Remarks for the Carnegie Discussion on February 6, 2007

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Let me start with a simple fact: The United States military is not thinking about the likelihood of war with Great Britain.

That was not always the case. Between 1890 and 1939, the War Department and the Navy had plans to fight Great Britain. By 1939, we were allies.

My point is, in assessing potential threats; we make judgments about another nation's military capacity and the intentions of its leaders. The fact that we are wary about China's military growth does not mean that conflict is inevitable.

The course we have taken with China is different from the containment policy toward the Soviet Union. We are heavily involved in trade and political engagement with China. China is not an enemy of the United States and it certainly is not an ally. While China seeks to limit free speech and the spread of democracy, it does not seek to overthrow democratic systems by force. China counters American diplomacy, but is not conducting proxy wars against the United States. China and the United States share interests in open trade, but China frustrates efforts to ensure that Beijing enforces agreed rules. China and the U.S. want a peaceful international environment, but we have very different views on how to treat human beings. We also differ strongly on policies regarding transfers of certain weapons. Finally, we have different approaches to territory and sovereignty.

We do not know China's intentions, but from observing its military capabilities and reading its military doctrine, we know that the PLA is behaving as though it may have to fight the United States.

China is a totalitarian state, to quote from its own constitution, a "People's Democratic Dictatorship." All political power is concentrated in the hands of the Communist Party. Citizens do not freely elect leaders or make public policy choices. PLA leaders do not go in front of a freely elected legislature to justify defense goals, budgets, or weapons needs. A small number of leaders make decisions in secret. Often, the Party takes one stance in public but has different, hidden objectives. Their intentions are not transparent.

In my view, China's military modernization goals are to develop a modern force equipped with advanced weapons capable of securing global interests. They seek to do this in a 20 to 30 year period. In its own region, China's goals are to control the sea and air lines of communication over China and out to about 300 miles. Also, a major goal is to dominate and, if necessary, defeat Taiwan. The PLA is close to these capabilities today. China seeks to deny other countries the capability to operate freely in the Western Pacific. Within two to five years, China can probably accomplish this out to a range of 2,000 miles in one or two geographic areas for periods of up to 48 hours.

I believe that the PLA can impede the military operations of advanced nations like Japan and the United States. Today, China can probably dominate the militaries of other East Asian nations.

China's conventional military capabilities are coupled with a real nuclear threat. China has 20-24 ballistic missiles that can hit the United States with warheads of up to 3 megatons. To give you a frame of reference, a one-megaton warhead on Detroit, Michigan can immediately kill about 2 million people, and in a month, the death rate would be twice as high.

China's mobile missiles and warhead countermeasures create a greater challenge for the United States.

In the area of hypersonic cruise and anti-aircraft missiles, China has advanced capabilities that the U.S. cannot counter. Some of these were bought from Russia, but China has also been successful in reverse-engineering and developing its own missiles. And they are exploring putting them on submarines.

The Attorney General has said that China is the number one intelligence threat we face.

China can probably achieve space control over its territory, as demonstrated by the recent satellite attacks. Some PLA officers argue that China should be able to prevent foreign space vehicles from crossing over and observing China from outer space. That creates strategic instability by undermining warning.

China's submarine warfare capabilities exceed the United States capacity in anti-submarine warfare.

China is working to achieve capabilities to destroy an enemy's situational awareness, ability to use space and the electro-magnetic spectrum, and continuity of command and control.

All of these capabilities target United States military strengths. Therefore, it is prudent to keep our military prepared.

I want to put the concept of national interest into perspective. When I talk about national interest, I mean the government's concern for the "well being of American citizens and enterprises operating outside the United States and beyond the government's jurisdiction." Donald A Nuechterlein, in the 1985 book *America Overcommitted,* placed the long-term national interests of the United States in four basic categories:

- Protecting the American people and defending the homeland of the United States;
- Promoting the economic well being of the country, including international trade and investment;
- Establishing and maintaining a peaceful international environment with a world order that favors American security; and

- Promoting the moral and ideological values that the American people and their elected leaders hold as universally good and worthy of emulation.

I use Nuechterlein because his definitions are standard at institutions like the U.S. Army War College, where Dave Finklestein and I received our advanced military educations. We agree on these matters, although we may disagree on the intensity with which the United States should pursue each of these interests.

Dave and I also agree on how Nuechterlein prioritized the pursuit of these interests. We believe that:

- Survival interests are areas where the very existence of the nation may be in peril;
- Vital interests are areas where serious harm to the security and well-being of the nation will occur if strong measures (including military measures) are not taken;
- Major interests are areas where potentially serious harm could come to the nation if no actions are taken to counter unfavorable trends abroad; and
- Peripheral or minor interests involve areas where little harm to the nation will result if the populace or leaders take a "wait and see" attitude toward a situation.

When you hear Dave or me use these terms, we refer to these definitions.

According to the monthly Hong Kong magazine *Cheng Ming*, after a large-scale Second Artillery exercise, vice chairman of the Central Military Commission General Guo Boxiong addressed the participants to discuss about the posture the PLA should maintain toward the United States. General Guo told the exercise participants "China must strive to increase the capabilities of its strategic nuclear weapons if it wants to stand firm against the United States, which routinely treats China as an enemy in its strategic planning."[1] Thus, both countries are out to deter each other while engaged in a range of trade and diplomatic cooperation.

From a strategic standpoint, China wants to ensure that no nation can threaten it with nuclear war without having some deterrent response. However, in my view there is a calculation in Beijing that China's willingness to risk a nuclear war is greater than that in the United States (or Japan for that matter). This calculation that the United States is more risk-averse than China leads the PLA and its leaders to engage in a program of perception-management involving threats against American forces and cities and to make bold threats from time to time.

I discussed China's strategic missile forces earlier in my remarks. In addition to these, China has some 800-900 shorter-range missiles poised against Taiwan. More seriously, China has the capability to threaten deployed U.S. forces and allies with another 75 or so theater-level missile that can hit targets in Japan, Okinawa, Guam, and other places around the Pacific region. These are mixed conventional and nuclear-capable strategic rocket forces units that are mobile and difficult to target with strike forces. The threat

[1] Hong Kong *Cheng Ming,* in FBIS Open Source Center CPP20060714715009, July 13, 2006 www.opensource.gov. *Cheng Ming* has served as an outlet for information released by the Chinese Communist Party for decades, although it is a private magazine that is not owned by the PRC government.

from China's nuclear forces is increasing as Beijing deploys submarines capable of launching nuclear missiles. In addition, the PLA's Second Artillery Corps is deploying new classes of mobile missile systems, increasing the second-strike capability against an adversary. The PLA is also working on penetration aids for the warheads, multiple warheads, and warheads that can maneuver on reentry. Also, younger PLA officers and civilian scholars in China are advocating nuclear retaliation for conventional strikes on China's missile forces. This and a discussion in China over the relationships between the concepts of "active defense" and "pre-emptive self defense," means that the doctrine that China will not be the first to use nuclear weapons is under debate.

China's nuclear forces are growing in capability, but the current United States strategic nuclear deterrent posture has been adequate to deter China from taking military action against the United States or its interests with strategic forces. It will likely remain adequate for nuclear deterrence for some time to come. However, the United States lacks missile defenses that would ensure that the PLA cannot engage in nuclear blackmail by threatening a city or military base in the United States.

What we need to be concerned about here in the United States is that the People's Liberation Army seems to have taken the United States seriously as its main potential enemy. They are not too worried about Russia; they are working well with Russia. They think they have strategically deterred India and they are not too worried about Japan. But in their writings, officers of the People's Liberation Army see the United States as the country with the greatest capacity to coerce them or attack them.

China's nuclear retaliatory plans require that the Second Artillery maintain a force sufficient to "threaten the opponent by striking his cities," and employ a strike force of "moderate intensity" that is "sufficient and effective" to cause the enemy to incur "a certain extent of unbearable destruction."[2] Thus, the size and composition of any nuclear counterattack is a function of a nuclear net assessment by Chinese political and military leaders. It is a function of what they assess as the level of damage the American public, and its leaders, would find "unbearable."

The objectives for nuclear campaign planning in China are also ambiguous enough to leave open the question of pre-emptive action by the PLA. A major objective of a nuclear counterattack campaign is to "alter enemy intentions by causing the enemy's will [to engage in war] to waver," according to *A Guide to the Study of Campaign Theory.*[3] One of my concerns about the PLA and its intentions is that pre-emption, therefore, would be a viable action that is consistent with the PLA's history of "self-defensive counterattacks."[4]

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[2] Peng Guangqian and Yao Youzhi, *The Science of Military Strategy.* Beijing: Military Science Publishing House, 2005. p. 218. This is the English language translation, with some updates, of Peng Guangqian, et. al. eds. , *Zhanlue Xue 2001 战略学 (On Strategy 2001).* Beijing: Military Science Press, 2001.

[3] Ibid.

The PLA leadership has prioritized the objectives of nuclear counterattack campaigns. These are:

- Cause the will of the enemy (and the populace) to waver;
- Destroy the enemy's command and control system;[5]
- Delay the enemy's war (or combat) operations;
- Reduce the enemy's force generation and war-making potential;
- Degrade the enemy's ability to win a nuclear war.[6]

The prioritized major targets for China's nuclear missile forces are:

- "Enemy political and economic centers, especially important urban areas with a goal of creating great shock in the enemy population's spirit and destroying their will to wage war;
- Destroy the critical infrastructure of the enemy to weaken the enemy's capacity for war (examples for targets are petroleum refining, storage and shipping links; electric power generation and transmission lines; and major heavy industry;
- Enemy transportation networks);
- Major military targets such as air force and navy staging areas and bases to degrade the ability of these services to wage war; and
- Major deployed military forces."[7]

There are also serious discussions in PLA doctrinal literature about need to mass missile fire and use missiles decisively, with surprise, in a theater war. These factors concern me. In my view they undermine the likelihood that China would adhere to its own declared

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[4] On this doctrine, see Cheng Feng and Larry M. Wortzel, "PLA Operational Principles and Limited War; The Sino-Indian War of 1962," in Mark A. Ryan, David M. Finklestein, and Michael McDevitt, eds., *Chinese Warfighting: The PLA Experience Since 1949.* Armonk, NY: M.E. Sharpe, 2003. pp. 180-183, 194-195.

[5] Xin Qin reinforces this, writing that" one must attack the C4ISR network that supports the command and control system of an enemy, particularly one that is fighting a war on external lines (in other words, an enemy fighting a power projection war)." Xin, X*inxihua Shidai de Zhanzheng,* p. 90.

[6]Ibid., pp. 384-385. These targeting priorities are repeated in a basic level PLA publication intended to educate the average soldier or junior officers on modern, high technology in war. This book says that nuclear-tipped intercontinental ballistic missiles target enemy political and economic centers, military bases, important defense industrial base areas, nuclear weapons storage depots, key communications hubs, and other such strategic targets. See Guo Yanhua, et. al., eds., Jushi Jishu Aomi Jieyi 军事技术奥秘解疑 (Explaining the "Mysteries" of Military High Technology). Beijing: National Defense University Press, 2005, p. 123.

[7] Xue, *Zhanyi Xuexi Lilun Zhinan*, 385. See also Liu Mingtao, Yang Chengjun, et. al, eds. *Gao Jishu Zhanzheng Zhong de Daodan Zhan (Ballistic Missile Battles in High Technology Warfare).* Beijing: National Defense University Press, 1993, p. 116.

[7] Ge Xinliu, Mao Guanghong and Yu Bo, *Wo Jun Xinxizhan Wenti Yanjiu 我 军 信息战 问题研究 (PLA Research on Problems of Information Warfare).* (Beijing: NDU Press, 1999)., pp. 188-192.

"no first use" policy. These considerations also reinforce the need for the United States to have effective ballistic missile defenses.

In 1996, the United States deployed two aircraft carrier battle groups off Taiwan when China fired a series of missiles over that island. The PLA was embarrassed that it had no effective military response to the U.S. deployments. At that time, PLA authors declared that China should seek the capability to attack a deployed American carrier battle group with ballistic missiles. According to an officer from the Navy Command Academy who addressed a PLA-wide conference on missile warfare, "the Second Artillery is the major factor in successfully attacking an enemy naval battle group."[8] To accomplish such an attack, this officer said

> "The PLA must use all of its electronic warfare and reconnaissance assets properly, must neutralize enemy anti-missile systems and missile sensor systems, and should use electronic jamming on the enemy fleet. The PLA can then attack the enemy fleet or naval bases with a combination of explosive, anti-radiation and fake warheads to deceive enemy radar and sensor systems and defeat a deployed battle group or one in port.[9]

Many in the PLA think this goal is realistic and achievable. Think of the implications of that! The *Enterprise* docked in Norfolk, Virginia just before Thanksgiving 2006 with 5,000 sailors and Marines aboard. The casualties at Pearl Harbor reached only 2,400. The World Trade Center was not much more than 2,400. Thus, when PLA officers talk about being able to attack and sink an American aircraft carrier as a routine military capability, they are not thinking hard about what comes back at them after that.

For some time, American naval officers have dismissed this capability as beyond the grasp of the PLA. American officers believe that China does not have the space sensor systems, relay satellites, and maneuvering warheads required to execute such an attack. However, PLA officers seem convinced that using ballistic missiles to attack naval battle groups is a viable concept and they are working to develop the necessary systems to do so.

China's ships can now fire supersonic cruise missiles that operate with data-link transmissions and update themselves en route. They also have the capability to data-link and update what they are doing from a satellite or GPS. That is a dangerous capability. The United States does not have cruise missile defenses that would be effective against a

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[8] Nie Yubao, "Daji haishang di da jian jianting biandui de dianzi zhan zhanfa" 打击海上敌大坚 舰的电子战战法 (Combat methods for electronic warfare attacks on heavily fortified enemy naval formations," in Military Science Editorial Group, *Wo Jun Xixi Zhan Wenti Yanjiu 我军信息战问题研究 (Research on Questions about Information Warfare in the PLA).* Beijing: National Defense University Press, 1999. pp. 183-187.

[9] Ibid.

cruise missile going two to four times the speed of sound. Nor have we made acceptable progress on an airborne laser system.

The PLA Air Force is developing a system of airborne warning and control aircraft and refueling aircraft that will extend the PLA's reach. When linked with data-transfer systems China's combat aircraft will be able to engage in over-the-horizon cooperative target engagement with Chinese ships using long-range missiles.

The PLA is developing command, control and targeting architectures to support regional military deployments and operations beyond China's borders. When China manages to launch a system of tracking and data-relay satellites, the PLA will have a global, real time intelligence collection and surveillance capability. It will also have a dedicated military communications system to support global force projection.

Of course, China is a major global power and it will likely build those types of capabilities. As I mentioned at the outset, however, the nature of the state makes it important that the United States be in a position so that it China's military forces cannot dominate or compel America.

One reason I think that a "hedging" or deterrent posture is appropriate with respect to China is the way Chinese strategists interpret the goals of "comprehensive national power." They see it as a combination of economic power, military power, diplomatic power, political power, what they call ideological or cultural power, and science and technology (S&T) power. Like good scientific Marxists, they have actually worked out the algorithm to compute every country's *zonghe guoli* (综合国力), or comprehensive national power. What bothers me about their formula is when you get enough comprehensive national power, in the view of these Chinese strategists, the end of that algorithm equals *qiang zhi li* (强制力), the power or strength to compel other countries.[10] The Communist Party in China can be quite brutal in its use of power, as we saw in the Tiananmen Massacre. Therefore, to repeat, we cannot fully discern the PLA's intentions; they do not go in front of their legislature and justify why they are doing things; therefore, I get nervous when I see the "power to compel" as the result of these military capabilities.

In the long-term, as China's military capacity builds, the PLA will also build a force projection capability to reinforce its interests. This is important to consider because in the area of resource competition, China is becoming an increasingly serious economic and security challenge to the United States.

The economic growth in China and its industrial output have created a huge need for natural resources there. In areas like energy reserves, raw wood products, and the magnetite used for computer disks, China is willing to pay a premium to achieve resource

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[10]Wu Chunqiu, *Da Zhanlue Lun 大战略论 (Grand Strategy: A Chinese View).* Beijing: Military Science Press, 1998, pp. 55-70.

security by controlling assets at the point of origin. This is how 18th and 19th century mercantilist states functioned. Today, some writers have termed China's behavior "neo-mercantilist." In the 18th century, mercantile states built strong military forces that could ensure that resource claims were secure. Today, for the most part, the Chinese companies involved in this effort are state-owned. Thus, when they act, they are agents of the state. China's efforts to achieve the direct control of energy resources could lead to disruptions in world markets and even direct conflict. It is one thing to have a private company acquire energy or resource rights and then to sell those resources in the international market place. This kind of action can drive up prices. However, it is still a market-based mechanism. When states take such actions, those resources do not go on the market.

The problem for the United States (and its allies) is that there is no clear roadmap or outline of the intentions of the Chinese Communist Party or how its Politburo Standing Committee will use this military power and technology. The major indication we have of China's intent is that many of China's military strategists and senior leaders seem to target the United States with this new military force.

Former Deputy Secretary of State Robert Zoellick's "responsible stakeholder" formulation is one type of diplomatic policy response designed to influence China's international behavior. Confidence building measures and defense consultations between the PLA and the United States armed forces are also important. However, such military dialogues must not improve the PLA's combat capabilities and should make it clear what actions on the part of either side could lead to conflict. Effective policy responses to Russian military sales to China are limited, but diplomatic and economic pressure should discourage this military cooperation and encourage Russia to avoid changing the military balance in Asia through weapons or technology transfers.

Only recently have European Union states accepted that the United States has security interests in the Western Pacific and that their technology sales to China can threaten American forces. Legislation by Henry Hyde and Duncan Hunter got their attention when EU nations were considering lifting the arms sanctions on the PLA imposed after the 1989 Tiananmen Massacre. These two pieces of legislation would have excluded European firms from participation in U.S. defense cooperation programs if they sold certain technologies to China. This type of legislative response is useful as long as PLA intentions are unclear and China's military actions or declarations impinge on U.S. security interests. The United States also needs effective national security controls on the export of critical military systems and technologies.

It is also important to remember that as the PLA becomes more dependent on the electro-magnetic spectrum for military operations, it is more susceptible to interference in that spectrum. For about a decade, PLA warfare experts concentrated on the weaknesses inherent in the American dependence on space and information. That dependence is becoming a two-way street. As the PLA modernizes, it also cannot function without access to space and the electromagnetic spectrum. Strong competition in space control and information warfare will characterize the future military development of China and

the United States for some time to come. Clearly, the United States must maintain its own military lead and ensure that a strong, prepared military is coupled with a strong alliance network.