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China's New War Concepts for 21st Century Battlefields

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Active Defence and Hi-tech Local War

The Chinese armed forces have embarked on a rapid modernization drive to prepare themselves for the 21st century battlefield and to enable China to project military power well away from its land borders and territorial waters. The new type of war that is now being envisaged by the PLA represents a revolutionary change from the traditional Chinese concept of People's War against an invading enemy seeking to occupy and destroy the PRC. People's War was expected to be an all-out or total war fought primarily by ground forces supported by a motivated population that was fully mobilised for a longdrawn struggle. The concept was evolved by Mao Zedong and was characterized by protracted, large-scale land warfare where the aim was to exploit China's strategic depth by luring the enemy in deep, extending his lines of communications and logistics and eventually destroying him through prolonged attrition.

Underpinning the new professionalism of the PLA is the basic doctrine of "active defence" (jiji fangyu) that seeks to conduct "people's war under modern conditions" (better understood as "local wars under hi-tech conditions" - gaojishu tiaojian xia de jubu zhanzheng. The 'active defence' doctrine calls for integrated, deep strikes - a concentration of superior firepower that is to be utilized to destroy the opponent's retaliatory capabilities through pre-emptive strikes employing long-range artillery, short-range ballistic missiles (SRBMs) and precision guided munitions. David Shambaugh writes, "Rather than conducting a 'people's war' (a strategy to 'lure the enemy in deep' into one's own territory), the PLA doctrine of 'active defence' calls for forward positioning, frontier defence, engagement of the enemy at or over the border and potential

engagement in conflict beyond China's immediate periphery... this doctrine is essentially pro-active and seeks to take the battle into enemy territory." Beijing has defined the following five likely limited war scenarios: military conflict with neighbouring countries in a limited region; military conflict in territorial waters; undeclared air attack by enemy countries; territorial defence in a limited military operation; and, punitive offensive with a minor incursion into a neighbouring country.

The new doctrine and the strategy and tactics associated with it have been influenced by the lessons of Gulf War I in 1991 and the Iraq War of 2003, both of which have been extensively studied by Chinese scholars. The doctrine requires the creation of a capability to project force across China's borders through rapid deployment, conventional SRBMs and cruise missiles, information warfare, electronic warfare, precisionguided munitions, night fighting capabilities and other advanced military technologies. The building of these capabilities, in turn, drives procurement and defence production policies, command and control structures and training. Victory is to be achieved through "strategic strikes," gaining the initiative by striking first, achieving victory with one strike and concentrating China's strength to attack the core of enemy defence.2

Centre, December 1996).

¹ David Shambaugh, "China's Security and Military Policy and Potential for CBMs in the Region," *Asian Security Series* (Washington, D.C.: Henry L Stimson

² US Department of Defense, Report to Congress Pursuant to the FY 2000 National Defense Authorization Act,

Maj. Gen. Shen Xuezai, head of the Military Systems Department of the Academy of Military Sciences (AMS), has written, "Only by controlling the entire battle-space and striking at key points so as to paralyse the enemy's entire operational system and immobilize its forces, will it be possible to win a war."3 Commenting on the PLA's evolving doctrine, Maj. Mark A Stokes of the United States says, "This strategic attack doctrine, one aspect of the PLA's 'limited war under hightech conditions'... continues to adhere to the traditional strategy of 'pitting the inferior against the superior' (yilie shengyou), which recognizes technological inferiority for an indefinite period of time." 4 Much the same point is made in the Pentagon's annual report on the military power of China, "Once hostilities have begun, according to the PLA text, Science of Campaigns (Zhanyixue) (2000),5 'the essence of (active defence) is to take the initiative and annihilate the enemy... While strategically the guideline is active defence, (in military campaigns) the emphasis is placed on taking the initiative in active offence. Only in this way can the strategic objective of active defence be realized" (emphasis added).6

http://www.defenselink.mil/news/Jun2000/china062220 00.htm.

³ Shen Xuezai, "The New Military Revolution and Change in Military Organizational Structure," *Zhongguo Junshi Kexue* (*China Military Science*), 20 February 1998, pp. 122-30, in Foreign Broadcast Information Service, China FBIS-CHI-98-167. Maj. Gen. Shen Xuezai, is one of the PLA's most influential figures in the development of strategy and operational doctrine.

⁴ Mark A Stokes, *China's Strategic Modernisation: Implications for the United States* (Carlisle, PA: Strategic Studies Institute, US Army War College, September 1999), pp. 7-8, http://www.strategicstudiesinstitute.army.mil/pdffiles/PU B74.pdf.

China also follows 'anti-access' strategies to deny access to the adversary to his planned launch pads in an endeavour to prevent build-up of forces for a war against China.7 Planning for antiaccess strategies flows from the apprehension that if superior, well-equipped forces (read the US and its allies) are allowed to arrive in the war zone with the force levels and in the timeframe planned by them, they are bound to prevail. The Chinese calculate that "by mounting a credible threat to do so, they will be able to deter the United States from intervening in the first place, or at least limit the scale and scope of that intervention." 8 The PLA's aim is clearly to deter a conflict or at least delay the opponent's preparation till the PLA is better prepared to react. The PLA seeks to achieve this aim through attacks against air bases and ports and other elements of the logistics chain and against information systems so as to disrupt command and control during build-up. While anti-access strategies are unlikely to succeed in preventing conflict completely, these could impose considerable delay and create the need for caution during build-up.

The PLA's new doctrine is also more assertive than previously and is not bound by any restrictions to confine and limit future conflict to within China's national boundaries. China claims that it has only peaceful intentions and does not believe in launching aggression and that it fights wars only to defend its sovereignty and territorial integrity. According to China's White Papers on national defence, active defence is a defensive military strategy. However, it is clear from Chinese writings that the major characteristics of active defence are distinctly offensive in nature. The PLA publication *The Science of Campaigns*

⁵ Wang Houquing and Zhang Xingye (eds.), *The Science of Campaigns* (Beijing: National Defence University Press, 2000).

⁶ United States Department of Defence, *Annual Report to Congress: The Military Power of the People's Republic of China 2007*, pp. 12-13.

⁷ Anti-access measures are actions taken by an opponent in order to slow down the deployment of friendly forces into a theatre in order to prevent them from operating from certain locations within that theatre, or to force them to operate from distances farther from the area of conflict than would ideally suit their design of battle.

⁸ Roger Cliff, Mark Burles, Michael S Chase, Derek Eaton and Kevin L. Pollpeter, *Entering the Dragon's Lair: Chinese Antiaccess Strategies and their Implications for the United States* (Santa Monica: RAND Corporation, 2007), pp. 13-14, http://www.rand.org/pubs/monographs/2007/RAND_M G524.pdf.

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(Zhanyixue) highlights this offensive approach: "While strategically the guideline is active defence, in military campaigns, though, the emphasis is placed on taking the initiative in 'active offense'. Only in this way the strategic objectives of "active defence" can be realized."9

The doctrine of high-tech local wars under conditions of informationization is still evolving. In the absence of active operational experience, the PLA may take another decade or so to fully implement all the ingredients of the new doctrine. According to Chinese scholars, the rise of hightech local wars is a "historic leap in the development of current wars"; it is the "reflection" of the historic logic of war development at (the) present time"; it is "an important linkage in the chain of war development"; and, it is "the reflection of change from industrial-era production mode to information-era production mode in the military field." 10 Chinese scholars emphasize the high-tech feature of modern wars, as they conceive them, as well as the local feature. In their view, "the aim, range, tools of war and time and space of engagements are all limited."11

'Informationization' as an Asymmetric Strategy

Early in the 21st century, based on recent conflicts, the Central Military Commission (CMC) called for a detailed study of the concept of "people's war under informationization conditions." Ka Po Ng, an associate professor at Aichi Bunkyo University, Japan, sums up the new concept in these words, "...what the PLA is prepared to fight is a people's war in the form of a 'local war under high-tech conditions' with increasing attention to the application of information technology." 12 Clearly, China is engaged in assessing the implications of

information technology and knowledge-based warfare on the modern battlefield and applying the lessons to its own war concepts.

The PLA expects to fight the next war under conditions of what it calls "informationization" or "informationalization." ¹³ In the White Paper on National Defence issued in 2004, informationization has been explained only in general terms, but bears repeating, "To adapt itself to the changes both in the international strategic situation and the national security environment and rise to the challenges presented by RMA worldwide, China adheres to the military strategy of active defense and works to speed up RMA with Chinese characteristics: ¹⁴

PLA analysts have called the ongoing RMA an "informationised military revolution." 15 It emerges that informationization "clearly relates to the PLA's ability to adopt information technologies to command, intelligence, training and weapon systems. This would include broad investment in new automatic command systems linked by fibreoptic Internet, satellite and new high-frequency digital radio systems... The PLA can also contest the information battle space with its new spacebased, airborne, naval and ground-based surveillance and intelligence gathering systems and its new anti-satellite, anti-radar, electronic warfare and information warfare systems... there is increasing 'information content' for new PLA weapons as it moves to link new space, airborne and ELINT sensors to missile, air, naval and groundbased 'shooters' to enable all its services to better

⁹ United States Department of Defence, n. 6.

¹⁰ Peng Guangqian and Yao Youzhi (eds.), *The Science of Military Strategy* (Beijing: Military Science Publishing House, 2005), pp. 403-08.

¹¹ Ibid, pp. 409-22.

¹² Ka Po Ng, *Interpreting China's Military Power:* Doctrine Makes Readiness (Abingdon, Oxon: Frank Cass, 2005), p. 21.

Western governments and analysts use the terms, "informationization" and "informationalization" interchangeably. It has not been possible to get an exact equivalent to the corresponding Chinese phrase from an authoritative source. From the point of view of language aesthetics and phonetics, the term informationization is preferred here. It is also to be noted that the Chinese themselves now increasingly prefer the term informationization in their writings.

¹⁴ White Paper on China's National Defence in 2004, (Beijing: Information Office of the State Council of the People's Republic of China, December 2004).

¹⁵ Zhou Fangyin, "The Impact of Information Revolution upon Military Affairs and Security," *Contemporary International Relations*, Vol. 7, 2001, p. 28.

use new precision-strike weapons." ¹⁶ According to the 2004 White Paper, "In its modernization drive, the PLA takes informationalization as its orientation and strategic focus." The PLA has adopted what it calls a "double historical mission" and a "leapfrog development strategy" – accelerating military informationization while still undergoing mechanization.¹⁷

The denial of information, strategic deception and the achievement of psychological surprise have for long been an integral part of Chinese military doctrine. The Chinese find information warfare (IW) extremely attractive as they view it as an asymmetric tool that will enable them to overcome their relative backwardness in military hardware. The Chinese are devoting considerable time and energy to perfecting the techniques of IW to target rapidly modernizing Western armed forces that are becoming increasingly more dependent on the software that runs computer networks and modern communications. In Chinese thinking, IW presents a level playing field for projecting power and prevailing upon the adversary in future wars.

The Chinese call their pursuit of information warfare and other hi-tech means to counter Washington's overwhelmingly superior conventional military capabilities "acupuncture warfare," a term that first surfaced in a 1997 PLA National Defence University publication entitled "On Commanding Warfighting Under High-Tech Conditions." Acupuncture warfare (also called "paralysis warfare" 18) was described as

¹⁶ Richard D. Fisher, Jr., "China's Military Power: An Assessment from Open Sources," Testimony before the Armed Services Committee of the US House of Representatives, July 27, 2005, http://www.strategycenter.net.

"Paralysing the enemy by attacking the weak link of his command, control, communications and information as if hitting his acupuncture point in *kung fu* combat." ¹⁹ Acupuncture warfare is a form of asymmetrical warfare dating back to the teachings of Sun Tzu, China's pre-eminent military strategist from the 5th century BC., The PLA has, for example, been simulating computer virus attacks in its military exercises for quite some time now.

According to a US Congressional Research Service report entitled "Cyberwarfare," authored by Steve Hildreth, China is developing a strategic information warfare unit called "Net Force" to neutralize the military capabilities of technologically superior adversaries. This new information warfare unit will "wage combat through computer networks to manipulate enemy information systems spanning spare parts deliveries to fire control and guidance systems." ²⁰ Though the PLA's research into the theoretical aspects of information warfare is fairly advanced, it does not appear to have developed a coordinated and integrated information warfare doctrine as yet.

Chong-Pin Lee, Vice Chairman of Taiwan's Mainland Affairs Council, says Beijing is redirecting its emphasis away from nuclear deterrence to this new asymmetrical strategy and its "overarching purpose is to deter the United States from intervening around China's peripheries and to seize Taiwan with minimum bloodshed and destruction." ²¹ In another five to ten years China will develop depth and sophistication in its understanding and handling of information warfare techniques and information operations. With India becoming increasingly dependent on automated data processing and

¹⁷ Ng, n. 12, p. 109.

¹⁸ "According to the Taiwanese Ministry of National Defence, China is shifting from deterrence-based strategy to pre-emptive strike strategy... 'Paralysis warfare features web-based information warfare, saturation ballistic missile attacks, joint precision strikes and seizure of the enemy's capital city by special operation units... Such tactics will become major options for the Chinese military in its choice of modes of modes of attack..." Srikanth Kondapalli, A Great Leap Forward Modernization: China's Armed Forces in 2003 (Taipei, Taiwan: Centre for China Studies, National Chengchi University, 2005), p. 27. See also Brian Hsu,

[&]quot;China Developing 'Paralysis Warfare," *Taipei Times*, 8 October, 2003, FBIS-CHI-2003-1008, 10 October 2003.

¹⁹ Barbara Opall-Rome, "PLA Pursues Acupuncture Warfare," *Defense News* (Springfield, Virginia), 1 March 1999.

²⁰ Jason Sherman, "Report: China Developing Force to Tackle Information Warfare." *Defense News*, 27 November 2000.

²¹ Robert Karniol, "Power to the People," *Jane's Defence Weekly* (Surrey, UK), 12 July 2000.

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vast computer networks, it too will become extremely vulnerable to such information warfare techniques. The fact that it can be practiced from virtually any place on the earth even during peacetime makes acupuncture warfare even more diabolical. India can ill-afford to ignore this new challenge to its security.

Edward Timperlake and William Triplett have written that American economic, political and social systems are essentially unprotected against Chinese information warfare attack. In their view, China has adopted a comprehensive strategy to further its information warfare plans:²²

- Information warfare has the support of the top PLA brass.
- The PLA's best strategists and defence scientists have had extensive open discussions about information warfare.
- The PLA is conducting military exercises in information warfare.
- It is expanding its already strong signals intelligence (SIGINT) capability in Cuba.
- The PLA is buying the hardware necessary. (As supercomputers require huge capital investments, a strong political and financial commitment is implied.)
- The Chinese are recruiting scientists and technicians.
- The PLA is building related weapons (such as high-powered microwave weapons).

The PLA is acutely conscious of its continuing relative backwardness in information technologies. To prepare itself for a conflict with an RMA-ready opponent, China's military thinkers recommend that China must close the information gap, network all forces, attack the enemy's C3I to paralyze it, and use directed energy weapons, computer viruses, submarine-launched munitions, anti-satellite weapons, prevent a logistics build-up, and conduct special operations raids.²³

Compared with China's historically reactive stance of luring the enemy in deep and destroying it through strategic defence, the present doctrine is essentially pro-active and seeks to take the battle into enemy territory. It also strives to achieve surprise in a pro-active manner that is demonstrated by new "quick-strike" tactics. The aim is to catch the enemy unprepared in order to inflict substantial damage on strategic targets and disrupt logistics to gain psychological ascendancy. While the land frontier is expected to continue to generate some local tensions, the CMC has identified space and the oceans as the new areas where future conflict might take place.



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²² Edward Timperlake and William C. Triplett III, *Red Dragon Rising: Communist China's Military Threat to America* (Washington, D.C.: Regnery Publishing, Inc., 1999).

²³ J S Bajwa, Modernisation of the PLA: Gauging its Latent Future Potential (New Delhi, Lancer Publishers, 2002), p. 216. See also Michael Pillsbury, "PLA Capabilities in the 21st Century: How does China Assess its Future Security Needs?" in Larry M Wortzel (ed.) The