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Ground Forces Modernization in China

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August 1987

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A thesis submitted to the University of Virginia in
Charlottesville, Virginia in partial fulfillment of the
requirements for the degree of Master of Arts in Foreign
Affairs

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle) Ground Forces Modernization in China		5. TYPE OF REPORT & PERIOD COVERED 11 Aug 87	
7. AUTHOR(s) CPT James M. Lowen		6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Student HGDA, MILPERLEN (DAPC-OPA-E) 200 Stovall Street Alexandria, VA 22332		8. CONTRACT OR GRANT NUMBER(s)	
11. CONTROLLING OFFICE NAME AND ADDRESS HGDA MILPERLEN ATTN: DAPC-OPA-E 200 Stovall St. ALEX, VA 22332		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE 11 Aug 87	
		13. NUMBER OF PAGES 134	
		15. SECURITY CLASS. (of this report) Unclassified	
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited			
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)			
18. SUPPLEMENTARY NOTES A thesis submitted to the University of Virginia in Charlottesville, Virginia in partial fulfillment of the requirements for the degree of Master of Arts in Foreign Affairs.			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Military Modernization in China; PLA; ground forces; military organization; military doctrine; military training; military equipment.			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) -This study is a comprehensive overview of defense modernization in China since 1979. It covers a variety of topics: the Chinese military ground forces' organization, doctrine, training, and equipment. The purpose is to show the progress of China's military, the People's Liberation			

Block 20

→ Army in the past eight years and to project the future of the PLA;

GROUND FORCES MODERNIZATION IN CHINA

James Martin Lowen
Charlottesville, Virginia

B.S.F.S., Georgetown University, 1982

A Thesis Presented to the Graduate
Faculty of the University of Virginia
in Candidacy for the Degree of
Master of Arts

The Woodrow Wilson Department of
Government and Foreign Affairs

University of Virginia

August 1987

Approved by
S. C. Lenz

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Chapter 1 Overview of Military Modernization in China

Introduction

Current modernization efforts of China's armed forces, the People's Liberation Army (PLA), can be traced to a speech given by Zhou Enlai on January 13, 1975. In this speech, Zhou discussed the modernization of agriculture, industry, national defense, and science and technology. If such changes were properly conducted, China would become a modern industrialized nation by the year 2000. While Zhou's speech did not focus specifically on military modernization, China's purchase of Spey airplane engines from Great Britain in late 1975 suggested that PLA leaders had become aware of the shortfalls of China's military.¹

On January 1, 1977, Peking Review (now, Beijing Review) republished an important speech made by Mao in 1956. In this speech, Mao described the relationship between the construction of China's economy and the development of its national defense. Mao argued that military and administrative expenditures should be reduced from thirty to twenty percent of the country's total budget. Mao believed that this policy would still enable China to produce a sufficient number of planes and artillery and probably its own atomic bomb.²

One month after the republication of the speech,

Chinese Communist Party (CCP) leader Hua Guofeng met with other leaders in four simultaneous conferences on military issues--air defense, machine building (military hardware), science and technology and research and planning. Mao's precepts of the importance of industrial modernization over defense construction, the need to reduce the administrative and defense share of the national budget from thirty to twenty percent, and the utility of the atomic bomb were emphasized at these conferences.³

In March 1977, Hua unveiled a plan to build "a smaller, more streamlined PLA, with more advanced weapons, tougher discipline, and a more centralized line of command."⁴ It was during the reign of the "gang of four" that China began to go abroad in search of military assistance and technology.

Preparation for a war fought with modern weapons, trained soldiers, and a high degree of mobility and discipline began to be taken seriously by the CCP's Military Affairs Commission in early 1978. In a speech in June 1978, Deng Xiaoping, then PLA Chief of Staff, urged China's armed forces to uphold Mao's principles and to "integrate them with reality, analyze and study actual conditions, and solve practical problems." Deng also stated that the most important mission of the PLA was to enhance its combat capability in modern warfare.⁵

In late 1978, military modernization was relegated to fourth place in China's four modernizations. Deng Xiaoping provided two reasons for this shift in priorities. First, PLA modernization would be too costly given the serious shortcomings of China's military.⁶ In 1979, a Pentagon study concluded that it would take between forty-one and sixty-three billion dollars for China to upgrade its military to the point that it could successfully thwart a Soviet attack. China simply did not have the financial resources for defense modernization, especially when top priority had been given to raising the living standard of its people.⁷ Thus, military modernization would only be successful if it followed, rather than led, economic modernization.

Second, China saw no immediate or short term threat from the Soviet Union. China believed that its modest nuclear capability and the growing Sino-American relationship would protect the country while the military slowly modernized. Indeed, Deng's views appeared accurate when the Soviet Union restrained itself from supporting Vietnam in its skirmish with China in February 1979.⁸

Conduct of Sino-Vietnamese War

While the Vietnam conflict may have demonstrated the Soviet Union's restraint in Southeast Asia, many scholars view the war as a catalyst to defense modernization in

China. Indeed, the Vietnamese Army (VNA) proved to be far more menacing than the PLA had anticipated. Jim Doyle, editor for the Army Times, described the PLA's bewilderment at the outset of the conflict:

The PLA proved no match for the battle hardened Vietnamese main forces. The Chinese were shocked to discover that the traditions of the Long March, World War II and Korea were not enough to meet the Vietnamese with their modern Soviet equipment and confidence gained at the expense of American forces. 9

Doyle outlined the numerous weaknesses of the PLA as it fought in Vietnam. These shortcomings included inadequate communications, transport and logistics and an elaborate but archaic command structure. Maps were seventy five years old and frequently disintegrated in the rain while runners were used to relay orders because of the shortage of radios. In addition, the PLA was hampered by horse-drawn artillery, a lack of ammunition and food and an absence of uniform insignia, which made it difficult to identify the commander.¹⁰ Yang Dezhi, chief of the PLA General Staff and deputy commander during the Vietnam operation commented on the important role that the Vietnam War played in the development of China's armed forces:

This battle has brought up a number of new questions for our military, political and logistical work. All of

these will have a profound influence
on the modernization of our army. 11

China regarded its invasion of Vietnamese territory in February 1979 as a counterattack in response to the continuous clashes which had disrupted the Sino-Vietnamese border since 1977. China's stated objective of this "counter-attack" was "to pacify the border region, and to permit its Chinese inhabitants to resume normal lives." The PRC intended to "punish" the Vietnamese and "teach them a lesson." Chinese leaders emphasized that they did not want to capture Vietnamese territory as the fighting was to be confined to the mountainous region of northern Annam.¹²

On February 24, 1979, one week after the invasion began, when it became apparent that China would not win its anticipated immediate triumph, Vice Premier Wang Zhen announced that the PLA would not proceed into the Red River Delta. At this point, Vietnam was no longer uncertain of China's objectives as the battle would be limited to the mountains. Because the nucleus of Vietnam's economic and political power was not at stake, Hanoi was able to prevent a total Chinese victory by refusing to send regular units into the mountains. After February 24th, the Vietnamese Army only had to fight long enough to "save face," since the PLA would be forced to return home before the rainy season.¹³

China had a total of about 80,000 soldiers in Vietnam at the climax of the battle in March 1979. Vietnam met the initial assault with approximately 75,000-100,000 border troops and militia, who were far better trained, equipped and led than had been expected by anyone. Statistics vary widely on the actual number of casualties in the war, but it is believed that at least 30,000 Vietnamese Army and PLA men died between February 17, 1979 and March 15, 1979. Although the Chinese disclosed no data on captured or destroyed equipment, the Vietnamese claim of destroying about 100 PLA tanks in the early stages of the war appears reasonable.¹⁴

Chinese leaders were disappointed with the military aspects of the war. While the terrain would have compelled any army to rely on dismounted infantry, political limitations and technical deficiencies appeared to be the primary reasons that the PLA was unable to fight a modern battle. Chinese military scholar Harlan W. Jencks, in his analysis of the Vietnamese conflict, claimed that the PLA used tactics from previous wars, although the Chinese military made some improvement in combined arms operations. In August 1979, Jencks asserted:

the Chinese basically just integrated light tanks and heavy artillery into the same tactics used in India in 1962, during the early months in Korea in 1951, and during the later phases of the civil war. 15

Impact of Sino-Vietnamese War

Several positive results from Beijing's perspective emanated from China's "punitive" attack on Vietnam. Among these results, Vietnam lost a significant number of soldiers as well as border installations. PLA ground forces also acquired valuable combat experience and Beijing proved that its threats should be taken seriously and not as a bluff.¹⁶

The weaknesses of the PLA exposed during the war appear to outweigh any potential gains, however. First, the Chinese were not able to "explode the myth" of Vietnamese military strength. The strong performance of the Vietnamese border and militia units dispelled the notion that the war would demonstrate the convincing military might of the PRC. In April 1979, the Central Committee of the CCP began to survey the results of the war with an apparent aim to improve the performance of the PLA. It is interesting to note that Jencks, writing in August 1979, predicted that military reorganizational and/or personnel changes within the PLA were likely outcomes of the war.¹⁷ As one surveys the PLA over the past five years, it becomes apparent that such changes have indeed occurred.

The PLA appeared to lose much in diplomatic and political terms from the war, as well. Moscow benefitted by projecting the image of "responsible restraint" while continuing to provide valuable assistance to Hanoi. The Sino-

Vietnamese alliance was enhanced with the construction of new Soviet naval and air facilities at Da Nang and Cam Ranh Bay and an expansion of Soviet military power in East Asia. China also lost diplomatic ground with the United States after Deng's trip to the U.S in January 1979, when he announced that China would teach Vietnam a lesson.

The Sino-Vietnamese border tension was not eliminated as news reports over the past eight years confirm. Jencks seemed to adequately summarize the results of the Vietnam experience for the Chinese:

For all their Machiavellian finesse in timing the 'self-defense counterattack,' and for all the sacrifice of their soldiers and their people, the Chinese authorities have probably lost more than they gained. 19

Not all scholars are agreed that the Vietnam border conflict in 1979 sparked the fire to rejuvenate China's armed forces. One individual who downplayed the impact of the Sino-Vietnamese war on military modernization was Angus Fraser. While Fraser admits that Hanoi possessed superior weapons, the actual effect of this difference in weapons technology, in his estimation, is not clear-cut. Fraser also dismisses the notion that China failed in its mission to teach Hanoi a lesson, if indeed there was a lesson to be taught.²⁰

Fraser mentions several factors in his argument that the Vietnam war did not significantly influence China's defense modernization agenda. First, he cites French statistics which assert that China suffered 20,000 casualties while Vietnam suffered over twice that amount. Second, the nature of the conflict in rugged terrain provided little room for subtlety, broad objectives, or the planning of breakthroughs or deep penetrations. Third, the logistics and the mobility of the PLA could not be tested in the space and time span of the conflict. Fourth, Fraser says that Vietnam did, in fact, move soldiers from southern reserve areas and from Kampuchea. Finally, China should be commended for its boldness in fighting a Soviet client and ally. Thus, Fraser concluded in 1979 that

there does not seem to be any massive aspect of this experience that would significantly alter the force modernization pattern that has been emerging in the late 1970s. 21

Military Modernization in China Today

Whatever one's perception of the impact of the Vietnam War on military modernization in the PRC may be, one thing appears certain: the PLA has made vast improvements in the areas of organization, doctrine, training, and equipment over the past eight years. The PLA has moved far from the Maoist years when it was believed that wars were won by

people with superior ideologies and political philosophies.²² Deng Xiaoping, current chief of the Central Military Commission (CMC), the highest organ of military administration in the Chinese Communist Party (CCP), has been the driving force in the modernization of the PLA.

China's current objective in modernizing its military is to reform the human infrastructure and to defer major hardware modernization attempts. There are two reasons for this strategy. First, the PLA must be prepared through proper staffing, organization, and training to employ new equipment. Second, the scarcity of capital would make any large scale effort to introduce new equipment an overwhelming drain on the Chinese economy.²³

Despite obstacles to reform, China is forging ahead in its effort to modernize the military. Internationally, China has become quite aggressive in selling military weapons and equipment to obtain the money needed for further modernization.²⁴ China has been promoting its arms in a host of military equipment exhibitions beginning with AUSDES in Australia in May 1984 and including a major exhibition in Beijing, ASIINDEX, in November 1986. PRC weapon and equipment sales have grown rapidly since 1982 with Chinese arms in widespread use, particularly in Africa and the Middle East. The Northern Industrial Corporation (NORINCO), China's primary ground forces equipment exporting organization, was

the PRC's fifth largest exporter in 1985, registering \$1.6 billion dollars in sales.²⁵

Domestically, the PLA has experienced a deemphasis on politics with the stress on professionalization and regularization. Younger, more educated officers are gradually replacing older cadres, and there has been a continuous drive to learn the techniques of modern warfare.²⁶

Major organizational changes in the mid-1980s have included the reduction of military regions from eleven to seven and the elimination of one million soldiers, reducing the PLA active duty strength to just over three million. Nearly half of the men dismissed were older officers or cadres who were opposed to Deng's reforms. Another organizational change has been the formation of Group Armies focusing on combined arms operations as an attempt to improve the older field armies established during Mao's reign.²⁷

Mao's military theory of a "people's war," in which the enemy is lured deep into the country and then defeated with an armed citizenry trained in guerrilla warfare, has also undergone some adjustments in the 1980s.²⁸ While recognizing the weaknesses of Mao's strategy, contemporary PLA leaders are reluctant to abandon the concept of a people's war chiefly because China lacks sufficient equipment to implement a major doctrinal change. Current military doctrine advocates a "people's war under modern conditions."

This new doctrine favors a forward defense over the "luring deep" of a people's war and positional warfare over mobile defense.²⁹ In essence, the modified strategy strikes a balance between Mao's people's war and more conventional battle tactics aimed at destroying the enemy's ability to continue the war.³⁰

Training has, by far, undergone the most dramatic changes since the late 1970s. The PLA has established new tactical training centers, and it has expanded the number of courses related to modern warfare at China's numerous military academies. All new PLA officers must now graduate from one of these academies. This new policy eliminates the former practice of promoting loyal but semi-literate soldiers to positions of responsibility and authority. By 1984, most of the division and army-level officers had graduated from a military academy, and almost all junior officers were college graduates.³¹

Training for new army enlistees has also increased. The typical PLA recruit today is educated to a reasonable degree and capable of operating the advanced military equipment of a modern army. Soldiers are receiving diversified training including specialized teaching in laser technology, electronic analog, and automatic command systems.³²

China has also expanded its military exchanges with foreign nations. The PLA has sent a number of delegations

to the West, including at least a dozen to the United States. Although the U.S. has gained very little information on the PLA from these visits, the PLA delegations have assiduously studied everything in the U.S. from the National Training Center at Fort Irwin, California to the National War College in Washington, D.C.³³

The PLA is beginning to acquire new equipment although many of the new weapons systems appear headed abroad for export. According to China analyst Clare Hollingsworth, "many units are still anxiously awaiting their new equipment."³⁴

China has carried out its military reforms in the 1980s within severe budgetary restrictions.³⁵ Despite all of the changes that have occurred in the PLA, the actual amount that China spends on national defense has decreased since the late 1970s. In 1985, China spent approximately six billion dollars (U.S.) on its armed forces. This figure represented less than one percent of the world total of 800 billion dollars (U.S.) for that same year. The defense budget as a proportion of the overall budget dropped from 17.5 percent in 1979 to 10.5 percent in 1985.³⁶

Apparently, the Chinese see no danger in this drop of military expenditures. Reasoning from the assumption that a war in the near term is rather unlikely, China's political and military leaders see no need to spend an enormous amount

of money on expensive reforms such as new equipment for the PLA. The changes to date have focused on less costly areas within the PLA such as its organization and personnel structure, military doctrine and strategy, and training of both officers and enlisted soldiers.³⁷ It is these changes as well as equipment modifications and arms sales that will be highlighted in this essay. This study will conclude by assessing where these changes have brought the PLA today and what the future holds for China's ground forces.

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Chapter 2 Changes in the PLA's Organizational and Personnel Structure

Introduction

The PLA is striving to produce an efficient, combat-ready military force that is responsive to Central Military Commission (CMC) chairman Deng Xiaoping and his modernization efforts.³⁸ In the process of military modernization, the PLA is attempting to remove Mao's "cult of personality." In March 1980, the party issued new guidelines that were designed to replace self-aggrandizement and individualism with collective leadership and a professional fighting force.³⁹ This professional force would be comprised of officers and troops who were younger and better educated in military technology and in scientific and cultural knowledge.⁴⁰ An editorial in the Liberation Army Daily in mid-1985 reflected China's perception of the importance of reorganization and streamlining:

The fundamental goal of the structural reform, streamlining and reorganization . . . is to build our Army into a crack force. . . . Without reforming the Army structure it would also be impossible to improve combat ability. 41

In his effort to improve the discipline and organization of the PLA in early 1982, Army Chief of Staff Yang Dezhi recalled similar efforts made by PLA leaders in the past. In the 1950s, Defense Minister Marshal Peng Dehuai imposed a series of regulations designed to develop the PLA

into a regular army. These changes included a military rank and title system, universal military service, military pay system, and combat rules and regulations. At that time, the PLA also established a large number of military academies and military schools to train PLA soldiers after many years of guerrilla warfare.⁴²

Many of these changes were eliminated under the leadership of Lin Biao, who assumed the post of defense minister in the 1960s. Lin Biao described the organizational improvements of the PLA as "bourgeois militarism." As a result, all of the ordinances established during the 1950s were discarded in the cultural revolution. This move led to a disruption of army discipline.⁴³

It was this lack of discipline and organization that prompted Yang Dezhi to urge all PLA soldiers to concentrate their energy into developing the PLA into a "highly educated, highly politically mature and highly disciplined army of powerful combat strength."⁴⁴ In November 1985, Yang Dezhi announced the military's organizational goals:

The reorganization of the armed forces is scheduled to be completed in two years. Following the reorganization, there will be a system of military ranks, military officer service regulations, and civilian employee service regulations in addition to better regulations and guidelines for realizing a regular armed forces. ⁴⁵

Central Military Council (CMC)

This announcement followed a number of organizational changes implemented in the early 1980s. One of the most significant changes was the creation of the Central Military Council (CMC). The CMC appears to be part of Deng's effort to separate the party, army, and state in order to circumvent an overconcentration of power. The CMC is the highest decision-making body for operational or military aspects of the PLA. It is the governmental counterpart to the Party's Military Affairs Commission (MAC), which is the highest decision-making organization for political components of PLA policy.⁴⁶ Colonel Monte R. Bullard, former U.S. Army Liaison Officer in the U.S. Consulate General in Hong Kong, commented on the usefulness of the CMC:

With the creation of the CMC, professional military leaders (as contrasted with professional commissars) will be able to take key issues directly to those who make the final decisions without going through the party apparatus (MAC and its subordinate committees).⁴⁷

Although the CMC's precise role in the chain of command is still unclear, it appears likely that it will play a crucial role with military regions reporting to the CMC through the General Staff Department in operational matters.⁴⁸

Consolidation of Organizations

Several consolidations within the PLA have been made to make it an efficient and more streamlined organization. In August 1982, the National Defense Science and Technology Commission was combined with the National Defense Industry Commission to create the National Defense Science, Technology and Industrial Commission. This decision was an apparent effort to improve the arms modernization process.⁴⁹

Consolidation within the operational part of the High Command included the redesignation of the Artillery Corps, Armored Corps, Engineer Corps, Signal Corps and Antichemical Corps as subdepartments of the General Staff Department. On January 1, 1984, the PLA Railway Corps was transferred to the civilian Ministry of Railways.⁵⁰

There have also been several changes at the lower levels of the PLA. A number of local force units have been changed to people's armed police units and transferred to the Ministry of Public Security. The motive behind this change was to free the PLA from internal security problems so it could focus on external threats. Assessing the merit of this decision, Bullard wrote:

This was another area of functional differentiation which is likely to contribute to an increased level of professionalization and efficiency in the PLA, particularly its main force units. 51

To avoid an overconcentration of power, the PRC has divided control of the armed forces between the PLA and the Ministry of Public Security to insure a system of checks and balances.⁵²

Local force and militia have also experienced organizational changes in recent years, although their exact nature is still not clear. The three traditional parts of the militia (primary, secondary, and backbone) have been reduced to two (primary and backbone). The PLA also appears to be making a deliberate effort to regularize its reserve systems. The aim of these organizational changes in the PLA seems to be to separate functions and make all units more efficient and specialized.⁵³

Another organizational change which has occurred in the PLA is the downgrading of the militia's role to the point that it plays a very minor role in China's military strategy. Only on-duty or border militia troops are well trained and equipped. The common militia or basic militia organizations, according to Colonel Roberts, former Army attache at the American Embassy in Beijing, are only nominally existent.⁵⁴

Troop Reduction

The largest organizational change experienced by the PLA in the 1980s was the announcement in 1985 of a one-

million man reduction in China's armed forces. The decision to reduce the PLA by one million men was made for several reasons. The Central Military Commission believed that the cutback would contribute to world peace and advance China's modernization drive through the diversion of funds and manpower to peaceful construction. The 25 percent reduction in armed forces would also give the PLA the opportunity to trim its staff, modernize its military technology and weaponry, field training and defense production.⁵⁵

The PLA has long been plagued with overmanning problems, primarily a result of the excess number of officers. This overmanning is representative of the general overlapping bureaucracies, inefficiency, and personal loyalties and factionalism characteristic of Chinese society.⁵⁶ Well aware of this overmanning problem and China's tight budget, Deng Xiaoping is determined to make the most of the PLA's limited financial resources. Speaking to senior members of China's Military Affairs Commission (MAC) of the Central Committee in mid-1986, Deng stated:

There is no reason or necessity to maintain huge armoured forces in peacetime and thus spend most of our military expenditure on food, clothing and daily articles which are consumed by our troops. By reducing the size of the army, we can spare more money for the research and development of modern weapons, technology and equipment. 57

Deng also appears firmly convinced that the world situation today is conducive to a substantially smaller PLA.

Speaking at the same conference, Deng observed:

In the world today, the forces striving for peace have outgrown the forces working for war. Therefore, it is possible that a large-scale world war would not occur for a relatively long time. China should concentrate its resources on economic construction so as to build itself into a modern, powerful socialist country. This represents the overall interests and everything must be subordinated to it. 58

Clearly, Deng sees no immediate threat that would require a four million man military force. While Deng's assessment of the unlikelihood of a world war appears plausible, his statement that "the forces striving for peace have outgrown the forces working for war" seems rather idealistic and unrealistic, especially in light of Biblical prophecy. Jesus Christ predicted that "wars and rumors of wars" would occur and that nations would rise up against nations.⁵⁹ From a Judaeo-Christian perspective, there is no indication that war will ever cease given man's human instinct to guard and protect his interests and possessions against all external forces. For the benefit of the Chinese economy and society, as well as our own, one can only hope that Deng's prediction of the unlikelihood of a major world war is indeed correct.

It is important to view the cut of one million soldiers in its historical context. Between 1974 and 1978, the PLA grew from 3 million to 4.2 million troops, with most of the expansion occurring in the ground and air forces. China at the time faced an unstable international situation--the Soviets were building up their forces along China's northern border and in the south after North Vietnam's conquest over South Vietnam. Additionally, U.S. capabilities in southeast Asia declined. Finally, there was major domestic uncertainty following the death of Mao Zedong and Zhou Enlai in 1976. Since 1979, the PRC has gained a certain degree of stability. Thus, the cuts can be seen as "a return to the status quo ante."⁶⁰

Although there were rumors in the early 1980s of a significant reduction of military forces, the actual decision was made in April 1985. Beijing stressed three themes when it discussed the cuts: the decision was made at the top with unanimous support of all leaders, the reduction was part of the economic reform effort, and the cuts demonstrated China's commitment to world peace.⁶¹

A closer analysis of some press reports at the time, however, reveals that there was some disagreement among China's political and military leaders concerning the cut. Nevertheless, Deng was able to successfully carry out the decision to reduce China's armed forces. John Frankenstein,

Associate Professor of International Studies at the American Graduate School of International Management, viewed Deng's success in this decision as indicative of his control within the party and the military. Writing in the summer of 1985, Frankenstein stated:

. . . the announcement of the reduction in force is more than just a military adjustment. It is another sign of the regime's commitment to economic reform and military modernization. It is also a salient demonstration of the regime's ability to implement its program, despite opposition. 62

Frankenstein also believed that the "diplomatic and political ramifications" of the cut were more significant than the military impact of the reduction. Frankenstein points out that CCP General Secretary Hu Yaobang made the announcement of a reduction in force while at a press conference in New Zealand. When asked what role China would play in the South Pacific, Hu stated unequivocally that the PRC had no intention of expanding its military muscle in the region. Frankenstein saw this trip as part of a large Chinese effort to demonstrate to the rapidly growing economies of the Pacific Basin that China was a good neighbor in search of "economic cooperation, not revolution."⁶³

To accommodate this mandatory reduction in China's armed forces, the PLA has outlined specific guidelines

including the following:

promote qualified middle-aged and younger persons to fill administrative positions; reduce the number of deputies serving, including the number of 'advisers' continuing to serve in various capacities; adjust the new guidelines and manpower requirements to fit the PLA structure before it becomes overloaded with senior personnel; introduce reforms adjusting the criteria for selection of personnel for rank promotion with increased emphasis on individual competence and accomplishment. 64

The status of "advisers" to the PLA is particularly interesting. In the early days of the reform, the use of "advisers" was a "face saving" technique for Deng to reduce the hostility towards mandatory retirement from some of the older cadres. Recently, many of these senior "advisers" have been retired with a strong likelihood that all the senior ranks will be purged of these elderly cadres. In some cases, "advisers" may continue to remain for an indefinite period, where individual experience is especially desirable.⁶⁵

According to Han Huaizhi, deputy chief of the General Staff, China has found a solution to employing discharged soldiers. All active duty soldiers are required to learn a productive skill in addition to their military training. This plan is designed to assist servicemen in adjusting to civilian life upon discharge.⁶⁶

The response by soldiers who have been asked to leave the Army appears mixed. Many welcome the discharge as an opportunity to return to the family farm and earn a higher income. Others would like to find a job in a state factory, but employment is not always available.⁶⁷

The Chinese government has done much to prepare its soldiers for demobilization. Prior to their discharge, officers and enlisted soldiers are given intensive adult education classes. By the time of their departure, most of the officers are able to successfully pass an examination equivalent to a high school degree and many of the enlisted troops have mastered one or two skills. Nevertheless, a certain level of disappointment is evident in soldiers who were committed to a long life in the PLA. Zhu Jiangyu, a former political commissar who was removed from his post in August 1985, expressed this feeling of loss, which is undoubtedly true for many other soldiers:

I'm physically fit. In 1984, I stayed with a company and even took part in drilling together with the soldiers for 22 days. I think I could still do something for society--and the army. 68

Despite the disappointment of some soldiers, the PLA has made remarkable progress in implementing its decision to reduce its active duty strength by one million troops. In 1985, there was a 50 percent reduction in the organs of the

General Staff Headquarters, General Political Department, and the General Logistics Department. Eleven military regions were merged into seven during the same period. The PLA cut thirty one units at Army level and above and 4,054 divisional and regimental units. The officer to enlisted men ratio was reduced from about 1:2.45 to 1:3.3 as many officer positions were changed to either enlisted or civilian jobs, and 600,000 officers were scheduled to leave the military and be reassigned to local areas within three years. The Hong Kong journal Wen Wei Po described the reorganization of the PLA as "a 'major operation' performed to thoroughly remold the huge body of the Army."⁶⁹

By early 1986, more than half of PLA veterans in all seven military regions had retired, and the average age of officers at army level and higher was three to five years younger than their predecessors. Two-thirds of the officers in combat units had been replaced with those who had undergone training in military institutions.⁷⁰

The active duty forces have not been the only soldiers undergoing a reduction in force. According to the People's Daily, the CCP newspaper, China's huge militia was reduced by 80 percent from its previous size of twelve to fifteen million men.⁷¹

Younger Leaders

The PLA's military personnel reduction is closely tied to Deng's effort to reduce the age of military cadres. As early as September 1981, the PLA was concerned about the age of many of its leaders. In a speech in September 1981, CCP chairman Hu Yaobang announced the need for many army cadres, especially division level leaders and higher ranking officers to retire. At the same time, the PLA was to concentrate on recruiting younger leaders. This speech was made shortly after the PLA's major joint, large-scale exercise in Zhangjiakou (Hebei Province, northwest of Beijing) in September 1981. It is likely that this exercise exposed many of the weaknesses of the PLA's aging leaders.⁷²

Older officials throughout China's bureaucracy have been pressured to step down in favor of younger men. These retirees have been offered material and moral benefits and opportunities to attend newly formed advisory commissions. Hu estimated in 1985 that by the end of 1986, two million cadres--almost ten percent of China's total cadre force of twenty two million--and 70,000 to 80,000 older PLA officers would have retired. In December 1984, forty top officers in the General Staff at the rank of three-star general and higher retired. It was also estimated that approximately 80 percent of China's new military region leaders would be new appointees.⁷³

Deng's attempt to reduce the age of PLA leaders is part of a "two-pronged effort" aimed at reducing the army's political importance while simultaneously increasing its military effectiveness. Most of the older retiring officers are "old guard" revolutionaries who joined the party around the time of the civil war (1946-1949). These older cadres tend to favor Mao's political and military dogma over Deng's endeavor to professionalize and regularize the Party and the Army. The assumption in placing younger, more educated officers in positions of responsibility is that they will be more interested in fulfilling their professional responsibilities and less inclined to perpetuate revolutionary causes. Another drawing card of the younger officers is that they are more apt to accept political guidance from the top levels of the CCP leadership, which is stressing economic development, not class struggle.⁷⁴

Mandatory retirement appears to be making more progress at the middle and lower levels of military leadership than at the higher levels, such as the CMC. The average age of CMC members continues to be in the seventies and eighties.⁷⁵ Nevertheless, the average age of field army leaders dropped from fifty six in 1982 to forty seven in 1986. The average age for leaders in the military regions has been reduced by seven years.⁷⁶ In May 1985, the youngest army-level officer was thirty four while the youngest division commander was

thirty.⁷⁷ These ages represent a significant change from earlier years and are substantially lower than leaders at similar levels in the U.S. military.

Group Armies

The Chinese identify three stages in the development of the PLA. The first stage, which took place during the long revolutionary wars produced an army of almost all infantry soldiers. In the second stage, beginning with the founding of the PRC in 1949, the PLA broadened into a military force of army, air force, and navy troops as well as artillery, engineering corps, armour, railway corps, signal corps, antichemical warfare corps, and strategic missile soldiers.⁷⁸

In the current stage beginning with China's most recent quest to modernize its forces, the PLA is striving to increase interaction among the various services and to establish combined arms branches. The goal is to increase the PLA's combat capability in modern warfare.⁷⁹

The Chinese see the transformation of the field army into a group army as an important step in the reform of the PLA. No longer is the infantryman in the PLA the primary asset of the main force unit. Professional and technical units have become the most important part of China's first mechanized group army. One half of all the soldiers in the Group Armies is a technician while only one-fifth are

infantrymen. The group army comprises various modern units such as infantry, artillery, armored signal, antichemical warfare, engineer, air defense, air, and electronic counter-measure units. It has over 370 professional and modern units and 200 technical items including radar, computers, lasers, and meteorological instruments.⁸⁰

In an interview in late 1985, PLA deputy chief of General Staff He Qizong described the benefits of the new Group Army:

Now, with better weaponry and more effective combination, the field army-turned group army has become more responsive; and as the Army has become more rationally structured, it has become more effective in keeping up with the needs in future anti-aggression wars. 81

Qizong also mentioned that the increased coordination between various technical arms would require competent and well trained officers. In addition to their many benefits, the Group Armies would also pose new logistical support problems, according to Qizong.⁸² PLA leaders are certain to make great progress in solving these problems as they prepare the military to fight on a modern, combined arms battlefield.

Recruitment

Recruitment of new PLA soldiers has posed a problem for

the PLA in the 1980s. This problem may seem a bit ironic in a country which has a population of over one billion people. Nevertheless, China has found it increasingly difficult to recruit young motivated soldiers. Whereas young people were once eager to join the army in hopes of being demobilized in a favorable job market, the military is no longer viewed as an attractive career. Today, a young person can pursue a professional career in science, technology, foreign trade, or another field without joining the military. In addition, a demobilized soldier is currently returned to the location where he enlisted rather than to a more desirable urban location.⁸³

The primary cause for the drop in recruitment appears to be the salary of PLA soldiers. In the past, a young Chinese peasant viewed the army as a means to acquire training and a better job. Deng's economic changes, however, have resulted in a greater prosperity in the countryside, where the army draws most of its new soldiers. Thus, Chinese young people find it more profitable to manage a rural workshop or remain on the farm. Other problems which face the PLA soldier of today are a reduced social status and lack of any vacation time.⁸⁴

A brief salary comparison illustrates the plight of PLA soldiers. Soldiers serving for three years earn ten to fourteen yuan, or three to four U.S. dollars per month. A

factory worker can make as much as 100 yuan or about thirty one U.S. dollars a month.⁸⁵

The recent difficulty in acquiring recruits is the first time that China has experienced this problem since the communist takeover in 1949. According to some reports, the PLA is beginning to rely on "heavy-handed recruiters" and factory quotas. It is not uncommon for city dwellers to mock PLA troops. In some cases, military officers have been found treating their soldiers like servants, utilizing them for such tasks as gardening or laundry cleaning.⁸⁶

Despite the low incentives for joining the PLA, there has been a marked increase in the educational level of new recruits in the 1980s. Youths must now meet certain educational criteria before acceptance into the PLA is granted. The criteria varies depending on the background of the individual. A young person from a rural area must be a middle school graduate while a recruit from an urban area must be a senior middle school graduate.⁸⁷

New Military Service Law

China has recently implemented a new military service law designed to strengthen the country's military forces and improve combat readiness. New conscripts will be given the option, for the first time in PLA history, to remain in the army for an additional eight to twelve years beyond their

initial commitment. Although conscription will continue to serve as the backbone of the PLA, specialized volunteers will reinforce the supply of army technicians, who are indispensable in the PLA's modernization drive. The new law will meet China's economic capabilities by maintaining fewer forces in peacetime while still having sufficient reserves in the event of a war.⁸⁸

The key features of the new service law are the following:

1. Integrate compulsory service system and volunteer soldiers as well as reserve service and people's militia.
2. Integrate field army people's militia and regional troops.
3. Require peacetime officers to complete training in military schools. The intent is to insure that cadres are in the words of the Chinese, 'revolutionary, young, intellectual and specialized.'
4. Reform the people's militia system.
5. Specify principles and requirements to insure 'rapid wartime mobilization.' Clearly define the duties of of active and reserve forces and all levels of leadership during the war. 89

NCO System

The PLA General Staff announced in July 1986 that the Chinese Army was to employ noncommissioned officers (NCOs)

for the first time in its history. Seventy-six administrative and technical positions which previously were performed by army officers will be assigned to noncommissioned officers. These jobs include company quartermaster and secretary, radio station director and various technical positions. The reform was expected to be completed by the end of 1987.⁹⁰

Two schools for noncommissioned officers have been established, and NCO training classes have begun in forty two military academies and schools.⁹¹

NCOs will be selected from male soldiers who have served in the army for at least one year and have a good record. Upon conclusion of their studies, the NCOs will serve in the PLA for ten to twelve years, a longer time period than junior army officers. The Chinese view the creation of the NCO system as an important step in the modernization of the military.⁹²

Rank System

The Chinese military first began to utilize rank and insignias in 1955 when the PLA moved in status from a "revolutionary guerrilla force" to a modern regular army."⁹³ Complaints of an elitist attitude led to the abolishment of the rank system in 1965 in favor of a more egalitarian system. Since that time, a soldier's position rather than

rank has formed the basis of his title.⁹⁴

The confusion created by the lack of insignia during the 1979 Sino-Vietnam war spurred the drive to reinstate the rank system.⁹⁵ In May 1984, PLA leaders approved the restoration of military ranks after a lapse of almost twenty years. Chief of General Staff Yang Dezhi believed that a rank system would help regularize the nation's armed forces, facilitate coordination of various armed units in combat, and enhance liaison with military units of other nations.⁹⁶ A few months after the decision in May, Deng chose to temporarily delay the restoration of the military rank system. Apparently, this delay was an attempt to appease hard-liners who viewed the rank system as a means of undercutting their authority and eliminating their privileges.⁹⁷ It remains to be seen when military rank will officially be restored in the Chinese army.

New Uniforms

Soldiers in the PLA were issued new uniforms composed of better material on May 1, 1985. The new uniform was part of the CCP's effort to modernize and standardize the PLA as well as enhance the appearance of military personnel. The three services have different colored uniforms with their own collar badges, epaulets, and special insignia.⁹⁸

Conclusion

The organizational changes that have taken place in the 1980s are vast and have far reaching ramifications in every sector of the PLA. It is clear that given China's limited defense budget, the PLA has concentrated on the more inexpensive organizational and personnel improvement reforms before initiating the more costly scientific and technological improvements. Now that most of these organizational changes have taken place resulting in a much more efficient and streamlined military organization, the PLA is certain to devote more attention to improving the hardware and weaponry of its soldiers.⁹⁹

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Chapter 3 The Modernization of China's Military Doctrine

Introduction

Military doctrine in China is defined as the basic principles by which the PLA would guide its conduct in support of China's national goals in the event of an enemy attack.¹⁰⁰ As in the Soviet Union, military doctrine in China is determined by the highest level of political and military leaders. There are two essential characteristics of Chinese military doctrine.¹⁰¹

First, military doctrine synthesizes the accepted views of the nature of combat. Military doctrine reflects the military policy as well as the global ideological strategy of the Chinese Communist Party (CCP). In this sense, military doctrine in China stresses the superiority of men over weapons and the use of war as a means to serve political goals.¹⁰²

Second, military doctrine provides guidance for military leaders to use in preparing the military for war. Although military doctrine in China has always stressed the defensive nature of "people's war," offensive tactics may be employed to frustrate the enemy's ability to execute adverse policies.¹⁰³

The Theory of "People's War"

In common language, the primary objective of Mao's military philosophy is to transform every person into a soldier to drown the enemy in an ocean of "people's war." Mao described this theory in vivid detail:

In the event of the outbreak of war, we have in our hands a powerful people's army and a mighty reserve force. We can fight a regular war and an extensive people's guerrilla war. . . . The two aggressors--the United States and the Soviet Union--will definitely be drowned in a vast ocean of the people's war, in which a population of 800 million is instantly transformed into a people's army that is armed to the teeth and trained to fight a people's war in every nook and cranny of our vast land. 104

Professor Harvey W. Nelsen expanded Mao's simple definition of "people's war":

Strategically, the concept has been to draw the enemy deep into Chinese territory, trading space for time, until his lines of communication are extended, his troops partially tied down in garrisons and units dispersed. The invading army is to be drawn into pre-selected battlefields. Meanwhile regional and militia forces would harass the enemy behind his lines while the main forces prepared to launch a massive counter-offensive which would eventually annihilate the enemy or drive him from Chinese territory. 105

The most essential aspect of "people's war," in Mao's estimation, was political mobilization of the army and the people. Mao firmly believed that victory rested on the implementation of a program that would achieve the political objective of the war. Every person must be made aware of this objective and then mobilized to carry out the party's program.¹⁰⁶

The Drive to Modernize "People's War"

Rigid adherence to the theory of "people's war" appeared to subside after Mao's death in 1976. Several factors contributed to the current thrust for a more modern military doctrine. First, the rise of Deng Xiaoping in 1977 was accompanied by an increase in the number of PLA leaders, who began to express doubts concerning the relevance of Mao's theory to modern warfare.¹⁰⁷ These leaders, who no longer feared dismissal for questioning Mao's philosophy, believed that the concept of a "people's war" should no longer be mechanically applied in disregard of the specific time, place, and circumstances of the modern battlefield.¹⁰⁸

Second, the Sino-Vietnamese war in 1979 changed the nature of "people's war" from a defensive strategy to a more offensive strategy with the deployment of several thousand troops in Vietnam.¹⁰⁹ The Vietnam war demonstrated the serious deficiencies of China's tactics, logistical support,

leadership, and organization. These deficiencies clearly signalled the need for a more modern military strategy.¹¹⁰

Third, the expansion of scientific and technological achievements in modern weapons, equipment, and methods of operation required a doctrine that could utilize these achievements.¹¹¹ This factor reveals a two-fold doctrinal problem in China today. China must first develop a doctrine that will accommodate the modern equipment anticipated in the future. In the interim, the PLA must have a workable doctrine that is flexible enough to provide adequate defense today and also able to absorb new equipment in the future.¹¹² This interim doctrine must be able to cope with the highly mechanized Soviet army deployed in large numbers across China's northern border.¹¹³ The Soviet threat is probably the most significant force in the modernization of China's military doctrine.

The Soviet army poses several dangers to China. First, the Soviet Union's mechanized forces would render China's traditional reliance on foot mobility ineffective. Second, China could not afford the heavy losses occasioned by surrounding a modern firepower with a "human sea" of main force and militia units. Third, China's emphasis on camouflage and dispersion as a means to conceal large units is negated by the modern battlefield surveillance methods employed by the Soviets. Finally, Chinese armed forces are not prepared

to function in a battlefield environment of biological and chemical weapons, not to mention strategic nuclear weapons.¹¹⁴

China's tri-level structure of main forces, regional forces, and the militia is best prepared to defend against a conventional invasion. Such a strategy is unlikely to be employed by China's potential enemies, particularly the Soviet Union. An enemy is much more likely to attack China's technologically deficient naval and air forces or a selected portion of Chinese territory, as in northeast China.

"People's war" could never be fully brought into play in a limited Soviet incursion. For example, if the Soviets reasserted control in Manchuria, as far south as the old Chinese Eastern Railway line (Tsitsihar-Harbin-Vladivostock), they could cripple much of China's capability to challenge Soviet control of all of Manchuria. Because there is very little defensible terrain between Manchuria and the Yangtze River, a Soviet conquest of Manchuria would effectively destroy Chinese military power throughout northern China and give the Soviet Union unlimited access to the ports in northern China. Assuming that the Soviets are more interested in such a limited penetration than in a complete Russian victory in China, the battle would be over before "people's war" could be fully employed.¹¹⁵

Recognizing that the Soviets are unlikely to attempt a

large-scale invasion of China, PLA leaders are becoming concerned with defense against more limited Soviet goals, especially in north and northeast China. It is becoming increasingly evident that China needs a more forward defense strategy to protect its lines of communication and major cities, which are crucial for a healthy economy.¹¹⁶ Such a strategy would utilize all of China's assets, including its strategic nuclear capability. A joint PLA maneuver in Ningxia in 1982 demonstrated that China is experimenting with the use of simulated tactical nuclear weapons in its combined-arms operations. Shao-chuan Leng, professor in Asian Studies at the University of Virginia, commented on the impact of nuclear weapons on China's military strategy in an article on China's nuclear policies:

The implication of Chinese current interest in tactical nuclear weapons, the simulated use of which was reported in the 1982 Ningxia military exercise, suggests that notwithstanding its 'no-first-use' pledge, the PRC may conceivably contemplate the compelled use of tactical nuclear weapons against superior invading forces in the name of self-defense. 117

Chinese Allegiance to "People's War"

Despite the current drive for a more modern military doctrine, many veteran PLA cadres remain entrenched in the Maoist legacy of a "people's war." Thousands of urban

revolutionaries still serving in the PLA today remember their former days of glory as soldiers engaged in guerrilla warfare and light infantry tactics. Many of these soldiers see a de-emphasis of "people's war" as not only a betrayal of Mao and the ideals of the revolution, but also as an affront to their own hard-earned experience.¹¹⁸

Thus, China finds itself today with a large number of leaders who continue to pay lip service to Mao's military philosophy. China's firm allegiance to the doctrine of "people's war" was reflected in an editorial in the Beijing Review:

If the aggressors provoke war in the future, we will still persist in people's war even though we have better weapons and equipment and the forms of war have undergone many changes. 119

The persistence of "people's war" is evident, at least in name, in China's revised military strategy, known as "people's war under modern conditions." One scholar, Thomas G. Waller, defines this strategy as a Chinese attempt to maintain the terminology of an obsolete "people's war" strategy but develop a combat force that can confront a superior foe such as the Soviet Union.¹²⁰

"People's War Under Modern Conditions"

"People's war under modern conditions" is a strategy

using China's combined-arms capability of the militia, regional forces, and main forces to engage in guerrilla warfare, mobile operations, and positional defense. Although combined-arms forces are seen as playing the key role against a Soviet invasion, the Chinese have by no means abandoned guerrilla and light infantry operations.¹²¹

"People's war under modern conditions" is a transitory defensive strategy as China moves from a less developed status to that of a global power. Because this transition will take several decades, China's military strategy will, by necessity, remain pragmatic and flexible, which will probably result in more pronounced regional differences. For example, the Shengyang and Beijing military regions are stressing a modern, centralized strategy, and force structure while other military regions are emphasizing a more local, regional response to counter a potential threat.¹²²

The concept of "modern conditions" is nothing new to people's war. Chinese military doctrine has been flexible for the past 35 years of the PRC's existence. In their book, Chinese Defence Policy, Gerald Segal and William T. Tow comment on the flexibility of "people's war":

China has fought wars at its gates and beyond (Korea, India) and also chosen to sit behind the gates (Vietnam). China has fought positional war (Korea) and wars of greater mobility (India). Whatever the specifics of combat, it is

plain that Chinese military doctrine has been flexible and has regularly sought to adapt itself to modern conditions. 123

The flexibility of "people's war" yields a doctrine that can encompass weaponry ranging from nuclear missiles and submarines to rifles and bayonets. The doctrine's traditional emphasis on mobilization, protraction and defensive operations is still valid today. These three characteristics lend themselves to a wide variety of weapons, political ideologies, and tactics.¹²⁴

Regarding tactics, Chinese strategists are stressing a combination of active defense and guerrilla warfare. Mao's notion of "luring the enemy in deep" remains an essential part of "people's war" since the Chinese still opt for their home territory as the main battleground in strategic defense. Nevertheless, Chinese military planners are stressing defense of positions closer to the Sino-Soviet border rather than traditional "hit-and-run" tactics. This heightened need to react quickly and to inflict the maximum amount of damage possible will demand a sharp improvement in military hardware. Political analyst Christopher M. Clarke believes that this strategy means that China needs to develop "a high-quality early warning system, reliable and effective anti-aircraft and anti-tank systems, a capable

defensive air force and mobility, logistics and command and control systems." China still has much work to do to develop massive conventional forces capable of defending against a Soviet attack at the border.¹²⁵

The increased emphasis on positional defense has strengthened the role of the militia in protecting major cities and industrial centers. While the militia of the past was viewed primarily as an agricultural productive unit, the PLA today realizes that it would be virtually impossible to defend the country without the militia. Thus, the militia is being given more military training to increase its combat capabilities, especially in the areas of guerrilla warfare and logistical support. The Chinese believe that guerrilla warfare waged by militia and regional force units would add a greater degree of mobility to positional defense, in the event of a Soviet blitzkrieg attack.¹²⁶

Guerrilla warfare alone, though, cannot adequately protect China's urban areas. China is recognizing the need for more sophisticated weaponry to counter the enemy on the modern battlefield. To improve its ability to defeat a highly mechanized Soviet army, China has developed its own hand-held anti-tank miniature rocket. Although this weapon could probably not penetrate the armor plating of a Soviet T-62 or T-72 tank, it could destroy the tank's tracks or light armed vehicles. China now also has the ability to lay

a hasty minefield with vehicular, rocket, and aerial mining techniques. While the PLA's weapons and equipment are at least fifteen to twenty years behind those of the United States or the Soviet Union, military modernization continues to progress with the growth of China's economic and industrial sectors.¹²⁷

Significance of "People's War" Today

Speculation on the relevance of "people's war" today varies along a spectrum ranging from affirmation of the doctrine's merits to serious misgivings of its effectiveness in view of China's technological and military capabilities. On the positive end of the spectrum, "people's war" is seen as the heart of China's national defense policy. Many scholars believe that "people's war" will continue to remain the focal point of the nation's deterrence capability, at least until China's economy matches that of her enemies. These scholars emphasize the low monetary cost of a doctrine that stresses people over weaponry. Such a doctrine is seen as ideal for a nation that is suffering a huge budget deficit and thus unable to afford the vast amount of money needed to upgrade its forces to a minimum level of competency.¹²⁸

Conversely, scholars such as Harlan W. Jencks, research

associate at the Center for Chinese Studies at the University of California at Berkeley, point out the more dismal prospects of current Chinese military doctrine. Although acknowledging the effectiveness of "people's war" as a deterrent against a massive Soviet attack, Jencks believes that "people's war under modern conditions" will not succeed against a limited Soviet invasion unless PLA main forces can exercise a quick, punitive strike with combined-arms operations. China does not have the military capability to fight a brief, limited war to protect its own territory or political goals without incurring heavy losses of manpower and equipment. Jencks notes that the concept of a "people's war" has serious weaknesses, which can only be overcome when the PLA has a modern air force, air defense capability, and combined-arms ground force.¹²⁹

Within the center of the spectrum, "people's war" is viewed in more neutral terms. John T. Ostrich, research assistant at the University of Southern California, believes that given China's force structure and technological capabilities, "people's war" is the only viable military doctrine. Commenting on the status of "people's war," Ostrich said: "The leaders do not like it, will do what they can to replace it, but, in the short run, it will have to do."¹³⁰ Other scholars believe that "people's war under modern conditions" is an adequate strategy because it matches the nation's

current inventory of weapons and equipment and its previous experience in defensive warfare against an enemy in China.¹³¹

Perhaps, the greatest significance of "people's war" today is its collection of ideas on which a revolutionary or a nation's leader can develop a strategy suited to his particular needs. One such notion is the idea that spiritual power is more important than material power. This concept was Mao's most important contribution to current revolutionary theory. William L. Cogley described Mao's belief in the superiority of spiritual power over material power:

It ["people's war"] demonstrated that people, rather than things, could be decisive in war, that man could defeat weapons-- meaning that those who are weak can defeat those who are strong if only they rely on the spiritual power of man. 132

Mao's notion of spiritual power is, of course, vastly different from the Judaeo-Christian concept of spiritual power. Mao defined spiritual power as the use of ideological and political indoctrination to defeat an enemy psychologically rather than physically.¹³³ The Bible, on the other hand, defines spiritual power as faith in God. David, one of Israel's most powerful kings in Old Testament history, recognized the paramount importance of faith in God rather than material strength in battle:

Some trust in chariot, and some in horses, but we trust in the name of the Lord our God. They are brought to their knees and fall, but we rise up and stand firm. 134

While poles apart in much of their thinking, Mao and David both recognized the significance of spiritual power in defeating a superior military force.

It appears that the modernization of China's military doctrine leaves a few unanswered questions. Are Chinese military leaders still committed to Mao's concept of a "people's war"? Is the revised strategy of a "people's war under modern conditions" significantly different from its predecessors? What direction is China's military doctrine likely to take in the future?

In his analysis of "people's war," Paul H. B. Godwin, professor of national security policy at the National War College, believes that China will fight in the future the same way as it has in the recent past. Godwin states, "The Chinese 'way of war' since 1949 has been to take the battle to the 'aggressor' at the earliest opportunity." He cites examples by the Chinese in the Korean War, the Indian border war and the 1979 Sino-Vietnamese conflict. In each of these battles, China stressed that its military actions were solely defensive in nature. On the battlefield, however, the Chinese went on the offensive taking the war to the

"aggressor." Thus, it is, perhaps, better to judge the modernization of China's military doctrine on actual PLA conduct rather than the esoteric debate surrounding Mao Zedong's philosophy of a "people's war."¹³⁵

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Chapter 4 Education and Training in the PLA

Introduction

The traditionally low educational level of most PLA members has made the modernization of the training and structure of military personnel an enormous task. The significance of this task in the improvement of the PLA as a whole cannot be overemphasized. In early 1983, Yang Shangkun, vice-chairman of the Party's military commission, stated that "without a large number of younger, better educated and professionally competent cadres, there can be no modernization in the military."¹³⁶ In the same year, Xiao Xe, vice minister of national defense and commandant of the PLA Military Academy observed "how important scientific and general knowledge is to the modernization of the armed forces. If we do not have people with the knowledge to handle modern equipment, then modern equipment will be useless to us even when we do have it."¹³⁷ The PLA, then, is firmly convinced of the necessity of transforming a peasant army into a strong fighting force trained in military technology, battlefield skills, and modern military doctrine.

A recent article in Beijing's Jiefangjun Bao illustrates the high value that China places on military training. The article clearly states that military training must be the "top priority" of the PLA. The article dispels the

notion that training is unnecessary in view of the fact that China is unlikely to be involved in a major world war. The strong tone of the report reflects the Central Military Commission's commitment to military training:

Although a new world war is unlikely to break out in the next ten or twenty years, our military training cannot be relaxed. Only by training troops for 1,000 days shall we be able to use the troops for one hour. If we relax our vigilance and slow down the pace of the modernization of our Armed Forces because of a temporary peace at present, we will never be able to build up a strong force which is capable of preventing the outbreak of a new world war and safeguarding the peace. 138

Education has clearly been the PLA's primary emphasis in developing a more professional military. In March 1983, Yu Qiuli, deputy secretary-general of the Military Commission of the CCP Central Committee, mentioned several criteria for the selection and promotion of officers. The four criteria, which all linked education with promotion and selection for command positions, were:

1. Cease the practice of promoting only officers from the infantry, the Army's main force. Instead, stress the selection of better educated officers from the technical corps.
2. Allow educated staff officers and competent young instructors at army schools to assume command positions

rather than only choosing combat-arms officers.

3. Eliminate the practice of promotion by seniority.

4. Choose officer candidates from a pool of intellectuals who are willing to work for China's modernization. These candidates must also be dedicated adherents to the philosophy and policies of the CCP.¹³⁹

The military schools are seen as the key to acquiring a younger and more competent soldier. The upgrading of military schools has been marked by a noticeable decline in the practice of discriminating against intellectuals. Intellectuals are seen as a vital element in running the academies and schools efficiently and in improving the quality of military education. In February 1983, Yang Shangkun, vice-chairman of the Military Commission, expressed the military's fondness for intellectuals by stating, "We must show concern for intellectuals, cherish them and trust them so that their enthusiasm, wisdom and talents can be brought into full play."¹⁴⁰

In addition to education, the PLA also acknowledges the important character qualities vital to victory in a war. PLA Chief of Staff Yang Dezhi, in July 1982, noted, "In fighting a people's war today, the decisive factor is still a fighter's courage, consciousness and the mental preparation to sacrifice one's life."¹⁴¹ Education, especially cultural, scientific, and technical training, is seen as the

means to enhance these qualities. In the eyes of China's military leaders, every PLA officer must be more politically conscious, younger, better educated, and, above all, revolutionary, if China is to have a strong and efficient military.¹⁴²

Educational Requirements

PLA leaders have established minimum educational requirements for various positions in the military. Although there are numerous exceptions, recruits must have completed middle school (sixth grade). Noncommissioned officers or cadres at the platoon and company level must be senior middle school graduates (twelfth grade) while all officers must now graduate from one of China's military academies. Many college graduates now go through one year of officer training and then serve in frontline units on the Vietnam border in both combatant and technical positions.¹⁴³

In September 1985, China reinstated mandatory military training for high school and university students. The training program, which started on a trial basis at fifty two universities and 102 senior middle schools, was designed to create a reserve officer corps for the PLA. Qualified graduates of the military training program would receive additional training for reserve officers.¹⁴⁴

One year later, China expanded the number of colleges

that would offer military training to sixty nine. Students at these colleges spend ten to thirteen weeks during their first or second year of study. Over half of the training session will be dedicated to modern military science and the practice of actual military tactics and techniques. The remainder of the time will be devoted to political education in Mao's military theory and the history of the PLA. Students will receive the training in army units like regular soldiers or on their campus with instructors from tactical units. The Chinese report that this training has yielded positive results in the students' ideological and political knowledge, discipline, physical strength and overall knowledge.¹⁴⁵

In 1984, China announced that 1600 college graduates had been appointed as junior officers in the PLA upon concluding a year of military academy studies beyond college.¹⁴⁶ Before the PLA implemented the military service law in 1984, all officers came through the ranks. In 1982, the decision was made that 70 percent of the PLA officers at platoon level and higher should receive training in military schools and colleges. This new requirement greatly increased the demand for military academies.¹⁴⁷

Military Academies

The need for more academies to train a greater number

of personnel formed an integral part of the PLA's educational reform efforts. William R. Heaton and Charles D. Lovejoy, Jr., two scholars who have made extensive trips to Chinese military schools, described the military educational system at the close of the Cultural Revolution as "virtually in a shambles." The decisions made by the third plenum of the Eleventh Central Committee in December 1978 and particularly since Deng became PLA chief of staff, initiated the rehabilitation process. Several military academies, including the PLA Military Academy, were reestablished in 1978.¹⁴⁸

The reform movement gained momentum in 1981 when Xiao Ke recommended to the Party Military Commission a rapid growth in the number of military academies and a great improvement in the educational level of the staff. Since that time, the number of political commissars and military commanders trained at academies and schools has gradually increased. China, today, has over one hundred military schools. More than one million officers have undergone training at the academies since 1979.¹⁴⁹

National Defense University (NDU)

In 1986, the PLA Military Academy, the PLA Political Academy and the PLA Logistics Academy were combined to form the National Defense University, China's senior training and research institute. The Chinese view the NDU as a

significant step in the structural reform of PLA training. The NDU is China's top military school for training officers who will play an active role in the country's military, political, and logistical affairs. Its 600 students will include senior commanders, senior academics, and leading government officials.¹⁵⁰

The National Defense University has been administering a three-year teachers' training course for eighty one cadets since its inception in 1986. NDU plans to offer over 100 courses including elective courses and language training in English, Japanese, Russian, and other foreign languages. Many foreign army officers, military academy executives and scholars have visited NDU as lecturers or exchange students. In May 1987, at the invitation of Lieutenant General Bradley Hosmer, president of the U.S. National Defense University, the Commandant of China's National Defense University, Zhang Zen, arrived in Washington to meet with Casper Weinberger, U.S. Secretary of Defense and Admiral William Crowe, chairman of the Joint Chiefs of Staff. Such high-level visits are expected to lend credibility to China's NDU as a responsible and respected research institution and top training academy.¹⁵¹

In addition to the National Defense University, China operates other research institutes, such as the Academy of Military Sciences, the Beijing Institute for International

Strategic Studies (BIISS) and the PLA service academies. While the Chinese are quick to tout the success of these institutes, at least one scholar, Tai Ming Cheung, student at Sussex University in Brighton, is not similarly convinced. While Cheung acknowledges the importance of these institutes in studying current military doctrine and strategy, Cheung states that "many in the country's leadership are deeply concerned about the poor quality of output emanating from these research centres."¹⁵² The Chinese, in contrast, boast that the research institutes are focusing more attention on current and future warfare rather than historical facts. The institutes are embarking on many new fields including military operations research, military sociology and psychology, military systems engineering, and military management.¹⁵³ The impact of these research institutes on the modernization of China's military doctrine and strategy remains to be seen.

Faculty

While the PLA has made much progress in expanding the number of students trained in military academies and colleges and retiring many senior level officers, the faculty at several of these institutions remain entrenched in Mao's policies and theories. It appears that the degree of change at the various military academies is directly linked to the

level of support given to Deng's Four Modernizations program.¹⁵⁴ Those schools which are adopting innovative training ideas and methods tend to have faculty members who are supportive of Deng's reform measures. The converse is true in institutions dominated by Maoist ideologists. The purging of China's senior ranks will have to penetrate the military schooling system if the PLA hopes to instill fresh ideas and theories in the minds of its future leaders.

William R. Heaton and Charles D. Lovejoy, Jr. cite two problems with the faculty at PLA military schools: "the 'iron rice bowl' syndrome and the traditionally sharp division between abstract and practical knowledge."¹⁵⁵ Almost all faculty members appear to have some type of tenured position, have served almost their entire careers at their schools, and have had very little direct interaction with the field. Many instructors were selected for their special technical or academic skills and have been retained because of job seniority. Another drawback faced by PLA teachers is the limited career opportunities. Very few faculty members anticipate any promotions beyond their current rank.¹⁵⁶

Curriculum Reform

Although the Chinese have experienced difficulties in the updating of the curriculum of military schools, Deng has clearly emphasized the need for officers to be well grounded

in modern warfare and military strategy.¹⁵⁷ Deng has also written that "officers should study the works of Marx, Lenin, and Mao, as well as history, science, geography, foreign languages, mathematics, physics, chemistry, industry, agriculture and other subjects." Deng intends to better prepare officers for modern combat and civilian employment upon retirement.¹⁵⁸

The major theme of curriculum modernization has been improved training in strategy, tactics on the modern battlefield, and science and technology. In general, political education and indoctrination have probably been reduced somewhat with the exception of the political academies, where students specialize in ideology.¹⁵⁹

The lack of integration between the field and the classroom is a major obstacle in achieving reform of the curriculum. The training program for all three services of the PLA is highly centralized with control vested in the Training Department of the PLA General Staff. Subordinate elements including the division level at different schools have very little latitude in modifying the curriculum prescribed by the training department. Clearly, this centralized system will need to be revamped if the PLA is to develop new training programs and courses.¹⁶⁰

Throughout the PLA, there is a noticeable gap between the military schools and the operating force. Many of the

schools sense no obligation to develop training materials for field units. As a result, military education in China is often sustained in a vacuum. There also appears to be no standardization of training throughout the different service units, especially the Army with its vast size, geographical orientation and large quantity of combat units. PLA training is also very compartmentalized; regular force units, local force units and the militia all have separate programs.¹⁶¹

Another flaw in the PLA educational system is the tendency to overtrain higher ranking commanders and under-train middle grade officers. The PLA is firmly convinced of its need to train its commanders, although many of these officers have gained vital professional knowledge by this point in their career. The PLA, apparently, has no system for selecting only a limited number of commanders to attend military schools. Thus, China's military schools are bulging with senior officers who have no valid need for the training. The lack of training for lower ranking officers may pose a serious problem, as the PLA is not preparing for its future with a staff college network for the most outstanding mid-level officers.¹⁶²

Senior officers from the different military region (MR) staffs, who attend the PLA Military Academy, China's senior military academy, are given a curriculum that concentrates on battlefield analysis and military history. China's

modified doctrine of a "people's war under modern conditions" reflects the philosophical orientation of most of the teaching at the academy.¹⁶³

China's military leaders are preparing soldiers to fight an enemy (i.e., the Soviet Union) which is superior in technology and doctrine. Despite advances in technology, many PLA leaders still "teach on the value of men over machines," stressing the theory that wars are won, primarily, by superior tactics and human sacrifice and, secondarily, by human courage.¹⁶⁴

Chinese military students study the Arab-Israeli wars, as well as the lessons learned in the defeat of Chiang Kai-shek's armies. China has also hosted several foreign delegations including Argentina, Great Britain, and Israel. These countries have assisted the PLA in learning from previous battles such as the Falklands War. They have also helped PLA soldiers become familiar with modern weapons. As the Chinese learn from their foreign contacts and academies, there is a growing recognition that doctrine, small-unit tactics, and training must be modified in the future.¹⁶⁵

There has been a significant increase in the time dedicated to training as opposed to political indoctrination. At the peak of the Cultural Revolution, about 70 percent of a soldier's training was dedicated to nonmilitary and 30 percent to military activities. By 1984, the ratio

was reversed in many units: 70 percent military training and 30 percent political ideology and production tasks.¹⁶⁶ In 1981 and 1982, the PLA emphasized improved coordination in combined-arms exercises, a clear departure from guerrilla warfare as the primary mode of combat.¹⁶⁷ Other training priorities have included antitank and antiaircraft techniques, defense against chemical and tactical nuclear weapons, and the integration of various PLA branches.¹⁶⁸

Despite the statistics on political education versus military training, the PLA has not relented in its effort to fully indoctrinate its personnel in communist ideology. In early 1987, Chinese authorities ordered the PLA to conduct political training to oppose "bourgeois liberalization." The General Political Department (GPD) called on the entire army to study six major issues, which included:

- 1) The four cardinal principles must be upheld and bourgeois liberalization must be opposed;
- 2) China will have no future if it does not build socialism;
- 3) only when people's democratic dictatorship is upheld can the political situation of stability and unity be consolidated and developed and can the smooth building of socialism be ensured;
- 4) the leadership of the CPC is the fundamental guarantee of victory for China's revolution and construction;
- 5) Marxism-Leninism - Mao Zedong Thought is always our guide to action; and
- 6) officers and men of the whole Army should take a clear-cut stand in

upholding the four cardinal principles and opposing bourgeois liberalization. 169

It seems quite clear that despite its effort to acquire Western technology for the modernization of its armed forces, the PLA firmly resists any effort to westernize the political orientation of its soldiers. In one case, at the Wuhan General Hospital, veteran intellectuals were invited to "give lectures and talk about their personal experiences to inspire young intellectuals' faith in the party leadership and the socialist system." The purpose of these talks was "to help young medical workers gain a clear understanding of the mistaken view of 'total westernization.'"¹⁷⁰

CCP leader Hu Qili, in a speech at the opening of the National Defense University in September 1986, reinforced the Chinese government's commitment to politically indoctrinate its soldiers. In his talk, Hu Qili noted that cadets must understand current and future warfare, military management and advanced military sciences. In addition, Qili observed that cadets "must have a firm and correct political orientation. . . [and] they must also be fairly knowledgeable in Marxist theories."¹⁷¹

Recruit/NCO Training

New recruits now undergo basic training at training

regiments in each group army.¹⁷² In the past, recruits were sent directly to line units with no prior training, thus compelling units to begin yearly training cycles with basic skills such as marching, marksmanship, and boot shining. The use of separate basic training regiments gives second and third-year soldiers four months of advanced training each year.¹⁷³

In November 1986, the PLA enrolled its first group of noncommissioned officers in PLA academies. Although no academies were established at that time solely for Army NCOs, NCO classes have started in more than forty Army academies. The Air Force and Navy both established their own NCO academies. The first group of cadets was selected by examination from among outstanding soldiers who had two years of military experience, were graduates of a middle school or higher level, and were willing to remain on active duty for an extended period of time.¹⁷⁴

The PLA clearly recognizes the urgent need for a trained NCO corps. The General Staff Department in November 1986 stated:

NCO's will become a mainstay in the Army's grassroots construction. Strengthening NCO training is a major step to reform the system of training grassroots technical and administrative cadres and is a positive measure to enhance our troops' combat capacity.

After two years of study at the military academies and a year of practical training in the Army, the cadres will graduate with a degree similar to that of a specialized secondary school.¹⁷⁵

Combined Arms Training

The PLA has substantially increased the number of large-scale maneuvers and coordinated training exercises with the Air Force, Navy, and other technical arms. In September 1981, some 200,000 soldiers and almost 2,000 military aircraft, including transports, helicopters, fighters, and bombers, participated in a major combined-arms training exercise held near Beijing. Since that time, the PLA has held several smaller, local combined-arms maneuvers.¹⁷⁶

Coordinated training exercises have produced remarkable results. The PLA has noticed an improvement in the abilities of the ground, air, and naval forces to coordinate with each other in battle, counter electronic intelligence, react quickly, ensure the supply of logistics, and survive on the battlefield.¹⁷⁷ The high degree of training has produced commanders who can competently train infantry, armor, and artillery troops as well as coordinate combined forces.¹⁷⁸ It has also resulted in a large number of cadres and soldiers who are well-trained in advanced military thought, modern science, military weapons, and equipment.¹⁷⁹

The PLA is continuing to train in large-scale, combined-arms exercises utilizing the newly formed mechanized group armies. In a major exercise in late 1986, the PLA incorporated a wide range of equipment including bombers and attack planes, tanks, self-propelled guns, rocket mine-laying vehicles, armored ambulances, and armored bridge layers. The Group Armies' automatic command and control center utilized minicomputers, remote control, and large projection screens to control the exercise.¹⁸⁰

To improve its performance in combined arms warfare, the PLA opened up its first combined tactical training center in April 1986. According to the Chinese newspaper Jiefangjun Bao, this is China's "largest and best equipped comprehensive military training base." The Center is expected to have several, ultra-modern training tools including a laser battlefield, a live ammunition practice ground, a computer simulated combat command post, an indirect firing range and a general command-and-control unit. In addition, twelve systems utilizing laser simulators, remote control, screen display, telecommunications, and computers have been installed to assist the operation of the training center.¹⁸¹

It appears as though this center will be similar to the U.S. National Training Center at Fort Irwin, California, where soldiers from the entire Army are trained and

evaluated in their ability to fight on the modern battlefield. This center should prove to be a tremendous boost to the PLA's effort to gain proficiency in combined-arms warfare. The Chinese plan to use the combined tactics training center to organize "combined tactics exercises in order to train and assess Army units, to check their quality in training, and to ensure combined tactics training will be carried out." In addition, the center will also provide the opportunity to experiment with and prove tactics and techniques.¹⁸²

Simulators

The PLA is making extensive use of modern lasers and electronic simulators in the training of PLA soldiers. According to the Chinese, these simulators have increased the training results and considerably lowered training costs.¹⁸³

The Shijiazhuang Military Science and Education Institute recently developed a simulator to enhance a high ranking commander's policy making and strategic abilities in combat. The system, which utilizes "artificial intelligence modes, simulated with electronic computers" is a vast improvement over China's previous use of maps and sand tables in military exercises. The simulator closely resembles the military tactics, battlefield psychology and command skills

required in actual war.¹⁸⁴

The Antichemical Warfare Corp has developed a radiation-monitoring simulator designed to simulate conditions for nuclear fallout and contamination following a nuclear explosion. PLA artillery units are also making wide use of simulated artillery rounds and rocket launchers for training soldiers. These launchers and rounds can be used repeatedly, a cost effective feature for the PLA.¹⁸⁵

In April 1985, China reported a laser simulated firing device which makes battlefield "hits and misses" very realistic. If a soldier or group of soldiers is hit by the enemy, the laser simulator emits sounds and smoke which indicate that these officers and troops have lost their fighting capability. Meanwhile, no troops or equipment are damaged.¹⁸⁶ The system appears similar to the Multiple Integrated Laser Engagement Simulation (MILES) system employed by the U.S. Army. In this system, a soldier fires an eye-safe laser beam from an adapter on his weapon. The laser beam is picked up by sensors attached to the "enemy's" field equipment and vehicles. A continuous alarm is heard when a soldier is "killed" or equipment is destroyed. An intermittent alarm is heard when a "nearmiss" occurs.¹⁸⁷

PLA's Use of Modern Technology in General

In a war gaming exercise in September 1986, commanders

made use of computer and telex systems, Chinese character processors, automatic decoders and duplicators. The logistics units used computerized systems to develop channels for military supplies, fuel and security systems. The artillery units had an automated command and control system and were able to fire on a target within ten minutes of the spotters' report.¹⁸⁸

The Chinese appear overly enthralled by the sophistication of modern computers and military equipment. Commenting on China's first simulated computerized warfare system developed by the Academy of Military Science in late 1986, the Chinese news agency Xinhua reported: "In general, actual troops and ammunition will not be needed for conducting large-scale military exercises in the future."¹⁸⁹

This enthusiasm for current military hardware might lead to a dangerous tendency to ignore the most vital element on the battlefield: the soldier. Whatever breakthroughs are made in science and technology, the PLA cannot forget that it is the soldier who will operate that equipment. Thus, the notion of conducting a large-scale military exercise without troops or equipment is feasible, to a certain point, but the true capability of the PLA should be measured by the soldier's ability to survive and effectively fight on the modern battlefield. As in our own Army, the Chinese need the balance of computer simulated war games and

actual military exercises involving troops and equipment.

Training Results

There has been a dramatic rise in the professional competence and educational level of China's military leaders. In 1982, only 2.9 percent of PLA field leaders were senior middle school graduates. Today, at least 80 percent have received a senior middle school or higher education.¹⁹⁰

Sixty percent of the leading cadres of the major services and military regions have a college level education, and 75 percent of these officers have attended academies or colleges.¹⁹¹ In 1984, Han Huaizhi, assistant to the PLA Chief of Staff, reported the following statistics: "96.5 percent of corps-level officers, 87 percent of division level 'leading' officers, and 71 percent of regimental 'leading' officers had received training in military academies and schools."¹⁹²

The PLA has seen a noticeable rise in the number of M.A. and Ph.D. candidates in the last few years. From 1978 to 1986, M.A. candidates increased by more than ten times from 110 to 1200, and Ph.D. candidates have grown eleven times since 1981 alone. Today, thirteen military institutions offer doctoral degrees compared with seven in earlier years. Military schools which award master's degrees have

increased by about eight-fold, from fourteen to 135 institutions.¹⁹³

Conclusion

Deng has certainly faced great resistance in his effort to reform the PLA's educational system. In 1983, Xiao Ke enumerated three major problems of professional military education in China. Heaton and Lovejoy, Jr. outlined these three obstacles as presented by Xiao:

The first is that professional education is really irrelevant to command, and the second is similar in that it suggests that experience is far better than a textbook education in inculcating leadership. The third is a reversal of Xiao's propositions (or in other words, why have a professional military officer corps if China does not have a modern army and is not likely to have one in the foreseeable future).¹⁹⁴

Deng has consistently overcome these arguments as he has forged ahead in his effort to thoroughly revamp the military educational system. Judging by the accomplishments of the past few years, it seems that Deng has made great progress in meeting his goal of a professional, well-educated and highly capable fighting force.¹⁹⁵

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Chapter 5 PLA Equipment Acquisition and Sales

In our final area of ground forces modernization in China, we turn to the military equipment used by the PLA. In this section, we address the areas of China's current weapons inventory, technology transfer to the PRC, and China's arms sales to other nations.

Equipment modernization of the PLA is linked to the reforms made in the preceding sections of organization, doctrine, and training. Without an efficient military organization, a modern military doctrine that emphasizes equipment as much as manpower and thorough training of the soldier, equipment modernization would be a meaningless venture. Indeed, PLA leaders recognize that organization, doctrine and training are "prerequisites for the effective absorption and use of advanced weapons."¹⁹⁶ Nevertheless, weapons improvement has taken last priority because the other reforms were less expensive and more likely to assist the economy as a whole.¹⁹⁷

Historical Perspective

The Soviet Union was able to move in and support China in the 1950s because the PRC did not have the basic industries needed to elevate the standard of living and build a modern military. These industries included steel, machine

building, petroleum, and electronics.¹⁹⁸ The Soviets provided the PLA with blueprints, prototypes and even complete production lines for almost every category of conventional weapon, including fighters, infantry weapons, military radar, armored fighting vehicles and military communication systems.¹⁹⁹

When the Soviets withdrew their support for ideological reasons in 1960, China was left with its own engineers who were well trained but could not perform the basic research and development needed to produce new weapons systems. The departure of Soviet technical support was a blow to the pride of the Chinese and greatly influenced the PLA's reluctance to ever again become dependent on a foreign power. Since the Sino-Soviet split, China has been mass producing many archaic weapons with the exception of its nuclear and satellite systems, which have received much support from the PRC government.²⁰⁰

At the start of China's defense modernization effort, the PLA's most pressing equipment needs appeared to be antitank weapons, air defense missiles, and military electronic equipment. In the late 1970s, Admiral Stansfield Turner, then Director of Central Intelligence, predicted that China would have to adjust its foreign weapons procurement to allow for an expansion of its economy. China's military leaders appeared to be examining the acquisition of

foreign technology to insure that imports were not duplicated and could be easily absorbed and handled by the PLA. China was also vitally interested in upgrading the skills of its scientific, technical and managerial personnel.²⁰¹

Following its traditional pattern of self-reliance, China has consistently shown more interest in advanced technology than completed weapons systems. Numerous delegations have been sent to the West to study various weapons systems and technologies, but few purchases have been made.²⁰² Certainly there have been exceptions to this pattern, but the strong tendency to avoid mass importation of military equipment remains a basic tenet of PLA equipment modernization policy today.

Current PLA Weapons Inventory

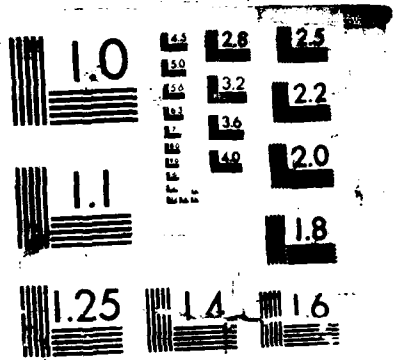
Modernization of the PLA ground forces has been a slow process given China's limitations of resources and shortage of technical expertise to produce advanced military equipment. As a result of these constraints, China has been forced to depend on existing weapons systems which are Chinese variations of Soviet military technology of the 1950s.²⁰³ Although there have been a few changes, the improvements have been incremental with no significant breakthroughs.²⁰⁴

In an article on Chinese weapons development, John

Frankenstein cites the Chinese tank as an example of a weapons system based on a Soviet design with minor Chinese modifications. The main Chinese combat tank, the Type 59, is based on the Soviet T-54, a tank of 1950s vintage. Incremental improvements have been made in recent years, including an infrared night vision device and laser range-finders.²⁰⁵ The Type 69-II, which is the current version, includes an upgraded main gun (a British 105 mm rifled gun has replaced the 100 mm smooth bore), nuclear biological and chemical protection, gun stabilization, and an "automatic fire-control system."²⁰⁶

China's light tanks, the T-62 and T-63, also reflect the Soviet influence. Both have an 85 mm main gun, a modification of the Soviet D-44 antitank gun. According to Jane's, the T-63 is "virtually a scaled down Type 59 MBT," while the T-62 resembles the Soviet PT-76 light amphibious tank with its water-jet capabilities.²⁰⁷

The adaptations and improvements in the tanks have been rather conservative. There are few indications that China has advanced toward advanced munitions or improved armor types. One explanation for this lack of improvement is the PLA's massive tank production requirements caused by the tripling of armored divisions in China from four to thirteen, or an expansion of tanks from 1,200 to 3,600. China's full tank inventory is approximately 13,000 tanks.²⁰⁸



MICROCOPY RESOLUTION TEST CHART

China's Current Weapons Modernization Policies

Since 1979, China's leaders have promulgated several policies designed to form a deliberate, coherent strategy for improving the quality of PLA weapons over the next five to ten years. First, China has, in some cases, purchased finished military equipment such as a French long-range radar system and several U.S. helicopters at a cost of about \$140 million. While these systems are extremely costly, it is quite possible that small purchases, targeted at specific weaknesses, will continue as the PRC's financial base grows.²⁰⁹

Second, China is seeking technology transfer agreements with American and European firms to improve the PLA's weapons manufacturing processes and equipment. Anti-armor technology is one area in which there have been discussions for substantive coproduction agreements between the U.S. and China.²¹⁰

Third, the PRC is making incremental improvements in existing systems utilizing both foreign and domestically developed technology.²¹¹ One example is the modifications which have been made on China's main battle tank cited above.

Fourth, China's leaders are making a dedicated effort to expand the supply of trained technical personnel. All

PLA soldiers, regardless of rank, now receive training in science and technology (S & T). This training has been accomplished through regional education centers supported by local universities, colleges, lecture series, foreign S & T journals, and films to train PLA personnel.²¹²

Fifth, China is seeking to successfully absorb foreign civilian technology into its defense sector. China has indicated an interest in procuring microwave technology, switches, modulators and passive elements such as filters, antennae, and duplexes which have military applications in radar, electronic warfare jammers and receivers, and fire control.²¹³

Finally, China's latest five-year plan calls for expanded growth in a number of areas directly and indirectly related to weapons production. These areas include automotive technology and electronics. Many of China's civilian industries, such as the China Automotive Industry Corporation and the Ministry of Electronics Industry, produce both military and civilian products. It is quite possible that the increased manpower and budgetary resources allocated to these industries will result in new military equipment.

Wendy Frieman, senior research scientist in Science Applications International Corporation, is quite optimistic about the impact of China's current programs and policies to modernize China's defense technology. Foreign technology is

viewed as a catalyst that will stimulate internal technological change. Thus, China's leaders recognize that foreign technology is not the panacea to all of the PLA's weaknesses. Rather, China is pursuing a two-pronged strategy aimed at importing advanced technology to solve specific problems in the short term and develop a first-class indigenous military R & D and production capacity over the long run.²¹⁵ Reviewing China's policies for modernizing the PLA weapons inventory, Frieman writes:

If the policies. . . are implemented consistently over the next five years, foreign observers will see a substantial improvement in both China's ability to assimilate foreign technology and capacity to develop and produce modern weaponry indigenously. 216

The Chinese utilize two basic strategies in their attempt to manufacture weapons and components in their own plants. Both strategies are designed to reduce Beijing's risk of becoming dependent on and vulnerable to fluctuations in policies and production capacities of suppliers. The two strategies are prototype copying, which may involve reverse engineering, and importation of entire plants. The Chinese record on reverse-engineering "dual-use technology" and prototype reproduction has not been good. A shortage of specialized materials and a poor science and technology infrastructure have been the primary problems. As a result,

the Chinese increasingly look for licensed production rights such as the case of the Spey engine. In 1975, China purchased 50 Rolls-Royce Spey turbofan jet engines from Great Britain with a license to manufacture these engines at a factory near Xian. The Spey was to be fitted on a modified version of a Soviet MiG-23 interceptor. With this single purchase, China was able to push its jet propulsion technology forward by ten years.²¹⁷

Although the Chinese lack the capital to make massive weapons purchases, they have expressed interest in a variety of ground force weapons systems including tanks, armoured personnel carriers, antitank weapons, artillery equipment, light arms and trucks. China has either examined, shown genuine interest in, or purchased systems from Great Britain, France, West Germany, Italy, Switzerland, Sweden, Australia, and the United States, among other nations.²¹⁸

While China's shopping list is impressive, very few contracts have actually been signed. This phenomenon is a result of China's overall defense modernization strategy, foreign exchange and COCOM constraints, and an acquisition strategy for procuring the means of production.²¹⁹

According to David Shambaugh, a scholar of Chinese military policy, the PRC's greatest asset at this stage of its quest for a modern military is "civilian industrial and scientific development." Although COCOM closely monitors

and controls the transfer of dual-use technology, China stands much to gain from the absorption of foreign technology potentially suitable to the defense sector.²²⁰

While China tilts undeniably to self-reliance in military technology, several factors have drawn China away from total adherence to self-sufficiency in weapons and equipment development. First, Beijing recognizes that as it tries to close the S & T gap with more developed countries, the rest of the world is shifting toward newer and more sophisticated weapons systems, thus widening the gap in relation to the PLA's capabilities.²²¹ Second, China realizes that if it hopes to reap the benefits of Western state of the art technology, it must enter into co-production and licensing agreements with Western industrialized countries, hoping that the "spill-over" effect of civilian and industrial research will positively influence the PLA's technological capability.²²²

Since the early 1970s, China has entered into these agreements at a surprisingly rapid rate. In such a way, it has gained access to an international pool of technical expertise useful for its own national development requirements including defense modernization.²²³

Arms Purchases by the PRC

China's new drive to obtain Western technology has led

to some important weapons agreements. In August 1985, China requested plant layout designs, technical data packages and technical assistance to establish large-caliber artillery fuze and detonator factories. If the Chinese decide to purchase the equipment, total sales could reach ninety eight million dollars.²²⁴

The Chinese have also negotiated with the U.S. to coproduce the improved TOW antitank guided missile. These negotiations have stalled, however, because the Chinese have insisted on purchasing TOW-II technology, which the U.S. is unwilling to sell. China has already purchased twenty four Sikorsky Blackhawk helicopters, coastal defense radars and communications equipment from the U.S. In February 1985, China signed an agreement with the UK's Vickers Defense Systems to jointly market a two-man 25 mm turret.²²⁵

Despite existing U.S. business agreements with China, there is much "frustration" in business transactions with the Chinese. Many American and European firms have labored diligently in recent years to secure contracts with the PRC, only to be overcome by a complex Chinese bureaucracy. Only eight U.S. companies had exhibits at ASIINDEX '86, Beijing's arms exhibition in November, 1986. These firms included FMC, LTV Aerospace and Defense Company, the ISC Group, Emerson Electric, Westinghouse Defense, Martin Marietta Corporation, Recon/Optical, and Cadillac Cage Company.

Apparently, many U.S. and other Western firms are discouraged by the fact that the Chinese are only interested in purchasing a small amount of Western arms and technology with the hope of producing their own version of the equipment.²²⁶

Scholars almost all agree on the future of arms sales to China. While China is in need of Western technology, it is unlikely that large equipment purchases will be made since Beijing does not have the necessary financial resources.²²⁷ Deputy Assistant Secretary of Defense James Kelly testified to Congress in June 1984: ". . . the Chinese face enormous needs with limited funds, and they must be careful shoppers. In most cases, they do not consider procurement of end items to be a viable option; they want the technology with which to manufacture their own weapons."²²⁸ Douglas Stuart and William Tow, in a discussion on the Chinese military in early 1981, concluded that the Sino-Western arms exchange "will probably continue to be characterized by inflated expectations and dashed hopes."²²⁹

Western Caution in Arms Sales to China

As Western governments, including the U.S., contemplate arms sales and the transfer of sophisticated dual-use technology, the potential costs to relations with the USSR must be carefully weighed.²³⁰ There are arguments for both positions on arms sales to China. On one side, there are those

who believe all arms sales or transfers should be abolished on the basis that they would threaten Taiwan and other noncommunist Asian nations, as well as the Soviet Union.²³¹ This group argues that such sales would make the USSR more:

- 1) sensitive to threats on its borders,
- 2) convinced of a U.S.-China-Japan anti-Soviet alliance,
- 3) dogmatic in its dealings with the West,
- 4) likely to expand defense expenditures,
- 5) prone to engage in military adventurism abroad. 232

On the opposite side are those individuals who seem willing to offer China anything and everything it desires.²³³ Shambaugh summarizes the arguments of this group, who believe that an improved Chinese defense establishment would:

- 1) restore a regional balance of power in Asia,
- 2) improve the Sino-Soviet military balance,
- 3) cause the Soviet Union to draw down its forces facing NATO, redeploy them to the Far East (which costs much more to maintain), and take seriously the possibility of a two-front conflict,
- 4) provide a potential market of considerable size and serve to bolster domestic production. 234

In between these two extreme positions lie a variety of policy instruments. Certain defensive equipment such as antitank and anti-air precision guided missiles (PGMs) and early warning radars could be aimed specifically at reducing

the PRC's vulnerability to a near term conventional Soviet attack. Because of the defensive nature of this equipment, it is unlikely that it would be construed as threatening to the Soviets, Vietnamese, Taiwanese or others.²³⁵

On the other hand, offensive weaponry such as tanks, APCs, heavy artillery and helicopter gunships would be of great concern to China's adversaries. While China neither possesses the foreign exchange for large weapons systems, nor does it desire such completed systems, Western governments and, in particular, the United States, must carefully consider the needs and requirements of the Chinese, as well as their own security requirements.²³⁶

Another individual who is cautious about U.S. arms sales to China is William T. Tow, Assistant Professor of International Relations at the University of Southern California. In an essay on the role of S & T in Chinese defense modernization, Tow points to the potential dangers of indiscriminate technology transfer to China. While many Western strategic policy makers envision a gradual strengthening in the Sino-Western collective defense tie, strong enough to contain Soviet adventurism in the Far East, many Asian-Pacific nations are not similarly convinced. The Association of Southeast Asian Nations (ASEAN) leaders have sharply rejected U.S. arguments about the strategic benefit of granting Beijing access to Western technology. These leaders believe

that a more powerful China would be capable militarily of endangering Southeast Asian security by challenging the advancing Soviet power there or supporting insurgent movements more ably than it did two decades ago during the era of decolonization.²³⁷

Although other Asian states are equally concerned about a massive effort to modernize the armed forces of China or Japan, it is the Soviet Union which is most concerned. Moscow has repeatedly warned that persistent Western or U.S. military sales to China will pose a "high military risk" both to China and the West.²³⁸ In spite of the fact that China fears Soviet military strength more than that of the United States, one must remember that Chinese Communist ideology is exceedingly wary of the West's political and economic system.²³⁹

William T. Tow cautions U.S. leaders who are overly confident that high technology transfers to China are in America's best interest:

The Reagan Administration must avoid making the same mistake that the Soviet Union made during the 1950s when it assumed that it was possible to transfer technology to China so discriminately that Beijing would not be able to develop a threatening military capability. 240

Tow continues by noting that China will always emphasize the "national dimension" of any strategic policy as it seeks to

preserve its ideology, culture, politics, and revolutionary traditions. Within this framework, its goal of self-reliance is essential although CCP leaders recognize that China's technological deficiencies might leave the country extremely vulnerable to outside influence as it tries to solve a myriad of managerial, political and logistical problems. Tow dismisses the notion that U.S. arms sales to China will lead to a close Sino-American military tie which will act as an effective counterweight to the Soviet menace in Asia.²⁴¹

It is at this point that one cannot ignore the fact that despite China's openness to the West, it is fundamentally a Marxist-Leninist-Maoist state. Thus, while receptivity to the West seems apparent on the economic front, one also observes a noticeable effort to punish those who openly oppose its stated objectives. The most graphic illustration of this effort was the removal of CCP Secretary General Hu Yaobang in early 1987 following a series of student riots at several universities in China. The West and particularly the U.S. must not become enamored with the potential arms market in China and thereby lose sight of the communist ideology which drives it. William T. Tow offers some advice which the West would be wise to follow:

. . . the United States and its allies
need to upgrade their own efforts in
forging common strategies directed toward
modernizing China without arming it in

ways which could ultimately compromise their own security and global security. 242

The possibility that China will one day possess sufficient military strength to expand its might beyond its borders cannot be dismissed. Already, the U.S. has agreed to share intelligence data with China and locate U.S. intelligence facilities in China. Other possible collaborative security steps include "the stationing of Western military experts in China; training of PLA personnel in the West; joint maneuvers and exercises; joint contingency planning; [and] institutionalized regular consultation." While some of these may appear rather unlikely in this decade, it must not be forgotten how far Sino-American relations have progressed in the past ten years. Thus, caution and prudence must be exercised by U.S. policy makers.²⁴³

Chinese Arms Sales

Arms sales in recent Chinese history have been primarily used as a foreign policy tool. China has supplied military weapons and equipment to Egypt, Pakistan, North Korea, and some African nations. In addition, they have supported guerrilla organizations in Afghanistan and Kampuchea. Only recently has China begun to view arms sales as a viable means to enhance the nation's economic base.²⁴⁴

One reason for the abundance of military equipment

available for sale in recent years by the Chinese was the surplus of military goods following the one million man reduction initiative in 1985. The cutback in manpower has left China with an excess of below standard tanks, armored personnel carriers (APCs) and other military items. China has found that selling the excess equipment, especially to Third World nations with modest budgets, was a convenient way to earn cash and to lower stockpiles of military equipment.²⁴⁵

Arms exports are viewed by the Chinese as an essential means to overcome the shortfall caused by the decline in the price of oil, a major export item. Arms sales reached two billion dollars in 1985, and China hopes to funnel the profits from these arms exports into advanced military research or Western defense technology exports.²⁴⁶

Civilian Use of Military Factories and Facilities

Many military factories in China are now being adjusted to accommodate the production of civilian goods such as bicycles, fans, and pharmaceutical products. In the past, defense factories producing spare parts for military equipment would close when their quotas were fulfilled. Today, these factories are being ordered to manufacture bicycles, fans or other consumer items with their excess capacity.²⁴⁷

An example of this new emphasis on broadening the

output of defense factories is the government corporation formed to modernize the pharmaceutical industry in China. The ministries of astronautics and aviation, two major defense industries, are joining the State Pharmaceutical Administration to assist in the research, design and manufacture of production facilities for China's domestic pharmaceutical industry. In addition, fourteen top military research institutes involved in the development of radar, aircraft and missiles will also build modern pharmaceutical facilities. The new inter-ministry corporation is a massive effort to modernize domestic drug production through the use of military assets.²⁴⁸

The defense industries in China have cut back on production of military equipment for several reasons, including reduced orders from the PLA caused by the obsolete nature of Chinese weapons. A reduction in foreign arms sales has also yielded a net decrease in Chinese military production.²⁴⁹

Tang Zhongyang, Vice Minister of the Ordnance Ministry, announced in late January 1986 a 60 percent cut in output compared to production in 1985. The surplus in manufacturing capacity was to be taken up by a switch to civilian production. The switchover came at an ideal time when demand was exceeding supply in many fields such as consumer products, energy, transportation, communications, building materials and infrastructural projects.²⁵⁰

The switchover to civilian production in China is linked to the PRC's perception of a peaceful, stable environment free from a war in the near term. Tai Ming Cheung, author of an article in the Pacific Defence Reporter in November 1986, praises the PRC for its stance in reducing arms escalation and thereby improving its economy.

Reducing tensions by a partial demilitarization of the economy and exploiting this by reinvestment in economic development, are the benefits the Chinese leadership reap from their moves. The PRC will continue with such a drive from defence to development while they watch the superpowers continue with their arms escalation and the increasingly burdening effects on their respective economies. 251

Conclusion

Several issues are of critical concern when assessing China's ability to become a world class military power:

1. In view of China's current shortage of scientists, skilled technicians and engineers, will the PRC give military modernization sufficient priority to allow the PLA to make the changes it must make to become a streamlined, capable fighting force?
2. Will China overcome its traditional self-reliance policy and become more open to foreign imports? Tow believes that there is little hope for China to stay abreast on science and technology if Beijing does not abandon its rigid

adherence to the maintenance of national sovereignty as a primary consideration.

3. Can China's military leaders match their doctrinal beliefs with current weapons and technology systems?

4. Can China overcome the internal bureaucratic rivalries over how much foreign technology to import? In addition, will China's suppliers come to an agreement regarding the restraint to be placed on military exports to China? There are still strong differences between the U.S. with its allies and China concerning the future of Taiwan, the development of market economies, and the support of violent Third World Revolutions.²⁵²

In whatever manner these issues are addressed, the PRC is likely to make great strides in upgrading its own equipment inventory and selling weapons abroad. The Chinese are aggressively selling their equipment on the international arms equipment. It is quite likely that Third World nations will continue to purchase Chinese weapons, which are lower priced and have less strings attached than arms from the Western world.

As China's economic base grows from these sales and from the economy as a whole, the end result will be an improved PLA arms inventory. The PLA will most likely upgrade its equipment on an incremental basis, continuing its strategy of seeking military technology rather than

completed weapons systems. The West, particularly the U.S., must decide how far China should go in purchasing defense technology.

Thus, the Western world, through its arms purchases from China and the constraints it places on technology transfer to the PRC, has an opportunity to significantly influence PLA equipment modernization.

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Chapter 6 Conclusion

The influence of Deng Xiaoping in China's communist party, government, and military is exceedingly great. Many believe that the longer Deng lives, the more likely it is that his policies will remain and political stability will continue in China. After Deng's death, it is possible that the domestic situation will change. The groups which comprise Deng's faction could splinter, and opposition to Deng's proteges could increase. Under such circumstances, the army might be able to exert tremendous pressure on Deng's successors to alter their pragmatic policies. Collective leadership is crucial, and compromise among various groups and factions is needed for political stability in China.²⁵³

While military modernization may be a bit uncertain after Deng's departure, economic modernization is likely to remain fixed in place and to continue with ever broadening freedom for the Chinese peasant and businessman alike. The Chinese have tasted the benefits of Western capitalism, and it is unlikely that they will want to surrender their new freedom for a more restrictive policy. In addition, arms sales from China will probably grow in the coming years, adding more fuel to fire economic expansion.

The growth of China's economy will help Beijing realize its goals in the modernization of agriculture, industry,

national defense, and science and technology. Economic modernization then is one of the PLA's greatest hopes for continued military modernization, particularly in the area of equipment improvements, since this is the most expensive aspect of military reform. If China's economy can continue to grow with an increase in foreign trade and domestic enterprise, it will have the resources to continue improving the Chinese military. If the economy becomes stagnant or regresses, the PLA will suffer a loss and be further deterred in its effort to reach the status of other industrialized countries.

The future of China's economy is, to a great extent, linked to the internal freedom of its people. Chinese leaders must recognize that peaceful coexistence between capitalism and communism is a hopeless venture. An employer who offers his workers a degree of freedom and then suddenly becomes restrictive in his policies will find it difficult to sustain a constant level of production. In the same manner, a nation that opens the door to the liberties we enjoy, such as freedom of speech, freedom of the press, and the right to petition, and then suddenly slams it shut may find itself with rebellion and turmoil on its hands. An example of this pattern is Poland, which granted its workers limited freedom in the late 1970s and early 1980s through the formation of the labor union, Solidarity. However, when

the government began to fear the power of Solidarity, it quickly moved to impose martial law in the country and restrict the power of Solidarity. The result has been continued unrest among a labor force that had tasted freedom and is now unwilling to relinquish it.

What happened in Poland could easily occur in China if its leadership fails to acknowledge that genuine liberty is essential for the country's growth and prosperity. Let us take our own country, the United States of America, as an example. Although we have experienced many problems in our nation, the U.S. has remained a free and prosperous nation founded on Judaeo-Christian values and a basic trust in God. We see this faith in the Almighty richly portrayed in a statement made by Benjamin Franklin during the drafting of the U.S. Constitution:

We have been assured, Sir, in the Sacred Writings that except the Lord build the house, they labor in vain that build it. I firmly believe this. I also believe that, without His concurring aid, we shall succeed in this political building no better than the builders of Babel. . . . 254

In the 1830s, Alexis de Tocqueville, a French political philosopher, traveled to the United States and was fascinated by America's greatness. As he searched for the source of its greatness, de Tocqueville realized that America's

greatness lay neither in its natural resources nor in its world commerce, but rather in the pulpits of its churches. Upon recognizing this truth, de Tocqueville stated, "America is great because she is good and if America ever ceases to be good America will cease to be great."²⁵⁵

The statements by Franklin and de Tocqueville reflect a philosophy of a Sovereign Being who has control over the universe. Certainly this view of an omnipotent God does not characterize Marxist-Leninist teaching. Nevertheless, China's leaders today are attempting to build a powerful country apart from the faith, values and traditions which have richly blessed our nation and many others. China stands on the threshold of a choice between giving lip service to freedom while persecuting those who adopt Western values on the one side and granting its people more overall freedom on the other side. The manner in which China resolves this issue will have a large impact on the future of China politically, economically, socially, and militarily.

From a military point of view, China appears to be in a rather favorable position at this time. Although it has had skirmishes on its borders with Vietnam and India in recent months, the likelihood of a major confrontation is rather remote. This fact will work to China's advantage as it uses the time to strengthen its economy and national defense. Progress is likely to continue in the PLA's organization,

doctrine, training, and equipment.

In the area of military organization, much has been accomplished, but there is still room for improvement. The PLA has been successful in consolidating its organizations and military regions, creating "group armies" to fight on the combined arms battlefield, forcing older PLA officers and cadres to retire, and establishing a noncommissioned officer training system. China also has made progress in its effort to reduce the PLA by one million soldiers, but much work remains to be done.

The Chinese news agency Xinhua reported in late 1986 that 400,000 officers and soldiers had either retired or transferred to civilian jobs. If one considers that China's target date was 1987, then a reduction of 400,000 in eighteen months certainly does not indicate rapid progress.²⁵⁵

June Teufel Dreyer, Director of East Asian Programs at the University of Miami, believes that China's current generation of leaders may put a stop to demobilization altogether. Apparently, conservatives within the military gained ground when Deng's former "hand-picked successor," Hu Yaobang, was forced to step down in January 1987. These conservatives have a very different picture of the role of the PLA in Chinese society. As a result, Dreyer states, "The demobilization effort could well stop short of completion, and its effects may even be reversed, either quickly by fiat or,

more likely by gradual accretion."²⁵⁶

The PLA faces other concerns in its organization and personnel structure. Recruitment has been a noticeable problem in recent years. China must offer more incentives to its recruits who otherwise will be attracted by a more promising career in industry, science and technology, or the family farm.

The NCO system must be further developed in the PLA. In most Western armies, particularly in the U.S., the noncommissioned officer corps forms the backbone of the military. NCOs support officers in a great variety of tasks ranging from leadership of soldiers on the battlefield to managing the administrative and logistical tasks in a military unit. The NCO corps is vital to the PLA as China recognized in its war with Vietnam in 1979. With a trained and competent NCO corps, the PLA will continue to develop into a highly capable fighting force; without it, the PLA is likely to stagnate and lose its ability to effectively wage war.

The rank system is an area which PLA leaders must implement in the very near future. Without a rank structure, the People's Liberation Army will remain an unprofessional fighting force vulnerable to chaos on the battlefield, as was demonstrated in Vietnam in 1979. Although China must guard itself from the elitism characteristic of military officers in the past, it must not lose sight of the

fact that a well-disciplined army led by competent and self-sacrificing officers and NCOs is vital to victory in battle.²⁵⁷

Turning to military doctrine, we see that China has begun to modify its theory of a "people's war" to adapt it to the conditions of modern warfare. Nevertheless, there appear to be many within the PLA who adhere to Mao's theory with unyielding allegiance. This excessive adherence to an archaic military theory could hinder defense modernization in the future, especially as the PLA attempts to assimilate sophisticated weapons systems into its inventory. There is room for optimism, however, as China's military academies, research institutes and the National Defense University expand their efforts to understand military strategy and tactics. The exchange of military students with Western nations should enable the PLA to further revise its military strategy, making it effective for both large scale warfare and low intensity, smaller conflicts such as the recent clash on China's border with India.

In the area of training, one would have to conclude that the PLA's accomplishments exceed its shortcomings. Since the start of military modernization in the late 1970s, China has reinstated over 100 military academies. This expansion has substantially enhanced the number of soldiers who understand the elements of combined arms warfare as well

as a variety of academic disciplines including philosophy, science, foreign languages and others.

The creation of separate training regiments and programs for recruits and NCOs respectively and the new combined arms training center are further signs of significant progress in PLA training. Finally, the PLA's extensive use of electronic and laser simulators is giving China's army the opportunity to train in conditions that closely resemble the battlefield.

Notwithstanding these improvements, there are several areas which need improvement in PLA training. First, the faculty at China's military schools must be of top caliber to motivate and inspire young officers, NCOs and recruits. Instructors should be given a variety of assignments with more direct interaction with the field to insure that their material is both current and relevant. Military teachers should also be offered more incentives to enhance their careers and inspire them to be diligent and capable instructors. Much of military modernization in the PRC depends on a trained officer and NCO corps. Without capable instructors, the PLA cannot hope to have the caliber of soldier it needs to fight and win on the battlefield of the future.

In addition, the PLA must increase the integration of the field and the classroom in military training. In the U.S. Army, soldiers are often given the opportunity to

practice skills learned in the classroom in a field setting resembling conditions in an actual wartime environment. Without this practical experience, military knowledge becomes abstract and removed from reality.

Finally, the PLA must not lose sight of its most valuable asset: the soldier. It is possible that the influx of new equipment, Western technology, and modern simulators might cause the PLA to downplay continued military exercises involving troops in battlefield-like conditions. Simulators and wargames are certainly beneficial to military training, but there is no substitute for actual "hands-on" experience by the soldier in a field environment. A recent statement by Yu Qiuli, director of the PLA General Political Department, indicates that the PLA does indeed recognize the value of its soldiers. Commenting on the importance of PLA troops, Yu Qiuli stated:

Science and technology have developed rapidly and the role played by weapons and equipment has increased significantly, but however the situation changes, the decisive role men play in a war will never change. On the contrary, the more developed the weapons and equipment, the higher the quality of men will have to be. 258

While the PLA's goal of high quality soldiers is similar to that of Western armies, the means to reach that goal are certainly not the same. China advocates strong

indoctrination in socialism and communism to raise the "ideological and ethical standards" of servicemen. While the West would be opposed to this method of teaching soldiers to be selfless, courageous, and willing to die for their country, China should be commended in the reduced emphasis it has placed on political training in recent years. PLA training has changed much since Mao's era when political training constituted almost three-quarters of a soldier's education. Today less than one-third of a soldier's time is devoted to political training.

Equipment, our final component of military modernization, is an area which has need for much growth. While China is gaining sufficient financial resources through arms sales to other countries, especially in the Third World, the PLA still needs much assistance in improving its own arms inventory. It is unlikely that China's "self-reliant" strategy will change in the years ahead. China will continue to seek state-of-the-art technology with the hope of producing its own modern weapons systems indigenously. It is likely that the PRC will succeed in both its ability to acquire Western technology and to sell military items at reduced prices to other countries. As was mentioned earlier, the West must exercise caution and prudence in its military dealings with China, based on the sharp dichotomy in ideology separating the two societies.

While much progress has been made in modernizing China's military organization, doctrine, training and equipment, the best assessment of the PLA at this point is that it is capable of protecting China from a conventional attack and capable of threatening its smaller neighbors. China's ability to protect itself must largely be credited to its strategic and nuclear capability. Without this capability, China's ground forces would indeed be weak in deterring a hostile neighbor such as the Soviet Union.²⁶⁰

China's current political leaders see no urgency in shifting resources from economic modernization to military modernization. Presumably, China's strategy of deterrence is working well since the Soviet Union has not attacked and seems to have no immediate intention of doing so. While there is an inherent calculated risk in assigning a low priority to military modernization, the Chinese leadership is minimizing the risk by improving security and economic ties with the United States and other Western nations.²⁶¹

It is unlikely that China will depart from its current pace of defense modernization until the economy improves significantly.²⁶² In addition to China's economy, the new generation of leaders will play a critical role in the future of defense modernization. If these leaders reassess the priorities of modernization, the military might prove to be a modern force in a few years.²⁶³ Although we know very

little about China's current generation of young military leaders, one thing is clear: modernization of the Chinese People's Liberation Army will continue to be an uphill climb and an arduous challenge for any group of military leaders. Barring any unforeseen hindrance, such as a second Cultural Revolution or another Great Leap Forward, China is likely to make great progress in meeting this challenge by the end of the century.

Endnotes

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255. Quoted in Ezra Taft Benson, God, Family, Country: Our Three Great Loyalties (Salt Lake City: Deseret Books Company, 1975), p. 360, cited by Skousen, The Making of America, p. 679.

256. June Teufel Dreyer, "Streamlining the People's Liberation Army: Demobilization and its Effects," paper presented at the Sixteenth Sino-American Conference on Mainland China, June 10-14, 1987, pp. 27-28.

257. Ibid., p. 30.

258. See Chu Liang, "Thorny Problems in the Modernization of the PLA," Issues and Studies, 18, February 1982, pp. 9-10 and Dreyer, "China's Military Modernization," p. 1022.

259. FBIS-CHI, December 29, 1986, p. K15.

260. Ibid.

261. Interview with Christopher M. Clarke, Department of State, Washington, D.C., October 29, 1984.

262. Robinson, "Chinese Military Modernization in the 1980s," pp. 245-246.

263. Ibid., p. 251.

264. Interview, Clarke, October 29, 1984.

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