



China's Evolving Military Doctrine

By
Nan Li, Eric McVadon,
and
Qinghong Wang

Issues and Insights
Vol. 6-No. 20

Honolulu, Hawaii
December 2006

Pacific Forum CSIS

Based in Honolulu, the Pacific Forum CSIS (www.pacforum.org) operates as the autonomous Asia-Pacific arm of the Center for Strategic and International Studies in Washington, DC. The Forum's programs encompass current and emerging political, security, economic, business, and oceans policy issues through analysis and dialogue undertaken with the region's leaders in the academic, government, and corporate areas. Founded in 1975, it collaborates with a broad network of research institutes from around the Pacific Rim, drawing on Asian perspectives and disseminating project findings and recommendations to opinion leaders, governments, and members of the public throughout the region.

Table of Contents

	Page
<u>Acknowledgements</u>	iv
<u>Overview</u> By Qinghong Wang	I
<u>New Developments in PLAs</u> <u>Operational Doctrine and Strategies</u> By Nan Li	5
<u>Development of a 'New PLA':</u> <u>Missiles and Maritime Reality, Implications, and Prospects</u> By Eric A. McVadon	13
<u>About the Authors</u>	19

Acknowledgements

The Pacific Forum CSIS thanks the authors for their insights and Taiwan's National Defense University for granting permission to reprint the papers originally presented by Professor Li and RADM McVadon at an October 2006 International conference in Taipei.

Overview

By Qinghong Wang

As China continues to emerge on the global stage, increasing attention is being paid to the growing capabilities and doctrine of the Peoples' Liberation Army (PLA), especially in light of steadily increasing Chinese military budgets.

At a recent seminar in Taipei, two American specialists on the PLA, Dr. Nan Li and RADM (ret) Eric McVadon, provided their insights on how to interpret the changes occurring in China's military doctrine. Those views are provided in this volume to stimulate debate and further understanding of China's growing military capability and how it might be employed.

In his commentary, Dr. Li traces the evolution of the PLA's operational doctrine and strategies, emphasizing the major differences between pre-2002 joint services operations and post-2002 integrated joint operations and the factors driving and the implications of these changes.

According to Li, PLA operational doctrine and strategies have evolved through five phases: (1) the "people's war" period (pre-1979), (2) the "people's war under modern conditions" period (1979-85), (3) the "local war under modern conditions" period (1985-96), (4) the "local war under high-tech conditions" period (1996-2002), and (5) the "local war under information conditions" period (post-2002).

Before 1979, the PLA focused on a protracted, "early, total, and nuclear war," which was based on the premise of a Soviet invasion of China. The PLA would compensate for its technological inferiority with its abundant space, manpower, and time by "luring the enemy in deep" and staying mobile.

During the second period, the PLA remained alert to major total war with the Soviets, but the PLA sought to defeat the adversary close to the border and adopted the positional defense of cities combined with mobile warfare. This conflict would be less protracted.

By 1985, PLA strategists had made the judgment that local, limited wars triggered by disputes over maritime and land territories were more likely than a massive foreign invasion and conquest of China. Therefore, the PLA adopted several new strategic principles, such as "victory through elite troops," "gaining initiative by striking first," "victory over inferiority through superiority," and "fighting a quick battle to force a quick resolution."

Li believes that the 1991 Gulf War and the 1996 Taiwan Strait crisis convinced PLA strategists that a more likely war scenario for the PLA would be a medium-sized local war, comparable to a PLA war zone (a region encompasses several adjacent

provinces) campaign (WZC). As a result, PLA strategists added a new concept to the post-1985 strategic principles – “joint operations” (JO, or *lianhe zuozhan*), which emphasizes both “equality” and “partnership” among the four services (ground, naval, air, and missile) while each service conducts relatively independent sub-campaigns. Due to the lack of effective lateral linkages and channels for communication and information transmission, JO is a level-limited, depth-limited, time-limited, unit-effected, and plan-based cooperation among four services.

In order to narrow the technological gap between the PLA and more advanced militaries, PLA strategists in late 2002 redefined PLA transformation as a dual-task involving mechanization and informationization. They articulated and advanced another new concept – “integrated joint operations” (IJO, or *yitihua lianhe zuozhan*), which emphasizes all-level, all-depth, all-time, system-effected, and action-based integration among operating units (land, sea, air, space, and electronic warfare) and essential operational elements (ISR, C4, K, and integrated logistics) with an interconnected information network.

Li believes that three factors – leadership change and consolidation, the development of China’s military research and learning, and the promotion of the institutional interests of the PLA – are driving the post-2002 change.

Li also notes that the post-2002 change provides a conceptual roadmap for the future direction of China’s military modernization, which will concentrate on improving the PLA’s traditionally weak subsystems. He concludes that successful implementation of those objectives not only depends on PLA access to generous financial support and more advanced IT but also depends on changes in its highly bureaucratic and secretive culture.

In his essay on “Development of a ‘New PLA’: Missiles and Maritime Reality, Implications, and Prospects,” RADM McVadon argues that PLA modernization is the result (for the most part) of Beijing’s obsession with Taiwan. He cautions, however, that Beijing is not looking for a fight but is trying to deemphasize the military threat it poses to Taiwan by increasingly resorting to soft power when dealing with Taiwan. Therefore, he believes that the challenge for Washington and Taipei is to reinforce the Chinese penchant to use non-military means to resolve the cross-Strait issue.

McVadon begins with an analysis of the purpose of PLA modernization. He believes that the PLA modernization program is designed to intimidate Taipei or, if used in combat, to achieve prompt success against ROC forces and threaten the U.S. ability to intervene promptly and effectively if the PLA attacks Taiwan. In order to achieve this goal, the PLA has developed two apparent categories of attack options: (1) initial attacks consisting of modern and accurate ballistic and long-range cruise missiles and (2) follow-on strikes using modern and older air and naval units.

McVadon elaborates on the strengths and shortcomings of the “new PLA.” For him, the most impressive aspect of PLA modernization is Beijing’s astute assessment of

the strengths and advantages of its potential adversaries, He notes that PLA modernization will be hampered by a lack of recent combat experience, adequate C4ISR, the ability to carry out true joint operations, and the ability to train in realistic combat conditions.

McVadon ends his essay by stressing the non-military, non-hardware implications of PLA modernization. Beijing's estimate of the risks and negative impacts of using military force against Taiwan, the CCP's priority on sustaining China's economic growth and regional stability, and China's recent preference for using soft power have provided Washington and Taipei opportunities to not only avoid military conflict with the PLA but also to influence Beijing's thinking.

Both Li and McVadon agree that the PLA is undergoing a remarkable modernization that aims at not only acquiring more advanced hardware but also improving network-based joint operations.

There are two significant differences between the two, however. First, McVadon stresses that the purpose and strategies of PLA modernization are tied to the Taiwan issue while Li believes that the post-2002 changes have more to do with China's domestic military development and political power struggles. Second, Li focuses on pure military perspectives of PLA modernization and its implications, while McVadon emphasizes the non-military, non-hardware implications of PLA modernization.

These two essays provide complementary perspectives on PLA modernization: the former offers a detailed review of the evolution of PLA military strategic principles while the latter stresses the connection between PLA modernization and cross-Strait relations. Li's essay provides a more academic analysis of PLA modernization through the eyes of a Chinese expat; McVadon offers more of a pol-mil analysis from a former American military officer. One view is clearly missing: a Taiwanese perspective on PLA modernization and its impact on cross-Strait relations.

I disagree with RADM McVadon's argument that PLA modernization is overwhelmingly focusing on Taiwan; rather, I believe that PLA modernization follows its own trajectory and the current Taiwan-oriented build-up is only one of its post Cold War strategic focuses. In the long run, PLA modernization also aims to protect China's national interests and promote regional and global stability. A modernized PLA can also help China play a bigger role in UN peacekeeping and peacemaking campaigns. Acknowledging the importance of being a "stakeholder" in existing international systems, China can be more "responsible" for maintaining those systems by modernizing its military capability along with other reforms.

McVadon's suggestion that Washington and Taipei should try to reinforce Beijing's penchant for the use of non-military means to resolve the cross-Strait problems is insightful. Apparently, Taipei's objection to the "Three Communications" and Washington's desire to sell more weapons and military equipment to Taiwan have encouraged Beijing to accelerate the pace of PLA modernization. President Hu Jintao's

new concept of “Harmonious Asia” along with Beijing’s use of soft power as stressed by McVadon clearly show the current Chinese leadership’s reluctance to resort to military means to solve the Taiwan problem. Now, the ball is on Washington and Taipei’s side.

In Dr. Li’s comprehensive review of PLA’s strategic evolution, he only touches on one controversial issue – the transparency of PLA modernization. In fact, in addition to the PLA’s “hardware” modernization, the PLA’s “software” modernization aims to increase transparency and to be versed in communicating and cooperating with foreign military groups as well as other objectives. Certainly, the transparency of PLA modernization will be greatly improved over time. The first ever U.S.-PLA navy joint exercise in China in November 2006 was a good starting point for this process.

New Developments in PLAs Operational Doctrine and Strategies

By Nan Li

This essay addresses four research questions: How have the operational doctrine and strategies of the People's Liberation Army (PLA) evolved over time? What are the major differences between the pre-2002 joint services operations and the post-2002 integrated joint operations? What drives the change and what are the implications?

The Evolution of the PLA's Operational Doctrine and Strategies

Before 1979, the central concept that guided PLA war preparation was Mao Zedong's notion of "early, total, and nuclear war." Such a scenario was based on the premise of a Soviet invasion of China. Faced with a technologically superior opponent, the PLA would compensate for its technological inferiority with its abundance in space, manpower, and time. The vast, familiar territory of China, coupled with a protracted, manpower-intensive people's war of dispersion, mobility, harassment and attrition, would gain China sufficient time. This would allow China to gradually weaken the overextended invading forces, identify their weaknesses, reconstitute the resistance forces, and finally win the war through more decisive, strategic offensives.

After 1979, however, the PLA's operational doctrine and strategies have undergone modifications even though the assumption of a Soviet invasion of China had not changed. Rather than fighting a classic people's war by "luring enemy in deep," the PLA now sought to defeat the adversary close to the border. Also, early battles were deemed more significant in influencing the course of war, a modification (if not a total rejection) of the notion of a protracted war of attrition associated with people's war. Positional warfare was also stressed as much as the Maoist maxims of mobile warfare and fluid front, resulting in a compromising strategy of positional defense combined with mobile warfare by small units attacking supply lines of heavily mechanized forces. Finally, cities were to be defended, a departure from the Maoist advocacy of abandoning cities for the vast rural areas where the over-extended enemy forces would be gradually divided and annihilated. These changes can be accounted for by several new post-1979 developments: the succession of Mao Zedong by Deng Xiaoping as the paramount leader since 1979 who placed more emphasis on science and technology; technological progress that had been made in PLA weaponry, particularly in terms of combined arms; and the new consensus among the PLA strategists that the cost might be too high if the Soviet army was allowed to penetrate the interior of China without serious resistance from the PLA.

Table 1: Evolution of the PLA’s Operational Doctrine and Strategies

Periods	Scale	Length	Posture	Dynamics	Manpower/Technology	Arms/Services
Pre-1979: people’s war	Early, total, nuclear war	Protracted	Defense dominant	Mobile, “lure enemy in deep”	Manpower-intensive, “inferior fighting superior”	Combination of regular, local and militia
Post-1979: people’s war under modern conditions	Major, total war	Less protracted	Defense dominant	Positional defense of borders and cities	Less Manpower-intensive	Combined arms (infantry, armor, artillery, engineering, etc.)
Post-1985: local war under modern conditions	Local war	“Quick battle quick resolution”	Offense: “gain initiative by striking first”	Mobile, forward deployment	“Elite forces and sharp arms”	Combined arms
Post-1996: local war under high-tech conditions	War zone campaign	“Quick battle quick resolution”	Offense dominant	Mobile, forward deployment	Mechanized “elite forces and sharp arms,” “local and temporary superiority”	Joint services operations (ground, naval, air, missile services)
Post-2002: local war under information conditions	Campaign and battle	“Quick battle quick resolution”	Offense dominant	Mobile, power projection	Mechanized and informationized “elite forces and sharp arms”	Integrated joint operations

By 1985, PLA strategists had made the judgment that the probability for a massive foreign invasion and total conquest of China had decreased, and this was reinforced by the decline and final end of the Cold War. On the other hand, local, limited wars involving disputes over maritime and land territories were assumed to be more likely to take place. Unlike a major, total war, however, these local wars presumably are shorter in duration, fought on the high seas or in remote border regions that are sparsely populated and have less depth for maneuverability. Such wars also usually require technology-based forces and arms capable of forward deployment. These make it difficult to accommodate a drawn-out, mass mobilization-oriented, heartland-based total war. Finally, potential opponents in these local wars are not as powerful as either of the two superpowers during the Cold War.

All these have reduced the relevance of the PLA’s old comparative advantage in space, manpower, and time. As a result, several new strategic principles had been articulated for fighting and winning local wars, and these are “victory through elite troops,” “gaining initiative by striking first,” “victory over inferiority through superiority,” and “fighting a quick battle to force a quick resolution.” These principles are

significant departures from those of the people's war, which stress manpower-based irregular guerrilla warfare, defensive counterattack, "inferior fighting and winning superior," and protracted war of attrition.

The 1991 Gulf War and the 1996 Taiwan Strait crisis have convinced PLA strategists that a likely war scenario for which the PLA should be prepared to deter or fight is a medium-sized local war comparable to a PLA war zone (a region that encompasses several adjacent provinces) campaign (WZC). All the new strategic principles endorsed after 1985 are applicable to preparation for a WZC. The only exception is that unlike most of the past PLA campaigns, which were dominated by ground forces such as the combined arms group armies, a WZC would be joint services operations-based campaign, where each service conducts relatively independent sub-campaigns. Because a war zone has one strategic direction with several campaign fronts and multidimensional space, sub-campaigns may include information operations, missile operations, air operations, sea operations, amphibious landing operations and land operations.

As a result, unlike earlier campaigns where other services played a supportive role in assisting ground forces operations, a WZC gives equal weight to the four services (ground, naval, air, and missile). This means that each service plays the leading role in a sub-campaign of its functionally specialized domain while other services play the supportive role, and there would be several autonomous but sequential sub-campaigns conducted in separate but inter-connected time and space. For purpose of inter-service coordination, the consciousness of "equality" and "partnership" among services now need to be cultivated, and the identity of the technology-intensive services that are historically marginalized needs to be strengthened.

Moreover, macro-level coordination is mainly realized through integrating commanding officers from the technology-intense services into the existing command structure. It also involves careful planning regarding the relationship between campaign goals and specific tasks and targets assigned to each service to achieve common understanding and purpose; regarding timing and manner of transition from one sub-campaign to another to minimize confusion or neglect; and regarding the relative positions of various services to reduce internal chaos and friendly fire casualties. At the micro-level, coordination is realized mainly through mutual dispatching of service representatives for air-land, air-sea and sea-land operations. They serve the purpose of informing each other of timing, methods, requirements and targets of operations, and formulating and implementing coordinating plans.

By late 1997, China's military planners for the first time raised the issue of "leapfrogging development" for military modernization. By far, PLA modernization had largely been focused on mechanization, or acquiring more advanced operational platforms, and the concept of joint operations (JO, or *lianhe zuozhan*) is articulated and endorsed to make operational sense of these new platforms, or "elite forces and sharp arms." Such an emphasis, however, may widen the technological gap between the PLA and the more advanced militaries, which have already completed mechanization and are

now concentrating on informationization. This is because by the time the PLA completes mechanization, the more advanced militaries would have completed informationization, meaning the PLA would lag behind again for a generation.

To avoid such a fateful outcome and to narrow the technological gap, a new policy has been articulated, and finally adopted by the CMC in late 2002 to guide PLA transformation: “strive to accomplish the dual-historical task of mechanization and informationization.” The endorsement of such a policy, or dual-construction, connotes that PLA transformation should encompass both mechanization and informationization simultaneously. The emphasis, however, should shift from mechanization to informationization. This is because unlike the industrial age where hardware capabilities determine the outcome of wars, in the information age, information has ascended to the commanding height to determine the outcome of future wars. To operationalize the dual-task of mechanization and informationization, PLA strategists have articulated and advanced the new concept of “integrated joint operations (IJO, or *yitihua lianhe zuozhan*).”

Major Differences between JO and IJO

The similarities between the two types of operations are that both involve two or more services, and operations are under one unified command for the purpose of realizing common objectives. There are, however, major differences between the two, particularly in terms of primary actors and their structure, service boundaries and identities, coordination, levels/space/time of operations, and operational effects.

The primary actors of JO, for instance, are relatively independent services. Each of these services possesses its own information system that lacks effective lateral linkage and channels for communications and information transmission. As a result, the structure of this system is vertical, narrow and tall, and JO are based on an ad hoc combination of several tall, smokestack-shaped services.

The primary actor of IJO, however, is an integrated system that comprises operating units (land, sea, air, space, and electronic warfare) and essential operational elements. These elements include 1) ISR (information, surveillance and reconnaissance) that is space, air, sea, and land-based and provides battlefield transparency leading to precision of decisions and operations; 2) C4 (command, control, communications, and computer) which connects the highest command and the lowest individual platform, and soldiers and units of both front and rear; 3) K (kill), or digitized and interconnected weapons platforms that constitute a network of superior fire power capable of non-contact, nonlinear, and asymmetrical strikes; and 4) integrated logistics. The technical platform that glues operating units and essential elements together is the unified information network that enables both smooth communications and real-time information transmission through data-link. The structure of such a system is flat, broad, and short, mainly because it is networked.

In JO, each service is highly specialized in its primary function. As a result, service boundaries are clear, service identities are strong, and the relationship among services is defined by equality. “Physical jointness” is also necessary to give full play to the primary function of each service. In IJO, however, service boundaries and identities may become blurred because 1) one service, unit, or platform may be capable of multiple functions (such as information, mobility, firepower, and protection) in different spatial domains, and 2) different services, units or, platforms may have similar functions (such as long-range precision munitions launched from land, naval, and air platforms and monitored and adjusted by surveillance and command and control). These reduce the need for physical massing of services-based forces and arms for joint operations. Therefore, modular units capable of multiple functions for operations in different spatial domains for different tasks are the basic units for JSO. These units are also capable of being plugged into the information network to achieve interconnectedness, inter-communications and inter-operatability.

Table 2: Major Differences between JO and IJO

	Actor/Structure	Service Boundaries/ Identities	Coordination	Levels	Depth	Time	Effects
JO	Individual service, vertical and tall	Clear	Plan-based	Campaign level	Limited depth	Limited times	Unit
IJO	Networked system, flat and short	Blurred	Action-based	All levels	All depth	All times	System

Coordination in JO is largely pre-planned, and based on a services-oriented division of labor. The planning process may involve layered levels and complex procedures. The implementation follows the prescribed order of the plan. Because such a coordination plan is not based on good, real-time information but on the fixed role of different services, it is difficult to change and cannot adapt to fast shifting circumstances in execution, thus creating new windows of vulnerabilities. Coordination in IJO, however, is random, initiative-based, mutually interactive, and continuous. This is because all the units are interconnected by the information network and can share, real-time information. This type of coordination is more flexible and precise and can adjust faster and better to changing circumstances.

The differences between JO and IJO can also be illustrated in terms of levels/depth/time of operations. In levels, for lack of precise enemy identification and precise strikes in JO, clear line of contact is necessary to differentiate enemy position from one’s own position for air strikes. Once both sides get closely intertwined, the safe distance diminishes and air support becomes difficult for fear of friendly fire casualties. As a result, air-land operations can only be conducted at the campaign, but not battle, level. In IJO, however, the issue of enemy identification and precise air strikes has been largely resolved by information technology (IT). As a result, joint operations can be

extended to more detailed and narrower domains and be conducted at the tactical and battle level without fear of friendly fire casualties. This also makes it possible to conduct asymmetrical strikes against the opponent – strikes with technologies that the opponent does not have and therefore finds it difficult to defend against.

In depth, the limited range of strikes stemming partly from poor weapons guidance and target acquisition makes it difficult to hit deep strategic targets in JO. As a result, JO must follow the sequence of tactical space conquest, campaign space conquest, and final occupation of the strategic heartland of the opponent. In IJO, however, the wide application of IT has alleviated the problem of long-range weapons guidance and target identification and acquisition. As a result, it is now possible to strike deep enemy targets of strategic importance, or those that sustain the opponent's war effort. The destruction of these targets makes it more difficult for the opponent to continue war and therefore more likely to yield. As a result, the need for total conquest and final occupation of enemy territory declines. This also makes it possible to replace the old operational style of sequential, linear push by concentrated forces and arms with parallel and nonlinear deep strikes from multi-dimensional and dispersed platforms. These strikes are also asymmetrical because they are outside the range of enemy fire, which denies the enemy the means to fight back.

Finally, due to the lack of all-time information and operational capabilities and precise air strikes, JO can not be applied during darkness and when the two sides become closely entangled. As a result, two windows of vulnerabilities appear: night combat and close combat. In IJO, IT helps to resolve the problems of all-time information and operational capabilities and close-range precise strikes. As a result, all-time battlefield transparency produced and provided by the information network and accessed by service units, and all-time air support, enable quick and decisive battle. This lowers the concern for exposure of flanks due to the high speed of advance. This means that coordination has to be action-based, flexible, and adaptable, but not plan-driven because of the fast-changing circumstances. The information network also makes it possible for action-based coordination.

The absence and presence of highly effective, integrative C4ISR (C4 plus intelligence, surveillance, and reconnaissance) is clearly the key variable that accounts for the differences between JO and IJO: serious gaps or windows of vulnerabilities in levels/depth/time for the former for lack of integration, and seamlessness in these three aspects for the latter due to a high level of integration.

The final difference between JO and IJO concerns operational effects. In JO, because of lack of IT-based integration, competition largely takes place at the unit level. As a result, operations tend to be more separate, the process slower and dispersed, and the effects more fragmented. Because of the high level of IT-driven integration, however, competition in IJO takes place at the system level. As a result, operations tend to be more focused and purposeful, the pace faster, and the effects more systemic and comprehensive.

Driving Factors and Implications

Three major factors seem to drive the post-2002 change in the PLA's operational doctrine and strategies. The first has to do with leadership change and consolidation. Trained as an electrical engineer who once served as China's Minister of Electronics Industry, Jiang Zemin, being the new chairman of the Central Military Commission (CMC), had clearly been more alert to the impact of the revolution on military affairs than his predecessors and the PLA old guard, such as Liu Huaqing and Zhang Zhen who surrounded him. But it was not after Deng's death and the retirement of Liu and Zhang from the CMC that Jiang felt his power was secure enough to promote this change in Chinese military affairs. The move was also intended to show to the PLA generals that Jiang was just as competent in military affairs, if not more so, than his predecessor and the old guard, in spite of the fact that he had never served in the PLA. This was intended to enhance his personal image in the PLA and further consolidate his position as the CMC chair. Moreover, having served as the CMC chair for many years, Jiang had largely won the political loyalty of the generals by increasing defense spending and promoting many of them to higher ranks, so Jiang was confident that he was in firm control of the PLA. On the other hand, Jiang did not want the generals to meddle in party and government affairs, which might complicate his image and position as an effective leader. So Jiang endorsed two new military policies since 1998. The first was to order the PLA to divest from business activities. The second was to promote a revolution in military affairs (RMA) in the PLA, which is an effective way to focus generals on the narrow military-technical issues rather than the broad area of civilian politics.

The second driving factor relates to the development of China's military research and learning. Military research and learning in China have largely been institutionalized over time, and institutions such as the Academy of Military Science and National Defense University have become the major reservoirs of translated foreign military literature, particularly those from the U.S. on RMA. They also serve as the primary agencies for socializing RMA ideas among China's military and civilian elite. Socialization of RMA ideas is important mainly because it contributes significantly to a general civil-military consensus, the basis for the endorsement of the 2002 policy change by the central leadership. This development in China validates the neo-realist theory of international politics, which argues that major countries attempt to imitate the most effective country in military organization and technology through learning and adaptation, because they are concerned about their own survival and security in an environment of international anarchy (particularly if they lag behind in relative military capabilities).

The last factor driving the change has to do with promoting the institutional interests of the PLA. PLA planners argue for the change because such a change provides a legitimate reason for the PLA to develop and acquire capital-intensive and technology-intensive operational platforms and an information grid. The argument justifies the allocation of more money and better technologies to the PLA, and this clearly serves the financial and technological interests of the PLA. Also, years of high economic growth make it easier to argue for allocating more funding to finance the technological

development of the PLA. Finally, the rapid growth of the civilian IT sector in China provides a strong rationale to argue for IT-based development of the PLA by exploiting dual-use technologies, which are largely associated with this sector.

What are the major implications of the change? The significance of the change is not that it reflects the current reality of the PLA, but that it provides a conceptual roadmap for the future direction of China's military modernization. Because the PLA is now conceptualized as an interconnected and organic operational system, it is likely that future attention and resources will be concentrated on PLA subsystems that are traditionally weak or those that may impede the effective formation and release of the systemic effects and even cause systemic failure. These subsystems include ISR capabilities, a unified information network with common technical standards, powerful and precise munitions, more advanced and digitized operational platforms, and key technologies such as the data-link.

In the final analysis, however, it is important to note that whether the policy of "informationization" can be successfully implemented may depend on whether the PLA will continue to enjoy the generous financial support from the central civilian authorities. Moreover, whether the PLA may get access to and integrate the more advanced IT also affects the outcome of the policy. Equally important, whether the new policy will succeed may depend on whether the PLA can overcome and change its highly bureaucratic and secretive, information-averse culture.

Development of a 'New PLA': Missiles and Maritime Reality, Implications, and Prospects

By RADM Eric A. McVadon, (USN Ret.)

This paper offers a new perspective on how we might cope with the “new People’s Liberation Army (PLA)” that has resulted from China’s ongoing military modernization program. Experienced diplomats and specialists currently consider a military attack on Taiwan by the PRC unlikely. Nevertheless, the Chinese military buildup continues apace. Consequently, the military dimension of Beijing’s obsessive attention to the Taiwan issue has resulted in a stunning modernization program for the PLA. The most remarkable aspects of the modernization are concentrated in the PLA’s missile, naval, and air forces.

The modernization program is sweeping, encompassing a spectrum of weapon systems and platforms ranging, for example, from many types of very lethal and accurate ballistic and cruise missiles to unmanned aerial vehicles (UAVs); from four new classes of modern destroyers to innovative fast missile boats; and from several types of fourth-generation fighter and multi-mission tactical aircraft to transport, early warning, and aerial refueling aircraft. Beijing and the leaders of the PLA have cleverly crafted the modernization program so that it is difficult for Taiwan and the United States readily to devise counters to the new and innovative capabilities.

Put another way, the modernization program that has emerged is clearly not a coincidental accumulation of new capabilities but rather an astutely chosen array of weapons and platforms designed to intimidate Taipei or, if used in combat, to achieve prompt success against ROC forces and threaten the ability of the U.S. to intervene promptly and effectively were the PLA to attack Taiwan. That is Beijing’s evident intent, to achieve that capability, although, it must be said, China is not looking for a fight and would be faced with daunting challenges in putting together a dual campaign against Taiwan and the U.S. using all this new hardware. It is moving quickly in acquiring the hardware but less impressively by far in training, exercising, and coordinating the employment of the new equipment in such a complex dual campaign.

Indeed, Beijing is trying to deemphasize the military threat it poses to Taiwan. Recently there has even been a glimmer of acknowledgment that military intimidation has brought about greater dislike of the PRC by many of Taiwan’s people – recognition that there is a counterproductive aspect to threatening Taiwan with the use of force – by continuing to amass an arsenal of missiles pointed at Taiwan. Beijing seems now to be seeking ways to better balance the military threat it poses with its announced efforts to create a more favorable impression of the PRC among the Taiwan citizenry. Despite Beijing’s assertions in response to U.S. criticism that its military buildup is inconsequential, intended for deterrence, and includes force reductions, the reality is that Taiwan and the U.S. are faced by what might be described as a “new PLA.” This remarkable buildup presents a new military situation in both the cross-Strait context and

in PRC-U.S. bilateral relations. Although conflict is not looming, we cannot prudently ignore these new capabilities.

The PLA has developed two apparent categories of attack options. The new PLA and its older components, taken together, afford conventional attack options that can reasonably and usefully be divided into initial and follow-on categories. Initial attack options consisting of modern and accurate ballistic and long-range cruise missiles would be employed:

- to degrade air and missile defenses in Taiwan and those of intervening U.S. forces,
- to decapitate the Taiwan government and demoralize the citizenry
- in the case of an impending or imminent U.S. intervention, to deter, delay, dissuade, and complicate the U.S. effort and thereby prevent its being timely and effective (intended to create the impression that U.S. direct help is not going to arrive in time to matter);
- as a plausible means to shock Taiwan, pursue its capitulation, and confront Washington with the tough decision on intervention – all of this to be done with long-range missiles without yet sending a single PLA person into direct combat.

Follow-on strike options using modernized and older air and naval units could be employed:

- to consolidate the damage to, or loss of, critical U.S. and Taiwan capabilities (e.g., ensuring that damaged air and missile defense systems are not repaired promptly and are not restored so as to threaten further PLA attacks);
- to administer a major defeat and/or inflict a very high number of casualties on U.S. forces, the idea stemming from the conviction by some in China that the U.S. is casualty averse; i.e., that the Americans would be unwilling to take on another major conflict where U.S. interests are arguably unclear, or would look for a way out of a major conflict in Asia once major losses are incurred.

All this would be part of an effort to convince Washington that support of Taipei is too costly, too difficult, and fruitless, while further convincing Taipei of the futility of continuing against PLA forces that have been very effective (supposedly) against Taiwan and are now (supposedly) preventing or delaying U.S. access.

Let me turn briefly to the strengths and shortcomings of this “new PLA.” The most impressive aspect of the PLA modernization effort may lie in the astute program choices that were obviously made in Beijing and the PLA long before the construction and acquisition began. Chinese leaders seem, unsurprisingly, to have decided to concentrate on the matter of a Taiwan campaign and the prospect of American

intervention therein. They seem to have astutely weighed the strengths and advantages of their potential adversaries and then objectively identified techniques and capabilities to overcome those advantages that were both feasible for the PRC to develop and would not likely be countered. The extensive development, enhancement, and deployment of medium-range and short-range ballistic missiles and impending employment of long-range land-attack cruise missiles reflect thinking along the lines of developing forces that cannot be readily countered. This also represents development of means that do not involve prematurely placing at risk major elements of the PLA.

This strategy of employing missiles coupled, in the case of the attack on Taiwan, with special operations, fifth column actions, and information operations seems to constitute a concerted effort *to be able* to initiate a campaign that cannot be preempted or readily thwarted, that does not directly risk major loss, and that might even be halted or reversed after initiation of hostilities if political or other developments go particularly well for the PRC cause – or even if the winds from Washington seem so unfavorable that halting the attack appears mandatory. In other words, prompt success or impending failure might be accommodated by this cleverly contrived stratagem. Beijing could pause to reconsider or call a halt and declare victory.

With respect to confronting U.S. forces, similarly incisive thinking seems to have prevailed. The U.S. has indisputable advantages in air defense at sea and ashore. These advantages include both shipboard Aegis and surface to air missiles (SAMs) as well as superior inflight-refuelable fighters directed by E-2C and (airborne warning and control) AWACs) aircraft. This made it highly desirable, or imperative, for the PLA to find a way to degrade or neutralize these capabilities by some means that would be largely invulnerable to the very defenses it is attacking. The scheme apparently under development of equipping medium range ballistic missiles (MRBMs) with maneuverable re-entry vehicles (MaRVs) seems specifically directed at that goal: beating U.S. air and missile defenses. At the same time, using ballistic missiles to reach the carriers and cruisers means that the superior U.S. nuclear submarine force is circumvented – for the PLA Navy (PLAN), another major problem avoided.

With respect to weaknesses, the PLA lacks recent combat experience, has inadequate C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) to command and control its forces and accomplish targeting, has not accomplished the ability to carry out true joint operations, and continues to fall short of its goals to train like it will fight. In other words, PLA statements about what it is striving to improve along these lines are actually a menu of needed improvements yet to be made.

To sum up the matter of PLA shortcomings or weaknesses with respect to carrying out a complex two-pronged campaign against Taiwan and to confront the most advanced naval and air forces in the world, the possibilities of complete success are probably low, but the prospects that Beijing may be emboldened by the possession of this “new PLA” and consequently initiate hostilities, whether actually ready or not, are, at a minimum, disturbing. It is certainly important for those who may confront the PLA to

monitor and take seriously evidence of efforts to overcome these shortcomings. It must be assumed, given Beijing's obsession over Taiwan, that the most competent PLA leaders are dedicated to planning this operation and to the specific task of pulling it all together so as to take full advantage of the remarkable hierarchy of forces Beijing and the PLA have so creatively acquired and deployed. We can't count on PLA lack of readiness or incompetence to carry the day for us.

There are of course other implications of the PLA modernization. Taiwan, more clearly than ever from a purely military capabilities perspective, has to look to the U.S. to deter China from attacking Taiwan and, if that fails, to depend on the U.S. to prevent a rapid multifaceted attack that would have a high likelihood of prompt success. Beijing and the PLA have devoted innovative, imaginative, single-minded, and focused, yet comprehensive, efforts toward achieving this new posture. The same degree of innovative and comprehensive effort in Washington and Taipei would seem appropriate to determine how best to cope with or manage the new situation.

The effort must encompass thinking on how to cope with the new threat militarily, of course. However, there is another at least equally important dimension. The thinking must also be geared to achieve a successful outcome in other non-military, non-hardware ways. This other dimension should not only focus on means to avoid conflict but also on ways to influence Beijing's thinking. It could succeed where military efforts could produce mostly frustration for Taipei.

To start, Taipei and Washington might try to reinforce feelings that appear to have taken root among Chinese leaders. There seems to be an increased inclination now in Beijing toward thinking that the use of military force against Taiwan would be imprudent, risky, dangerous, and not in the best interests of the PRC. This idea of having China appear as less threatening to Taiwan and more cooperative in cross-Strait relations is something that might be nurtured.

There are other factors that can be gently exploited in making Beijing less inclined to think that military force is a reasonable recourse. Yes, the PRC's military vulnerabilities are now far fewer than a few years ago, but other vulnerabilities and concerns persist. These center on the need for the Chinese Communist Party to sustain China's unprecedented economic growth and the regional stability upon which it depends, the desire of a more worldly Chinese nation to promote and preserve its international stature and reputation as a constructive member of the community of nations, and the need for the Party and the government to devote full attention to the social inequities, corruption, structural flaws and other matters that create unrest, dissent, and other domestic problems.

This is not to say that lectures to Beijing on these matters will prevent a decision to use military force against Taiwan. It is rather to argue that opportunities such as the exchanges between senior U.S. and Chinese officials should serve as a venue to subtly remind those in Beijing that all wish for China continuing economic success, a stable internal and external environment, and a continuing important role in the region and the

world. The demise of all those favorable elements for Beijing could be the result of a decision to attack Taiwan. That is the message we wish subtly to impart.

Much has been written in Washington in recent months about China's use of soft power. Actually, Beijing, for a decade and to the present, has assigned preference to the use of leverage or tools other than the PLA both to exercise influence and to protect its security interests, including economic security. As to the applicability of this with respect to Beijing and Taipei, the Taiwan problem for Beijing is not altogether an exception to a policy preference for soft power.

It should first be conceded that, despite the huge and sweeping economic links and enormous Taiwan investment in the mainland, the broad and fulsome employment of soft power vis-à-vis Taiwan has been tardy in coming and is still far from completely replacing belligerence and other obnoxious behavior. Nevertheless, there has now come to the fore the desire by Beijing to be attractive to Taiwan rather than relying almost altogether, as it did formerly, on what most would consider an overdose of coercion and threatening behavior. The challenge for Washington and especially for Taipei is further to reinforce this Chinese penchant for the use of non-military means to resolve problems. To suggest an example of how this might be pursued by Taiwan, in those exchanges that are going best with Chinese contacts who count, genuine concern should be expressed for the perils to China's economy and society that would accompany a military attack on Taiwan. In the same breath, however, attention can subtly be given to the mutual benefits of cooperative actions of the sort suggested by Beijing. Not to be flip, but the effort here is to get Beijing to agree with itself – to use Beijing's pronouncements as an opportunity to be delicately pursued.

Despite friction and tensions, there are sufficient positive factors so one need not feel foolish in pursuing the alternative of putting a hopeful, optimistic gloss on the development of China's role in the region and its relations with the United States – and that maybe, just maybe, Beijing's apparent decision to use more honey and less vinegar with respect to Taiwan can be parlayed into something substantively positive for all concerned. This does not ignore that unfavorable outcomes are also in the offing; nor does it necessarily suggest that China has adopted benevolence for the sake of being benevolent. Indeed, it is far more likely that Beijing concluded, that the use of military force was often counterproductive and alarming to its neighbors. Soft power simply worked better and in more ways. It was apparently perceived that China had excelled at national economic growth while only able, far less impressively, to build a military that was first chronically backward and that now promises success only in narrow circumstances; i.e., only when the U.S. is either not a factor or can be thwarted by asymmetric means. Regardless of Beijing's motives, there seem to be opportunities to be exploited.

Conclusion. I worry that the opportunities for possible exploitation that I have just listed may foster more anger and disagreement than innovative and imaginative thinking – especially for strategists in Taiwan who are directly threatened by a proximate PLA. I will be the first to admit that these examples and ideas are offered with considerable

trepidation and, indeed, may be flawed and undeserving in this initial, rudimentary form to serve as guidelines for new thinking by Washington and Taipei. However, I hope that the ideas presented in this paper serve to illustrate that we face a new threat from a “new PLA,” and that we need to appreciate fully the actual consequences of the new threat and the potential implications.

One possible conclusion – or flash of the obvious – is that it is now far more desirable, even imperative, for all sides to avoid military conflict. My offering of some alternative perspectives on the directions the PLA is taking is an effort to inform what I hope might become a serious debate or deliberation on how best to use these, or possibly other factors that others may perceive, to influence Chinese behavior in favorable directions – stemming from paths that Beijing has chosen. Washington and Taipei should help Beijing say things we want to hear them say and then encourage Beijing to repeat its words – until Chinese leaders and the Chinese people actually believe what they are saying.

About the Authors

Nan Li is a senior fellow at the Institute for Defense and Strategic Studies in Singapore.

Eric McVadon is a consultant for the Institute of Foreign Policy Analysis.

Qinghong Wang is a Vasey Fellow with the Pacific Forum CSIS.