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THE CHINESE ARMY TODAY

Tradition and transformation for the 21st century

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Routledge
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ABBREVIATIONS

AAA	Anti-Aircraft Artillery
AMS	Academy of Military Sciences
AP	Associated Press
APC	Armored Personnel Carrier
ARF	Association of Southeast Asian Nations (ASEAN) Regional Forum
ATGM	Anti-Tank Guided Missile
AVIC-I	China Aviation Industry Corporation I
AVIC-II	China Aviation Industry Corporation II
CAS	Close Air Support
CASC	China Aerospace Science and Technology Corporation
CASIC	China Aerospace Science and Industry Corporation
CATIC	China National Aero-Technology Import and Export Corporation
CCP	Chinese Communist Party
CEIEC	China National Electronics Import and Export Corporation
CETC	China Electronic Technology Group Corporation
CGWIC	China Great Wall Industries Corporation
CMC	Central Military Commission
CNEC	China Nuclear Engineering and Construction Corporation
CNEIC	China Nuclear Energy Industry Corporation
CNGC	China North Industries Group Corporation
CNNC	China National Nuclear Corporation
COSTIND	Commission of Science, Technology and Industry for National Defense
CP	Command Post
CPMIEC	China Precision Machinery Import-Export Corporation
CRS	Congressional Research Service (US)
CSG	China South Industries Group Corporation
CSIC	China Shipbuilding Industry Corporation
CSSC	China State Shipbuilding Corporation
CSTC	China Shipbuilding Trading Company
DF	*Dong Feng* ("East Wind")

DZ	Drop Zone (for airborne operations)
ECM	Electronic Countermeasure
FBIS	Foreign Broadcast Information System
GA	Group Army
GAD	General Armaments Department (sometimes called the General Equipment Department, GED)
GLD	General Logistics Department
GLONASS	Global Navigation Satellite System (Russia)
GPD	General Political Department
GPS	Global Positioning Satellite system
GSD	General Staff Department
HJ	*Hongjian* ("Red Arrow")
HMMWV	High Mobility Multipurpose Wheeled Vehicle (or Humvee)
HN	*Hongying* (variously "Red Tassel" or "Red Cherry")
HQ	*Hongqi* ("Red Flag")
IFV	Infantry Fighting Vehicle
Il	Ilysuhin
IT	Information Technology (sometime followed by the word "application")
IW	Information Warfare
KMT	Kuomintang (Nationalist Party)
LSM	Medium Landing Ship
LST	Tank Landing Ship
LTD	Laser Target Designator
LZ	Landing Zone (for airmobile operations)
MD	Military District (also known as Provincial Military Command)
mm	millimeter
MND	Ministry of National Defense
MPS	Ministry of Public Security
MR	Military Region (also known as Military Area Command, MAC)
MRL	Multiple Rocket Launcher
MRO	Military Representative Office
MSD	Military Subdistrict
MSS	Ministry of State Security
MTEP	Military Training and Evaluation Program (also called the Outline for Military Training and Testing)
MUCD	Military Unit Code Designator
NCO	Noncommissioned Officer
NDMC	National Defense Mobilization Committee
NDU	National Defense University
NORINCO	China North Industries Corporation
NUDT	National Defense Science and Technology University (also known as the National University of Defense Technology)
PAFD	People's Armed Forces Departments

PAP	People's Armed Police
PGM	Precision-Guided Munitions
PKO	Peacekeeping Operation
PLA	People's Liberation Army
PLAAF	People's Liberation Army Air Force
PLAN	People's Liberation Army Navy
POL	Petroleum, Oil, and Lubricants
PRC	People's Republic of China
QW	*Qianwei* ("Vanguard")
RMA	Revolution in Military Affairs
RRU	Rapid Reaction (or Response) Unit
SAM	Surface-to-Air Missile
SARS	Severe Acute Respiratory Syndrome
SCO	Shanghai Cooperation Organization
SIPRI	Stockholm International Peace Research Institute
SOF	Special Operations Forces
SP	Self-Propelled
SRBM	Short-Range Ballistic Missile
Su	Sukhoi
SWAT	Special Weapons and Tactics
TO&E	Table of Organization and Equipment
UAV	Unmanned Aerial Vehicle
UI	Unidentified
UN	United Nations
US	United States
WWW	Worldwide Web (Internet)
WZ	*Wuzhuang* ("armed")

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INTRODUCTION

Tiananmen Square. June 4th 1989. Lines of soldiers marching, firing in the dark. Burning armored personnel carriers. Civilians bleeding, dying, being carried away on carts. In the daylight after the assault, a lone civilian stops a column of tanks while the world watches on television.

Chicoms! Human wave attacks. Bugle calls in the night. Red flags waving. Peasant militia. Guerrillas swimming in a sea of the people. The largest army in the world.

These are the images of the Chinese army in the minds of many people throughout the world. While there is a kernel of truth in each image, the reality of the Chinese People's Liberation Army (PLA) today is quite different from the impressions of the past. Many traditions from the early days of the PLA remain, but just as many stereotypes are no longer valid as the PLA transforms itself into a smaller, more technologically advanced force. In numerous important ways, the Chinese army today is a vastly changed organization from a mere decade ago.

In the past several years, a number of books, studies, and articles have examined developments in the PLA Navy, PLA Air Force, and strategic missile forces, as well as addressed major themes in Chinese military modernization, such as strategic culture, civil–military relations, doctrine and strategy, information warfare, and the PLA's business empire.[1] The US government, through a series of annual reports to Congress from the Department of Defense and in congressional testimony and speeches by military, policy, and intelligence officials, also provides useful information about the PLA. The series of White Papers on National Defense issued by the Chinese government every two years since 1998 has become increasingly detailed and comprehensive.[2] However, compared to the other services and strategic issues, analysis of the Chinese army has been minimal.

This book attempts to fill that gap by focusing primarily on the Chinese ground forces, defined here as the Chinese "army" (active and reserve units), the People's Armed Police, militia, and airborne forces (though the airborne is actually part of the PLA Air Force), and placing these forces into the larger context of PLA transformation.[3] Many other texts describe in detail national-level organization, such as the Central Military Commission and four General Headquarters departments; this volume merely introduces these organizations and their general responsibilities in order to provide context for its examination of the ground forces.[4]

After an extremely short history of the "Red Army," the introductory chapter outlines traditional underpinnings of China's military transformation, identifies the components of the PLA's multifaceted, long-term modernization program, and briefly describes several themes which run through the book. Subsequent chapters answer the journalistic questions of what the PLA is (and what it is *not*), who makes up the PLA (conscripts, noncommissioned officers, officers, and civilians), where the PLA is located (order of battle) and what its missions are, how the PLA will fight (doctrine), what equipment it uses, how the PLA trains, and how it interacts with society. Information in the first six chapters builds the foundation for the discussion of PLA training and other activities found in the last chapters. The final chapter draws conclusions and addresses the legacy of Tiananmen. The text includes the *pinyin* for many important Chinese terms and alternative translations used mostly by the Chinese press in their English-language media (which often differ from the terminology used by foreign PLA-watchers). The book's journalistic "when" concentrates mainly on developments since 1998 and 1999, with the purpose to describe the Chinese army *as it is today* in the middle of the first decade of the twenty-first century.

This book does not dwell on history, either ancient or recent, nor does it analyze individual personalities to any extent. It also does not make judgments about many big questions, such as the military balance across the Taiwan Strait, the efficacies of foreign arms purchases or embargoes, etc., but should be useful to others in subsequent analysis of those topics. Though some professional PLA-watchers may find much of the information elementary, perhaps even long-time students of the Chinese military will discover something new. In brief, I have tried to write the type of book I would have liked to have read before becoming a US army attaché to China in 1992.

A short history of the "Red Army"

The "Red Army of Workers and Peasants" of the Chinese Communist Party (CCP) was established on 1 August 1927 during the Nanchang uprising led by Zhu De against the army of Nationalist Party (Kuomintang, KMT) led by Chiang Kai-shek. After a three-year period of cooperation with KMT to overcome warlord opposition throughout the country, beginning in 1924 and known as the "First United Front," the Chinese communists rose in revolt against the newly formed Nationalist government. The KMT suppressed this uprising and Zhu's small army retreated to the Jinggang mountains in Jiangxi province. There they were joined by other communist forces, including peasants and miners led by Mao Zedong, who had also been unsuccessful in his separate "Autumn Harvest Uprising." While in Jinggangshan, the communists formed "soviets" and began to exercise political control over the area. Not allowing the CCP any quarter, KMT forces initiated a series of "encirclement campaigns" to crush the guerrilla opposition. To escape the ever-tightening KMT noose, the communist forces broke out of the encirclement in October 1934 to begin their historic "Long March" that ended a year later in Yan'an in Shaanxi province.

Being the weaker military force at the time, guerrilla tactics predominated within the Red Army (with emphasis on speed, stealth, and stratagem), but there was always a number of professionally trained soldiers among the communists who advocated a shift to more conventional, regular-style military operations and organization. The vast majority of communist military leaders were also government leaders – a pattern that lasted for the four decades to follow.

The CCP continued its efforts to establish political control in Yan'an and nearby areas while under constant pressure from Chiang and KMT forces. The Japanese occupation of the northeastern provinces known as Manchuria, which had begun in 1931, created a new challenge to all of China. In 1937, the two Chinese forces joined once more, this time in opposition to Japan in a period that became known as the "Second United Front." After a shift to total war following the Marco Polo bridge incident of July 1937, the communists remained in their Yan'an stronghold where they persisted in exercising government functions while the KMT retreated to the city of Chongqing.

The Red Army established the "Eighth Route Army" and "New Fourth Army" to fight the Japanese. Through conscious decisions made by the communist leadership to obtain support of the Chinese populace, the Red Army's methods of operations among the common people of China were considerably different from the harsh policies of the warlord and the KMT armies. As the communists expanded their political control, Chiang once more began to exert military pressure to thwart their efforts. As a result, until the allied defeat of the Japanese in 1945, the KMT and CCP fought each other as much if not more than they fought the Japanese occupiers. Swift multipronged Soviet advances into Manchuria at the end of the war to defeat Japanese forces showed the vulnerability of that region of China, which soon became a communist stronghold.

By the middle of 1946 civil war had once again broken out in China. The Red Army had renamed itself the People's Liberation Army and took advantage of leftover Japanese weapons and equipment to rearm itself. With the communists controlling much of the countryside, the PLA initially waged a war of attrition against the KMT-held cities. Over the course of three years of fighting, the PLA employed not only guerrilla tactics but also conventional warfare to defeat the KMT, often in large-scale battles. After Chiang Kai-shek, the Nationalist government, and some two million followers fled to Taiwan, Mao Zedong declared that the Chinese people had stood up and established the communist People's Republic of China (PRC) on 1 October 1949.

A year later as American and South Korean forces approached the Yalu River, Mao committed "volunteers" from the PLA to enter North Korea to assist their communist brothers who had initiated a war on the peninsula in June 1950. Using infiltration and guerrilla tactics, the Chinese volunteers scored a number of striking successes against the United Nations forces, particularly those of the United States, from October to December. By July 1951, however, the situation had stabilized roughly along the 38th parallel, where the fighting had begun, and the war shifted to conventional, positional warfare waged for countless, bald hills across the peninsula. Over the next two years of fighting, the PLA was strengthened by an

influx of modern weapons from the Soviet Union, and the newly formed Chinese navy and air force were integrated into the PLA. In the trenches of Korea the PLA learned the importance of firepower and combined arms operations to modern warfare. After the war and the volunteers' return to China, the PLA began its first attempt at military modernization along Soviet lines, but the domestic political upheavals of the Great Leap Forward at the end of the decade and the Cultural Revolution of the late 1960s and early 1970s derailed these efforts.

China's potential enemies also changed in this same time-frame as the KMT continued to persevere on Taiwan. Tensions in the worldwide communist movement arose after the death of Stalin. The Soviet Union withdrew its military and industrial advisers to China at the end of the 1950s. Friction increased to the point of nuclear threats and border skirmishes in the late 1960s. In the early 1970s China found itself facing a Soviet military buildup along its northern borders and in Mongolia. Previously, in 1962, it had clashed with India along its southern border in Tibet, and an area, the Aksai Chin, remained under contention. Also to China's south, as a result of the United States air campaign against North Vietnam, PLA air defense and engineer troops were dispatched to aid their communist neighbor. Beijing's strategic intention was to deter the United States from taking the war north to China. Furthermore, China conducted campaigns to regain islands from South Vietnam and maintained pressure against the KMT island strongholds off the Chinese coast. By the late 1970s, Beijing perceived the Soviet Union and its ally, Vietnam, as China's greatest strategic rivals, having reached political accommodation with the United States and mutual recognition in 1979.

In December 1978 at the Third Plenum meeting of the 11th Central Committee of the Chinese Communist Party, the Chinese government and CCP, now led by Deng Xiaoping, formally adopted a shift in national strategy to the development of the economy and discarded the "continuous revolution" of Mao's last years. China's commitment to achieving the "Four Modernizations" of "agriculture, industry, science and technology, and national defense" was the foundation for the period of reform to follow that continues to this day.[5]

On 17 February 1979, after a visit by Deng to the United States, the PLA initiated a "self-defense counterattack" to "teach Vietnam a lesson." In mid-March, Beijing announced it had achieved the objectives of its "punitive" invasion and withdrew PLA forces back to China. This brief campaign, fought using many of the tactics and methods from its Red Army and Korean War days, was the PLA's last large-scale operation against a foreign military in the twentieth century. The lackluster performance of the troops was a major impetus for pursuing a new round of military modernization, as advocated by Deng and other military leaders.[6] Artillery duels and small-scale operations along the China–Vietnamese border continued into the mid-1980s, and the PLA took advantage of the situation by rotating units and leaders into the region to give them a taste of combat.

The roots of military transformation

The Chinese military has been in the process of modernization and transformation for more than twenty-five years. Listed last among the "Four Modernizations," the subordination of military modernization to national economic development was a consistent theme throughout the 1980s and 1990s. This ranking was a rational strategic decision in a period of minimal external threat for a nation starting from a low economic base.

The prioritization of the elements of the "Four Modernizations" was central to the thinking of paramount leader Deng Xiaoping, who justified a long-term approach to military modernization by announcing the danger of major world war to be remote. In 1985, China's supreme military command organization, the Central Military Commission (CMC), led by Deng, declared the most likely military contingency China faced no longer was "early, major, and nuclear war" (as foreseen by Mao), but rather "local, limited war."[7] Because the threat of major war was low, a "bloated" PLA could take its time to reform, focusing first on downsizing its four million-plus force. But also, because a major threat was not imminent, it was not necessary for the Chinese government to sink vast sums of money and natural resources to modernize the PLA rapidly. In its early years PLA modernization, therefore, focused primarily on relatively inexpensive reforms such as personnel reductions, force restructuring, and doctrinal updates.

Moreover, for the first decade and a half of reform and military modernization in the PRC, Chinese leaders were content that the goal of peaceful reunification of Taiwan with the mainland could be accomplished sometime in the unspecified distant future. But by the fall of 1999, political developments on Taiwan had outrun Beijing's unchanging principles for reunification, and the Chinese leadership, then led by president of the PRC, general secretary of the CCP, and chairman of the Central Military Commission Jiang Zemin, determined China's military power needed to be perceived as more credible to prevent further steps toward Taiwan independence.[8] Thus, the decision was made to increase the pace and scope of military modernization in the 10th Five-year Plan (2001 to 2005) and beyond.

As part of the "Four Modernizations," the transformation underway in the PLA is part of the larger modernization process found in all of Chinese society. Many of the old methods of communist rule have been modified or discarded since 1979 to allow for market forces to take hold and raise the economic and technological level of the country. Yet, much of the *ancien régime* remains. Even while liberalizing economically and to a great extent socially, the Chinese Communist Party does not allow any challenge to its political control and has established an effective security apparatus to maintain its supremacy. Steeped in its traditions, the PLA remains the ultimate guarantor of the CCP. In many ways, the PLA's role in society is unchanged even while the army is in the midst of a major break from many practices of the past. Recognizing both the change and the continuity in the Chinese armed forces today is essential to understanding the strengths and weaknesses of the PLA at the beginning of the twenty-first century.

Elements of PLA modernization

From its beginning in the late 1970s and early 1980s, Chinese military modernization has been comprised of multiple component parts. A great deal of attention by the outside world over the past 15 years has focused on the equipment acquisition factor in Chinese military modernization. While the introduction of new equipment into the force is important, it is only one part of a much more complex modernization process, much of which focuses on the way the Chinese military mentally approaches war.

By the end of the last decade of the twentieth century, in addition to the obvious equipment acquisition component, other elements of Chinese military modernization included: (1) changes in force structure (for example, force reductions, changes to the way units are organized, and the creation of new units suited to the requirements of modern war); (2) changes in the personnel system (rebalancing numbers and roles of officers, noncommissioned officers, and enlisted personnel) and reduction of the period of conscription to two years for all soldiers; (3) doctrinal change to prepare the PLA to fight and win "Local Wars Under Modern High Technology Conditions"; (4) improvements in the frequency, content, and methods of military training; (5) transformation of the PLA logistics system to enable it to support "joint operations" (i.e., operations involving more than one service); (6) reorganization of the professional military education system in order to accommodate changes in force structure, personnel, and doctrine; (7) enhancing all soldiers' standard of living, pay, and life style; (8) reforming the structure and missions of the reserves and militia; and (9) modification to the PLA's interaction with society.[9] Following chapters address each of these elements and put them into the context of the themes summarized below.

The PLA and the party

Political loyalty has been the bedrock of the PLA since its founding in 1927. While in Yan'an in 1938, Mao Zedong wrote: "Every Communist must grasp the truth, 'Political power grows out of the barrel of a gun.' Our principle is that the Party commands the gun, and the gun must never be allowed to command the Party."[10] While party membership is not required of all members of the armed forces, to reach senior leadership positions officers must be party members. Many soldiers still join the PLA as a route to enter the party.

Political and ideological indoctrination has priority in training, and a complex system has been established down to the lowest levels of PLA units to maintain party fealty. In the 1990s, Jiang Zemin contributed his "Five Sentences on Army Building" to the development of the PLA: "Politically qualified, militarily competent, good work style, strict discipline, and adequate logistical support." Three of the "Five Sentences," which were prominently displayed on banners in military barracks all over China and repeated in the military media, address political reliability while the remaining two are concerned with purely military matters.

Later Jiang would add his theory of the "Three Represents" to party doctrine, and it, too, would become the topic of endless study, discussion, and reference in the military and all of Chinese society.[11] This formulation is the basis of political work at the beginning of the twenty-first century and is used to justify continuation of reforms in both the military and society as a whole.

The party–army relationship in the PLA is unlike the civil–military relationships found in most professional military organizations in other countries (where military personnel express loyalty to the state or constitution, not to a particular political party), yet the system that has evolved over the decades has proven to be effective for the Chinese situation. Civil–military relations are based on a close connection between the military and society that has been a hallmark of the PLA (with the glaring exception of the period from the Tiananmen massacre of 4 June 1989 until the end of martial law). In January 2004, the authoritative *People's Daily* newspaper carried a commentary stating: "The strong unity between the military and the civilian government and the strong unity between the military and civilian people have played an extremely important role in years of revolutions and construction in China, particularly over recent years."[12]

Military modernization and the national economy

One of the greatest examples of the PLA's loyalty to the party in the last 25 years has been the senior military leadership's acceptance of the relatively low priority afforded to military modernization in relation to other elements of the "Four Modernizations." At the turn of the new century, subordination of defense modernization to economic development was still a major principle in China's overall development program, but the emphasis had changed to *coordination* of economic development with military modernization. The Defense White Paper from 2000 reads:

> Developing the economy and strengthening national defense are two strategic tasks in China's modernization efforts. *The Chinese government insists that economic development be taken as the center, while defense work be subordinate to and in the service of the nation's overall economic construction*. Meanwhile, along with economic development, the state strives to enhance its national defense strength, to effectively support the armed forces in their efforts to improve their quality and to form a mechanism which enables national defense and economic development *to promote each other and develop in harmony*.[13]
>
> (emphasis added)

In February 2001, Jiang Zemin was quoted as saying:

> "We must persistently ensure unreserved coordination by building *a system of coordination* in the whole society to facilitate scientific or

technological development for national defense. We must combine military efforts with non-military efforts and build a structure full of vitality for developing science and technology for national defense" (emphasis added).[14]

The 2004 Defense White Paper did not include specific reference to "national economic development as the central task," but maintained the theme of "coordinated development of national defense and the economy, and to build modernized, regularized and revolutionary armed forces to keep the country safe" as a "major strategic task" of the Chinese Communist Party.[15] A *PLA Daily* editorial during the 2005 session of the National People's Congress, China's unicameral legislative body, echoed current PRC president, CCP general secretary, and Central Military Commission chairman Hu Jintao's reaffirmation of the central position of economic development in China's national strategy and the coordinated development of the national economy and military modernization:

> The army must rely on national economic and social development and integrate the national defense development into the national economic construction, attach importance to *the combined development* of national defense economy and social economy, military technology and civilian technology, and military talents and civilian talents, so as to create a fine situation in which national defense development and economic construction *would promote and coordinate* with each other. . . . The army must, *on the basis of national economic development*, speed up national defense development and its modernization drive, and strive to build itself into a force capable of ensuring China's security and protecting China's interests of development, effectively maintaining national security and unity, and safeguarding the smooth building of a well-off society in an all-round way.[16]
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> (emphasis added)

Leadership organizations that combine the party, government, and military now exist from national to county level to coordinate economic and military development. At all echelons throughout the country, military and civilian sectors complement the development of each other; however, senior uniformed military leaders are primarily focused on military issues, while civilian leaders make political and economic decisions. For example, currently there are no uniformed members of the PLA on the CCP's highest policy-making organization, the nine-member Political Bureau Standing Committee of the Central Committee. The full Political Bureau has only two uniformed officers among its 24 members. The PLA does send some 250 to 275 delegates to the National People's Congress, which meets once a year in March for a full session of its approximately 3,000 members. While senior military officers inform their superiors of military needs, decisions on the size of the military budget are part of the larger governmental budgetary decision-making process.

The defense budget and the great unknown

Although there have been many requests for increased resources dedicated to the military, senior PLA leaders consistently have conformed to the party line on the issue of subordination of defense to national economic development. Partially as a result of their obedience to the party line, PLA generals have seen defense budgets increase significantly over the past decade as the Chinese economy continued to grow. In 1994, the officially announced defense budget amounted to about 52 billion *renminbi* (yuan) (about $6 billion in US dollars at the exchange rate of the time); in 1999, it had grown to 107.7 billion *renminbi* (about $13 billion); and in 2005 to about 248 billion *renminbi* (about $30 billion).[17] Chinese leaders and publications acknowledge these increases but frequently cite "improvements in soldiers' pay and living standards" as the main area toward which new funds are applied. Wages and subsidies for military members have indeed increased significantly over the past decade – from a very low start point – amounting to an 84 percent increase for officers and 92 percent for enlisted men.[18] Moreover, the nationwide emphasis on barracks construction and facility upgrades is readily apparent even to visitors to the country. These efforts have helped maintain morale among the troops, but they do not explain fully where all the additional money available to the PLA has gone. Nor does the Chinese government officially disclose the *total* amount of money used to fund all military-related activities.

Chinese spokesmen usually do not acknowledge sources of extrabudgetary income, for example, from other central government allotments or from local governments, that add significantly to the amount of money available to the PLA. The impact of "relative buying power" of less expensive Chinese-produced goods is also not factored into Chinese government figures. Therefore, foreign analysts often project an estimated range for the size of actual Chinese defense expenditures varying on the conservative side from two to three times the size of the officially announced budget to much larger (and less credible) estimates of up to ten or more times the officially announced numbers.[19] Whatever the true numbers may be, the Chinese military has a much larger pot of cash to spend on fewer troops than it did ten years ago. At the same time, personnel, equipment, and training costs for a more modern, technologically advanced military are also significantly higher than in previous decades.

Compared to other militaries, and particularly because of its size, the PLA is still relatively constrained in what it can do because of funds available. Therefore, a common theme for Chinese military leaders is *saving money* and finding innovative ways to conserve or better spend available funds.[20] A key to understanding many developments in the military modernization program is to look for how any specific policy saves the PLA, and thus the Chinese government and society, money.

Consensus, connections, and communications

Over many years, Chinese political and military leaders have reached a consensus concerning the need to fund the PLA adequately while not adversely affecting the

growth of the civilian economy. Acceptance by the PLA leadership of the limited defense budget highlights another fundamental found in Chinese society applicable to the military: the need for consensus building in the decision-making process. The concept of consensus building is found throughout the military from the highest levels of command to grass-roots units.

Though an established line of command exists from chairman of the Central Military Commission down to company and squad level, except in tactical or emergency situations leaders prefer to discuss important decisions before they are made within small groups of commanders, political officers, and their deputies. Unit-level party committees are the focal points for the consensus-building process. These small leadership groups are formalized structures that meet on a regular basis to discuss a variety of issues appropriate for their level of authority. Using an iterative process of study and discussion, strategies are developed and specific actions are agreed upon by the group. The details and length of this process may vary at the different levels of command, but the objective is to reach common ground through active participation by all members of the group.

Another important group dynamic of special relevance to the PLA can be found in the Chinese concept of *guanxi*, or connections. *Guanxi* has been defined as a web of an individual's blood and/or social connections which define who he or she is and what he or she is capable of accomplishing without accounting for other resources available (such as money, access to technology, etc.).[21] For members of the military, both family and social *guanxi* may be important to a person's status, influence, promotion, and assignments.

Social *guanxi* in the military is formed among members of units, schools they have attended, hometowns, or provinces. The classic study of traditional PLA social *guanxi* was written by William Whitson, who, along with Chen-hsia Huang, outlined in exquisite detail the relationships among senior Chinese military leaders in five field armies from 1926 to 1968.[22] The personal connections among members of the field armies influenced the PLA for decades, causing both cooperation and conflict. Most observers believe the web of field-army connections became tenuous in the 1990s as many elder leaders died, and posit that military academy ties or hometown/provincial connections have risen in importance in the contemporary PLA. Naturally, *guanxi* also exists among members of large units, especially because the vast majority of officers and soldiers spend long periods, if not their entire terms of service, in just one unit. As in other militaries, PLA professional connections result in the formation of mentor–protégé relationships between senior officers and capable, trusted subordinates. *Guanxi* is a reality in the PLA, just as it is in all of Chinese society.

Another form of connections of value to understanding the PLA is the relationship of members of a particular organizational *xitong*, or system. These systems, sometimes called "stovepipes," are vertically integrated associations in government, industry, and other areas of society. Information is passed up and down the line within systems and generally not horizontally to other systems. Many *xitong* exist in the military, such as command, intelligence, logistics, education, each of which

could further be broken down into smaller subsystems. The proliferation of modern communications and computer capabilities in the PLA has helped to break through the walls of some of these systems, but control of information remains an important consideration among members of individual *xitong*.

One of the most important systems in the PLA is the political system, which controls the propaganda or "publicity" (*xuanchuan*) subsystem. Many outsiders may be surprised by the degree the information revolution in China has been extended into the Chinese military. Although much specific data are still considered secret, and many books and journals are still categorized as for "internal use" (*neibu faxing*) or for "internal military use" (*junnei faxing*), more books, magazines, and electronic media are available than might be expected in an authoritarian regime, including websites for many military and defense industry newspapers and magazines. A growing number of independent, non-government-controlled publications of varying reliability are also available. Accordingly, care must be taken in discerning what is accurate, timely, and trustworthy. While the PLA propaganda system will repeat the "Big Lies" required of it by the party, many small details can be used to piece together a relatively accurate portrait of the PLA. Some speeches and essays also include criticism and realistic evaluations of the current state of affairs in some units. While generally maintaining positive attitudes, such criticism often provides insight into the actual conditions within the force.

Though they may bluster as the political situation requires, certain portions of the writings and speeches of many senior PLA leaders reflect a realism about the PLA that can easily be lost in a sea of meaningless, unverifiable statistics and seemingly endless political boilerplate. Often confusing are Chinese slogans and forms of shorthand, which commonly use catchy word combinations and numbers, to describe political campaigns and areas of leadership emphasis prevalent throughout Chinese society. New slogans arise as conditions and leaders change. Some slogans are discarded over time, others maintain their viability. For example, in the 1990s the term "People's War" no longer seemed relevant to many observers as Chinese military modernization was directed toward fighting future Local War(s).

People's War and Local War

For decades, the foundation of China's military thinking was based upon Mao's military thought (*junshi sixiang*) formulated in the 1930s and 1940s, which included the concept of People's War (*renmin zhanzheng*). Fundamentally People's War was intended to defend the Chinese mainland (i.e., a continental defense focused on ground forces) from a more advanced enemy by taking advantage of China's inherent strengths (a large population and vast land mass) while at the same time employing traditional Chinese fighting skills of speed, surprise, deception, and stratagem. In particular, Mao emphasized the role of man over weapons, mobilization of the population, and use of guerrilla tactics until enough combat power could be accumulated for a transition to conventional operations. As China's actual and potential enemies changed and its technological base improved, People's War

was modified to adapt to new circumstances. This process began in the 1950s with the change in terminology to "People's War Under Modern Conditions," and continued into the twenty-first century when the term "People's War Under Information Conditions" began to be used. In the Chinese military mind, this new construction reflects both the continuing applicability of People's War concepts to the conflicts China considers most likely and the recent advances in the world's communications and computer technologies.

A common misperception is that People's War *is* guerrilla war; however, guerrilla *tactics* are only a small component of People's War. Far more important is the role of the Chinese population, and the country's natural and industrial resources which are *mobilized* in times of emergency to support the Chinese armed forces. The concept of People's War still has a major impact on the thinking of Chinese military leaders today as they prepare for the most likely *condition for* conflict that China expects to encounter: Local War (*jubu zhanzheng*).

Local War was envisioned as a short, mid- to high-intensity conflict on China's borders or not far from the border region. The idea of "Local War" was modified to "Local War Under Modern High Technology Conditions" (*gaojishu tiaojianxia jubu zhanzheng*) as conditions changed in the late 1980s and 1990s, and then to "Local War Under the Conditions of Informationalization" (*xinxihua tiaojianxia jubu zhanzheng*) in the early twenty-first century.[23] In their efforts to "prepare for military struggle," Chinese strategists primarily focus on training to fight wars within a few hundred miles of their borders.

A related theme, still prevalent in PLA modernization, is China's portrayal of itself as the "weaker" military force in future conflicts. The PLA leadership unremittingly encourages its troops to develop new ways for the "weak to defeat the strong." Considering itself the less technologically advanced force, the PLA stresses using "existing equipment to defeat a high technology enemy." Even as large quantities of new equipment enter the force, constant emphasis remains on traditional PLA operational methods incorporating speed, mobility, stealth, deception, and use of stratagem to confuse or mislead the enemy. These methods depend more on Chinese ingenuity than expensive technology, though PLA planners also seek to exploit modern technologies to enhance their traditional operational methods.

Transformations – man and machine

In recent years, Chinese military leaders have summarized the main direction of PLA modernization with several slogans and descriptive phrases. Much has been written about the "two transformations" (*liangge zhuanbian*): transforming from a manpower-intensive, technologically backward force into a quantitatively smaller, qualitatively better, technologically advanced force; and transforming from preparing to fight a major defensive war in China to preparing to fight and win local wars on or near China's periphery.[24] Frequently "two historic tasks" are cited as underway to accomplish these transformations: "Mechanization" (*jixiehua*, changing from an army based on manpower and manual labor to one which uses vehicles

and machines to improve its combat effectiveness) and "Information Technology (IT) application" (*xinxihua*, integrating modern communications, computers, software, training simulators, and command and control techniques into all levels of the force to make it more efficient, flexible, and responsive).[25] Though there may be debate about whether mechanization or information technology application should receive priority, in reality both objectives are being pursued in tandem, with some units moving faster in some aspects than others.

In 2003 and throughout 2004, the PLA officially endorsed the concept of promoting "military transformation with Chinese characteristics" or "Chinese-style military change" (*zhongguo tese junshi biange*) to build an "informationalized army" capable of fighting and winning an Information War.[26] This formula takes the concept of the Revolution in Military Affairs (RMA) and applies it to the Chinese situation *as the method by which China will build its new military force*. In fact, the Chinese terminology *zhongguo tese junshi biange* is sometimes translated by both Chinese and foreign sources as "the RMA with Chinese characteristics." This use of this terminology was codified by the Chinese government's official 2004 White Paper on National Defense, which has an entire chapter on the "Revolution in Military Affairs with Chinese Characteristics" that describes how the PLA is being transformed through structural, training, and logistics reform and political work.[27]

The PLA recognizes, however, that due to its relatively low technological base what is understood to be the RMA in other armies is not the same as what is happening in the PLA's military transformation.[28] In many ways, "advancing the RMA with Chinese characteristics" is the logical continuation of the PLA's multifaceted military modernization program that has been underway for 25 years, enhanced by a large dose of electronics, computers, and advanced communications technologies made available by advances in China's economic development. In a Chinese-style blending of the old with the new, there is no contradiction in the PLA's collective mind today about employing advanced weapons developed as part of the Revolution in Military Affairs to prosecute a Local War using principles of People's War.

The role of man in war

The Chinese military leadership understands the importance of properly training its soldiers to operate, maintain, and employ its newly acquired weapons and equipment. In the 1990s Jiang Zemin observed: "Though we're unable to develop all high-technology weapons and equipment within a short period of time, we must train qualified personnel first, *for we would rather let our qualified personnel wait for equipment than the other way round*" (emphasis added).[29] This principle has long been a fundamental component of PLA modernization and has been expressed by many senior officers in the period of reform. For many years it was easy to repeat these words as the PLA saw little new equipment enter the force; however, since 1999, when much more new equipment has been distributed to units, Jiang's

emphasis – and its repetition by PLA leaders – indicates that the concept remains essential to the PLA modernization process.

"The role of man in war" has been a traditional point of emphasis and contention in the PLA. From the PLA's earliest days to the 1990s, debates raged over the relationship of man to weapons and which should have priority. As military technologies advanced through the twentieth century, Chinese leaders argued over the optimum balance between "Red" (being politically reliable, often using simple, guerrilla-style tactics and weapons) and "Expert" (taking a professional approach that employs regularized tactics and integrates technology into the force). After careful examination of the 1991 Persian Gulf War, the PLA leadership concluded its soldiers must now be *both* "Red" and "Expert."

Disruptions due to change and ground force leadership

A transformation as complex as this – one that also has been adjusted repeatedly to fit the domestic and external environment – cannot be accomplished in a short period of time. Moreover, along this protracted course of change, life in the forces can be extremely disruptive, resulting in periodic or localized drops in troop morale. Indeed, there have been indicators of morale problems in some units and resultant action to ameliorate such problems.[30]

If the Chinese military leadership had its way, the modernization process would likely continue for at least another decade or two before they would feel fully confident in the PLA's combat abilities. However, should the situation require it and the PLA be ordered by proper authority, the Chinese military will make use of whatever progress it has made to date and devise plans appropriate to its current conditions to accomplish the missions assigned. Likelihood of success will be dependent upon many factors, a large portion of which will be beyond the control of the PLA. But the PLA leadership is unlikely to tell its civilian leaders the PLA is not ready for battle.

The Chinese penchant for secrecy has resulted in much speculation by foreigners about the exact nature, extent, and objectives of Chinese military modernization. Since the late 1990s, the Chinese army has undergone as much change as the other service arms of the PLA. The changes to the largest segment of the PLA are important because ground force officers still dominate the senior levels of the uniformed Chinese military leadership, though this situation is gradually beginning to change. Many high-ranking army officers, whose formative years were spent in strictly ground force operations, bring with them a way of thinking that until recently may not have been exposed to some of the intricacies of modern, joint warfare involving land, air, sea, space, and electromagnetic components. This ground force-oriented approach to war is also colored by the PLA's last military campaign against a foreign foe, the Vietnamese in 1979, and sporadically through the early and mid-1980s along China's southern border. However, doctrinal changes since 1999 make single-service, land-based operations an exception to the general rules

envisioned for future conflicts. And even conservative ground force leaders now accept this fact.

The remainder of this book examines the developments in Chinese army modernization and transformation since 1999. Though much has been accomplished, many hurdles remain. For interested observers, the first step in the Long March to understanding the PLA is to define exactly what the People's Liberation Army is, and what it is not.

2
WHAT IS THE PLA?

Visitors to China may rightly be confused by the number of people they see on the streets wearing military-looking uniforms. People in various shades of green, blue, beige, and camouflage are everywhere. A possible conclusion is that these uniforms are all part of the Chinese army – after all, it's the largest army in the world. In fact, in addition to military personnel who wear uniforms both on and off duty, as in most countries, police and paramilitary forces wear uniforms. Unlike some other countries, however, many government officials who have non-military or security functions, such as in the legal, transportation, and health and sanitation systems, also may wear military-appearing dress. Moreover, parts of military uniforms, which are relatively cheap and sturdy, are available for sale to civilians, although purchase of military insignia requires presentation of proper identification. Green military overcoats in particular are popular among the poor. The problem of identifying who is who wearing the many different uniforms underlies an important question – just what exactly is the People's Liberation Army? In order to understand the role of the PLA in contemporary Chinese society, it is just as important to understand what the PLA is *not*.

The Chinese security apparatus

A variety of Chinese government entities are tasked with domestic security and external defense missions. An overarching term for the entire spectrum of the official Chinese civilian police, government security forces, and military forces is the Chinese security apparatus.[1] These forces include the Ministry of Public Security (MPS), the Ministry of State Security (MSS), and the Chinese armed forces consisting of the PLA, People's Armed Police (PAP), and militia. While some of the functions of the individual entities in the security apparatus overlap, their primary and secondary missions and chains of command are different. The forces that make up the official government security apparatus may be categorized as civilian, paramilitary, or military organizations.[2]

Furthermore, an offshoot of China's economic success and rising crime rates has been the creation of *private* security companies to guard construction sites, businesses, residential areas, and especially banks and armored cars transferring

cash. These private security companies often recruit demobilized soldiers as guards, or transient peasants who have come to the city to earn money. Because of the availability of military uniform parts, personnel in many security companies may wear bits and pieces of uniforms to present an official-looking appearance. They may also practice marching and other military drills, but basically stand static guard duty on perimeters and entry points, and must call for the police in emergencies. Some private security forces, such as bank and armored car guards, may be armed. But they are not part of China's official security structure.

The Ministry of Public Security and the Ministry of State Security

Civilian police and security forces responsible to the Chinese government's State Council include the Ministry of Public Security (*gong'an bu*) and the Ministry of State Security (*guojia anquan bu*). The MPS, as its name implies, is "in charge of public security in the country"; i.e., domestic law enforcement operations. A main function of the MPS is to "coordinate the action against serious cases and turmoil and major public security incidences . . ."[3] Approximately 1.7 million MPS police officers (*renmin jingcha*) are found throughout China.[4] Chinese police have many functions including domestic patrol, traffic control, detective, anti-crime, anti-riot, and anti-terrorism. In 2001, the MPS issued an order for major cities to establish an anti-riot force of no less than 300 personnel, or 200 for capitals of provinces.[5] Police anti-riot units often are equipped with armored cars or armored personnel carriers and sophisticated small arms. These special units, often dressed in black, look and operate like SWAT teams in police forces throughout the world.

The majority of civilian police wear blue uniforms – a fairly recent change from the drab olive-green uniforms of previous years, which made them look even more like soldiers than they do today. Some MPS officers wear civilian clothes when in undercover roles. The civilian police force has its own system of schools for training, a unique set of ranks and insignia, and a chain of command that goes from neighborhood stations (*paichusuo*) up through local government and provincial levels to Beijing. While other elements of the security apparatus may assist the police, MPS officers have arrest authority and generally take the lead in domestic and criminal operations.

The Ministry of State Security is the Chinese government's main domestic and international intelligence organization. Officially, the MSS is responsible for

> counter-espionage work, preventing, holding in check and combating illegal criminal activities endangering China's state security and interests in accordance with law, defending state security, maintaining social and political stability, guaranteeing socialist construction, publicizing and educating Chinese citizens to be loyal to the motherland, maintaining state secrets, state security and interests.[6]

MSS officers routinely do not wear uniforms in the performance of their duties, which often require stealthy activities such as surveillance of Chinese citizens as well as foreigners. The MSS system extends from the national level down to offices subordinate to provincial and local governments. MSS officers are basically "secret police" for internal matters and spies and counterintelligence agents for external purposes.

The Ministry of Public Security and Ministry of State Security are civilian systems which report to the State Council headed by the premier.[7] Uniformed military officers *are not* involved in this chain of command. Military units, as well as the paramilitary People's Armed Police and militia (see next section), may cooperate with the police under certain circumstances, but will do so after collective decisions are made by government, military, and party authorities.

The Chinese armed forces

The Chinese armed forces (*wuzhuang liliang*) are responsible to a different chain of command than the MPS and MSS that culminates in the national level Central Military Commission (CMC, *zhongyang junshi weiyuanhui*). According to the PRC Law on National Defense adopted on 14 March 1997, the Chinese armed forces have three major components, two of which are considered paramilitary forces:

- Active and reserve units of the Chinese People's Liberation Army (*zhongguo renmin jiefangjun*)
- Chinese People's Armed Police Force (*zhongguo renmin wuzhuang jingcha budui*)
- People's militia (*renmin minbing*)

The PLA is a military force composed of both active duty (*xianyi budui*) and reserve units (*yubeiyi budui*) primarily responsible to defend China from external threats, while the PAP and militia are paramilitary organizations. By law and definition, the PAP is *not* part of the PLA. The PAP is further different from the PLA in that it has a dual command structure that includes both the CMC and the State Council through the Ministry of Public Security. Likewise, the State Council is also in the militia's chain of command (through local government bodies).[8]

The three individual components of the armed forces each wear similar, but distinct uniforms, and have similar organizational and rank structures; they undergo similar basic training, but have separate systems for promotion, education, and training. Nevertheless, there is cooperation among the systems. For example, basic regulations apply to both the PLA and PAP; often senior PLA leaders are assigned to top positions in the PAP. Moreover, the PLA may assist in training the militia. Missions for the three components overlap, but different priorities are assigned to each force.

According to the National Defense Law, the missions for the Chinese armed forces are defined as:

- The active units of the Chinese People's Liberation Army are a standing army, which is mainly charged with the defensive fighting mission. The standing army, when necessary, may assist in maintaining public order in accordance with the law. Reserve units shall take training according to regulations in peacetime, may assist in maintaining public order according to the law when necessary, and shall change to active units in wartime according to mobilization orders issued by the state.
- Under the leadership and command of the State Council and the Central Military Commission, the Chinese People's Armed Police force is charged by the state with the mission of safeguarding security and maintaining public order.
- Under the command of military organs, militia units shall perform combat-readiness duty, carry out defensive fighting tasks, and assist in maintaining the public order.[9]

Thus, the PLA, both active and reserve units, is primarily responsible for the external defense of China, but has the secondary mission of domestic security *in accordance with the law*. By including the terminology "in accordance with the law," the National Defense Law implies that the civilian government can call on the PLA to assist in domestic security operations in exceptional circumstances, but the PLA itself does not have the authority to decide unilaterally to perform the functions of an internal security organization.

In contrast, the primary mission for the PAP is domestic security, but it, too, has a secondary mission of local defense in wartime. The militia, like the PLA, also has the primary duty of external defense and also may *assist* in maintaining domestic security. It is possible, depending on the local conditions, to see civilian police forces operating in conjunction with PLA, PAP, or militia forces. In such instances of domestic law enforcement activity, the local police forces have primary responsibility for arrests and detainment, while the PLA, PAP, and militia provide

Table 2.1 China's security apparatus[10]

Force	*Type*	*Primary mission*	*Secondary mission*	*Chain of command*
MPS	Civilian	Law enforcement/ domestic security		State Council
MSS	Civilian	Counter-espionage/ intelligence	Domestic security	State Council
PLA	Military	External defense	Domestic security	CMC
PAP	Paramilitary	Domestic security	External defense	CMC and State Council
Militia	Paramilitary	External defense	Domestic security	CMC and State Council

backup support. A summary of the components of the Chinese security apparatus and their missions is found in Table 2.1.

The People's Liberation Army

The name "People's Liberation Army" reflects the ground-force orientation of the modern Chinese military from its earliest days, beginning in 1927. The PLA includes the Chinese army (or ground forces), PLA Navy (PLAN), PLA Air Force (PLAAF), strategic missile forces (known as the Second Artillery), and reserve units for each component. The exact number of personnel estimated in the PLA varies according to sources. For example, the Chinese 2004 White Paper on National Defense states the total size of the PLA to be 2.3 million, while the International Institute of Strategic Studies estimates "some 2,255,000."[11] Official public Chinese documents do not specify the numbers of personnel in the army, navy, air force, or Second Artillery. The International Institute of Strategic Studies estimates the army to number about 1,600,000 personnel, the PLA Navy approximately 255,000, the PLA Air Force about 400,000, and the Second Artillery roughly 100,000. In addition to the active duty numbers, reserve forces are estimated to number around 800,000.[12]

An unknown number of uniformed PLA civilians (*wenzhi ganbu*) is included on the rosters of active duty units, a practice which China acknowledges is different from the method of counting active duty forces in other countries.[13] Uniformed PLA civilians perform a variety of non-combat functions, similar to civilians working for other militaries. (See Chapter 3 for additional detail about PLA civilians.)

The PLA ground force (or army) is composed of numerous branches or arms (*bingzhong*) and support units:

- Infantry, divided into motorized (using trucks), mechanized (using wheeled or tracked armored personnel carriers and includes some amphibious mechanized units), and mountain units.
- Armored, with both tank and mechanized infantry units.
- Artillery, using both towed and self-propelled artillery, multiple rocket launchers, anti-tank guns and missiles, and conventionally armed surface-to-surface missile units.
- Air defense, including anti-aircraft artillery (AAA) and surface-to-air missile (SAM) units (army formations with a combination of AAA guns and SAMs are called "air defense" units; the PLA Air Force also has air defense troops armed with large caliber AAA guns and SAMs that reach to longer ranges and higher altitudes than those found in the army).
- Army aviation, primarily using helicopters, but also with a few small fixed-wing aircraft.
- Engineers, including combat and construction, pontoon bridge, camouflage, and water supply units.

- Chemical defense, including flame thrower and smoke generating units.
- Communications, both mobile and fixed.
- Electronic warfare, including electronic countermeasure (ECM) units.[14]
- Logistics, including supply (quartermaster), petroleum, oil, and lubricants (POL), medical, and transportation units including both truck and ship units.
- Armaments units, responsible for equipment maintenance, repair, and ammunition storage.

In the 1990s, special operations forces (SOF) were created to add new capabilities and augment existing reconnaissance units. SOF units are small, highly trained, specially equipped elite units tasked with accomplishing difficult and sensitive tasks, such as long-range infiltration, reconnaissance, intelligence collection, and strike missions including anti-terrorist actions. The majority of Chinese SOF units likely have capabilities similar to commando or US Army Ranger units, but not US "Green Beret" or Special Forces. (In addition to army SOF units, special operations units are also found in the PLA Air Force airborne and PLA Navy marine forces.) Other new "high technology" units have also been formed (such as electronic warfare and information warfare units), as well as psychological warfare units.

Forces are further categorized as "main force units" that may be dispatched throughout the country and local forces responsible for defense of the areas in which they are stationed. Local forces include combat units (infantry, armor, artillery, or AAA), border (frontier) and coastal defense units, reserve and militia units, as well as supporting logistics and armaments units. The PLA ground forces are structured in formations known as group army (*jituan jun*, usually considered equivalent to a western corps level organization), division (*shi*), brigade (*lu*), regiment (*tuan*), battalion (*ying*), company (*lian*), platoon (*pai*), and squad (*ban*). Units from squad to battalion size are sometimes called *fendui* or elements, while the term *dadui* refers to groups or regimental-size organizations. The term *budui* can apply to units ranging in size from regiment to group army.[15]

PLA force reductions

In September 2003, chairman of the CMC Jiang Zemin announced a reduction of 200,000 personnel in the size of the PLA to be completed by 2005. The majority of personnel reductions are expected to be felt by officers and headquarters units, with the army, as the largest service, likely to bear the brunt of the impact. Thus, by the middle of the first decade of the twenty-first century, the PLA should have roughly 2,300,000 personnel or less in its active duty ranks (with the ground forces around 1,500,000). The size of the reserve force may grow slightly while the active force is reduced. If the PLA did not use the unusual practice of including its civilian personnel on its active rolls, by creating a separate accounting category for civilians outside the active force, the nominal size of the PLA could undergo a further significant reduction without any effect on its combat capabilities.

Previously, in September 1997, Jiang announced a 500,000-man cut that was conducted over a three-year period ending in 2000. In that round of reductions, the army was cut by about 19 percent (or about 418,000 personnel), while the navy and air force were both reduced by about 11 percent, which due to their smaller sizes amounted to far fewer people.[16] To achieve these cuts, the army eliminated three group army headquarters, deactivated over a dozen divisions, downsized about 30 divisions to brigades, transferred 14 divisions to the PAP, and transformed a division in Guangzhou province into a marine brigade in the PLA Navy.[17] Some units, which had belonged to headquarters that were eliminated but were not themselves deactivated, were transferred to other headquarters. Variations of some of these themes have been repeated in the 200,000-man reduction of the first decade of this century.

PLA reserve units

The PLA reserve unit force as known today was established in 1983.[18] The majority of personnel in reserve unit are civilians, many of whom have been demobilized from military service. Technical specialists, who have not previously served on active duty, may be specifically recruited into the reserves as unit needs dictate. All reserve units also have a backbone of active duty military cadre. After 1996, military ranks were given to reserve officers for the first time and more officers were recruited from active service.[19] Reservists range in age from 18 to 35 and are categorized as Category One or Two based on their age and "military qualities" (*junshi sushi*).[20] Military qualities presumably include education levels, prior military service, military training received, and technical skills.

Like the active duty ground forces, reserve units have undergone significant restructuring in the years following 1998. Reserve units are organized into divisions or brigades based in single provinces, autonomous regions, or centrally administered cities, with subordinate regiments, battalions, companies, and platoons. Reserve divisions and brigades are classified as infantry, artillery, and AAA. Unlike the active PLA, the reserves have no organizational level above division, i.e., no reserve group armies exist. Several reserve chemical defense, engineer, and communications regiments also are found in its order of battle. Since 1999, each Military Region has formed a reserve logistics support brigade capable of providing logistics support in the field to both active and other reserve units. Some reservists, particularly in the PLAN, PLAAF, and Second Artillery, are tasked to act as individual replacements for personnel in active duty units.

In peacetime, reserve units come under the command of provincial Military District headquarters or the garrison commands found in the four municipalities under the State Council, Beijing, Tianjin, Shanghai, and Chongqing. In war, reserve units may be assigned to and commanded by active units or operate independently. Over the past five years, reserve units have begun training with active duty forces, something that had not been attempted previously. Coordinated training among active forces, reserve units, and militia forces is slowly taking hold throughout the

country. PLA active and reserve units and militia forces also commonly cooperate with units from the People's Armed Police to conduct disaster relief operations in all parts of China.

The People's Armed Police

The People's Armed Police was formed in 1983 from elements of the PLA's border patrol and internal security units, as well as units from the Ministry of Public Security. The total PAP force currently is estimated to be as large as 1.5 million.[21] It is composed of several different types of units, each with specific tasks. Internal security units (*neiwei budui*) comprise the largest portion of the PAP and are organized in division-size elements (known as *zongdui*, or "contingents") in each province, autonomous region, and centrally controlled city (Beijing, Tianjin, Shanghai, and Chongqing).[22] The 14 PLA divisions transferred to the PAP during the 500,000-man reduction of the PLA in the late 1990s perform internal security functions, and as a result some provinces have more than one internal security *zongdui* present. In time of war, internal security units can function as light infantry in local defense missions in conjunction with the PLA. PAP internal security forces are estimated to number about 800,000, or over half the total PAP strength.[23] The PAP also has border security forces (*bianfang budui*) found throughout the country at ports and airports and on China's land and sea frontiers. Other PAP units guard China's forests (*senlin jingcha budui*), hydropower facilities (*shuidian budui*), gold mines (*huangjin budui*), and perform fire-fighting (*xiaofang budui*) and road transportation construction (*jiaotong budui*) functions. PAP units also perform guard duty in China's civilian prison system and provide personal protection services for some senior government officials.

PAP forces wear different uniforms and insignia from the PLA, but have a similar rank structure and obey PLA general regulations. The PAP also has its own system of education and training institutions separate from the PLA. New soldiers for the PAP are conscripted at the same time, from the same civilian population pool, using the same procedures as PLA conscripts, though they are trained in PAP, not PLA, basic training units.[24]

Some sources, both foreign and Chinese, sometimes incorrectly and inaccurately call PAP personnel or units "military police." The term "military police" implies that these forces are part of the PLA, which, by Chinese law, the PAP is not. A better term would be "paramilitary police." Many observers, both foreign and Chinese, cannot distinguish the difference between PLA and PAP units and do not understand the difference between each organization's missions. Photographs are often published that misidentify PLA personnel as PAP, or PAP as PLA. Confusion in identification can result in misperceptions about the actual responsibilities of these separate forces. PLA soldiers performing "military police" functions wear PLA uniforms and have authority only over members of the PLA. (See discussion of garrison commands in "Local commands" section, pp. 34–35.)

The militia

The militia is "an armed mass organization not released from production,"[25] which basically means that the militia is composed of civilians who work in civilian jobs and are organized into military formations. According to the Military Service Law, "male citizens from 18 to 35 years of age who are fit for military service, excluding those enlisted for active service, shall be regimented into militia units to perform reserve service." The militia is divided into two categories, the primary (*jigan minbing*) and the ordinary militia (*putong minbing*):

- The primary militia is defined as "a selected group of militiamen under the age of 28, including soldiers discharged from active service and other persons who have received or are selected for military training." The primary militia receives training "in militia military training bases of administrative areas at the county level" for 30 to 40 days.[26] Additionally, "the primary militia may recruit female citizens when necessary."
- The ordinary militia is composed of "other male citizens belonging to the age group of 18 to 35, who are qualified for reserve service."

Militia units are found in "rural towns and townships, administrative villages, urban sub-districts, and enterprises and institutions of a certain scale." Personnel to man militia units are drawn from rural areas, factories, research institutes, and commercial enterprises; militia personnel may have served in the PLA or PAP and have been demobilized, but prior service is not required. Some Chinese workers in foreign-owned enterprises may be members of the militia, and militia units may be found in some foreign-owned companies.[27]

By definition, the militia is a vast organization. The 2004 Defense White Paper acknowledged 10 million primary militia members, but did not estimate the number of ordinary militia members.[28] In prior years, in some places militia rosters were simply lists of names and any actual training conducted was problematic. Currently, the emphasis is on adjusting the size, in particular reducing the size of the ordinary militia, and modifying the roles of the militia so it can better support the PLA in time of war.

The militia assists the PLA by performing security and logistics functions in war. Militia units are organized into infantry, anti-aircraft artillery, anti-aircraft machine-gun, man-portable air defense missile, artillery, communications, chemical defense, engineering, and reconnaissance units. Militia units are especially important to mobilize land, sea (or river), and air assets to augment the PLA's transportation capacity in times of emergency. The militia has also been assigned the task of repairing civilian infrastructure, such as roads, bridges, railroads, electric power plants, or communications facilities, damaged during attacks on China. To accomplish its new missions the militia has formed many thousands of "emergency" or "high technology" units, including some that have been organized to provide information warfare support. In 2002, Chinese leaders began emphasizing the role

of the "Urban Militia" in the defense of China. Rapid mobilization and response are stressed in organization and training utilizing all forms of China's modernized communication system.

Like the PLA, the militia may also be used in domestic security roles. In December 2003, the Ministry of Public Security Central Committee for Comprehensive Management and the PLA General Staff Department's Mobilization Department issued a joint circular on the militia's role in "safeguarding the public order." *In accordance with the law*, and under the command of the People's Armed Forces Departments (see p. 35), the militia is tasked to:

- organize and carry out joint defense and protection of roads, to safeguard factories, mines, villages, waterways, and power facilities, and to handle regional guard duties;
- help the public security departments strike at all kinds of criminal offenses, to restore peace and order in chaotic areas and places, and to maintain public order;
- guard important targets, and to defend the country and protect the people's life and properties; to participate in dealing with sudden group incidents (i.e., demonstrations and riots); and to coordinate with the troops and public security departments to strengthen administration of the border regions and protect the security of the frontiers.[29]

In performing the missions indicated above, the militia would act in support of local public security forces and would assume such roles only if requested by local authorities in conjunction with the military chain of command.

Reserve forces versus reserve units

Before concluding the discussion on the components of the Chinese armed forces, a definition of the term "reserve force" may be helpful to reduce the confusion it sometimes engenders. The terms *yubei liliang* or *houbei liliang*, translated as "reserve force(s)," are often used at the macro-level to describe China's entire part-time civilian, uniformed force, including *both* PLA reserve units (*yubeiyi budui*) and militia units (*minbing*). For example, in the 1990s, as described above, *the reserve force* (both reserve units and the militia) underwent a series of adjustments and reforms. In particular, "size control" was identified as a major topic with the goal of making the reserves "more scientific and rational in scale and more commensurate with quality building as well."[30]

At the tactical, operational, and strategic levels of war, the terms *yubei* or *houbei* may also be used as an adjective to describe reserve, alternate, or emergency forces, locations, or equipment that are not committed to the current battle, but are being held by a commander for employment when necessary. In this case, PLA reserve units or militia units, as well as active PLA units, could act as reserve forces.

National level command authority

The national level command structure for the PLA consists of approximately a dozen major organizations, divided roughly into three levels (see Figure 2.1), most with headquarters located in Beijing.

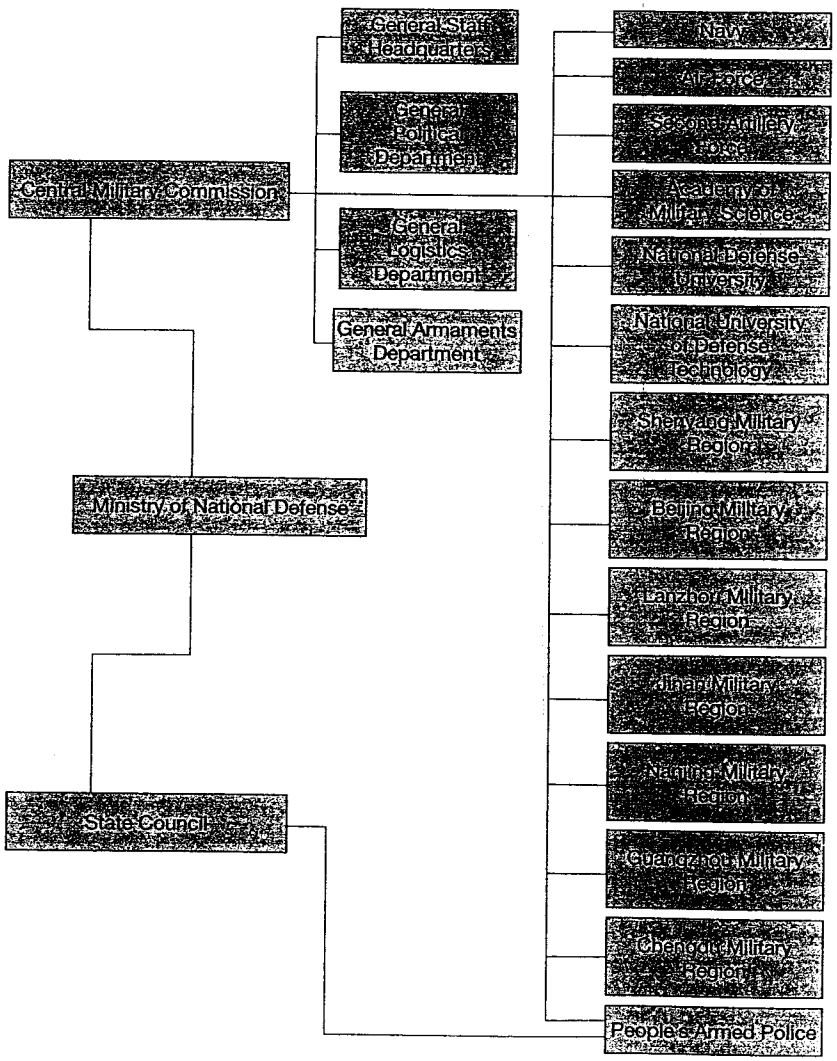


Figure 2.1 National-level organizations

Source: *PLA Daily* online at http://english.pladaily.com.cn/special/strength/content/index.htm

The supreme command and leadership organization for the Chinese armed forces is the Central Military Commission.[31] The CMC is both a Chinese Communist Party and a government organization – technically it is two separate entities, established by both the state and party constitutions, which in practice are identical.[32] The size and composition of the CMC have varied over time and there are no formal parameters for inclusion on this body; only the names of the positions of "chairman, vice chairmen, and members" are identified in Article 93 of the PRC constitution. Earlier articles (62, 67, and 80) give the state president and National People's Congress power to proclaim martial law or a state of war and to issue mobilization orders, so it would seem likely that the PRC president should always be on the CMC. Article 22 of the party constitution requires the party Central Committee to select members of the CMC, thus giving the CCP's highest decision-making organ control of the CMC and enforcing "party control of the gun."

In reality, the CMC is the formal organization composed of China's highest civilian leader(s) and most senior uniformed military officers, all of whom are party members. It exercises command of the Chinese armed forces and determines national defense policies (such as the size and composition of the armed forces, planning priorities, sources for major foreign equipment purchases, etc.). The ranking member of the CMC is the chairman, currently PRC president and party general secretary Hu Jintao, who assumed this position in September 2004. Hu's predecessor, Jiang Zemin, held on to this position for two years after he retired from his other government and party positions, while Hu was senior vice-chairman. (Before Jiang was promoted to chairman of the CMC in 1989, Deng Xiaoping likewise had held this position for several years after giving up other official duties.) Neither Jiang nor Hu had any experience in the uniformed military before assuming their positions on the CMC.

The CMC chairman is assisted by several vice-chairmen. Three of the most senior PLA officers now serve as vice-chairmen, generals Guo Boxiong, Cao Gangchuan, and Xu Caihou, but the number of vice chairmen is not permanent. A secretariat position is sometimes created between the vice-chairmen and members. The number of members of the CMC may vary, but usually includes at least the heads of the four General Headquarters Departments (see pp. 28–30). Also in September 2004, when Hu became CMC chairman, the commanders of the PLA Navy, Air Force, and Second Artillery were added to the CMC as members. The expansion of the CMC to include the service chiefs was generally regarded as a move to increase "jointness" in the PLA (i.e., to enhance the ability of the four services to operate together), and also as a result of the importance of preparing military options for the Taiwan scenario. Most campaigns directed toward Taiwan would likely see navy, air, or missile forces in dominant roles, especially in the early stages of an operation.

The CMC vice-chairmen sit on the State National Defense Mobilization Committee (*guojia guofang dongyuan weiyuanhui*), a party–army–government leadership system that extends down to county level to coordinate mobilization of personnel and resources in times of emergency, to integrate military and civilian

economic development, and to oversee civil air defense and national defense education for the civilian population. The CMC also directs the work of the People's Armed Forces Committee (*renmin wuzhuang weiyuanhui*) system, which supervises conscription/recruitment and demobilization of personnel for the armed forces. The CMC has a small staff to assist in holding meetings, managing projects, and conducting research. It holds formal meetings of its membership and may invite other military or government leaders to attend "expanded meetings." A normal function of the chairman of the CMC is to promote senior PLA officers.

The four General Headquarters Departments

The CMC sets policies and directions which are executed by the four General Headquarters Departments: the General Staff Department (GSD, *zongcanmou bu*), General Political Department (GPD, *zongzhengzhi bu*), General Logistics Department (GLD, *zonghouqin bu*), and General Armaments (or Equipment) Department (GAD, *zongzhuangbei bu*). The GSD is led by the chief of the General Staff (*zongcanmou zhang*), while the senior officers in the other general departments are known in English as "directors," with variations in their Chinese titles (*zongzhengzhi zhuren* for director of the GPD; *zonghouqin bu buzhang* for director of the GLD, and *zongzhuangbei bu buzhang* for director of the GAD). All have a number of deputies who oversee various portfolios from their department's functions, along with political commissars and their deputies in each department (except for the GPD, where everyone is a political officer). In July 2004, in a major step toward "jointness" that foreshadowed the expansion of the CMC in September, an air force general and navy admiral were assigned as deputy chiefs of the General Staff. Formerly, the deputy chief positions were nearly always filled by ground-force officers.

When officers hold multiple posts, such as vice-chairman of the CMC and chief of the General Staff, officially both positions are identified with the higher post listed first. Similarly, when multiple officers are mentioned in speeches or writings, they are listed in protocol order according to seniority and duty position. Protocol order for the PLA services (*junzhong*) is army, navy, air force, Second Artillery (based on the dates of their creation); similarly listings of staff functions follow the precedence of GSD, GPD, GLD, and GAD.

According to regulations, members of the PLA address each other (1) by their duty position, or (2) by their position plus surname, or (3) by their position plus the title "comrade" (*tongzhi*). When the duty position of the other person is not known, one service member may address the other by military rank plus the word "comrade" or only as "comrade."[33] (These customs differ from other militaries where the person's rank and surname are the most common form of address. This system stems back to the various periods in PLA history when a formal rank structure was not used, prior to 1952 and then again from 1965 to 1988.[34])

The General Staff Department is responsible for operations, intelligence, electronic warfare, communications, military affairs, training, mobilization, meteorological and survey, cartographic functions, and foreign affairs for the entire PLA. The GSD also acts as the service headquarters for the army (the GPD, GLD, and GAD perform similar functions within their areas of responsibilities). The GSD Service Arms Department (*bingzhong bu*) directly oversees the development of the army's armored, aviation (helicopter), artillery and air defense, chemical defense, electronic warfare, and engineer forces. Officers and NCOs who perform command and staff duties from the GSD down to the grass-roots units are considered to be part of the "military" system. (See Chapter 3 for a description of the various duty systems in the PLA.)

The General Political Department is responsible for political and ideological reliability and training in the PLA, which includes many aspects of morale building (often referred to as cultural affairs) and propaganda (publicity) functions, such as song and dance troupes, sports teams, museums, and a wide array of media – newspapers, magazines, television, film, and the Internet. Perhaps most importantly the GPD system is also responsible for personnel matters, including party discipline, internal security, legal affairs, management of dossiers, and promotions. GPD functions are performed by officers known as political commissars (*zhengzhi weiyuan* or *zhengwei*) or political instructors (*zhengzhi jiaodao yuan*) in units and staffs throughout the army. At all levels of the PLA, principal commanders (or primary staff officers) and their respective political officers usually share the same rank just as they share responsibility for the performance of their units. (Ranks may vary between commanders and political officers due to promotions or reassignments, and it is possible for a political officer to outrank his commander.)

In addition to personnel who are part of the political officer system, all units have party committees to help guide ideological training and participate in collective or consensus decision making. The party committee is formed of principal commanders and political officers, their deputies, and other senior officers within the unit. The political commissar/instructor acts as secretary of the party committee and the commander as deputy secretary. Party committees at all levels are very active in all aspects of military training as well as political training. Guidance from national level headquarters is passed down the chain of command through a series of party committee meetings extending from Beijing to the grass-roots unit level. After disseminating information to party committees, unit leaders hold training sessions with all soldiers to ensure understanding and compliance.

The General Logistics Department is responsible for finances, military supplies (also known as quartermaster functions), health services, military transportation, POL, barracks (capital) construction, and auditing for the PLA. It provides supplies and services common to all services of the PLA. The GLD also supervises production in the factories and farms operated by the PLA and controls several national level logistics bases consisting of supply and POL depots and transportation units.[35] Under GLD oversight, units below brigade and regimental level run farms to produce vegetables and raise livestock (especially fish, pigs, and chickens) to supplement unit mess funds, while higher level agricultural and sideline production bases focus on production of grain.[36] The GLD also runs about 50 numbered

factories that produce quartermaster items for the PLA, such as uniforms, helmets, field and bivouac gear (called "camping gear" by the Chinese), and food and beverage items; however, these factories *do not* produce weapons used by the forces.[37] The GLD sponsors several military research institutes, manned by military personnel, dedicated to improving the PLA's equipment. In contrast to the GLD's responsibility for common-use items, specialized supply and services are provided by the General Armaments Department system.

The GAD is responsible for the weapons and equipment of the PLA, including maintenance, repair, ammunition, and research, development, testing, and acquisition, including the procurement of major weapons, equipment, and ammunition. Many of the GAD's functions are considered logistics functions in other armies, and were incorporated into this new national level General Headquarters Department formed in April 1998. The GAD maintains numerous research institutes and weapons test centers, including the nuclear test base at Lop Nor and China's satellite launch and tracking network. It also oversees the production of nuclear weapons. The GAD assigns personnel to Military Representative Offices (MRO) in many Chinese civilian factories that produce weapons. Military Representative Bureaux in selected industrial cities perform liaison work with the defense industrial sector.

Both the GLD and GAD supervise a major element of logistics reform instituted since 1998: the "socialization" or "out-sourcing" of services by contracting with local civilian entities to perform functions previously undertaken by soldiers or units. These tasks range from food storage to running mess halls to purchase of spare parts and vehicle/equipment repair. For example, instead of the PLA and local civilian governments each maintaining separate grain storage facilities, the PLA is experimenting with civilian-managed joint storage facilities to replace or supplement PLA warehouses. In peacetime or emergency conditions, PLA units can draw rations from these civilian warehouses and pay for them using modern "smart card" technology. Likewise, the PLA has established contractual relations with many civilian vehicle repair and auto supply shops throughout the country so vehicles may receive maintenance or repair when away from their home base. A primary purpose of out-sourcing is to save money by having the civilian community augment the PLA's existing facilities. Reportedly, "out-sourcing" has allowed many logistics support personnel slots to be eliminated or reallocated to other purposes.[38]

Senior level professional military education institutes

One organizational level below the four General Headquarters Departments are the Academy of Military Sciences (AMS, *junshi kexue yuan*), the National Defense University (NDU, *guofang daxue*), and the National Defense Science and Technology University (*guofang keji jishu daxue*, also known as the National University of Defense Technology, NUDT), which are directly subordinate to the CMC. The AMS in northwest Beijing is primarily a research center for the study

of military strategy, operations, and tactics; military systems; military history; and foreign militaries. The AMS does not focus on student education, but rather is the premier doctrinal research and development institute for the entire PLA.

Differing from the AMS, both the NDU (also in northwest Beijing) and NUDT in Changsha form the pinnacle of the PLA professional military education system, offering a number of courses to senior PLA, PAP, and a few civilian officers. Students at the NDU are senior commanders, staff officers, and researchers and civilians from government organizations above provincial level. NUDT students are senior scientists, engineers, and commanders of technical units (such as maintenance and repair units or military run scientific or technical research institutes) and cadets who will enter the PLA to serve in technical units. (See Chapter 3 for a complete description of the PLA professional military education system.)

Service headquarters and the Ministry of National Defense

The CMC exercises command of the PLA through the four General Headquarters Departments to the PLA Navy, PLA Air Force, Second Artillery, and the seven Military Regions, all of which are at the same organizational level as the AMS, NDU, and NUDT. The army, navy, and air force are characterized as separate "services," while the Second Artillery technically is an "independent arm" or "branch" (*bingzhong*). The PLAN, PLAAF, and Second Artillery each have their own commanders and separate national level headquarters and staffs in Beijing. As mentioned earlier, the army has no separate service headquarters. Instead, the four General Headquarters act as the national level army headquarters with direct links to the Military Regions. The national PAP headquarters is also found at this organizational level, but with a line of command to the State Council through the Ministry of Public Security, as well as to the CMC. The PAP national headquarters building is located separately in Beijing from PLA headquarters facilities.

The Ministry of National Defense (MND, *guofang bu*) is a government body responsible both to the State Council and the Central Military Commission. The Minister of National Defense (*guofang bu buzhang*) is usually a senior military officer. The Minister of National Defense is *not* in the operational chain of command running from the CMC through the General Headquarters to the various military commands and services. The minister's power comes primarily from his seat on the CMC and his personal relationships with other senior leaders. The ministry itself is composed of very few people and is mostly concerned with the conduct of defense and military relations with other countries. In particular, the MND oversees military attachés assigned to Chinese embassies throughout the world, with the GSD Second Department (Intelligence) responsible for their daily operations. Most staff work for the ministry is performed by the General Headquarters Departments.

The Central Military Commission and Ministry of National Defense Foreign Affairs Office (*waishi bangongshi*) plans, executes, and coordinates interactions with foreign militaries, both in China and outside its borders. Personnel from this

one office perform these functions for the GSD, Defense Ministry, and CMC. Smaller Foreign Affairs Offices are found in the other General Headquarters Departments and lower level headquarters, such as the PLA Air Force, Navy, and Military Regions.

Military Regions

The Chinese mainland is divided into seven large Military Regions (MR, *da junqu*, Chinese sources usually translate this term as "Military Area Commands"), each covering several provinces, autonomous regions, or centrally administered cities, and are named after the city in which their headquarters is located. In 2005, the seven MRs were structured as follows (listed in the protocol order assigned by the PLA[39]):

- Shenyang MR, consisting of the Liaoning, Jilin, and Heilongjiang Military Districts
- Beijing MR, consisting of the Beijing and Tianjin Garrisons and the Hebei, Shanxi, and Neimenggu (Inner Mongolia) Military Districts
- Lanzhou MR, consisting of the Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang Military Districts
- Jinan MR, consisting of the Shandong and Henan Military Districts
- Nanjing MR, consisting of the Shanghai Garrison and the Jiangsu, Zhejiang, Anhui, Fujian, and Jiangxi Military Districts
- Guangzhou MR, consisting of the Hunan, Guangdong, Guangxi, Hainan, and Hubei Military Districts[40]
- Chengdu MR, consisting of the Chongqing Garrison and the Sichuan, Xizang (Tibet), Guizhou, and Yunnan Military Districts.

Subordinate to MR headquarters are (1) army, navy, and air force units in the region; army units may be either main force units organized into group armies or independent units of division, brigade, or regimental size that report directly to MR headquarters; (2) logistics and armaments support units organized into logistics subdepartments (*houqin fenbu*); and (3) provincial Military Districts (MD, *sheng junqu*, also called "Provincial Military Commands") and Garrison Commands of the four centrally administered cities of Beijing, Tianjin, Shanghai, and Chongqing (using the terminology *weishuqu* for the Beijing Garrison Command and *jingbeiqu* for the other three cities). Military Districts and Garrison Commands control local forces that may include both active and reserve combat and logistics/armament units as well as border and coastal defense units.

Each Military Region commander (*siling yuan*) is assisted by a political commissar; several deputy commanders (*fu siling yuan*), including the regional air force commander and naval commander (for the Nanjing, Jinan, and Guangzhou MRs); and a number of deputy political commissars (*fu zhengwei*).[41] These personnel form

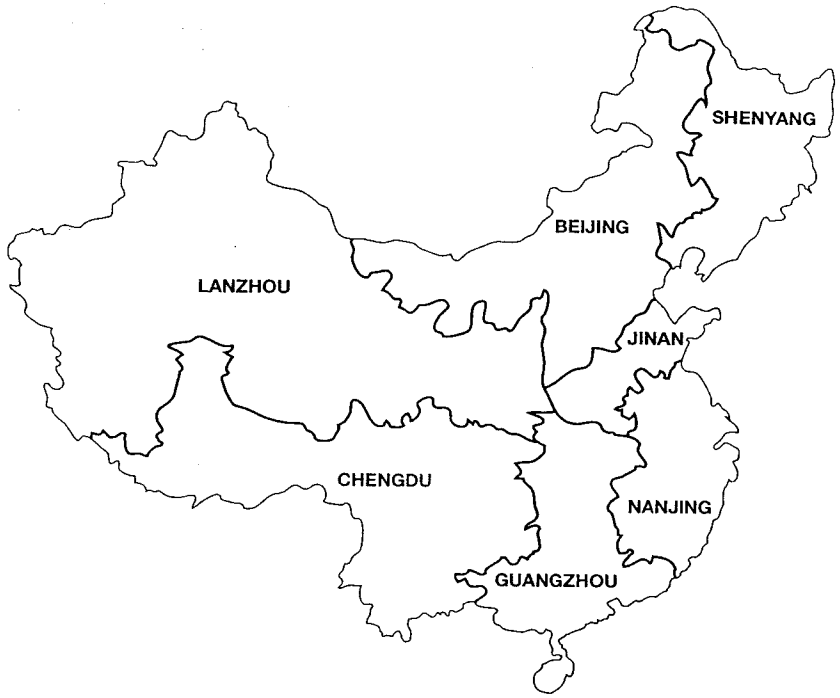


Figure 2.2 Military Regions

the nucleus of the MR level party committee. MR staffs parallel, but are smaller than, the organization of the four General Headquarters Departments and are overseen by an MR chief of staff (*canmou zhang*). Each MR has a headquarters element (consisting of operations, intelligence, communications, etc.), political department, joint logistics department (*lianhoubu*), and armaments department. Joint logistics departments were formed in 2000 in order to better provide support to all services located in the MR. To date all MR commanders have been ground force officers. Another major move toward "jointness" would be assigning a navy or air force officer as an MR commander.

During peacetime, MR headquarters are administrative organizations charged to prepare the forces in their regions to accomplish the missions assigned. Depending on their location and geographical situation, various MRs have differing orientations and force composition. In time of emergency, MR headquarters are likely to be formed into temporary operational War Zone headquarters (*zhanqu*) to conduct military operations. These *ad hoc* wartime headquarters would be formed around the structure of an MR headquarters, but could be augmented, and perhaps commanded, by officers from higher headquarters in Beijing. The boundaries of

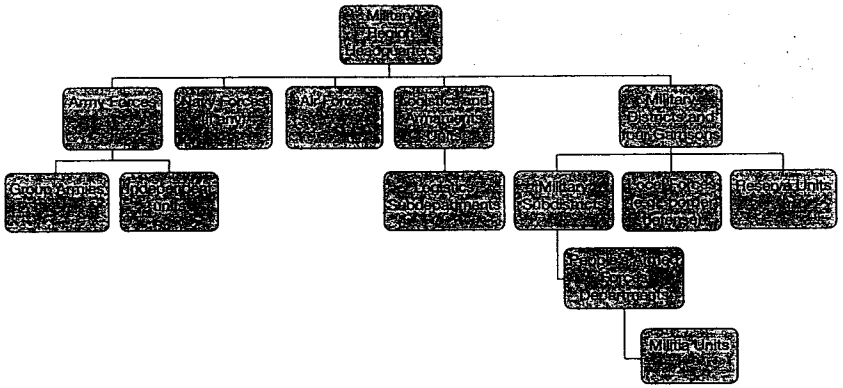


Figure 2.3 Military Region structure

a War Zone will not necessarily correspond directly with the pre-existing MR boundaries, but will vary according to the operational objectives assigned to the War Zone.

Local commands

Each Military District headquarters is responsible for a single province or autonomous region and bears its province's or region's name. MD commanders (*siling yuan*) are responsible for the local and reserve forces (both reserve units and militia units) in their province and for mobilization preparations. Active duty local forces may include coastal defense and border defense regiments, as well as infantry, armor, or artillery units. Reserve units in each province fall under the command of the Military District (or the Beijing, Tianjin, Shanghai, and Chongqing garrisons commands) in peacetime and may operate independently in wartime or be assigned to augment main force units. MD headquarters also oversee logistics depots and bases and armaments units, such as repair and maintenance depots, in their province. MD commanders are assisted by political commissars, deputy commanders, deputy political commissars, and staffs similar to, but smaller than, MR headquarters. MD commanders coordinate closely with local government leaders and PAP forces in their area.

In addition to the garrison headquarters in Beijing, Tianjin, Shanghai, and Chongqing, within the Military Districts are local garrison commands in most Chinese cities, which also use the Chinese term *jingbeiqu*. Garrison duties are frequently assigned to operational PLA units or other headquarters units stationed in the area as an additional duty of the local commander. The primary duty of garrison units is to guard military facilities and maintain order among the troops when they are outside of their military barracks on pass, leave, or official duties, similar to

Military Police functions in other armies. According to the 1998 Defense White Paper, garrison units in large and medium sized cities are responsible to "check, inspect and handle cases of infringements of military discipline by military personnel as well as cases of violations of relevant rules by military vehicles."[42] Soldiers performing garrison duty are often seen patrolling the streets on foot or in vehicles, or setting up "military vehicle checkpoints." These soldiers have authority only over members of the PLA and are not involved in the law enforcement activities of the local public security apparatus.

Each Military District is divided into numerous Military Subdistricts (MSD, *junfenqu*, also called Military Sub-Commands). MSD are found in prefectures or cities and counties and take the name of their prefecture, city, or county. Like MR and MD commanders, MSD commanders are also known as *siling yuan* and have small staffs. MSD headquarters are responsible for formulating mobilization plans, organizing conscription, supporting reserve and militia training, and supervising the activities of People's Armed Forces Departments in their areas.

People's Armed Forces Departments (PAFD, *renmin wuzhuang bu*) are found at county, city, district, and sometimes work unit level, such as in large factories. PAFD are primarily responsible for meeting local conscription quotas for the active force and the militia as determined by MSD and MD headquarters. In addition to providing manpower to the military, they also assist in obtaining local material resources for the units in their area (logistics support) and are involved with supporting demobilized soldiers and organizing reserve and militia training. PAFD officers wear PLA uniforms but have distinctive epaulets of rank. Local PAFDs provide peacetime command for militia units in their areas of responsibility.

The National Defense Mobilization Committee system

Each level of PLA regional and local command is part of the National Defense Mobilization Committee (NDMC) system, which originates in Beijing and extends down to county level. The NDMC system was created in 1994 and refined over the subsequent years. At the national level, the premier of the State Council is the chairman of the State NDMC with the vice-premiers of the State Council and vice-chairmen of the CMC serving as vice-chairmen. Other members include heads of government ministries and commissions and senior leaders from the PLA General Headquarters Departments.[43] A deputy chief of the General Staff is assigned the position of secretary-general of the State NDMC and is primarily responsible for overseeing mobilization work in the PLA.

Moving down the government structure at each level – provincial, prefecture/city, and county – the chairman of local NDMC is the principal leader of the local government (governor, mayor, etc), and is assisted by several vice-chairmen. Local NDMC vice-chairmen are deputy leaders of the local government and the principal leaders (commanders and political commissars) of military units at the same level (such as MR, MD, and MSD). All Military Regions have intermediary level National Defense Mobilization Committees formed by the NDMCs in each province of the

region. The NDMC system is linked by various means of modern communications made widely available in the 1990s and can form "Joint Military–Civilian Command Centers" integrating military, government, and party leaders in times of emergency.

The primary function of the NDMC system is to "organize and implement" national defense mobilization by coordinating "relations between economic and military affairs, the armed forces and the government, and manpower and materials support in defense mobilization" so that the shift from peacetime to war can be made efficiently.[44] During peacetime, the NDMC system allows for military and civilian leaders to meet regularly to plan the coordinated development of the economy and military and to make preparations to transform resources (such as personnel, vehicles, ships, planes, and material) and economic production to support wartime operational needs. Local NDMCs and military headquarters have conducted detailed surveys of civilian personnel and equipment that can be used to support military operations. Each NDMC is organized according to the functions of:

- manpower mobilization (reserves, militia, and civilians);
- economic (industry, agriculture, science and technology, material supply and storage, commerce and trade, and finance) and transportation (transportation, communications and postal services, repair, and construction) war readiness;
- civil air defense;
- national defense education for the general civilian population.[45]

The level of activity over the past decade in NDMCs at all levels indicates that the PRC has not abandoned its traditional emphasis on the role of "the masses" in defense of the mainland. Material and political support of the Chinese public is considered essential for success in any military campaign the PLA undertakes in the twenty-first century. The NDMC system's mission is to ensure that the proper level of civilian support is always available to the PLA.

Tactical organizations: squads to battalions

The basic organizational building blocks of the ground forces are squads, platoons, companies, battalions, and regiments. Few, if any, official Chinese sources available to the public discuss the composition of these units at a level of detail to allow the construction of an accurate and timely Table of Organization and Equipment (TO&E), which spells out the number of personnel and equipment for each type of unit at every level. PLA regulations, however, provide insight into the duties of a number of leaders, staff officers, and specialists at regimental/brigade level and below.[46]

Squads of about 10–12 personnel are found in a variety of types of units: infantry, engineers, communications, headquarters, and logistics units, etc. Specific personnel numbers will vary according to the type of squad and its mission. Infantry

squads are led by a noncommissioned officer squad leader (*banzhang*), who is assisted by a deputy or assistant squad leader, a radio operator, vehicle driver (if a vehicle is assigned to the squad), and possibly a rifleman who also carries a portable anti-tank weapon. The squad leader is responsible for the combat readiness, military and political training, equipment maintenance and employment, and discipline of all members of the squad. The remainder of the squad is likely divided into two sections of roughly equal size (three to four people) armed with an assortment of individual or crew-served weapons. In tactical situations, squad leaders use hand signals and small flags to control their unit's actions. In units equipped with larger weapons systems, such as tanks, artillery, air defense artillery, or missiles, the equivalent to the squad is the crew for a tank, artillery piece, surface-to-air missile system, etc. Depending on the specific type of equipment, these weapons systems require from three to about ten personnel to operate; each crew is also led by an NCO (unless the vehicle is commanded by a platoon leader or other commanding officer). Usually three or four squads or crews form a platoon.

The platoon is the first organizational level commanded by an officer, usually a first or second lieutenant, known as platoon leader or commander (*paizhang*). This junior officer is required by regulations to live in the barracks with his platoon. Platoon leaders are responsible for their unit's combat readiness, military and political training, equipment maintenance and employment, and discipline. The platoon chain of command goes from the platoon leader to squad leaders. Current regulations do not mention a deputy platoon leader, either officer or NCO, but it is likely, as the PLA NCO corps increases in size and responsibilities, that "platoon sergeants" will be assigned to assist platoon leaders in their duties. Like the squad leader, a platoon leader is assisted by a radio operator to maintain communications with subordinate squads and company headquarters above. An infantry platoon will likely have three infantry squads and an additional weapons squad with machine-guns and anti-tank weapons. Tank platoons traditionally consisted of three tanks each, but may have expanded to four tanks per platoon in some units. Platoons in other arms will likely be composed of three or four squads based on the mission of the type unit. As a rule of thumb, platoons have about 40 personnel assigned (but could be larger or smaller depending on the type of equipment assigned).

A company usually is composed of a headquarters section, mess squad, and three or four platoons. A company commander (*lianzhang*), usually a captain, has a small headquarters section with a political instructor (and possibly a deputy political instructor), deputy commander, mess officer (*siwuzhang*, now being changed to NCO[47]), and a few enlisted personnel who serve as armorer-clerks, medical orderlies, communications personnel, and technicians. By regulations, the company commander and the company political instructor jointly are responsible for the work of the entire company. The political instructor concentrates primarily on the company's political indoctrination and loyalty and performs many duties related to the morale of the troops. Deputies to the commander and political instructor assist their principal officers and assume their duties when they are away from the company. The mess officer or NCO is responsible for company supply and

equipment (such as bedding and company furniture) as well as supervising a mess squad of about ten people that prepares the unit's meals. The mess squad is overseen by a separate mess squad leader. The duties of the mess officer or NCO are similar to company supply sergeants in other militaries. The armorer-clerk is responsible for maintaining and securing the company's weapons and keeping the company's records and other required forms. Medical orderlies perform first aid and evacuate sick or wounded personnel to higher headquarters and also work with the mess squad to ensure sanitation. Specially trained "technicians," who are responsible for the service, maintenance, and training in the care of equipment, may be assigned to various positions in the company (and higher units). Farms and sideline production (raising pigs, ducks, fish, etc.), where soldiers work part time to help provide basic sustenance, are found at company level and are the responsibility of the commander.

Subordinate to the company are three or four platoons depending on the type unit. In infantry and armored units, in addition to three infantry or tank platoons, a weapons platoon with mortars and anti-tank weapons (such as recoilless rifles, anti-tank guided missiles) is found.[48] In total, a company may have from about 120–150 personnel depending on its type, with armored and mechanized companies having approximately ten armored vehicles plus additional trucks and jeeps for support. Regulations require a series of meetings within the company to be held to review past work and plan for the future. Squads hold weekly meetings, platoons once or twice a month. Squad leaders and above attend a monthly "company affairs meeting," while all members of the company take part in a separate "company soldier's conference" held monthly or at the end of major work (or exercise) periods.[49] A party cell is also present in the company, made up of members of the party and Communist Youth League. This party organization includes both officers and enlisted personnel who discuss political work and assist in maintaining party discipline.

Three to five companies generally make up a battalion led by a lieutenant-colonel battalion commander (*yingzhang*). The battalion commander has only a small staff consisting of a political instructor, deputy battalion commander, and director of the battalion medical clinic. The battalion commander and political instructor jointly share responsibility for the work of the entire battalion, with the battalion commander having primary responsibility for the military work and the political instructor, political work and morale. The battalion has a small clinic responsible for medical training, disease prevention, rescue, care, and evacuation of sick and wounded. The small staff found at battalion level indicates that many command and staff functions move primarily from regiment (or brigade) headquarters directly to subordinate companies. Infantry and likely armored battalions have three companies and a heavy weapons company. Total number of personnel in a battalion will vary according to unit type, but will probably range from some 200 to around 700 officers, NCOs, and conscripts. Armored and mechanized battalions will likely have over 30 armored vehicles with a significant amount of trucks and jeeps in supporting units.

Tactical organizations: regiments and brigades

Regiments and brigades are important organizational levels where true combined arms formations are first found (integrating elements from more than one arm, such as infantry, armor, artillery, AAA, engineer, chemical defense, and logistics, etc., into an organic unit). Therefore, regiment and brigade headquarters are staffed by significant numbers of personnel. Since 1998, the brigade level has become more prominent in the PLA as many divisions have been reduced in size and new brigades formed.

Regiments usually are composed of numbered companies (identified by numbers one through nine) of their basic type (infantry, armored, etc.), which are assigned under the command of three battalion headquarters. In addition to maneuver battalions, combat regiments will likely have an artillery battalion and AAA unit permanently assigned. Regimental headquarters may also command engineer, chemical defense, and logistics and armament support units, usually of company size. Depending on the type of unit, regiments may have from about 1,000 to over 2,500 personnel and over 100 armored vehicles in armored and mechanized units.

Maneuver (infantry and armored) and artillery brigade headquarters exercise direct command over a number of subordinate battalions. Some older brigade headquarters may have regimental headquarters below brigade level, but such a command structure appears less common than it may have been in the past. Brigades are probably manned by 2,000 to 6,000 personnel depending on type and organizational structure, with numbers and types of vehicles assigned varying greatly. Within brigades, combat units (infantry and armor) will be organized into approximately three to five battalions; artillery, AAA, or air defense units may be of battalion or company size; and logistics and armaments support units likely of company size. Logistics and equipment support capabilities in brigades are greater than found in regiments. It is likely that experimentation is still underway for the optimal brigade structure for the various types of brigades that have been formed during and after the 500,000-man reduction of the late 1990s.

Current regulations treat the regiment and brigade staff as being at an equivalent level with similar functional structures (though staff "offices" within regimental headquarters are called "departments" in brigades). Regimental commanders usually are colonels, while senior colonels usually command brigades. The regimental commander (*tuanzhang*) or brigade commander (*luzhang*) is assisted by a political commissar (*zhengzhi weiyuan*), deputy commander, deputy political commissar, and chief of staff. The commander and political commissar are jointly responsible for all the work of the regiment or brigade, with the commander focusing on military work. The director of the headquarters political department/office reports to both the commander and political commissar and is assisted by a deputy director in the performance of political work for the entire unit. The chief of staff is the senior officer of the headquarters department who oversees the work of several staff officers and their subordinates. Reporting directly to the chief of staff is at least one deputy chief of staff, the director of the logistics department/office,

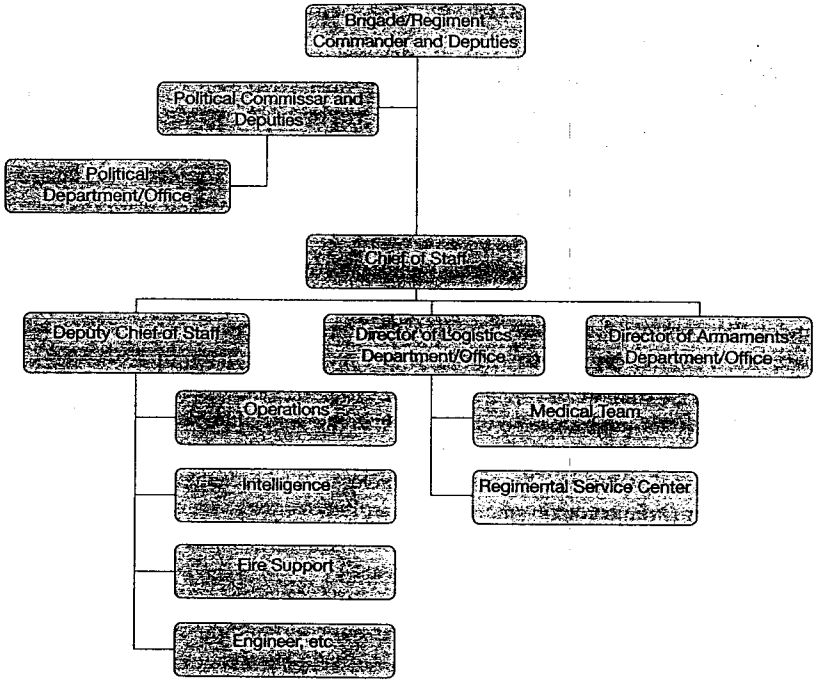


Figure 2.4 Brigade/regimental headquarters structure

and the director of the armaments or equipment department/office. All of these officers have specialized staff personnel to perform the functions of the various systems for which they are responsible. The deputy chief of staff probably is responsible for planning operations and has several assistants who perform other operations-related functions such as intelligence, fire support, and engineer planning. Answering to the director of logistics is the chief of the regimental medical team and the director of the regimental service center. The regimental service center works directly with subordinate companies to ensure proper supply and preparation of food for all units.

The number of personnel present for duty often differs from the number authorized to be in any unit. Units may be short of personnel because of (1) sickness, injury, or death, (2) discipline problems resulting in the removal of offenders, (3) absence for training in a separate location, (4) temporary duty assignments outside of the unit, (5) authorized leave or pass, and (6) insufficient numbers of properly trained personnel or insufficient personnel of appropriate seniority or rank. It is not known whether or how the PLA takes these factors into account when determining the number of personnel assigned to each type and level of unit.

Tactical organization: divisions

The organizational level immediately above regiment and brigade is division, though *operationally* brigades appear to have become equivalent to divisions now that many former divisions have been downsized into brigades. (See pp. 42–44 for discussion of group armies.) In addition to maneuver (infantry and armored) divisions and brigades, the PLA also has artillery and AAA divisions and brigades. Air defense units, i.e., units with both AAA guns and SAMs, are organized as brigades. PLA divisions are structured with regiments as their next lower organizational level; unlike some other militaries, PLA division headquarters *do not* control brigades.

Beginning in the 1950s, PLA maneuver divisions were usually organized along the Soviet model. Most Soviet maneuver divisions (either tank or infantry, which was also known as "motorized rifle") were composed of three regiments of the "type" unit that identified the division. For example, a motorized rifle (i.e., infantry) division had three subordinate infantry regiments and a fourth tank regiment; a tank division had three tank regiments and a fourth regiment of infantry. Full-strength PLA infantry and tank divisions followed that structure until the late 1990s. (In the late 1990s, the PLA stopped using the term "tank" (*tanke*) to designate unit type and substituted the word "armored" (*zhuangjia*) to better indicate the combined arms nature of the unit.)

Likewise, according to Soviet organizational structure, each full-strength PLA division had a subordinate artillery regiment, an AAA regiment, and an assortment of reconnaissance, chemical defense, engineer, communications, and logistics (medical, supply, maintenance, repair, etc.) battalions or companies and a few additional units to perform guard or headquarters functions. It is likely that PLA divisions also have been assigned organic transportation regiments consisting of various large cargo trucks, POL tankers, and heavy equipment transport trailers (for carrying heavy armored vehicles to spare them wear and tear during long movements).

Depending on their state of readiness (or readiness category), not all divisions were manned and equipped at the same levels. For example, instead of tank regiments, lower readiness category infantry divisions might have had tank battalions or no tanks at all, with similar decreases in unit size for other support elements. The time required for mobilization and movement out of barracks varied according to readiness category. Previously readiness levels were known in English as Category "One, Two, or Three," or "A, B, or C," and used the Chinese characters of *jia, yi, or bing* with the addition of the word *lei* for "class."

Force restructuring continued after the completion of the 500,000-man reduction in 2000 into the 200,000-man reduction period that began in 2003. More divisions have been downsized to brigades or transformed into different type units (such as changing from motorized to mechanized infantry or armored units). Some infantry divisions that previously had three infantry regiments have been downsized to consist of only two infantry regiments, while the third infantry regiment was transformed to an armored regiment. Thus, the pre-reduction number of 12,000 to

13,000 personnel in a division may now be reduced by 2,000 to 2,500 combat soldiers in some divisions, though it is likely logistics or armament units, such as maintenance/repair and transportation units, have been expanded to better support the more mechanized force.

In the late 1990s, many, but not all, divisions received priority for new equipment entering the ground forces. At the same time, brigades were told to find new ways of fighting to use their "existing equipment to defeat a high-technology enemy." However, by about 2002 some brigades, too, began the process of upgrading to newly produced Chinese weapons and equipment.[50]

In Chinese military writing, a formula frequently used to depict a division is "10,000 men and 1,000 vehicles." This formulation is still generally accurate. A brigade may be said to have "several thousand personnel and hundreds of vehicles," which, too, is more or less accurate (see Table 2.2).

Table 2.2 Estimated personnel numbers (all numbers are approximate)[51]

Type unit	*Division*	*Brigade*	*Regiment*	*Battalion*
Infantry	10,000–12,000	5,000–6,000	2,800	700
Armor	10,000	2,000	1,200	175
Artillery	5,000–6,000	2,200	1,100	275
AAA	5,000	2,000	1,000	250

A division commander (*shizhang*) usually is a senior colonel and is assisted by a political commissar, at least one deputy commander and deputy political commissar, a chief of staff, and a larger staff organization than found in brigades and regiments. The staff is responsible for military (operations, intelligence, and communications), political, logistics, and armaments functions. When deployed to the field, the division staff must have enough personnel to man a series of field command posts (CP), including the division main CP (*jiben zhihuisuo*), division rear CP (*houqin zhihuisuo*, primarily responsible for logistics, armaments, and administrative functions), forward CP (*qianjin zhihuisuo*), and alternate CP (*yubei zhihuisuo*). Mobile satellite communications equipment is becoming prevalent in field headquarters for formations down to division/brigade level.

Tactical/operational organization: group armies

Group armies are composed of combinations of divisions, brigades, and regiments. After the reductions of the late 1990s, the variation in group army composition has increased considerably from previous years. A few group armies have only divisions as their main maneuver elements; a few others are composed of all maneuver brigades. The majority of group armies contain a mix of both maneuver divisions and brigades ranging from three to five in number. (These variations are clearly evident in Tables 4.1–4.7.) The structure of the various group armies is likely to

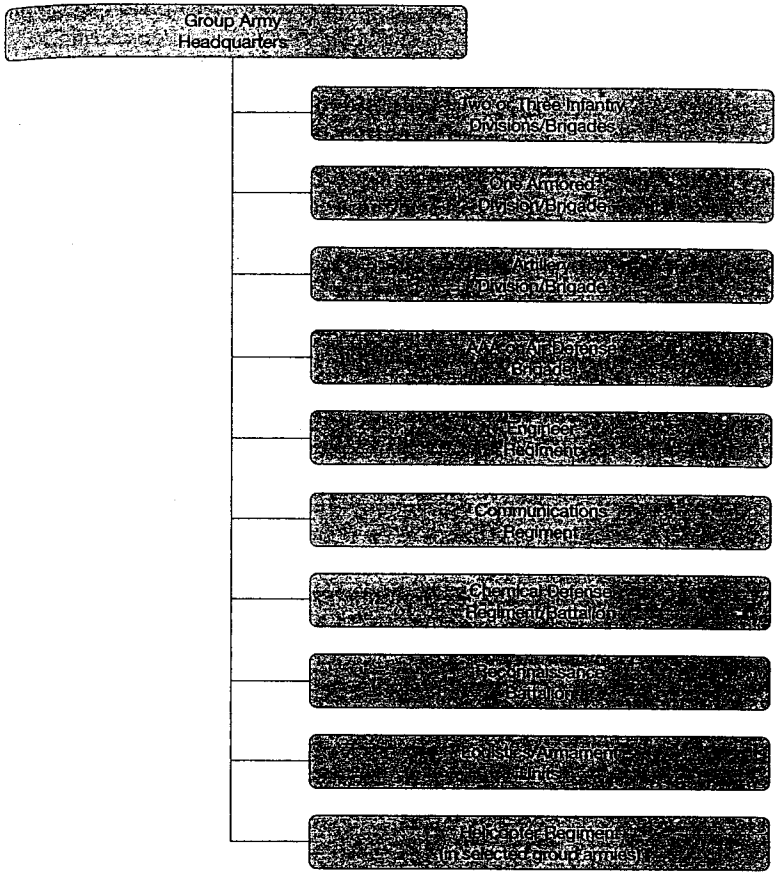


Figure 2.5 Group Army structure[52]

continue to evolve during the 200,000-man reduction and beyond. Most group armies have a combination of units similar to that found in Figure 2.5, with an army aviation (helicopter) regiment assigned to a few selected formations.

Total personnel assigned to group armies probably varies from roughly 30,000 to about 50,000, depending on the number of divisions and brigades. Group army commanders (*junzhang*) usually are major generals and are assisted by a similar, but larger, assortment of political commissars, deputy commanders and deputy political commissars, and staff elements as found in divisions. Additional capabilities, such as army aviation and electronic warfare, that may be assigned to the group army also require staff representation at group army headquarters. When deployed from garrison locations, group armies also will be capable of setting up multiple

command posts with increasing numbers of mobile command and communications vans and vehicles.

Tactical organizations: independent units and logistics subdepartments

Each Military Region headquarters has an assortment of combat and support units reporting directly to it that are not part of group armies. In addition to its subordinate group armies, logistics and armaments subdepartments, and local forces (reporting through the MD chain of command), Military Regions may command independent infantry, armored, reconnaissance and/or SOF, aviation (helicopter), engineer (particularly pontoon bridge regiments), chemical defense, electronic warfare, and psychological warfare units, often at regimental or group (*dadui*) level. One short-range ballistic missile (SRBM) brigade, converted from a traditional artillery unit, is present in the Nanjing Military Region opposite Taiwan.

Military Region logistics subdepartments are equivalent to divisions in the PLA's organizational hierarchy and consist of multiple storage and repair depots, bases, hospitals, and the units that man these facilities. Logistics subdepartments provide both fixed and mobile support to forces in the region. Forward and mobile support is performed by "emergency support units" formed on a case-by-case basis from subordinate elements of logistics subdepartments to satisfy the logistics requirements of specific units conducting discrete operations. Logistics subdepartments are usually commanded by senior colonels.

Transportation regiments are major components of the MR logistics support system and include both motor transport (truck) units and army ship *dadui* in at least three MRs for coastal and river operations. Army ship units include a variety of small ships and vessels, operated by ground force soldiers, that augment PLAN transport and amphibious capabilities.

What the PLA is not: the civilian defense industries

Before examining who makes up the PLA, it is necessary to define one final example of what the PLA is not.

The PLA also *does not* include the large number of Chinese civilians who work within the civilian-managed defense industrial sector. The Chinese defense industries are divided into six sectors – nuclear, aerospace, aviation, shipbuilding, ordnance, and electronics – and produce the majority of weapons and equipment used by the PLA. The six sectors together employ a total of approximately two million civilian workers, scientists, staff, and managers.[53] The corporations, factories, research institutes, schools, trading companies, and other associated entities which make up the six sectors are organized into 11 large enterprise groups:

- China National Nuclear Corporation (CNNC)
- China Nuclear Engineering and Construction Corporation (CNEC)
- China Aerospace Science and Technology Corporation (CASC)

- China Aerospace Science and Industry Corporation (CASIC)
- China Aviation Industry Corporation I (AVIC I)
- China Aviation Industry Corporation II (AVIC II)
- China State Shipbuilding Corporation (CSSC)
- China Shipbuilding Industry Corporation (CSIC)
- China North Industries Group Corporation (CNGC)
- China South Industries Group Corporation (CSG)
- China Electronic Technology Group Corporation (CETC)

Each sector of the Chinese defense industries also has at least one import-export company responsible for representing the companies and factories in the sector overseas and for buying and selling equipment and technology from abroad. Perhaps the best known, or most infamous, of the import-export companies is NORINCO (China North Industries Corporation) that services the ordnance sector (China North and South Industries Groups). Several others also remain operational, such as the China Nuclear Energy Industry Corporation (CNEIC); China Great Wall Industries Corporation (CGWIC), and China Precision Machinery Import-Export Corporation (CPMIEC) for the aerospace industries; China National Aero-Technology Import and Export Corporation (CATIC) for the aviation sector; China Shipbuilding Trading Company (CSTC); and China National Electronics Import and Export Corporation (CEIEC). In addition to specifically designated import-export companies, individual entities within the defense industries, such as factories and research institutes themselves, are increasingly being authorized to conduct sales to foreign countries and purchase foreign supplies and technology.

The system of defense industry enterprises is supervised by the ministerial-level State Commission of Science, Technology and Industry for National Defense (COSTIND), under the State Council, which is now completely separate organizationally from the PLA. Within the defense industrial sector, however, are PLA officers *who perform liaison functions* between the military and industries. These officers are organized into a system of Military Representative Offices in factories and Military Representative Bureaux in selected industrial cities overseen by the General Armaments Department or service headquarters.

Prior to 1998, COSTIND was part of the PLA general headquarters structure and led by uniformed military generals, as well as civilian managers and technicians. In April 1998, the old COSTIND was abolished, reformed, and given the same name as in the past, but completely separated from PLA headquarters. All uniformed military left COSTIND and were reassigned within the PLA, mostly in the GAD. The new COSTIND is now staffed only by civilians and performs policy-making and government regulatory functions for the defense industrial sector. Though COSTIND may help market products and services, it is not directly responsible for production, a responsibility which has devolved to civilian corporation and factory managers over the period of economic reform.

Fifty years ago the relationship between the PLA and defense industries was much different. But during the period of reform the two systems have evolved

separately so that the relationship that now exists is primarily one of PLA "buyer" to civilian defense industries "seller." Though both systems seek to defend China's national security, the defense industries operate under a "for-profit" motivation, while few members of the military serve in order to get rich. (In 1998, the PLA was ordered to divest itself of the *commercial* enterprises, such as hotels, real estate companies, etc., that had proliferated throughout the PLA. Originally these entities were tasked to make money for the units they represented to supplement official funds available to units, but greed, corruption, and illegal activities marred their activities. While many sideline production enterprises are still subordinate to PLA headquarters and units, thousands of commercial enterprises have cut their formal ties with military units. Along with them, some officers, who were responsible for these activities, also left the PLA. A close, but unofficial, relationship between many of these enterprises and their former units likely remains.)

Like the defense industries, the PLA is trying to attract and retain highly educated and trained personnel, but must compete with the civilian business sector where the money is better and the life easier. The people who make up the PLA and how they are trained and educated are vital elements of the military transformation in progress.

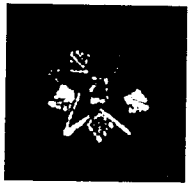
3
WHO IS THE PLA?

Highly educated, properly trained, and motivated personnel are the heart of a modern army. Since the late 1990s, the PLA has made great efforts to attract and retain the kind of people needed to operate and maintain its more technologically advanced weapons and equipment as well as plan and execute its new military doctrine. In the process, the Chinese military has made changes to its personnel system and the training and education systems for conscripts, NCOs, and officers. In particular, the force is in the process of rebalancing the number of conscripts with NCOs, and NCOs with officers. In both cases NCOs are assuming more duties and responsibilities than in previous years.

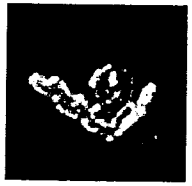
Often Chinese terminology and practices not found in other armies make it difficult for outsiders to fully understand many of the details of the PLA's personnel system. For example, the term *ganbu*, or cadre, refers to leaders in general and is often used in reference to officers and PLA civilians, and does not include enlisted soldiers (*shibing*), meaning both conscripts and NCOs. (As noncommissioned officers assume greater leadership responsibilities, it will be interesting to see if NCOs are included in future uses of the term "cadre.") The PLA also makes a distinction between personnel responsible for various aspects of military, political, logistics, and armament affairs, and technicians or technical personnel, who are principally responsible for equipment maintenance, repair, research, development, and testing.

As new equipment has entered the PLA, the role of technicians has risen in importance. Bureaucratically, the creation of the GAD in 1998 is an example of the increased attention given to how equipment is handled and personnel are trained to maintain and operate it. Technical personnel are identified by special insignia on their collars consisting of a red star (thinly outlined in gold) with the Chinese characters 8–1 (*bayi*, which commemorate the founding of the Red Army on 1 August 1927) superimposed over the elongated orbits of two electrons on a white background. For all members of the PLA, it is important to distinguish among the various services, military ranks, duty positions, and specialties.

PLA ground, naval, and air forces, as well as the PAP, can all be identified by their uniforms and insignia. In total, the PLA uses some 29 different types and styles of uniforms, including dress, spring/autumn service, summer, winter, and field



PLA ground force collar insignia



PAP collar insignia

Figure 3.1 Collar insignia

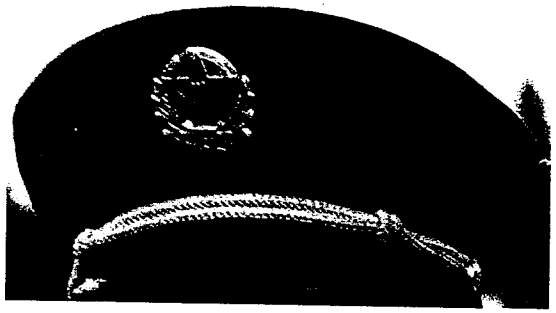


Figure 3.2 PLA cap insignia

uniforms.[1] PLA ground force personnel (other than technicians and PLA civilians) wear collar insignia consisting of the *bayi* insignia on a red star (superimposed over a second, underlying five-pointed gold star protruding between the points of the red star).[2] Ground force personnel also are recognized by a red band on their service hat (a black brimmed, peaked saucer hat), with officers, PLA civilians, and NCOs having a thick (or wide) red band and conscripts a much thinner red band. The red star *bayi* cap insignia is affixed over the brim of the peak hat and field caps, on the beret introduced in recent years, and sometimes on helmets. PLA ground forces wear matching green jackets and trousers with dress, spring/autumn service, and winter uniforms. The dress and spring/autumn service uniforms are four-button, open-neck jackets worn over a shirt and tie (black tie for men, red tie for women), while the winter uniform jacket is the traditional Mao-style jacket that buttons to the top with a closed collar (the women's winter dress jacket is double-breasted). In December 2004, the PLA announced the quality of winter uniforms for enlisted soldiers would be improved in material and color. The Mao-style did not change. Summer uniforms consist of short- and long-sleeved shirts of lighter green worn

over dark green trousers. PLA ground forces use both camouflage battle dress uniforms and/or solid green fatigue uniforms, both of which can be worn with soft-brimmed field caps (with red star *bayi* insignia) or helmets (either "Kevlar" style or older Japanese-style steel pots). Ceremonial dress uniforms and insignia for ground forces differ considerably from uniforms worn on a daily basis and may cause confusion with PAP forces' uniforms. The PLA guard of honor, which greets senior foreign dignitaries, routinely wears the ceremonial uniform.

Ranks are indicated by epaulets worn on the shoulder, with hard epaulets (with gold background for officers) for dress, service, and winter uniforms and soft epaulets (with dark green-black background) for summer and camouflage or fatigue uniforms. Ground force enlisted ceremonial epaulets are red, like the daily use PAP epaulets. PLA soldiers performing "courtesy patrol" duties may also wear ceremonial epaulets while on the street. PLAN and PLAAF personnel are easily distinguished from the ground forces by different color uniforms, hats, and insignia.

This chapter will look at who makes up the modern PLA ground forces, the manner by which their ranks and duty positions are classified, and how the soldiers are individually trained and educated, starting first with the conscript force, moving on to noncommissioned officers, the officer corps, PLA civilians, and finally the personnel who make up reserve units.

The conscript force

The enlisted ranks within the PLA are divided into (1) conscripts (*yiwu bing*), soldiers who are recruited according to quotas levied upon local governments and serve for two years, and (2) volunteers (*zhiyuan bing*), who are selected from the conscript pool to voluntarily extend their period of service to become non-commissioned officers (*shiguan*). Prior to 1999, the period of conscription for ground troops was three years (with four years for the navy and air force), but partly because of the hardships placed on some families who had only one son (as a result of the nation's "one child policy"), the decision was made to reduce the time of conscripted service in order to allow the youth to return to their families quicker. At the same time, a complementary decision was made to readjust the ratio of conscripts to NCOs, with the NCO corps becoming larger in size as the number of conscripts fell. The period of adjustment would take several years to reach the proper mix of conscripts, NCOs, and officers. The number of officers in the force is also being adjusted as noncommissioned officers assume many responsibilities previously assigned to officers.

According to China's "Conscription Work Regulations," males aged 18 to 22 may be drafted to serve in the PLA (or PAP) if qualified physically and politically. Females may be recruited depending on the "needs of the military." Students in that age range attending full-time schools may be deferred from service.[3] Persons who are the sole supporter of their family may also be deferred from service.[4] There are no official education requirements for service, but graduation from lower middle school (nine years of education) or higher is preferred. Conscription quotas are

based as much as possible on the distribution of the population – about 70 percent from rural areas and 30 percent from the cities in the first decade of the new century. These percentages will shift as China's population distribution changes, but inherent in these numbers are differing levels of education and technological sophistication found among those from the countryside and those from urban areas. City youth, who often are more highly educated and have greater economic opportunities available to them, may be less inclined to serve in the PLA than peasants from the countryside. Urban youth often are not as physically fit and accustomed to hardship as their cousins from the farms. However, the hearty peasant is less likely to be prepared to operate and maintain advanced weapons and equipment than the better-educated city dwellers. Stories abound concerning various ways young men have tried to avoid conscription. Accordingly, the tasks of enlisting, training, and retaining new recruits from such varied backgrounds have become increasingly challenging.

The conscription process and basic training[5]

In September each year, the General Staff's Mobilization Department and General Political Department decide how many conscripts are needed to be inducted that year.[6] The Central Military Commission and State Council then jointly issue a "conscription order" which is sent to each of the seven Military Regions. Quotas are passed to the provincial Military Districts, which then send specific requirements for new soldiers to Military Subdistricts and local People's Armed Forces Departments. The local PAFDs are responsible for enlisting the number of recruits necessary from their district. Quota numbers include both PLA and People's Armed Police recruits. The PAFD also decides which new soldiers go into the PLA (army, navy, air force, Second Artillery) or into the PAP. As a general rule, new recruits from a single district are sent at most to three separate division or brigade level units. Some recruits are assigned to units in their province, but others are dispatched outside their home province so every PLA and PAP unit is composed of soldiers from many parts of the country.

Personnel selected as conscripts are notified in early November by their local PAFDs. The potential conscripts then undergo physical and political tests administered by the Military Subdistrict. If the recruits pass the screening process, in early December they are issued uniforms and bedding and travel to induction training units (usually by train). Units receiving new soldiers establish reception committees to meet the incoming recruits and help them settle into their training units.

Division and brigades establish temporary recruit basic training units called "training regiments" that operate out of a "training center," which is in or near their garrison areas. Division and brigade commanders and political officers are responsible for basic training to be conducted according to standards set by the GSD and supervise closely the activity at each training center. NCOs and junior officers are selected from the unit to be training cadre and conduct most of the actual training instruction. One or two NCOs are responsible for a squad of about 12 new soldiers. Squads are organized into platoons and companies; each training regiment

may have up to nine training companies. In addition to the training cadre, many members from the permanent unit support basic training, such as cooks, supply personnel, clerks, and armorers. Basic training lasts for about three months until approximately February and the Chinese New Year.

All new soldiers go through the same basic training course of instruction, which includes how to wear the uniform, saluting, marching, physical conditioning training, how to shoot and maintain a rifle, and especially the history of the PLA and how to be a good soldier and citizen. Instilling discipline and accustoming recruits to obey orders are fundamental to recruit training. During this period, new soldiers do not wear rank or insignia. At the end of training, the new soldiers are given insignia of rank and take the "Soldier's Oath" that says,

> "I am a member of the People's Liberation Army. I promise that I will follow the leadership of the Communist Party of China, serve the people wholeheartedly, obey orders, strictly observe discipline, fight heroically, fear no sacrifice, loyally discharge my duties, work hard, practice hard to master combat skills, and resolutely fulfill my missions. Under no circumstances will I betray the motherland or desert the Army."[7]

Conscripts in units

After basic training soldiers are assigned to permanent companies in larger units where they receive additional training. There they learn how to function in squads and platoons within the company. Specific functions, such as driving, operating radios, how to be a member of a tank or artillery crew, or fire machine guns and grenade launchers, will be taught in special training facilities/instructional units within permanent units. Some new soldiers are sent to specialty training at facilities outside of their permanent units, such as mechanics, supply, specialized communications, engineers, chemical defense, etc. This specialty (technical) training may last several months. Later, some soldiers are selected to serve as squad leaders and receive additional training of three months or longer. (The process to select and train soldiers to be squad leaders is being revised as volunteer NCOs are given that responsibility.) By about April, companies have integrated new soldiers into their positions and are ready to begin training at higher organizational levels. Individual and small unit skills are practiced and expanded throughout the year. Physical fitness is emphasized constantly in unit training.

First-year soldiers are called "private" or "private second class" (*lie bing*) and have a single chevron of rank on their shoulder epaulets. In their second year, conscripts are called "private first class" (*shangdeng bing*) and receive a second chevron on their epaulets. Pay is based on rank and years in service, with subsidies given for being stationed in "difficult living conditions." Privates are not allowed to marry, must live in the barracks, and are discouraged from having their family visit. Privates are not authorized vacation leave, but may be granted passes for a day on Sundays or holidays and are encouraged to travel in groups of two or more with one person in charge.

At the end of their second year, in November, conscripts may be allowed to volunteer to become NCOs and remain on active duty or they may be demobilized and returned to their homes. If demobilized, soldiers receive a small stipend for their service and are transported back to their original residence. Some demobilized soldiers may join reserve units in their local areas depending on the needs of the reserve unit. If allowed to extend their time on active duty, the volunteers will enter the ranks of the noncommissioned officer corps.

The noncommissioned officer corps

The PLA's noncommissioned officer corps has undergone substantial change since 1999. During the 20 years of reform from 1979 to 1999, many PLA delegations had observed the roles of NCOs in other armies and the functions of the professional NCO had been studied carefully in PLA academic and research institutes. The decision to cut conscription time to two years was accompanied by a concurrent decision to increase the number of NCOs and give them greater responsibilities. Most NCOs are selected from conscripts at the end of their two-year enlistment, but others may be brought into the service directly from the civilian world, provided they have professional/technical qualifications needed by the army. These civilians-turned-NCOs receive introductory basic training to prepare them for military life and are spared the hardships of the first two years of conscription. Policies for NCO recruitment continue to evolve and are likely to change according to the needs of the army and the success of experiments undertaken since the turn of the century.

In 2003 only 630 NCOs were recruited directly from local civilian schools; in 2004 that number was raised to 1,064 NCOs, including some 300 female NCOs.[8] An article in the Jinan Military Region newspaper in 2002 reported that after just a few days of training, the first group of 40 new NCOs to be recruited directly from civilian technical schools were said to have abilities comparable to soldiers who had been in the army for five years.[9] If accurate, this report indicates the relatively low level of technical sophistication among PLA enlisted troops in the late 1990s. Reforms in the NCO corps are intended to overcome such shortcomings.

The NCO corps is divided among professional and technical NCOs as well as non-professional and non-technical NCOs.[10] NCOs are divided into six grades and may stay on active duty for 30 or more years up to the age of 55. NCO ranks and lengths of service for each grade are categorized in Table 3.1.

NCOs who are recruited initially from conscript ranks must be graduates from lower middle school (nine years of education) or higher and have received training at or above regimental level or from a military academy or institute during the period of their two-year conscription. They must also have demonstrated technical proficiency and preferably served as a squad leader (having previously received squad leader training), deputy squad leader, or equivalent of squad leader (such as tank commander). In late 2004, the General Staff Department announced the goal for 2005 of recruiting 2,000 company level mess NCOs from conscripts who entered the PLA in 2002 and 2003 and another 9,000 "short-term training" NCOs, who

Table 3.1 NCO categories and ranks

Category	*Rank/grade*	*Term of service in grade*
Junior sergeant (*chuji shiguan*)	NCO Grade 1 or Class 1 NCO (*yiji shiguan*)	3 years
Junior sergeant	NCO Grade 2 or Class 2 NCO (*erji shiguan*)	3 years
Intermediate sergeant (*zhongji shiguan*)	NCO Grade 3 or Class 3 NCO (*sanji shiguan*)	4 years
Intermediate sergeant	NCO Grade 4 or Class 4 NCO (*siji shiguan*)	4 years
Senior sergeant (*gaoji shiguan*)	NCO Grade 5 or Class 5 NCO (*wuji shiguan*)	5 years
Senior sergeant	NCO Grade 6 or Class 6 NCO (*liuji shiguan*)	9 years

were currently serving in units as squad leaders, from NCOs who entered service from 1998 to 2001. Newly selected NCO candidates take an exam in January and those accepted report to PLA schools on 1 March for two or more years of training. Upon graduation, NCOs are obligated to serve for 12 years or longer.[11]

An NCO candidate must submit a formal, written application and be recommended by his grass-roots unit (company), including an evaluation by the party branch within the unit. NCOs Grade 1 and 2 are approved at the regimental or brigade level after review of the candidate's application and physical checkup. At the end of each term of service, NCOs undergo similar processes of volunteering to extend their duty, including recommendations by personnel in the unit. Promotions are approved at division or brigade level for NCO Grades 3 and 4, and at army level for Grades 5 and 6. NCOs are encouraged to continue their professional education either through correspondence courses or attendance at military or civilian institutions of higher learning. NCOs who earn merit citations may be promoted ahead of schedule and given a pay raise.

Regimental and higher headquarters are tasked with developing, recruiting, selecting, and training noncommissioned officers. Battalion commanders assign soldiers to be squad leaders or deputy squad leaders.[12] According to regulations, first priority is assigned to filling NCO slots in emergency and mobile combat units, especially those involved in high-technology operations and at the grass-roots level. In other words, headquarters staffs should not rob tactical units of their NCOs. In general, NCOs are prohibited from serving as acting officers, though exceptions can be made with the approval of higher headquarters, and they are not allowed to transfer to other units. Nor are professional and technical NCOs allowed to change their specialties at will.[13] Units establish methods by which NCOs brief their senior officers of their activities and by which they are evaluated by "the masses," i.e., the soldiers in their unit. NCOs receive annual formal evaluations by their companies

when units prepare their year-end reports. Those who perform below standards may be placed on probation.

NCOs may marry, though they are required to live in the troop barracks in grassroots units (exceptions may be made for NCO families to live in garrison areas when conditions permit). NCO spouses are allowed to visit the barracks once a year, staying at quarters inside the garrison for up to 45 days. Senior NCO families are authorized to live in the barracks when approved. NCOs are also authorized vacation leave according to time in service. Noncommissioned officers are paid according to their rank and duty position and may receive food subsidies, housing allowance, child-care and child-education allowances, one-child parent bonus, and subsidies for professional and hazardous duties. They also receive insurance, free medical care, and a discharge allowance when demobilized.

NCO ranks are distinguished by their shoulder epaulets, which have an increasingly complex insignia of a star, crossed rifles, and a wreath centered on the epaulet, as well as a series of thick and thin chevrons at the edge nearest the shoulder. In contrast, conscripts do not have any insignia in the center of their epaulets.

The number of noncommissioned officers in the force is understood to have increased substantially since 1999, but specific figures are not available to the public. NCOs have also been given greater leadership, training, and maintenance responsibilities including squad leader, deputy squad leader, and repairman. The trend to replace company mess officers with NCOs reflects a new degree of confidence in the modern NCO corps in an area of great importance to troop morale. If all company level mess officers were replaced by noncommissioned officers, this would lead to the reduction of many thousands of officer billets and a similar increase in the rolls of the NCO corps. Such a transformation will likely take several years to implement fully as enough properly trained and experienced NCOs gradually become available. NCOs with tactical experience in field units are also being assigned to teach within the military's system of professional education academies and institutes.[14] According to the *PLA Daily*, "tens of thousands" of officer positions are being converted to NCO billets.[15]

The PLA now expects its noncommissioned officers to be capable of commanding operations, organizing training, and managing subordinates (known as the "Three Abilities," *sanzhong nengli*) and to "speak, do, teach, and perform political work" (known as the "Four Can Do's," *si hui*). To acquire these abilities, NCOs are required to receive training throughout their careers at professional military education schools and colleges, as well as through correspondence courses while at their units. Accordingly, the PLA has established six NCO schools; 28 officer academies and schools have assumed NCO training responsibilities. In the three years from 2000 to 2003, more than 20,000 NCOs received training at these schools.[16] According to the *People's Daily*, the PLA intends to enroll "a record number of 15,000" students for NCO training in "about 35 Chinese military academies" in the fall of 2005.[17]

As the number and quality of NCOs expand, the number of officers can be reduced. Nevertheless, in an army well over a million strong (even after the

completion of the 200,000-man reduction), a large number of personnel must be recruited, educated, trained, and integrated into the officer corps every year.

The officer corps

The PLA officer corps is categorized according to (1) the nature of their duties (*zhiwu xingzhi*, referred to below as "categories"), (2) grade level and military rank (*dengji*), and (3) duty position grade (*zhiwu dengji*, also translated as "post").[18] PLA officers are assigned duties in five categories: military (or operational) officers (*junshi junguan*), political officers (*zhengzhi junguan*), logistics officers (*houqin junguan*), armaments officers (*zhuangbei junguan*), and specialist technical officers (*zhuanye jishu junguan*). These categories correspond to the four systems established by the four General Headquarters Departments (GSD, GPD, GLD, and GAD) with the addition of technical officers directly responsible for equipment maintenance, repair, research, development, and testing. For the most part, officers are inducted into one of these systems, are trained and educated throughout their career in the system, serve in units and headquarters within that system, and do not routinely transfer from one system to another until relatively late in their careers, if at all.[19]

Officers are further categorized into three grade levels and ten ranks (*sandeng shiji*). The lowest grade level consists of company grade or junior officers (*weiguan*) with the ranks of second lieutenant (*shaowei*), first lieutenant (*zhongwei*), and captain (*shangwei*). Company grade officers are recognized by a single thin stripe running lengthwise centered on their epaulets with one, two, or three stars, according to rank, centered on the single stripe.[20] Above company grade are field grade officers (*xiaoguan*) consisting of four ranks: major (*shaoxiao*), lieutenant colonel (*zhongxiao*), colonel (*shangxiao*), and senior colonel (*daxiao*). Field grade officers are identified by two parallel stripes running lengthwise in the middle of their epaulets with one, two, three, or four stars centered between the two stripes. The highest grade level is for general officers (*jiangguan*) with three ranks, major general (*shaojiang*), lieutenant general (*zhongjiang*), and general (*shangjiang*). General officer epaulets have no stripes, but instead have a wreath at the shoulder edge of the epaulet with one, two, or three stars in the center as appropriate. On average, an officer is promoted from one military rank to the next higher rank approximately every four years, except when he or she is assigned to a higher duty position grade.

The officer duty position grade (or post) system is essential for understanding protocol order and seniority among officers. Duty position grades are divided into 15 levels from platoon to chairman of the Central Military Commission. For the most part, two military ranks are associated with each level, as is a mandatory retirement age for officers serving at that level. Retirement ages, or maximum age limits, vary among officers, with officers in combat units required to retire a few years earlier than those in non-combat units. The duty position grade (from platoon to CMC) takes precedence over military rank (lieutenant through general). If an officer

is assigned to a higher duty position grade than his current military rank, the officer will be promoted to the proper military rank for the duty position assigned. (Thus, it is now apparent why PLA regulations first require service members to address each other using their duty position title and not military rank. See Chapter 2 for a discussion of preferred forms of address.) An officer may be promoted to a higher duty position grade after three years of service at the current duty position. Duty position grade levels apply to commanders and political officers; officers serving on staffs will have lower grade levels than principal commanders and commissars at that same level. For example, a staff officer in the operations department of a division is likely to have a grade level equivalent to regiment, deputy regiment, or lower level. The 15 duty position grades, associated military ranks, retirement ages, and equivalent unit organization levels are listed in Table 3.2.[21]

Officers below the regiment level (levels 10–15) are promoted by the political department at army/corps level (group army) headquarters; officers at the regiment to division levels (levels 7–9) are promoted by authority of the political department at Military Region headquarters; and officers above deputy army level (levels 2–6) are promoted by the General Political Department.[22] Officers routinely serve three to four years in a single assignment as commander, political officer, deputy, or staff officer, and change jobs, moving laterally or up the chain, within an army level/group army structure for the majority of their career. Officer transfers outside of a group army usually do not occur until reaching higher level duty positions (above division level) and ranks (senior colonel and above). Commanders and senior officers at Military District and higher levels are rotated periodically, usually every few years, so they do not form "unhealthy" relationships that could lead to corruption or misplaced loyalties (as occurred in previous decades when it was called "mountain-topism" or "warlordism"[23]). Senior officer rotations also broaden their professional experience base through service in different units in different regions of the country.

Technical officers are divided into three duty position categories: senior technical officers (*gaoji zhuanye jishu zhiwu*) with military ranks from lieutenant general to major; intermediate technical officers (*zhongji zhuanye jishu zhiwu*) from senior colonel to captain; and junior technical officers (*chuji zhuanye jishu zhiwu*) from lieutenant colonel to second lieutenant.[24]

Like conscripts and NCOs, PLA officer pay is calculated on a variety of factors. Since taxes in China make distinctions between salaries and what are called subsidies (*butie*), bonuses, and allowances, additional pay is often called a "subsidy, bonus, or allowance" in order to minimize the tax burden on soldiers. All officers receive a base salary, with increases based on duty position grade, military rank, and time in service.[25] Officers also receive housing allowances and have been encouraged to purchase their own houses. Additional money (subsidies) is paid for specialties and living conditions. For example, subsidies for officers stationed in Tibet can almost triple the amount they would receive if assigned to other areas in China.[26]

Table 3.2 PLA officer duty position grades and military ranks

Duty position grade or post (zhiwu dengji)	*Military rank* (junxian)	*Retirement age (Combat unit/ non-combat unit)*	*Equivalent unit level*
1 CMC chairman	None	None	
2 CMC Vice-chairman or member	General		General Headquarters Departments
3 Military region (*dajunqu zhengzhi*)	General/lieutenant general	65	
4 Deputy Military Region (*dajunqu fuzhi*)	Lieutenant general/major general	63	
5 Army/corps (*zhengjunzhi*)	Major general/lieutenant general	55/60	Group Army/Military District
6 Deputy army/corps (*fujunzhi*)	Major general/senior colonel	53/58	
7 Division (*zhengshizhi*)	Senior colonel/major general	50/55	Division
8 Deputy division (*fushizhi*)	Colonel/senior colonel	48	Brigade
9 Regiment (*zhengtuanzhi*)	Colonel/lieutenant colonel	45/50	Regiment/group
10 Deputy regiment (*futuanzhi*)	Lieutenant colonel/major	43/45	
11 Battalion (*zhengyingzhi*)	Major/lieutenant colonel	40	Battalion
12 Deputy battalion (*fuyingzhi*)	Captain/major	38	
13 Company (*zhenglianzhi*)	Captain/first lieutenant	35	Company
14 Deputy company (*fulianzhi*)	First lieutenant/captain	33	
15 Platoon (*paizhi*)	Second lieutenant/first lieutenant	30	Platoon

Sources of new officers

New officers for the PLA come from four sources: graduates from civilian colleges and universities; "national defense students" (*guofang sheng*) from civilian colleges; cadets graduating from PLA military universities (*daxue*), academies, and institutes (*xueyuan*); and personnel selected from the enlisted ranks to become officers. (Military universities are made up of several smaller, related colleges or academies, not necessarily all in the same location.) The last category of "up from the ranks" is a traditional source of leadership for the PLA and reflects the kind of upward mobility, both in the social and political sense, the Chinese army has afforded its personnel. Currently the practice is still in effect, but the number of enlisted soldiers who become officers annually is not known.

New officers who attend civilian schools include both those who decide to join the PLA upon graduation without previously having made a commitment to the army and those who attend civilian institutions on military scholarships having made a commitment to join the PLA after graduation – the latter group is known as "national defense students" and is managed by "Reserve Officers Selection and Training Offices" in the various universities. Students are motivated to join the PLA by a variety of reasons, such as patriotism, financial assistance offered, and guaranteed employment after graduation. In 2002, the PLA was reported to accept more than 10,000 graduates annually from civilian colleges and universities.[27] At that time, the "national defense" scholarship program was only in its second year of operation.

After a short period of experimentation in a limited number of schools in the late 1990s, the PLA officially established the national defense student system in May 2000. The program grants a scholarship of 5,000 yuan annually (with cost of living adjustments) in exchange for a promise to serve in the PLA after graduation. High school and junior college students who apply must pass physical, political, and cultural examinations to be accepted. While in school, national defense students are treated like other college students except they also receive basic military training. Most students study engineering and information technology; some national defense students may pursue advanced degrees immediately after graduation if an agreement is made with the unit to which they will be posted.

By the fall of 2005, the PLA planned for a total of some 35,000 students in all years of schooling to be distributed among about 110 civilian institutions participating in the program, which supports both the PLA and PAP.[28] In 2005, the PLA planned to enroll more than 12,000 national defense students, up from some 8,000 freshmen who entered colleges under the program in 2004.[29] In 2003, more than a thousand national defense students graduated from about 30 institutions in the program and entered the PLA; in 2004, that number rose to 1,800.[30] The rapid expansion of the program indicates that it is fulfilling both the increase in military requirements for college graduates and social needs for upward mobility through access to tuition-assisted college education.

In contrast to the 8,000 national defense students who entered college in 2004, some 20,000 high school graduates entered PLA and PAP military universities,

academies, and institutions in that same year.[31] The 20,000 goal for new military cadets remained constant in 2005.[32] The numbers for national defense students and cadets entering military academies are the result of a joint planning effort conducted by the Ministry of Education and the General Political Department. Applicants for military academies must be under 20 years old, unmarried, and physically and politically qualified. Tuition is provided by the government, and cadets (*xueyuan*) are paid modest sums progressing from 110 yuan in the first year up to 230 yuan in their last year. Cadets are recognized by solid red epaulets with gold stripes on the edges but no stars or chevrons.

Students attending military institutions are at the bottom level of the PLA professional military education pyramid composed of induction or basic level institutes or academies, intermediate level command academies, and senior level universities. The most recent reform and reorganization of the professional military education system was initiated in 1999, resulting in the streamlining and consolidation of what previously numbered about a hundred academies, institutes, and universities. In 2004, two basic level PLA institutions were changed to intermediate level command academies and several basic level colleges and universities were transferred to civilian control. During the summer of 2004, the former First Military Medical University, the Quartermaster University in Changchun, the Jilin Medical College of the Fourth Military Medical University, and the Chengdu Medical Institute of the Third Military Medical University began their transformation from the PLA's GLD supervision to local government control.[33]

Basic-level PLA academies

Approximately 35 four-year schools for personnel initially entering the PLA ground force comprise the largest group of institutions within the PLA professional military education system. Many of these academies and institutes have also developed shorter-length courses for noncommissioned officers as the NCO corps has expanded. "Distance learning" courses are also being set up for officers and NCOs in units to continue their education without having to be transferred to an academy.

Cadets graduating from basic academies' four-year courses receive bachelor's degrees and are commissioned as second lieutenants. These institutes provide both university level education *and* basic military training to prepare cadets for assignments to operational units immediately after graduation. Basic PLA army-related academies or institutes are subordinate to the various systems overseen by the four General Headquarters Departments, the GSD, GPD, GLD, and GAD. These relationships are identified in Table 3.3.

As can be seen, the functional areas of responsibility found within the four General Headquarters Department systems are represented in the schools each department oversees. For example, the GSD-supervised academies educate officers who enter the military system, including infantry, armored, artillery, aviation, engineer, etc. The large number of schools under the GSD accounts for the majority

Table 3.3 Basic level PLA ground force academies or institutes and locations[34]

General Staff Department	*General Political Department*	*General Logistics Department*	*General Armaments Department*
• Armored Force Academy, Bengbu • Army Academy, Dalian • Army Academy, Jinan • Army Academy, Kunming • Army Academy, Nanchang • Army Academy (Mechanized Infantry), Shijiazhuang • Army Academy, Xi'an • Army Academy (Military Medicine), Urumqi • Army Aviation Corps Academy, Beijing • Artillery Academy, Hefei (with Nanjing Branch) • Artillery Academy, Shenyang • Communications Academy, Chongqing • Communications Academy, Xi'an • Electronic Engineering Academy, Hefei • Foreign Languages Academy, Luoyang • Information Engineering University, Zhengzhou (with four campuses) • International Relations Academy, Nanjing • Physical Culture (Sports) Academy, Guangzhou • Science and Engineering Technology University, Nanjing (with Engineer Corps School)	• Art Academy (or College) • Political Academy, Nanjing (with Shanghai branch) • Political Academy, Xi'an	• Logistics Engineering Academy, Chongqing • Military Communications (Transportation) Academy, Tianjin • Vehicle Management Academy, Bengbu • Military Economics Academy, Hubei • Military Medical Sciences Academy, Beijing • Second Military Medical University, Shanghai • Third Military Medical University, Chongqing • Fourth Military Medical University, Xi'an • Beijing Military Medical Academy, Fengtai, Beijing	• Armored Force Engineering Academy, Changxindian, Beijing • Armored Force Technical Academy, Changchun • Ordnance Engineering Academy, Shijiazhuang

of junior officers needed to enter the force each year as platoon leaders and low level staff officers. The GLD functions of transportation, economics, and medical support are readily apparent in the academies within that system, as are the political specialization of the GPD schools and the technical specialties of the GAD academies. Each academy or institute graduates several hundred cadets each year, some of whom may stay on for graduate education or return at a later date in their service to pursue advanced degrees.

The seven "army academies" indicate the prevalence of infantry officers in the force. Some infantry cadets also receive several months of specialized combined arms training at Military Region training bases in preparation for their assignment to mechanized units. In February 2005, the former Army Academy in Guilin, which up to that time had been an eighth army academy, was transformed into Guangzhou Military Region Integrated (or Comprehensive) Training Base (*Guangzhou junqu zonghe xunlian jidi*). The former academy merged with a communications training group to form the new training facility.[35] In addition to the Army Academy in Xi'an, the Lanzhou Military Region has a second army academy in Urumqi specializing in military medicine. The recent emphasis on building Special Operations Forces has resulted in the establishment of a unique course within the Physical Culture Academy in Guangzhou that includes anti-terrorist, peacekeeping, and information technology operations.[36] The Nanjing International Relations Academy also has a reconnaissance and SOF leaders course in addition to its role in training future Chinese military attachés.

Many PLA institutions at all levels offer advanced degrees. As of 2002, 36 institutes within the professional military education system offered doctorates, and 55 were authorized to grant master's degrees. Additionally, the PLA sends officers to civilian universities, both in China and in foreign countries, to receive advanced degrees. In 2003, about 3,000 officers studying for advanced degrees were enrolled in some 29 civilian institutions in China. The "Program of Strengthening the Army by having More High-Caliber Talents" was started in 2001, with participating schools setting aside about 60 billets each for PLA students, allowing for nearly 1,800 officers to be enrolled annually. The program is funded by the Ministry of Education, not the PLA.[37]

According to the 2004 Defense White Paper, induction level academies "offer basic courses in joint operations."[38] In order to further promote "jointness," some academies have begun exchange programs with academies from other services. Such programs provide students with an opportunity to expand their professional horizons by participating in another service's training and having extended personal contact with officers outside of their normal duty category. It is unclear how extensive this program has become, but is another example of the PLA's intention to better prepare its officers for modern combat.

Intermediate level academies

A much smaller number of intermediate level academies, referred to as "command academies or institutes" (*zhihui xueyuan*), train serving mid-level officers from battalion to division level, including commanders, political officers, and staff officers. Command academies "offer courses on service campaigns and combined operations."[39] In addition to field grade students, many, if not all, intermediate level academies also educate cadets out of high school before they become junior officers. Furthermore, command academies provide postgraduate education in which graduate students often research specific operational and equipment-related subjects directly applicable to their field experience. The Nanjing Army Command Academy also has a Foreign Training Department which is attended by officers from many different countries.[40]

Ground force command academies include the:

- Air Defense Command Academy in Zhengzhou
- Army Command Academy in Nanjing
- Army Command Academy in Shijiazhuang
- Armament Command and Technology Academy, Huairou, Beijing
- Artillery Command Academy in Xuanhua
- Artillery Command Academy in Langfang
- Chemical Defense Command and Engineering Academy, Yangfang, Beijing
- Communications Command Academy in Wuhan
- Engineer Command Academy in Xuzhou
- Logistics Command Academy in Beijing

In June 2004, the former Air Defense Force Academy at Zhengzhou was transformed into a command academy whose objective is to train both "primary and intermediate commanders, staff, and technicians in the air defense force."[41] A month later in July, the former Army Guided Missile Academy at Langfang was reformed to become the second Artillery Command Academy.[42] This new command academy will probably focus on training commanders and staff officers from company to brigade level for ground force missile units, including anti-tank guided missile, surface-to-air missile, and surface-to-surface missile units.

Senior level universities

The top of the PLA professional military education pyramid is formed by the National Defense University and National Defense Science and Technology University, both of which are under CMC direction. These two schools offer "courses on strategic studies and joint operations."[43] The NDU student body consists of senior PLA commanders, staff officers, and researchers, and senior civilian officials from government organizations above provincial level. Courses include the three-month "National Defense Course" (*guofang yanjiu xi*) for officers from Military Region headquarters, service headquarters, and other government ministries (this

course is sometimes referred to as the "PLA Capstone Course"); senior officer's refresher course; higher command course (one year in length); overseas (foreign) student course (conducted at a separate campus from the main campus in northwest Beijing); and postgraduate study. In recent years, NDU has emphasized master's research in military science for leaders from PLA combat units. According to the *PLA Daily*, the NDU has awarded a total of more than 1,200 master's and doctorate degrees.[44] In 2004, the foreign student course was upgraded into a special department, the "Defense Affairs Institute," for training senior foreign officers.[45] Most of the NDU faculty are professional educators and researchers with little recent tactical experience. In 2003, the NDU received its first batch of 13 recent division, brigade, and regiment commanders from all services to provide their expertise to the teaching staff.[46]

National Defense Science and Technology University students are senior scientists, engineers, and commanders of technical units who attend senior level classes, as well as undergraduates just out of high school.[47] In 2003, the NUDT had 12,390 students, including 4,243 graduate students.[48] Subjects taught include optical engineering, information technology and communications, control science, computer science and technology, management science, aerodynamic optics, space information technology, information security, and space control engineering.[49] While the NDU focuses more on senior officers from the military, political, and logistics systems, NUDT students are mostly from (or about to enter) the armaments system or are technicians.

In the year 2000, the NUDT was the leading institution to implement a "4 + 1" pattern for training new officers. In that year, 400 "joint training" students were recruited into the NUDT. The new system includes four years at the university, where students receive a bachelor's degree, followed by a fifth year in "post" training where they receive instruction on specific military tasks. Disciplines offered in the first four years of education include science, technology, military, management, and philosophy courses. In the fifth year, students are transferred to one of the command academies to acquire "comprehensive" abilities. In 2004, the first group of students completed the bachelor's portion of the program. With a total of 1,800 students in the program, the NUDT has the largest enrollment of "4 + 1" students in the PLA education system.[50] Presumably, the last year at the command academy will expose the new technical officers to the rigors and intricacies of operational planning, tactics, and the requirements of field operations. With this introduction to operational matters, NUDT graduates can better support the needs of the troops in their future assignments, which most likely will focus on the research, development, testing, and maintenance of equipment.

Uniformed PLA civilians

Many instructors and research staff within the professional military education system are PLA civilians – uniformed members of the active duty PLA, but who do not have military rank. (In June 2005, regulations were issued to allow the PLA

Figure 3.3 PLA civilian collar insignia and epaulet

to hire civilian contract workers, who will also wear uniforms but *will not* be counted on active duty rosters.[51]) PLA civilians are categorized as specialist technical cadre, non-specialist technical cadre, and office or administrative personnel. Like PLA officers and NCOs they also have a system of numbered grades indicating their seniority. *Wenzhi ganbu* (uniformed PLA civilians) are identified by special collar insignia differing from the red star *bayi* or technical personnel insignia worn by the ground forces, as well as by their shoulder epaulets which have a single, large, red star *bayi* mounted in the center.

PLA civilians are found in a wide variety of jobs in research, engineering, medical, education, publishing, archives, cultural, and sports units. According to work requirements, PLA civilians may be transformed into officers.[52] Likewise, some PLA officers who have reached retirement age may become PLA civilians and stay on to perform similar functions as when they were commissioned officers. The number of PLA civilians on active duty has not been made public, but may have amounted to some 20 percent of the active duty force before the reductions that began in 1997.[53] This percentage is likely to have decreased as headquarters and administrative staffs were the targets of both the 500,000 and 200,000 man cutbacks.

The ratio of conscripts to NCOs to officers and PLA civilians on active duty has not been released publicly. The numbers and percentages are probably changing as the PLA continues to reduce its size and reform its organizational structure. A best guess at these percentages for the entire PLA may be: 30 percent conscripts, 20 percent NCOs, 33 percent officers, and 17 percent PLA civilians, give or take a few percentage points either way in each category. The ratios of enlisted to officers will vary among the services, with the army having more conscripts than the more technically-oriented air force, navy, and Second Artillery. Ratios will also differ among headquarters units, with more officers and senior NCOs assigned at higher levels. Nevertheless, all units and headquarters that deploy to the field will require a certain number of conscripts to perform physical tasks, like setting up tents, pulling electrical cables, performing guard duties, manning communications, feeding the troops, and refueling vehicles. Some functions formerly performed by soldiers are now being contracted out to civilian enterprises ("out-sourcing") as part of the reform of the PLA's logistics system, thus allowing for personnel billets to be reassigned to other functions or eliminated from the overall force structure.

PLA reserve unit personnel

One final element in answering the question "Who is the PLA?" concerns who makes up PLA reserve units. All reserve units have a small contingent of active duty personnel to serve as the backbone (*gugan*). The majority of reserve unit personnel, however, are civilians, only some of whom have been demobilized from the army. Other civilians with no military experience are recruited because they possess skills needed by the reserve units to perform their missions (this is especially true for more technical units). The rank structure for reserve personnel is similar to active forces, but the highest rank a reserve officer may attain is major general. Reservists wear uniforms similar to active PLA personnel and can be recognized by an elongated arm patch with a red star bayi and a large yellow "Y" for *yubeiyi*. The reservist "Y" insignia may also appear on the epaulets of some uniforms.

As the number of active duty personnel has been cut since 1997, the number of reserve units has increased moderately. However, the growth in the size of the reserve force has not been as great as might have been expected. It is a fact that not all demobilized military personnel enter into reserve service, nor are all deactivated units transformed into reserve units. Instead, like the active force, reserve units are seeking to improve the quality of their personnel, enhance training, and shorten the time it takes for them to assemble and deploy.

PLA personnel are assigned to headquarters and operational units stationed in all parts of China. The organizational structure and deployment of PLA ground force units provide insight into the expected missions for the military and potential enemies facing China in the twenty-first century.