours is as well." He noted AirSea Battle is a direct response to China's conventional ballistic missile threat. "Whether you call it an arms race or not, there's a real competition of the *attack* capability of China and *defense* capability of the United States," he said.

A Chinese participant acknowledged that there is a tendency by Chinese and US planners to make worst-case assumptions about the other side. "That's a problem, and we need to understand each other better to make assumptions that are more realistic." Chinese participants then stressed the defensive nature of their military programs and the benign nature of their intentions. "With regard to the South China Sea, the US has misunderstood the concept," one said. "We all agree on the need for free navigation in the South China Sea, and China hasn't affected this. The US is confusing free navigation and close-range reconnaissance. China opposes the latter, not the former." (It should be noted that the close-in reconnaissance issue that has plagued the relationship and

dominated discussion in previous meetings was only mentioned in passing in this session.)

The long shadow of cybersecurity

Chinese participants frequently raised the issue of cybersecurity, though it was not on the agenda. They see themselves as victims of hackers, not perpetrators and Chinese participants expressed resentment at the portrait of China as the main culprit in cyber-attacks. One called it “a cheap shot” and said the US, with 58 percent of the world’s servers, had the stronger cyber capability. “Fifty percent of our computers have suffered intrusion and we have 500 million Internet users,” one Chinese participant said. “At least 250 million users have suffered cyber-attacks or cyber-criminal actions. One million were launched from within China,” he said. (Privately, some Chinese acknowledged that there are Chinese hackers working against the US. When asked why they deny it in public, they said that they could not publicly dispute the party line.)

That attacks originate from within China does not mean they are sanctioned by the government, Chinese participants said. Taiwan-based hackers or even Taiwan tourists visiting the Mainland could originate the attacks, for example. A participant cited a cyber-attack on Rear Adm. Yang Yi as an example of an attack whose origins were untraceable, though it appeared to come from Taiwan.

US participants rebutted this defense vigorously. Strong statements from knowledgeable Americans made clear that the US side recognized the extensive nature of military espionage, but also that the Chinese support for commercial cyber-espionage was unacceptable.

Chinese see US actions as threatening their own cybersecurity. A Chinese participant highlighted the placement of the new US Cyber Command under STRATCOM. “Does it mean the strategic forces of the US will include cyber and space forces? Will this be a new ‘3 in 1’ strategic capability?” US participants told the Chinese not to read so much into the move, saying it was a decision made for bureaucratic and not strategic reasons. “It had lot to do with personalities... STRATCOM didn’t even want it,” a US official explained. The Cyber Command is located at Fort Meade, not in Omaha with STRATCOM. “So the idea that cyber is maliciously being put together [with nuclear forces] is a misunderstanding,” he said. This issue is worth contemplating by both sides, as the danger of self-fulfilling prophecies loom larger here.

Chinese participants stressed defensive measures to strengthen cybersecurity. One participant suggested both sides agree to a “no first use” doctrine that included cyber domains, as well as nuclear and space assets. This issue was not pursued further although it likely merits additional discussions. Another Chinese participant called the Stuxnet worm that reportedly took down Iranian centrifuges “a dangerous step.” Yet another Chinese participant called on governments to pass national cybersecurity legislation so they could then cooperate on law enforcement.

Topics for future discussion

A number of topics were put forth as subjects for joint research or cooperation:

- A long-term study of the desirable long-term US-China strategic relationship and how to get there.

- The US side proposed a joint assessment of the North Korean ballistic missile threat; a Chinese military participant favored the idea so long as it was conducted at the track-two level. North Korean demands for security assurances were also raised as a topic for a joint assessment.

- The US side proposed a scenario-based joint exploration of the implications of the collapse of governments in Pakistan and/or North Korea (including dealing with the “loose nukes” issue). An alternative discussion could center on missile defense requirements to counter a nuclear-armed Iran, or on how to respond jointly to advanced detection of fissile material being transferred, to advanced warning of a potential terrorist nuclear attack, or to an actual attack after it occurs.

- A Chinese civilian participant proposed cooperation on nuclear security issues, such as standardizing responses to crises like Fukushima, with the US and Chinese militaries discussing how jointly to respond to nuclear disasters, or conducting bilateral safety training. He acknowledged that the latter might run into US controls on US technology transfers.

- A US participant proposed a joint technical assessment and presentation on US BMD capabilities, drawing from the individual presentations made at this meeting, which had many common elements. A US participant suggested the National Defense Universities of the two countries would be the appropriate organizing bodies, since they would be able to ensure good experts.

- A US participant proposed a joint PLAN-US Navy discussion on security and weapons release procedures for ballistic missile submarines “so we have confidence that a single rogue commander won’t have the opportunity to release a rogue weapon.”

- Several Chinese (military and civilian) suggested a military-to-military dialogue to create a glossary of strategic policy terms. A similar bilateral process produced a useful glossary two years ago, but it involved civilian/industry scientific experts, not military officers or strategy experts. A Chinese participant pointed out that the Chinese military uses many strategic nuclear terms that are different from scientific or civilian terms. For example, *he weishe* (核威慑) is the stock civilian term in China for “nuclear deterrence;” within the Second Artillery, the same term means “nuclear blackmail,” while civilians use the term *he ezha* (核讹诈) for that behavior.

- The two sides discussed joint research projects as a way to maintain communications among strategic communities throughout the year; this would also be a

confidence-building measure. A US participant put forth the idea of exploring a China-US “No-First Use” agreement. A Chinese civilian responded favorably, and proposed exploring a No First Use agreement in the space and cyber realms in addition to the nuclear realm.

- A Chinese participant expressed regret that Congress blocked cooperation in space between NASA and China’s space agency, and asked whether such cooperation could be resurrected.

- In terms of format for future strategic dialogues, a Chinese civilian suggested picking fewer topics than the five or six that have dominated past discussions and going into greater depth on those that are chosen.

Common Definition of Terms

The conference featured two breakout groups in which a series of terms were discussed by both sides. As in the past, our objective was not to come to a common definition, but to understand what each side means when it uses these terms. This year’s terms included: national technical means, survivability, multilateral nuclear stability (originally ‘multipolar,’ but this changed during the discussion as it was clear that this is a loaded term), action-reaction arms races, nonproliferation vs. counter-proliferation, security assurance (negative assurances vs. positive assurances), credibility of deterrent posture and declaratory policies, and security dilemma. (The presentations from these discussions are attached as Appendix A and B)

National Technical Means. The US side began by explaining the history of national technical means (NTM) in US-Soviet treaty negotiations. Questions from Chinese participants, a country that has never entered into a treaty featuring NTM clauses, evinced unfamiliarity with the notion that collection assets are considered “NTM” only when they are monitoring compliance with a treaty.

A US participant explained that NTM became an official term when the first SALT talks opened in 1969. It was agreed in those talks that the only way to monitor compliance would be for each side to use its technical intelligence systems (mainly overhead reconnaissance satellites) to monitor the activity of the other side as opposed to invasive inspections. Each side agreed not to conceal their activities or to obstruct the other side’s NTM.

Chinese participants posed numerous questions about whether NTM includes human intelligence (HUMINT). US participants explained that they did not. NTM are forbidden from intruding into the territory, airspace, or national waters of the target country. When a US participant asked whether China would view NTM as stabilizing and useful for regional security, a Chinese participant accused him of attempting to legitimize US reconnaissance in the South China Sea.

A Second Artillery officer asked whether the US would be willing to help China raise the level of its national technical means. A US participant said NTM are not

assumed to be equal on both sides. If one country doesn't have a particular satellite system, it has to find another way; there's no implication of equal capability in NTM.

Survivability. A US participant defined survivability as the ability of strategic nuclear forces, command and control systems, and national leadership to continue functioning effectively in the wake of an enemy attack. The term is generally linked to the ability to support an effective retaliatory strike.

A Second Artillery officer acknowledged the importance of survivability for strategic forces, but said he believed in a broader definition that includes the ability of a country's population to survive an attack and recover in its wake. "It's a comprehensive construction," he said. Other Chinese participants put forth competing views without reaching a consensus.

Multiparty Nuclear Stability. This term was originally "multipolar nuclear stability," but it became clear that the notion of "multipolar" was contentious on its own and the phrase was altered to head off a more limited debate on its meaning. The two sides agreed that the increasing number of nuclear-weapons states was inherently dangerous. A Chinese participant proposed that a process similar to the Six-Party Talks would have limited the effects of India's nuclear testing.

Action-Reaction Military Competition. The US side said there were two categories of action-reaction military competitions: "matching" and "countering." In a matching dynamic, a nation builds an offensive capability to match its competitor's offensive capability. In a countering scenario, defenses are built in response to an offensive capability.

A Chinese participant distinguished an "arms competition" and an "arms race" by asserting that the latter is a graver dynamic. He defined an arms race as a vicious cycle that leads the two sides to switch from defensive to offensive (or even preemptive) postures, and that leads to a substantial militarization of each side's national economy. He was alone among Chinese participants in conceding during the forum that the US and China might be in an "arms competition." No Chinese participant would accept that the two sides were at risk of an arms race, which is generally understood on the Chinese side to be of the scale of US-Soviet competitions, and to be centered in the nuclear/strategic realm.

Nonproliferation vs Counter-Proliferation. A US participant explained that these are originally two US terms (a view with which Chinese concurred; they said the terms have been imported from the US). While there is much overlap between the two, the primary difference between them is that counter-proliferation is more kinetic and consists of more active measures, typically involving a wider range of government actors and instruments. US participants insisted that counter-proliferation is consistent with international law.

Chinese countered that counter-proliferation is seen as "post-proliferation," and relies more on military measures. Perhaps as a corollary, counter-proliferation is usually

undertaken unilaterally, but that isn't always the case. They consider nonproliferation to be better grounded in international law and therefore more legitimate. This view may be fed by the perception that counter-proliferation efforts have been applied in a discriminatory fashion. Chinese noted that they prefer to address the root causes of insecurity that trigger proliferation efforts rather than the “symptoms” of that insecurity.

Security Assurances. Significantly, the terms “Security Assurances” and “Security Guarantees” have different meanings in English but are the same term – *anquan baozheng* (安全保证) – in Chinese. Americans said they see guarantees as more binding than mere assurances, while Chinese see the meaning as context dependent. Nevertheless, both sides agree they encompass a wide range of interactions among nations. Chinese participants indicated that they didn't feel positive security assurances are very useful; this view is evident in their thinking about extended deterrence. Instead, the Chinese prefer to rely on negative security assurances, such as no first use.

Credibility of Deterrent Posture and Declaratory Policies. US participants argued that credibility depends on a nation's capability and the will to fight, even if it means creating risks and costs. Proportionality and the rationality of options are critical components of credibility. Chinese participants emphasized that force structure and posture are important, but will is *the* critical factor. Moreover, they emphasized that deterrence is only for homeland defense. This seems to serve two purposes. First, it is yet another attempt to minimize the importance of extended deterrence. By restricting the application of deterrence, however, proportionality becomes far less important.

Second, it underscores the significance of the stakes for China in any conflict. Since it is the homeland which is being defended, Chinese survival is (potentially) at stake and the determination to defend its interests should never be questioned. Additionally, since China's nuclear weapons are for a second strike, rather than war fighting, then the credibility of their use should be even less subject to challenge.

Chinese participants noted that they are troubled by the concept of declaratory policy as the very term suggests there is another policy, somewhere else. (This seems disingenuous, given the long history of deception in Chinese strategic culture.) At the same time, Chinese participants emphasized the importance of consistency in such policy. Chinese see little need to pay much attention to declaratory policy if it can be changed with ease and frequency.

Security Dilemma. Chinese noted that this is an academic term with a generally agreed meaning: a process by which one state takes steps to secure itself with the result that other states feel insecure; those other states then take corresponding steps to secure themselves and as a result all states are left more insecure. Chinese participants noted, however, that it has a much broader conception in Chinese than English. They explained that a “dilemma” in Chinese is usually a difficult situation, rather than a difficult choice between specific options. More significantly, Chinese seem to believe that a security dilemma cannot occur when the two sides have asymmetric capabilities. China cannot

create a security dilemma with the US since it is much weaker on every index of military power.

Plainly, there are significant divergences in thinking that need to be explored and bridged. It is difficult to create mutual understanding over the long term, or have confidence in crisis management, when the building blocks of strategic thinking seem to differ. The sixth US-China Strategic Dialogue attested once again to the value of such exchanges and the interest by both sides in further pursuit of these issues and ideas – and others.

The Current State of the Nuclear Field and our Task

By Li Bin [Unofficial Translation]

In the previous year, the most important event in the nuclear field was the Fukushima nuclear accident. The Fukushima accident not only damaged the Japanese environment and economy, but also affected neighboring countries and the whole world. This event reminds us that, on the nuclear energy question, we exist in a mutually interdependent world. In this regard, the question of nuclear weapons and the question of nuclear energy are similar. Once the disaster of a nuclear attack occurs, the result will be globalized. Therefore, the elimination of the nuclear threat is our common duty.

Eliminating the nuclear threat entails promoting nuclear security, preventing nuclear proliferation, eliminating nuclear mistrust (enhancing nuclear strategic stability), etc. In these fields, China and the United States have had some successful cooperation, and at the same time face challenges, and need to make some further efforts.

China and the United States have each made great efforts toward preventing nuclear terrorism and promoting nuclear security. In 2010, Chinese leaders attended the Nuclear Security Summit in Washington D.C., and China and the United States began some new nuclear security collaboration. Progress was made, especially in the area of nuclear security training. In the field of nuclear security, China and the United States still need to carry out more exchanges on both types of threats: the two countries could also consider establishing a nuclear terrorism notification mechanism, and could surmount unreasonable export controls, in order to launch new technological collaboration.

China and the United States have basically the same goal in preventing nuclear proliferation. However, both countries have other concerns, interests, and responsibilities. In the past several years, I have not seen the US government come up with programmatic regional nonproliferation plans. This certainly is not because the US government is not concerned with regional nonproliferation, but is because the question itself has many difficulties, and the United States faces many domestic political and economic challenges, as well as problems coming from allies. Under these difficult conditions, China and the United States cannot criticize each other; we must understand each other, strengthen dialogue, and seek methods for resolving problems.

In the nuclear field, eradicating mutual distrust and establishing strategic stability primarily requires mutual understanding. Apart from this series of discussions, we have a few other bilateral and multilateral dialogue mechanisms, and our two countries are developing new mechanisms and channels of communication, this is the most important way for our two countries to build strategic stability. We hope to understand what it is that the United States envisions for strategic stability with China, understand the United States tendencies toward developing missile defense and extending a nuclear umbrella over its allies, etc. I personally think that it is very helpful that our seminar begins with understanding the implication of vocabulary in the nuclear field. I hope that the governments and militaries on both sides support this work, and it serves to make future exchanges run more smoothly.

Changes and Developments in China and US Nuclear Policies

By SUN Hai Yang [Unofficial Translation]

Summing up the basic spirit and main features of China and US Nuclear policies, the basic spirit of China's nuclear policy has the following points:

- China's development of nuclear weapons is to counter nuclear blackmail and keep a check on nuclear war.
- China adheres to no first use of nuclear weapons, nuclear forces are defensive in nature.
- the development of China's nuclear weapons is limited, [China] will not participate in nuclear arms race.
- China supports the prohibition and through destruction of nuclear weapons, to finally realize a nuclear weapon free world.

China's nuclear policy has these several special characteristics.

First, defensive nature. China was forced to develop nuclear weapons, from the beginning, the goal was to oppose nuclear war, curb nuclear war, and to protect itself from nuclear attack through self-defense. China has all along supported a no first use of nuclear weapons policy, this is the important mark of the difference between Chinese nuclear policy and the nuclear policies of other countries.

Second, limited nature. China has taken a very restrained attitude toward the question of the development of nuclear weapons, never deploying nuclear weapons abroad, never participating in any form of arms race, and all along maintaining a nuclear force at the lowest level needed for national security.

Third, stability. Since the establishment of the policy of no first-use of nuclear weapons, China's policies have been consistent.

Enrichment and Development of China's nuclear policy.

Looking at the basic spirit of the policy, China's nuclear policy has not changed in several decades. However, following changes in the strategic environment, China's nuclear policies and nuclear strategy has been enriched and developed. The main examples are:

- Have new judgments on nuclear war situations.
- Presented new ideas on the elimination of nuclear war.
- Have new understanding of "force building."

- Have new measures for safeguarding nuclear security and preventing nuclear proliferation.

A few comments on the development and adjustment of US Nuclear policy

In recent years the US has made some relatively large adjustments to its own nuclear policies, sending positive signals:

- Made new judgments on nuclear security threats.
- Have conditionally promised not to use nuclear weapons.
- Have reduced the uses of nuclear weapons for national security.
- Gone further in reducing nuclear weapons.

As for the above changes in US nuclear policy, I personally give them a positive evaluation. At the same time we notice some tendencies that make us feel anxious and concerned:

- The US Continues to strengthen its own nuclear forces.
- The development of new conventional strategic weapons
- The building of a global missile defense system

Implementing the Nuclear Posture Review

By M. Elaine Bunn¹

Session 2: Developments in US and Chinese Strategic Doctrine and Policies

For the US presenter:

- How is the Nuclear Posture Review (NPR) being operationalized in the US?
- What are the prospects for future reductions or other forms of control in US and Russian strategic arsenals?

For the Chinese presenter:

- What has been the impact of the US NPR on Chinese nuclear policy and strategy to date?
 - Has/how has Chinese nuclear doctrine and policies changed?
- Nuclear Guidance review called for in NPR is ongoing: Principal Deputy Under Secretary for Policy Jim Miller testified to Congress in May that the review would analyze and potentially revise Presidential and Departmental guidance for nuclear operations and deterrence. He emphasized that the administration would analyze potential force posture and targeting requirement changes “according to how they meet key objectives outlined in the NPR, including reducing the role of nuclear weapons, sustaining strategic deterrence and stability, strengthening regional deterrence, and assuring US allies and partners.” The review will also examine “force posture changes associated with different types of reductions,” the implications of changes in the strategic environment for US deterrence strategies, and the role of non-nuclear capabilities...²
 - Implementing the New START Treaty; inspections have started and USG is studying how best to reduce to meet the Treaty’s limits.
 - Funding for nuclear infrastructure, Triad modernization is a work-in-progress: Seems to be a bi-partisan consensus, codified in the Resolution of Ratification to New START, that we must reinvigorate our infrastructure and maintain the Triad in the near term. According to the November 2010 update to the 1251 Report, the United States will continue to work toward a follow-on nuclear-armed SSBN with the goal of achieving “strategic at-sea service” by 2029; build a follow-on bomber and replace the current nuclear ALCM with an advanced long-range standoff cruise missile; and study a potential follow-on ICBM and complete an analysis of alternatives. The budget is an inherently messy process, and is even more so now due to a partisan climate, pressure to reduce spending and rein in debt. It is unclear how it will unfold, if the super committee will reach an agreement, if

¹ M. Elaine Bunn is a Senior Fellow at the Institute for National Strategic Studies of the National Defense University. Views expressed in this paper are those of the author alone and do not necessarily reflect the policies of the National Defense University, the Department of Defense or the United States Government.

² Miller, prepared testimony <http://armed-services.senate.gov/statemnt/2011/05%20May/Miller%2005-04-11.pdf>

Congress will follow through with trigger. It is hard for me to see a scenario where the United States doesn't maintain a safe and effective nuclear deterrent and supporting infrastructure.

- We are still pursuing CPGS. However, the US has set aside the Conventional Trident concept (due to concerns about nuclear ambiguity) and exploring CPGS through boost-glide technology. The past two boost-glide tests, with the Hypersonic Test Vehicle, have encountered difficulties. Some in the technical community remain optimistic, but I am not sure if the technology will pan out at a cost that we're willing to pay for a niche capability. I support a niche CPGS capability, and think we should reconsider Conventional Trident, but if China is worried about it, an objective reading of the past 12 months suggests that we won't achieve CPGS anytime soon. In fact, since China does deploy conventional ballistic missiles, I would be interested in hearing if China had a debate about nuclear ambiguity and, if so, how advocates of conventional ballistic missiles convinced the leadership to move forward with the concept.
- The US continues to work with allies in three key regions – East Asia, Europe and the Middle East – to strengthen deterrence and assurance. NATO is in the midst of a Deterrence and Defense Posture Review to assess the appropriate mix of nuclear, conventional and missile defense capabilities. Regular discussions on deterrence have been established with S. Korea and Japan.
- The US is implementing the European Phased Adaptive Approach (EPAA) (NATO formally adopted territorial defense as a goal at Lisbon). Romania & Poland have agreed to host SM-3 interceptors and Turkey will host the radar. We are also discussing how to bring the Phased Adaptive Approach to East Asia. We are also continuing to improve the GMD, so that it provides the best possible protection of the US against limited missile strikes from countries such as North Korea and Iran – though the upgraded Exothermic Kill Vehicle is running into some complications. Policy in the BMDR (i.e., GMD not designed to affect strategic balance with China) still holds.
- Strategic Stability Dialogues with China, which are now called the Strategic Security Dialogues, reportedly include official discussions on nuclear, cyber, missile defense, space, & maritime issues. I am glad that the SSD is focusing on more than nuclear because all of these strategic capabilities interact, and I actually worry more about misperception and miscalculation in space, cyberspace, and perhaps with conventional strike forces than with nuclear weapons. And while I'm always happy to participate in these track 1.5 discussions, I don't believe they can substitute for Track 1 dialogues.
- The United States continues to work with Russia on allaying their concerns about US and NATO missile defenses – we would like to see sharing of early warning information and missile threat assessments of countries such as Iran. We are interested in cooperation, not a shared system. And our ultimate goal is persuade them that the EPAA and GMD are tailored to North Korea and Iran, not Russia.

- Another US-Russian arms control treaty following on to New Start won't come quickly or easily: Dealing with limits for tactical nuclear weapons and non-deployed warheads will be difficult, and limits on those categories would mean unprecedented verification of warheads. Beyond perhaps one more bilateral treaty between the United States and Russia, I think both countries would find it difficult agree to more reductions without assurances from China that it won't respond by building up.
- The NPR expressed the US goal of preventing Iran from acquiring nuclear weapons and persuading North Korea to give up its nuclear capability. North Korea's attacks on South Korea in 2010, and the recent Iranian plot to kill a Saudi Ambassador in Washington and bomb Saudi and Israeli embassies, did not involve nuclear threats or coercion. Simply because the United States and allies didn't deter either regime from taking these actions (assuming the Iranian regime authorized the assassination plot – if they didn't, it raises a host of other deterrence challenges) doesn't mean we won't be able to deter nuclear aggression, conventional aggression under the nuclear shadow, and transfer of WMD materials to terrorists. These actions would be fundamentally different than what has occurred thus far, and US responses would reflect these differences. However, these actions are troubling; the United States needs to take steps to assure South Korea, and South Korea may take steps with or without US approval and assistance. The United States faces many deterrence and assurance questions in the Middle East – and these tough security questions will become more difficult if Iran acquires nuclear weapons.
- So that's an overview. What are the implications for US-China strategic relations? Well, as you can see, there are many variables that influence US strategic forces policy and posture (encompassing nuclear, missile defense, conventional, cyber, space, and alliances), such as domestic politics in US and allied countries, our budget and deficit, technological developments, our relationship with Russia, our relationship with China, and perhaps the most unpredictable variables – Iranian and North Korean actions.
- Clearly, US policy and posture is not tailored exclusively to China. Our relationships with allies and our concerns about other countries might require us to take steps that China is understandably concerned about, and that might prompt China to adjust its nuclear plans and programs. And there is always the possibility that US and allied uncertainty about the scope of China's nuclear modernization and intentions could prompt the United States, or allies, to adjust our policies and posture based on worst-case scenario defense planning. After all, even though we are looking at a future of more constrained resources, the United States will maintain its role and presence in Asia.
- Since US-China relations will unfold in this complex, interconnected web of relationships, ongoing official and unofficial dialogues are one way we can mitigate the risks of an action-reaction cycle between our strategic postures. Maybe there's nothing we can say that will convince China not to hedge against, for instance, potential CPGS and missile defense developments in the future. But

- perhaps China can provide a more detailed explanation of what that hedge would entail at the official level. Understanding how each side thinks about these strategic interactions is a critical aspect of transparency that can help build trust without compromising security. To be sure, such information might prompt US strategic force adjustments, but depending on the hedge, it would also make it easier for the United States to say with confidence that we see no need to adjust, because we have an idea of where China is headed, and it doesn't alarm us.
- With that in mind, I look forward to hearing more about the issues and challenges China has encountered while implementing its 2010 White Paper. For example, has the statement in the BMDR, that the US GMD “does not have the capacity to cope with large scale Russian or Chinese missile attacks, and is not intended to affect the strategic balance with those countries” affected Chinese nuclear plans and programs, or at least prompted some discussion within the Chinese strategic community? Additionally, I would be interested to hear why China thinks its reactions to the US strategic posture is stabilizing, and how it can be stabilizing if the United States does not have a clear sense of how China's strategic posture will look in 10-15 years.

A Few Comments on the US Ballistic Missile Defense System

By QIU Yong

(This paper was originally published in Chinese by CACDA)

The US is developing a wide variety of anti-missile defensive systems, including Ground-based Midcourse Defense systems (GMD), Sea-based Midcourse Defense systems (SMD) terminal High Altitude Area Defense systems (THAAD), Patriot-3 systems (PAC3), Airborne Laser systems (ABL), etc. These defensive systems can be divided into strategic defense systems and tactical defense systems, my talk will be aimed at only midcourse defense systems possessing strategic defense capabilities.

Views on the Defensive Policies of Obama's New Government

Obama absolutely does not oppose the development and deployment of ballistic missile defense systems. When running for president, he put forth that his future administration would "Support missile defense, but would develop it along pragmatic and cost effective lines," and on the controversial plan of deploying ground-based midcourse defenses in Eastern Europe, he also did not make clear any objections.

In the 2010 NPR and BMDR, the Obama administration put forth a "Renewed focus on the homeland ballistic missile defense plan."

As for the development focus of anti-missile defensive systems, support for the current GMD scale has not changed, the focus has changed to a regional defense system:

- Ground-based midcourse defense systems (GMD) will be maintained at a level of 2 bases and 30 interceptors, and continue to enhance the operational capabilities at the Fort Greely and Vandenberg interceptor bases, and the completion of construction of 14 backup underground wells at Fort Greely base.
- Sea-based midcourse defense systems (SMD), planning to develop the SM-3 defensive system, currently based on the sea-based "Aegis" ships, into a land-based system, for use defending against ICBMs.
- The development path for the future SM3 system is not yet clear; in the analysis of the most recent CRS report³, the Phased Adapted Approach plans to have more than 500 SM-3 interceptor missiles deployed on 43 ships and at two bases in Eastern Europe by 2018.

As for the mode of development for anti-missile defensive systems, it stresses the promotion of combat capability and cost effectiveness, and strengthening international dialogue and cooperation:

³ See Ronald O'Rourke, *CRS Report: "Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress,"* Congressional Research Service (CRS) Report, April 19, 2011.

- Eliminate some immature projects, focus resources on more mature BMD; strengthen testing plans, develop more durable, effective systems which pass through full testing and verification, and which prove to be effective defenses in real combat conditions.
- Strengthening the international dialogue and cooperation on missile defense. The NPR put forth, America will “launch strategic stability dialogues with China, to provide an occasion and mechanism for exchanges of views on nuclear strategy, policy, plans and other strategic capabilities, to enhance mutual trust, improve transparency and reduce mistrust.” In the BMDR, the new Obama Administration said: “One important part of our work to strengthen international cooperation is to make China participate in talks on the US missile defense plans. China is one of the countries that has most frankly raised objections to US ballistic missile defense, and Chinese leaders have clearly expressed concerns that missile defense could cause China’s strategic deterrence to fail.”

It is thus clear that since the new Obama Administration took office, US commitment to the development of anti-missile defense systems has really not changed, it is only the focus and manner of development that has changed: the focus of development has changed to regional defense and the manner of development has become more pragmatic, emphasizing international cooperation and cost-effectiveness.

Opinions on the Technological Capabilities of US Ground-based Midcourse Defense (GMD) Systems

The process of a missile defense system intercepting an ICBM can broadly be decided into reaching the target and hitting the target:

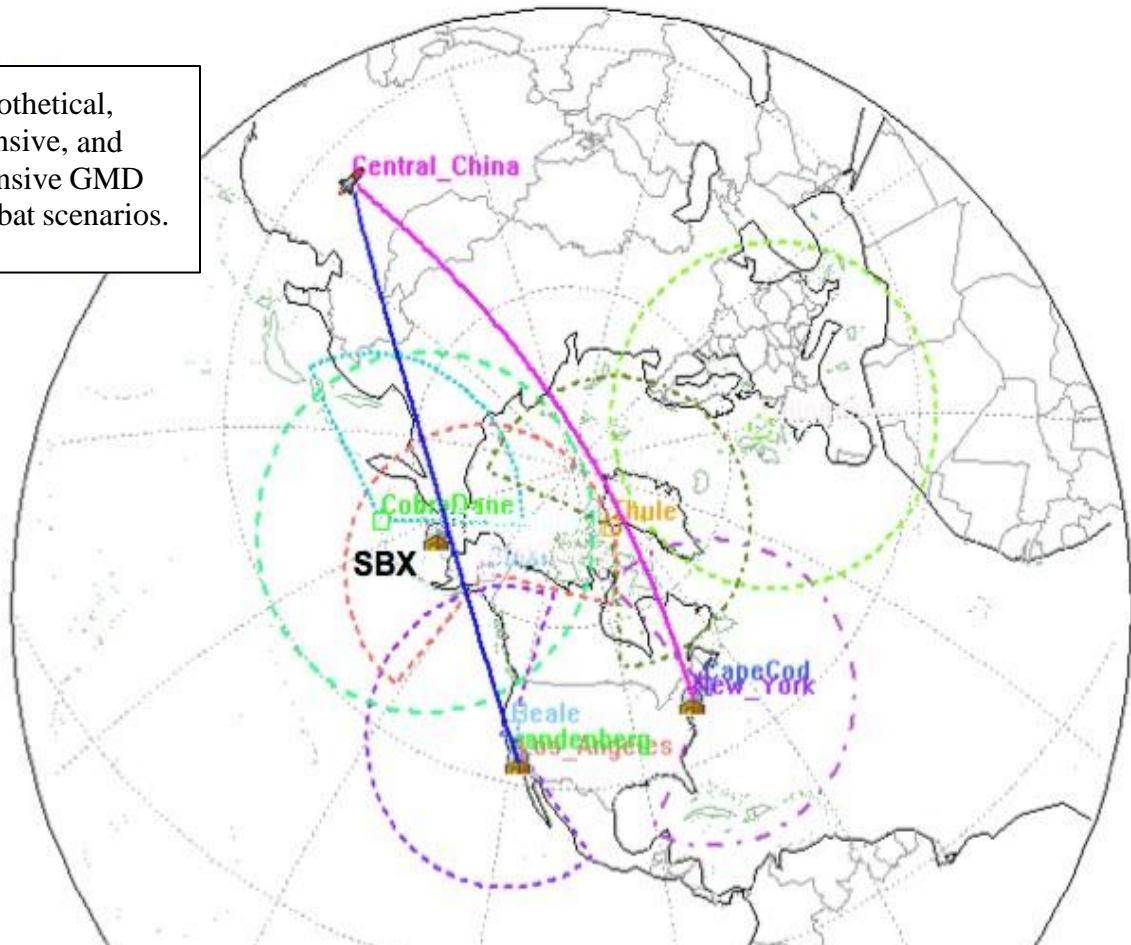
- Reaching the target means interceptors and radar and other sensing capabilities are sufficient to arrive at the target, this is equivalent to “the eye that sees and the legs that run,” this capability can use the characteristic parameters of the interceptor missiles and the characteristic parameters of radar to carry out calculation and analysis;
- The probability of hitting the target is related to many factors, it has a large degree of uncertainty, one can use the characteristic parameters of the kinetic kill vehicle to carry out calculation and analysis for specific interception scenarios.

We believe that as long as a missile defense system has the capability to reach a target, than it is sufficient to raise strategic concerns for the other side. Therefore the focus of our analytic work is on the first part that is to intercept the ICBM warhead, or whether or not in a missile defense system “the eyes can see it” and the legs can run to it.”

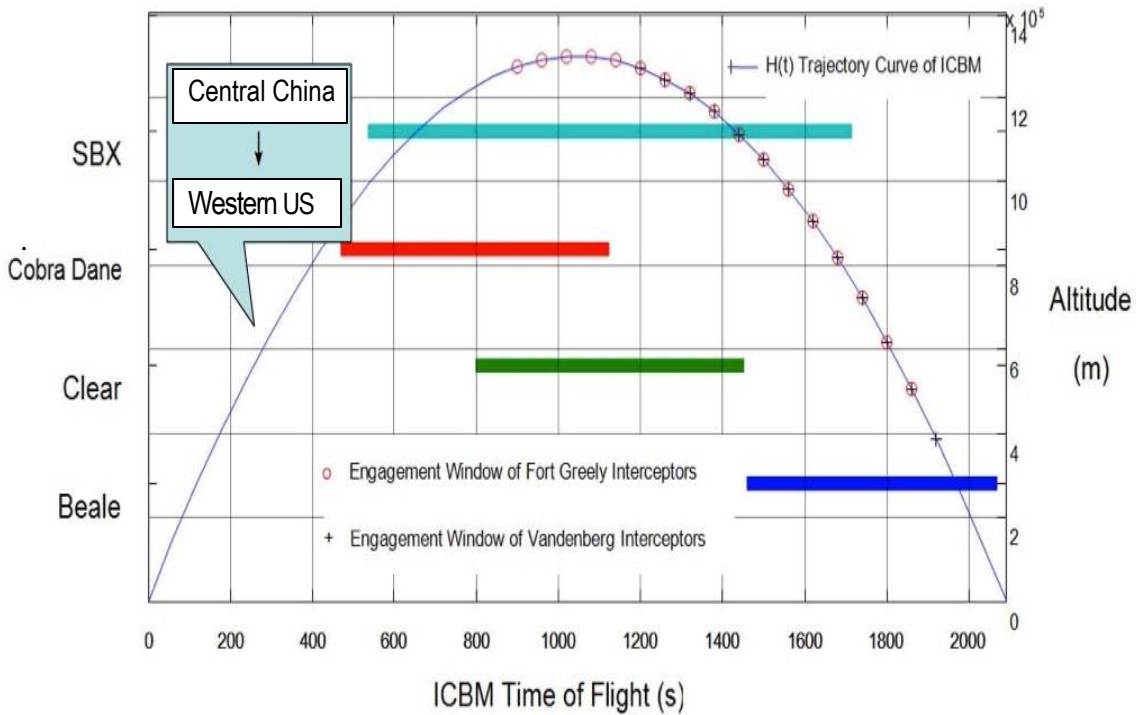
As for analysis on the probability of hitting the target, you can consult our previous technical work,⁴ this report will only briefly comment on it.

⁴ See HE Yingbo and QIU Yong. “THAAD-Like High Altitude Theater Missile Defense: *Strategic Defense Capability and Certain Countermeasures Analysis*” Science & Global Security, Volume 11, Issue 2-3, 2003.

Hypothetical,
offensive, and
defensive GMD
combat scenarios.



Hypothetical nuclear attack against China, in order to retaliate there are two ICBMs launched from Central China, they split apart and fly toward the American east and west coasts. The ICBMs will be picked up by many fixed position early warning radars and mobile SBX radar, the location and measuring distances are indicated on the map.

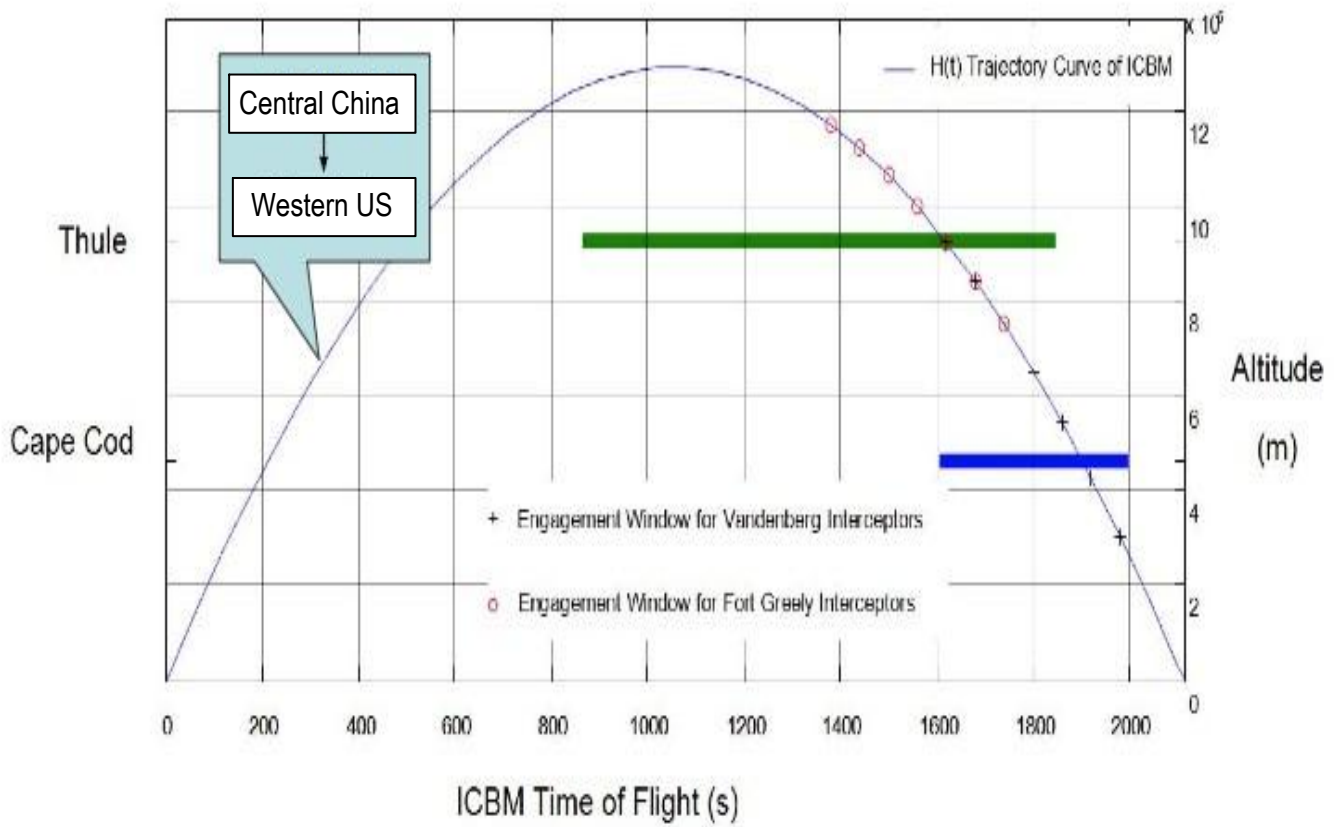


This graph shows the flight period of a Chinese ICBM's flight, and the time interval when it is being tracked by various US anti-missile radar. The horizontal axis is the flight time, 0s marks the launch point; the right vertical axis is for the ICBM warhead's flight altitude, the left vertical axis marks which US radar tracks the ICBM warhead.

From this graph it can be seen, including SBX, the many anti-missile radars can detect the flight of a Chinese ICBM warhead over a long period, and can provide the technical prerequisites for inception operations.

If you add California's Vandenberg base and Alaska's Fort Greely's ground-based interceptor to carry out interception, the graph gives the windows of opportunity for the two bases to launch interceptors. The center red "O" represents the Alaska window, the black "+" represent the California window.

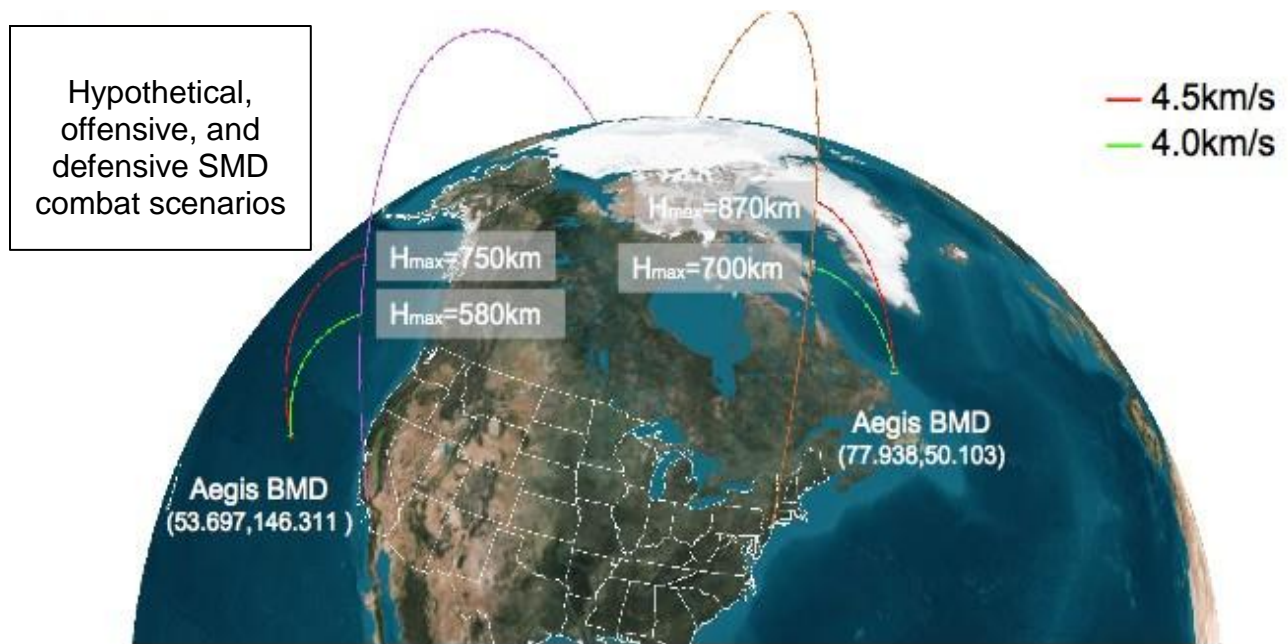
The above analysis makes it clear, the two ground-based interceptor bases possess the technological capability to intercept Chinese ICBMs.



ICBM flying from Central China to Western US, the result of the analysis is essentially the same.

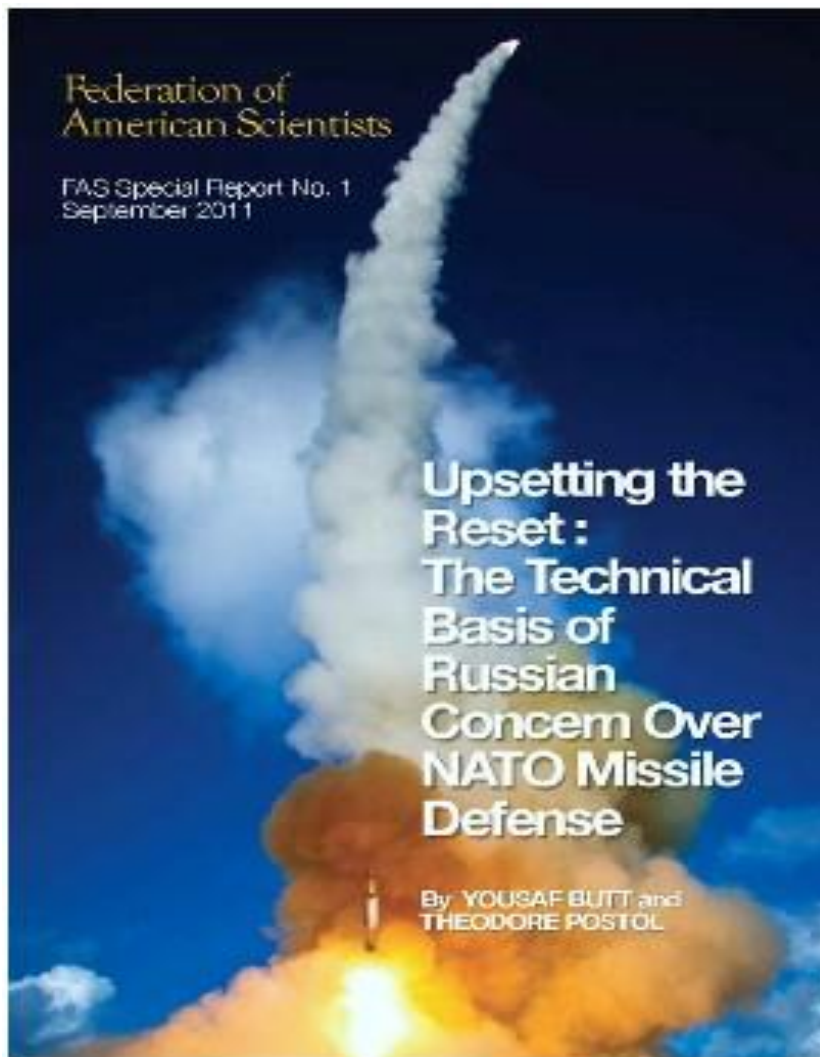
The US has always claimed that the deployment of existing GMD is in response to ICBM threats from North Korea and Iran. Because the geographic location of North Korea and China are so similar, the trajectories of ICBMs flying toward the US are similar. Therefore midcourse defense systems that can intercept North Korean ICBM, necessarily possess a capability to intercept Chinese ICBMs, the result of above technical analysis is fully in line with this analysis.

Opinions on the Basic Capabilities of the US Sea-Based SM-3 Missile Defense System (SMD)



The SM-3 currently deployed on Aegis ships is designed for midcourse defense. If they go up to Block II according to BMDR, the cutoff speed could reach 4.0-4.5 km/s, if they are deployed in a suitable position, then they have the ability to intercept Chinese ICBMs. The above figure shows different speeds at maximum altitude.

The sea-based Aegis defense system is a mobile defense system, considering the situation of global mobile deployment capacity, the concerns of Chinese military planners is quite natural



Recently, the researchers at the US FAS issued a technical analysis on the future strategic defensive capability of sea-based SM-3 missiles against China and Russia, their conclusions are very similar to our own.

Opinions on the Political Intentions and Interception Effectiveness of US Missile Defense

We know that many US scholars and officials believe that China does not need to worry about US missile defense, they believe that the US missile defense system is aimed at North Korea and Iran, it is not to deal with China, so China does not need to condemn it.

There are a few scholars who believe the current missile defense capability is limited, the numbers are not large, the level of reliability is not high, it is not sufficient to

deal with current Chinese penetrative measures, therefore China simply does not need to worry.

Are these views enough to convince Chinese military decision makers? Keeping these two views in mind, I will discuss my personal views.

The first view concerns technological capability versus political intentions. We know that many factors influence military decision making, technical capability and political intentions are two important factors among them. Political intentions are abstract, cannot be seen, and are easily changed; and technological capabilities are real, visible, and are hard to change in the short run. Therefore, in the opinion of military decision-makers, decision making is not just influenced by the opponents political intention, more important is technical capability.

We can use the example of US-Russian nuclear disarmament to illustrate this problem: In January 1994, the US and Russia announce that they are mutually de-targeting each other with nuclear weapons, since then both sides have complied, the political intention is clear. However, while negotiating the Moscow treaty and New START, both sides stressed the number of deployed nuclear weapons and didn't take notice of the issue of targeting. This demonstrates, for these two parties, the baseline of military decision making is technical capability, not political intentions.

We note that the US's will for developing anti-missile systems is not about China, but will is not enough, it is not sufficient to eliminate the concerns of Chinese decision-makers.

The second view has to do with the problem of operational effectiveness of interceptors. The effectiveness of interceptors hinges on the technical capability for attack and defense on both sides as well as specific interception operational scenarios, following the development of attack and defense technology, changes are constant and hard to predict. However, as long as [effectiveness] isn't 0 percent, it will effect the effectiveness of strategic deterrence, and it will be incorporated into consideration of strategic stability.

Therefore the effectiveness of interceptors cannot allay Chinese fears about BMD.

Summary of main points

- After the new Obama Administration came to power, US determination to develop missile defense systems did not change, it was just the development focus and manner that changed.
- The already deployed ground-based mid-course defense systems and future sea-based SM-3 mid-course defense systems, have the technical capability to intercept Chinese ICBM warheads.

- Although the US claims that anti-missile systems are not aimed at China, and that the effectiveness of existing interceptors is low, this is not enough to eliminate the concerns of Chinese decision-makers.
- Chinese leader's fears that missile defense could render China's strategic deterrent is rational. The US should restrain development of missile defense systems, carefully consider China's security concerns, and strengthen dialogues and exchanges.

Outline of Statement on the Sixth Discussion Topic

By Yao Yunzhu [Unofficial Translation]

When considering the carrying out of cooperation between China and the United States on the nuclear question, we first must consider bilateral cooperation between China and the United States. The important thing is to increase trust, clear up doubts, and maintain strategic stability. Strategic stability is beneficial for both sides, it is a condition that benefits both regional and world peace, and is a condition that is beneficial to international nuclear disarmament and nuclear nonproliferation. The NPR published by the United States last year expressed the importance of maintaining strategic stability with Russia and China. We recognize this is a positive change in US nuclear policy. In the Sino-US nuclear relationship, we have at least a tacit understanding that strategic stability is built on the physical fact of mutual vulnerability. If one side unilaterally seeks absolute security, this will lead to instability.

Next, in considering cooperation on regional nuclear problems, the key issue is still the DPRK nuclear question. The US Government has apparently already given up the goal of forcing the DPRK to abandon its nuclear program, in favor of dealing with the DPRK's nuclear weapons by providing stronger extended deterrence to South Korea and Japan, while at the same time waiting for change to occur within the DPRK. Abandoning the cooperation of the Six Party Talks means giving up on resolving the nuclear issue on the Korean peninsula, and giving up on efforts to end the cold war system on the peninsula. Strengthening extended deterrence for South Korea and Japan will strengthen the means of military confrontation, which will in turn bring about side effects, such as giving rise to new suspicions in China that the United States and her allies are exploiting the DPRK situation to deal with China. Regional cooperation also involves efforts on the South Asia nuclear question, Iran nuclear question and the establishment of a Nuclear Weapons Free Zone in the Middle East.

The focus of carrying out global cooperation is to deal with common threats, such as the common safeguard mechanism, the implementation of cooperation required in the "Final Document" of last year's NPT review conference, promotion of the entrance into force of the "Comprehensive Test Ban Treaty," cooperation to draw up international nuclear safety standards, carrying out technological and policy cooperation, carrying out nuclear disaster relief training exchanges and cooperation, etc. The last is to safeguard the dominant position and leading role of the Five NPT nuclear nations in nuclear arms control and disarmament work.

Strengthening China-US Cooperation in the Area of Strategic Security and Stability

By Lewis A. Dunn

I am pleased to participate again in the US-China Strategic Dialogue and to offer some remarks to help introduce our discussion on Strengthening China-US Cooperation in the Area of Strategic Security and Stability.

My remarks will be divided into three main areas. First, I shall set out some judgments – or as we Americans would say, some “takeaway points” – based on the related conversation held among quite a few of us last June at the Strategic Dialogue session in Honolulu, Hawaii. Second, I shall put forward some principles or guidelines for moving toward strengthened China-US security and stability cooperation. Third, I shall set out 3 more specific proposals, partly recalling Ambassador Brooks’ presentation in Hawaii, partly based on my own continuing work on China-US cooperative security engagement – and I shall ask one closing question.

I alone am responsible for the remarks that follow.

Start then with some judgments based on the US-China dialogue last June in Hawaii.

- First, both Chinese and US participants agree on the need and importance of a continuing dialogue on strategic issues, though there are continuing differences over the best mix of official and non-official, Track 1 and Track 1.5 or 2 dialogue
- Second, both Chinese and US participants agree that the scope of that dialogue needs to be broader than nuclear issues, to encompass missile defenses, conventional weapons, regional postures, and other matters
- Third, there also is agreement, though perhaps not always explicit, that continuing dialogue needs to address the existence of mutual suspicions about the other’s intentions – and to help prevent the potential instabilities that could result as each side responds to the military actions, deployments, and decisions of the other side
- Fourth, Chinese and US participants, however, do not agree on what should be the overarching concept or approach for organizing that dialogue or for that matter, to structure the overall China-US strategic relationship – in brief:
 - Chinese participants are uncomfortable with the US idea of using “strategic stability” as such an overarching concept – in part, because it is seen to suggest the type of Cold War, adversarial nuclear relationship that existed between the United States and the Soviet Union
 - American participants are uncomfortable with the Chinese idea of using “mutual vulnerability” or “mutual deterrence” as such an overarching concept – in part, because while mutual vulnerability may be a “fact,” its explicit acknowledgement would be very difficult politically

for any US administration and in part, because of concern that emphasis on mutual deterrence will strengthen adversarial thinking in both countries

- At the same time, both Chinese and US participants, perhaps to differing extent, appear to share a belief in the need to identify or develop afresh a mutually acceptable overarching concept, term, or approach to structure China-US strategic and security interaction

Let me now turn to some possible principles or guidelines for strengthening China-US cooperation. In so doing, I shall draw on some of my own work but also the thinking of others. I shall also try to build on our continuing dialogue here and elsewhere. First, we should emphasize mutual reassurance as the overarching concept of our interaction rather than either strategic stability or mutual vulnerability-mutual deterrence

- As both Chinese and US participants often note, the United States and China are not adversaries
- At the same time, as is also noted, there are questions in each country about the strategic intentions, plans, and programs of the other country
- For that reason, the challenge both countries confront is one of mutual reassurance
- Second, mutual reassurance, as the phrase states, needs to be a two-way street
 - It is not simply a question of the United States reassuring China, e.g., about missile defense or about conventional prompt global strike
 - It is also a question of China reassuring the United States, e.g., concerning the ultimate scope and purpose of Chinese military modernization, programs, and activities, including particularly both nuclear and anti-satellite capabilities
- Third, we need to find as many ways as possible in the strategic arena writ large both to provide windows into each other's thinking and to build habits of security cooperation
 - Or to phrase it somewhat differently, as Ambassador Brooks suggested in Hawaii, we need to put in place a China-US confidence-building process
 - Do so at all levels from non-governmental to official, Track 2 to Track 1
 - Do so while recognizing the constraints – whether differing views of the payoffs and risks of transparency; the spillovers of bilateral dealings, from China's alliance relationship with the DPRK to US concerns about a future nuclear missile threat from Iran; or the always in the background issue of Taiwan

By way of conclusion, here are three specific confidence-building initiatives to complement the continuing strategic dialogue in this and other China-US forums and to build habits of cooperation – in each case, a “what,” a “why,” and a “who.”

- First, we should undertake some joint studies and joint table-top exercises
 - What topics: there are many possibilities – by way of example, options for analysis range from a big picture study of desirable longer-term China-US strategic relationship and how to get there to exploring a China-US no-first-use understanding; options for table-top exercises range from one on US missile defense requirements to counter a nuclear-armed Iran to one on containing the next nuclear crisis in South Asia
 - Why: studies and table-tops offer a way for us to work through a problem or an issue together and as a result, at least to understand each other’s perspectives better, to build expertise and gain new insights from each other, and at best to identify confidence-building cooperative initiatives
 - Who: Tailor the specific participants to the given study or table-top exercise – Track 1, Track 1.5, and Track 2 all have role to play
- Second, we should strengthen cooperation to prevent or respond to a terrorist nuclear smuggling incident
 - What: again, there are quite a few possibilities, from actions together or in parallel to help other countries to strengthen their nuclear security postures to discussions or table-top exercises on how to prevent a successful terrorist nuclear attack with warning or to do nuclear forensics or respond if an attack occurs
 - Why: both countries have a shared interest in this area and both countries have capabilities to help meet this threat
 - Who: here, I believe this is an area ready for strengthened official-level cooperation, whether among our national scientists or among those persons responsible for dealing with the threat of nuclear terrorism
- Third, explore possibilities for reciprocal unilateral restraints of programs, deployments, and declaratory posture to reduce mutual strategic uncertainties
 - What: unilateral political commitments that each country’s leadership could make in parallel, after discussions, to signal future strategic intentions and programmatic directions for offenses and defenses, conventional and nuclear forces, on the ground and in space
 - Why: provides an approach to lessen mutual suspicions and uncertainties but also recognizes that time is not ripe for formal treaty-based arms control limits
 - Who: here, start with expert level Track 2 or 1.5 discussions and then add exchanges among officials of both of our countries’ officials even if those official exchanges take place using so-called “non-papers” and without confirmation

Finally, to my closing question, in this case for our Chinese colleagues: What confidence-building measures that involves actions by both China and the United States do you think officials in both countries should explore? In answering, please recall my proposition earlier that mutual reassurance needs to be a “two-way street.” Thank you

Appendix A

Breakout Group 1 – National Technical Means

National owned instruments for surveying (or monitoring) a party's compliance with agreement obligations. Information derived from NTM may be used from verification regimes to question another party's compliance. Does not violate the territory, territorial seas or airspace of either country.

- Nationally owned.
- For monitoring activities to gauge compliance with treaty obligations.
- Importance of noninterference with NTM. Does not violate the territory of a country (unless allowed by treaty).
- Does not include human intelligence.
- Without a treaty, intelligence collection is not NTM.

PRC

- Legitimate or illegitimate use of NTM is determined by the context of its use. NTM should only be employed within a treaty, not interfering with the core interests of parties concerned.
- Is US willing to help China raise its NTM capabilities?
- NTM should be based on a treaty. Within a treaty, there must be an agreement to verify obligations with NTM. This helps settle disputes, built into treaty language.

U.S.

- Plays a role in eliminating misperceptions and building trust.
- Verification is a political judgment matching treaty obligations with information from NTM.
- Human Intelligence is not officially a national technical means, though it can help inform a country's judgment
- NTM are not considered equal on both sides. There is no obligation to help the other side verify – no requirement to make NTM capabilities equal. Standard is sufficiency to verify the treaty – not equality.
- Self-help, but each side could make the case (using evidence gathered from national technical means) of violations to the other side.
- Seen as a positive that allowed each side to monitor compliance and build confidence as part of a process to further agreements.
- Example of non-interference: telemetry from missile tests. Neither US or USSR encrypted missile test telemetry, allowing NTM to collect telemetry and verify tests did not violate treaty obligations.
- Limited allowance for concealment – submarines can submerge, ICBMs in the field can be hidden.
- Interference in other intelligence gathering activities not prohibited, if collection is not related to monitoring for compliance with treaty obligations.
- Getting over early hurdles in early arms control agreements allowed for more significant and more invasive forms of verification, as both sides grew more comfortable as they saw it satisfied their security needs.

Survivability

- Directly related to deterrence.
- Role of passive survivability (hardening, mobility and concealment).

US

- Transparency is required in order to deter.
- Also achieved by active measures (missile defense and computer network defense).
- In the context of nuclear deterrence, ability of strategic nuclear forces, supporting command and control, and national political leadership to continue to function and support effective retaliation (as directed by the national authority) in the wake of an enemy attack.

PRC

- Survivability does not necessarily require transparency.
- Importance of ability to consolidate against attack, and the ability to recover after an attack.
- Survivability is especially important given China's NFU policy. For other countries, less essential.

Some PRC disagreement:

- Narrow definition: inward ability for nuclear forces to partially survive.
- Broad definition: nuclear forces are reliable, command and control in place, capable of retaliation. Misuse will not happen – able to use usual processes for retaliatory strike.

Action-Reaction Military Competition

- Not all arms races (or military competitions) are of an “action-reaction” type. US building missile defense not aimed at China, but naturally drives China to react.
- There is no nuclear arms race between US and China.

U.S.

- Matching: You build up offense, I build up offense.
- Countering: You build up offense, I build up defense.
- Fear of inferiority, and going beyond sufficiency, can fuel nuclear arms races – China's acceptance of a minimal deterrent helps prevent a US-China nuclear arms race.
- AirSea Battle and US-ROK ED are examples of conventional action-reaction dynamic.
- Chinese reaction to US missile defense is natural.

PRC

- Arms development is a sovereign activity.
- International arms competition leads to security dilemma.
- Competition in extreme leads to an arms race
- Features a clear adversary, relative military balance, trend of mutual imaging, and a vicious spiral that is difficult to get out of.
- Consequences: switch from defensive to offensive national policy, inclination to preemption, low mutual trust, and militarization of the national economies.

- Changing security environment may cause an action-reaction cycle – not an arms race.
- Must consider how to build mutual trust in order to break action-reaction cycle.

Multiparty Nuclear Stability

- Defined as a series of stable nuclear deterrent relationships among the nuclear parties.
- Multipolar stability is complicated by a series of bilateral deterrent relationships.
- For multiparty nuclear stability, all nuclear powers should have stable bilateral nuclear deterrent relationships.
- Discussing this issue is helpful for dealing with nuclear issues (i.e., DPRK or Iran).
- Nuclear proliferation leads to greater instability and raises the chances of miscalculation and unintended reaction.

U.S.

- In a multiparty nuclear world, diadic nuclear relationships bleed into others, the risk of transfer to terrorist organizations increase, and the potential for “spill-over” effects (Pakistan-India-China and DPRK-US-China) on arms race and crisis stability increase.
- Example of unintended consequences: US homeland missile defense is directed against Iranian and North Korean ICBMs (deterrence by denial), but has an effect on the judgments and assessments of Russia and China about their nuclear weapons calculations.
- What if a nuclear state (DPRK) uses nuclear weapons on a non-nuclear state (ROK)? Or Israel?
- Concern that a nuclear power collapses (Pakistan, DPRK) – what happens to their nuclear weapons?

PRC

- Strategic stability has two definitions:
 - Crisis Stability: all bilateral - no historical evidence of multiparty nuclear crisis. Even with multi-party conflicts, they break down to two sides.
 - Arms Race Stability: As US and Russia reduce nuclear stockpiles, should China likewise limit nuclear development?
- It is best to have 5 countries with nuclear weapons.
- It is important that P5 have stable relations.
- As P5 have stable relationships, smaller conflicts with non-P5 nuclear powers can be controlled. International community has not controlled India nuclear development, and Pakistan reacted. 6PT would have controlled it.
- Strategic stability is not limited to nuclear forces – space, cyber, Taiwan, etc.

Appendix B

Breakout Group 2 Definitions

Non-proliferation vs. Counterproliferation

- Terms originate as US terms, originated under Clinton, but emphasized in Bush Admin as a more muscular variant
- Lots of overlap; grey areas between
- US: NP = legal, diplomatic regimes; CP = military, economic pressure
 - CP implies a degree of rollback, more kinetic, active measures but it is not exclusively kinetic, but does involve putting pressure and taking active steps
 - CP is a subset of the broader NP effort, not free-standing
 - US emphasizes CP is consistent with international law
 - And necessary for enforcement of anti-proliferation norms
 - US views CP as a very broad based effort, across “whole of government”

Chinese views on NP v CP

- China has same perception of the concepts, imported from US (after delay)
 - CP is what you do when proliferation has occurred, has military connotations
 - NP has more international legitimacy, affiliation with comprehensive int’l agreements such as NPT
 - Multilateral usually goes with NP, unilateral with CP, but not strict separation
 - PSI an exception
- China generally views CP as less legitimate and at times less useful
 - Would prefer to address root causes
- Indeed, historically even NP had negative connotation as it is inherently discriminatory

Credibility of Deterrent Posture and Declaratory Policies

US: Credibility of deterrent posture depends on capability and will

- Capability to conduct strikes
- Will to do so even at risk to yourself
- Proportionality, rationality of options becomes crucial
 - Especially important as opponent develops second strike capabilities
 - Proportional in a broader sense of norms (from where?)

Credibility II

PRC: Credibility has similar structure, but different emphases

- Force structure, posture is important
- Will is crucial
 - Stakes are always high for China b/c NW are only for homeland deterrence
- Proportionality far less salient than in US conception
 - Just beginning to discuss this concept internally
- Basic point is simply for opponent to have uncertainty he can first strike PRC and to ensure penetration of weapons to attack “most important” targets, whatever they may be
 - “One is enough”
 - Or certainty that one would get through
 - Key centers...

Credibility III: Declaratory

For PRC, “declaratory policy” is a troubling term

- Suggests there is “another [secret] policy”

PRC: Consistency of China’s policy is important for credibility

- US is seen as changeable [so when to trust you]
 - US disagrees

Capability and Credibility

Weak powers rely on willpower and stakes

- For China, stakes inherently high

Strong powers with lots of capabilities can rely on those to manipulate forces, deployments to enhance credibility (rather than relying on will)

- And China can’t today...
- Might this change in the future

PRC – nuclear weapons will be used for second-strike, but not to win wars

- Must be seen to be willing to use NW, but only for second strike
- US has different force posture, so focused on warfighting

Security Dilemma

Academic Term

- Situation in which one state takes steps to secure itself which prompts other state to take corresponding steps to secure *itself*, leaving both states less secure
 - Perceptual variants; offense-defense matters
 -

Chinese do understand the academic term in similar terms, but generally, a much broader conception of the term in Chinese than in English

- Dilemma just means difficult situation, doesn't have the connotation of difficult choice between options
- Other terms perhaps more appropriate (*anquan kunjing*; *anquan liangnan*)

Security Dilemma II

The broader conception might include:

- Rising China leads to dilemmas (for US, others?)
 - More generally, asymmetry precludes Sec Dilemma?
- Is security dilemma logic relevant to non-traditional security challenges

Appendix C

About the Authors

M. Elaine Bunn is a Distinguished Research Fellow in the Center for Strategic Research at National Defense University's Institute for National Strategic Studies, where she heads a project on future strategic concepts. Before joining INSS in 2000, she was a senior executive in the Office of the Secretary of Defense (OSD), where she worked for 20 years in international security policy. Bunn, a 1988 graduate of the National War College, received an MA in International Security from Johns Hopkins School of Advanced International Studies in 1980. She was a Fulbright Scholar at the Université de Neuchâtel, Switzerland in 1974-75, after graduating from the University of Georgia (BA).

Lewis A. Dunn is a Senior Vice President of Science Applications International Corporation. At SAIC, he has led studies and supported US policymakers on a broad range of non-proliferation, nuclear arms control, and nuclear security issues. Dr. Dunn served as Assistant Director of the US Arms Control and Disarmament Agency from 1983-1987 (appointed by President Reagan and confirmed by the US Senate with the rank of Assistant Secretary) and as Ambassador to the 1985 Nuclear Non-Proliferation Treaty Review Conference as well as Ambassador to the 1987 United Nations Peaceful Uses of Nuclear Energy Conference. He has a PhD in Political Science from the University of Chicago.

Li Bin is Professor, Institute of International Studies, Tsinghua University.

Sun Haiyang is Professor, Second Artillery Commanding College

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

Appendix D

Sixth China-US Strategic Dialogue on Strategic Nuclear Dynamics
A CFISS-Pacific Forum CSIS Workshop
November 10-11, 2011 – Beijing, China

CONFERENCE AGENDA

Thursday, November 10

- 9:00-9:15AM OPENING REMARKS
Chinese side: Secretary-General Chen Zhiya
US Side: Adm. Dennis Blair
- 9:15-10:45AM **SESSION 1: Survey of Strategic Nuclear and Non-Proliferation Environment**
Moderator: Zhu Chenghu
Speakers: US Side: Michael Glosny
Chinese Side: Li Bin
- Discussion
- 10:45-11:00AM Break
- 11:00-12:30PM **SESSION 2: Developments in US and Chinese Strategic Doctrine and Policies**
Moderator: US Side: Linton Brooks
Speakers: Chinese Side: Sun Haiyang
US Side: Elaine Bunn
- Discussion
- 12:30PM Lunch
- Afternoon**
- 2:00-3:15PM **SESSION 3: The Strategic Impact of Developments in the Sphere of Non-Nuclear Weapons**
Moderator: Wu Jun
Speakers: US Side: Dean Wilkening
Chinese Side: Qiu Yong
- Discussion
- 3:15-3:30PM Break

3:30-5:00pm Discussion

5:30pm Dinner

Friday, November 11

Morning

9:00-10:30AM **SESSION 4: Break-out Session: Discussion of terms/definitions**

The plenary group splits into two breakout groups. Each panel will be assigned four terms to define.

Breakout Group One (Venue: Ballroom Salon C)

Chair: Chinese – Zhang Tuosheng

Breakout Group Two (Venue: Meeting Room 6)

Chair: US – Christopher Twomey

10:30-10:45AM Break

10:45-12:00pm Discussion

12:00pm Lunch

Afternoon

1:30-2:45PM **SESSION 5: Report from Breakout Sessions**

Speakers: Zhang Tuosheng
Christopher Twomey

2:45-3:00PM Break

3:00-4:30PM **SESSION 6: Strengthening Sino-American Cooperation in the Area of Strategic Security and Stability**

Moderator: US Side: Ralph Cossa
Speakers: Chinese Side: Yao Yunzhu
US Side: Lewis Dunn

Discussion

4:30-4:50PM **CLOSING REMARKS**

US Side: Adm. Dennis Blair
Chinese Side: Secretary-General Chen Zhiya

5:30PM Dinner

Appendix E

Participant List

Chinese Participants

Hu Side

Academician, Former President, China Academy of Engineering Physics

Chen Zhiya

Secretary-General, China Foundation for International & Strategic Studies

Chen Zhou

Maj.Gen., Research Fellow, Academy of Military Science of PLA

Fan Jishe

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

Guo Xiaobing

Associate Researcher, Chinese Institutes of Contemporary International Relations

Hu Yumin

Research Fellow, China Institute for International and Strategic Studies

Li Bin

Professor, Institute of International Studies, Tsinghua University

Li Hong

Secretary-General, China Association of Arms Control and Disarmament

Lu Dehong

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

Qiu Yong

Senior Researcher, China Academy of Engineering Physics

Sun Haiyang

Professor, Second Artillery Commanding College

Sun Xiangli

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

Teng Jianqun

Senior Researcher, Department of International Strategic Studies, China Institute of International Studies

Wu Jun

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

Xu Weidi

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

Yang Mingjie

Vice President, Chinese Institutes of Contemporary International Relations

Yao Yunzhu

Maj. Gen. Senior Research Fellow, Department of World Military Studies, Academy of Military Science of PLA

Zhang Tuosheng

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

Zhu Chenghu

Major General, Senior Researcher, National Defense University

One more participant from Second Artillery and officials from Foreign Ministry and Defense Ministry are not decided yet.

US Participants

Mr. Steven Angel is an advisor to the Defense Attaché at the US Embassy, Beijing, China.

Mr. Brett Blackshaw joined the Regional Unit of Embassy Beijing's Political Section in August, 2011, after two years studying Mandarin.

Adm. Dennis Blair 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.

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

Ms. Jennifer Bradley is an analyst for the National Institute for Public Policy. She currently supports United States Strategic Command Plans and Policy Directorate in Omaha, Nebraska.

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.

Ms. 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 a Fellow with the Center for a New American Security (CNAS), where he directs the Asia-Pacific Security Program and several defense strategy and planning projects.

Dr. David B. Dorman, a member of the United States Government Senior Executive Service, has been China Senior Advisor to the United States Pacific Command (PACOM) since August 2007 and currently serves as Director of the PACOM China Strategic Focus Group.

Dr. Lewis A. Dunn is a Senior Vice President of Science Applications International Corporation.

Mr. William Flens is a First Secretary in the Political Affairs Section at the US Embassy in Beijing.

Mr. Michael Glosny joined the Department of National Security Affairs as an Instructor in July 2010. He is also an Adjunct Senior Research Fellow at the Institute for National Strategic Studies (INSS) at the National Defense University in Washington DC.

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

Mr. Brad Glosserman is executive director at Pacific Forum CSIS and co-editor of *Comparative Connections*.

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. Matt Pottinger is a WSD-Handa Fellow with the Pacific Forum CSIS. Matt served five years as a US Marine, completing three combat deployments to Iraq and Afghanistan.

Mr. Erik Quam is a Foreign Affairs Officer on the East Asia Team in the State Department's Bureau of International Security and Nonproliferation, Regional Affairs Office.

Dr. Lora Saalman is a Beijing-based associate in the Nuclear Policy Program at the Carnegie Endowment.

Mr. Ronald C. Shepherd is currently the senior US DoD civilian and Senior Advisor to the Defense Attaché at the US Embassy, Beijing, China.

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 A. Taylor is the Director of the Office of Strategic Affairs, Bureau of Arms Control, Verification and Compliance.

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.

Mr. 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.