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The Chinese People's Liberation Army: Should the United States Be Worried?

EDITED BY MARK MOHR

ABSTRACT This Special Report examines the modernization program of the Chinese People's Liberation Army (PLA). The essayists conclude that while this program bears watching, the U.S. military, assuming it too continues to modernize, will be able to maintain its lead in overall capability. **Litai Xue** of Stanford University emphasizes communist party control of the military, and describes a case study in 1969 where the country went on full nuclear alert—without much organizational control. **Bernard D. Cole** of the National War College states the primary concern of the Chinese navy is Taiwan, but downplays the idea that China intends to compete with the U.S. navy to defend sea lines of communication. **Dennis J. Blasko**, U.S. Army (ret.), points out that Chinese military planners themselves say the modernization process for the army will not be completed until 2020. **Kristen A. Gunness** of the CNA Corporation describes the problems that civil society in China is creating for the military, noting, for example, that as Chinese society becomes "grayer," this puts more pressure on the military budget to pay for a growing number of retirees.

INTRODUCTION

MARK MOHR

With China becoming an ever-stronger economic power, and with that growing economic clout being translated into an increasing military capability, there is natural concern that such burgeoning military strength will eventually be able to challenge the military position of the United States. For example, the Department of Defense, in this year's *Quadrennial Defense Review Report*, states: "Of the 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." The essays that follow, originally presented at a September 9, 2006, symposium at the Woodrow Wilson International Center for Scholars, analyze China's military modernization program, especially over the last decade, and seek to draw conclusions about the degree to which the United States should be worried about China's People's Liberation Army (PLA).

The first essay, by **Litai Xue**, research associate at the Center for International Security and Cooperation, Stanford University, makes the point that the PLA is under the control of the Chinese Communist Party (CCP), and that this is true for strategic (nuclear) forces as well. In times of peace, it is the Politburo (33 members) and its Standing Committee (9 members) which are in overall charge of the work of the entire political-military system in China. The reality is

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that the Standing Committee acts as the ultimate national authority. Once war is declared, however, the burden of command authority passes to the Party's Central Military Commission, which is dominated by senior PLA officers. Thus, there is tight Party control over the military.

Xue offers a case study concerning the only time in the history of the People's Republic of China (PRC) when the country went to full nuclear alert. At that time, there was not such tight collective Party control over the military. In 1969, the Sino-Soviet split was so severe that the Chinese were bracing for a possible nuclear attack from the Soviet Union. In October 1969, a secret report allegedly originating in Moscow stated that Russian technicians had begun retrofitting the plane carrying a Soviet delegation to Beijing with nuclear-tipped air-to-surface missiles.

In response, on October 18, Defense Minister Lin Biao dictated a six-point message to the General Staff ordering preparations against a surprise attack. The strategic missile forces were to be placed on full alert, and all PLA units were ordered to assume full-time combat readiness with their personnel confined to their bases. While Lin subsequently informed Chairman Mao Zedong of his order, there is no evidence he asked for Mao's approval. Today, the Standing Committee of the Politburo would have to approve such an order.

Regarding the question of how much the U.S. should be concerned over China's growing military strength, Xue believes that the Chinese themselves recognize the wide gap that exists between their weaponry and that of their potential adversaries, particularly the United States. While it is true that the gap in strategic weaponry has narrowed between China and the United States, he thinks that an overall catching up with U.S. forces is an "impossible" objective for the PLA in the foreseeable future.

In the second essay, **Bernard D. Cole**, professor of international history at the National War College, writes specifically on the PLA navy (PLAN). He notes that one of its main missions is to deal with a Taiwan contingency. The naval modernization so prominently funded by Beijing during the past 15 years, and especially since the Taiwan Strait crisis of 1995-1996, has been focused on preparing for possible armed conflict over the island's status.

Second only to Taiwan as a strategic maritime issue, states Cole, is Beijing's concern about future Japanese interference with China's sovereignty claims in the East China Sea. This in turn ties directly to the more general, increasing worry about securing the sea lines of communication (SLOC) upon which increasing amounts of China's imported energy resources depend. The SLOC-defense mission, says Cole, probably remains ill-defined for the PLAN, as Beijing wrestles with decisions such as whether to continue relying on the U.S. Navy for defending those maritime highways, or allocating the extensive resources required to build a navy even partially capable of defending China's very long SLOCs to southwest Asia and eastern Africa.

China's navy today, states Cole, has the most capable conventionally powered submarine force in the world, a large and capable surface warship force, and a strong and modernizing naval aviation force. Does this force pose a threat to the United States, asks Cole? Clearly, the PLAN is not capable of defeating the U.S. Navy one on one, and the odds against the PLAN would increase with the addition to the U.S. side of likely Japanese and Australian force augmentation. However, on

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any given day, American naval forces in the Western Pacific may be surprisingly weak, depending on maintenance status and on commitments in the Indian Ocean and Persian Gulf. Windows of opportunity would be available for Beijing to benefit from its new naval power, even should the United States intervene in a Taiwan scenario. But there is little indication that Beijing desires any such maritime confrontation.

Thus, concludes Cole, China's modernizing navy is already in a position to hinder U.S. naval operations in some scenarios involving Taiwan, although its main strategy in this area seems to be to deter the involvement of U.S. forces. The PLAN is certainly not able to pose a significant threat to open-ocean naval operations by the U.S. Navy, either in the East China Sea or over the long SLOCs from that sea, through the South China Sea and Malacca Strait, across the Indian Ocean to the Persian Gulf. The United States does, however, need to increase the ability of its navy to maintain the presence and capability to safeguard national maritime interests in East Asia.

Dennis J. Blasko, a retired U.S. army officer, observes in the third essay that in 1997, the PLA had a personnel size of around 3 million. Subsequently, the PLA has undergone two reductions in force, so that it now numbers around 2.3 million. He notes, as did Litai Xue, that unlike most other modern militaries, the PLA still has an active system of political officers to ensure ideological and political loyalty to the CCP. Ground force modernization is underway in each of the seven military regions throughout the country and includes preparation for a wide variety of missions. Yet the target date for completion of this modernization is not until 2020.

The progress of PLA modernization, states Blasko, deserves careful attention by the United States, Europe, and China's neighbors. The past decade has resulted in significant increases in a variety of military capabilities, though the PLA leadership itself understands that many challenges remain. China's civilian and military leadership is attempting to balance military modernization with the larger requirements of national economic development and domestic stability. Unlike some countries—such as the former USSR and North Korea—which have had an overt "military first" policy, China is not diverting so many resources to the PLA that other parts of the society and economy suffer.

As it modernizes, however, many PLA efforts will be focused on countering the types of advanced capabilities the U.S. military has proven effective in combat on numerous occasions since 1991. On the other hand, development of such capabilities does not in itself reflect a strategic political intent to challenge the position of the United States in Asia or globally. Blasko argues that with a generally positive international environment, a long-term approach to military modernization, and the need for continued economic development and social stability, Beijing is focused more on *preventing* the occurrence of negative events (i.e., deterrence) than on compelling certain events to occur by the overt use of military force.

There is, however, an inherent danger, according to Blasko. In order to achieve their strategic goals through deterrence, Chinese leaders believe they must demonstrate both their improving military capabilities and their determination to use force, if necessary. These demonstrations, though, create the risk of misinterpretation and international reaction contrary to Beijing's intended goals. Thus, Beijing finds itself facing a security dilemma as it builds a modern military to protect its national interests. China's actions do not occur in isolation, and its growing capabilities need to be evaluated in relation to the capabilities and intentions of other regional powers and the United States.

In the final essay, **Kristen A. Gunness** of the CNA Corporation asserts that the PLA and its modernization program do not exist in a vacuum. Understanding what the PLA aspires to achieve also requires placing PLA modernization within the broader domestic context of a changing China. On the one hand, the ability of the Chinese military establishment to achieve many of its near- and long-term objectives will be as much a function of what Chinese society can or cannot support, as of the plans and aspirations of the military leadership. On the other hand, social, economic, and political changes in Chinese society are serving as catalyzing forces for adaptive change within the PLA. Understanding these forces are as important

as understanding the nuts and bolts of the PLA's modernization program.

In some cases, Gunness points out, the advances of "Rising China" bode well for the aspirations of China's leaders to modernize the military. For example, China's booming economy adds to the increasing levels of funding that the PLA needs to modernize the force (new equipment and technologies) and pay for operations, maintenance, and especially personnel. On the other hand, socioeconomic change engenders challenges to the institutional agenda of the PLA. The same economy that is supporting PLA modernization now provides stiff competition to the PLA in attracting the best and brightest of China's youth, and offers challenges to the retention of the military's most talented officers.

Rising life expectancies and the "one child policy" have each affected the PLA. Increased life expectancy is one of the many benefits of a modernizing China. Yet the "graying of China" comes with its own set of pressures on the government. For the PLA in particular, this means increasing burdens on the military benefits and retirement system as the ranks of retirees grow. At the other end of the life cycle, the greatest impact China's one-child policy has had on the PLA is the revision in 1998 of the military service laws. Prior to 1998, conscripts sent to the ground forces (the army) served three years while conscripts sent to the navy and air force served for four years. In 1998, the new laws reduced service to two years for all branches of the PLA. A key driving force for the reduction in service time was rising pressures from below over the hardships and opportunity costs associated with the absence of only sons for so long a period.

Should the United States be worried about the PLA's modernization program? In Gunness's opinion, that is the wrong question to be asking. Whether the modernization of the PLA should or should not be a source of worry depends upon what that force will be used for in the future, and that is a political question, not a question that can be answered strictly on a capabilities-based assessment of the PLA's modernization program. In other words, it is about Beijing's intentions, not merely its capabilities. If one assumes that the U.S. military's program of transformation and modernization is going to stand still over the next decade, then the PLA may be able to close the capabilities gap that currently exists. If, on the other hand, U.S. military transformation and modernization continues, then it is unlikely that the current capabilities gap will be closed anytime soon.

CHINA'S PEOPLE'S LIBERATION ARMY: PARTY CONTROL AND MILITARY DECISION-MAKING

LITAI XUE[1]

Beijing's leaders have established a highly centralized and unified national command authority over the past half century. They have exhibited a trademark caution mixed with periodic and unexpected boldness when reacting to external threats to the nation or its sovereignty. Beijing currently is preoccupied with Taiwanese separatism and preparations for a war to thwart it. The Chinese have also concentrated on measures to deter American intervention because such a war might involve the United States.

A HISTORY OF PARTY CONTROL

The Chinese Communist Party (CCP), not the National People's Congress, has governed the People's Republic of China (PRC) since its founding on October 1, 1949. The CCP exercises its core leadership through four central bodies: the Political Bureau (Politburo), the Politburo's Standing Committee, the Central Secretariat, and the Central Military Commission.

Chosen in theory by the Party Central Committee (198 members), the Politburo (33 members) and its Standing Committee (9 members) are in overall charge of the work of the entire political-military system in China and have the right under the party constitution to make decisions on all central policies when the Central Committee is not in session. The reality is that the Standing Committee acts as the ultimate political authority. In the past, when there was a top leader, such as Deng Xiaoping or Mao Zedong, the Standing Committee acted under the direction of that leader.

Currently, the Secretariat reports to and operates under the Standing Committee and manages the CCP's daily operations in accord with the guidelines of the Politburo and its Standing Committee. Its duties include implementing the Standing Committee's policies, administering the distribution of central-level tasks, and serving as the switchboard for communicating instructions from and receiving reports destined for the Standing Committee and the larger Politburo membership. In name, the Secretariat is an "administrative organ" (*banshi jigou*) of the Politburo and its Standing Committee, but in fact, it acts as a partner of the Standing Committee.

The Standing Committee, when the Politburo is not in plenary session, acts on all critical matters, especially those involving national security and the fate of the Party. Even in full Politburo meetings, its members have the governing voice. Nevertheless, the most important of these decisions are usually reached in special enlarged meetings.

The Standing Committee, when the Politburo is not in plenary session, acts on all critical matters, especially those involving national security and the fate of the Party. Even in full Politburo meetings its members have the governing voice. Nevertheless, the most important of these decisions are usually reached in special enlarged meetings because of the need for consensus building, Party unity, and well-informed counsel.

The Politburo will not depart from this routine except in genuine emergencies. One of the most important "emergencies" occurs when the Standing Committee, acting as the central decision-maker, cannot hammer out a consensus on vital issues and stays deeply divided. Most such issues fall in the category of domestic security or ideological direction, because for more than three decades the political line and main policies on

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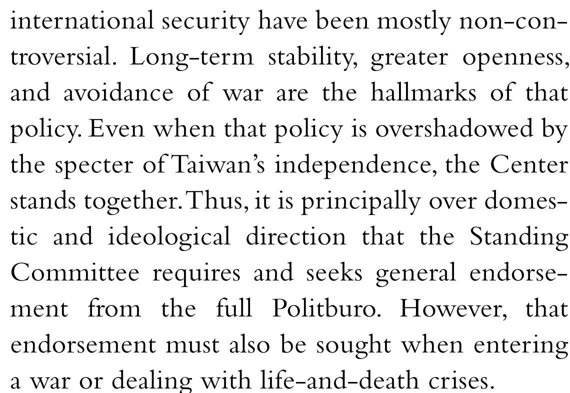


international security have been mostly non-controversial. Long-term stability, greater openness, and avoidance of war are the hallmarks of that policy. Even when that policy is overshadowed by the specter of Taiwan's independence, the Center stands together. Thus, it is principally over domestic and ideological direction that the Standing Committee requires and seeks general endorsement from the full Politburo. However, that endorsement must also be sought when entering a war or dealing with life-and-death crises.

Although the triad system works reasonably well, it is neither efficient nor effective when decisions must be reached quickly and decisively. The result all too often has been lost opportunities or miscues over Taiwan, failure to take advantage of openings with the United States and other states, and a risk-aversion culture that is quite unsuited for fast-moving events.

Moreover, it is possible for the Central Secretariat to use its bureaucratic know-how and power to delay or reshape the Standing Committee's instructions. By the mid-1960s, Mao had come to believe that his decision to enlarge the role of the Secretariat had resulted in "his loss of power," and he shelved it for ten years during the Cultural Revolution. The allocation of tasks within the leadership had in fact left the power of the Secretariat largely unchecked and sometimes unresponsive.

When Deng consolidated his power in the early 1980s, he faced a shattered party and state bureaucracy. His solution and that of his successors was the creation of a number of "leading groups." These groups and their offices play a central role in today's China, and that role involves jurisdiction over national security matters.

Headed by a member of the Standing Committee and manned by senior party and state officials and several top generals, the five leading groups in charge of security issues are those for national security, foreign affairs, Taiwan affairs, counterterrorism, and the "Three Anti" (*sanfan*). The first four directly deal with external crises and conflict resolution, and all draw on parallel State ministries and the People's Liberation Army (PLA) command and technical systems for information and support. Set up in 2004 by the Politburo and CMC, the Three-Anti Leading Group was tasked to ferret out "spies, special agents, and hidden traitors" after the exposure of alleged Taiwanese spy networks from 1999 to 2004.

Several bureaucratic changes that could help transform the national command system are now underway: accelerated openness to foreign political and ideological concepts; increased practice of collective decision-making; greater concern with public opinion; greater use of enforcement agencies to ensure compliance; an ever-younger leadership; and more tolerance toward inner-party dissent. There are, however, countervailing trends such as greed, corruption, and the decline of selfless service that vie with the ongoing desired transformation and complicate any assessment of its likely outcome.

When Beijing's leaders reiterate that man still matters more than technology or weapons, they are stressing the urgent requirement to train qualified command personnel to manage the transformation of the nation's security system. It does make a difference.

THE PLA'S COMMAND AND CONTROL ORGANIZATION

As used in the U.S. military, "command" refers to the administrative and personnel systems for placement, promotion, training, and mission assignments, whereas "control" refers to the operational deployment and employment of combat forces. We will use these terms to deal with the organization of the PLA and how it has evolved in recent years.

In times of peace, not excluding the most intense crises involving armed threats and military deployments, the Politburo Standing Committee alone acts as the supreme national command authority. Once war is declared, however, the burden of command authority passes to the Party's Central Military Commission, which is dominated by senior PLA officers. All of the PLA's "first-grade greater units" come under the CMC's direct control.[2]

For crisis operations, the CMC has built command centers (*zhihui zhongxin*) in hardened silos in the Western Hills in the northwestern suburb of Beijing, among other places, to house several task teams of the PLA "operations system" (*zuozhan xitong*).[3] This system is on permanent alert status, and its teams must be prepared at all times to brief

their superiors on important defense-related developments and contingency plans.

In Chinese military terms, several types of command posts exist. The PLA creates its "main command posts" (*jiben zhihuisuo*) for regiments and above; prior to an impending conflict, it adds "alternate" (*yubei*), "rear" (*houfang*), and "advance" (*qianjin*) command posts. Alternate posts replace damaged or destroyed main command posts; rear posts provide logistical backup and stand-by or replacement personnel; and advance posts serve frontal units and provide the "primary direction" of the battle. The prescribed redundancy and related contingency plans for further dispersion as needed reflect a strong concern for survivability of command and control in wartime.

The PLA has two highly secretive research units that conduct the most important studies on global strategy and potential crises. The first is the Strategic Committee under the CMC; the second, the International Situation Research Team, comes directly under the General Staff and works closely with its First (Operations), Second (Intelligence), and Third (Technical) departments. Its members come mainly from these departments and the Academy of Military Science's Department for Foreign Military Studies. It submits monthly reports to the CMC for crisis assessment and carries out special projects assigned by the CMC. Directly under operations, two division-level offices serve as the research staff for this team and the Strategic Committee, respectively. In comparison to the Intelligence Department, this team is smaller in scale but similar in rank. The chief and deputy chief of operations concurrently serve as leader and deputy leader of this team as well as office director and deputy office director of the Strategic Committee. In reaching its decisions, the CMC relies more on the two units than any other research groups.

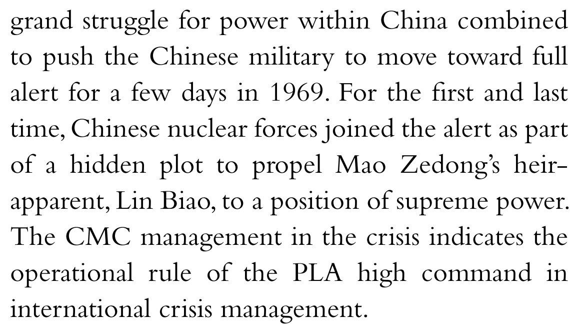
Within the General Staff, the Operations (First), Intelligence (Second), Technical (Third), Radar and Electronic Countermeasures (Fourth), and Communications departments directly participate in the command-and-control process. The most important of these is the Operations Department, which serves as the nerve center in the communications chain from the CMC to battalion-level combat forces. This department performs like a telecommunications switching center for the transmittal and retransmittal of all central orders and reports. Even deputy chiefs of the General Staff, if they are not in charge of operations, must frequently check with operations for reliable and timely information, especially during emergencies.

Until the mid-1990s, the Operations Department was composed principally of officers from the PLA ground forces. In an attempt to ready the military for a high-tech local war, however, many air and naval, and Second Artillery officers thereafter were assigned to operations' functional bureaus. In addition to the offices of the Strategic Committee and the International Situation Research Team and an Administrative Section to handle routine matters, the nine principal bureaus under the Operations Department are the Operations, Civilian Air Defense, Frontier Defense and Garrison, Air Force, Naval, Strategic Forces, Regional, Comprehensive Planning, and Joint Operations. The Operations Bureau coordinates the other bureaus and service-specific plans and contains the full-time command center (*zuozhan zhiban shi*) at the heart of the General Staff's operations system mentioned earlier. The nominal assignments of most of the other bureaus are quite clear and need little explanation. The service-specific bureaus make requests for equipment, personnel, and funding through the Operations Department to the General Staff, which is assigned to forge a comprehensive understanding of ongoing buildups and readiness.

In addition, the Strategic Weapons Bureau oversees the operations of the nuclear forces of the Second Artillery, the special nuclear-armed air force squadrons, and the navy's nuclear-powered ballistic-missile submarine force. This bureau helps the CMC keep a tight rein on all nuclear units and how they fit into China's national strategy. Only the CMC's chairman—not China's president—has the authority to launch any nuclear weapons after getting the concurrence of the Politburo Standing Committee and CMC.

A CASE STUDY: THE 1969 NUCLEAR CRISIS

To gain some insight regarding how the CMC has operated during a nuclear crisis, we turn to the events of 1969. The Sino-Soviet conflict and a



grand struggle for power within China combined to push the Chinese military to move toward full alert for a few days in 1969. For the first and last time, Chinese nuclear forces joined the alert as part of a hidden plot to propel Mao Zedong's heir-apparent, Lin Biao, to a position of supreme power. The CMC management in the crisis indicates the operational rule of the PLA high command in international crisis management.

Mao worried about a surprise attack from the north as early as the mid-1960s. He more than once asked visitors with access to the Kremlin whether it was "possible for the Soviet Union to send troops to occupy Xinjiang, Heilongjiang, and even Inner Mongolia." Moscow launched a large-scale military action against Czechoslovakia in August 1968. Almost immediately, the Chinese upgraded the probability of a Soviet invasion against them.

The action-and-reaction process after the Sino-Soviet border conflicts in March 1969 caused a further deterioration in bilateral relations. The intelligence reports the Chinese received throughout September and early October reinforced the Chinese military's conviction that Soviet forces were preparing surgical nuclear strikes against China's big cities and key military targets.

Still anticipating a Russian sneak attack on National Day, Mao turned to his nuclear arsenal as his messenger. He ordered a thermonuclear test to be conducted prior to that date "as another great blow" at Soviet social-imperialism. On September 23, the first underground explosion was conducted at the Lop Nor test site, and six days later China set off a 3-megaton thermonuclear weapon. Moreover, over the coming months, Chinese missiles targeted on the Soviet Union increased to fifty. Few in Moscow missed the unmistakable messages.

By the second week of October, Mao received a most alarming piece of intelligence that Soviet troops would launch a large-scale assault on the 20th at the time of the next round of Sino-Soviet border negotiations. This was quickly followed by a secret report allegedly originating in Moscow itself that Russian technicians had begun retrofitting the plane carrying the Soviet delegation to Beijing with nuclear-tipped air-to-surface missiles. When a "reliable" East European source confirmed the D-Day, Mao needed no more convincing. He told his colleagues, "the international situation can deteriorate suddenly," and directed most of the central leaders to depart Beijing before the 20th. The ever-worried Mao entrained for Wuhan on the 14th, and Lin Biao flew to the city of Suzhou near Shanghai three days later.

Lin Biao, now working in Suzhou, had become obsessed with the possibility that the Soviet airplane carrying the negotiation team would launch its smuggled nuclear missiles upon entering Chinese air space on October 19. On the 18th, he dictated a six-point message to the General Staff ordering preparations for a surprise attack: the strategic missile forces were to be placed on full alert, and all PLA units were ordered to assume full-time combat readiness with their personnel confined to their bases. Lin's wife personally informed Mao in Wuhan of the new directive. But there was no evidence that Lin had requested Mao's approval before sending the document to the General Staff for implementation. While Mao knew the contents of the six-point directive, he did not know this directive would be issued under the title of "Vice-Chairman Lin's No. 1 Order". Lin Biao, only recently chosen the heir apparent, would never again have Mao's full trust.

A general, chief of the General Staff's "operations system," rewrote Lin's six points into four separate orders and called the first of the orders "Vice-Chairman Lin's No. 1 Order." The order has a special place in the history of the Chinese military as the first and only time the CMC was to place its strategic forces on full alert. Coming at a critical juncture of Cultural Revolution politics, Sino-Soviet tensions, and the initial deployment of China's strategic weapons, this unprecedented document and its ultimate consequences were to shape the high command's judgments on the control of the nation's weapons and the efficacy of their threatened use.

With regard to Directive No. 2 of the No. 1 Order, Lin decided to put the Second Artillery on high alert to ready its nuclear-armed missiles for immediate launch. For security reasons, the advance command post did not even copy Directive No. 2 to other units because of its highly sensitive nature. The General Staff told the Second Artillery to report on the directive's

implementation and then to submit its responses for transmittal to the CMC.

Neither the CMC nor the General Staff had bothered to notify Premier Zhou Enlai of its activities. Only days before, Mao had put Zhou in charge of the Center's overall operations, and for hours, Zhou had been kept in dark. Those closest to the situation guessed that perhaps the General Staff had bypassed Zhou. At the same time, most of the region commanders held concurrent positions as provincial authorities, and some of them transmitted the top secret order to unauthorized local officials and even mass organizations. In Yunnan Province, these mass organizations copied the secret order onto "big-character posters" and pasted them on street walls overnight. Local authorities used their own channels to alert the Party Center and State Council about the mysterious No. 1 Order and street gossip surrounding it.

On the evening of the 19th, Zhou summoned the CMC leaders. "Who," he asked, "had named the directives Vice Chairman Lin's No. 1 Order, and why had they permitted secret military orders to reach the street? Whose name would they put on the next No. 2 Order, because they had named Lin's order as No. 1 Order?"

Lin clearly worried most about being caught off guard by a surprise attack. He did not fully control the reporting process and told the air force Intelligence Department to send him all relevant intelligence without passing it through channels. He heavily depended on airborne reconnaissance information and his personal ties in the air force. Directive No. 2 caused the strategic missiles to prepare for immediate launch. Lin had included in the directive the DF-3 intermediate-range ballistic missile. The problem was that this missile was more than 18 months away from initial deployment. Only the DF-2A had been deployed against the Russian Far East since the fall of 1966. The Second Artillery reported to the CMC that no combat unit had yet been equipped with DF-3s. Lin's order reflected the state of mind of Beijing's leaders as they grasped for any means to respond to a nuclear attack. It may be a continuing problem in China as in other nuclear nations: the highest leadership may have a limited understanding of the lethal weaponry at its command.

POSSIBLE USE OF NUCLEAR WEAPONS AGAINST TAIWAN

Zhu Chenghu, a major general from the National Defense University, surprised the West when he was quoted as saying, "we will have to respond with nuclear weapons" if the United States attacks China's territory using missiles and position-guided ammunitions.[4] General Zhu must have paid close attention to and taken into account the U.S. policy on the preemptive use of nuclear weapons, which was stated in the U.S. *Nuclear Posture Review* (January 8, 2002) .

Neither General Zhu or others, however, said anything about how the CMC would weigh its response should deterrence against Taiwan's independence fail. In 2004, however, a discussion of the possible use of nuclear weapons on China's "sovereign territory" finally surfaced in a year-long series of articles that described a PLA "invasion" of an unnamed island. Published in *Jianchuan Zhishi* (Naval & Merchant Ships), a widely circulated monthly with apparent ties to the PLA Navy, these eleven articles and another in *Bingqi Zhishi* (Ordnance Knowledge) examined Chinese nuclear preemption and justified it in operations that would determine the "nation's destiny" and where defeat would be unacceptable.

China has proclaimed a no-first-use of nuclear weapons policy. The real change occurred when Beijing indicated it regarded the policy as inapplicable to its own territory. On August 4, 1996, for example, Sha Zukang, the PRC disarmament representative to the Geneva arms control talks, told *Newsweek* magazine, "China promises no-first-use of nuclear weapons to any country, but this does not apply to Taiwan, because Taiwan is a province of China."

Most troubling of all was the specificity of the *Jianchuan Zhishi* articles. They discussed a nuclear assault against the island in global and domestic scenarios, the coordination of nuclear and conventional operations, the types of nuclear weapons to be employed, and the issues of psychological warfare, civilian casualties, and mass evacuations. Could it be that the island was Taiwan and that *Jianchuan Zhishi* had been selected as the outlet because the navy would carry the brunt of an invasion?

There were many possible answers to this question. The military arguments for the use of tactical nuclear weapons in an attack on Taiwan cannot simply be dismissed. Perhaps more plausible reasons for the articles might include the scare factor as Beijing seeks to intimidate pro-independence activists on Taiwan. Beijing might well have been attempting to raise the stakes of a showdown with Taipei to convince its own people, including the PLA, of its determination to block the island's independence.

Yet, the year-long release of sensitive information is also inconsistent with the way Chinese security officials would normally react. So, could this be a deliberate leak through an unofficial source, an act similar to the "unauthorized" leak of portions of the *Nuclear Posture Review* in the United States?

RECOGNIZED SHORTCOMINGS BY THE PLA

In recent years, PLA strategists revealed a number of troubling deficiencies: incompatible and unstable communications, unreliable friend-or-foe identification, poorly integrated foreign equipment, low quality early warning and real-time command and control, questionable survivability, and poor control of strategic weapons. The weak links critical to all these deficiencies were low quality and inadequately connected sensors. For PLA combat units, the battlefields are far from transparent.

Reorganizing command and control and future combat operations to meet fully the requirements for conducting a high-tech local war or information warfare remains a distant goal. Joint exercises in recent years, PLA planners acknowledge, have exposed "the low efficiency in command and control and the loose combination of the services." These deficiencies can be summarized under six headings.

1. *Duplicative command responsibilities*. Both Beijing and the region commands continue to exercise separate but parallel control over the regional units. The checks and balances produced by this system have impeded command responsiveness and departmental initiative.

2. *Low quality of commanders*. Most senior officers are considered unqualified to fight a high-tech war. In the CMC's own authorized assessment, for example, only three of 36 corps-level officers from one region's five group armies were university graduates, and none of the region division commanders held a college degree. All field commanders come from the ground forces, and most senior staff officers at the four general departments in Beijing and the seven region commands have never held assignments in services other than their own, again mostly the ground forces. Few understand even the basic technologies required in joint operations. Conversely, the technical officers in the Intelligence, Technical (signals monitoring), Radar and Electronic Countermeasures, and Communications departments know little about operations.

3. *Bloated headquarters*. The overstaffing of headquarters units has inhibited well-organized command and control. As one CMC leader put it, "[In a war,] it is not easy even to evacuate [headquarters] personnel, let alone exercise command and control."

4. *Uncoordinated regional organization and force structure*. In peacetime, a region command cannot directly control the air and naval units in the region. Even for the ground forces, the command can only control the subordinate group armies or in a few cases division-level units. It was not until the mid-1990s that regulations and communications were put in place to coordinate infantry regiments and armored and artillery battalions. They enabled PLA ground forces to perform combined-arms operations. The same lack of coordination plagued the air and ground forces, and only in the late 1990s were qualified teams of air-ground fire controllers created to solve the problem. The air force sent forward controllers to each joint command and most divisions (but not to battalions) to support close air-ground strikes. Engineers are still developing interoperative communications for these missions, but serious training in this regard is years away.

5. *Obsolete command-and-control technologies*. Recent PLA sources blame the air force for its inadequate use of China's satellite reconnaissance and surveillance systems, and accuse the other services of lagging ever farther behind. A special problem relates to the failure of the army to introduce the newest technologies and techniques to fight at night and in highly mobile situations. China's potential adversaries now have the advantage in these operations. Few space-borne and airborne sensors exist, computerized intelligence

information is just coming on line, and all foreign-made communication equipment is considered suspect.

6. *Questionable survivability*. Most PLA specialists fear that a dedicated information warfare attack would paralyze their communication networks. Only a few command centers and early-warning radars are located in hardened silos. PLA commanders worry most that when fighting a technologically advanced adversary, their command centers and radars would be priority targets with few surviving. Without them, the ability to wage a sustained high-tech local war would vanish.

The durability of the six deficiencies after a decade of a dedicated effort to remove them causes us to ask why the disparity between plan and reality has persisted and in some cases even widened. In addition to the ever-targeted bureaucratic impediments, three principal reasons explain much of the gap: first, Deng Xiaoping made military modernization a distant priority, even though he acknowledged that the command system was "very backward"; the second reason goes beyond the lack of funds or technical sophistication. In a word, that reason is corruption. During the years when the military engaged in business, the PLA's culture of sacrifice and devotion to duty waned, and the culture of making money led many in the PLA to misappropriate substantial funds for private use; the third reason relates to the PLA's obsession with obsolete doctrines. Long isolated from foreign military debates and developments, the Chinese military resisted conceptual and doctrinal change.

SHOULD WE BE WORRIED?

The overall topic of this seminar is the degree to which the United States should be worried about a "rising" PLA. From the evidence I have presented above, it seems clear to me that the Chinese themselves recognize the wide gap that exists between their weaponry and that of their potential adversaries, particularly the United States. While it is true that the gap has narrowed between China and the United States in strategic weaponry, I do not think it is an exaggeration to state that .an overall catching up with U.S. forces is an impossible mission for the PLA in the foreseeable future.

ENDNOTES

1. Most of the information in this paper is from John W. Lewis and Litai Xue, *Imagined Enemies: China Prepares for Uncertain War.* (Palo Alto: Stanford University Press, 2006).
2. The PLA's "first-grade greater units" include the four general departments, the air force, the navy, the Second Artillery, the Armed Police, the Academy of Military Science, the National Defense University, the National University of Defense Technology, and the seven regional commands.
3. The "operations system" is composed of teams of officers from the General Staff's Operations (First), Intelligence (Second), Technical (Third), Radar and Electronic Countermeasures (Fourth), and Communications departments and Confidential Bureau.
4. Alexandra Harney, "Top Chinese General Warns US Over Attack," *Financial Times* (internet edition), July 14, 2005. Available from http://www.ft.com/cms/s/28cfe55a-f4a7-11d9-9dd1-00000e2511c8.html.

CHINA'S GROWING MARITIME POWER: IMPLICATIONS FOR THE UNITED STATES

BERNARD D. COLE

China's remarkable blossoming into a 21st century world power has been marked by dramatic economic growth since the end of the terribly disruptive Great Proletarian Cultural Revolution in 1976. Under the rubric of "rich country, strong army," this post-revolutionary period has also seen the modernization of China's military, called the People's Liberation Army (PLA). The PLA has decreased in size since 1985 from approximately 4.3 million to 2.25 million, but has increased greatly in apparent capability.[1] The PLA is no longer a manpower-dependent revolutionary force, but a modernizing military trying to incorporate the technology and joint capability that characterizes a 21st century force. The People's Liberation Army Navy (PLAN) has also reduced its personnel numbers, but to a significantly less extent than the army and air force.[2]

The PLAN was established in 1949 to "independently or jointly with the Army and Air Force guard against enemy invasion from the sea, defend the state's sovereignty over its territorial waters, and safeguard the state's maritime rights and interests." A half-century later, the 2004 Chinese Defense White Paper acknowledged a shift from China's traditional focus on ground forces when it stated that "the PLA gives priority to the building of the Navy, Air Force and Second Artillery Force to seek balanced development of the combat force structure, in order to strengthen the capabilities for winning both command of the sea and command of the air, and conducting strategic counterstrikes."

The White Paper further stated that "the PLA Navy is responsible for safeguarding China's maritime security and maintaining the sovereignty of its territorial seas along with its maritime rights and interests." It emphasizes the importance of conducting operations well offshore, timely "preparation for [the] maritime battlefield," enhanced "integrated combat capabilities," and the ability to conduct "nuclear counterattacks." Also cited is the importance of "building maritime combat forces, especially amphibious combat forces . . . [and] updating its weaponry and equipment," to include "long-range precision strike capability . . . joint exercises . . . and integrated maritime support capabilities."[3]

The PLAN is organized into submarine, surface, and aviation combat arms, coastal defense troops, and a Marine Corps.[4] This is a common naval organization, but is distinguished for the PLAN by several factors. First and foremost are the issues raised by Taiwan's status. The naval modernization so prominently funded by Beijing during the past fifteen years, and especially since the Taiwan Strait crisis of 1995-1996, has been focused on preparing for possible armed conflict over that island's status. Such a conflict would almost certainly feature a maritime scenario and explains why China has been investing so seriously in modernizing its navy. While striking in terms of capability, however, this modernization has been moderate in terms of pace and national priority.

Second only to Taiwan as a strategic maritime issue is Beijing's concern about future Japanese interference with China's sovereignty claims in the East China Sea. This in turn ties directly to the more general, increasing worry about securing the sea lines of communication (SLOC) upon which increasing amounts of China's imported energy

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resources depend. The SLOC-defense mission probably remains ill-defined for the PLAN, as Beijing wrestles with decisions that include whether to continue relying on the U.S. Navy for defending those maritime highways or allocating the extensive resources required to build a navy even partially capable of defending China's very long SLOCs to southwest Asia and eastern Africa. World Wars I and II demonstrated the difficulty of either protecting SLOCs or interdicting them decisively. Hence, history and national priorities should convince Beijing not to embark on a massive naval expansion program.

SUBMARINE FORCE

The navy's submarine force is its most potent arm. Beijing has correctly decided that submarine warfare would be the most effective way both to isolate Taiwan, should the Taipei administration declare *de jure* independence or otherwise cross a Chinese red line, and also as the most striking way to deter, and if necessary delay and even defeat U.S. naval intervention on Taiwan's behalf. The first of these goals—deterrence—cannot or at least should not be taken seriously by Beijing: American policy has been consistent about insisting that the China-Taiwan imbroglio be resolved peacefully—regardless of which political party has controlled Congress and the White House. The Taiwan Relations Act of 1979 may not commit the United States to intervene militarily on Taiwan's behalf, but President William Clinton's dispatch of two aircraft carrier battle groups to the scene of China's military pressure in the spring of 1996 evidenced just such a commitment.

The second of these objectives—delay—is more attainable by the PLAN, as China's already formidable submarine force continues to modernize. Old *Romeo*- and *Ming*-class conventionally powered submarines are being replaced and augmented by much more capable *Song*- and *Kilo*-class boats, the first indigenously produced, the second purchased from Russia. China also launched a *Yuan*-class submarine in the summer of 2004; this boat appears to resemble a *Kilo*-class and may reflect a PLAN attempt to replicate that very successful submarine.[5]

The PLAN is also renewing its small force of nuclear powered submarines; the old *Han*-class of five boats is being augmented and will likely be replaced by the newly constructed Type 093-class. At least two of these are operational; the final number planned is uncertain. China has not been able previously to deploy an effective fleet ballistic missile submarine (FBM)—the one *Xia*-class has never operated regularly—but is now building the Type 094-class FBM with Russian assistance. How many of these will be built is unknown, but three is a likely number.[6]

The next step in the development of China's submarine force probably will be incorporation of Air Independent Propulsion (AIP) into some of its boats. An AIP system enables a conventionally powered submarine to remain submerged for up to 40 days (at slow speed) instead of the usual 4 days before snorkeling is required.[7]

SURFACE SHIPS

China is also building up its force of surface warships. Steady modernization since the early 1990s has created a force of relatively modern guided missile-equipped frigates and destroyers. Although all are equipped with potent surface-to-surface cruise missiles, they remain significantly limited in the crucial warfare areas of anti-submarine (ASW) and anti-air warfare (AAW). It is only since the 2004 commissioning of three new classes of destroyers that the PLAN appears to have deployed ships capable of area AAW. This important capability means that a single ship is able to provide anti-aircraft defenses for a formation of ships, a capability obviously crucial to any fleet operations at sea, whether against a U.S. naval task force or for escorting an amphibious task force against Taiwan.

Beijing has also been making a significant investment in amphibious shipping. The result has been modernization of a limited capability, however, rather than a dramatic improvement in the ability to transport multiple divisions across even the 100- mile wide Taiwan Strait to conduct an opposed landing. (The common estimate is that the PLAN is capable of transporting not more than two infantry divisions—approximately 12,000–14,000 troops—in navy amphibious ships designed for

amphibious assault.) The PLAN's ability in mine warfare (MIW) also remains limited. Its relatively old minesweepers apparently have only recently begun exercising with late 20th century MIW systems. The PLAN's mine laying capability is more formidable, and would be effective in a maritime campaign against Taiwan.

NAVAL AVIATION

China's naval aviation capability remains its weakest warfare force. That said, however, the proximity of Taiwan to the mainland air bases of the People's Liberation Army Air Force (PLAAF), and the increasingly close integration of naval and air force aviation, reduces the requirement for sea-based aviation assets. Hence, while PLAN aviation continues to expand ship-borne helicopter capabilities, its shore-based fighter and attack air assets remain limited. More serious for China's maritime power, and not compensated for by the PLAAF, is the PLAN's very limited airborne ASW and reconnaissance capability.

THREAT TO THE UNITED STATES?

In summary, the China's navy today has the most capable conventionally powered submarine force in the world; a large and capable surface warship force, and a strong, modernizing air force (including the PLAAF and naval aviation). Does this force pose a threat to the United States?

Clearly, the PLAN is not capable of defeating the U.S. Navy one on one; and the odds against the PLAN would increase with the addition to the U.S. side of likely Japanese and Australian augmentation. However, on any given day, American naval forces in the Western Pacific area may be surprisingly weak, depending on maintenance status, and commitments in the Indian Ocean and Persian Gulf. Windows of opportunity would be available for Beijing to benefit from its new naval power, even should the United States intervene in a Taiwan scenario.

But there is little indication that Beijing desires any such maritime confrontation. Rather, the PLAN's current strategic goal is much more likely to be to marginalize Washington's ability to intervene with naval forces to prevent the forced reunification of Taiwan with the mainland.

The question of a Chinese naval threat to the United States can be reasonably addressed only in terms of specific maritime scenarios. In the Taiwan case, the PLAN is already capable of significantly slowing the approach of U.S. forces into the theater, defined as an area approximately 1000 nautical miles (nm) to the east of the island. The PLAN would cause this delay if it could covertly deploy perhaps two dozen submarines and maintain them on station for at least a month; this might well be too long for the Taipei government to maintain a struggle against military pressure exerted by the mainland. And such pressure would likely not be in the form of an amphibious assault, which would provide a target-rich environment for U.S. airpower. The will to fight of Taiwan's government and people may be its weakest link. Thus, Beijing is more likely to use maritime measures against the island's economy, to pressure the population and Taipei's decision-makers.

THREAT TO JAPAN?

The second strategic maritime concern for China is its disputed waters with Japan. Tokyo would likely insist on the U.S. naval assistance implied by its Mutual Defense Treaty, should a threatening crisis develop. Beijing's aim in such a situation would likely be consistent with that in a Taiwan scenario: to deter, delay, and if necessary fight American naval intervention, preferably on the margins. These objectives would be much more difficult to attain—in fact, probably impossible—in a Japan scenario, given the proximity of U.S. bases and forces, the clear defense treaty obligations, and the greater sense of American obligation.

SEA LINES OF COMMUNICATION

China's third strategic maritime concern is its long SLOCs. Petroleum imports from Southeast Asia and the Middle East, including the Persian Gulf, face a long seaborne transit. And the Gulf is the source of 60 percent of China's imported oil, while most of its imported natural gas comes from Southeast Asia.[8] These appear vulnerable to PLAN eyes,

but in fact it would be difficult for even the U.S. Navy to interrupt China's sea lanes over which international energy flows. Should the United States attempt physically to interrupt the SLOCs, it would almost certainly mean directly attacking China, directly attacking other nations, interfering with the peacetime passage of third-country tankers at sea, or all of the above.

The SLOCs are most vulnerable not on the high seas, but at transit points through narrow straits, including Hormuz, the 9-Degree Channel, Malacca, Luzon, and Taiwan. The most likely tactic for the United States to employ would be a blockade of Chinese oil port terminals, or of these chokepoints. Such actions would be acts of war against China and other nations, and also would likely not succeed in significantly reducing China's overall energy supply.

A Sino-American crisis (over Taiwan for instance) might drive Beijing to decide that the PLAN had to be capable of defending these SLOCs. Beijing would have to make a major change in national budgeting priorities to build a navy capable of protecting the extended SLOCs. This degree of PLA growth is inhibited by several factors.

First, developing China's economy and ensuring the welfare of its people remains the government's top priority. Second, while Taiwan remains the most sensitive issue between Beijing and Washington, the present economic and political situation on the island, U.S. and Chinese interest in keeping the issue within peaceful bounds, and common interest in the campaign against terrorism, mitigate against the reunification issue deteriorating to the point of hostilities.

Third, despite announced budget priorities, the PLA remains dominated by the army, with the navy only as strong as specific maritime-associated national interests justify. Current PLAN modernization seems fueled by increased national revenues rather than by a reordering of budgeting priorities within the PLA.

China's leaders are well aware of maritime interests as vital elements in their nation's economic health and their own political legitimacy, and the importance of a capable PLAN. But China's concern for the security of its overseas energy supplies does not dominate its national security policy process, and the most important aspects of energy security for Beijing are economic and political, not military.

SOUTH CHINA SEA

Fourth for Beijing as a strategic maritime concern is the South China Sea, with its contentious territorial claims among five or more claimants to the bits and pieces of land that dot that body of water. Little chance of armed conflict presently exists, however, primarily because no significant energy reserves have been found in the disputed central areas of the Sea. In fact, China, the Philippines, and Vietnam have signed an agreement to jointly explore the area. Control of the Malacca Strait is also probably viewed as a vital national interest in Beijing, but that is also the view of the United States, Japan, and the other East Asian nations. China almost certainly considers the United States Navy as the only force capable of interrupting traffic through Malacca.[9]

CONCLUSION

In conclusion, China's modernizing navy is already in a position to hinder U.S. naval operations in some scenarios involving Taiwan. The PLAN is certainly not able to pose a significant threat to open-ocean naval operations by the U.S. Navy, either in the East China Sea or over the long SLOCs from that sea, through the South China Sea and Malacca Strait, across the Indian Ocean to the Persian Gulf. The United States does, however, need to increase the ability of the American Navy to maintain the presence and capability to safeguard national maritime interests in East Asia.

ENDNOTES

1. All such numbers are speculative: not only is Beijing secretive and inconsistent about publicizing the size of its active duty forces, but uncertainties regarding the size and role of the militia, reserve forces, and the People's Armed Police (PAP) further blur the picture. The official Chinese numbers presented in the 2005 White Paper on "China's Endeavors for Arms Control, Disarmament and Non-Proliferation," Section IV, "Large-scale Reduction of the Military Personnel," at: http://www.china.org.cn/english/features/

book/140320.htm, states that China made the decision to downsize its military personnel by one million in 1985. By 1987, the size of the People's Liberation Army (PLA) had been reduced from 4.238 million to 3.235 million and further reductions followed thereafter. By 1990, the number of armed forces had been cut down to 3.199 million, downsized by a total of 1.039 million. Since 1990, China's armed forces have undergone a series of adjustments and their size has continued to shrink. China decided in 1997 to once again downsize its military by 500,000 within three years, reducing its military size to the level of 2.5 million. In 2003, China decided to further cut down the number by 200,000 within two years and to reduce its military size to the level of 2.3 million." Practically no current member of the PLA has experienced combat.

2. China's 2000 *Defense White Paper*, Section IV: while the army will be reduced by approximately 18 percent as a result of the then most recent cuts, the navy would suffer an 11 percent reduction in personnel. See: http://www.china.org.cn/e-white/2000/20-5.htm.
3. 2004 *Defense White Paper* Chapter III, "Revolution in Military Affairs with Chinese Characteristics," at: http://www.fas.org/nuke/guide/china/doctrine/natdef2004.html#4.
4. China's *2002 Defense White Paper*, Section III: The Armed Forces, at: http://news.xinhuanet.com/english/2002-12/10/content_654706.htm.
5. China's conventionally powered submarine force is currently led by twelve Kilo-class and approximately ten Song-class boats, with more of the latter under construction. Less capable and older are the seventeen Ming-class. Of the thirty to fifty Romeo-class submarines in the PLAN, probably no more than twenty are operational, due primarily to personnel availability.
6. Three FBMs are considered the minimum number to keep one constantly on patrol. This reflects U.S. practice, however, and may not be Beijing's goal.
7. A good explanation of AIP is provided in Richard Scott, "Boosting the Staying Power of the Non-Nuclear Submarine," *Jane's International Defense Review*, vol. 32 (November 1999): 41-50.
8. Philip Bowring, "Oil-Thirsty Asia Looks to Calm Gulf Waters," *International Herald Tribune* (9 February 2006), at http://www.iht.com/bin/print_ipub.php?file=/articles/2006/02/08/opinion/edbowring.php.
9. See, for instance, "China and Vietnam Agree to Promote South China Sea Joint Exploitation," *Xinhua* (19 July 2005), in *Alexander's*, Vol. 10, Nr. 15 (17 August 2005), at http://www.gasandoil.com/goc/news/nts53364.htm.

PLA GROUND FORCES: THE VIEW FROM BEIJING … OR HEILONGJIANG … OR XINJIANG

DENNIS J. BLASKO

A People's Liberation Army (PLA) ground force (army) officer who entered service in the mid-1990s would be able to outline a long list of developments over the past decade that point to a significant increase in China's military capabilities. These developments are all part of a general military modernization program that began in the late 1970s and became much more determined and focused around 1999. In many ways, today's PLA is much different than that of the mid-90s, but in many other ways it has maintained many of the traditions of the Red Army from half a century before. The most fundamental tradition underlying all changes of the past decade is that the PLA remains both an army of the people and an army of the Chinese Communist Party (CCP). Unlike most other modern militaries, the PLA still has an active system of political officers to ensure ideological and political loyalty to the CCP. Within units, both the commander and political officer are responsible for the performance of their organization, and a party committee, consisting of senior party members in the unit, helps make decisions and spread information necessary to accomplish any mission assigned. Although the political officer system is ubiquitous throughout the PLA, officers and soldiers stationed throughout the country will have different perspectives of their own unit's modernization based on where they are stationed and the missions assigned. Most PLA officers, too, would have a different view of their force than what is portrayed in most foreign media.

Nearly any PLA officer with 10 years of duty would note that ground force modernization is underway throughout the country in each of the seven Military Regions and includes preparation for a wide variety of missions. They likely also could describe most of the following changes in the force.

MANPOWER

Starting in 1997 with a personnel size of around 3 million, the PLA has undergone two recent reductions in force, so that it now numbers about 2.3 million. (The initial reduction amounted to 500,000 personnel and was followed by an additional 200,000 from 2003 to 2005.) Despite taking the bulk of the personnel hits, today the army is estimated to comprise approximately two-thirds of the force, with about 11% in the navy, 17% in the air force, and 4% in the Second Artillery (strategic missile force). The vast majority of officers in senior leadership positions still are army officers, though that situation is changing gradually. PLA officers and uniformed civilian cadre in higher headquarters were the primary targets of the last reduction in force. In a new development over the last year, however, the PLA has begun hiring "non-active duty civilian contract workers," who are not counted as active duty personnel, but serve in specialist and technical positions in headquarters at or above army level and in non-combat units in education, research, engineering, health, administration, and logistics jobs.

BUDGET

At the same time the PLA has been reduced in number by about a quarter, its official budget has grown from about $6 billion in 1995 to some $35 billion in 2006. Fortunately, for officers and soldiers, a large percentage of this increase has gone to provide better food, housing, and uniforms. In just this

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past July, pay for many service members reportedly doubled. But there is still not enough money to go around, in part because everything in a modernized force costs more money than in the past.

PERSONNEL SYSTEM

In 1999, the term of service for all conscripts was reduced to two years. Concurrently, a new noncommissioned officer (NCO) system was implemented providing for six grades of NCOs with total service up to 30 years. NCOs have also been given many of the duties previously performed by both officers and conscripts. Improving NCO professional education and technical capabilities is a high priority. As the PLA has reduced its numbers, the ratio of conscripts to NCOs to officers has been and continues to be adjusted with significant growth in the numbers of NCOs, while numbers of conscripts and officers are cut. These developments have important impacts on PLA training, education, and force structure.

FORCE STRUCTURE

Prior to the personnel reductions starting in 1997, the ground force was structured into 24 group armies (corps-sized units). Maneuver units (armor and infantry) were broken down into some 90 infantry and armored divisions and approximately another 15 brigades (mostly armored), with significant numbers of artillery, anti-aircraft artillery (AAA), other support units, and local border/coastal defense units. A decade later, the number of group armies is 18, most of which are considerably smaller than in 1997; the number of maneuver divisions has dropped to about 35, while the number of maneuver brigades has increased to about 45. Many former divisions have been downsized to brigade strength (perhaps half as large as their previous selves). A number of the remaining infantry divisions have been reduced in size by transforming one infantry regiment to an armored regiment, giving them a total of three maneuver regiments (instead of four in a full strength division). At the same time, the number of mechanized infantry units (both divisions and brigades) has increased, including the formation of two amphibious mechanized divisions, so that the army now has a larger amphibious force than the PLA Navy's marines. Mechanized infantry units are now found in every Military Region (a decade ago they were found in only Beijing and Shenyang Military Regions). Currently, armored and mechanized infantry units comprise nearly half of the maneuver force. Over the past 15 years, new units have been created including a Special Operations Force group in each Military Region, helicopter groups, air defense brigades (composed of both AAA guns and surface-to-air missiles), one or two short-range ballistic missile brigades, psychological operations units, and information warfare units. Many developments in force structure and equipment modernization are part of the PLA's "army building," which is part of the "Revolution in Military Affairs with Chinese Characteristics" and propelled by "the dual historic tasks of mechanization and informationalization."

NEW EQUIPMENT

Though much attention has been paid to new weapons and equipment in the navy, air force, and Second Artillery, the army, too, has been the recipient of large amounts of new gear since the late 1990s, most of it produced by the Chinese defense industries. Unlike the navy and air force, which have received significant numbers of several types of weapons systems from Russia, the ground force has mainly received only Russian Mi-17-series helicopters and some precision-guided artillery munitions and technology. On the other hand, the Chinese defense industries have supplied everything from new main battle tanks, AAA and surface-to-air missiles, Unmanned Aerial Vehicles, and small arms to logistics and repair vans and other support equipment (part of the "mechanization" of the force). A major part of the new equipment entering the force is electronics, computers, and communications gear produced by Ministry of Information Industry (MII) factories (part of the drive to "informationalize" the PLA). Smaller forces and more money available to the PLA came at about the same time the MII achieved take-off in electronics production and the military has taken great advantage of the new electronics equipment

and communications capabilities hardly dreamed of a decade ago. At the same time, major emphasis has been placed on "new equipment training" so that soldiers are capable of actually using and maintaining the entire array of new equipment once it gets to units. Nevertheless, there are still reports of units that do not have adequate training material for their new gear, do not use it properly, or are afraid to take it to the field. In order to better prepare soldiers to operate more expensive equipment more efficiently, the PLA uses a wide variety of training simulators to provide (relatively) realistic experiences at less cost and with less wear and tear on operational equipment than during field training. Due to the size of the ground force, all units cannot be equipped with modern equipment at the same speed, resulting in many units still having a mix of low-technology, medium- and high-technology equipment in their formations. Moreover, often there are multiple versions of the same type of equipment, which complicates both training and maintenance. Modern systems often are still outnumbered by older weapons, many of which are ready to be retired. The helicopter force, in particular, with some 400+/- airframes, is still small for such a large army.

NEW DOCTRINE

Also in 1999, after nearly a decade of study, new training regulations were issued, which brought PLA doctrine up to date with the most likely conflict situation the force would face (local war under informationalized conditions). It formally accepted the role of high-technology on battlefields that extend from the ground to the air and sea (as well as under the sea), and to space and throughout the electromagnetic spectrum. The new doctrine understands military power is but one element of comprehensive national power and calls for the integration of firepower, mobility, information warfare, and special operations through joint operations of all services in its campaigns. It retains traditional elements of speed, surprise, deception, and use of stratagem. The PLA continues to emphasize many aspects of People's War (also under informationalized conditions), especially the mobilization of the Chinese people and economy. In particular, Chinese military planners are focused on air defense of the mainland by military, paramilitary, and civilian forces to protect China from long-range, precision-guided munitions it assumes the enemy will use. While calling it "active defense," PLA doctrine recognizes the decisive nature of the offense and allows for the possibility of preemption. The PLA also sees itself having a mission of strategic deterrence, maintaining "the more powerful the warfighting capability, the more effective the deterrence."[1] New doctrine is one of the important elements of the "preparation for military struggle," which covers the entire spectrum of potential missions that drive military training.

TRAINING

All components of the PLA are focused on improving their joint operational capabilities through realistic training. PLA training is guided by annual regional and service training tasks and a large body of guidance known as the "Military Training and Evaluation Program" (MTEP). The MTEP provides training standards for all types and levels of units and headquarters. In addition to standardized requirements, currently the PLA is emphasizing techniques to attain accurate evaluations of unit proficiency through annual tests in the field, usually including live fire exercises. Although increasing proficiency in joint operations has been a goal for several decades, in 2004 the senior PLA leadership determined that all of the military's new equipment, capabilities, and various components of the Chinese armed forces were not being included sufficiently in much of the training throughout the country. In response, the leadership developed a new phrase, "integrated joint operations," to refocus efforts on incorporating *all* existing and developing capabilities into training. Beijing assigned the Chengdu Military Region to take the lead in the integrated joint training pilot project to experiment in how to work out the kinks of interservice operations. Much of the this training is now being conducted by the 13th Group Army and the 33rd Air Division, both headquartered in Chongqing, deep in China's interior. While many types of exercises have been conducted, a significant new focus appears to be on the development of doctrine for

PLA Air Force aircraft to provide Close Air Support (CAS) to ground troops. In the past, the PLA did not appear to have included CAS as an Air Force mission (focusing instead on pre-planned, centrally controlled battlefield air interdiction missions to support ground forces), but now 13th Group Army and the 33rd Air Division appear to be taking the initial steps to develop tactics and techniques for this important joint mission. Training commanders and headquarters staff in live exercises and computer simulations is a major emphasis throughout the country. Along the coast, units from the Nanjing, Guangzhou, and Jinan Military Regions (and to a lesser extent, the Shenyang and Beijing Military Regions) practice amphibious operations annually. Much amphibious training is by nature joint, but much preparatory individual service unit training is required to make sure that time is well spent when all forces exercise together. Though amphibious training receives a lot of press attention, units in all Military Regions engage in training for many missions, such as border defense, defense against amphibious operations, high-altitude and desert operations, forest and urban operations, and, now with the Olympics just two years away, anti-terrorist operations. In order to make these integrated joint operations, active duty units incorporate reserve units, militia forces, and civilian support into training. The PLA often trains with the militia, People's Armed Police (PAP), civilian police forces, and civilian support elements in local air defense, nuclear, chemical, and biological defense, and anti-terrorist drills. These efforts are often coordinated in joint military-civilian command posts, which are linked by modern communications and manned by military, party, and government officials. (These joint military-civilian facilities are usually part of the nation-wide system of National Defense Mobilization Committees.) As the force modernizes, PLA trainers recognize the need for additional, modern training areas and facilities to support the needs of the transformed PLA.

LOGISTICS

In its study of foreign wars in the late 20th century, the PLA well-understood the need for a modern logistics system to meet the requirements of high expenditures of ammunition, fuel, and other supplies on the high-technology battlefield and the absolute necessity for proper maintenance and repair of modern weapons. Force structure has been modified to accommodate these requirements, with perhaps the most obvious examples being the creation of Joint Logistics Departments at each Military Region headquarters and the formation of a Logistics Support Brigade in the reserve forces of each Military Region. The Jinan Military Region has been assigned the experimental task of perfecting the joint logistics system. New equipment, covering the gamut from field kitchens to fuel trucks and field pipelines to forklifts and conveyor belts ("mechanization" of the force), controlled and accounted for by computers, bar codes, video-links, and smart cards ("informationalization" of the force), has been introduced throughout the country, with attention paid particularly to remote regions. Logistics and armament units conduct their own functional training to prepare them to support the combat units, then deploy to the field in exercises to provide real-life support. A major element of logistics doctrine incorporates support by the local civilian economy and militia forces. Local governments are also involved in planning infrastructure development (roads, highways, railroads, ports, airports, etc) to accommodate military needs.

MILITARY EDUCATION

The PLA recognizes that highly skilled and educated officers, NCOs, and enlisted personnel are the key to modernizing and transforming the force. As the PLA has downsized, its professional military education system has also restructured in size and course content. In the past few years, several military academies have been turned over to local control, reorganized, or been reformed into comprehensive military training bases to fulfill new requirements. NCO education at NCO academies and in officer academies has been emphasized. Course content has been modified to include instruction on the PLA's new doctrine. This year the number of high school graduates entering the officer academies has been cut in half, down to 10,000 from 20,000 in previous years, and the number of freshman

"national defense students" (in civilian universities on PLA scholarships) has been reduced to 10,000, down from 12,000 last year.[2]

RESERVE UNITS AND MILITIA

Since about 1998 the reserve force (which is made up of both PLA reserve units and the militia) has undergone many of the same transformations and modernizations as the active PLA. Reserve units often receive old equipment from active forces when they are upgraded to new gear, but some new equipment has also entered into the reserve force. Reserve units and militia are more frequently integrated into larger exercise scenarios than in prior decades. Fully one-third of the number of PLA reserve divisions and brigades are AAA units. Urban air defense is a major emphasis for the militia. Local governments are instrumental in funding operational and training requirements for the reserves and allocating space for training areas (which recently have begun consolidation for efficiency purposes).

MISSIONS

If asked, PLA officers could probably recite China's basic goals and tasks in maintaining national security (as defined by the Chinese Defense White Paper in 2004), beginning with, "To stop separation and promote reunification, guard against and resist aggression, and defend national sovereignty, territorial integrity and maritime rights and interests." They would note the priority given to Taiwan, implied in the first element of the goals, but also point out that China is threatened by terrorist and extremist groups on or near its borders. With regard to Taiwan, they might mention that instead of overt threats as in some past times, Defense Minister Cao Gangchuan, in his "Army Day" speech of this year, emphasized first the peaceful reunification of Taiwan with the mainland:

Safeguarding national sovereignty and territorial integrity and achieving the motherland's complete reunification are the core interests of our country and our nation. We will firmly execute the central authorities' fundamental policy for settling the Taiwan issue. *We will show our maximum sincerity and exert our greatest efforts to promote a peaceful development of cross-strait relations and ensure the prospects for peaceful reunification*. At the same time, we will firmly fulfill our sacred duty of safeguarding our national sovereignty, territorial integrity and security. We will absolutely not tolerate "Taiwan independence," and will absolutely not permit the "Taiwan independence" forces from dividing Taiwan from our motherland in any name and any form.[3] (emphasis added)

While a significant portion of the ground force is focused on the Taiwan mission, the rest of the PLA undertakes preparations for a variety of other missions, often involving the security of China's 22,000 kilometer land borders with 14 countries and 14,500 kilometers of coastline. An undisclosed number of PLA troops guards China's borders and coasts (in conjunction with about 100,000 PAP border security personnel) in units stationed all along its periphery. These units are among the local forces throughout the country that are unlikely ever to be deployed in a force projection role, as some of the main force group armies, divisions, and brigades might be.

A PLA officer might also point with some pride to the extent that units from the PLA, PAP, reserves, and militia all participate in disaster relief operations throughout the country. This year has been a particularly bad year for floods, fires, and drought. He might also be proud to report that Chinese and PLA participation in UN peacekeeping missions is the largest among the Permanent Five members of the Security Council. In recent years, units from all over the country have deployed to UN missions, including Lebanon, Congo, and Liberia. Some officers may have mixed feelings, however, about the amount of time their units are involved with providing labor and material support to the local government, often in construction projects in poverty-stricken rural areas. These efforts are a major element in the PLA's support to national economic development.

PLA SELF-ASSESSMENT

The number of moving parts to the PLA modernization program, such as personnel policies, force structure, equipment, training, and education, could easily be disorienting to some mid-level

officers. But what is likely to be readily apparent to an officer in the field is that all these changes will not come to fruition overnight, and the PLA still has a long way to go in the modernization process. In that regard, the target date of 2020 for completion of many reforms, such as the "Strategic Project for Talented People," likely would seem reasonable to people actually involved in the process. An even longer timeframe might be envisioned for the complete transformation of the PLA.

A PLA officer might even be amused if his political officer were to tell him that the U.S. Department of Defense just reported to Congress that "China's leaders may overestimate the proficiency of their forces by assuming new systems are fully operational, adeptly operated, adequately supplied and maintained, and well integrated with existing or other new capabilities."[4] While acknowledging much progress has been made, any PLA officer would know from his own experience and reading of the PLA press that senior Chinese officials are well aware of the shortcomings in the force and the amount of work necessary to overcome them. For example, within the last six months, a PLA officer is likely to have read many of the following authoritative assessments.

- **General assessment:** "Now our army has made tremendous achievements in building itself, but it is also faced with the problems that its level of modernization does not meet the requirements of winning local war under "informatized" conditions and that its military capability does not meet the requirements of carrying out its historic missions at the new stage of the new century. Deep-seated problems need to be solved urgently, and some major relationships need to be grasped scientifically. . . . Ours is a large developing country, and the contradiction between the demand of army modernization and the inadequate input will exist for a long time to come. So we should pay more attention to scientific management, optimize the allocation of resources, and increase the comprehensive efficiency of their utilization. . . . We should energetically carry forward the spirit of hard struggle, always implement the principle of building the army through diligence and thrift, and do a good job in managing and using the limited military expenditure. This has provided an important method for our army to follow the road of modern development with less input but higher efficiency and of bringing about faster and better development."[5]
- **Lack of funds:** "However, China is a large developing country. Money is needed in many aspects. The contradiction between the needs of military modernization construction and the short supply of funds will exist for the long run. Satisfactorily managing and using limited financial resources offered by the national government is a very practical issue before us."[6]
- **Lack of qualified personnel:** "At present, the quality of our officers and soldiers has comparatively improved. However, there is still a gap between the current level and the requirements that must be met in order to win wars. The low level of military quality and scientific and cultural quality has remained a noticeable problem with the structure of the quality of officers and soldiers. A serious shortage of professionals for commanders of joint operations and professional technicians is still apparent. All of these problems hold back and impede the development of military capability building."[7]
- **Problems in joint training:** "At present, our military is still comparatively weak in joint training. Some commanders have yet to strengthen their awareness of joint operations, the leadership and administrative framework and the operating mechanism for joint operations have yet to be completed, joint actual-troop operations are still insufficient and there is still a comparatively wide gap between the current joint operation abilities and the requirements of actual battles."[8]
- **Technology gap:** "Over recent years, our military has made leaps-and-bounds progress in weaponry and armaments construction. However, there is still a considerable gap between the current level and the requirement that must be met in order to effectively fulfill the historic mission of our military in the new period of the new century."[9]
- **Technology gap** (continued)**: "**At present, our military modernization construction is in the

> initial period in which mechanization, semi-mechanization and "informatization" develop together. This determines that exploration in integrated training—which is related to mechanization, semi-mechanization and "informatization"—is also in the initial period and our achievements in mechanization, semi-mechanization and "informatization" are also in the initial [stage]."[10]

Despite the 2020 and beyond timeframe for completion of the Chinese military modernization program, PLA officers understand that *if the CCP leadership orders the PLA to accomplish a mission, the military will follow the orders* of its civilian leaders and attempt to carry out its tasks based on the capabilities at hand and the progress made to date. While such an officer can point to any number of areas of marked improvement in capabilities over the past decade, the PLA field grade officer also knows that none of his superiors have actually planned for, implemented, or commanded in actual combat any of the intricate joint campaigns as called for by their new doctrine. While he has much to be proud of, much uncertainty remains, and every PLA officer (and NCO) faces much hard work to develop a modern military in the years and decades ahead.

CONCLUSIONS

The progress of PLA modernization deserves careful attention by the United States, Europe, and China's neighbors. The past decade has resulted in significant increases in a variety of military capabilities, though, as illustrated above, the PLA leadership itself understands that many challenges remain ahead. China's civilian and military leadership is attempting to balance military modernization with the larger requirements of national economic development and domestic stability. Unlike some countries which have had an overt "military first" policy, such as the former USSR and North Korea, China is not diverting so many resources to the PLA that other parts of the society and economy suffer. A major shift in resource allocation to the military would be visible to the outside world and very likely have adverse impact on domestic development programs.

As it modernizes, however, many PLA efforts will be focused on countering the types of advanced capabilities the United States military has proven effective in combat on numerous occasions since 1991. While preparing to defeat the world's most advanced forces tactically and operationally may be a prudent, but ambitious, military goal, development of such capabilities does not in itself reflect a strategic political intent to challenge the position of the United States in Asia or globally.

With a generally positive international environment, a long-term approach to military modernization, and the need for continued economic development and social stability, it is arguable that currently Beijing is focused more on *preventing* the occurrence of negative events (i.e., deterrence) than it is on compelling certain events to occur by the overt use of military force. PLA doctrine understands the relationship between military capabilities, deterrence, and achieving strategic objectives:

"Strategic deterrence is a major means for attaining the objective of military strategy, and its risks and costs are less than strategic operations. . . .Warfighting is generally used only when deterrence fails and there is no alternative… Strategic deterrence is also a means for attaining the political objective…Without resolute determination and firm volition, deterrence is feeble."[11]

In order to achieve its strategic goals through deterrence, Chinese leaders believe they must demonstrate both their improving military capabilities and their determination to use force, if necessary. These demonstrations, however, create the risk of misinterpretation and international reaction contrary to Beijing's intended goals. Thus, Beijing finds itself facing a security dilemma as it builds a modern military to protect its national interests. China's actions do not occur in a vacuum and its growing capabilities need to be evaluated in relation to the capabilities and intentions of other regional powers. China's transition from a continental-orientation to both a land and maritime power has just begun—and the perception of progress and intentions from Heilongjiang or Xinjiang is probably quite different than the perception in Washington.

ENDNOTES

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CHINA'S NEW CIVIL-MILITARY DYNAMIC: CHALLENGES AND OPPORTUNITIES FOR PLA MODERNIZATION

KRISTEN A. GUNNESS

Since the mid-1990s the Chinese People's Liberation Army (PLA) has been undergoing an ambitious reform and modernization program. Acting upon its own assessments of the rapidly changing nature of modern warfare in the wake of the first Gulf War—and changing perceptions about China's security situation—Beijing's military leadership concluded that the armed forces of China were ill-suited to cope with its future defense-related challenges. In response, the leadership of the PLA set upon a path of reform aimed at building a more professional force in a corporate and institutional sense, and a more capable force in an operational sense. This primarily entailed changing the Chinese armed forces in two ways, called the "Two Transformations" in the parlance of the PLA:[1]

- From an army preparing to fight local wars under ordinary conditions to an army prepared to fight and win Local Wars Under Modern Informationalized Conditions; and
- From an army based on quantity to an army based on quality.

A corollary to the "Two Transformations" is that the PLA must shift from an army that is personnel intensive to one that is science and technology intensive. The scope of reforms that the PLA is aiming to implement in order to achieve this is broad and affects all areas of PLA activity. Three key areas that the PLA is focusing on include:

- The development, procurement, acquisition, and fielding of new high-tech weapons, technologies, and combat capabilities.
- The development of new operational concepts and war fighting doctrine for their employment.
- The vast array of institutional reforms that will be necessary to underwrite the first two.

However, the PLA and its modernization program do not exist in a vacuum. Understanding what the PLA aspires to achieve also requires placing PLA modernization within the broader domestic context of a changing China. On the one hand, the ability of the Chinese military establishment to achieve many of its near- and long-term objectives will be as much a function of what Chinese society can or cannot support, as it will be a function of the plans and aspirations of the military leadership. On the other hand, social, economic, and political change in Chinese society—forces operating beyond the institutional boundaries of the PLA—are serving as catalyzing forces for adaptive change within the PLA.[2] Understanding these forces are as important as understanding the nuts and bolts of the PLA's modernization program. While this paper cannot possibly address all of the complexities that are present in the Chinese civil-military dynamic, it will look at three "realities" that the PLA is facing, and discuss how the PLA is adapting to socio-economic changes on the ground.

THE THREE REALITIES

Reality #1: The changing dynamics in Chinese society resulting from over two decades of "reform and opening up" represent a double-edged sword for the PLA.

In some cases, the advances of the so-called "Rising China" bode well for the aspirations of China's leaders to modernize the military. For example, China's booming economy adds to the increasing

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levels of funding that the PLA needs to modernize the force (new equipment and technologies) and pay for operations, maintenance, and especially personnel. Moreover, growing pockets of capacity in key sectors of China's "new economy" are assisting the PLA in the research and development of the technologies its new war fighting paradigms demand. One could also point to the emergence of a private sector economy as creating opportunities to rationalize the inefficiencies in the PLA's logistics system, by allowing the PLA to "outsource" for common use goods and services it previously had to provide for itself.

In other cases, socio-economic change engenders challenges to the institutional agenda of the PLA. The same economy that is supporting PLA modernization now provides stiff competition to the PLA in attracting the best and brightest of China's youth, and offers challenges to the retention of the military's most talented officers. On the enlisted side, the highly educated urban high school youth the PLA needs for conscripts are often loath to heed the bugle's call and find ways to evade locally-mandated conscription quotas, whereas the rural poor still see PLA service as a means of personal advancement. Thus, while the ranks are being filled, they are not necessarily being manned with those the PLA desires.

Reality #2: Emerging demographic trends affect the PLA as much as they do the rest of Chinese society.

Rising life expectancies and the "one child policy" have each affected the PLA. Increased life expectancy is one of the many benefits of a modernizing China. Yet the "graying of China" comes with its own set of pressures on the government. For the PLA in particular this means increasing burdens on the military benefits and retirement system as the ranks of retirees grows.[3] It also means problems for retention as those officers who have the requisite skill sets to successfully move into the private sector do so in order to support financially the emerging "4-2-1" family structure (4 grandparents, 2 parents, 1 child). In some cases, "PLA couples" (e.g., husbands and wives who are both commissioned officers) have had to make a conscious decision that one spouse should leave the PLA and find employment in the more lucrative private sector economy in order to more adequately support the family, and to hedge against the declining financial advantages of serving in the military.

Moreover, China's "one-child policy" brings its own set of challenges to the PLA. According to one statistic, in 2006, "only-child soldiers" will account for 52.4% of the force.[4] This trend comes with dual implications. A survey conducted by the political officers in one particular group army is instructive: on the one hand, the survey found that "only sons" tend to outperform soldiers with siblings in verbal tests, communication skills, and aptitude for computer use. On the other hand, "only-child soldiers" tend to exhibit behaviors that are worrisome from the perspective of unit cohesion and effectiveness, including reluctance to engage in high-risk training; problems in cooperating with peers; and a sick call rate twice that of soldiers with siblings.[5] While the data sample on this issue is admittedly small, it is highly suggestive that, if nothing else, the PLA itself is concerned with understanding the implications of the new demographics of Chinese youth.

Working in conjunction with the realities of market forces, the greatest impact China's one-child policy has had on the PLA is the revision in 1998 of the military service laws.[6] Prior to 1998, conscripts sent to the ground forces (the army) served three years while conscripts sent to the navy and air force served for four years. In 1998 the new laws reduced service to two years for all services and branches in the PLA. A key driving force for the reduction in service time was rising pressures from below over the hardships and opportunity costs associated with the absence of only sons for so long a period. In the countryside, the issue revolved around the economic hardships rural families faced with their only son unavailable for working the family farm in the absence of a rural social safety net. In the cities, parents of well-educated "only sons" were becoming deft in finding ways for their only-children to evade military service so as not to miss opportunities for college or higher paying private sector employment.[7]

The new laws have had an immediate impact on the PLA. The amount of time conscripts on active duty now have to train to standard is seriously curtailed with uncertain, but potentially serious,

implications for unit readiness. Moreover, the conscription and demobilization cycles are now shorter. Hence, the cycle is more time intensive to manage and requires greater coordination between military authorities and local civil authorities on both ends of the process.

Reality #3: The most complex adjustments in civil-military relations in today's China are those occurring at the local level.

It is in the provinces, counties, and municipalities where the national defense responsibilities of civilian authorities, the institutional requirements of the PLA, and changing socio-economic circumstances on the ground are intersecting to create new tensions and challenges.

Since the founding of the PRC, civil-military relations at the local level have exhibited a duality of cooperation and competition. In times of great duress, cooperation and mutual support between civil and military authorities, and soldiers and civilians at the local levels, has usually been the rule, not the exception. Whether combating floods or fires, providing disaster relief in the wake of earthquakes, or even the recent "campaign" against SARS, local governments and local PLA garrisons have worked in concert for the greater good. This is the story the Party-State would prefer to tell.

However, evidence indicates that civil-military tensions at the local level are increasingly a function of the pressures under which civilian and military officials labor to meet their respective national defense responsibilities in the face of new socio-economic challenges at the "grass-roots levels." These pressures stand in bold relief when considering the challenges posed by conscription, demobilization, and the mustering of civilian assets for national defense mobilization.

For example, the widening gender gap and continued population growth in China insures, in theory, that there is no dearth of males available for conscription—and it is the responsibility of local civilian officials to produce them every year for the PLA. But meeting the quotas for *qualified candidates* is often problematic. For example, in rural China, the breakdown of the traditional household registration system (the *hu kou* system), the dissolution of the large agricultural communes of the past, and especially the exodus of country youth to the cities and coastal regions in search of work and higher wages is making it increasingly difficult for local officials to produce their quota of males who possess the requisite educational levels, clean criminal records, and medical qualifications for military service. The pressures on local officials are compounded by the compressed conscription cycle in the wake of the new military service laws. As a result, the PLA is not always getting the personnel it needs. The unqualified, with the connivance of pressured civilian officials, can buy their way into the PLA. At the same time, the qualified, especially in the cities, can buy their way *out* of military service by purchasing false statements of medical disqualification. [8]

A potentially greater challenge at the local level—and one that has broader implications for social stability—is the issue of demobilization. Large groups of two-year conscripts—numbering about 400,000 annually according to one statistic—are released from mandatory military service each year and sent back to their homes of record. These former soldiers must be reabsorbed into their communities, and are supposed to be guaranteed job placement, given preferential treatment for various social services, and in some cases provided a living allowance until they begin civilian employment.[9]

It is the responsibility of local governments to provide these benefits for demobilized conscripts. Depending upon the economic conditions of the locality, and the numbers of conscripts returning home, these requirements can pose tremendous burdens that not all localities can meet. These obligations were being so unevenly fulfilled at the local level that in 2002 Beijing issued a circular that was meant to force local officials to meet their obligations.[10] And Beijing has a large stake in ensuring that they do. In May 2003, Professor Yu Jinrong of the Chinese Academy of Social Sciences, published research which found that a good number of the peasant uprisings in one county in Hunan Province were led by males with prior service in the PLA.[11]

Equal, if not greater, than the socio-economic burdens posed by returning conscripts is the challenge of absorbing the hundreds of thousands of career officers who have been, and continue to be, released from service in the course of the massive

reductions in force that have taken place in the last few years.[12]

The difficulties associated with the reintegration of former officers into Chinese society, the complex options and accompanying regulations devised at the national level to accommodate officers released from active duty, and especially the burdens under which local governments are laboring to absorb these numbers are not well understood. For example, the unknown tens of thousands of officers who have chosen to take lateral transfers to state sector jobs (*zhuanye*, one of several options) are finding local officials hard-pressed to place them in civil bureaucracies that are under their own pressures to downsize, or in state-owned factories that are already inefficient due to underemployment. Placing these demobilized officers in jobs is all the more difficult when local officials have to deal with skill sets incompatible with local needs. Moreover, since the civil service and the military personnel systems have evolved along dissimilar paths over the past decade, finding positions where the demobilized officer receives a comparable level of salary and benefits is difficult.

A final issue in local civil-military relations that presents new challenges is the impact of a thriving private sector economy on the national defense mobilization system. Local governments still bear the costs of raising and training their people's militia units and providing logistical support to the PLA when large exercises are held in their locales. In today's China, however, "time is money," and resources sent from the private sector to support mobilization activities are resources not applied to achieving the "bottom line." Who, if anyone, will compensate local private entrepreneurs for the use of their resources? On what legal basis do local civil-military authorities request the support of private assets? What happens if local entrepreneurs do not provide the resources they are asked for, as was the case in Hainan Province in 2002 when only 50% of the civilian vehicles requested for a mobilization exercise actually showed up?[13] For years now PLA mobilization officials, from the General Staff Department down to the county-level offices of the People's Armed Forces Departments, have been voicing a dire need for the National People's Congress to pass a National Defense Mobilization Law to grapple with these and other unresolved questions. The fact that such a law has yet to be passed is an indication that the politics and economics on this issue have not been fully resolved.

HOW THE PLA IS ADAPTING

The PLA is exhibiting adaptive capacity both in adjusting to China's new realities as well as taking advantages of new socio-economic conditions to achieve its own ends.

China's new socio-economic environment clearly presents many challenges to the PLA's modernization plans. The PLA, however, is responding by adjusting the institutional policies and practices that it can control, and by taking advantage of the opportunities presented by economic changes.

One example of this is the formation of a Non-Commissioned Officer (NCO) corps. Nearly simultaneously with the revision of the military service laws, the PLA in 1999 issued a revision to its *Regulations on Military Service of Active-Duty Soldiers*. The new *Regulations* laid the foundation for the creation, for the first time, of a professional corps of Non-Commissioned Officers.[14] By January 2001 the PLA's four general departments issued a regulation that provided detailed policies and procedures for the recruitment, professional development, and career management of a cadre of professional senior enlisted persons. The new NCO Corps program, still in its infancy, will replace the previous haphazard practice of granting voluntary extensions to conscripts who previously served as surrogates for a professional NCO Corps, compensate for the turmoil resulting from shorter two-year conscription periods, and nurture a professional and full-career enlisted force to meet the demands of modern warfare.

Another example of the PLA taking advantage of the new economic environment is the creation in 1998 of the National Defense Scholarship program. Under this program, the PLA provides partial scholarships to worthy high school students to attend civilian universities in return for a commitment to be commissioned in the PLA upon graduation.[15] The PLA established the program to take advantage of the rising costs of a civilian college education in China, which is increasingly out of reach for talented but financially challenged high

school students. With a scholarship program to offset the cost of education, the PLA has been able to take advantage of the civilian education system to recruit more easily the types of students that it can train into the officers it needs for the future.

Beyond scholarships, the PLA is using China's civilian higher education system in other ways. This includes enrolling officers *already* serving on active duty in advanced degree programs at the nation's best civilian institutions; pulling its own military academies up to a higher level of academic standard through curriculum reforms modeled on civilian university models; and enhancing the quality of instruction at PLA academies by accepting top civilian professors as visiting faculty. In addition, the PLA is looking to China's civilian academic institutions to raise the level of the work done in its own academic and technical research institutes by partnering with civilian universities on joint research projects. [16] Where once leaders of the Party enjoined the people of China to "learn from the PLA," it is now clear that the PLA is quite prepared to learn from other sectors of society.

PLA MODERNIZATION AND IMPLICATIONS FOR THE UNITED STATES

Should the United States be worried about the PLA's modernization program? In the author's opinion, that is the wrong question to be asking. Whether the modernization of the PLA should or should not be a source of worry depends upon what that force will be used for in the future, and that is a political question, not a question that can be answered strictly on a capabilities-based assessment of the PLA's modernization program. In other words, it is about Beijing's intentions, not merely its capabilities. In addition, even if one looks at the question, "should the U.S. be worried?" strictly from a capabilities-based assessment, the answer also depends on how U.S. military modernization and transformation proceeds in the future.

For example, if one assumes that the U.S. military's program of transformation and modernization is going to stand still over the next decade then the PLA may be able to close the capabilities gap that currently exists. And yes, there might be cause to worry.

If, on the other hand, U.S. military transformation and modernization continues, then it is unlikely that the current capabilities gap will be closed anytime soon. Thus, whether the United States should be worried depends upon (1) the PLA's ability to continue to modernize (2) whether U.S. military capabilities will stagnate, remain frozen, or move further ahead as has been the historic norm, and (3) political factors that have nothing to do with a capabilities-based assessment of the PLA.

In closing, it is apparent that the immense socio-economic changes occurring in China today will continue to present great challenges, but also great opportunities, for the PLA. The PLA's ability to cultivate the high-tech soldiers capable of implementing its reform program in the face of tremendous socio-economic change is still up in the air. As Shi Yunsheng, former commander of the PLA Navy, complained in 1998, ". . . those we need cannot come, or are not willing to stay after they have come, while those we do not need do not want to go away."[17] The next 10 to 15 years will largely determine whether or not the PLA can manage its human capital to become the fully modernized and technologically capable force it aspires to be.

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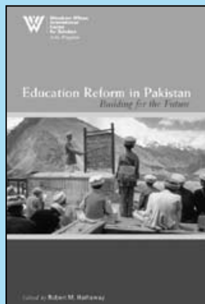

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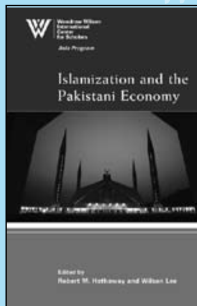

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