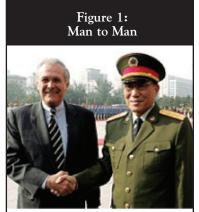
The Debate Over China's Nuclear Modernization

China, like the other nuclear weapon states, is modernizing, upgrading and improving its nuclear forces. The debate about this modernization has been largely one-sided, with the U.S. government offering a steady refrain that it indicates aggressive intentions, sprinkled with selective highlights of what those developments are. Outside cheerleaders from the rightwing media and conservative think tanks chime in with fervid predictions about the future threat and what it means. The Chinese government has not directly countered this campaign. Rather, it has retreated into its own world of state secrecy, concealing the scale, scope and purpose of its military modernization, and finger-pointed at the United

States. Over the past decade, the debate has centered on the following claims about Chinese nuclear forces:

- China is modernizing its nuclear forces.
- The number of warheads targeted primarily against the U.S. mainland will increase "several-fold" in the next decade.
- Three new solid-fuel ballistic missiles under development will be mobile, harder to locate, more accurate, and have greater range.
- Some missiles may be equipped with multiple warheads (the U.S. government does not believe the new missiles will have this capability but an older missile may be equipped with them).



U.S. Secretary of Defense Donald Rumsfeld shakes hands with Chinese Defense Minister Gao Gangchuang in Beijing in October 2005. The two officials are responsible for nuclear strike plans that would kill tens of millions of civilians in China and the United States if carried out.

Image: DOD

- A new strategic submarine is under development with a new ballistic missile. The submarine will be quieter and more reliable that the first generation SSBN (Xia) and may be able to target some parts of the United States.
- Land-attack cruise missiles are under development, some of which may have nuclear capability.

China is clearly modernizing it nuclear forces (it is also modernizing its much larger conventional forces). Modernization does not occur in a vacuum, however, but within political and military relationships with other major powers. Context and explication is needed. Moreover, important questions need to be addressed without resorting to worst-case thinking: How fast are the programs proceeding? Are they changing in qualitative ways? What will be the eventual size of the forces? How is the modernization related to China's emerging status as a major regional power? In what ways is Chinese nuclear modernization influenced by past and present U.S. military posturing against China? To what extent do U.S. military programs and operations trigger Chinese moves that are not in the interest of the United States or its allies? Is capability-based military planning counterproductive and out of sync with long-term aspirations for a non-contentious relationship with China?

Whatever else one might say about Chinese nuclear efforts, they clearly are not "crash" programs. The characteristic feature of Chinese military modernization has been how long it has taken them to research, design, develop, deploy and operate a new system. The Chinese have been engaged for years and years in developing new nuclear systems, but compared with the United States and Russia their efforts have been modest.

A central question that must be asked with regard to China has to do with its intentions. Admittedly, these are difficult to infer. The Chinese government is notoriously secretive about its nuclear weapons programs, and in the minds of some U.S. government officials, suspicion abounds.

As Secretary of Defense Donald Rumsfeld said in a speech about the Asian security situation, "China appears to be expanding its missile forces, allowing them to reach targets in many areas of the world, not just the Pacific region, while expanding its missile capabilities within this region. China is also improving its ability to project power, and developing advanced systems of military technology." With words that must have caused bewilderment in Beijing, Rumsfeld went on to say, "since no nation threatens China, one must wonder: Why this growing investment? Why these continuing large and expanding arms purchases? Why these continuing robust deployments?"27

Figure 2: Wondering About Chinese Motivations:	
Question:	Answers:
"[S]ince no nation threatens China, one must wonder: Why this growing investment? Why these continuing large and expanding arms purchases? Why these continuing robust deployments?" **Donald H. Rumsfeld, Secretary of Defense, June 4, 2005**	"China feels [its retaliatory nuclear] deterrent is at risk over the next decade because of U.S. targeting capabilities, missile accuracy, and potential ballistic missile defenses. Beijing is, therefore, modernizing and expanding its missile force to restore its deterrent value." Defense Intelligence Agency, July 1999
	"China became concerned about the survivability of its silos when the U.S. deployed the Trident II-D5 because you could hit those silos." Robert D. Walpole, Central Intelligence Agency, March 11, 2002

As the official who resides over a large U.S. military reorganization partly directed toward China, Rumsfeld's question seems disingenuous not least because estimates made by the U.S. intelligence community plainly have stated that China's nuclear modernization is driven – at least in part – by U.S. actions and deployments (see Figure 2).28 A RAND Corporation report funded by the Pentagon and published in 2005 provides additional details about the PLA's threat perceptions and its assessment of the international security environment:

The most important threats for the PLA currently include:

- U.S. military and foreign policies (especially those related to Taiwan)
- Japan's reemergence as a regional power
- India's growing military power and regional influence
- Border and coastal defense
- Defending territorial waters and airspace.²⁹

Another important factor in China's nuclear modernization, according to the U.S. intelligence community and the Pentagon, is the U.S. ballistic missile defense system. Although Under Secretary of Defense for Policy Douglas J. Feith played down the impact of a ballistic missile defense system on China nuclear modernization by stating before the Senate Foreign Relations Committee in July 2001 that China "will continue this modernization whether or not we build missile defenses,"30 the office of the secretary of defense knew very well that that characterization was both disingenuous and misleading. In the report it delivered to Congress the following year, the DOD said it anticipated China would take "measures to improve its ability to defeat the defense system in order to preserve its strategic deterrent. The measures likely will include improved penetration packages for its ICBMs, an increase in the number of deployed ICBMs, and perhaps development of a multiple warhead system for an ICBM, most likely for the CSS-4."31

Moreover, in July 2005, Air Force Lt. Gen. Henry A. Obering III, the director of the Missile Defense Agency responsible for developing U.S. missile defense systems, plainly stated that U.S. missile defense planning should take China into consideration. "What... we have to do is, in our development program, be able to address the Chinese capabilities, because that's prudent," Obering said.³²

This brief background helps provide context and may explain why China is doing some of the things it is doing. Rumsfeld acknowledges some of this in his own 2004 report on Chinese military forces, where five pages are dedicated to describing China's many external national security concerns.³³ Although the United States is not likely to attack China tomorrow, Beijing must base its military planning on the capabilities that potential adversaries have, not on their statements, the same standard that Rumsfeld insists the U.S. military must follow in its planning.

That planning has, in turn, prompted the White House to warn Beijing that its non-transparent expansion of military capabilities is inherently contradictory to peace in East Asia because it creates mistrust. The Bush administration's policy, as expressed in the National Security Strategy, therefore is to "encourage China to make the right strategic choices for its people, while we hedge against other possibilities."34

The Office of the Secretary of Defense

Hedging means planning for the worst, however, and the offensive U.S. posture this strategy spawns is what Beijing sees as the real expression of U.S. intentions toward China. Prudent military planning on both sides therefore feeds a vicious cycle that drives the very posture it is said to hedge against. On the U.S. side, the guidance that directs this planning primarily comes from the Office of the Secretary of Defense (OSD). One example of this is the 2001 Nuclear Posture Review (NPR), part of which was leaked to the public, which concluded:

Due to the combination of China's still developing strategic objectives and its ongoing modernization of its nuclear and non nuclear forces, China is a country that could be involved in an immediate or potential contingency.35

The "immediate" contingency referred to is a potential conflict over Taiwan, which is what most analysts fear could trigger a U.S.- Chinese military clash. As the NPR was nearing completion, the Pentagon wrote up a new war plan (Operations Plan (OPLAN) 5077) for defending Taiwan against a Chinese attack. Between 2003 and 2005, the Pentagon fine-tuned OPLAN 5077 to include maritime interception operations in the Taiwan Straits, attacks on targets on the Chinese mainland, information warfare and non-kinetic options, and even the potential use of U.S. nuclear weapons.³⁶ In February 2006, for the first time OSD elevated China to the top of the list (above Russia) of large-scale military threats facing the United States. According to the QDR:

Of the major and emerging powers, China has the greatest potential to compete militarily with the United States and field disruptive military technologies that could over time offset traditional U.S. military advantages absent U.S. counter strategies.³⁷

The QDR noted that "China continues to invest heavily in its military, particularly in its strategic arsenal and capabilities designed to improve its ability to project power beyond its borders." This "military modernization has accelerated since the mid-to-late 1990s," the QDR stated.³⁸ At the same time that the Office of the Secretary of Defense under Donald Rumsfeld has curtailed the information provided in the Annual Report to the President and the Congress to an absolute minimum,39 the QDR complained (justifiably) that secrecy "envelopes most aspects of Chinese security affairs," and that the "outside world has little knowledge of Chinese motivations and decision-making or of key capabilities supporting its military modernization."40

An important source of information about what China is doing is a series of reports to Congress by the Pentagon that are required by law. The FY2000 National Defense Authorization Act (Section 1202) directed the secretary of defense to submit a report "... on the current and future military strategy of the People's Republic of China. The report shall address the current and probable future course of military-technological development on the People's Liberation Army and the tenets and probable development of Chinese grand strategy, security strategy, and military strategy, and of the military organizations and operational concepts, through the next 20 years."41

Known as the Military Power of the People's Republic of China, the reports resemble the Reagan administration's Soviet Military Power series, albeit in a much less glossy or dramatic format, and have become a principal source to follow Chinese military developments and understand Pentagon thinking.

The OSD describes the Military Power of the People's Republic of China as "a product of intensive interagency coordination" with the State Department, the National Security Council and the intelligence community. The OSD says the report describes "the military component of China's rise based on the best available information," and presents "our findings in a factual, descriptive, analytical, and detailed way. We are not attempting to prove or disprove a China 'threat.' Our goal is to let the facts speak for themselves, and to contribute useful information to the public discussion."42

The tone of the reports, however, has changed considerably during the current Bush administration. The 1997 report during the Clinton era described significant developments in China's modernization, but made a cautious overall projection:

Evidence suggests ... that China will develop her military strength at a measured pace. A more rapid or large-scale military build-up is seen by the Chinese leadership as unnecessary and detrimental to continued economic growth.... China's nuclear strategy probably will continue to emphasize the development of a nuclear retaliatory capability as a deterrent against the potential use of nuclear weapons by existing nuclear weapons states. Ongoing ballistic missile modernization encompasses a shift from liquid to solid fuel missiles.43

The 2005 report, in contrast, portrayed a more dynamic modernization of "survivable" forces with a "counterstrike" capability against a wide range of specific countries:

China is qualitatively and quantitatively improving its long-range nuclear missile force. China is pursuing strategic forces modernization to provide a credible, survivable nuclear deterrent and counterstrike capability in response to its perception of an increasingly complex nuclear security environment. The PLA Second Artillery is fielding mobile, more survivable missiles capable of targeting the United States, Japan, India, Russia, and other targets in Asia and the rest of the world.44

Estimates From the Intelligence Community

A second major source of U.S. government estimates about Chinese nuclear forces comes from the director of central intelligence's annual briefings to Congress and reports published by the Central Intelligence Agency (CIA) and the Defense Intelligence Agency (DIA). In the aftermath of the reorganization of the intelligence community, the overall intelligence responsibility now falls to the director of national intelligence.

Director of national intelligence, John D. Negroponte, warned of China's military ambitions before the Senate Select Committee on Intelligence on February 2, 2006. "China's military is vigorously pursuing a modernization program: a full suite of modern weapons and hardware for a large proportion of its overall force structure; designs for a more effective operational doctrine at the tactical and theater level; training reforms; and wide-ranging improvements in logistics, administration, financial management, mobilization, and other critical support functions." 45 China's increased wealth has "fueled a military modernization program that has steadily increased Beijing's force projection capabilities," and the country "may become a peer competitor to the United States at some point," Negroponte warned. (Emphasis added.) The "rise of emerging powers like China" is one of the threats that "demand heightened vigilance from our intelligence community."46

Some of the most important elements of the U.S. claims about Chinese nuclear weapons modernizations come from the CIA's National Intelligence Estimates (NIEs), which occasionally are published in unclassified versions. The most important of these is the Foreign Missile Developments and the Ballistic Missile Threat Through 2015, published in December 2001, which contained what has since become the standard projection for the future size of Chinese nuclear forces: The intelligence community projects that Chinese ballistic missile forces will increase several-fold by 2015, but Beijing's future ICBM force deployed primarily against the United States – which will number around 75 to 100 warheads - will remain considerably smaller and less capable than the strategic missile forces of Russia and the United States.⁴⁷

The director of the Defense Intelligence Agency also presents a briefing to Congress titled Current and Projected National Security Threats to the United States. On February 28, 2006, Lt. Gen. Michael D. Maples presented DIA's estimates to the Senate Armed Services Committee. About China he said:

One of China's top military priorities is to strengthen and modernize its strategic nuclear deterrent force by increasing its size, accuracy and survivability. It is likely the number of deployed Chinese nuclear-armed theater and strategic systems will increase in the next several years. China currently has more than 100 nuclear warheads. We believe China has sufficient fissile material to support this growth.⁴⁸

The estimate of "more than 100 nuclear warheads" and sufficient fissile material for more is consistent (although less detailed) with previous statements made by the intelligence community over the past decade. DIA's briefing also echoed DOD's assessment of a more dynamic emerging Chinese nuclear doctrine:

China continues to expand and modernize its ballistic missile forces to increase their survivability and warfighting capabilities, enhance their coercion and deterrence value and overcome ballistic missile defenses.49

The intelligence that forms the basis of these claims is not normally disclosed but occasionally finds its way into the public domain via leaks. Excerpts from a DIA document titled A Primer on the Future Threat (July 1999) and stamped "SECRET NOFORN" were reproduced as an appendix in a book written by a Washington Times reporter, Rowan Scarborough. 50 The Washington Times in general, and Scarborough's colleague Bill Gertz in particular, are notorious for publishing leaked classified information, funneled to them by intelligence officers who apparently feel that not enough is being done to address this "threat" or that. Unlike some of the more excitable public statements, the classified DIA versions often are muted. The 1999 DIA report, for example, stated that China is modernizing but is doing so because it feels its deterrent is at risk "because of U.S. targeting capabilities, missile accuracy, and potential missile defenses." Survivability will improve through mobility and adding penetration aids, or possibly multiple warheads, will increase its ability to penetrate missile defenses. These are all logical responses to perceived threats on the Chinese part though U.S. public intelligence briefings never highlight and only rarely mention such motivations.

Congress and the 1999 Cox Report

Hearings held by congressional committees provide an important – although sometimes one-sided - record of government statements and estimates about the status of Chinese nuclear forces. In addition to hearings, the committees occasionally will conduct specific studies that provide more in-depth analysis and information.

One congressional study that has left an enduring mark on the debate over China's nuclear modernization was the so-called Cox report, named for Representative Christopher Cox (R-Calif.) who chaired the House Policy Committee. Cox led the work of the Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China, which was tasked to investigate allegations that China had stolen nuclear weapons secrets and other knowledge from the United States to improve its own military forces.⁵¹ A series of hearings culminated in the Cox report in January 1999, a three volume opus that caused quite a commotion. Five basic allegations were made in the Cox report about nuclear weapons and China:

- 1. China has stolen design information on the United States' seven most advanced thermonuclear weapons.
- 2. The stolen secrets have enabled China to design, develop and successfully test modern strategic nuclear weapons sooner than would otherwise have been possible.
- 3. China's next generation of smaller thermonuclear weapons, currently under development, will use elements of stolen U.S. design information and be "on par with our own."

- 4. Small warheads based on information stolen from the United States could be ready for deployment by 2002 and will make it possible for China to develop and deploy multiple reentry vehicles on its next general missiles.
- 5. The theft is the fruit of several decades worth of pervasive and successful penetration of U.S. nuclear weapon laboratories, an activity that likely continues today.

The report also used what later turned out to be incorrect claims about the capability of China's new missiles as the basis for far-reaching predictions about Chinese nuclear policy and intentions. One example concerned the mobile missile force. Cox told the Washington Times after China test-launched the DF-31 that it "will give the PRC a first-strike capability against every country in the region except Russia, while limiting U.S. options, were we to intervene against aggression."52

Another exaggerated claim was that the JL-2 missile under development for a new ballistic missile submarine would have a range of 7,400 miles (nearly 12,000 km) and be capable of striking targets throughout the United States. Based on this information, the authors of the Cox report speculated about developments in China's nuclear policy:

The deployment of the PRC's new nuclear-powered ballistic missile submarine could also lead to a shift in PRC doctrine, as these submarines will likely be deployed with their nuclear warheads already mated to the missiles. The long range of the JL-2 submarine-launched intercontinental ballistic missile will allow the PRC to conduct patrols close to its base, and under the protective cover of the PLA Navy and Air Force. This would provide the PLA submarine fleet with a more survivable nuclear force.

The fact that these new nuclear weapons will be far more survivable than the PRC's current silo-based forces could signal a major shift in the PRC's current nuclear strategy and doctrine. 53 (Emphasis added.)

Apart from the fact that the Cox report elsewhere listed the JL-2 range as only 4,900 miles (about 8,000 km),⁵⁴ the number normally used by the U.S. intelligence community, such a nuclear policy shift would require two things: first, that China actually begins to deploy its SSBNs on deterrent patrols (something it has never done; see submarine section below); and second, that China changes its practice of not deploying nuclear weapons "outside its own territories."55

Given the highly classified nature of the issue investigated by the Cox report, especially those related to nuclear weapons, the main allegations and even the methodology are impossible to verify. Moreover, the public Cox report was published as a redacted version of a larger secret report, and therefore a significant amount of information that may or may not substantiate the allegations and conclusions was deleted.

Despite its strong and specific allegations and the spying that China – like all major powers – may be conducting, the Cox report came across as a politically motivated effort to paint China as an aggressive menace.

The serious allegations triggered a CIA-lead intelligence community damage assessment under the leadership of Admiral David Jeremiah (U.S. Navy, Ret.) that in April 1999 undercut the Cox report's central claim that stolen information had been used to develop or modernize Chinese missiles or warheads. "To date, the aggressive Chinese collection effort has not resulted in any apparent modernization of their deployed strategic force or any new nuclear weapons deployment," Jeremiah's report concluded.⁵⁶

Others criticized the Cox report for hyping the Chinese threat while ignoring other relevant information. The "dirty little secret" of the report, wrote Jonathan D. Pollack, a senior advisor for international policy at the RAND Corporation, was that it completely ignored that "successive Republican and Democratic administrations" from the very onset of the Sino-U.S. relationship in the early 1970s, "believed that the enhancement of Chinese power – as a counterbalance to Soviet power - was in the national security interest of the United States, and persistently sought to advance this goal in the ensuing two decades.... The Chinese may well have exploited these opportunities by all available means, but they were walking through a door that the U.S. government had long since decided to open."57

Richard L. Garwin, a former U.S. nuclear weapons designer and long-term government advisor, challenged the report's central claim that theft of specific U.S. nuclear warhead secrets had aided China's development of small nuclear warheads for its new generation of ballistic missiles. In fact, "the alleged acquisition by the Chinese of the particular nuclear weapon information in regard to the W-88 and W-70 would not appear to directly impair U.S. security," Garwin stated. "To build nuclear weapons on the basis of this information, China would need to make massive investments and acquire a capability not particularly helpful to "them.""58

In addition, a team of scholars and physicists from Harvard University, Stanford University and Lawrence Livermore National Laboratory further undercut the Cox report's conclusions and methodology. Their review was published by the Stanford University Center for International Security and Cooperation (CISAC) in December 1999:

A problem with the Cox Commission report is that the authors provide little context for their allegations, leaving the reader with no way to judge their importance, aside from whether the allegations are true. Thus it is never made clear how much the Chinese learned on their own and from publicly available information. The report makes broad accusations against the Chinese with little or no support or comparison with other states' practices. The impact of losses is either overstated or not stated.... No information is given that traces China's nuclear weapons to U.S. sources. There is no way to judge whether a "next generation of thermonuclear weapons" would be based on such theft or earlier Chinese knowledge. It is extremely unlikely that, absent nuclear testing, theft of information could lead to any such new generation. (Emphasis added.)

On Chinese nuclear doctrine issues, the report is exceedingly unclear about the actual state of development in Chinese nuclear weapons capabilities.... In addition, the report mischaracterizes Chinese nuclear doctrine, claiming that its announced doctrine is one of limited deterrence. In fact, China has no announced doctrine, and the few comments that Chinese leaders have made over the years indicate an operational doctrine that to this point is more akin to a minimum deterrence doctrine than a limited deterrence doctrine.... It also misstates China's position on no first use of nuclear weapons and Taiwan. In short, the discussion of Chinese politics, economic modernization, and nuclear doctrine lacks scholarly rigor, and exhibits too many examples of sloppy research, factual errors, and weakly justified inferences.⁵⁹

The CISAC assessment included individual analysis by each of the four co-authors that refutes or questions all the five major conclusions of the Cox report. The CISAC assessment showed that the authors of the Cox report did not understand Chinese decision-making. "The Cox report description of how actual policy is made in China is surprisingly inaccurate," the CISAC report concluded.60

These problems were ignored by some news media that continued to report the inaccuracies even after the central allegations of the Cox report had been refuted. The new Julang-2 SLBM to go on the next-generation ballistic missile submarine, the Washington Times reported in December 1999, "is expected by Pentagon officials to carry China's newest small warhead that is believed to be copied from the U.S. W-88 warhead."61 (Emphasis added.)

Despite its serious shortcomings, the Cox report managed to deepen the hostile perception that China cannot be trusted and that the United States needs to adjust military planning against China accordingly.⁶² To that end, the timing was impeccable. As we illustrate (Chapter III: China in U.S. Nuclear War Planning), the allegations about Chinese nuclear spying surfaced at a time when U.S. nuclear planners were busy trying to convince the Clinton administration to reinstate China at the center of U.S. nuclear planning. After President Clinton was informed of the suspected Chinese spying, the planners had their way in November 1997 when the new Presidential Decision Directive (PDD-60) ordered the military to broaden the list of Chinese facilities to be held a risk by U.S. nuclear forces.

Traditional congressional committee hearings are another source of information about China. Often the information presented depends upon who the committee chairman decides to invite to give testimony. By favoring witnesses they agree with, the unfortunate result may be that important foreign policy and military issues do not get a balanced hearing. One recent example of this is the House Armed Services Committee's hearing on China's military power that was held one week after the Pentagon published its 2005 report on that issue. Rather than inviting witnesses who might critique the DOD report, committee chairman Duncan Hunter (R-Calif.) invited three witnesses who were either in the government or at conservative think tanks that were unlikely to disagree with the Pentagon (Figure 3).

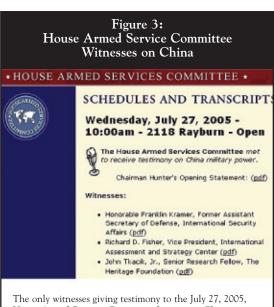
While the congressional hearings often fail to provide balanced and critical reviews of the Pentagon's planning and policies against China, they are venues for official military and civilian statements. The statements sometimes offer surprising admissions that are at odds with the main thrust of warnings about the Chinese threat. One example is the testimony by commander of U.S. Pacific Command, Admiral William J. Fallon, before the Senate Armed Services Committee in March 2006. He said that although China's military modernization concerns him, China predominantly has a "legacy" force that is "not particularly well equipped" and that the numbers "are not yet anywhere near the kinds of numbers that I believe truly can threaten this country."63

The example reveals that opinions about China inside the Pentagon are not unanimous or that they cannot change. More moderate language surrounded the July 2006 of Gen Guo Boxiong, vice-chairman of the Central Military Commission. He spent a week in the United States visiting an aircraft carrier, West Point, the Pentagon and the National Defense University. Both countries seemed interested in improving confident-building measures, including more frequent contacts between senior military leaders, exchanges of personnel

between the respective military academies, reciprocal visits of mid-level officers, and consultations about maritime safety. humanitarian rescue and environmental protection.⁶⁴

Congressional Research Service

A more balanced contribution to the debate over U.S.-Chinese nuclear relations comes from the Library of Congress' Congressional Research Service (CRS), which publishes periodically informative reports about various aspects of U.S.-



House Armed Services Committee hearing on Chinese military power were either in government or conservative think tanks with views close to or more hawkish than the Pentagon. No "independent" testimonies were invited to present a critical review of the Pentagon's annual report on China's military forces.

Chinese relations. 65 One of these reports reviewed the debate over China's alleged acquisition of U.S. nuclear weapons information. 66 Another, published in August 2006, discussed U.S. conventional forces and nuclear deterrence, and how they relate to China. Specifically, the report examined three potential scenarios in which U.S. conventional and nuclear forces might be involved in a war with China:

- 1. Chinese Special Operations Forces infiltration of Taiwan
- 2. Maritime conflict between China and Taiwan.
- 3. Full-scale, combined Chinese attack on Taiwan
- 4. Pre-emptive attack by Taiwan on Chinese forces⁶⁷

U.S. deterrence objectives in these illustrative scenarios, CRS estimated, may be to deploy nuclear and conventional weapons that 1) are more capable than the Chinese forces, 2) are postured in a way that makes their use appear credible, and 3) cast doubt on whether China would be able to satisfy its military or political objectives at an acceptable cost.⁶⁸

Yet the CRS report painted an ambivalent role for nuclear weapons and in several places directly challenged claims about their contribution to U.S.-Chinese relations. In an apparent rebuke of those who suggest that nuclear weapons have prevented an open, armed conflict between China and the United States in the past, the CRS report stated that this is a "too narrow" conclusion. ⁶⁹ In three of the four scenarios examined, CRS concluded that nuclear weapons may have no role at all or that their contribution is dubious. Even in the type of scenario that is most frequently cited as most likely to escalate to use of nuclear weapons (a Chinese attack on Taiwan), the CRS report concluded that "it is unlikely that nuclear forces would either exacerbate or calm the crisis." Although superior U.S. nuclear forces clearly are capable of punishing China for attacking Taiwan, CRS argued, China's ability to respond with a limited nuclear attack on the United States "could be sufficient to deter the United States from threatening a nuclear response to China's conventional attack."70

This conclusion is supported by our simulations of the effects of a potential Chinese nuclear attack on the continental United States (see Chapter IV), which vividly illustrate the considerable destruction that even a few warheads from Chinese long-range missiles could cause in the United States. The United States civilian and military leaders would have to be prepared to give the impression that they are willing to accept very high numbers of civilian casualties for U.S. deterrence against China to work. It illustrates an inherent dilemma for the U.S. nuclear policy against China: Either develop a very aggressive, capable, prompt and decapitating posture that can ensure near invulnerability, but risks triggering a Chinese build-up; or expect a high level of vulnerability, but with a relaxed posture on each side.

The CRS report also suggested, surprisingly, that China currently does not deploy its long-range nuclear forces in ways that would leave it vulnerable to a first strike. China would not, CRS claimed, "experience pressure to use these weapons before losing them." That is a surprising conclusion given that current Chinese modernization of its long-range ballistic missiles is widely said – including by the U.S. intelligence community – to be motivated by precisely that: fear that the existing missiles are too vulnerable to a first strike.

China's Nuclear Weapons Policy

How China's nuclear policy will evolve in the future, and particularly whether it will maintain a no-first-use policy, is a recurring yet elusive element of the debate. A decade ago some Western analysts suggested that Chinese thinking about nuclear strategy might be moving from a minimum deterrence posture toward limited deterrence, which would mean a more dynamic targeting policy with the potential of using nuclear weapons first. 71 Since then, however, Chinese nuclear policy does not appear to have changed noticeably nor has it affected operational nuclear weapons deployment in any important way.72 Chinese declaratory policy has always been one of "no first use" with a retaliatory minimum deterrent force aimed at countervalue (i.e., population centers) targets with forces maintained on very low alert or no alert at all.

Official Chinese statements continue to ascribe to a no-first-use policy, but leave some confusion about the scope of the policy and its conditions. A 2005 Chinese Foreign Ministry white paper reiterated the pledge by stating that the "Chinese government has solemnly declared that it would not be the first to use such weapons at any time and in any circumstance," and that this policy "will remain unchanged in the future." In addition, the paper reiterated that "China has committed unconditionally not to use or threaten to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones."73

This language is consistent with earlier declarations made by China, including the security assurances statement issued at the Non-Proliferation Treaty (NPT) Review and Extension Conference in April 1995 and the working paper issued to the Conference on Disarmament in August 1981. Interestingly, in the 1995 statement China appears to have avoided the temptation to place conditions on its security assurances by saying that the "commitment naturally complies" to members of the NPT or others that have made similar binding commitments.⁷⁴ Yet the Chinese policy raises several questions.

First, a literal reading of the phrase "in any circumstance" suggests that even if the United States (or Russia) invaded China and threatened the political survival of the country, China would not resort to using nuclear weapons as long as the U.S. refrained from using them. This seems unlikely. China, like the other nuclear powers, probably would resort to the use of nuclear weapons in such an extreme situation where the survival of the nation was a stake.

Second, since China does not consider Taiwan to be an independent "country" or a "state" but a part of China, the stated policy appears not to cover Taiwan. That raises other issues, of course, including whether Chinese leaders would ever use nuclear weapons against their own people.

Third, the "unconditional" pledge not to use nuclear weapon against any non-nuclear weapon states appears to commit China not to use or threaten to use nuclear weapons against U.S. bases that are located on the territories of non-nuclear weapons states including Japan and South Korea. India used to be covered by this pledge, but the Indian government's decision to officially make India a nuclear weapon state means that China's planning against India is no longer constrained – if one believes it ever was – by this part of its security assurances.

Whether or not the policy would constrain China in a war, the declaratory policy in fact does seem to influence China's acquisition and employment policies, with the result that the country keeps its nuclear forces relatively small. A more ambitious strategy would require larger forces as well as much improved command and control and early warning capabilities. But words mean little to U.S. nuclear war planners, who are tasked to plan and deploy forces based on China's actual capabilities (the so-called capability-based planning).

Some Pentagon analysts fear that China's improved next-generation land- and sea-based ballistic missiles (and possibly also cruise missiles) may result in more ambitious and extensive deployment patterns and even some form of counterforce (e.g., opposition nuclear forces) targeting. 75 Increased accuracy brings with it the possibility of more flexible strategies and some U.S. analysts anticipate that China may alter its policy. For example, a 2003 Pentagon report stated: "As China improves its strategic forces, despite Beijing's 'no-first-use' pledge, there are indications that some strategists are reconsidering the conditions under which Beijing would employ theater nuclear weapons against U.S. forces in the region."76

This theme was echoed in a 2005 RAND study prepared for the U.S. Air Force: "Some in China may also be contemplating the shift to a 'limited nuclear deterrent' capability that would allow China to target military sites as part of a damage limitation strategy - as opposed to a nuclear strategy that simply seeks to provide a secure second-strike capability."77 The 2006 DOD annual report significantly expands on this theme by dedicating almost a full page to discussing possible changes to China's employment policy.

"[T]he circle of military and civilian national security professionals discussing the value of China's current 'no first use' nuclear policy is broader than previously assessed," the report states. Scenarios where change could occur, DOD explains, involve cases where the use of force by China involves core interests, such as sovereignty or territorial claims, including Taiwan. In such cases, "Beijing could claim military preemption as a strategically defensive act [and thereby] add ambiguity to the dimension of China's policy of 'no first use' of nuclear weapons."78

According to the report, it appears that "this policy may be under discussion," and it "remains to be seen ... how the introduction of more capable and survivable nuclear systems in greater numbers will shape the terms of this debate or affect Beijing's thinking about its nuclear options in the future."79

In a prepared testimony before the House Armed Services Committee on June 22, 2006, Peter W. Rodman, the assistant secretary of defense for international security affairs, toned down the extent to which that debate may influence Chinese policy, though he concluded that it is still going on:

We see discussions, albeit limited, beneath the surface in China over the future of its nuclear doctrine, including a July 2005 statement by Major General Zhu Chenghu of the People's Liberation Army National Defense University. The Chinese reassured Secretary [Donald] Rumsfeld that China's 'no-first-use' policy remains unchanged and emphasized to me in Beijing earlier this month that there is no debate in China over the policy. We take China at its word on this point. However, the comments suggest Chinese specialists may be exploring internally the implications of China's evolving force structure, and the inherent options that that force structure provides.80

It seems there is no public evidence that China's nuclear policy is evolving significantly beyond its minimum deterrent and no-first-use pledge. The U.S. intelligence community appears to conclude that it is not sure either, but that it is monitoring the nuclear debate very closely. What adds to the confusion is that China does not publish a doctrinal statement equivalent to the U.S. National Military Strategy, but uses what it calls the "National Military Strategic Guidelines for the New Period" as its national military strategy. Just like detailed U.S. military guidance documents, the specific content of the Chinese " guidance" is not publicly known, but the intelligence community says that it includes two primary components: an operational component ("active defense") and an organizational component ("new-period army building"). According to the 2006 DOD report:

The 'active defense' guideline posits a defensive military strategy and asserts that China does not initiate wars or fight wars of aggression, but engages in war only to defend national sovereignty and territorial integrity.... Beijing's definition of an attack against its territory, or what constitutes an initial attack, is too vague to clarify matters to outsiders, however. In cases where Chinese use of force involves core interests, such as sovereignty or territorial claims (including Taiwan), Beijing could claim military preemption as a strategically defensive act. For example, China refers to its intervention in the Korean War (1950-1953) as the War to Resist U.S. Aggression and Aid Korea. Similarly, border incursions and conflicts against India (1962), the Soviet Union (1969), and Vietnam (1979) are referred to in authoritative texts as 'Self-Defense Counter Attacks.' This logic could also add ambiguity to the dimension of China's policy of 'no first use' of nuclear weapons.81

The logic of this hypothesis seems to be that because China considers Taiwan to be a part of China, the no-first-use policy does not apply to a Taiwan scenario. This logic is poor analysis, however, because it ignores the fact that China has deployed theater nuclear weapons against U.S. forces in the region for four decades without changing its no-first-use policy. Besides, the logic ignores the important question of whether China would be willing to risk a much wider nuclear war with the United States over Taiwan. China's extensive deployment of short-range conventional ballistic missiles in the Taiwan region suggests an effort to avoid escalation to nuclear war.

To what extent China's nuclear modernization and U.S. offensive and defensive capabilities will influence the evolution of China's nuclear policy remains to be seen. So far, however, there is little concrete evidence that a change has happened or is underway. Yet it is possible that a change could happen in the future if both countries get further entangled in an adversarial relationship with increasingly capable nuclear forces poised to overcome the other side. The trap of ensuring a credible deterrent is that it may increase insecurity for both countries.