China's Navy 2007

Office of Naval Intelligence

China's Navy 2007

Office of Naval Intelligence

The PLA Navy is responsible for safeguarding China's maritime security and maintaining the sovereignty of its territorial seas along with its maritime rights and interests. Preparation for the maritime battlefield has been intensified and improved while the integrated combat capabilities are being enhanced to conduct offshore campaigns. The capability of nuclear counter-attacks has also been enhanced. In accordance with the principle of smaller but more efficient troops, the PLA Navy has compressed the chain of command and reorganized the combat forces in a more scientific way while giving prominence to building maritime combat forces, especially amphibious combat forces. The PLA Navy has also sped up the process of updating its weaponry and equipment with priority given to the development of new combat ships as well as various kinds of special-purpose aircraft and relevant equipment. At the same time, the weaponry is increasingly informationalized and long-range precision strike capability raised.

China's 2004 Defense White Paper

The Navy aims at gradual extension of the strategic depth for offshore defensive operations and enhancing its capabilities in integrated maritime operations and nuclear counterattacks. The Navy is working to build itself into a modern maritime force of operation consisting of combined arms with both nuclear and conventional means of operations. Taking informationization as the goal and strategic focus in its modernization drive, the Navy gives high priority to the development of maritime information systems, and new-generation weaponry and equipment. Efforts are being made to improve maritime battlefield capabilities, with emphasis on the construction of relevant facilities for new equipment and the development of combat support capabilities. The Navy is endeavoring to build mobile maritime troops capable of conducting operations under conditions of informationization, and strengthen its overall capabilities of operations in coastal waters, joint operations and integrated maritime support. Efforts are being made to improve and reform training programs and methods to intensify training in joint integrated maritime operations.

China's 2006 Defense White Paper

Contents

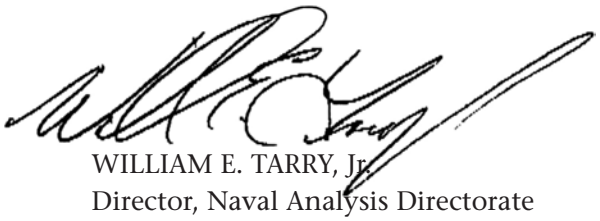
Preface

Over the past decade, the Chinese Navy has embarked on a modernization program with the goal of being the preeminent regional power in East Asia. By acquiring some of the world's most impressive naval technologies from abroad while simultaneously building advanced indigenous submarines, combatants, and naval aircraft, China is positioning itself to play a growing role in regional and trans-regional affairs.

This enhanced naval power sought by Beijing is meant to answer global changes in the nature of warfare and domestic concerns about continued economic prosperity. Responding to global trends, this modernization program is meant to address what China terms "the generation gap in military technology" brought on by the revolution in military affairs (RMA) and the RMA's associated application of information and technology to the means of warfare. As such, this modernization effort is driven by China's strategic requirement to maintain the effectiveness of its military against a backdrop of global changes in military weaponry and doctrine. Domestically, this modernization effort aims to ensure access to trade routes and economic resources throughout the region. This drive to build a military component to protect the means of economic development is one of the most prevalent historical reasons for building a blue water naval capability.

China's Navy is in a state of transition as it strives to fill these new goals and objectives. Just as China's sailors are learning to operate this new equipment, China's leaders are learning the means of employing a navy with modern capabilities to support national objectives. During this period of learning, many opportunities will be presented to China as well other parties in the region. In order to better understand the world's fastest growing maritime power and its means of naval action and thereby foster a better understanding of China's Navy, the Office of Naval Intelligence has prepared this study with the goal of educating and informing those who may be called upon to aid during this time of greater contact between the United States Navy and the People's Liberation Army Navy (PLAN).

The first five chapters provide detailed background into the history, doctrine, leadership, structure, and politics of the PLAN. The next five chapters provide information on the operating forces of the PLAN – submarines, surface ships, naval aviation, coastal defense forces, and marines. The following section deals with the people who make up the PLAN, with chapters on manpower, the officer corps, the enlisted force, training, and the quality of life of PLAN personnel. Finally, the last two chapters regarding the PLAN's foreign relations and the development process for major weapon systems and equipment conclude the handbook.



WILLIAM E. TARRY, Jr.
Director, Naval Analysis Directorate
Office of Naval Intelligence

Acronyms and Abbreviations

AAA	Antiaircraft artillery
AAM	Air-to-air missile
ADM	Admiral
AFVAB	Armed Forces Vocational Aptitude Battery
AMS	Academy of Military Science
ASCM	Antiship cruise missile
ASM	Antiship missile
ASW	Antisubmarine warfare
CAPT	Captain
CCP	Chinese Communist Party
CDR	Commander
CMC	Central Military Commission
CO	Commanding officer
COL	Colonel
COSTIND	Commission for Science Technology and Industry for National Defense
CPT	Captain
CPX	Command post exercise
CSSC	China State Shipbuilding Corp.
CYL	Communist Youth League
EEZ	Exclusive economic zone
ELINT	Electronic intelligence
ENS	Ensign
ESF	East Sea Fleet
FTX	Field training exercise
GAD	General Armament Department
GED	General Equipment Department
GLD	General Logistics Department
GPD	General Political Department
GPS	Global positioning system
GSD	General Staff Department
ICBM	Intercontinental ballistic missile
IFR	Instrument flight rules
IOC	Initial Operational Capability
kg	Kilograms
km	Kilometers
km/h	Kilometers per hour
kt	Knots
LCDR	Lieutenant commander
LT	Lieutenant
LTC	Lieutenant colonel
LTJG	Lieutenant junior grade
m	Meters
MAJ	Major
MR	Military Region
MRAF	Military Region Air Force
MUCD	Military unit cover designator
MWR	Morale, welfare, and recreation
NCO	Noncommissioned officer
NDU	National Defense University
nm	Nautical miles
NPC	National People's Congress
NRC	Navy Equipment Proving Research Center
NRI	Naval Research Institute
NSF	North Sea Fleet
OJT	On-the-job training
OMTE	Outline of Military Training and Evaluation (*Dagang*)
PAFD	People's Armed Forces Department
PAP	People's Armed Police
PC	Political commissar
PLA	People's Liberation Army
PLAAF	PLA Air Force
PLAN	PLA Navy
PME	Professional military education
PRC	People's Republic of China
R&D	Research and development
RADM	Rear Admiral
RMB	Renminbi
ROTC	Reserve Officer Training Corps
SAM	Surface-to-air missile
SCAPT	Senior captain
SCOL	Senior colonel
SLOC	Sea lines of communication
SSBN	Ballistic missile submarine
SSF	South Sea Fleet
SSM	Surface-to-surface missile
SSN	Nuclear powered attack submarine
TUD	True unit designator
UAV	Unmanned aerial vehicle
US	United States
USD	US dollar
USG	US government
USN	US Navy
USSR	Union of Soviet Socialist Republics
VADM	Vice Admiral
VIP	Very important person
WPNS	Western Pacific Naval Symposium
XO	Executive officer

Chapter 1
Organizational Structure

This chapter addresses the People's Liberation Army Navy's (PLAN's) organizational structure, to include the use of unit designators, the PLA's and PLAN's grade and rank structure, and the leadership, administrative, and operational organizational structure.

Brief History

The PLAN considers its founding day as 23 April 1949, when the East China Military Region Navy was created. In January 1950, the Chinese Communist Party (CCP) Central Committee's Military Commission, commonly known as the Central Military Commission (CMC), appointed an Army general, Xiao Jinguang, as the first PLAN commander. On 14 April 1950, PLAN Headquarters was officially established in Beijing.

Today, the PLAN is composed of five branches—submarine, surface forces, naval aviation, coastal defense, and marine corps. It also has 10 subordinate academies and schools, as well as various research institutes, specialized support forces, and a political, logistics, and maintenance structure. These forces are organized into three fleets—North Sea Fleet (NSF), East Sea Fleet (ESF), and South Sea Fleet (SSF).

The PLAN's primary missions are to guard against enemy invasion from the sea, defend the state's sovereignty over its territorial waters, and safeguard the state's maritime rights and interests.

Unit Designators

Every PLAN platoon and above unit has a true unit designator or TUD (部队番号), such as the 62nd Submarine *Zhidui* or the Qingdao Support Base. However, the PLAN rarely provides these designators to the public in speeches or newspaper articles, on letterhead, or on Internet sites. Instead, the PLAN identifies them as a "certain" (某) unit, such as a "certain North Sea Fleet submarine *zhidui*." In some cases, the PLAN identifies regiment level and above units with what it calls a "unit designator code" (部队代号). Outside China, this is known as a Military Unit Cover Designator, or MUCD.

The PLA's Grade and Rank Structure

The PLA is organized into an administrative structure and an operational structure. Both of these are based on the PLA's officer personnel structure, which is composed of 15 grades and 10 ranks. Therefore, a basic knowledge of the PLA's officer grade and rank structure is essential to understanding the organizational structure.

Since the Red Army was founded in 1927, the PLA has always had a grade system for its officers, who are usually referred to as cadre. The first rank system was not introduced until 1955. Changes in the grade and rank system are shown below:

- 1927: A simple grade structure was introduced
- 1952: A revised structure of 21 grades was implemented

- 1955: A system with 20 grades and 15 ranks was introduced
- 1965: At the beginning of the Cultural Revolution, the rank system was abolished and officers used the government's National Administrative Cadre system of 27 grades
- 1972: Four grades were abolished, leaving 23 grades
- 1979: 23 grades were reduced to 15
- 1988: New rank system with 10 ranks was implemented

Today, all PLA officers and organizations are assigned one of these 15 grades. Figure 1 shows the current system with 10 ranks and 15 grades as it applies to the PLAN.

Understanding the Two Systems

In the US military system, grades and ranks are synonymous. US military officers are assigned one of 10 ranks and each rank has an equal grade of O-1 to O-10 (i.e., a US Navy commander is an O-5).

Figure 1—PLAN Officer Grades, Retirement Ages, and Ranks
Each Grade has 2 Ranks (Primary and Secondary)

Grade #	Grade	Retirement Age	PLAN Rank (USN Equivalent Grade)	
			Primary	Secondary
1	CMC Chairman (军委主席) Vice Chairman (军委副主席)	N/A	None ADM (O-10)	None
2	CMC Member (军委委员)	N/A	ADM (O-10)	None
3	Military Region Leader (大区正职)	65	ADM (O-10)	VADM (O-9)
4	Military Region Deputy Leader (大区副职)	63	VADM (O-9)	RADM (O-8)
5	Jun Leader (正军)*	55	RADM (O-8)	VADM (O-9)
6	Jun Deputy Leader (副军)		RADM (O-8)	SCAPT (O-7)
7	Division Leader (正师)	50	SCAPT (O-7)	RADM (O-8)
8	Division Deputy Leader (副师) (Brigade Leader)		CAPT (O-6)	SCAPT (O-7)
9	Regiment Leader (正团)	45	CAPT (O-6)	CDR (O-5)
10	Regiment Deputy Leader (副团)		CDR (O-5)	CAPT (O-6)
11	Battalion Leader (正营)	40	LCDR (O-4)	CDR (O-5)
12	Battalion Deputy Leader (副营)		LT (O-3)	LCDR (O-4)
13	Company Leader (正连)	35	LT (O-3)	LTJG (O-2)
14	Company Deputy Leader (副连)		LTJG (O-2)	ENS (O-1)
15	Platoon Leader (正排)	30	ENS (O-1)	LTJG (O-2)

* The Chinese term *jun* is usually translated as "army" or "corps," but the *Handbook* will use *jun*.

The PLA also has 10 officer ranks, but it has 15 officer grades, which are identified by the type of organization and whether it is a leader or deputy leader position (i.e., division leader or division deputy leader). Each named grade has an associated number. However, when referring to officers or organizations, the PLA uses the name, not the number. For example, a division leader is not called a Grade-7 officer.

Each grade has both a primary rank and a secondary rank. For example, a fleet commander can have the primary rank of vice admiral or the secondary rank of rear admiral. Furthermore, as shown in Figure 2, each rank can have from one to four grades associated with it. For example, a PLA Navy commander can be assigned the grade of regiment leader, regiment deputy leader, or battalion leader.

Promotions

Within the PLA, the grade, not the rank, has always reflected authority and responsibility across service, branch, and organizational lines. Thus, although rank is a key indicator of position within the hierarchy of foreign militaries, grade is the key indicator within the PLA.

One must make a clear distinction about what constitutes a "promotion" in the PLA. Within the PLA, promotions in grade are what count. Moving forward from one grade to the next

Figure 2—PLA Ranks and Grade Relationship
Each Rank Has 1-4 Grades Associated With It

Rank (Army/Navy)	Grade	Grade	Grade	Grade
GEN/ADM	CMC Vice Chairman	CMC Member	MR Leader	
LTG/VADM	MR Leader	MR Deputy Leader	Jun Leader	
MG/RADM	MR Deputy Leader	Jun Leader	Jun Deputy Leader	Division Leader
SCOL/SCAPT	Jun Deputy Leader	Division Leader	Division Deputy Leader (Brigade Leader)	
COL/CAPT	Division Deputy Leader (Brigade Leader)	Regiment Leader	Regiment Deputy Leader	
LTC/CDR	Regiment Leader	Regiment Deputy Leader	Battalion Leader	
MAJ/LCDR	Battalion Leader	Battalion Deputy Leader		
CPT/LT	Battalion Deputy Leader	Company Leader	Company Deputy Leader	
1LT/LTJG	Company Leader	Company Deputy Leader	Platoon Leader	
2LT/ENS	Platoon Leader			

is a promotion. For example, from a regiment leader to a division deputy leader is a grade promotion. Moving from one position to another in the same grade is a lateral transfer. For example, moving from the chief of staff to be a deputy commander in PLAN Headquarters is not a grade promotion, because both of these positions are MR deputy leaders.

Furthermore, one should not equate a promotion in rank to a promotion in grade. For example, the commander and political officer at every level in the PLA's chain of command hold the same grade, but they often do not have the same rank. The reason for this is that officers must serve in a particular grade for a set period of time before they are promoted in rank.

PLA regulations specify the time-in-rank and time-in-grade requirements for officers before they are promoted to the next rank and grade. For all ranks except second lieutenant to first lieutenant, the time-in-rank requirement is four years. However, the time-in-grade requirement is three years. Furthermore, in the PLA, time in service begins the first day as a cadet in an academy, not the day of commissioning upon graduation. As shown in Figure 3, the promotion cycle for grades and ranks is not a 1:1 ratio.

Military Pay Criteria and Retirement

Military pay is calculated on the basis of time in rank, time in grade, and time in service. Unlike the US military, the PLA includes the three or four years served as an academy cadet in their total time in service. Finally, regulations regarding retirement ages are based on grade, not rank.

Key Organizational Terminology

For purposes of the *Handbook*, three specific terms relating to the PLAN's organizational structure—*zhidui*, *dadui*, *zhongdui*—will be noted in Chinese rather than English as follows:

- *Zhidui* (支队): A PLAN *zhidui* is a division leader-grade vessel headquarters organization, which various dictionaries translate

Figure 3—Rank and Grade Promotion Cycle

Rank	Time in Rank	Grade	Time in Grade
Cadet	3-4 years	Cadet	4 years
2LT/ENS	2 years	Platoon Leader	3 years
1LT/LTJG	4 years	Company Deputy Leader	3 years
CPT/LT	4 years	Company Leader	3 years
MAJ/LCDR	4 years	Battalion Deputy Leader	3 years
LTC/CDR	4 years	Battalion Leader	3 years
COL/CAPT	4 years	Minimum of 3 years for promotion to each next higher grade	

as a "flotilla" or "division." The PLAN has seven types of *zhidui:*

— Submarine
— Destroyer
— Frigate
— Speedboat
— Combat support vessel
— Submarine chaser and frigate
— Landing ship

- Some *zhidui* are combined-vessel *zhidui* that are composed of several types of vessels. For example, the PLAN has destroyer and frigate *zhidui*, nuclear and conventional submarine *zhidui*, and speedboat *zhidui* that consist of missile boats, minesweeper boats, submarine chasers, and torpedo boats. Vessel *zhidui* normally have a set number of support vessels.
- *Dadui* (大队): A PLAN *dadui* can be either a regiment-leader or battalion-leader grade organization, depending on which branch and type of unit is being discussed. When applied to naval vessels, a *dadui* is a regiment leader-grade vessel headquarters organization and is most often translated as a "squadron." Training *dadui* are also regiment leader-grade organizations. For PLAN aviation, coastal defense, Marine Corps, and maintenance troops, a *dadui* is a battalion leader-grade headquarters organization, which is sometimes translated as a "group."
- *Zhongdui* (中队): This level of organization for vessels is generally not discussed in English-language articles about the PLAN. For PLAN vessels and training organizations, this is a battalion leader-grade organization. For PLAN aviation, coastal defense, Marine Corps, and maintenance troops, this is a company leader-grade organization.

The PLAN has the following five specific terms for its vessels, ships, and boats, each with a specific meaning and organizational grade level. To avoid confusion, the *Handbook* uses the generic term "vessels." Within the PLAN, each type of vessel is assigned one of the PLA's 15 grades. The vessel terms and their grades are shown below:

- *Jianting* (舰艇) and *jianchuan* (舰船) are generic terms that refer to boats, ships, and vessels.
- *Chuan* (船) is best translated as a "ship." Within the PLAN, a *chuan* is a non-combat support vessel that can be of any size or type. Therefore, there is no set grade level for a *chuan*. In fact, the commander for some *chuan* are noncommissioned officers (NCOs).
- *Jian* (舰) is best translated as a "ship." Within the PLAN, a *jian* is a combat vessel that is more than 400 tons. A *jian* is a regiment leader-grade organization.
- *Ting* (艇) is best translated as a "boat." Within the PLAN, a *ting* is a vessel that is less than 400 tons. Certain types of *ting* are now more than 400 tons, especially after they have been upgraded with heavier weapon systems, but the designation has remained based on historical precedence. The highest grade for a *ting* is battalion leader-grade, but some *ting* can be lower than battalion leader-grade. For example, a 125-ton escort boat (护卫艇) is a company leader-grade organization; a guided-missile boat (导弹艇) is a company deputy leader-grade or platoon leader-grade organization; and a landing craft (登陆艇), which has an NCO as the commander, does not have a grade.

In the PLAN, a submarine (潜艇) is classified as a boat. However, nuclear submarines are considered a division deputy-grade organization, and conventional-powered submarines are considered regiment deputy-leader grade organizations.

Figure 4 shows the grade structure for the three types of vessel headquarters and vessel types that are subordinate to the headquarters. For example, destroyers, which are a regiment leader-grade organization, are subordinate to a *zhidui* headquarters, and frigates, which are a regiment deputy leader-grade organization, are subordinate to a *dadui* headquarters.

Overall Structure

The PLAN's overall structure can be viewed from four perspectives:

- Tiered structure
- Administrative structure
- Leadership and command structure
- Logistics and technical support structure

Tiered Structure

The PLAN's tiered structure consists of the following five levels:

- PLAN Headquarters is an MR leader-grade organization. Until 2004, both the PLAN commander and political commissar were grade-3 officers. This issue became somewhat blurred in mid-2004, when the PLAN commander was elevated as a member of the Military Commission, which is a grade-2 billet. Even though the commander was elevated to a grade-2 officer, the PLAN as an organization remained a grade-3 organization. Furthermore, the commander and political commissar are still considered co-equals within the PLAN, even though the political commissar is still a grade-3 officer.

Figure 4—Grade Structure for Vessel Headquarters and Vessel Types

Grade	Headquarters	Vessel Types
(3) MR Leader	PLAN HQ	
(4) MR Deputy Leader	Fleet HQ	
(6) Jun Deputy Leader	Support Bases	
(7) Division Leader	Zhidui Garrisons	
(8) Division Deputy Leader (Brigade Leader)		Nuclear-powered submarines
(9) Regiment Leader	Dadui	Destroyers, conventional-powered submarines
(10) Regiment Deputy Leader		Frigates, service ships, conventional-powered submarines
(11) Battalion Leader	Zhongdui	Escort boats, submarine chasers, minesweeper ships, service ships, landing ships (3-digit hull numbers)
(13) Company Leader		Escort boats, minesweeper boats, service ships, landing craft, missile speedboats, missile boats (4-digit hull numbers)

- The PLAN has three Fleet Headquarters (North Sea, East Sea, and South Sea), each of which is an MR deputy leader-grade organization. Therefore, since the late 1980s, each fleet commander has been concurrently assigned as an MR deputy commander.
- Each fleet has several subordinate bases, which are *jun* deputy leader-grade organizations, and can be categorized into three types: support bases, test bases, and training bases. Fleet aviation is at the same level.
  - Of the total number of bases, the following eight are considered major support bases:
    - North Sea Fleet (NSF)
      - Qingdao
      - Lushun
    - East Sea Fleet (ESF)
      - Zhoushan
      - Fujian
      - Shanghai
    - South Sea Fleet (SSF)
      - Guangzhou
      - Yulin
      - Zhanjiang
  - The PLAN also has other specialized bases as follows:
    - Huludao is a missile test, research and development (R&D), and training base
    - Jianggezhuang is for the PLAN's nuclear powered submarines only
    - A third type of base, which may or may not be co-located with a support base, is a training base or training center
- Some support bases have subordinate division leader-grade garrisons (水警区), which are responsible primarily for coastal patrol, coastal defense, and protecting fishing boats. The PLAN has six subordinate garrisons:
  - NSF: Dalian and Weihai
  - ESF: Xiamen
  - SSF: Shantou, Beihai, and Xisha (Paracel Islands)
- Vessel *zhidui*, which are usually subordinate to a support base, and *dadui*, which can be subordinate to a support base or a *zhidui*.

Administrative Structure

The PLAN's administrative structure at each level throughout the chain-of-command consists of four first-level departments: Headquarters, Political, Logistics, and Equipment.

Each first-level department has several second-level departments that have administrative and/or functional responsibilities for subordinate organizations within the headquarters and throughout the PLAN. It is not always clear what the differences between the two responsibilities are, but some administrative responsibilities include housing, food, and transportation support, while functional responsibilities include plans and budgeting.

PLAN Headquarters

When the PLAN Headquarters was established in Beijing in 1949, it had three first-level departments—Headquarters, Political, and Logistics. In April 1952, Naval Aviation was added as a fourth first-level department. During the 1950s, the PLAN also formed various other first-level departments, but they were eventually reorganized, abolished, or merged with other departments.

During the 1960s to 1990s, the PLAN established different departments to manage vessel equipment and technical issues. Following the establishment of the PLA's General Equipment

Department (GED) in 1998, the PLAN merged these departments into the Equipment Department.[1]

Since then, the PLAN's administrative organization has included four first-level departments—Headquarters, Political, Logistics, and Equipment. The directors are the same grade as the PLAN deputy commanders and the three fleet commanders.

PLAN Headquarters Department

The PLAN Headquarters Department is the military command organization for the Navy's leaders. The director is the Chief of Staff. The Headquarters Department consists of several functional departments and military studies research organizations. The primary functional departments, listed in alphabetical order, are as follows:

- Communications
- Intelligence
- Military Affairs
- Operations
- Training

PLAN Political Department

The Political Department is the leading organization responsible for political work. It consists of several functional departments, plus the military court and procuratorate (i.e., the Inspector General). The primary functional departments are as follows:

- Cadre (Officer)
- Discipline Inspection
- Organization
- Propaganda
- Security

PLAN Logistics Department

In 1985, the PLAN changed the existing four-tiered logistics supply structure—PLAN Headquarters, Fleet Headquarters, support base, and units—to a three-tiered structure—PLAN Headquarters, support base, and units. As such, the three fleet headquarters no longer have a logistics administrative structure.

The Logistics Department is the leading organization responsible for managing logistics support. Because it is the largest component of the PLAN, the Logistics Department is organized more like a command than a department. As such, it has a director and a political commissar. The primary second-level functional departments are as follows:

- Audit
- Engineering Design
- Finance
- Health
- Military Transportation
- Port, Airfield, and Barracks Management
- Quartermaster, Materials, and Fuel

The PLAN has some second-level departments within the logistics organizational structure that are unique to the Navy. The first organization is the Engineering Command Department, and the second is the Vessel On-Shore Service Department. The Engineering Command Department is responsible for construction of all naval facilities, including airfields, ports, air defense, and buildings. The Vessel On-Shore Service Departments are responsible for lo-

[1] The General Equipment Department is sometimes noted as the General Armament Department (GAD) and the services' Equipment Department is sometimes referred to as the Armament Department.

gistics and technical support for naval vessel units while they are in port.

The logistics support system is primarily responsible for supporting personnel living conditions, port and shore base facilities construction, plus supply and technical support for all types of munitions (including vessel gun shells, missiles, torpedoes, and mines) and land-based common-use weapons and equipment. Although the PLAN supplies units with special-use materials, the military regions supply them with common-use materials.

PLAN Equipment Department

The Equipment Department is primarily responsible for technical support for all PLAN equipment and weapon systems from concept development to retirement. As such, the Equipment Department is responsible for the PLAN's special-use equipment throughout the following seven steps:

- Plans and theoretical evaluation
- Technical design
- Construction design
- Inspection during construction
- Test and evaluation
- Delivery of the vessel to the unit
- Lifetime repair support

The Equipment Department has subordinate factories, repair facilities, depots, warehouses, and purchasing stations. Because it is one of the largest components of the PLAN, the Equipment Department is organized more like a command than a department. As such, it has a director and a political commissar. The primary second-level functional departments are as follows:

- Armament
- Comprehensive Plans
- Defense Industry Regional Representative Bureaus
- Electronics
- Equipment
- Inspection and Management
- Vessel Technology

Leadership and Command Structure

The PLAN has a four-tiered on-shore vertical and lateral leadership and command structure. Within the PLAN's vertical structure:

- PLAN Headquarters is the highest tier, is the service's supreme command staff, and is the CMC's and Four General Departments' functional department that implements leadership over PLAN units.
- The three fleet headquarters make up the second tier. They are the campaign component and constitute the leadership and command staff for a certain strategic direction. Furthermore, the three fleet headquarters receive leadership not only from PLAN Headquarters but also from their respective military region headquarters.
- Support bases make up the third tier and are primarily responsible for the comprehensive support of all naval forces within their area of responsibility.
- Garrisons and *zhidui* make up the fourth tier.

When the fleets conduct mobile task-force operations, the PLAN employs only a three-tiered at-sea command structure:

- PLAN Headquarters
- Fleet Headquarters
- *Zhidui*

Within the PLAN's lateral leadership and command structure, all four tiers have fairly equivalent staffs and functional departments, even though the names may be slightly different:

- PLAN Headquarters, support bases, and garrisons have four first-level departments—Headquarters, Political, Logistics, and Equipment
- The Fleet Headquarters have only two first-level departments—Headquarters and Political. They do not have a Logistics or Equipment Department
- Support bases and garrisons have four first-level departments—Headquarters, Political, Logistics, and Equipment
- *Zhidui* have three first-level departments—Headquarters, Political, and an On-Shore Service Department, which is equivalent to a Logistics Department

Logistics and Technical Support Structure

Finally, the PLAN also has a three-tiered on-shore logistics and technical support structure that skips the fleet headquarters:

- PLAN Headquarters
- Support bases
- Garrisons and *zhidui*

Chapter 2
Leadership

Leadership is implemented at all levels in the PLAN as a shared responsibility through the CCP Party committee system. In general, every headquarters organization in the PLAN down to the company level has a commander and a co-equal political officer. The commander and political officer, along with the deputy commanders, deputy political officers, and the directors of the four departments (Headquarters, Political, Logistics, and Equipment), compose the Party committee's standing committee, where all major decisions are discussed and decided upon for implementation. The political officer usually serves as the Party secretary and the commander as the deputy secretary. The Party committee system is discussed in more detail in Chapter 3.

In September 2004, the commander of the PLAN, Admiral Zhang Dingfa, became the first PLAN commander ever to serve concurrently as a member of the CCP Central Committee's Military Commission (CMC). His promotion in grade and appointment to the CMC provided a unique challenge for the PLAN within the PLA hierarchy.

As is discussed in Chapter 1, all organizations within the PLA are assigned one of 15 grades. In addition, the commander and political officer are assigned the same grade. However, when Zhang Dingfa was promoted one grade as a CMC member, neither the grade for the PLAN as an organization nor the grade of the PLAN political commissar was raised to the same level. Therefore, although Zhang and his successors will hold the same grade as the Chief of the General Staff and the directors of the General Political Department (GPD), General Logistics Department (GLD), and General Equipment Department (GED), the PLAN as an organization is not equal to the four General Departments and is still at the same grade as the seven Military Regions.

Commanders and Political Commissars

From 1949 to 2006, the PLAN has had a total of 7 commanders and 11 political commissars, as shown in Figure 5 (below) and Figure 6 (top of the next page).

Commanders

Wu Shengli (2006-Present): Wu was born in Wuqiao, Hebei Province, in August 1945. As a senior officer, he served as chief of staff of the PLAN's Fujian Base, commandant of the Dalian Naval Vessel Academy, commander of

Figure 5—PLAN Commanders

Commander	Command Period
Wu Shengli (吴胜利)	Aug 2006 – Present
Zhang Dingfa (张定发)	Jun 2003 – Aug 2006
Shi Yunsheng (石云生)	Nov 1996 – Jun 2003
Zhang Lianzhong (张连忠)	Jan 1988 – Nov 1996
Liu Huaqing (刘华清)	Aug 1982 – Jan 1988
Ye Fei (叶飞)	Jan 1980 – Aug 1982
Xiao Jinguang (萧劲光)	Jan 1950 – Dec 1979

Figure 6—PLAN Political Commissars

Political Commissar	Command Period
Hu Yanlin (胡彦林)	Jun 2003–Present
Yang Huaiqing (杨怀庆)	Jul 1995–Jun 2003
Zhou Kunren (周坤仁)	Dec 1993–Jul 1995
Wei Jinshan (魏金山)	Apr 1990–Dec 1993
Li Yaowen (李耀文)	Oct 1980–Apr 1990
Ye Fei (叶飞)	Feb 1979–Jan 1980
Du Yide (杜义德)	Oct 1977–Dec 1978
Su Zhenhua (苏振华)	Sep 1971–Sep 1977
Li Zuopeng (李作鹏)	Jun 1967–Sep 1971
Wang Hongkun (王宏坤)	Mar 1966–Jun 1967
Su Zhenhua (苏振华)	Feb 1957–Mar 1966

the Fujian Base, deputy commander of the East Sea Fleet, and commander of the South Sea Fleet and concurrently deputy commander of the Guangzhou Military Region. In 2004, he was appointed as one of the deputy chiefs of the general staff. In August 2006, Wu replaced Zhang Dingfa as the PLAN commander.

Zhang Dingfa (2003-2006): Zhang was born in December 1943 in Shanghai and joined the PLAN in 1960. From 1960-1964, he was a cadet at a PLAN submarine academy. After graduating, he served as a submarine CO, submarine *zhidui* deputy commander, assistant to the chief of staff of the NSF, and chief of staff of the Qingdao Base. He then successively became the chief of staff, deputy commander, and commander of the NSF. In November 2002, Zhang was assigned as the first naval officer to be the president of the PLA's Academy of Military Science (AMS). In June 2003, he replaced Shi Yunsheng as the PLAN commander. In September 2004, Zhang was selected as a concurrent member of the CMC, making him the first PLAN commander to hold this position. Zhang became seriously ill in January 2006 and was replaced in August 2006.

Shi Yunsheng (1996-2003): Shi was born in Liaoning Province in January 1940 and joined the PLA in 1956. In 1958, he graduated from an aviation preparatory school. He then attended the PLAAF's 7th Aviation School in Changchun, graduating in 1962. After graduating, he served as a Naval Aviation pilot, *zhongdui* commander, *dadui* commander, and deputy regiment commander. In 1976, he was appointed as the deputy commander of NSF Naval Aviation. In 1981, he became a Naval Aviation division commander. In 1983, he was appointed as the SSF Naval Aviation commander. In 1990, he became a deputy commander of Naval Aviation. In November 1992, he was assigned as a PLAN deputy commander and was promoted to commander in November 1996. Shi served as the commander until he was relieved of duty in June 2003 as a result of the death of the entire crew on a Ming submarine two months earlier.

Zhang Lianzhong (1988-1996): Zhang was born in June 1931 in Shandong Province and joined the PLA in 1947. During 1948, he participated in several campaigns against the Nationalists. Beginning in 1949, he served in several junior officer positions in the Third Field Army's 273rd Regiment. After attending an infantry school in 1956, he served in several ground-force billets until he enrolled in a PLAN submarine school in August 1960. After graduating in 1965, he served in various billets, including a submarine CO, deputy zhidui commander, zhidui commander, NSF deputy chief of staff, Lushun Base commander, and PLAN deputy commander. He succeeded Liu Huaqing as commander of the PLAN in January 1988,

serving in that post until November 1996. As a submariner, Zhang was the first PLAN commander to have served at sea.

Liu Huaqing (1982-1988): Liu was born in October 1916 in Hubei Province and joined the Red Army at age 14 in 1930. He participated in the Long March, where he established personal relations that would serve him well in the future. For the next 15 years, he served in political commissar positions with various Red Army and PLA units.

His naval career began when he was appointed as the deputy political commissar of the 1st Naval College in 1952. From 1954-1958, he attended the Voroshilov Naval Academy in Leningrad, where he was influenced by the writings of Admiral Sergei Gorshkov. After returning to China in 1958, he served as first deputy-commander, chief of staff, and commander of the PLAN's Lushun base, and deputy commander of the NSF.

The second phase of his naval career began in 1961, when he was assigned as the president of the Ministry of National Defense's 7th Research Academy, which was established in 1958 to manage naval ship development. In 1965, Liu became a vice minister of the 6th Ministry of Machine Building (shipbuilding). The following year, he became a vice minister of the Commission for Science, Technology, and Industry of National Defense (COSTIND), which was responsible for guiding development of the military's weapon systems.

In 1970, he returned to the PLAN as a deputy chief of staff. It was during this time that he also broadened his influence by becoming a member of the Party leading group of the Chinese Academy of Sciences, assistant to Deng Xiaoping (who at the time was the PLA's chief of the general staff), and then deputy chief of the general staff. In August 1982, he was assigned as the third PLA Navy commander. This position also included being selected as a member of the CCP's 12th Central Committee.

In November 1987, Liu moved from the navy to the final phase of his military career in the CMC, where he eventually became the senior vice chairman and one of the most powerful men in the PLA behind Deng, who was the CMC chairman. In 1992, he also became a member of the 10th CCP Central Committee's Politburo and the Politburo Standing Committee, where he helped shape the future of the PLA as a whole.

Ye Fei (1980-1982): Ye was born in the Philippines and his family returned to China when he was four years old. He joined the Communist Youth League in 1928 and the CCP in 1932. During the 1930s and 1940s, Ye was involved in CCP activities in southeastern China and as a political commissar and commander of various Red Army units. In 1953, he held several concurrent positions, including the governor of Fujian Province, deputy commander of the Nanjing Military Region, and commander and political commissar of the Fujian Military District. At age 40, Ye Fei received the rank of general when ranks were first given to the PLA in 1955. In 1975, he became the People's Republic of China's (PRC's) Minister of Transportation. In February 1979, Deng Xiaoping appointed Ye, who had never served in the PLAN, as the Navy's political commissar for one year. Deng then appointed him as the commander until August 1982. After leaving his position as PLAN commander, he served as the vice-chairman of the standing committee of the 6th and 7th National People's Congress (1983-1993).

Xiao Jinguang (1950-1979): Xiao was born in January 1903 in Hunan Province. At age 16, Xiao became involved in political activities and joined the Communist Party at age 17. He studied in Moscow from 1921-1924. In 1925, he served as a political officer during the Northern Expedition and was given the rank of lieutenant general. He went back to Moscow in 1927 and studied there until 1930. From then until 1949, he served in various Red Army and PLA command and political commissar positions. At the age of 46, Xiao Jinguang became the Navy's first commander. Technically, he held the position until December 1979. In 1962, however, Xiao came under attack from Defense Minister Lin Biao, and Lin relieved him of his PLAN duties in January 1967. When Lin's plane went down over Mongolia in September 1971, Xiao was reinstated but came under immediate attack from Mao Zedong's wife, Jiang Qing. For all practical purposes, the PLAN's political commissar, Li Zuopeng, ran the Navy from 1962 until he was arrested immediately after Lin's plane crash.

Political Commissars

Of the PLAN's 11 political commissars, the first 8 spent most of their career in the Army and moved into the PLAN political commissar position without much, if any, naval experience. Zhou Kunren, who was appointed to the position in 1993, was the first PLAN political commissar to spend most of his career in the Navy. His successor, Yang Huaiqing, spent most of his career in PLAN political officer billets, but his replacement, Hu Yanlin, spent most of his career in PLAAF and Army political officer positions.

Li Zuopeng (1967-1971): Although the PLAN has had 11 political commissars, Li Zuopeng probably had the most significant impact on PLAN development, because, for all practical purposes, he ran the Navy from 1962 until 1971. He was born in 1914 in Jiangxi Province and joined the Red Army in 1930. In 1935, he began working in the General Staff Department and participated in the Long March. From 1939 to the early 1950s, he served in various Army staff, training, school, and command positions, including the commander of the 4th Field Army's 43rd Army. In 1962, he was assigned to his first Navy position as a PLAN deputy commander. In 1967, he became the PLAN political commissar and was later assigned as a concurrent deputy chief of the general staff. Li was the last PLAN flag officer to serve as a deputy chief of the general staff until the early 1990s.

The PLA Navy's encyclopedia states that, under Minister of Defense Lin Biao's tutelage as vice chairman of the CMC, Li Zuopeng essentially took over command of the navy, which negatively affected the PLAN's direction of development. After the Cultural Revolution was launched, this battle became more bitter, especially during the period from January 1967 to September 1971. During this time, Li advocated politics above all else, and he brutally persecuted officers who disagreed with him, thus destroying unit development.

From 1965-1971, Naval Aviation fighter and bomber pilots averaged 26 flying hours annually, with a low of 12.5 hours in 1968. In November 1969, Li abolished Naval Aviation headquarters and its entire command staff. It was not re-established until May 1978. Therefore, aviation units within the fleets were left to themselves without guidance from PLAN Headquarters. From 1969-1978, Naval Aviation had more than 70 aircraft accidents that resulted in total loss of the aircraft and 62 pilot deaths. The serious accident rate in Naval Aviation was quite high.

When Lin Biao's plane crashed in September 1971, Li was immediately arrested. Ten years later, the PRC's highest court tried and sentenced him to 17 years. Although he was arrested in 1971, his policies continued to negatively affect PLAN development through the end of the decade.

Deputy Commanders

Since 1949, the PLAN has had about 40 deputy commanders, with an average of three serving at the same time. Each deputy has his own broad portfolio of responsibilities that cut across the four major departments. Whereas many of the early deputies were transferred from Army positions, almost all the deputies from the 1970s on rose up through the PLAN.

Of the deputy commanders, 12 previously served as fleet commanders (2 NSF, 3 ESF, and 7 SSF) and 7 served as PLAN Headquarters chiefs of staff (i.e., director of the Headquarters Department). The remaining 19 deputies came from a wide variety of positions in the four major departments within PLAN Headquarters. Of the deputies, three were later promoted as the plan commander.

Deputy Political Commissars

Since 1949, the PLAN has also had about 25 deputy political commissars, with an average of two serving at the same time. Of the deputies, 10 previously served as fleet political commissars (3 NSF, 2 ESF, and 5 SSF) and 5 served as the director of the Political Department in PLAN Headquarters. The remaining deputies came from a wide variety of political positions within the PLAN, Army, and four General Departments. Six of the deputy political commissars have been promoted as the PLAN political commissar.

Chiefs of Staff

Since 1949, the PLAN has had at least 14 chiefs of staff, who serve as the director of the Headquarters Department within PLAN Headquarters. Of these, 7 have received lateral promotions in grade as a deputy commander.

Political Department Directors

Since 1949, the PLAN has had at least 15 directors of the Political Department within PLAN Headquarters. Of these, 5 have received lateral promotions in grade as a deputy political commissar.

Fleet Commanders and Political Commissars

Each of the PLAN's three fleets has a commander and political commissar, who hold the same grade as the deputy commanders, deputy political commissars, chief of staff and Political Department director at PLAN Headquarters. Since the late 1980s, the NSF, ESF, and SSF fleet commanders have also been concurrently appointed as a deputy commander of the Jinan, Nanjing, and Guangzhou Military Regions, respectively.

Since the three fleets were established, the NSF has had 11 commanders and 11 political commissars, the ESF has had 11 commanders and 13 political commissars, and the SSF has had 14 commanders and 12 political commissars.

Of these, only the former commander of the NSF, Zhang Dingfa, and the commander of the SSF, Wu Shengli, have become the PLAN commander. In addition, only one fleet political commissar, Zhou Kunren, who served as the SSF political commissar, has become the PLAN political commissar.

Chapter 3
Political System

According to PLA writings, the PLA's political work system is the means through which the Chinese Communist Party (CCP) guarantees absolute control over the military. Every organization in the PLA, including headquarters, operational units, academies, research institutes, and factories, has one or more components of the political work system, which consists of the following six main components:

- Party committee system
- Political administrative system
- Discipline inspection system
- Party congresses
- Political officer system
- Judicial system

The PLAN's political work system is identical to the larger PLA's political work system.

Party Committee System

The PLA has five types of Party committees that can be established in organizations at all levels of the PLA. The type of Party committee established depends on three factors:

- The level at which the organization resides
- The organization's responsibilities, such as the Operations Department having greater responsibilities than the Management Bureau, even though they are at the same level
- The number of Party members

Each Party committee is responsible to a higher-level committee and ultimately through the Central Military Commission (CMC) to the CCP's Central Committee. The five types of Party committees, which are discussed in more detail later, are shown below:

- Party Committee (党委)
- Grassroots Party Committee (基层党委)
- Party general branch (党总支)
- Party branch (党支部)
- Party small group (党小组)

Every organization in the PLA is composed of two basic components:

- A headquarters element
- Administrative departments

Every headquarters element has one of the three types of Party committees shown below:

- A Party committee established in every regiment-level and above organization headquarters
- A grassroots Party committee established in each battalion-level organization headquarters
- A Party branch established in each company-level organization headquarters

Every administrative department has one of the four types of Party committees shown below:

- Party committee
- Party general branch

Figure 7—PLAN Headquarters Party Committees

Organization Level	Organization	Party Committee
Headquarters element	PLAN Headquarters	Party Committee
First-level department	Headquarters Department	Party Committee
Second-level department	Operations Department	Party General Branch
Third-level department	Operations Division	Party Branch

- Party branch
- Party small group

Figure 7 provides an example of the different types of Party committees within PLAN Headquarters' structure, including the Operations Division of the Operations Department in the Headquarters Department.

Party Committees

A Party committee is established in each headquarters element for all PLA regiment-level and above organizations. The PLAN has a Party committee for each regiment and above organization. At the regiment level, this includes vessel *dadui*, aviation regiments, coastal defense regiments, and all regiment-equivalent organizations.

Each of these Party committees has a standing committee (党委常委) consisting of the commander, political commissar, deputy commanders, deputy political commissars, and directors of the four first-level administrative departments—Headquarters, Political, Logistics, and Equipment. In most cases, the political commissar is the Party secretary and the commander is the deputy secretary. In some situations, however, the commander is the secretary and the political officer is the deputy secretary.

In addition to the headquarters element's Party committee, each of the four first-level administrative departments has its own Party committee. In addition, some second-level departments for regiment and above organizations have their own Party committee if there are enough Party members for one.

Grassroots Party Committees

A grassroots Party committee is assigned to the headquarters element for all battalion-level organizations. Although these committees are formally identified as grassroots Party committees, the PLA often omits the term "grassroots" and identifies them just as Party committees. Grassroots Party committees are not assigned to administrative departments.

Party General Branches

Party general branches are established only within administrative departments that are not large enough to have a Party committee but are too large for a Party branch. Party general branches are not established in headquarters elements.

Party Branches

Party branches are assigned to all company-level organization headquarters and to all second-

and third-level administrative departments. For example, the second-level Operations Division subordinate to PLAN North Sea Fleet's Headquarters Department has a Party branch. Furthermore, each administrative branch on PLAN vessels, such as a destroyer's radar and sonar branch, has its own Party branch.[2]

Party Small Groups

All PLA Party members must belong to some type of Party organization. Party small groups are established at the platoon level, where only a few officers are present, and at the squad level, which is composed solely of enlisted personnel.

In addition, when the PLA establishes ad hoc working groups, the members, regardless of their grade or rank, are organized into a Party small group or a Party branch. Which type of Party committee is established, such as a Party small group or Party branch, depends on the number of Party members involved.

Party Congresses

By regulation, every regiment-level and above organization in the PLA holds a Party Congress (党代表大会) once every five years, but a Party Congress can be held on an ad hoc basis if necessary. For example, from 1956 to 2004, the PLAN held 10 Party Congresses. Although they were held sporadically through the 1960s, they have been held every five years since. The PLAN holds plenary sessions for each congress about twice a year.

Party Congresses are composed of elected representatives from the Party committee at each level. They are the top-level organizations responsible for supervising lower-level Party committees.

In addition, every administrative department that has a Party committee with more than 200 Party members holds its own Party Congress every five years. The Party Congress reviews the department's activities for the previous five years and selects new members for the next Party committee.

Battalion- and company-level organizations and administrative departments that have fewer than 200 Party members convene a Congress of Military Party Members (军队党员大会).

All of these Party Congresses are responsible for approving the Party Committee's report, the report for that level's discipline inspection commission, discussing key issues and making decisions based on those issues, and selecting and approving the members for the next Party committee and that organization's discipline inspection commission.

Political Officer System

Party committees are the decision-making and guidance bodies for all key issues, including training, at each level in the chain of command.

The political officer system consists of political officers at every level in the chain of command from the company level up to the four General Departments. Platoons and squads do

[2] PLAN vessels are organized into *bumen* (部门), which the PLA translates as "branch." In the US Navy, they are called departments, each of which has subordinate divisions.

not have political officers. The three types of political officers are:

- Political commissars (政委) are assigned to all regiment-level and above organizations
- Political directors (教导员) are assigned to all battalion-level organizations
- Political instructors (指导员) are assigned to all company-level organizations

Some of the key responsibilities for political officers include:

- Serving as either the secretary or deputy secretary of the Party committee
- Implementing decisions made within the Party committee system
- Instilling Party discipline among Party members
- Providing political education to the troops within their organization
- Working with other components of the political work system

Political officers at the company and battalion levels are responsible for gathering information on all personnel for promotions. They are also responsible for administering the Party member selection process. However, promotions and Party membership decisions are decided by the appropriate Party committee.

The PLA has a dual leadership system, where the commander and political officer are coequal in grade; however, almost all key decisions are made by the organization's Party committee, where the political commissar is normally the secretary and the commander is the deputy secretary. For example, Party committees oversee virtually all of a unit's work: from operations and training issues, such as logistics support and personnel completion of training tasks; to officer evaluation, selection, and staffing; to expenditure of unit funds for goods and materials; to the implementation of higher-level Party committee decisions.

Political Administrative System

All regiment-level and above headquarters in the PLA have a political administrative structure, which is responsible for implementing the organization's political work. Organizations at the battalion level and below do not have any administrative departments.

The political administrative structure consists of departments (部), divisions (处), offices (科), or branches (股), which are responsible for managing the establishment of Party organizations, officer personnel records, propaganda, security, culture, mass work, and Party discipline.[3] At the regiment level, some of the administrative branches are combined. For example, Figure 8 (top of the next page) shows how the propaganda and security administrative structure is organized from PLAN Headquarters down to the regiment-level vessel *dadui*.

Discipline Inspection System

The PLA has a system of discipline inspection organizations that are responsible for monitoring the actions of PLA Party members and

[3] Although the Political Department's Cadre Department is responsible for officer personnel management, the General Staff Department's Military Affairs Department is responsible for enlisted personnel management.

Figure 8—PLAN Propaganda and Security Administrative Structure

Organization Level	Propaganda	Security
PLAN Headquarters	Propaganda Department	Security Department
Fleet Headquarters	Propaganda Division	Security Division
Support Base	Propaganda Division	Security Division
Vessel Zhidui	Propaganda Office	Security Office
Marine Brigade	Propaganda Office	Security Office
Vessel Dadui	Propaganda and Security Branch	

Party organizations and ensuring that Party discipline is maintained. This system is mirrored after the CCP's discipline inspection system on the civilian side.

The components comprising the PLA's discipline inspection system can be divided into three groups:

- Party discipline inspection commissions (党纪律检查委员会)
  - — The CMC Discipline Inspection Commission is the top-level military organization that oversees the PLA's discipline inspection system
  - — CCP discipline inspection commissions are established in all PLA units at the regiment-level and above
- Discipline inspection departments (纪律检查部), which include:
  - — The General Political Department's Discipline Inspection Department
  - — The PLAN's Political Department's Discipline Inspection Department
  - — The political department in each *jun*-level and above headquarters has a subordinate Discipline Inspection Department
  - — Below the *jun* level, the Organization Department within the Political Department is responsible for carrying out discipline inspection tasks
- At battalion- and company-level units, the Party committee or branch assigns Party members to undertake discipline inspection tasks

Members of the discipline inspection commission at each level are selected by the Party Congress, which is held every five years.

Judicial System

China's armed forces have a military judicial system composed of the military courts (军事法院), military procuratorates (军事检察院), and security departments (保卫部门), which exercise the trial, procuratorial, and investigating powers, respectively, in accordance with the laws regarding criminal cases within the armed forces. The military courts and military procuratorates are established within the armed forces as part of the State judicial system, meaning that they adhere to State laws.

Within the PLAN, military courts and procuratorates have been created in PLAN Headquarters and each of the three fleet headquarters. They are considered administratively subordinate units within PLAN Headquarters and the three fleet headquarters, but exercise independent judgment. Although neither organization is directly subordinate to the Party Committee

or Political Department in PLAN Headquarters or the fleet headquarters, the PLA incorporates judicial system work as part of the political work system.

The military courts accept criminal cases within the armed forces and may accept other cases with authorization from the Supreme People's Court.

The military procuratorates serve the role of an Inspector General and judge advocate organization. Their responsibilities are as follows:

- Examining criminal cases investigated by the internal security organs and deciding whether to approve an arrest or to initiate a prosecution
- Directly accepting and investigating criminal cases involving crimes committed
- Deciding whether to make an arrest or to initiate a prosecution
- Exercising supervision over the legality of the investigatory and judicial activities of the internal security organs and the military courts.

The security departments, which are established in the political departments of PLA units at or above the regiment level, investigate criminal cases within the armed forces in accordance with the provisions of the Criminal Procedures Law.

Chapter 4
Doctrine

Doctrine, Theory, and Practice

The PLA does not have one specific word for doctrine, and it does not use a word substitute for "doctrine" in referring to its own operational theory or operational concepts. What the PLA does write about is operational "theory" and operational "practice." Therefore, understanding the linkage between operational theory and operational practice in the PLA is an important tool for identifying operational concepts.

In the PLA, the field of "military science," which is the link between theory and practice, has two broad components: "basic military theory" and "applied military theory."

"Basic military theory" articulates the fundamental "laws" that govern modern military operations for the PLA. The PLA presents these fundamental "laws" in its professional institutions, textbooks, "doctrinal literature," and training as strategic "guidelines," operational "concepts," and tactical "guiding principles."

"Applied military theory" is the practical application of those fundamental "laws," "guidelines," "concepts," and "principles." Whereas "basic military theory" articulates *what* will guide the PLA in the application of military force at each level of warfare in broad conceptual terms, "applied military theory" addresses the specifics of *how* to do it.

Figure 9—The PLA's Three Levels of Conflict

Level of Conflict	Informed by
War (战争)	Strategy (战略)
Campaigns (战役)	Campaign Methods (战役法)
Battles (战斗)	Tactics (战术)

The PLA's Three Levels of Conflict

The PLA writes that warfare consists of three levels of armed conflict and combat: war, campaigns, and battles. Wars can be either "local" or "total." Wars are fought to achieve a nation's overall political objectives. Campaigns serve as the operational link between the conduct of battles, which are tactical engagements, and the achievement of the nation's overall objectives in a war. Each of the three levels of conflict is "informed" by a different level of "basic military theory" as shown in Figure 9.

"Active Defense" Strategic Guidelines

As a component of the "greater PLA," much of the strategic and operational jargon of the PLAN, its constructs for the analysis of warfare and operations, and the basics of Chinese naval military science reflect the universally applicable "PLA approach." In other words, it is couched in "Army" terminology. It is arguable that the PLAN's theory does not start resembling a distinctly naval organization until one goes down to the tactical level of warfare.

Therefore, all of the PLA's major strategic and operational concepts apply equally to the PLA Navy. The near equivalent in China of the US's "National Military Strategy" is called "The National Military Strategic Guidelines for the New Period." These guidelines have two major components.

The first is a reform and modernization component, referred to as "Army Building." It provides direction to the totality of the PLA's modernization efforts: equipment development and procurement, and institutional and organizational reforms. The current guidance for "Army Building" for the entire PLA is the "Two Transformations" program, which calls for the PLA to transform itself:

- "From an army preparing to fight local wars under ordinary conditions to an army preparing to fight and win local wars under modern, high-tech conditions"
- "From an army based on quantity to an army based on quality."
- A corollary that usually accompanies these two imperatives in PLA literature is that the PLA must also transform itself from an army that is *personnel intensive* to one that is *science and technology intensive*

Since the early 2000s, the PLA has also begun focusing on building a military based on informationalization and mechanization.[4]

The second component is operational, which provides a broad and overarching set of fundamental approaches to the conduct of war. These national-level operational guidelines are general. They are not intended to provide specific direction for campaign- or tactical-level operations or even specific contingencies. They are always keyed to an assessment of the most likely type of conflict China will face in the near term (total war or local war, nuclear war or conventional war).

The current operational component of the "National Military Strategic Guidelines for the New Period" is known as "Active Defense" (积极防御) as adjusted for the conduct of "Local Wars Under Modern High-Tech Conditions." "Active Defense," therefore, is the highest level of strategic guidance for all PLA military operations during war and preparation for war during peacetime. It applies to all PLA services and branches, including the PLAN.

Offshore Defense

In 1985, the CMC approved a PLAN component of the "Active Defense" strategic guidelines known as "Offshore Defense" (近海防御). The PLAN also refers to this concept as the "Offshore Defense Strategy." Operationally, "Offshore Defense" adheres to the following basic tenets of "Active Defense":

- "Overall, our military strategy is defensive. We attack only after being attacked. *But our operations are offensive*."
- "Space or time will not limit our counter-offensive."
- "We will not put boundaries on the limits of our offensives."
- "We will wait for the time and conditions that favor our forces when we do initiate offensive operations."
- "We will focus on the opposing force's weaknesses."

[4] The Chinese term *xinxihua* (信息化) is translated as either informationalization or informatization.

- "We will use our own forces to eliminate the enemy's forces"
- "Offensive operations against the enemy and defensive operations for our own force protection will be conducted simultaneously"

"Offshore Defense" as a Strategic Paradigm Shift

Adopting "Offshore Defense" represented a significant strategic paradigm shift for both PLAN operations and naval modernization. It revised the strategic-level operational guidance to the PLAN, directing it to shift from preparing for operations close to Chinese shores to preparing for maritime operations in the seas off the Chinese littoral.

The PLAN's previous strategic concept of "Coastal Defense" (进岸防御) focused planning and operations on a close-in defense of China's coast *in support of* a major land war. Specifically, "Coastal Defense" addressed an anticipated Soviet land invasion from the north supported by operations against the Chinese coast by the Soviet Pacific Fleet. Hence, the PLAN was landward-focused and was expected to play a supporting role in China's most likely assessed future contingency.

As a result, with the promulgation of "Offshore Defense" in 1985, the PLAN's strategic orientation was redirected—out to sea. As is usually the case in China, this major shift in maritime strategic reorientation was a response to a changed assessment of the "international security environment" and changes in global military capabilities.

By 1985, Beijing no longer believed that a Soviet land invasion was likely. Furthermore, Chinese assessments of the changes in naval warfare, especially the increasing reach of modern naval weapons, led to requirements for a naval service that could defend China by operating credibly further out at sea.

The adoption of "Offshore Defense" also matched China's changing priorities, specifically Deng's focus on economic modernization and the realization that ocean resources—food and energy sources—would be of increasing importance to China's future development. Moreover, the need for greater strategic depth for the maritime defense of China's coastline was clear given that the PRC's economic center of gravity was quickly shifting from deep in the interior to China's eastern seaboard.

Finally, "Offshore Defense" and the PLAN's move out to sea coincided with increased international focus on the growing importance of ocean resources, issues associated with the sovereignty of territorial waters, and, equally important, competing maritime claims among the nations of Asia.

"Offshore Defense" as a Broad Strategic Concept

According to PLAN writings, "Offshore Defense" is simply an overarching strategic concept that directs the PLAN to be prepared to accomplish its three key missions "for the new period" by engaging in maritime operations out at sea and building a naval service that is capable of sustaining operations out at sea. Those three key missions are to:

- Keep the enemy within limits and resist invasion from the sea
- Protect the nation's territorial sovereignty
- Safeguard the motherland's unity and maritime rights

The Changing Definition of "Offshore"

Among many foreign specialists of the PLAN, the meaning behind "Offshore Defense" as a broad strategic-level operational concept has often become enmeshed with the associated questions of "operational reach," strategic intentions, and PLAN modernization programs. An example is the idea of operating within the "two island chains" or out to the 200-nautical-mile Exclusive Economic Zone (EEZ).

The first island chain is usually described as a line through the Kurile Islands, Japan, the Ryukyu Islands, Taiwan, the Philippines, and Indonesia (Borneo to Natuna Besar). The second island chain runs from a north-south line from the Kuriles through Japan, the Bonins, the Marianas, the Carolines, and Indonesia. Together, they encompass maritime areas out to approximately 1,800 nm from China's coast, including most of the East China Sea and East Asian SLOCs.

Most commonly, the discussion about "Offshore Defense" has used terms that link it to geographic boundaries out at sea, future aspirations to control various zones of ocean, or intentions to dominate island chains. When the "Offshore Defense" concept was first being formulated in the late 1970s and early 1980s, and for some time after its formal adoption in 1985, the PLAN engaged in a good deal of debate and produced a good number of studies on the issue of how far offshore "Offshore Defense" should be. Many of the internal debates did in fact argue in terms of geography.

Moreover, PLAN officers have often explained the "Offshore Defense" concept to foreigners in terms that are justified by the "right of China" to defend its claims of sovereignty over its EEZ, thus confusing the issue by implying a 200-nm limit on the concept.

It is clear, however, that "Offshore Defense" has evolved beyond the question of geography or geographic reach. Research strongly suggests that, *today*, the term "Offshore Defense" does not imply any geographic limits or boundaries. It does not appear that there is today, in fact, any *official* minimum or maximum distances out into the oceans associated with the "Offshore Defense" concept.

According to the PLA's Academy of Military Science, "Prior to the 1980s, the PLAN considered 'offshore' to mean 200 nm from China's coast. Under Deng Xiaoping's guidance in the 1980s, China's 'offshore' included the Yellow Sea, East China Sea, South China Sea, the Spratly Islands, the sea area inside and outside of Taiwan and the Ryukyu Islands, and the sea area in the northern Pacific Ocean."

In 1997, Jiang Zemin provided guidance to the PLAN that it "should focus on raising its offshore comprehensive combat capabilities within the first island chain, should increase nuclear and conventional deterrence and counterattack capabilities, and should gradually develop combat capabilities for distant ocean defense."

So, how far "offshore" will "Offshore Defense" take the PLA Navy? According to PLAN officers, and implied in some PLAN publications, the answer appears to be…

> *…as far as the PLA Navy's capabilities will allow it to operate task forces out at sea with the requisite amount of support and security.*

For many PLAN officers, this is still a function of the operational reach of the PLA's land-based aircraft and the PLAN's antisubmarine warfare capabilities.

PLAN Campaigns

The PLA has identified 22 types of campaigns it could conduct during a conflict. Of these, the PLAN has six key types of campaigns that it may be called upon to engage in, either as part of a larger joint campaign or as a single-service affair. They include:

- Sea Blockade Campaign: A campaign aimed at blocking or reducing the sea links between the enemy and the rest of the world.
- Anti-Sea Lines of Communication (SLOC) Campaign: A campaign to damage and paralyze enemy sea lines of communication.
- Sea-to-Land Attack Campaign: A campaign aimed at "attacking enemy naval bases, ports, and other important land-based targets." These campaigns can involve either the use of conventional weapons or sea-based nuclear weapons.
- Antiship Campaign: A campaign to destroy or damage large surface warships. It is "the most typical of all naval campaigns."
- Sea Transportation Protection Campaign: A Navy campaign to defend the safety of sea transportation and sea lines of communication.
- Naval Base Defense Campaign: A campaign to resist large-scale enemy attack, blockade, or occupation of friendly naval bases. This includes defense against a variety of attacks, including attacks with submarines, surface warships, water mines, air and land attacks, and attacks with nuclear, biological, or chemical weapons.

Three Attacks and Three Defenses

Within its 22 campaigns, the PLA conducts training on specific types of combat methods for what it calls the "Three Attacks and Three Defenses." Originally, the "Three Attacks" referred to attacks against tanks, aircraft, and airborne forces, and the "Three Defenses" referred to defense against chemical, biological, and nuclear attack. In 1999, the PLA initiated the concept of "New Three Attacks," which refers to attacks against stealth aircraft, cruise missiles, and armed helicopters, and the "New Three Defenses," which refers to defense against precision strikes, electronic jamming, and electronic reconnaissance and surveillance.[5] The PLAN is actively involved in developing and training with its own combat methods for the new "Three Attacks and Three Defenses."

Key Guidance Documents

The PLAN disseminates its operational and training guidance via official documents, slogans, and books. The highest-level campaign guidance documents are known as *gangyao* (纲要).[6] Other layers in the process include the Outline of Military Training and Evaluation, military training guidance concepts, regulations, and teaching materials. What is significant is that the PLAN has published an entirely new set of revised guidance documents since the end of the 9th Five-Year Plan (1996-2000).

[5] The word "new" is usually dropped, so it is not always clear which "3 defenses" is being discussed, but in today's context, it generally means the program initiated in 1999.

[6] *Gangyao* can be translated as outline, essentials, or compendium, but is best left untranslated.

The Gangyao

Campaign *gangyao* are an authoritative and official set of guidelines, often classified, which have a relatively long shelf life (5 to 10 years) and from which other more granular guidance, such as specific regulations, are derived. Comparable US Navy documents would be a classified *Naval Doctrine Publication*.

In 1999, the PLAN reissued its *Campaign Gangyao* at the same time the PLA reissued revised campaign *gangyao* for the Army, Air Force, and Second Artillery. At that time, the PLA also issued its first ever *Joint Campaign Gangyao* and *Joint Logistics Campaign Gangyao*.

Outline of Military Training and Evaluation

In June 2001, the General Staff Department issued a completely revised Outline of Military Training and Evaluation or OMTE (军事训练与考核大纲) for the ground forces, which, as a set of classified documents, is simply identified in PLA writings as *dagang* (大纲). After three years of research and writing, the PLAN published its own completely revised set of OMTE in January 2002. In April 2002, the PLAAF reissued all of its OMTE. Of note, the word "evaluation" was not included until the revised OMTE were issued.

According to PLAN writings, the OMTE consists of the standardized documents used by each branch and type of vessel unit to organize and conduct military training. The OMTE are divided according to branch, vessel type, specialized function, and specialized technology. Their content includes the guiding thought, training subjects, content, timing, and objectives of training.

The OMTE stipulate the procedures for implementing training, the drafting of plans, the topics and programs, the training organization, and the examination and assessment of training. Some examples of PLAN OMTE are as follows:

- Units Equipped with Each Class of Naval Submarine and Surface Vessel
- Units Equipped with Each Type of Naval Aviation Aircraft, AAA, and SAM
- Naval Coastal Defense Artillery and Missile Units
- Marine Corps
- Logistics Units
- Chemical Defense Units

Military Training Guidance Concepts

Based on specific "military training guidance concepts" (军事训练指导思想) established by the four general departments, the PLA Navy has identified similar, if not the same, concepts as the basic principles for its military training. They are merely a set of 16 characters organized into four sets of four characters. A review of the PLAN writings identified the following PLAN military training guidance concepts:

- Closely adhere to actual combat situations (贴近实战)
- Stress training against opposition forces (突出对抗)
- Implement strict discipline during training (从难从严)
- Apply science and technology during training (科技兴训)

PLAN Regulations

The PLAN has a wide range of documents with different names that can all be trans-

lated in English as rules and regulations. Different headquarters can issue different types of rules and regulations. Only the four general departments and service headquarters can issue certain types of regulations. Units as low as a regiment can issue various types of regulations.

Teaching Materials

The PLAN uses teaching materials based on the documents and training guidance concepts, which are written by organizations such as the PLAN Command Academy and the PLA's Academy of Military Science (AMS).

Doctrine Development

PLA Doctrinal Development

Because the PLA is a conservative organization, it takes time to enact major institutional, systemic, or operational changes. This also includes the internal resistance such changes often encounter. When the PLA does move toward making major doctrinal, administrative, or operational reforms, the evidence suggests it undertakes a methodical process. Based on an understanding of the organization, roles, and missions of the PLA in general, it is apparent that most major reforms go through a thorough and sequential 10-step process as follows:

- Recognize there is a problem
- Conduct research and theoretical work to look for solutions
- Experiment with new concepts
- Make adjustments to theories and experiments based on results
- Establish limited prototypes or conduct larger exercises to validate adjustments
- Promulgate regulations or directives to codify changes
- Study the new procedures PLA- or service-wide
- Execute the new procedures
- Inspect "from the center" for compliance
- Declare "success" or identify "contradictions"

Merely getting to the point of a codification of what the new changes should be on any major issue requires a good deal of ad-hoc committee work and consensus building within the PLA "community" responsible for the particular change, reform, or adjustment to practice.

Not surprisingly, major reforms in the PLA also require a political imprimatur. Most directives, policies, and regulations are issued under the authority of the CMC. However, when potentially significant (and potentially dislocating) change is required or a completely new direction is taken, the reforms are further justified by the invocation of the ideological "correctness" of the policy. Ideological correctness is a function of invoking a body of military "theories," "thinking," or "thought" that is tied to the "original" military thinking of one of China's past (or present) leaders. This invocation of such high-level ideological justification is continually referred to even after the fact of the change in order to reinforce the seriousness of the need within the PLA to carry through with the intent of the change or reform.

As such, each doctrinal reform can take a different amount of time, depending on the scope of the changes. In some cases, however, the changes take place in conjunction with one of China's Five-Year Plans. They are identified for

implementation either at the end of one plan for the next plan, or at the beginning of the plan.

PLAN Doctrine

The Navy Military Studies Research Institute is the single most important center in the PLAN for the development of national-level naval strategy, the development of navy operational-level (campaign-level) warfighting concepts, naval tactics, and research and studies that look to the future of naval warfare and the development of foreign naval issues. Established in August 1985, the PLAN refers to it in English as the "Navy Research Institute" (NRI).

Tactics, Combat Methods, and Training Concept Development

The PLAN follows a basic seven-step process in developing new tactics, combat methods, and training concepts, which can take several years to complete. Although the PLAN has a Naval Tactics Department in NRI, it often tasks specific operational units as test points to develop certain tactics and combat methods and to test new concepts. For example, the PLAN identified several different units as test points for the new OMTE up to two years before it was finally published. The eight steps are as follows:

- Study the theory. This can be done by bringing in specialists from PLAN and civilian institutions. In addition, the project participants at the unit usually visit PLAN academies and research institutes, as well as the civilian production facilities for the equipment being studied.
- Begin developing the concepts on paper and receive theoretical evaluation approval from higher headquarters for them.
- Begin using the specific equipment or weapon system to develop and revise the concepts.
- Test the concepts at a PLAN test facility.
- Receive a technical evaluation and approval from higher headquarters.
- PLAN Headquarters authorizes them for use throughout the force.
- Demonstrate the tactics, combat methods, or training concepts to VIPs and the rest of the force.
- Units begin to implement the changes.

Chapter 5
Submarine Forces

The PLA Navy's submarine forces (潜艇部队) are generally listed as first in protocol order among the PLAN's five branches. This chapter provides a brief history of the submarine forces, followed by information on the branch's organizational structure and training.

Brief History

The Soviet Union played a key role in the early development of China's submarine forces. Although the PLAN was founded in April 1949, it was not until April 1951 that it organized 275 personnel into a submarine study team that studied at the Soviet Pacific Fleet's submarine unit stationed at Lushun.

The PLAN chose Qingdao on the Shandong Peninsula as its base for its submarine training and operations. In May 1952, the PLAN set up its first submarine base in Qingdao, and, in June 1954, the PLAN established its first independent submarine *dadui* in Qingdao and purchased four old submarines from the Soviet Union. The two medium-class submarines were named *New China* (新中国) 11 and 12 and the two small-class submarines were designated *National Defense* (国防) 21 and 22.

The PLAN also chose Qingdao as the site for its submarine school, which was created in August 1953 as the 4th Naval School (第四海军学校). In September 1957, the PLAN changed the name to the Naval Submarine School (海军潜水艇学校). In June 1983, the school again changed its name to the Naval Submarine Academy (海军潜艇学院).

In January 1956, China began assembling the first type-03 submarine from parts provided by the Soviet Union at Shanghai's Jiangnan Shipyard, which was then deployed to the PLAN in June 1957 and named *New China 15*.

The Sino-Soviet rift that began in 1959 and the Cultural Revolution (1966-1976) marked major setbacks for the PLAN submarine forces, as both events resulted in the loss of essential technological expertise. During the Cultural Revolution, the Naval Submarine School was closed in 1969 and not reopened until December 1973. As a result of these setbacks, though production was begun in 1959, the first submarine (type 33 *Romeo* class) produced from domestic components was not commissioned in the PLAN until June 1969.

In the early 1970s, the PLAN began organizing several division-grade submarine *zhidui*, which, at that time, were subordinate to each fleet headquarters. In addition, the PLAN organized its first nuclear submarine unit in 1975, which, at that time, was directly subordinate to PLAN Headquarters. Today, each submarine *zhidui* is administratively subordinate to a fleet support base.

In 1982, the PLAN successfully fired a submarine-launched ballistic missile, thus marking the emergence of China's submarine forces into a new phase of modern development.

Organizational Structure

Today, the PLAN has one nuclear submarine base and six conventional submarine *zhidui*. It

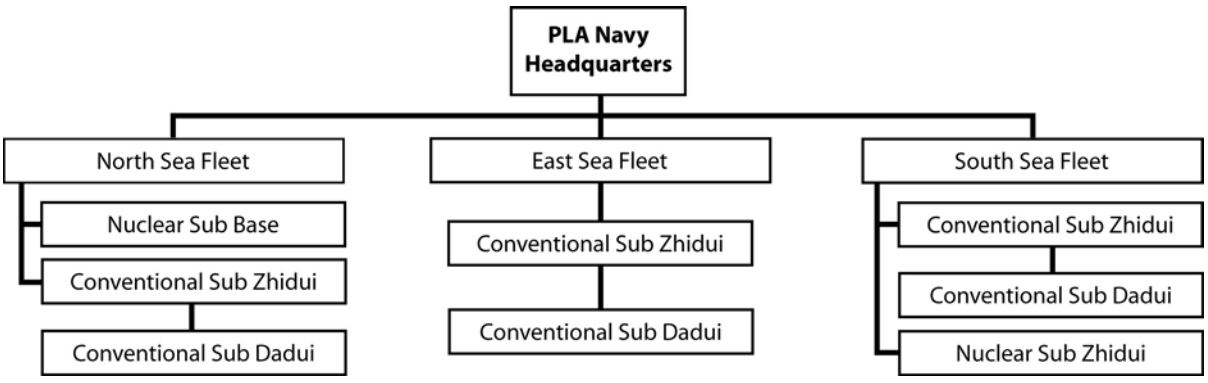
is also building a nuclear submarine base on Hainan. As shown in Figures 10 & 11, each PLAN submarine is assigned a specific grade, which is lower than the higher-level headquarters to which it is subordinate. For example:

- Some conventional-powered submarines (*Golf*, *Ming*, *Romeo*, and *Wuhan*) are regiment deputy leader-grade organizations and are directly subordinate to a regiment leader-grade submarine *dadui*, which is subordinate to a submarine *zhidui*. The primary rank for the submarine CO and political commissar is commander.
- Some conventional-powered submarines (*Kilo*, *Song*, and *Yuan*) are regiment leader-grade organizations and are directly subordinate to a submarine *zhidui*. The primary rank for the submarine CO and political commissar is captain.
- Nuclear-powered submarines are division deputy leader-grade organizations and are subordinate to division leader-grade submarine *zhidui*. The primary rank for the submarine CO and political commissar is captain.

Figure 10—Submarine Forces Headquarters, Vessel Grades, and Ranks

Grade #	Grade	PLAN Submarine Structure	Primary Rank
3	Military Region Leader	Navy HQ	Admiral
4	Military Region Deputy Leader	Fleet HQ	Vice Admiral
5	Jun Leader		Rear Admiral
6	Jun Deputy Leader	Support Base	Rear Admiral
7	Division Leader	Zhidui	Senior Captain
8	Division Deputy Leader	Nuclear-powered submarines	Captain
9	Regiment Leader	Dadui; Conventional-powered submarines	Captain
10	Regiment Deputy Leader	Conventional-powered submarines	Commander
11	Battalion Leader	Zhongdui	Lieutenant Commander

Figure 11—PLA Navy Submarine Organizational Structure



- Each submarine *zhidui* is, in turn, subordinate to a *jun* deputy leader-grade support base. The primary rank for the support base commander and political commissar is rear admiral.
- Each submarine *zhidui* may also have a subordinate service ship *zhongdui* and an auxiliary ship *zhongdui*. Each vessel has its own grade, depending on the size and function.
- Nuclear-powered submarines each have more than one crew, compared to one crew for each conventional-powered submarine.

Submarine Force Hull Numbers

The PLAN assigns 3-digit hull numbers to its submarines as follows:

- Nuclear submarines have 4xx hull numbers
- Conventional submarines have 2xx or 3xx hull numbers

Submarine Force Training

The PLAN states that the objective of submarine unit training is to increase the organizational command capabilities of submarine command personnel at all levels, as well as increase the technical and tactics level of submarine units.

Training is conducted so submarine units can carry out their combat responsibilities, either individually or in coordination with another naval branch.

Types of Training

During the 1950s, PLAN submarines began conducting predominantly technical training, then shifted to strengthening command staff training. During the 1970s, submarines began organizing long-range navigation training, submarine group training, and campaign and tactics combined-arms training. For example, in October 1975, submarine 295 conducted tests on self-sustained power. In January 1977, submarine 252 completed a 3,300-nm mission through the Pacific Ocean. In July 1977, submarine 296 successfully conducted depth tests in the South China Sea.

Today, the PLAN organizes submarine training into three types: common training subjects, technical specialty training, and tactics training.

Common Training Subjects

All officers and enlisted crew members must pass a specified set of common training subjects to meet their basic training requirements, which includes:

- Common military regulations
- Damage control
- Light weapons
- Physical training and swimming
- Regulations for routine support for submarines
- Seamanship
- Shallow diving and underwater escape from danger
- Submarine organization and deployment
- Submarine structure
- Three defenses training (i.e., chemical, biological, and nuclear)
- Vessel regulations

In addition to the basic training subjects noted above, each type of organization and submarine has its own individual and group training subjects.

Technical Specialty Training

Technical specialty training consists of the items individual officers and enlisted sailors need to carry out their own duties. The different types of technical specialty training include:

- Chemical defense
- Command-and-control systems
- Communications
- Electro-mechanical
- Electronic countermeasures
- Health
- Missiles
- Navigation
- Radar
- Sails and ropes[7]
- Sonar
- Underwater weapons

The content for technical specialty training deals specifically with:

- Capabilities
- Employment methods during combat
- Maintenance and care
- Management
- Organization and command of specialties
- Principles
- Rules and regulations
- Safety measures
- Specialized theoretical knowledge
- Training methods
- Weapons and equipment structures

Tactics Training

Tactics training consists of the principles and methods for maritime combat and is given to command personnel of all levels, as well as task-force headquarters and units. Combat training includes:

- Single-vessel tactics training
- Vessel group tactics training
- Combined-arms tactics training during coordinated operations with other PLAN branches

The content for tactics training consists of the following:

- Theory, principles, and combat methods
- Mobility methods and weapons employment
- Organization and command
- Coordination activities and battle support
- Knowledge about all services and branches
- Case studies of battles
- Maritime military geography
- Naval organizational structure, equipment, and special combat characteristics for naval opponents

Training Procedures and Methods

The PLAN divides its submarine training into three phases: shore-based training for personnel, unit technical and tactics basic training, and combined-arms training.

[7] In US Navy parlance, this is the bridge, conning tower, antenna, mast, and periscope storage.

Shore-Based Training

Shore-based training for personnel refers to the basic training given to officers and enlisted sailors before they are assigned to their permanent duty stations. This includes relevant education at submarine academies or other naval specialized academies, as well as practical training at sea, observation, and qualification examinations. Training on basic subjects continues after personnel are assigned to their permanent units.

Unit Technical and Tactics Basic Training

Unit technical and tactics basic training refers to the training carried out in either training centers and bases, or by task forces whose primary responsibility is training. This usually entails implementing a certain number of training subjects that are identified specifically for submarines, including:

- Submarine organization
- Navigation preparations
- Single-vessel torpedo or missile attack
- Mine laying
- Defense
- Reconnaissance

These training subjects are completed in a specific order to enhance a logical organization and disposition, to correctly utilize weapons and equipment, to conduct proper coordination, to establish a technical and tactics foundation, and to organize all of the submarine's components into a complete fighting force.

Combined-Arms Training

Combined-arms training is usually conducted after basic training is completed. Combined-arms training is organized according to tactics training subjects, including tactical group (战术群) training, coordination and training with other naval branches such as surface vessels and naval aviation troops, and participation in at-sea training exercises. To increase at-sea combined-arms combat capabilities, combined-arms training is conducted under near-real-war conditions.

Unit Training

After officers and enlisted sailors of PLAN submarine units have completed their academy or specialized training, they are assigned to their permanent duty station on a vessel. Units rely upon the PLAN's Outline of Military Training and Evaluation (OMTE) discussed in Chapter 4 to conduct different types and levels of training. For nuclear submarines, each vessel has two sets of personnel who rotate on cruises, combat readiness and training, and resting. Training is carried out according to the needs of real war and seeks to connect theory with reality. It is designed to improve the performance of all individual sailors, posts, branches, submarine compartments, the entire submarine, and submarine groups at each level. Training at an operational unit alternates between basic training and practical training, and shore-based training and at-sea training.

Shore-Based Training

The basic hands-on and crisis-management training for strategic-missile submarines that cannot be conducted while the submarine is navigating underwater for long periods of time must be conducted on shore. Shore-based training is conducted at base and harbor facilities, using real situations, simulation training, and hands-on learning to control a vessel.

The training entails controlling a submarine while submerged and torpedo-attack instrument training, as well as attack methods, tactics principles, and coordination of activities aboard the submarine. Other examples of shore-based training include using a diving board and diving into a swimming pool, underwater escape from danger, and self-rescue methods.

At-Sea Training

As soon as shore-based training is completed, at-sea training begins and focuses on navigation and mission-based training subjects. Navigation training focuses on:

- Controlling the submarine under special situations
- Controlling the submarine while submerged
- Submerging and surfacing
- Crisis situation management
- Navigation during different watch periods
- Becoming familiar with maritime areas

Day and night surface and subsurface training involves everyone, including the CO, XO, duty watch officers, technical officers, and enlisted sailors. The goal is to accomplish independent control of the submarine and obtain watch officer certification. Mission-based training subjects focus on navigation training and the use of torpedoes, missiles, mines, and other weapons. They follow the same pattern as other training—from theory to practice, from shore to sea, and from a little to substantive. At-sea training includes:

- Anchoring
- Assembled training for the crew while at anchor
- Training in maritime training areas
- Practice navigation
- Transiting sea areas
- Long-range navigation

Long-range navigation training is an important overall type of training for submarines. Going through concealed navigation for long periods of time increases the appropriate capabilities for vessel personnel, and increases combat levels by testing a submarine and its weapons and equipment.

Training for submarine tactical groups and combined-arms training are done only after all of the training subjects in the OMTE are completed. These types of training focus on the following:

- Subsurface movement methods for task forces
- Identifying friendly and hostile submarines while under water
- Communications and fixing vessel positions
- Submarine group communications and liaison with shore-based entities
- Combined-arms tactics with other PLAN branches

COs first study the relevant theories. Next, they become familiar with how to coordinate force with group and combined-arms tactics, and with the characteristics of tactical situations. They also research case studies of battles and create scenarios. During each step along the way, they begin by conducting training for individual parts and then combining the parts. The final step is to conduct comprehensive at-sea training to put it all together, to include live-fire exercises.

Submarine Force Training Reforms

Based on the revised OMTE issued in 2002, the PLAN is developing and implementing new and more realistic tactics and combat methods to enable its submarines to be able to attack, survive after an attack, and maintain the capability to attack again at a later time. This is a change from previous tactics, which focused primarily on attacking and less on defense before and after an attack.

Under the new OMTE, submarine training now focuses on completing attacks and then breaking safely through the enemy's antisubmarine positions. This, it is hoped, will allow submarines the opportunity to attack again later. Based on the revised OMTE, PLAN submarine units have adopted the following reforms:

- The old concept of single submarines departing early in the morning and returning late on the same day was replaced with the concept of multiple submarines conducting navigation training together over multiple days throughout the day and night.
- The old concept of single submarines conducting independent training was replaced with multiple submarines attacking as a task force.
- The PLAN replaced the old basic training method of simple and redundant training with mission-oriented training subjects.
- The old method of training on single submarine tactics per sortie was replaced with training on several combined-arms tactics simultaneously in a combined-arms environment.
- The revised OMTE calls for significant training advances in all three fleets for "damaged" submarines and to rescue a submerged submarine in distress.
- The submarine force has also increased its use of simulator training.

Finally, the PLAN has begun extending both the range for some of its submarines and increasing the duration of some training events, including training during poor weather conditions. All of these training reforms have affected how the submarine force provides logistics and maintenance support before, during, and after each training event.

Chapter 6
Surface Forces

The PLA Navy's surface forces (水面舰艇部队) are usually listed as second in protocol order among the PLAN's five branches. This chapter provides a brief history of the surface forces, followed by information on the branch's organizational structure and training.

Brief History

When the PLA Navy was founded in 1949, the surface branch was the PLAN's only maritime force and was composed of combat vessels and service vessels. In November 1949, the PLAN established its first frigate *dadui*. Shortly thereafter, the PLAN created landing vessel, minesweeper, torpedo boat, submarine chaser, and destroyer forces. By the end of 1955, the surface force expanded in size, types of vessels, and organizational structure. During the 1950s, the PLAN's surface vessels helped occupy several Nationalist-held islands off the coast and supported Chinese fishing rights.

During the early 1960s, China began designing and researching its own missile boats, destroyers, frigates, and landing vessels, which were then incorporated into the PLAN.

In the early 1970s, the PLAN created several guided-missile speedboat and guided-missile destroyer units. During the 1980s, the focal points for PLAN development were frigate and destroyer combat-vessel units, while significant progress also occurred for the minesweeper, mine-laying, and submarine-chaser forces. Furthermore, the PLAN expanded its service- and support-vessel force structure with composite-supply ships, long-range salvage-and-rescue ships, and long-range tugboats.

Organizational Structure

The PLAN's surface forces are organized into three levels of headquarters as follows:

- *Zhidui* are division-leader organizations
- *Dadui* are regiment-leader organizations
- *Zhongdui* are battalion-leader organizations

Each individual vessel in the surface forces is also assigned a grade, which is the same grade as the commanding officer (CO) and political officer. Because the PLA's organizational structure does not allow for an organization at one level to be subordinate to another organization at the same level, each PLAN vessel has a lower grade than its headquarters. Figure 12 (top of the next page) shows the types of headquarters and their assigned grade. In addition, the assigned grade for each type of the PLAN's surface vessels is shown.

During the 2000s, the PLAN has been restructuring its surface forces' organizational structure to better meet its operational needs. For example, in 2004 the PLAN created a new *zhidui*-level organization identified as a Combat Support Vessel *Zhidui* (作战支援舰支队) in each fleet. Several existing vessel *dadui* were re-subordinated to the *zhidui* to provide better guidance for support for combat vessels at sea. In addition, the East Sea Fleet created a new submarine chaser and frigate *zhidui*.

Figure 12—Surface Force Headquarters and Vessel Grades

PLA Grades	Naval Headquarters Levels	Vessel Types and Grades
(3) MR Leader	Navy HQ	None
(4) MR Deputy	Fleet HQ	None
(6) Jun Deputy	Support Base	None
(7) Division Leader	Garrison Zhidui	None
(9) Regiment Leader	Dadui	Destroyers
(10) Regiment Deputy	None	Frigates and service ships
(11) Battalion Leader	Zhongdui	Escort boats (3-digit hull numbers) Landing ships (3-digit hull numbers) Minesweeper ships (3-digit hull numbers) Service ships and submarine chasers
(13) Company Leader	None	Escort boats (4-digit hull numbers) Landing craft (4-digit hull numbers) Minesweeper boats (4-digit hull numbers) Missile boats (4-digit hull numbers) Missile speedboats (4-digit hull numbers) Service ships

Figure 13 (top, page 41) provides a general overview of the types of *zhidui*, *dadui*, and *zhongdui* subordinate to each fleet headquarters.

Each fleet has a destroyer *zhidui* that is composed of subordinate destroyers and frigates. Whereas the destroyers are directly subordinate to the *zhidui*, the frigates are subordinate to a *dadui*, which is subordinate to the *zhidui*. The reason for this is that the PLAN's destroyers are considered regiment leader-grade organizations, so they cannot be subordinate to a *dadui*, which is also a regiment leader-grade organization. Therefore, they are directly subordinate to the division leader-grade *zhidui*. However, frigates, which are regiment deputy leader-grade organizations, are subordinate to a *dadui*, which is, in turn, subordinate to the destroyer *zhidui*. Figure 14 (bottom, page 41) shows the organizational relationship for destroyers and frigates within each fleet.

When vessels from the same or different *zhidui* and *dadui* are organized into task forces (编队), the task force is assigned the grade of the vessel with the highest grade, not that of the officer with the highest grade. For example, if a deputy fleet commander, who is a *jun* leader-grade (grade 5) officer, is the task force commander and is aboard a destroyer, the grade of the task force is still that of the regiment leader-grade (grade 9) destroyer.

PLAN Vessel Hull Number System

The PLAN assigns 3-digit hull numbers to its destroyers and frigates as follows:

Figure 13—Types of Surface Force Zhidui, Dadui, and Zhongdui by Fleet

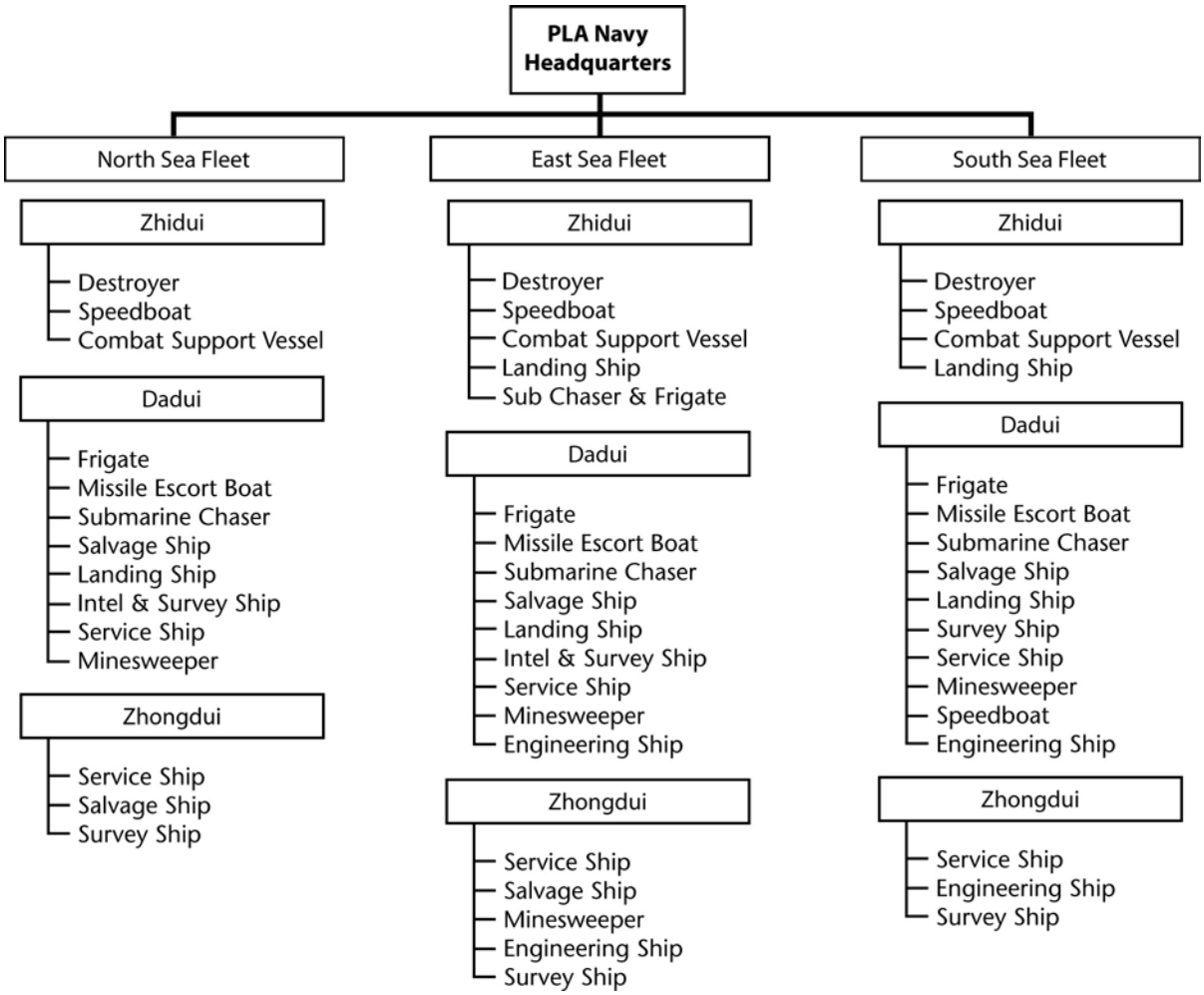
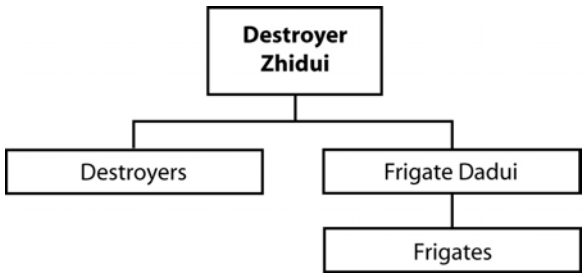


Figure 14—PLAN Destroyer Zhidui Structure



- Destroyers have 1xx hull numbers
- Frigates have 5xx hull numbers

In addition, vessels above battalion leader-grade have 3-digit hull numbers. These include submarine chasers, minesweeper ships, service ships, landing ships, and some escort boats.

Small combatants have a 4-digit pennant number, the first digit of which signifies area subordination. Furthermore, company leader-grade boats have 4-digit hull numbers. These include minesweeper boats, service ships, landing craft, missile speedboats, missile boats, and some escort boats.

The system for hull numbers on auxiliaries consists of a 3-digit number preceded by two or more Chinese characters describing the ship's fleet and function. For example, "*nanshui*" (南水) is an SSF water tanker:

- The first character shows the fleet as follows:
  - "*Bei*" (北) for North Sea Fleet
  - "*Dong*" (东) for East Sea Fleet
  - "*Nan*" (南) for South Sea Fleet
- The second character shows the function as follows:
  - "*Jiao*" (交) for transport
  - "*Jiu*" (救) for salvage
  - "*Jun*" (浚) for dredge
  - "*Kang*" (康) for hospital
  - "*Shui*" (水) for water tanker
  - "*Tuo*" (拖) for tug
  - "*Xiu*" (修) for repair
  - "*You*" (油) for oiler

Unit Training

Today, the PLAN organizes surface-force training into three types: common training subjects, technical specialty training, and tactics training.

Common Training Subjects

All officers and enlisted crew members must pass a specified set of common training subjects to meet their basic training requirements, which includes:

- Common military regulations
- Vessel deployment
- Damage control
- Seamanship
- Vessel repairs below the surface
- Camouflage and concealment
- Light weapons
- Physical training and swimming
- At-sea practical training

In addition to the basic training subjects noted above, each surface vessel has its own individual and group training subjects.

Technical Specialty Training

Technical specialty training consists of the subjects that individual officers and enlisted sailors need to carry out their own duties. The different types of training include:

- Navigation
- Missiles and guns
- Underwater weapons
- Communications
- Radar
- Sonar
- Electronic countermeasures
- Electro-mechanical
- Sails and ropes
- Chemical defense
- Health
- Command-and-control
- On-board aviation services

Technical specialty training for individual classes of service ships also includes the following:

- Ocean reconnaissance
- Salvage
- Medical care
- Transport and supply
- Ocean surveillance and mapping
- At-sea engineering

Tactics Training

Tactics training consists of the principles and methods for maritime combat and is given to command personnel of all levels, as well as task-force headquarters and units. Combat training is divided into the following two types:

- Tactics training by vessel class
- Combined-arms tactics training with other PLAN branches

Training Procedures and Methods

The PLAN divides its surface-force training into the following two phases in accordance with the OMTE:

- Technical and tactics basic training
- Combined-arms training

Technical and tactics basic training is conducted at one of the fleet vessel training centers or training bases, or during task-force training, and includes vessel organization, management, navigation, defense, and combat training subjects.

Combined-arms training usually begins after individual vessel technical and tactics training is completed and is organized between different classes of vessels or different PLAN branches. As the annual training cycle progresses through the calendar year, surface-force training shifts from shore-based and shallow-water to deep-water training, from simple to complex training, and from separate training by individuals and individual functional branches to combined training for different functional branches on the same vessel, and from single vessel to multiple vessel training.

Current Training Reforms

Based on the revised OMTE issued in 2002, the PLAN has implemented several significant training reforms.

Task Force Reforms

Based on the new OMTE, the surface forces are moving away from task forces composed of a single class of vessel to employing what the PLAN calls composite task forces. Composite task forces are composed of multiple classes of vessels or combine older and newer classes of vessels.

Although not every vessel has the same data-link systems and connectivity, the use of data-links is helping to change the way task forces are organized and operate together. New combat methods have been devised to take advantage of the data links.

Although different classes of surface vessels are working together more closely and the surface forces occasionally conduct combined-arms training with the submarine force, the surface forces do not train that often with naval aviation or the coastal defense forces.

The PLAN is also increasing the coordinated employment of different types of task forces

for offensive purposes. For example, in 2003, composite task forces used a new training subject involving firing their main guns together while at sea. Under the old OMTE, they had not done so due to an inability to coordinate different classes of vessels or establish the right command relationships.

The surface forces are beginning to include opposition-force offensive and defensive training together during the same sortie. This includes dealing with battle damage and the loss of personnel while conducting an attack. Under the old OMTE, they conducted offensive and defensive training separately.

The PLAN is particularly concerned about the lack of adequate air defense capabilities and training.

Training Content

The surface forces are spending more time training on beyond-visual-range attacks against maritime and shore-based targets.

They are also increasing their training at night, from day into night, in poor weather conditions, near shoals and reefs, and in narrow passageways. In some instances this means increasing the distances covered, the number of combat-readiness patrols, the number of hours at sea, and the number of sea-area borders crossed.

The surface forces are gradually moving away from training events being 100% scripted where the "Blue Force" and "Red Force" know in advance what each side is doing, to training under unknown conditions that allow the COs to adapt to changing conditions as the event progresses. This includes training in unfamiliar sea areas away from "one's front door."

Logistics and Maintenance Reforms

The PLAN's surface forces have also made several changes to their logistics and maintenance training. For example, as individual vessels spend more time at sea on longer missions, they are adjusting the types and amount of food and water on board, as well as figuring out how to receive supplies if their port facilities are destroyed.

Shore-based food supply stations are computerizing their operations, to include inventory management, product selection by vessel supply personnel, and online purchase of goods. In addition, some have begun supplying goods through civilian vendors on a contract basis—a process known as "socialization." In some instances, these depots have switched methods. Now, instead of storing items, they use procurement arrangements to acquire and supply goods on short notice.

Previously, logistics and maintenance training was not necessarily incorporated into vessel training at sea. That situation is changing, so that the entire unit, including shore-based organizations and vessels, are training together.

In an effort to train personnel for real-war situations and to save money, the PLAN has emphasized repairing equipment instead of simply replacing it, as had been done in the past.

Chapter 7
Naval Aviation

The PLA Navy's aviation forces are known as Naval Aviation (海军航空兵 or 海航). Naval Aviation is ranked third in protocol order among the PLAN's five branches. Besides aircraft and airfields, Naval Aviation has subordinate antiaircraft artillery (AAA), radar, communications, chemical defense, aircraft maintenance, and logistics units, as well as various academies. During the 1980s, Naval Aviation had subordinate surface-to-air missile (SAM) units, but no longer has them.

This chapter provides a brief history of naval aviation, followed by information on the branch's organizational structure and training.

Brief History

The Early Years

Following its founding in April 1949, the PLAN issued its first three-year plan. The portions that pertained to creating an aviation branch included:

- Establishing three air divisions (one aerial mine-laying bomber division, one fighter division, and one division consisting of two ground-attack regiments and one fighter regiment)
- Establishing three aviation schools, which would train a total of 10,000 pilots and ground support personnel
- Building two to three Naval Aviation airfields in each strategic combat area
- Purchasing 360 aircraft and necessary support equipment from the Soviet Union

Although the advent of the Korean War did not allow the PLAN to fulfill its goals on schedule, the three-year plan laid the foundation for creating an aviation arm. Based on this plan, Naval Aviation had its origins when the CMC established the PLAN 1st Aviation School on 1 October 1950 at Qingdao on the Shandong peninsula.

On 27 June 1952, the Naval Aviation 1st Division became operational at Shanghai Hongqiao airfield, followed by several Naval Aviation units, schools, and fleet aviation troops. This air division was manned with the first graduates of the aviation school at Qingdao.

Naval Aviation celebrates 6 September 1952 as its founding, based on the following events:

- The Naval Aviation Department was established in Beijing as one of six separate administrative departments within PLAN Headquarters
- A Naval Aviation Headquarters was established at Liangxiang Airfield near Beijing
- Naval Aviation was designated one of the PLAN's five operational branches, along with the submarine, surface, coastal defense, and Marine Corps branches

Operational and Administrative Structure

By the end of 1954, Naval Aviation had 5 air divisions and 1 independent regiment. By 1960, the force comprised 500 aircraft, which were organized into 9 divisions and 3 independent regiments. Today, Naval Aviation has

7 air divisions assigned to 25 airbases located throughout the three fleets.

After the Naval Aviation branch was established, the structure changed several times. Through April 1960, the Naval Aviation Department was responsible for implementing leadership over the aviation troops and schools. From May 1960 to January 1964, Naval Aviation units were placed under the three fleets, but simultaneously received leadership and command from the Naval Aviation Department. After January 1964, Naval Aviation units came under the leadership of the fleets, while the Naval Aviation Department was responsible for only Naval Aviation schools and for naval aviation unit functional, not operational, responsibilities.

The Cultural Revolution Period

By 1965, the PLAN had created 14 schools, including three aviation schools—1st Aviation School in Qingdao, Shandong (1950), 2nd Aviation School in Qingdao (1952), 4th Aviation School in Langzhong, Sichuan (1961). During the Cultural Revolution, however, several schools were closed.

Besides schools closing, the Cultural Revolution had disastrous consequences across the board for Naval Aviation. For example, Naval Aviation headquarters was abolished in November 1969 and was not reestablished until May 1978. Around 1986, the Naval Aviation Department was re-subordinated under the Headquarters Department at PLAN Headquarters. As part of its downsizing program in late 2003, the PLAN again abolished Naval Aviation Headquarters at Liangxiang Airfield near Beijing, which was a first-level MR deputy leader-grade organization equivalent to a fleet headquarters, but kept the Naval Aviation Department as a second-level department under the Headquarters Department at PLAN Headquarters.

As a result of the PLAN's policies, Naval Aviation fighter and bomber pilots averaged less than 30 hours annually from 1965-1971. During 1968 alone, combat pilots averaged only 12.5 hours per year. In addition, from 1969-1977, Naval Aviation had more than 70 aircraft accidents that resulted in total loss of the aircraft and 62 pilot deaths. By the end of 1977, however, this trend began to turn around when Naval Aviation pilots flew more hours annually than they had since 1959. For example, in 1978, Naval Aviation pilots averaged just under 90 hours, which was the highest number of hours ever flown.

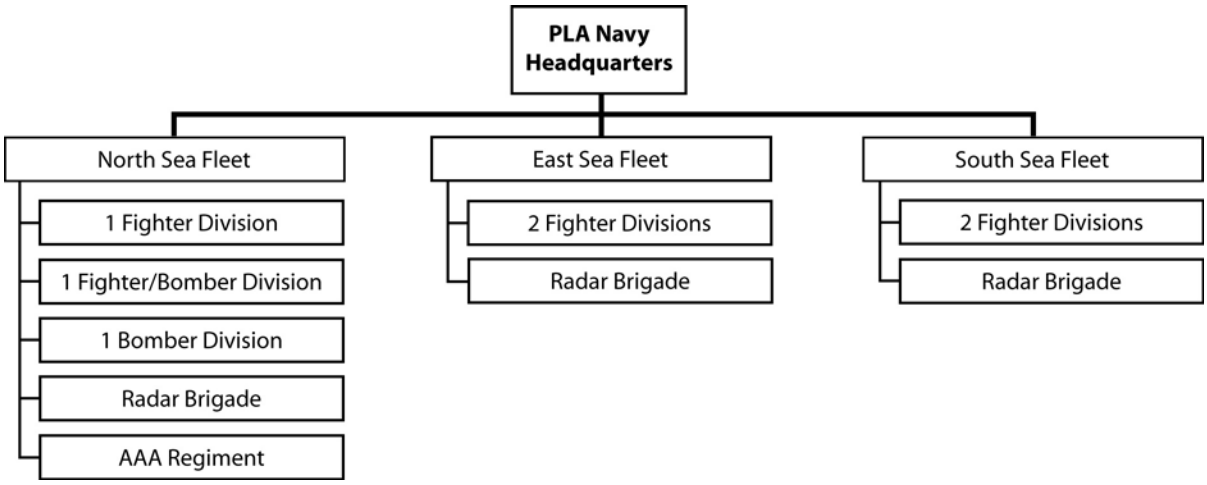
Combat History

On 18 March 1954, Naval Aviation engaged in its first air combat, and the last air combat took place on 10 February 1970 over Hainan. The PLAN states that its Naval Aviation pilots have shot down or damaged 40 aircraft and Naval Aviation AAA have shot down 380 aircraft, some of which were unmanned drones.

Organizational Structure

Naval Aviation is composed of bomber, fighter-bomber, attack, fighter, antisubmarine and reconnaissance units, as well as warning, electronic countermeasure, transport, rescue, and air refueling units. Together, these aircraft have reconnaissance, security, antiship, antisubmarine, and air defense capabilities. The organizational order moves from the Naval Aviation

Figure 15—Fleet Naval Aviation Force Structure



Department through fleet aviation to air divisions and regiments.

Today, as shown in Figure 15, Naval Aviation has 7 air divisions, which are organized into air regiments and regiment-grade field stations, battalion-grade flight and maintenance groups (大队), and company-grade flight and maintenance squadrons (中队). Naval Aviation also has several independent regiments, such as its shipborne helicopter regiments. Each fleet also has a radar brigade subordinate to Naval Aviation. In addition, the North Sea Fleet has a Naval Aviation AAA regiment.

Naval Aviation's air divisions and regiments are assigned to the following 25 airbases located throughout the three fleets:

- North Sea Fleet
  - — Anyang, Changzhi, Dalian, Jiaoxian, Jinxi, Jiyuan, Laishan, Laiyang, Liangxiang, Qingdao, Shanhaiguan, and Xingtai
- East Sea Fleet
  - — Daishan, Danyang, Ningbo, Luqiao, Shanghai, and Shitangqiao
- South Sea Fleet
  - — Foluo, Guiping, Haikou, Jialaishi, Lingling, Lingshui, and Sanya

Aircraft Generations

When discussing generations of aircraft (i.e., 1st, 2nd, 3rd, 4th, or 5th generation), the international community bases the generation on particular decades as follows:

- 1st generation: circa 1945-1955
- 2nd generation: circa 1955-1960
- 3rd generation: circa 1960-1970
- 4th generation: circa 1970-1990
- 5th generation: circa 1990-present

The PLA's system, however, does not necessarily match the international system. The PLAAF and Naval Aviation identify their aircraft only as 1st, 2nd, and 3rd generation based on when they were first integrated into the force. Specifically, the PLA considers:

- 1st-generation aircraft: the J-5 and J-6, because they were first deployed in the 1950s and 1960s

- 2nd-generation aircraft: the J-7 and J-8, because they were first deployed in the 1970s and 1980s
- 3rd-generation aircraft: the Su-27/30, J-10, JH-7 and J-11, because they were first deployed in the 1990s and 2000s. The FC-1 is also considered a 3rd-generation aircraft

Pilot Recruitment and Training

Historically, Naval Aviation pilot cadets were selected only from high school graduates, but that situation began to change in 2001, when Naval Aviation began selecting personnel who already had a bachelor's degree from a PLAN academy.

The high school graduate cadets receive their bachelor's degree in one of two ways. They either attend their first two years at the PLAN's Aviation Engineering College in Yantai, Shandong Province, or at the PLAAF Aeronautics University in Changchun, Jilin Province. After they complete their basic studies, they then spend two years in flight training at Naval Aviation's only flying academy at Huludao, Liaoning Province, or one of the PLAAF's flight academies.

After completing their bachelor's degree, the new officer pilots attend about one year of transition training at the Naval Aviation base in Shanhaiguan, Hebei Province, in the North Sea Fleet.

In 2001, Naval Aviation began training its first pilots who have bachelor's degrees from one of several PLAN academies. After completing two years of basic flight training at a PLAAF flight academy in 2003, they received a second bachelor's degree and were assigned to the Naval Aviation transition training base. After completing their transition training, they entered the operational force in mid-2004.

After completing their transition training, all new Naval Aviation pilots are assigned to an operational unit where they receive their initial flight training in the unit's aircraft. Following two to three years of technical training and basic tactics training, the pilots can be awarded wings as a third-grade pilot. As their training continues, they have the opportunity to become a second-grade pilot by flying in day and night using instrument flight rules (IFR), maintaining flight safety, and reaching a certain proficiency level. Next, if they have conducted combat and training missions under day and night IFR conditions, flown a certain number of hours, reached the level of instructor pilot and flight controller, and maintained flight safety, they can become a first-grade pilot. Finally, they can become a special-grade pilot if they have made special achievements in combat, training, and test flights, and maintained flight safety.

Unit Training

As noted above, Naval Aviation has three phases of pilot training: academy, transition, and unit training.

- Phase 1 consists of aviation basic theory and technical flight training in a basic, intermediate, and advanced trainer at a flight academy.
- Phase 2 consists of transitioning into a combat aircraft and conducting basic combat technical training at a transition training unit.
- Phase 3 consists of tactics training in the primary combat aircraft at an operational unit.

Naval Aviation also conducts training for its AAA, radar, communications, chemical defense, weather, aircraft maintenance, and logistics troops.

Flying Hours and Content

China does not provide public information about how many flying hours its Naval Aviation pilots receive each year. Each regiment has two quotas it must meet during the year. The first quota is a total number of hours. The second quota is the percentage of flight time dedicated to tactics training. Naval Aviation performs about 8.5% of each quota per month and usually completes its quota in mid-December.

Based on information available in PLAN writings, it appears that Naval Aviation combat aircraft pilots average around 125 hours per year. Most units normally fly only three days per week. Each training sortie for fighter and attack aircraft averages around 45 minutes. Bomber sorties are longer.

The PLAN divides the training day into three 8-hour flying periods, and most training events occur within one of those periods. To meet the goals of the new OMTE, however, Naval Aviation has experimented with certain adjustments with the length of the flying periods, time per sortie, and content per sortie. Specifically, some units have been flying what the PLAN calls "large flying periods" that cross from one flying period into another. Some units have also increased the time per sortie and incorporated more training subjects per sortie.

As a result, the total number of hours per pilot has not necessarily increased, but the number of sorties and flying periods has decreased to accomplish the same amount of training.

Current Training Reforms

Based on the revised OMTE issued in 2002, the PLAN has implemented several significant Naval Aviation training reforms.

More Rigorous Training Scenarios

As Naval Aviation adapts to more offensive and defensive missions at further distances and the possibility of having its home airfields destroyed or damaged by enemy missiles, it has changed the way its units and individuals train.

In 1996, the North Sea Fleet formed a Blue Force aviation ground-attack unit that simulates enemy tactics. In addition, individual pilot training on simulators in all three fleets was not emphasized as much until the new OMTE was implemented in 2002.

The new OMTE requires Naval Aviation pilots to conduct more rigorous training than before. For example, pilots fly more long-distance, over-water, cross-border missions during the day and night. Many of the flights are at minimum altitude (i.e., below 100 meters) or low altitude (above 100 meters) and in poor weather conditions. Vessels with helicopters have focused on helicopter operations during day and night that are gradually moving further from the vessel.

The new OMTE also requires Naval Aviation pilots to take more responsibility for building their own flight plans, rather than merely implementing flight plans developed by higher headquarters or someone else in the regiment.

To train in a real-war situation, Naval Aviation has increased its training at unfamiliar airfields, in unfamiliar airspace, and under unknown conditions. Some training events include mobility transits to another airfield when an enemy attack is imminent.

Naval Aviation divides the day into three flying periods and has increased its use of longer flying periods that transition from day into

night, night into after midnight, and late night into day. Naval Aviation is also now conducting some "rolling-type" training events that include activity through all three flying periods without rest.

In addition, rather than conducting a single flight subject per sortie, Naval Aviation is now conducting two or more flight subjects per sortie. Attacks on surface vessels are now conducted from multiple altitudes and multiple directions by increasingly large groups of aircraft.

To deal with the higher training tempo, Naval Aviation has begun placing greater emphasis on psychological and fatigue training for its pilots.

Under the old OMTE, the flying process consisted of the following four phases:

- Advance preparation, which usually takes place the day before a flight
- Direct preparation, which occurs the day of the flight
- Flight implementation
- Flight appraisal

Under the new OMTE, Naval Aviation merged the advance-preparation and direct-preparation phases to better manage flight activity.

Logistics and Maintenance

To meet the needs of a more mobile force and to deal with possible damage to airfields and aircraft during a conflict, Naval Aviation field stations are moving from providing logistics and maintenance support for a single type of aircraft at home to supporting operations for multiple types of aircraft at home and during mobile operations. Naval Aviation is also practicing rapid repair of facilities, runways, and aircraft following an enemy attack.

Naval Aviation airfields are also now able to support visiting PLAAF and Army Aviation aircraft and helicopters for short periods of time as they transit within and between military regions.

Chapter 8

Coastal Defense Forces

The PLA Navy's coastal defense forces (海军岸防兵) are composed primarily of shore-to-ship missile units and antiaircraft artillery (AAA) units. The PLAN usually lists the coastal defense forces as fourth in protocol order among its five branches. However, the PLAN provides very little public coverage of the coastal defense forces compared to the other branches.

This chapter provides a brief history of the coastal defense forces, followed by information on the branch's organizational structure and training.

Brief History

The coastal defense forces were officially established in 1950 with the opening of the Coastal Artillery School in August and the creation of the first coastal artillery battalion in October.

In 1952, PLAN Headquarters created a Coastal Defense Department within the Headquarters Department. Today, PLAN Headquarters, each fleet headquarters, and each support base with subordinate coastal defense units has a coastal defense troop administrative organization in the Headquarters Department.

During 1951, the PLAN created several coastal artillery regiments, which were subordinate to either a base or a naval garrison. In 1955, a mobile coastal artillery regiment was established along with several independent coastal artillery battalions.

In 1963, the PLAN began equipping its coastal defense forces with fixed and mobile shore-to-ship missiles. By the end of the 1960s, these missiles were organized into either regiments or battalions and were subordinate to either a fleet headquarters or a base.

The PLAN states that, since being created in the 1950s, the coastal defense forces have, either independently or in coordination with the ground forces or other PLAN branches, participated in more than 400 combat operations. During these operations, the coastal defense forces sank or damaged more than 70 vessels and shot down or damaged more than 40 aircraft.

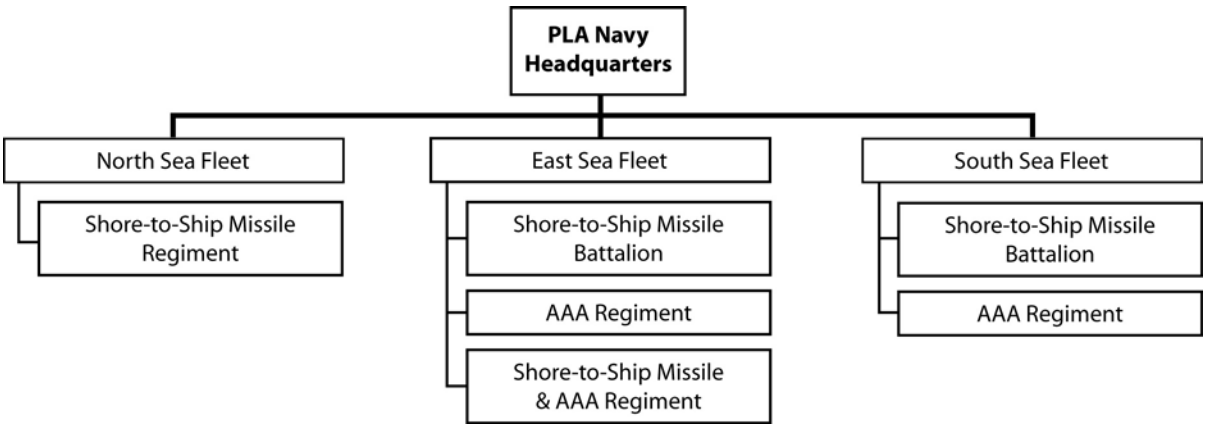
Organizational Structure

Today, the coastal defense force's shore-to-ship missiles are organized into either regiments or battalions, and AAA are organized into regiments. In some cases, shore-to-ship missiles and AAA are combined into a single regiment. Each regiment and battalion is subordinate to a fleet headquarters or a support base. However, not every fleet has the same type of units. Figure 16 (top of page 52) shows the current organizational structure for the three fleets.

Unit Training

The coastal defense forces conduct four types of training organized into three phases.

Figure 16—PLAN Coastal Defense Force Structure by Fleet



Types of Unit Training

The PLAN's coastal defense forces conduct four types of training as follows:

- Technical specialty training
- Firing training
- Tactics training
- Common training subjects

Technical Specialty Training

Technical specialty training focuses on providing individuals with the knowledge and skills for their technical specialty. The different types of technical specialty training include knowledge of theory, as well as the capabilities, structure, principles, operation, and management of weapons and equipment, technical equipment, and other relevant systems.

Firing Training

Firing training involves the combat use of weapon systems either singly or by an entire company. This training includes the principles, operation, and command of firing guns or launching missiles at moving maritime targets.

Tactics Training

Tactics training focuses on tactics theory, principles, and combat methods. This training includes single-branch and combined-arms tactics training.

Single-branch tactics training consists of artillery and missile tactics, plus combat principles, command, and support. It also includes defending one's firing or launch site and conducting mobile combat.

Combined-arms tactics training consists of combined-arms principles, coordination between artillery and missiles, and coordinated combat with the surface forces and Naval Aviation.

Common Training Subjects

Common training subjects include common naval education, as well as camouflage, concealment, and defense against winds and floods.

Training Phases

The PLAN divides its coastal defense forces' training into the following three phases in accordance with the OMTE:

- Personnel training
- Technical and tactics basic training
- Combined-arms training events

Personnel Training

Officers receive their basic training at a PLAN academy. Enlisted personnel receive their technical training at an academy or a training base. Their training consists of studying basic knowledge, specialty theory, and the basic control and command of weapon systems and equipment.

Technical and Tactics Basic Training

Once the officers and enlisted personnel are assigned to their permanent unit, they conduct individual training, as well as unit training at the company and battalion levels. This training includes deployment, management, specialty skills, and firing or launching their weapon systems, as well as concealing, defending, and supporting everything at their launch or firing site.

Combined-Arms Training Events

Once the companies and battalions have completed their basic technical and tactics training phase, regiment and above organizations organize larger coordinated training events. The training gradually moves from artillery and missile battalions coordinating together, to having several missile battalions coordinating together. From here, they begin conducting larger coordinated training events in a campaign- or tactical-level exercise with the surface forces and Naval Aviation under the leadership of a support base.

Current Training Reforms

Compared to the other branches, the PLAN has clearly lagged behind in implementing training reforms involving the coastal defense forces. Specifically, although the submarine, surface, and aviation forces, and the Marine Corps are conducting increasingly more combined-arms training, the PLAN rarely conducts combined-arms training between the coastal defense forces and the surface and aviation forces. The primary reason is the cost in time, money, and effort to the surface and aviation forces to plan, coordinate, and conduct this type of training.

At the same time, however, the coastal defense forces are beginning to coordinate more often with other components of the PLAN, such as the observation and communications stations located along the coast.

Chapter 9
Marine Corps

The Marine Corps (海军陆战队) is the PLA Navy's rapid-assault force for amphibious operations. The PLAN usually lists the Marine Corps as fifth in protocol order among its five branches.

This chapter provides a brief history of the Marine Corps, followed by information on the branch's organizational structure and training.

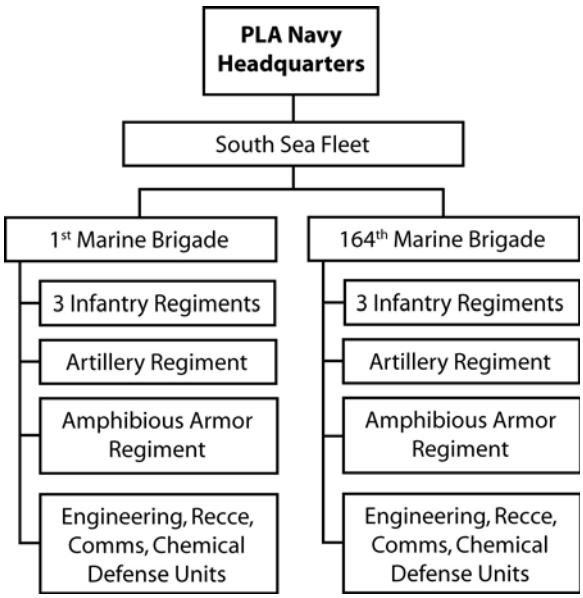
Brief History

The Marine Corps had its origins in 1953, when the Marine Corps 1st Regiment was created in the Huadong (East China) Military Region. This regiment became the basis for the marines' first division. After that, the organizational structure changed several times. The Marine Corps began forming brigades in the late 1970s, which became the primary operational organization.

The marines participated in the Yijiangshan Island campaign and contributed to other island campaigns along the coast during the late 1950s.

Prior to 1999, Marine Corps officers were trained in Army academies. In 1999, the PLAN's Guangzhou Naval Vessel Academy established a Naval Marine Corps Tactics Command Department, which is responsible for training all new and company-grade Marine Corps officers.

Figure 17—Marine Corps Organizational Structure



Organizational Structure

Today, as shown in Figure 17, the PLAN has two Marine Corps brigades, which are designated the 1st and 164th. Both brigades are subordinate to the South Sea Fleet Headquarters and are located in Zhanjiang, Guangdong Province. Each brigade has three infantry regiments, one artillery regiment, and one amphibious armor regiment. The Marine Corps also consists of engineering, reconnaissance, chemical defense, and communications units, which are battalion- or company-level organizations.

Unit Training

Marine Corps personnel receive three types of training at one of three types of locations. Training is conducted during three phases.

Types of Training

The Marine Corps conducts three types of training as shown below:

- Technical training
- Tactics training
- Psychological, physical, and field-combat survival training

Technical Training

Technical training consists of basic knowledge for amphibious combat, swimming in full battle gear, reconnaissance, capturing enemy personnel, hand-to-hand combat, airborne landing and parachuting, using water and land loading and unloading equipment, driving combat vehicles, firing from shore-to-sea and sea-to-shore, and overcoming water and beach obstacles, as well as using survival equipment.

Tactics Training

Tactics training consists of knowledge of services and branches, principles of tactics theory, individual and unit tactics, and combined-arms tactics. It also includes the following:

- Theory and principles of amphibious operations
- Boarding landing vessels, crossing bodies of water, and loading and unloading equipment
- Selecting loading sites and landing sites
- Assaulting beaches, establishing beachheads, and breaking out from beachheads
- Organizing and commanding pre-invasion night operations
- Dealing with different terrain features
- Planning, organizing, and commanding amphibious operations
- Coordinating with other services and branches

Psychological, Physical, and Field-Combat Survival Training

This training consists of adapting to different types of conditions, including crossing long distances of water under difficult conditions and surviving under field combat conditions after landing on shore or on an island or reef.

Training Methods

Officers receive their basic training at a PLAN academy, but enlisted force members receive their training at an operational unit. Unit training is normally conducted at one of three locations:

- Training base
- Training center
- Special training site

Unit training normally occurs in the following three phases:

- Shore-based training
- At-sea training
- Amphibious landing exercises

Current Training Reforms

Based on the revised OMTE issued in 2002, the PLAN has implemented some training reforms for the Marine Corps. For example, under the new OMTE, the Marine Corps is now paying more attention to simulator training for a wide variety of specialties, such as driving and using various types of equipment.

The Marine Corps also conducts combined-arms training with the South Sea Fleet's landing vessel *zhidui*. This training is now taking place under more difficult sea and weather conditions than before.

Chapter 10
Manpower

Understanding the size of the PLA in the past, present, or future is not an easy task. The main reasons for this are because the PLA's organizational structure has changed significantly over the past five decades and statistics were not always available or accurate. Furthermore, the statistics provided have not always differentiated among the different components of the armed forces.

Although China has provided public information about the total size of the PLA over the past decade, it has not broken down the number of personnel by service or branch, nor has it provided specific figures for the number of officers, technical officers, civilian cadre, noncommissioned officers, and conscripts. Figures for the PLA Navy available in Western publications are not necessarily accurate, but they do provide a rough estimate.

This chapter first examines the three components of China's armed forces and then briefly discusses the 10 PLA force reductions since 1950. The final section provides information about the estimated number of PLA Navy personnel.

China's Armed Forces

When looking at China's military, it is important to make a distinction among the three different components of the armed forces (武装力量):

- People's Liberation Army
- People's Armed Police
- Militia

People's Liberation Army

The PLA currently has 2.3 million personnel, comprised of both active and reserve components. The active components of the PLA are the country's standing forces, consisting of the Army, Navy, Air Force, and Second Artillery.

China's reserve units were created in 1983 as an important component of the PLA's organizational structure. Over the past 20 years, China has gone from having only ground-force reserve units to developing PLA Navy, Air Force, and Second Artillery reserve units. Today, China has more than 500,000 reserve personnel. During peacetime, the reserves come under the leadership of the provincial military district or garrisons. After they are mobilized during wartime, they come under the command of active-duty units or they can carry out independent combat missions. During wartime, the reserves transition to active-duty status.

People's Armed Police

The People's Armed Police or PAP (中国人民武装警察部队) was established in 1982. It belongs within the organizational structure of the State Council and is under the dual leadership of the State Council and the Chinese Communist Party Central Committee's Military Commission (CMC).

The PAP has eight types of troops. Of these, PAP Headquarters manages five (internal security, gold mines, forests, hydroelectric, and

transportation) with a combined total of more than 600,000 troops. The Ministry of Public Security manages the remaining three (border guards, fire fighters, and security guards) with a total of more than 200,000 people.

Militia

China describes the militia (民兵) as the armed organization drawn from the masses involved in production work, which serves as a reserve force for the PLA. The General Staff Department administers the building of the militia under the leadership of the State Council and the CMC.

Currently, the total number of primary militia stands at about 10 million, with about 100 million people registered as ordinary militia.

Force Reductions

Since 1950, the PLA has implemented 10 force reductions. When the PRC was established in 1949, the PLA had 5.5 million troops. At that time, the enlisted force consisted primarily of illiterate peasant volunteers and the officer-to-enlisted-member ratio was about 1:1. Today, the PLA has a 1:1:1 ratio for officers to noncommissioned officers (NCOs) to conscripts, which equates to approximately 760,000 personnel in each category. This 33% ratio for PLA officers contrasts to about a 15% ratio for officers in the US Military.

The first downsizing occurred in late 1950, but when the Korean War broke out, the force quickly grew to 6.3 million. The increase affected almost all infantry forces. The next six force reductions occurred in 1952, 1953, 1957, 1966, 1980, and 1982.

The eighth downsizing occurred from 1985 to 1987, with a reduction from 4.238 million to 3.235 million. The ninth downsizing occurred between 1997 and 2000 with a 500,000-man reduction to 2.5 million. The 10th downsizing occurred between September 2003 and December 2004, with a 200,000-man reduction to the current PLA force of 2.3 million.

The 10 force reductions in the PLA have focused on the following areas:

- Strengthening the PLAN, PLAAF, and Second Artillery
- Reducing the officer-to-enlisted-member ratio
- Increasing the NCO-to-conscript ratio
- Replacing officer billets with NCO billets
- Reducing the number of headquarters
- Reducing the number of administrative organizations within each headquarters
- Streamlining the operational, logistics, and administrative chains of command
- Abolishing or merging operational units
- Transferring certain units to non-PLA organizations, such as the railway troops in 1978
- Strengthening the warfighting capability for grassroots units in an informationalized environment
- Reforming the professional military education system

PLA Navy Personnel

Although the PLAN does not provide specific data about the size and breakdown of its personnel force, available information suggests the PLAN has approximately 290,000 personnel, which equates to 12.6% of the PLA's 2.3 million.

Given a 1:1:1 ratio for officers, NCOs, and conscripts for the PLA as a whole, and assuming that the ratio holds for the PLAN, means the PLAN has approximately 97,000 personnel in each category.

However, the ratio of officers to enlisted personnel in the PLA Navy and US Navy can vary depending on the type of unit. For example, a PLAN *Luhai*-class destroyer has 40 officers (16.0%) out of a crew of 250 personnel, while a USN Arleigh Burke-class destroyer has 23 officers (7.1%) out of a crew of 323 personnel.

Chapter 11
Officer Corps

The PLA Navy's officer (cadre) corps is part of the overall People's Liberation Army officer corps.

The PLA's and PLAN's officer corps are organized into officers (军官) and technical officers (技术军官).

All PLA officers serve in one of five career tracks, each of which is broken into several specialties. With the exception of the political career track, officers are assigned to their career track and specialty when they enter an officer academy as a cadet.

The PLA's education system has undergone continuous reforms along an uneven path since the PRC was founded in 1949. The primary goal of these reforms has been to produce an educated officer corps capable of commanding, using, supplying, and maintaining the PLA's weapon systems and equipment during wartime. The path began with an illiterate or semiliterate force and is now producing operational and technical officers with graduate degrees.

As noted in Chapter 10, although the PLAN does not provide specific data about the size and breakdown of its personnel force, available information suggests the PLAN has approximately 290,000 personnel. A 1:1:1 ratio for PLA officers, NCOs, and conscripts means the PLAN has approximately 97,000 officers.

This chapter begins by examining the force-management system for PLA officers, including career tracks, promotion and assignment procedures, the promotion cycle, and mandatory retirement ages. That is followed by a brief history of the PLA's education system, including the types of PLA education institutions and degrees, officer recruiting, and education reforms since the 1950s. The last two sections examine the PLAN's officer recruitment program, PLAN academies, and continuing education.

Force Management

Personnel Management System

The General Political Department's Cadre Department (总政治部干部部) is the personnel office for all PLA officer promotion, assignment, and retirement issues. The Political Department in each military region and service headquarters down to the regiment level in the chain of command has its own cadre administrative organization. For example, the Cadre Department in the PLAN's Political Department is responsible for all PLAN officer personnel issues.

The political officer at the battalion, company, and platoon levels is responsible for managing officer personnel issues, but the personnel records are kept at the regiment level.

Officer Career Tracks

PLA officers are assigned to one of five career tracks:

- Military officer (军事军官), also identified as the command (指挥) track

- Political officer (政治军官)
- Logistics officer (后勤军官)
- Equipment officer (装备军官)
- Technical officer (技术军官)

Officers in the military track normally attend one of the PLA's command academies or specialized academies, such as the Dalian Naval Vessel Academy. Upon graduation, these officers are assigned as unit commanders throughout the chain of command or as staff officers in the Headquarters Department at regiment and above organizations.

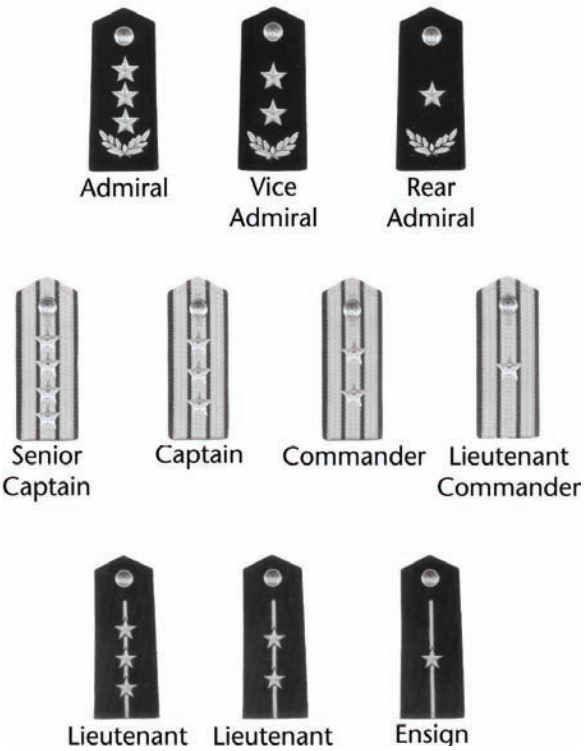
Officers in the political officer career track are usually chosen from officers who have already served as a platoon or company officer in the military career track, but they can also come from the other three career tracks. Once they are selected for the political career track, they receive training as a political officer.

Officers in the logistics, equipment, and technical officer career track attend specialty academies, such as the PLAN Logistics Academy or the Aviation Engineering Academy.

Each career track has sub-specialties, which equate to the appropriate department within the Four General Departments and the PLAN Logistics Department. For example, logistics officers specialize in finance, quartermaster, transportation, materials, fuel, and so on, which equate to the administrative departments under the General Logistics Department.

Figure 18 shows the rank insignia for the PLA Navy's officers.

Figure 18—Officer Rank Insignia



Technical Officers

The technical officer system was introduced in 1980. Since 1988, technical officers have been divided into three categories (senior, intermediate, and junior), 14 grades (platoon leader to CMC member), and 10 ranks (second lieutenant/ensign to lieutenant general/vice admiral).

Technical officers wear the same rank insignia as regular officers, but they wear a special technical officer insignia on their collar.

Promotion and Assignment Procedures

Officer promotions and assignments are managed through the political work system in a three-step process.

- The first step consists of the organization's political office gathering information on the officer, including interviews with the

officer's subordinates, co-workers, and bosses. Each officer receives three evaluations, including an annual evaluation, one every two to three years, and a promotion evaluation. The evaluations focus on four items: political character, general military and billet knowledge, achievements, and physical fitness.

- During the second step, the political office makes a recommendation to the organization's Party committee. Depending on the level within the chain of command, the Party committee can either authorize the promotion or assignment or send the recommendation to the Party organization in the next higher command for approval.
- Finally, the Party committee announces the promotion or assignment.

Based on the officer's grade, promotions and assignments are approved at different levels as follows:

- The chairman of the CMC approves all promotions and assignments for officers at the division-leader grade up to the chief of the general staff and director of the General Political Department.
- The general departments or military region leaders approve all promotions for officers at the division deputy-leader (brigade-leader) and regiment-leader grade.
- The group army or *jun*-level leaders approve all promotions for officers at the regiment deputy-leader and battalion-leader grade.
- The division or brigade leaders approve promotions for officers at the battalion deputy-leader and below grades.

Promotion Cycle

PLA regulations specify the time-in-rank and time-in-grade requirements for officers before they are promoted to the next rank and grade. For all ranks except second lieutenant to first lieutenant, the time-in-rank requirement is four years. However, the time-in-grade requirement is three years. Furthermore, in the PLA, time in service begins the first day as a cadet in an academy, not the day of commissioning upon graduation. As shown in Figure 19, the promotion cycle for grades and ranks is not a 1:1 ratio.

Figure 19—Rank and Grade Promotion Cycle

Rank	Time in Rank	Grade	Time in Grade
Cadet	3-4 years	Cadet	4 years
2LT/ENS	2 years	Platoon Leader	3 years
		Company Deputy Leader	3 years
1LT/LTJG	4 years		
		Company Leader	3 years
CPT/LT	4 years		
		Battalion Deputy Leader	3 years
MAJ/LCDR	4 years		
		Battalion Leader	3 years
LTC/CDR	4 years	Minimum of 3 years for promotion to each higher grade	
COL/CAPT	4 years		

Figure 20—Mandatory Retirement Ages

Grade #	Grade	Retirement Age
1	CMC Chairman and Vice Chairmen	N/A
2	CMC Member	N/A
3	Military Region Leader	65
4	Military Region Deputy Leader	63
5	Jun Leader	55
6	Jun Deputy Leader	
7	Division Leader	50
8	Division Deputy Leader (Brigade Leader)	
9	Regiment Leader	45
10	Regiment Deputy Leader	
11	Battalion Leader	40
12	Battalion Deputy Leader	
13	Company Leader	35
14	Company Deputy Leader	
15	Platoon Leader	30

Mandatory Retirement Ages

As shown in Figure 20, the mandatory retirement age for PLA officers is based on their grade, not their rank or time in service. In 1994, retirement ages were added for military region deputy leader- and military region leader-grade officers. CMC vice chairmen and CMC members do not have mandatory retirement ages.

The mandatory retirement age for technical officers is slightly higher for each grade than for regular officers.

Brief History: PLA's Education System

PLA Education Institutions

Throughout its history, the PLA has had three levels of education institutions as follows:

- Schools (学校): Most of the PLA's education institutions through the mid-1980s were schools. Around 1986, the PLA began upgrading all of its schools, except the NCO Schools, to academies.

- Academies (学院):[8] The majority of the PLA's education institutions today are academies.

- Universities (大学): In the PLA, a university can be a stand-alone institution, such as the National Defense University (NDU), or have several subordinate academies, such as the PLA Navy's Engineering University that has a subordinate Engineering Academy and an Electronics Engineering Academy located in two different cities.

[8] The Chinese term *xueyuan* (学院) can be translated as either academy or college.

PLA Education Degrees

As the PLA has gradually moved from an education system based primarily on schools to one based on academies and a growing number of universities, the types of degrees offered have expanded as shown below:

- Secondary technical degree (中专), which is a high school equivalency degree in China
- Senior technical degree (大专), which is roughly equivalent to a vocational or associate's degree offered by a community college in the US
- Bachelor's degree (学士)
- Master's degree (硕士)
- Doctorate (博士)

Prior to the mid-1980s, PLA schools offered primarily secondary and senior technical degrees to officers, along with some bachelor's degrees. Today, academies offer senior technical degrees to both officers and enlisted personnel, as well as bachelor's degrees to officers. Some, but not all, academies offer master's and doctorate degrees to officers. Universities offer bachelor's, master's, and doctorate degrees to officers.

One significant trend is that the PLA is gradually moving from providing graduate degrees to academy instructors and technical personnel only, to emphasizing graduate degrees for operations personnel, including vessel commanding officers.

From Illiteracy to Doctorate Degrees

The PLA officer corps' recruitment process has gradually transitioned from selecting enlisted members for direct commissioning or receiving a secondary technical degree at a PLA academy, to selecting high school graduates to receive a senior technical or bachelor's degree at a PLA academy, to selecting civilian college students and graduates as officers.

The education level for officers was primarily at the illiteracy level in the 1940s. As the PRC's overall education system began improving, officers received middle school and high school education in the 1950s and 1960s. For example, by the end of the 1970s, more than 70% of the junior officers in the PLA had only a middle school education. During the 1980s, most officers received a two-year degree (i.e., a high school equivalency degree), three-year vocational school degree, or four-year bachelor's degree. The PLA began offering master's degrees in the 1980s and doctorate degrees in the 1990s.

Officer Recruitment

The PLA states that, between 1927 and 1949, many cadres were "extricated from illiteracy or were still illiterate." Therefore, after the PRC was founded, this situation limited how the PLA recruited its officers.

One of the primary methods of filling the officer corps ranks was to provide a direct commission from within the enlisted force or to select enlisted members to attend a PLA academy and receive a secondary technical degree. This method was prevalent through the late 1970s, but, in the early 1980s, the PLA virtually eliminated direct commissioning during peacetime and has now eliminated secondary technical degrees for officers.

The second method was to select high school graduates to attend a PLA academy to receive a senior technical or bachelor's degree and then

commission them as officers. This process was interrupted during the Cultural Revolution when most schools in China were closed.

Since the early 1980s, the PLA has tried different programs for recruiting civilian college graduates as officers. The internal debate has focused on whether these officers should assume command positions or be limited to technical officer billets.

PLA Academy Reforms

The exact number of officer academies over time is difficult to determine with any precision, due to the PLA's changes in the nomenclature for the types of academies.

Today, the PLA has about 65 academies, depending on how they are counted (i.e., as one university with two subordinate academies or as three separate institutions).

The Early Years

In its early post-1949 days, the PLA had certain types of military academies that kept the initial number high but were eliminated over time. For example, during the first decade of the PRC, the PLA established "Cultural Schools" as part of its professional military education (PME) system. The mission of these schools was to teach basic literacy (reading and writing). These types of schools were gradually eliminated as the PRC's civilian education system became more highly developed.

From the early 1950s until the beginning of the Cultural Revolution in 1966, the PLA had about 125 academies, of which two-thirds were engineering and technical schools. Academy degrees ranged from a two-year secondary technical degree or three-year senior technical degree to a four-year bachelor's degree.

As a result of the political chaos in all of China during the Cultural Revolution (1966-1976), most civilian and military schools were closed or the courses were greatly curtailed.

During this period, two-thirds of all PLA schools were closed, including almost all the command schools and half of the technical schools.

In 1968, five of the PLAN's 14 existing academies were closed, entrance policies were relaxed, the academic period was shortened, and teaching content was reduced. For example, the academic period at command academies was reduced from four years to eight months with a heavy emphasis on political training.

Military training for units more or less ceased to exist, resulting in serious consequences. To adhere to some of Defense Minister Lin Biao's political education and military training regulations, the PLAN had many surface ships that did not set sail for months on end, some submarine units did not train for half a year, and flying units did not fly for many months, causing aircraft to rust. For example, Naval Aviation fighter and bomber pilots averaged less than 30 hours annually from 1965-1971, which was a 50 percent drop from the early 1960s. During 1968 alone, combat pilots averaged only 12.5 hours per year. From 1969-1978, there were more than 70 aircraft accidents that resulted in total loss of the aircraft and 62 pilot deaths.

In addition, from 1966 until the mid-1980s, technical officers throughout the PLA were not considered as important as command or political officers. In reaction to this, in January 1983, Zhang Tingfa, who was the PLAAF commander

and a member of the CCP Central Committee Political Bureau, stated, "It is an erroneous, muddled idea to look down on technical cadres, and the practice of discriminating against them is seriously wrong."

Reforms Begin in the 1980s

Based on a decision made at the 12th Party Congress in September 1982, the PLA began placing greater emphasis on education for its officer corps. First, the number of PLA academies expanded to around 100. Second, to help make up for the shortfall of educated officers, the PLA trained 2,000 civilian college graduates in 1983 for one year in military schools. Upon graduation, they were assigned as platoon commanders.

As the number of military academies grew during the 1980s and more military cadets selected from high school students graduated from them, fewer civilian college graduates were being recruited and assigned to command positions. Those who were recruited were assigned primarily as technical officers. However, the PLA was still concerned the education level for its officer corps was not optimal.

Jiang Zemin Implements New Reforms

During the early 1990s, CMC Chairman Jiang Zemin provided guidance to "strengthen the Army through science and technology" by better integrating military academies and civilian colleges. As such, during the 14th Party Congress in October 1992, the PLA revived the program of recruiting civilian college graduates as officers with an emphasis on technical skills.

By the late 1990s, however, the PLA was still faced with an undereducated officer corps. For example, in 1997, Xinhua reported that only 43% of the PLA's low-ranking officers had academy diplomas, of whom 20% earned through correspondence courses.

As a result of this shortfall, a December 1997 Xinhua report stated that the PLA had revived the program of recruiting civilian college graduates on a limited trial basis to fill junior officer command positions. For example, during that year, the PLA recruited 630 graduates, who were to receive one year of military training before being assigned as platoon commanders. By 2000, the PLA had reduced the training from twelve months down to three. These civilian college graduates were offered several inducements to enlist, including larger subsidies, higher ranks, and priority employment opportunities after their enlistment period.

According to *Liberation Army Daily* and Xinhua reports, since the 14th Party Congress in 1992 until 2000, the PLA had recruited 46,000 college graduates, of whom 6,200 were assigned to the General Staff Department.

Although the trend today is for more civilian college graduates to assume command track positions, the majority are still filling technical officer billets.

Restructuring the Academies

In spite of the reforms and the fact that more than 700 college graduates with master's or doctorate degrees had become regiment and division commanders between 1985 and 1999, the PLA still faced the problem of what it considered an undereducated officer corps.

To help solve this problem, in 1999, the CMC approved the "Plan to Adjust and Reform the Organizational Structure of Military Academies and Training Organizations," which downsized the number of academies and restructured their curricula to better meet the needs of the operational community. The 1999 reforms constructed a new type of framework for the system of academies. The old system featured the following types of academies:

- Three levels of command academies
  - — Basic for platoon-level officers
  - — Intermediate for regiment-level officers
  - — Advanced for *jun*-level officers
- Two types of technical academies
  - — Intermediate
  - — Advanced

Based on the reforms, the system now consists of just two main types: academies that provide basic training and education for officer cadets, and academies that provide intermediate and advanced professional military education for officers. Furthermore, today, the academies are divided into two types: single-discipline specialized academies, and multi-disciplinary comprehensive academies. In addition, some comprehensive academies have been restructured as universities.

One of the obstacles the PLA ran into during the late 1990s, however, was that, to compete with the growing private sector for good college graduates, the PLA found it had to start recruiting students during the first couple of years in college. As a result, the PLA instituted a National Defense Scholarship (国防生) Program, which is similar to the US military's Reserve Officer Training Corps (ROTC) program, and established reserve officer recruitment and training offices in several civilian colleges. The first national defense scholarships were offered at Beijing and Qinghua universities in late 1999 for specialties in electronics, computer science, automation, and foreign languages.

Fostering Educated Officers

In 2000, the State Council and CMC issued the "Decision on Establishing a Military Cadre Cultivation System Relying on General High-Level Education" as part of Jiang Zemin's overall guidance to merge military education into the national education program and to "train officers by both military and civilian academies." The "Decision" had two major components: recruiting civilian college graduates for the PLA, and training PLA officers in civilian colleges.

As noted in *China's National Defense in 2004*, the PLA has been realigning the organizational structure of its educational institutions. In recent years, the PLA has utilized military educational institutions as major platforms for training military personnel. However, a functional transformation of military educational institutions is taking place with the emphasis shifting from academic credentials education to pre-assignment training. To accomplish this, more military personnel with specialties for both military and civilian use will be trained by civilian institutions of higher learning.

These educational reforms are aimed at meeting the goals of the PLA's Strategic Project for Talented People, which the CMC implemented in August 2003. The Project proposes that in one to two decades, the PLA will possess: a contingent of command officers capable of directing informationalized wars and of building informationalized armed forces; a contingent of staff officers proficient in planning armed forces building and military operations; a con-

tingent of scientists capable of planning and organizing the innovative development of weaponry and equipment and the exploration of key technologies; a contingent of technical specialists with thorough knowledge of new- and high-tech weaponry performance; and a contingent of NCOs with expertise in using weapons and equipment at hand.

The Project will be implemented in two stages. By the end of 2010, there will be a remarkable improvement in the quality of military personnel and a large increase in the number of well-educated personnel in combat units. The following decade will witness a big leap in the training of military personnel.

PLA Navy Officer Recruitment

Today, the PLAN has a program for commissioning enlisted sailors, plus two separate programs for recruiting and commissioning civilian college students. The first program for civilian college students involves three months of military-political training following graduation from a civilian college. The second program is the National Defense Scholarship Program.

Enlisted Sailor Selection for Officer Training

The number of enlisted sailors selected to attend an officer academy and graduate as an officer has continued to decrease significantly over the past few years. The primary reason is that the PLAN has increased the number of civilian college graduates recruited as officers. The second reason is that the PLAN would prefer to retain its best enlisted personnel as NCOs.

Civilian College Student Programs

From 1994 to 2004, the PLAN accepted more than 7,000 civilian college graduates as officers, and, from 2000 to 2006, more than 1,800 students participated in the National Defense Scholarship Program.

As part of China's 10th Five-Year Plan (2001-2005), the PLAN increased its recruitment of civilian college students as officers to supplement the number of officers trained in PLAN academies. The goal for the 11th Five-Year Plan (2006-2010) is to have officers trained through civilian colleges comprise 40% of new officers each year. The two plans emphasize such specialties as electronic information, communications, radar, machinery, foreign languages, and construction.

The PLAN has been testing different models for integrating the civilian college graduates into the force. For example, the new civilian college graduate officers must first receive training for up to one year at a PLAN academy before being assigned to an operational unit. The PLAN designated the Dalian Naval Vessel Academy as a test point for this training work. It began training civilian college students who already had a bachelor's degree as surface vessel technical and command officers and as grassroots political work and command officers. In 2002, the PLAN began testing the "2+2" program, whereby outstanding undergraduate students in civilian colleges finish a two-year basic course at selected universities and then enter one of the naval academies for the last two years.

The PLAN's National Defense Student Program was officially started in 2000. These students, who are identified as reserve officers (后备军官), receive a stipend and summer training while they are attending college. Upon graduation, they join the PLAN as active-duty officers.

The PLAN has signed agreements with 12 universities to support the National Defense Scholarship Program and has set up selection and training offices at each school. The schools include Nanchang University, Huazhong Science and Technology University, Harbin Engineering University, Northwestern Polytechnic University, China Ocean University, Huadong Ship Engineering University, Ningbo University, Nanhua University, the Nanchang Aviation Industry College, and Xian University.

According to the agreements, students who will soon graduate from the program can apply for graduate school in PLA academies, and the PLAN can select officers to take postgraduate courses in the civilian institutions.

Upon graduation from a civilian college, the new officers receive from one to three months of military-political training. After completing this training, they are assigned as "student officers" to their operational unit, where they receive on-the-job training for one to three years.

A continuing complaint within the PLAN for some of the civilian college graduates is that, "although their education level is high, their basic understanding of military technology is low, their ability to adapt to working in a military environment is lacking, and their ability to manage troops is weak." At the same time, however, several civilian college graduates have now become key personnel on vessels and in operational unit headquarters.

PLAN Academies

As part of the PLA's reforms discussed above, the PLAN implemented several changes to its education system by creating comprehensive academies and expanding the curriculum beyond a single branch. As shown in Figure 21, the PLAN currently has 10 officer academies.

In April 1999, the PLAN integrated the Naval Engineering Academy in Wuhan and the Naval Electronic Engineering Academy in Nanjing to form the Naval Engineering University, which is one of the PLA's five comprehensive institutions. After it was formed, the university became the first PLAN institution to confer master's and doctoral degrees. Today, it offers courses in technology, command, engineering, and management in several academic disciplines on multiple levels.

In 2004, the PLAN renamed the Naval Guangzhou Vessel Academy as the Naval Service Arms Command Academy. It is the only tactical command specialty school for all five PLAN branches and has primary responsibility for training surface force, Marine Corps, and coastal defense force intermediate-level command personnel, and submarine force and naval avi-

Figure 21—PLAN Officer Academies

Academy	City, Province
Command Academy	Nanjing, Jiangsu
Dalian Vessel Academy	Dalian, Liaoning
Engineering University	Wuhan, Hubei
Engineering Academy	Wuhan, Hubei
Electronics Engineering Academy	Nanjing, Jiangsu
Service Arms Command Academy	Guangzhou, Guangdong
Submarine Academy	Qingdao, Shandong
Logistics Academy	Tianjin City
Flight Academy	Huludao, Liaoning
Aviation Engineering Academy	Yantai, Shandong

ation tactical command personnel. Since the academy was established in 1977, it has graduated more than 6,000 officers. At least 97% of the current surface vessel COs, 80% of the surface vessel *dadui*, Marine Corps, and coastal defense battalion and regiment commanders, and 70% of the destroyer and frigate *zhidui* commanders received their basic training at the academy. The academy has also hosted military delegations from more than 50 countries.

Teaching Reforms

In addition to restructuring its academies, the PLAN has attempted to address two major complaints about its education system. First, the students spend too much time studying theory. Second, the students do not spend enough time on practical application. Part of this problem is that much of the teaching material at the academies has not been updated for years and the equipment the students train on is not the same as in the PLAN's operational units.

To solve these problems, the academies have attempted to acquire advanced equipment for training purposes and to update their written training materials. The academies are also acquiring and making more use of simulators. Second, students in their final year spend a few weeks before graduation with an operational unit to gain some practical experience.

Graduate Programs

Today, seven of the PLAN's officer academies offer master's degrees and five offer doctorate degrees. This is a one-third increase since 2000. As a result, an increasingly higher number of PLAN officers are invovled in some type of post-graduate work or receiving master's or doctoral degrees in PLAN academies.

Since the early 2000s, this program has transitioned from technical personnel, researchers, and academy instructors receiving post-graduate education to providing the same opportunities to vessel commanding officers and junior officers, as well as other key operations and headquarters personnel.

PLAN officers are also receiving graduate degrees from civilian universities. For example, about 1,000 PLA officers stationed in the Shanghai area have received master's and doctorate degrees from various Shanghai institutions, such as Fudan University, Shanghai Jiaotong University, and Tongji University.

In addition, PLAN officers are increasingly going abroad to attend foreign war college programs.

Continuing Education

The PLAN has spent considerable sums of money to provide the means and resources for its officers to continue their education after being assigned to their operational units. For example:

- Some units have signed agreements for local civilian universities to conduct night classes on certain technical specialties.
- Certain civilian universities, such as the Jiangsu Science and Technology University, have provided training classes for PLAN officers for several decades.
- The PLAN has also spent millions of Renminbi on reading rooms, online systems, computers, and stocking libraries with thousands of books.
- Some units have designated certain nights as study periods, which can be used to conduct individual or group study.

Several PLAN units have also created officer training centers, which include the use of sim-

ulators and training on naval stratagem. In addition, the PLAN has a Navy Cadre Training Center associated with the Central Party School in the Western Hills near Beijing, which serves as a base for studying advanced naval and intermediate-level cadre theory.

Chapter 12
Enlisted Force

The PLA's enlisted force for all services and branches consists of two components:

- Conscripts (义务兵)
- Noncommissioned officers or NCOs (士官)

In the PLA, officers (军官) and cadre (干部) are synonymous, and all enlisted personnel, regardless of service or branch, are identified as soldiers (士兵 and 战士). Enlisted personnel, not officers, in the PLAN are also called sailors (水兵). Unlike the US Navy, PLAN enlisted personnel use Army terminology for all ranks and grades.

The enlisted force has changed profoundly this decade, particularly as a result of the revised "Military Service Law of the People's Republic of China" that became effective in January 1999. Prior to 1999, PLA Navy and Air Force conscripts served for four years, and Army and Second Artillery conscripts served for three years. Upon completion of their conscription period, they could remain on active duty as a "volunteer" (志愿兵) for a total service time of 16 years.

The revised Service Law reformed the entire enlisted force structure in the following two ways:

- It reduced the mandatory service period for conscripts in all PLA services and branches to two years.
- It established a formal NCO corps that is divided into six service periods, as shown in Figure 22, so that enlisted personnel can now potentially serve for a total of 30 years.

All conscripts report for induction screening on 1 November and begin their basic training during early December. Near the conclusion of their conscription period, they have the following three career options:

- Selection for officer training at a PLA academy
- Selection as an NCO
- Demobilization

Concerning the enlisted force, conscripts and junior NCOs who meet the age requirements can take the examinations to attend an officer academy. All NCOs who are not selected for officer training or promoted to the next grade are demobilized at the end of November.

Figure 22—NCO Service Periods and Ranks

Grade Level	Service Period and Years per Period	Rank
Junior NCO	1st Period (3 years)	Grade-1 NCO
	2nd Period (3 years)	Grade-2 NCO
Intermediate NCO	3rd Period (4 years)	Grade-3 NCO
	4th Period (4 years)	Grade-4 NCO
Senior NCO	5th Period (5 years)	Grade-5 NCO
	6th Period (9 years)	Grade-6 NCO

Because the new NCO program did not begin until 1999, at which time the service period for volunteers ended at the 16-year point, the PLA has a small number of grade-5 NCOs and only a few grade-6 NCOs today. The majority of NCOs are in grades 1 to 3, with a large turnover of grade-1 NCOs who are not promoted to grade-2 after they have completed their three-year service period.

Today, the PLA has 2.3 million personnel divided roughly into thirds (765,000) for officers, NCOs, and conscripts. Although the PLA actually conscripts only about 4% of the males eligible each year, it is still having some problems meeting its quotas.

As noted in Chapter 10, the PLAN has approximately 290,000 personnel. As the ratio of officers, NCOs, and conscripts in the PLAN likely mirrors the 1:1:1 ratio for the PLA as a whole, the PLAN has about 194,000 enlisted personnel, of whom one-half (97,000) are conscripts and one-half are NCOs.

Therefore, based on the two-year conscription cycle, the PLAN receives approximately 48,500 new conscripts each November and demobilizes a similar number of conscripts and an unknown number of NCOs at the same time. This process is a primary factor that drives the PLAN's one-year training cycle.

This chapter begins by examining the force management system for all members of the PLAN enlisted force. It then addresses the conscription and training process for PLAN conscripts. This chapter also illustrates the NCO selection process in the PLAN and examines the wide array of opportunities for NCO professional military education. It then concludes by addressing the issue of demobilization and its effect on the PLA, as well as Chinese society.

Force Management

The PLA has several organizations within the General Staff Department (GSD) and General Political Department (GPD) that are responsible for different administrative aspects of the enlisted force. The organization with the greatest amount of jurisdiction is the GSD's Military Affairs Department (军务部), which is responsible for managing the size and composition of the enlisted force, as well as maintaining their personnel records. The GSD's Mobilization Department (动员部) is responsible for the recruiting and induction process for conscripts, and the GSD's Military Training and Service Arms Department (军训和兵种部) is responsible for training.

The GPD's Organization Department (组织部) is responsible for selecting enlisted-force personnel as Party members and managing all of their political-related issues. Although primarily concerned with officer personnel management, the GPD Cadre Department (干部部) also defines the guidelines governing the selection of enlisted-force personnel as officers.

Conscripts

Conscription Process

The annual conscription process in the PLA begins each August when the military holds a two-day conference to make arrangements for the upcoming winter conscription cycle. In the PLAN, operational units determine how many new conscripts and NCOs are needed for the coming year. PLAN units then submit these figures to each fleet, military region, and PLAN Headquarters, where they are compiled and sent to the GSD.

Also in August, local People's Armed Forces Departments or PAFDs (人民武装部), which are military organizations that operate on behalf of the local government, are required to contact all draft-age males who reach the age of 18 before 31 December of the current calendar year. These individuals must register for military service by the end of September.

Each locality in China is assigned an annual recruitment quota, which is based on distribution of population. At present, the proportion of conscripts from urban areas accounts for just over 33% with the remaining 67% conscripted from rural areas.

Although most individuals who register for conscription are 18, theoretically any male between the ages of 18 and 22 may sign up. Females may also register provided they are between the ages of 18 and 19 and have graduated from high school the previous spring. Although neither the "Military Service Law" nor the "Regulations on PLA Conscription Work" stipulate official education requirements for conscripted males, many of the recent annual conscription orders state that incoming conscripts should be graduates of intermediate school, which in China runs through the 9th grade.

Media reporting suggests that most intermediate school graduates wait until they are 18 to either join or be conscripted. Individuals specifically exempted from registration include those who have secured admission to college, are medically or physically exempt, have been imprisoned, or are under investigation at the time of conscription. Chinese media also indicates that bribery is used both by people who want to join but are not qualified and by those who do not want to be conscripted.

Once registration is complete, the PAFD begins the process of pre-selecting potential conscripts. This process continues until the end of October when the State Council and the CMC issue the order for the upcoming conscription period. This annual conscription order specifies the requirements for conscripted citizens and contains instructions for local PAFDs on how to carry out conscription work. On the basis of this conscription order, PAFDs throughout the country then notify personnel of their selection as potential conscripts and instruct them to report to a local induction center run by the PAFD for a series of examinations.

The induction process occurs throughout November, with potential conscripts being examined for a single day, after which they return home and wait for their conscription orders or rejection letter. The three types of exams include:

- Physical exam
- Political exam (administered by the local public security bureau)
- Psychological exam

Unlike the US military, the PLA does not give any pre-induction written examinations such as the Armed Forces Vocational Aptitude Battery (AFVAB) to determine each conscript's specific proficiencies for military specialties. As a result, it is also unclear how the PLA determines which conscripts go into the PLAN and what their specialty will be.

Before 1999, conscripts had no control over which service or branch they would be assigned to. Today, they can voice a preference to enter a particular service or branch, although their choice is far from guaranteed, possibly due to the educational or technical requirements of certain services or branches. As PAFDs are composed primarily of personnel from the ground forces, recruitment teams from the

PLAN, PLAAF, and Second Artillery are often dispatched to selected regions to handpick their own conscripts.

Leaving Home and Reporting for Active Duty

In most instances, conscripts in all of the PLA's services and branches serve in a province other than their home of record. During the second week of December, PLAN conscripts travel from across the country to one of several training and operational facilities concentrated along the coast. Transportation arrangements are usually made in advance, and it is common for large numbers of conscripts to travel together. Although the majority of travel is done by train, the PLAN has begun to charter civilian aircraft to transport the new conscripts.

Conscription Difficulties and the Urban-Rural Divide

As noted earlier, PLA conscription quotas are based on the distribution of the population. Inherent in these quotas are differing educational levels, technical abilities, and attitudes towards military service. For example, those who grow up in the countryside are less likely to be able to operate and maintain advanced weapons and equipment.

Conversely, although many potential urban recruits are often better educated, they may also be blessed with greater economic opportunities and thus have less desire to serve in the PLA than their rural counterparts. Therefore, although the PLA believes conscripts selected from urban areas are more likely to possess the educational and technical skills it desires, it is having difficulties in its urban conscription work, as well as in its abilities to recruit high school graduates in general.

A number of different reasons explain why individuals may decide against joining the military. One is that many increasingly feel that, in an era of rapid economic growth and greater opportunities, joining the PLA is simply not attractive. By comparison, although many young people were once attracted to the PLA due to the prospects for upward mobility, many now believe there is no future in joining the PLA, especially when testing into a military academy or becoming an NCO is increasingly difficult.

Moreover, educational reforms have made attending college in the PRC much easier than it used to be, which has reduced the pool of eligible conscripts. For example, the number of students attending college today is about 20% versus 1.4% in 1978. In addition, a college education is widely viewed as a way to improve one's future prospects, including the opportunity to make money after graduation.

Furthermore, although the PLA provides stipends for its conscripts and their families, these minimal allowances have not kept pace with the rising cost of living and are far less attractive to individuals from more affluent areas of the country. Thus, many people, particularly in urban areas, think it simply does not pay to join the military. There appears to be little incentive to register and essentially waste two years, especially as post-demobilization employment prospects do not markedly improve.

Therefore, despite the recent emphasis on technology and education, the core of the enlisted force continues to be made up of young men from poor rural areas. Although four of the last five annual conscription orders (2001-2005) note that it is preferable that conscripts

recruited from rural areas be high school graduates, in truth, most rural conscripts are intermediate school graduates with low degrees of technical proficiency.

China has a system of compulsory education through intermediate school, but many families are unable to cope with the high cost of school fees once their child enters high school. For these families, particularly those from the countryside, the prospect of joining the PLA is viewed as one of the only means available to potentially escape a life of poverty. Not surprisingly, some resort to bribery in an attempt to pay their way into the military. As a result of all these factors, the proportion of new conscripts who are high school graduates remains in the minority.

Recruiting Civilian College Students and Graduates

One way the PLA has attempted to compensate for its inability to conscript some of China's more educated youth is by recruiting them once they are in college or after they have graduated. In 2001, the PLA began to recruit civilian college students in their first to third year of school as members of the enlisted force.

Most of these students who join as conscripts resume their studies once they complete their two-year conscription obligation, but the PLA's unwritten goal appears to be to retain them on active duty and have them become NCOs.

The PLA has instituted several preferential policies, including monetary incentives and reduced tuition, to recruit college students as conscripts. In addition, depending on their college specialty, some students who join as conscripts are given the rank of private 1st class immediately upon joining instead of waiting until after they complete basic training.

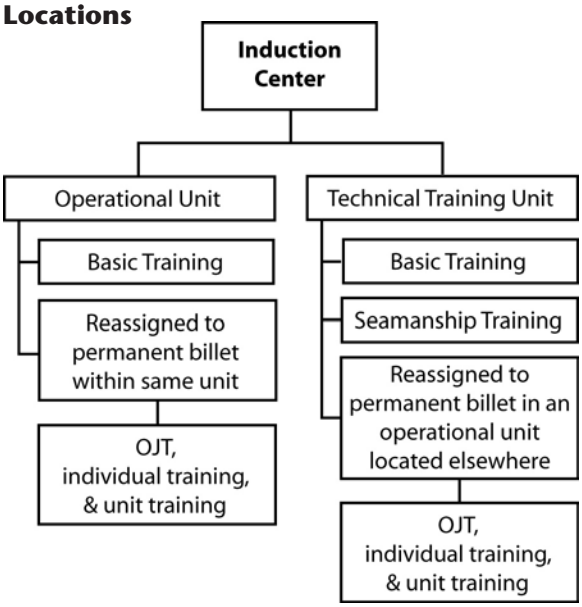
The PLA has also begun recruiting civilian college graduates and promoting them directly as NCOs. The specific grade they are given depends on their experience.

Such incentives are probably necessary as media reporting suggests that many students voluntarily join the PLA for personal reasons instead of idealistic motivations. Although many students join the military to learn new skills or gain experience, others view enlisting as a way to improve their chances to join the Communist Party, which is widely seen as a tool of social mobility in China, or as a way to reduce the financial burden on one's family.

Conscript Training

As shown in Figure 23, after completing the induction process, conscripts are assigned to

Figure 23—Conscript Training Phases and Locations



either an operational unit or technical training base where they receive basic training. Regardless of where they are initially assigned, the duration of basic training is about two months. Once basic training is complete, conscripts assigned to an operational unit are then reassigned within the same unit, where they receive individual and unit training. New conscripts initially assigned to a technical training base remain there for technical training once their basic training is complete. After completing their training, they are reassigned to an operational unit located elsewhere.

Basic Training

All incoming PLAN conscripts arrive at their operational or technical training unit in mid-December for approximately two months of basic training. The actual length of time for basic training varies depending on one's branch and usually ends around Chinese New Year (Spring Festival), which occurs sometime between late January and mid-February.

The basic training instructors are mostly NCOs or junior officers assigned to the unit on a temporary basis from their operational unit. Upon completion of basic training, they return to their unit.

Basic training in the PLAN includes subjects common to all new PLA conscripts, such as marching and saluting, as well as some training focusing on PLAN-wide or branch-specific topics. During basic training, new conscripts do not wear any rank insignia on their shoulders, collars, or caps. During this period, they are called "new soldiers" (新兵) and are assigned to "new soldier companies."

Conscripts who are sent directly to an operational unit are initially assigned to a training unit (教导队), which is an ad hoc organization in the PLA for group army-, division-, brigade-, and regiment-level units. The PLAN has training units at each of these levels, as well those assigned to each of the PLAN's support bases.

From December through February, these training units provide conscript basic training. Once basic training is over, they transition to providing short-term training courses for NCO squad leaders and officers. Some instructors are brought in on a temporary basis, while others are permanently assigned to the training unit.

Conscripts who are sent directly to a technical training base spend the first period receiving basic training. Again, some instructors are brought in on a temporary basis, while others are permanently assigned to the training base.

Taking the Oath and Receiving Rank

Once basic training is complete, the new conscripts take the PLA service member's oath shown in Figure 24, receive their rank of pri-

Figure 24—Serviceman's Oath

"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."

Figure 25—Conscript Rank Insignia

vate 2nd class (列兵), and wear a shoulder epaulet with a single yellow stripe. At the conclusion of their first year of service, they are promoted to private 1st class (上等兵) and wear a shoulder epaulet with two yellow stripes. The PLAN shoulder insignia for the two conscript ranks are shown in Figure 25.

Operational Unit Training

Upon completing their basic training, conscripts are assigned to a company within their permanent unit, where they learn how to function in squads and platoons. From this point forward, they are no longer called new soldiers, but are referred to as soldiers (士兵 or 战士). After being assigned to their billet, they receive on-the-job training (OJT), individual training, and unit training. This is where most PLAN conscripts learn their specialty.

The PLA expects that, after six months into their two-year conscription period, conscripts will be integrated into their billets enough to take part in larger unit training.

Technical Training

The transition to a two-year conscription period has significantly affected the ways in which conscripts are trained and used during their time in service. When PLAN conscripts served for four years, it was not a problem to devote three months to basic training followed by up to eight months of training unique to their military specialty, referred to as technical training (技术训练) within the PLA. However, now that conscripts serve for only two years, the PLAN elected to abolish technical training for the majority of its conscripts, starting with those who arrived in late 2002.

Today, once incoming PLAN conscripts complete their two months of basic training at a technical training base, they receive one month of training on vessel common training subjects, which focus on seamanship, damage control, life saving and rescue, navigation knowledge, observation and identification, deployment, and dinghies. During this period, they are called "students" (学兵).

Upon completing their training in late March, they are assigned directly to a vessel unit where they study their specialty and apply what they have learned in practical situations.

PLAN Technical Training Bases

Following their second year, if conscripts show good political and military qualities, want to continue their military service, and are chosen as an NCO selectee, they are sent to a PLAN technical training base or a unit training organization for specialty training.

Each of the PLAN's three fleets has a single division-grade technical training base for conscripts as follows:

- The North Sea Fleet Training Base is located on Liugong Island (刘公岛) off the Shandong Peninsula near Weihai.

- The East Sea Fleet Training Base is located in Wusong (吴松), which is part of Shanghai Municipality.
- The South Sea Fleet Training Base is located in Dongguan (东莞), Guangdong Province, just east of Guangzhou.

Prior to 2003, these bases were devoted to training conscripts, but their role has now changed. To compensate for the lack of conscript technical training, the PLAN initiated a new program at each of its three fleet training bases in 2003. The programs involve training second-year conscripts who have been selected to remain on active duty as grade-1 NCOs, and grade-1 NCOs who are already in their fifth year of active duty prior to their selection as grade-2 NCOs. This type of training typically begins after the annual demobilization of NCOs near the end of November. At the conclusion of the training course, trainees are promoted to grade-1 or grade-2 NCOs.

In addition to the three fleet training bases, the PLAN has some specialized training bases, such as a Logistics Training Base and a Naval Aviation Training Base. Each of the training bases above train several thousand conscripts.

Conscript Duties and Responsibilities

Reduced Leadership Responsibilities

The shortening of the mandatory conscription period, coupled with the expansion of the NCO corps, has led to a gradual reduction in conscript leadership and some technical responsibilities throughout the PLA. With conscripts now serving only two years on active duty and with the PLAN no longer providing technical training to its conscripts, the Navy has begun to turn over many of the leadership responsibilities previously held by conscripts in their third or fourth year to junior NCOs (NCO grades 1 and 2).

As a result, the scope of conscript responsibilities has diminished, with typical duties today consisting of tasks that do not require significant leadership skills or technical competency. These include such tasks as performing physical security and guard work, engaging in logistical support, and operating motor vehicles and unsophisticated communications equipment.

Efficiency Reports

All members of the enlisted force receive an efficiency report written by their immediate supervisor. In the PLAN, enlisted sailors receive an annual efficiency report. Company Party branches review each efficiency report and receive input from the person's supervisor, coworkers, and subordinates. Their efficiency reports are included in their personnel records, which are managed through the GSD Military Affairs Department system. In 2003, as part of its "transparency in grassroots affairs" campaign, the PLAN began to allow sailors to review and comment on their efficiency reports.

Conscript Party Membership

Conscripts in the PLAN are eligible to become members of the Chinese Communist Party (CCP). Applicants must be at least 18 years of age and a member of the Communist Youth League or CYL (共青团). Conscripts have a number of motivations for wanting to become Party members. Many view membership in the CCP as a tool of upward mobility and an asset

that can help them attain their goal of becoming an officer or NCO. For the majority of PLA conscripts demobilized after the conclusion of their two-year conscription period, Party membership can also be a valuable asset in finding employment or obtaining a better job upon returning home.

The process to become a Party member is arduous and can take just about the entire two-year conscription period. Therefore, the Party has basically given up recruiting conscripts. Predictably, the lengthy recruitment process, competitive selective procedures, and low overall quota (about 3%) of conscripts eligible to become Party members have caused many conscripts to be less than enthusiastic about joining. As a result, it is common today for many PLAN units to be without a single conscript Party member.

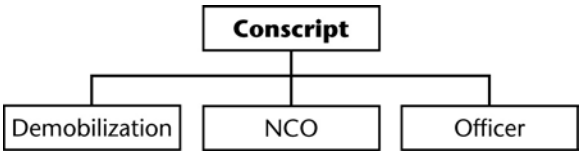
Although conscripts may not be Party members, most of them are involved in Party-sponsored activities through the CYL system. For example, besides daily and weekly activities administered through the CYL organization in each unit, PLAN Headquarters holds CYL Congresses attended by members from throughout the PLAN.

NCO Corps

NCO Selection, Retention, and Evaluation Process

At the conclusion of their second year of service, conscripts have the option of applying to extend their stay in the PLA by becoming NCOs or officers. Conscripts not selected as an NCO or for officer training conclude their conscription period at the end of October and are demobilized. The possible career paths available to conscripts are illustrated in Figure 26.

Figure 26—Conscript Options



The majority of conscripts who remain on active duty do so by becoming NCOs. Conscripts who choose to become NCOs can either be selected on the basis of merit or pass an exam for entrance into an NCO program of study at a PLA academy or school. In both situations, however, the process is highly competitive and the results are by no means guaranteed. Also, media reports indicate that corruption is widespread in the selection process.

One of the key changes instituted by the revised "Military Service Law" was the formal creation of a professional NCO corps with a 30-year career path, as shown in Figure 27. At the end of each period, NCOs may extend their

Figure 27—NCO Service Periods and Ranks

Grade Level	Service Period & Years per Period	Rank
Junior NCO	1st Period (3 years)	Grade-1 NCO
	2nd Period (3 years)	Grade-2 NCO
Intermediate NCO	3rd Period (4 years)	Grade-3 NCO
	4th Period (4 years)	Grade-4 NCO
Senior NCO	5th Period (5 years)	Grade-5 NCO
	6th Period (9 years)	Grade-6 NCO

Figure 28—NCO Rank Insignia

stay in the PLA by being promoted to a higher rank; otherwise, they are demobilized.

An NCO's rank is based on his service period, as are his salary, promotion, and date of demobilization. Figure 28 shows the PLAN rank insignias for each of the six NCO service periods.

NCO Professional Military Education

NCOs in the PLAN have a number of options for receiving professional military education (PME). Figure 29 shows these options, which range from receiving no training at all, to technical training at a training organization, continuing education usually in the form of correspondence or distance-learning courses done from within the unit, to training at a special NCO school or NCO program at an officer academy.

Although the number of noncommissioned officers who attend an NCO school or officer academy NCO program is presently small, the number attending academies and schools has doubled since the 1999 reforms to the NCO system. For example, between 2000 and 2003, more than 20,000 PLA NCOs received training at either an NCO school or officer academy NCO program. This is a direct result of the PLA's increased emphasis on the importance of NCO training and education.

According to guidance issued in 2005 by the GSD Military Affairs Department, all NCOs who hope to be selected to a higher grade must undergo education at a PLA academy or school or receive training at a training organization. The guidance is as follows:

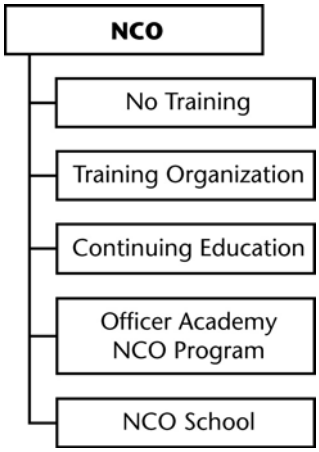
Junior NCOs (grades 1-2), intermediate NCOs (grades 3-4), and all technical and command NCOs must have at least a high school-level education.

Senior NCOs (grades 5-6) must have at least a senior technical-level education, as well as at least 10 years of experience in their specialty.

Learning Multiple Specialties

The PLAN is now focusing on its personnel learning more than one skill to fill in for others who take vacation or are killed or injured during combat. Specifically, the PLAN has begun developing NCOs who master one tech-

Figure 29—NCO PME Options



nical specialty but are competent in several others. For example, conscripts must master one technical specialty, while grade-4 NCOs must master two specialties and be competent in two others.

Training by Skill Levels

Under the PLAN's old Outline of Military Training and Evaluation (OMTE), all enlisted personnel on board a ship received the same type of training, regardless of their skill level. Under the new OMTE, the PLAN is providing different types of training for each grade and skill level.

Refresher Training

As part of its "Talent Cultivation Project," the PLAN has also begun to mandate short-term refresher training for NCOs prior to promotion to the next service period. NCOs receive instruction on new events and concepts, as well as the latest developments in armament and technology. A breakdown of the five training phases is shown in Figure 30.

College-Level Education

NCOs in the PLAN have the option of getting a college-level education at the PLAN NCO School (海军蚌埠士管学校) located in Bengbu, Anhui Province, or one of the following six PLAN officer academies that offer NCO programs:

- Dalian Vessel Academy
- Naval Engineering University
- Service Arms Command Academy
- Submarine Academy
- Logistics Academy
- Aviation Engineering Academy

Noncommissioned officers who attend an NCO program at an officer academy are assigned to their own student units and are not mixed with officer cadets. The duration of study is between two to three years, after which they receive either a secondary or senior technical degree.

Until the early 2000s, the highest degree NCOs could receive was a two-year secondary technical degree (中专), which in China is viewed as a high school equivalency degree. The three-year senior technical degree (大专), which is equivalent to a US associate's or vocational degree, is a relatively new phenomenon for PLA NCOs. The PLAN's first class of NCO senior technical graduates completed their program at the PLAN NCO School in July 2003.

PLAN NCO School

The PLAN NCO School is a technical school that trains NCOs for two or three years to

Figure 30—NCO Pre-Promotion Training Phases

Phase	Personnel Trained	Training Location
1	Grade-1 NCOs	Naval Academies and Fleet Training Bases
2	Grade-2 NCOs	Academy Instructors and Experts Train Personnel Within Units
3	Grade-3 NCOs	
4	Grade-4 NCOs	Naval Academies and Research Institutes
5	Grade-5 NCOs	

work in maritime and ground-based services. Originally founded in 1977, the school has 24 academic specialties divided into nine categories, including chemical defense, communications, navigation, logistics, machinery, mechanical and electrical, and weapons. The school also publishes the journal *NCO Training*.

The school began its first short-term training classes in March 2005, which consisted of 17 technical specialties. The new courses last from one to three months. These training opportunities are the outgrowth of a PLA plan to increase the professional skills of its NCOs. According to PRC media reports, some units appear to be having trouble finding suitable candidates to hold down certain billets due to a lack of specialties in the current NCO education system.

The PLA as a whole, as well as the PLAN, has been trying to address complaints from operational units that the NCO schools focus on too much theory and not enough practical application.

Duties and Responsibilities

As the overall proportion of NCOs in the enlisted force has surged to about 50%, and over 60% in some technical units, the responsibilities of noncommissioned officers have also increased, primarily at the expense of conscripts and junior officers. At present, NCOs hold down many key technical billets in all types of units. Other recent examples of the expansion of the scope of NCO duties and responsibilities include:

- Inheriting billets once held exclusively by officers, such as mess officers
- Handling much of the training for both conscripts and junior NCOs
- Serving as the commanding officer for some smaller vessels in the PLAN
- Serving as acting platoon leaders.

As the NCO force grows and the officer corps gets smaller, the PLAN has begun training noncommissioned officers at its NCO School and NCO programs in officer academies to take over several different types of officer billets. These billets include electronic countermeasures, land-based radar, sonar technology, and signals communication.

NCO Party Membership

Although only a small percentage of conscripts are actively recruited for Party membership, the proportion of NCOs who are Party members has increased greatly in recent years. With the large increase in NCO Party members, PRC media reports suggest that the role of Party organizations in grassroots units (i.e., battalion level and below) has been strengthened and that a number of NCO Party members are also members of company-level Party branches (党支部).

According to the *PLA Daily*, following the 16th Party Congress in October 2002, the PLA tasked each company-level Party branch to incorporate one to two NCO Party members. Usually these are more experienced NCOs who are squad leaders and serve as the head of a Party small group (党小组), which is the smallest organization that makes up a Party branch. For example, one PLAN vessel unit, where NCOs consisted of 70% of all Party members, incorporated many of these NCO Party members into the Party branch to adapt to this new reality.

The PLAN's goals are to have NCOs actively participate in work decisions and to gain managerial experience. That said, NCO involve-

ment in the Party decision-making process is limited to the company level, as only the Party branch secretaries and deputies, which are positions staffed by officers, can participate in Party committees above the company level.

Officer Selection

Although the direct commissioning of members of the enlisted force to the officer corps was prevalent during the Red Army days and still existed after the PLA was formed in the mid-1940s, the practice was abolished shortly after the Cultural Revolution. Since 1980, the PLA has gradually changed its system of directly commissioning enlisted members as officers, so that, during peacetime, all conscripts selected to become officers are now required to undergo three to four years of training in a PLA academy. This is true for NCOs as well, although a handful of more experienced, older NCOs may be selected to undergo only a few months of short-term training before being commissioned. Upon graduating from a military academy, the new officers incur a 7- to 8-year commitment to the PLA.

In 2003, the four General Departments issued new age requirements for enlisted personnel applying for officer training. Members of the enlisted force who were conscripted after graduating from high school cannot be more than 23 years old when they applied. The age requirement was further reduced since 2003 to 22 years old. This implies that the only members of the enlisted force permitted to apply to an officer academy are conscripts and grade-1 NCOs who have not exceeded the age limit.

All conscripts and NCOs who apply to officer undergraduate and senior technical academic specialties offered at military academies take the All-Army Uniform Academic Examination for admission to military schools. The exam is held throughout the PLA once a year, usually in early June. The examination results and academy enrollment decisions are usually posted in mid-July, and classes begin in the fall.

In addition to taking the Uniform Academic Examination, many enlisted applicants for military academies and schools must take an exam covering specific military training subjects, depending on the academic specialty they elect to study. This test is usually given several months ahead of the Uniform Academic Examination. The duration of the exam is about two hours, and the scores on these specialty exams are combined with the applicant's score on the Uniform Academic Examination for an overall score. According to the All-Army Recruitment Office, nearly 30,000 enlisted personnel nationwide took the exam in 2005, with more than 5,000 individuals gaining admission to military academies as officers, an overall national ratio of 1 to 6.

Of note, the total number of enlisted personnel in the PLAN recruited into officer academies during the 2003 recruitment cycle plunged by 58% from the previous year. Statistics from the PLAN Political Department's Cadre Department show that about 650 enlisted sailors were admitted to naval academies in 2003 compared to more than 1,500 in 2002. An examination of admissions statistics from 2005 reveals a further reduction, with the number of enlisted sailors admitted dropping to about 450.

Although the high number of applicants who take the examination each year suggests there remains great interest in extending one's active-duty service as an officer, it has become increasingly difficult for enlisted personnel to gain admission to military academies in recent years for the following three reasons:

- First, the PLA has been reducing its overall size, with a major focus on shrinking the officer corps.
- Second, the PLA began recruiting civilian college graduates as officers in the early 1990s and instituted a National Defense Scholarship Program in civilian universities in the early 2000s. This program has further reduced the number of officer slots available to enlisted personnel.
- Third, the PLA has been trying to expand the size of its NCO corps with personnel who previously would have been qualified to become officers.

Retirement and Demobilization

With the reduction of the mandatory conscription period to two years, half of the entire conscription force now turns over each November. Moreover, NCOs are also demobilized at this time, provided they have completed a service period and are not selected for promotion to the next higher grade.

When a conscript or NCO is demobilized from the PLA, he receives a retirement subsidy, as well as a medical subsidy if he suffers from a chronic illness. Once the soldier is formally demobilized and returns to civilian life, all expenses related to his demobilization and job placement are paid by the local government where he resides.

The demobilization process for NCOs is sometimes disruptive for unit training. In some cases, NCOs receive about a month of training prior to demobilization to prepare them for a civilian job. Typical types of training include computers, driving, cooking, photography, and vehicle repair.

The changeover of personnel can sometimes cause difficulties for units to manage, particularly when it leaves a gap in expertise. For example, the replacements for NCOs who serve as squad leaders are sometimes not identified until the NCOs are demobilized. The units must then spend time training the new NCO as a squad leader. In addition, because the PLAN takes the demobilization date seriously, vessels on patrol have returned to port just to disembark NCOs who are being demobilized the following day. The vessels are then left shorthanded until replacements can be trained.

After demobilization, conscripts and NCOs can be placed in enlisted reserve service if they are evaluated as suitable. These forces are occasionally brought in to active-duty units for training. In 2002, the PLAN decided to conduct its first reservist mobilization training to keep reserve personnel updated with the more technically sophisticated equipment currently in service. For example, one destroyer unit called up 80 reservists who had previously served in the unit as grade-2 or higher NCOs. The reservists trained together for several days and then conducted at-sea training for about a week.

Chapter 13
Unit Training

This chapter examines the PLAN's guidance and objectives for unit training as well as the annual training cycle for vessels, Naval Aviation, and the Marine Corps. It then discusses the different types of naval exercises, combined-arms training, and joint training.

Training Guidance

The PLA Navy provides training guidance to its forces in several ways, including conferences, training documents, and training guidance concepts.

The PLAN convenes a Party Congress every five years and usually convenes two plenary sessions each year, which provide guidance for all PLAN activities. After each plenary session, the PLAN then holds a conference to review all of its training for the previous period and to provide guidance for the next period.

The PLAN's training conference occasionally coincides with an All-Army Training Conference. Following the PLAN Training Conference, participants return to their units and hold fleet- and unit-level training meetings to discuss the implementation of the training guidance.

As noted in Chapter 4, besides the training guidance concepts, the PLAN also provides long-term training guidance to its units through the following documents:

- The *Gangyao*
- The Outline of Military Training and Evaluation (OMTE)
- Various types of regulations

The OMTE

As discussed in Chapter 4, the PLAN published a completely revised Outline of Military Training and Evaluation in January 2002. The OMTE consists of multiple volumes, with each volume identified as the OMTE for a specific topic. According to PLAN writings, the OMTE consists of the standardized documents used by each branch and type of vessel unit to organize and conduct military training. The OMTE is divided according to branch, vessel type, specialized function, and specialized technology. Its content includes the guiding thought, training subjects, content, timing, and objectives of training. The OMTE is now issued in binder format, rather than as a bound volume, so that individual sections can be replaced as necessary.

The OMTE stipulates the procedures for implementing training, the drafting of plans, the topics and programs, the training organization, and the examination and assessment of training. Some examples of individual OMTE volumes are as follows:

- Units Equipped with Each Class of Naval Submarine and Surface Vessel
- Units Equipped with Each Type of Naval Aviation Aircraft, AAA, and SAM
- Naval Coastal Defense Coastal Artillery and Coastal Missile Units
- Marine Corps
- Logistics Units
- Chemical Defense Units

Regulations

Since the revised OMTE was issued, the PLAN has published numerous revised and new regulations that provide guidance for units on how to implement the OMTE. For example, in December 2002, the PLAN commander and political commissar formally issued the new PLAN *Military Training Regulation*s. The new regulations completely updated the previous ones, which were issued in 1991. New regulations, such as joint training, were added, while others, such as the standards for quantifying training types and training time, were removed.

Unit Training Objectives

The PLAN's training objectives for all units today consist of the following key components:

- Training under real-war situations
- Employing mobile operations and support
- Operating in unfamiliar areas and under unknown conditions
- Transitioning from day into night
- Training in poor weather conditions
- Conducting multiple training subjects simultaneously
- Employing increasingly larger formations
- Using data links and radio silence
- Operating in an electromagnetic jamming and countermeasures environment.

Real-War Situations

To increase PLAN units' ability to operate under real-war conditions, the PLAN is increasingly using scenarios for its training events that focus on reacting to an "enemy" attack that has just occurred or is imminent against land- and sea-based assets. The training consists of raising readiness conditions, implementing defensive measures, moving munitions from storage facilities to aircraft and vessels, scrambling aircraft and vessels, quickly moving forces out of harm's way, repairing damage after an attack, dealing with injured personnel, and supplying forces at home and deployed locations.

The PLAN is also restructuring its forces based on the assumption it will experience considerable personnel losses during a conflict. Specifically, officers and enlisted personnel must now have more than one specialty, so they can fill in for someone if that person is killed or injured.

Although the PLAN, like the rest of the PLA, relies heavily on centralized control for all of its training and operations, it is slowly trying to provide its pilots and vessel COs with some command autonomy to implement the war plan if communications are disrupted or the situation changes rapidly.

Mobile Operations and Support

Over the past two decades, a consistent PLAN objective has been to move from a force focused on "coastal defense" to one focused on "offshore defense." This force transformation requires the ability to conduct mobile operations in both offensive and defensive campaigns further from its home bases for longer periods of time. To fulfill this objective, the PLAN has acquired new weapon systems, but even more important have been the PLAN's efforts to restructure its vessel and aircraft logistics and maintenance support systems.

As the PLAN restructures its operational vessel forces, such as creating combined destroyer and frigate *zhidui*, to be able to better conduct

more complex task force operations, it is also restructuring its on-shore and at-sea support forces. For example, in 2004, the PLAN created its first combat support vessel *zhidui* in each fleet to be able to provide better at-sea support for the more demanding mobile operations the PLAN aspires to execute.

The PLAN is also implementing what it calls "socialized support" of its on-shore logistics support by contracting with local vendors for food supplies that can be delivered within hours after ordering them via the internet.

Poor pre-departure preventive maintenance and vessel maintenance problems at sea, however, have affected the PLAN's ability to conduct certain types of mobile operations. As a result, vessels often must return to base shortly after departing because of insufficient technical training for crewmembers or the lack of spare parts aboard the vessel. This remains a major concern for the PLAN.

Concerning aircraft mobility, until the late 1990s, Naval Aviation aircraft rarely deployed to another base equipped with a different type of aircraft because of the fixed maintenance and logistics support structure in existence.

This situation has now changed. Over the past few years, Naval Aviation has created small mobile logistics and maintenance teams that can accompany deploying aircraft to units equipped with a different type of aircraft. These units can be deployed mostly by rail or road, but some are now using transport aircraft that accompany the combat aircraft deployment. Other small teams are being trained to support other types of visiting aircraft for short periods of time. As a result, Naval Aviation aircraft are now conducting more deployments from their home base for longer periods of time for both offensive and defensive purposes, including avoiding imminent "enemy" attacks.

These deployments are taking place both within and among the three fleets. Naval Aviation airfields are also increasingly supporting PLAAF aircraft and Army Aviation helicopters during their deployments through the coastal provinces.

Unfamiliar Areas and Unknown Conditions

As the PLAN implements its "offshore defense" strategic guidelines, it is now conducting training further from "its own front door." Vessels and aircraft are now training in what the PLAN calls "unfamiliar" sea areas, airspace, and airfields. To be better prepared for operating in these areas, the PLAN has undertaken a concerted effort to map the ocean's floor in the Bohai Gulf, Yellow Sea, East China Sea, and South China Sea.

As part of its mobility training, Naval Aviation aircraft now routinely deploy to "unfamiliar" airfields for short periods of time.

One of the PLAN's limitations has been the reliance on scripted training events. Under the old OMTE, the "Red Force" and "Blue Force" commanders in a training event or exercise exchanged information about their movements and intentions before deploying to sea or conducting air engagements. The PLA calls this training under "known conditions."

Under the new OMTE, only a general area of operations is provided and neither side is prebriefed about the other's activities. The PLA calls this training under "unknown conditions." The premise is that the "enemy" is not

going to pre-brief the PLAN on its intentions or operations before or during a conflict.

Furthermore, PLAN vessels are beginning to conduct more training in narrow and shallow seas, and in areas with islands, shoals, and reefs.

Transitioning from Day into Night during All Types of Weather

Historically, due to various weapon system limitations, the PLAN did not often train during non-daylight hours or during poor weather conditions. Vessels often trained during the day and anchored at night. While the PLAN divides the training day into three 8-hour periods, most training events occured in only one of those periods.

The situation is now changing as the PLAN acquires more weapon systems that can operate in all types of weather conditions and the realization that future conflicts may very well be conducted mostly at night.

Under the new OMTE, PLAN aircraft and vessels now routinely conduct training that transitions from one period into the next. Training that covers all three periods is called "rolling-type" training.

The Shift to Multiple Training Subjects

As noted in the earlier chapters on each of the PLAN's branches, the annual training cycle progresses from individuals, to small units, to larger units, and from basic subjects to techniques to tactics and combat methods. These tactics and combat methods are then incorporated into larger air formations and vessel task forces as campaign-level training subjects, such as antisubmarine warfare.

Typically, PLAN units previously conducted only one training subject per sortie in a building block approach. Under the new OMTE, however, vessels and aircraft now conduct more than one training subject per sortie. For example, vessels now conduct both offensive and defensive training subjects at the same time, to include dealing with injured crewmembers and shipboard damage.

This change now allows the vessel crewmembers and pilots to conduct longer but fewer sorties to accomplish the same training requirements. Among other factors, the rising cost of fuel is driving this reform.

Annual Training Cycle

The PLAN conducts what can best be described as a one-year training cycle. The five key factors driving this cycle are as follows:

- The annual conscription and demobilization for one-half of all conscripts during October and November
- The demobilization during November for all PLAN NCOs who are not promoted to the next grade
- The inclusion of new officers into the operational force after their graduation from a PLAN academy in June
- Weather
- Holidays

The annual conscription cycle does not affect every branch equally. For example, training for surface vessels and the Marine Corps, where conscripts constitute a higher proportion of personnel involved in the day-to-day training and operations, is more dependent on new conscripts than for Naval Aviation training, where all of the pilots and a high percentage of maintenance personnel are officers. However,

the annual training cycle is slowly changing as the size of the NCO corps grows in relation to the conscript force.

Naval Vessel Training

Training for PLAN surface and subsurface vessels occurs at the three fleet vessel training centers, in port, and at sea. The PLAN has implemented several officer corps and enlisted force reforms that are changing the way its vessels are training.

Vessel Training Centers

In 1982, the PLAN began creating a single vessel training center in each its three fleets, where all PLAN surface and subsurface vessels and crews receive what is called "full training" or "single-vessel full training." Some crewmembers and vessels also receive refresher training when necessary.

The training is organized around a set of common training subjects, followed by task-force basic tactics training subjects, each of which must be completed in a specified sequence. When each training subject is completed, an evaluation for each crewmember and for the vessel as a whole must be passed before moving on to the next subject.

As noted below, several significant changes took place in the training at the centers as a result of the new OMTE.

Under the old OMTE, every newly commissioned vessel and every vessel that had just completed an overhaul or received new equipment had to go through the training center and complete every training subject in sequence. All training started after Spring Festival and ended several months later. If a vessel missed the cutoff, it had to wait until the next year to begin.

The new OMTE now allows vessels to enter training throughout the year and to bypass certain sequential training subjects if the vessel and crew pass the evaluation. Furthermore, commanding officers (COs) now have more flexibility in determining their vessel's training schedule.

Under the old OMTE, any 1st-class vessel (i.e., one that was on readiness alert or on patrol) that received a new CO who had not received his full training qualifications had to be downgraded to a 2nd-class vessel (i.e., one that could go on alert in a short period of time). These vessels had to return to a training center so that the CO could receive his full training certification. This regulation also applied to the training qualifications of the crew as a whole.

The new OMTE now allows for more COs to be fully qualified, so that new COs can assume their duties without the vessel having to return to the training center.

Furthermore, the new OMTE allows some older vessels to be assigned on a permanent basis to training centers. These vessels are used for training new crewmembers and for refresher training. These personnel are then rotated to the 1st-class vessels so the vessels do not have to return to the training center.

Under the old OMTE, opposition-force training at the centers was not a high priority, due primarily to safety considerations. The evaluation vessel served as the target vessel but did not pose a threat to the vessels being evaluated, so there was no true opposition. The situation has changed under the new OMTE, so that opposition-force training is now a key component of the training. The vessels undergoing training

now serve as the opponents. Today, opposition-force training constitutes about one-third of the overall evaluation.

Under the new OMTE, the centers have built simulation labs and now require a high percentage of training to take place using simulators.

Under the new OMTE, vessel COs have more flexibility to independently conduct their vessel's training while in the training center. Each CO organizes his own vessel's training plan with the center's assistance. As a result, the training time for some vessels has been reduced by one-half.

As a result of these changes, the vessel training centers have significantly increased the number and types of vessels they train annually.

Naval Vessel Training Cycle

PLAN vessel training is divided into three phases based on the annual conscription and NCO demobilization cycle.

Altogether, PLAN vessels train about 150 days per year, much of which is for just one day in port or anchored off shore. The three fleets rarely train with each other, especially during phase one, but a couple of times per year two or all three of the fleets conduct training together. This training is not necessarily an exercise, because PLAN exercises are based on specific scenarios, as is discussed below.

Phase One

Phase one lasts from 1 November until Spring Festival in late January to early February. Some vessels are not fully manned during this phase because the new conscripts are still receiving basic training at a fleet training center until early February. Furthermore, all NCOs who are not promoted to the next grade are demobilized in late November, and their replacements are not yet necessarily selected or trained. Weather in some fleets is also a factor during this phase.

During this phase, vessel crews conduct training on basic subjects in port and in nearby coastal waters. In December, the vessels can begin sea training in coastal waters. Sometimes the vessels just leave port and anchor near the coast. The reason for this is so the crew is not distracted by wanting to go ashore. This portion consists primarily of single vessel training, but sometimes vessels informally form a small group for advanced training, depending on their status. During this period, the crew trains to see how everything fits together for an individual vessel. This phase also includes live gunnery against land targets.

Phase one also consists of lectures and organized study of regulations. Study begins with the general regulations and then moves to specific regulations for each job. Some officers also take this opportunity to go on leave or to have their families join them while the vessel is in port and during Spring Festival. The training cycle during phase one is gradually changing, however, as the number of conscripts decreases and the number of NCOs increases aboard each vessel. Some vessels are conducting training in January and February that they previously did not conduct until the spring.

Phase Two

Phase two lasts from March through June. During this phase, the vessels begin formally training together in groups. After they have mastered this, they then form larger task forc-

es, but this is not a true "task force." During this phase, the vessels shoot at drones and work with Naval Aviation fighters. The vessels are involved in various types of training, such as antiaircraft artillery, antisubmarine warfare, and antisurface warfare. Destroyers also begin to train with frigates during this phase.

Phase Three

Phase three lasts from summer until the end of October, when a final exercise takes place. During this period, special task-force mobility training usually takes place.

Vessel Officer and NCO Training Reforms

Based on the new OMTE, one of the PLAN's goals is to have more vessels on combat patrol or alert status in port (i.e., on 1st-class status). Prior to the new OMTE, the PLAN deemed the number of certified COs as insufficient to meet its current and future needs, especially in times of war.

One of the PLAN's largest bureaucratic challenges was that a vessel was taken off 1st-class status if the CO was replaced or could not perform his duties for various reasons, such as being sick. When this happened, the vessel was taken off 1st-class status, and, in some cases, the entire crew had to be re-certified along with the new CO.

Under the old OMTE, political officers, executive officers (XOs), and watch officers had only limited command roles on the vessel. As a result, they could not step in to assume the CO's role if necessary. In response to these challenges, the new OMTE allows XOs and some political officers to train as COs and allows watch officers to conduct additional duties at sea.

This issue is somewhat controversial, however, because the limited time at sea for many PLAN vessels does not allow enough time for multiple officers to train in the same position.

The PLAN also believed that flexibility in terms of fully training crews was hampered under the old OMTE. This was because PLAN NCOs possessed only one technical skill and were assigned to the same vessel their entire career. Therefore, under the new OMTE, NCOs are required to learn more than one technical skill on the same and, in some cases, on different classes of vessels.

Naval Aviation Training Cycle

The enlisted force conscription and demobilization cycles do not impact Naval Aviation as much as they do the surface and submarine forces. However, the addition of new pilots from the transition training base during June, along with weather and holidays, does affect Naval Aviation's annual training cycle.

Naval Aviation assigns monthly percentage quotas to each unit for completion of training subjects and flight time. Each month averages about 8% of the annual quota, with most units completing their quotas in early December. Each unit reviews its quotas on a quarterly basis and adjusts the training accordingly.

Although flying takes place in late December, early January, and during Spring Festival, the overall level is less than the rest of the year. Naval Aviation takes the opportunity during late December, Spring Festival, and at least once in the summer to conduct intensive maintenance inspections on all of its aircraft before heavy flight activity resumes.

Under the old OMTE, most Naval Aviation units usually elected to fly only on days when the weather was good. Even then, they flew only easy training subjects during the first part of the year and gradually increased the difficulty as weather got better and the training cycle progressed. However, under the new OMTE, Naval Aviation has increased the intensity and difficulty of training throughout each quarter of the year regardless of the weather conditions.

In addition, the transition from technical training, which usually took place during the early part of the year, to more complicated tactics training has been shortened by two to three months. Whereas the reluctance or technical inability to fly during bad weather conditions previously necessitated waiting for spring to begin the transition, Naval Aviation units are increasingly training in all weather conditions and relying on simulators to overcome this bottleneck.

Marine Corps Training Cycle

The annual cycle for conscription and NCO demobilization is an important driving factor for the Marine Corps training cycle. Although some unit training occurs from 1 November through February, the majority of the training occurs during the summer and fall after the new conscripts have completed their basic training and have been gradually integrated into the operational brigades.

Once the new conscripts are assigned to their permanent units, the training cycle progresses from individual training to small-unit training to larger-unit training, and from technical to tactics training events.

The Marine Corps conducts two comprehensive training evaluations per year. The first one occurs in early June and the second in late November. These evaluations include live maneuver on shore and at sea, as well as live firing on shore, defense at-sea, and landing assaults on beaches under different weather and sea conditions.

PLAN Exercises

This section begins by noting the six types of training methods and then focuses on the different types of PLA Navy exercises. It also discusses how exercises are organized.

Naval Training Methods

The PLA Navy uses three terms for training:

- *Xunlian* (训练) refers to training that occurs on a daily basis for individual training subjects
- *Yanxi* (演习) refers to an exercise
- *Yanlian* (演练) is a combination of the two terms above and usually refers to a training event by a unit that takes place during one or more days and incorporates several training subjects but is not at the scope of an exercise.

The PLAN organizes and conducts military training for naval personnel to gain naval knowledge, technical skills, and combat methods. Training is divided into theory and practical application. Theory training includes self-study, lectures, seminars, correspondence courses, and reports. Practical application occurs in a work environment to implement the theory. There are six types of training methods:

- Drills (操练) include the instruction, demonstration, and use of live weapons and equipment in a simulated combat situation.
- Practical application (实习) includes observation and hands-on use of equipment.
- Demonstrations (操演) occur after the officers and enlisted troops have a basic technical capability. These include deployment, battle, and support demonstrations by combining the individual skills learned up to that point. The goal is to become familiar with command and coordination functions, raise the skill level for weapons and equipment use, and train for combat support. Demonstrations can be divided into battle demonstrations and demonstrations for routine support.
- Exercises (演习) are the basic method for units to conduct actual combat training and include single-force, opposition-force, command and staff, combined-arms, joint, and live-munitions exercises.
- Live-weapons training (实际使用武器训练) includes: firing artillery; launching missiles, mines, and rockets; dropping depth charges; laying mines; and mine sweeping.
- At-sea training (海上训练) is conducted on single or multiple training subjects.

Exercise Plan

The exercise plan is the basis for organizing an exercise and guides its preparation and execution. The contents include the exercise tasks, goals, problems, participating forces, organization and leadership, exercise area, methods, start time and progression times, exercise phases and times, materials support, and safety measures.

Exercise Timing and Duration

The duration of an exercise is determined by the subject matter and scale as follows:

- A division- or brigade-scale maneuver exercise usually lasts about five days and nights
- A regiment-scale maneuver exercise lasts about three days and nights

Exercise Ratings

The General Staff Department assigns one of four performance ratings for exercises as follows:

- Grade 1 is excellent
- Grade 2 is good
- Grade 3 is pass
- Grade 4 is fail

Naval Exercise Goals

Naval exercises use scenarios to conduct unified training for campaigns and battles. The goals are to:

- Raise the capability for organizing and commanding during a real war
- Coordinate closely among all services and branches
- Evaluate weapons and equipment teaching materials
- Discuss combat methods

After officers and enlisted sailors have an understanding of theory and have trained in basic technical and tactics skills, the PLAN uses exercises to simulate real and specific situations.

Naval Exercise Categories

Naval exercises are divided into the following seven categories and subcategories:

- Scale
  - — Strategic and campaign exercises
  - — Campaign exercises
  - — Tactical exercises
- The level targeted for training
  - — Unit training
  - — Command and staff exercises
- Organization form
  - — Single-force exercise
  - — Opposition-force exercise
- Organization level
  - — Single-level exercise
  - — Two-level exercise
  - — Multiple-level exercise
- The conditions
  - — Chart exercise
  - — Live-maneuver exercise
  - — Live-maneuver with live munitions exercise
- Location
  - — Indoors exercise
  - — Field exercise
  - — In-port or on-shore exercise
  - — At-sea exercise
- Objective
  - — Inspection or evaluation exercise
  - — Demonstration exercise
  - — Trial exercise
  - — Research exercise

Types of PLAN Exercises

The PLAN conducts 14 different types of exercises, which are briefly discussed below. Although each exercise is a stand-alone event for planning and execution purposes, it can incorporate components of other exercises. For example, a combined-arms exercise includes naval maneuvers and opposition-force training.

At-Sea Exercise (海上演习)

This type of exercise is conducted on the ocean or water areas near the coast using naval vessel units as the primary participants. It is conducted only after the basic technical and tactics training foundation has been laid and the proper plans have been completed.

Normally, this type of exercise is organized and led by higher-level commanders and staffs. It is organized into three phases: preparation, implementation, and conclusion.

The objective is to raise the maritime campaign and battle command level and real-war capabilities, become familiar with coordination work, inspect and evaluate weapons and equipment, evaluate orders and teaching materials, and discuss new naval warfare methods. It is a high form of naval campaign and tactical training. Exercises at sea are categorized and subdivided into three types based on:

- Scope: This category is divided into tactical, campaign, and naval maneuver exercises.
- Objective: This category is divided into inspection, evaluation, demonstration, trial, and research types.
- Organization: This category is divided into single force and opposition force; single branch, vessel, or aircraft type; combined-arms exercises; actual troop without live munitions, and actual troop with live munitions.

The content for naval exercises at sea consists of multiple comprehensive subjects. The exercises often include actual use of weapons, such as artillery firing, launching of missiles, mines, and rockets, as well as dropping depth charges, mine laying, mine sweeping, and

electronic countermeasures. Depending on the task character and exercise scale, this type of exercise can be conducted in the same sea area or multiple sea areas.

At-Sea Inspection or Evaluation Exercise (检验性海上演习)

This type of exercise is used to inspect and check naval units for completion of their training mission, their battle preparation procedures, and their technical and tactics levels. This type of exercise is organized and conducted by the supported commander and staff and is often conducted on a no-notice basis.

At-Sea Demonstration Exercise (示范性海上演习)

After a new combat method has been approved and regulations have been issued, the navy uses this type of exercise to demonstrate the new methods to the rest of the force, so that everyone implements them in a uniform manner.

At-Sea Trial Exercise (试验性海上演习)

Trial exercises are used to conduct research and testing for new weapon systems and combat methods. They are organized and implemented according to the specific subjects being tested.

At-Sea Research Exercise (研究性海上演习)

The goal of this type of exercise is to research naval combat and training methods and the special organizations needed at sea to implement them. This normally consists of uniting military scientific-research missions, theory discussions, experience, and scientific testing at the same time. The research subject and training requirements determine the content and methods of the exercise.

At-Sea Opposition-Force Exercise (对抗性海上演习)

This type of exercise involves having the participating units simulate combat for both sides in offensive and defensive maneuvers. Each side has its own tasks and implementation methods, which it must keep secret from the other side. This type of exercise is organized and implemented under the unified exercise leader.

At-Sea Campaign Maneuver Exercise (海上战役演习)

This type of exercise is organized and implemented to employ naval campaign methods at sea based on a specific campaign scenario. The goal is to increase the organizational and command capability of the commander and command staff, strengthen the ability to conduct maritime warfare, and train unit capabilities for campaign mobility, coordinating operations, and campaign support. These exercises are conducted individually by PLAN Headquarters, fleet headquarters, or base-level organizations. They can also be conducted in a joint campaign with other services and branches. These exercises use the PLA's military strategic guidelines of "active defense" as its basis.

At-Sea Tactical Exercise (海上战术演习)

This type of exercise uses naval vessel units as the primary participants during a tactical scenario and is organized and implemented based on naval tactical principles. The goal is to allow naval tactical commanders to:

- Grasp, organize, and command battles at sea
- Conduct tactical mobility and coordination methods
- Strengthen their modern naval-warfare tactics
- Raise the ability of vessel units to conduct real-war offense and defense independently or using combined arms

A tactical exercise at sea is an important method for naval units to conduct comprehensive training. This type of exercise can be divided into different categories based on three different criteria as follows, each of which is organized and implemented in the same basic manner:

- Based on how the fire power is organized, tactical exercises at sea can be divided into single-branch and single-vessel type, or multiple-branch and multiple-vessel type exercises.
- Based on the battle character, tactical exercises at sea can be divided into offensive and defensive exercises.
- Based on the implementation method, tactical exercises at sea can be divided into single-force and opposition-force exercises.

Naval Combined-Arms Exercise (海军合同演习)

A naval combined-arms exercise employs units from two or more naval branches or vessel types, or units from different organizational systems, under a unified command in the same exercise scenario. The goal is to raise the capability for commanders, staffs, and units to conduct combined-arms campaigns and battles. Combined-arms exercises are divided into naval combined-arms tactical exercises and naval combined-arms campaign exercises. Normally, a combined-arms exercise is organized and led by a unit's higher-level commander. Before the exercise, a coordination conference is held, where all of the participants decide on an exercise plan and preparation work; the commander, staff, and units complete advanced training, including theory study, chart work, and joint exercise leadership, which is divided into training and pre-exercise portions. After the exercise, a unified critique is held.

Naval Exercise with Live Troops and Live Munitions (海军实兵实弹演习)

The goal is to train and inspect unit real-war capabilities under near-real-war conditions. Normally, the exercise has a combat scenario and uses fake surface, subsurface, aerial, and shore-based enemy targets. The units employ firing missiles, rockets, and guns, dropping depth charges, deep-water bombing, mine laying, mine sweeping, and electronic warfare. This type of exercise requires careful planning and safety measures. Prior to the exercise, a chart exercise and pre-exercise preparations are conducted. Normally, notification of a restricted area is announced just before the exercise, and the navy dispatches patrols and security. The navy also organizes observation and recording of the exercise and conducts a post-exercise analysis and critique.

Naval Combat Readiness Exercise (海军战备演习)

This type of exercise is based on requirements for combat readiness. The goal is to inspect and reform naval combat readiness work and to raise the level of unit combat readiness. It is conducted in accordance with the combat readiness plan or a special plan, and is organized and led by higher headquarters or the commander and staff of the unit being exercised. The exercise scale, contents, and procedures are based on the grade level and mission of the unit, and is determined by the exercise tasks.

The exercise's content includes transforming: from peacetime to a war preparation mode; from local combat preparation and navigation preparation to dispersal and being under way; from establishing a command post to opening a wartime headquarters; and from completing combat deployments to managing battle situations. Usually, the exercise plan is kept from the unit being exercised until just before orders are issued, or until the warning or signal is given.

Joint At-Sea Exercise (海上联合演习)

This type of exercise involves the navy plus other services and branches, or involves naval forces from two or more countries.

Naval Maneuvers (海军大演习)

This type of exercise is a large-scale strategic and campaign exercise organized by PLAN Headquarters. It is conducted under near-real-war conditions and is intended to inspect the PLAN's real power capabilities. This exercise can also be used to synthesize naval military science research, evaluate naval combat concepts, plus examine the organizational and combat structure, military orders, weapons and equipment, and all types of support. It can also research ocean combat areas and every combat direction special point. It is the highest form of naval training.

This type of exercise includes: shifting to each level of combat readiness, developing strategy and campaigns, and carrying out the beginning strategic surprise attack phase of war and countering strategic surprise attacks; seizing and maintaining command of the sea and ocean passage, and protecting sea lines of communication; engaging in combat with missile-equipped nuclear submarines and aircraft-carrier task forces; protecting naval bases and coastal key points; and dealing with local attacks on the ocean.

Command and Staff Chart Exercise (首长司令部图上演习)

This type of exercise, which can also be called a command post exercise (CPX), involves regiment and above unit commanders and their Headquarters Department staff personnel who conduct command and comprehensive work using a military chart. The commander is located in the command post and uses communications equipment to command the exercise.

The Naval Command Academy in Nanjing conducts one CPX annually and sometimes moves this into a field training exercise (FTX). This CPX is for command personnel from PLAN Headquarters and the three fleets only and does not include command academy students, who have their own CPXs during their training.

Combined-Arms Training

Combined-arms training (合同训练) involves two or more of the PLAN's five branches—submarine, surface, aviation, coastal defense, and Marine Corps. However, not all of the branches conduct combined-arms training with other branches. For the most part, the five PLAN branches conduct intra-branch training. Under the new OMTE, intra-branch training has been gradually expanding to dissimilar aircraft training and training with multiple classes of vessels in the same task force.

Figure 31 provides a general idea of the level of combined-arms training between branches as being high, medium, or low. Note that the only two branches that train with any regularity together are the surface and subsurface forces, but even this training is at a medium to low level. The Marine Corps trains a lot with the South Sea Fleet's amphibious forces, but training with the Marine Corps for the surface branch as a whole is still quite low.

One issue inhibiting combined-arms training is a lack of understanding by personnel in one branch about the operations of another branch. Therefore, under the new OMTE, the PLAN has begun sending officers from one branch to another branch for six months to a year to gain some practical experience. For example, surface officers and aviation pilots are now spending time with the submarine forces, and submarine officers are spending time on surface vessels.

Figure 31.—PLAN Combined-Arms Training Levels

	High	Medium	Low
Submarine		Surface	NA, CD, MC
Surface		Subs	NA, CD, MC
Naval Aviation			Surface, Subs, CD, MC
Coastal Defense			Surface, Subs, NA, MC
Marine Corps	Surface		Subs, NA, CD

Subs = Submarine; Surface = Surface; NA = Naval Aviation; CD = Coastal Defense; MC = Marine Corps

Intra-Fleet Training

Historically, Naval Aviation aircraft have deployed to airfields in other fleets and crossed fleet boundaries at sea to conduct training, but naval vessels have rarely conducted intra-fleet training. One of the reasons vessels have not conducted intra-fleet training is administrative in nature. Until recently, each fleet managed its funding in cash, including paying its personnel, so it was difficult to coordinate funding for intra-fleet training. Now, however, the PLAN is working toward funding the fleets and personnel through centralized and individual bank accounts.

As a result, changes in intra-fleet training have now begun to take place under the new OMTE. For example, during early 2003, five aircraft from the North Sea Fleet, consisting of patrol aircraft, warning aircraft, and reconnaissance aircraft, flew to the South China Sea, where they conducted a mission to recover an "enemy-held island" that included reconnaissance of their target, guiding fighters during intercepts, and providing jamming.

During 2005, destroyers and frigates from the North Sea Fleet and South Sea Fleet deployed to the East Sea Fleet for training with the ESF's destroyer *zhidui*. The PLAN described this as "a new training model that explores crossing organizational systems for joint mobile task-force fire power."

Joint Training

In the mid-1990s, the PLA began to focus on joint training (联合训练), which usually means training by two or more services. According to *China's National Defense in 2004*,

> *"To step up preparations for military struggle, the PLA takes as its objective to win local wars under the conditions of informationalization and gives priority to developing weaponry and equipment, to building joint operational capabilities, and to making full preparations in the battlefields."*

Although the PLA has publicly cited high interest in joint training, the actual amount of joint training has not been high. In some instances, opposition-force training between different services has been cited as joint training. For example, PLAAF aircraft attacking PLAN surface vessels is actually opposition-force, not joint, training. Furthermore, when this type of training occurs, Naval Aviation aircraft are not involved in providing protection for the surface vessels.

The PLAN and PLAAF have identified specific practical and administrative problems with joint training, to include the following issues:

- Lack of a Joint Training Department in the General Staff Department and the seven military region headquarters
- Lack of a joint training structure and program at the fleet and military region air force headquarters levels
- Lack of understanding of each other's systems and tactics
- Problems with poor weather conditions that preclude aircraft from departing after ships have already been at sea for some time
- The short duration of time (measured in seconds) the ships really get to practice when an aircraft flies over and returns home after a single pass
- Lack of real combat tactics practiced by the aircraft
- When a joint training day is missed for weather or other reasons, it is difficult to make up given the other requirements of each unit

The three services have begun to address some of these problems by sending a handful of officers on temporary duty to another service for six months to a year to learn about their operations.

Chapter 14
Quality of Life

This section provides information on quality-of-life issues for the PLAN's officers and enlisted sailors. The PLAN claims that it continues to spend millions of dollars to upgrade the living and working conditions for its forces, including housing, entertainment, and work facilities. The focus has been on grassroots-level units that are not located near urban areas. The PLAN, along with local governments, also helps find jobs for family members.

The PLAN has had to implement these expensive reforms as a means of recruiting and retaining the type of force that it needs for the present and future.

Military Pay

Neither the PLA nor the PLAN publish detailed statistics about their personnel or military pay. As a result, it is difficult to ascertain the exact pay scale and subsidies for each officer and enlisted person.

The majority of PLAN personnel still receive their monthly pay in cash from their unit's finance office. However, the PLAN is gradually transitioning to paying by direct deposit to savings accounts, especially in urban areas. Checking and credit card accounts are not widely used within the PLAN, but the use of debit cards is growing.

Transportation

The majority of PLAN personnel, including officers, do not have a driver's license, primarily because they do not own a vehicle. Personnel usually ride a bicycle, take a bus, or walk to work and have a driver from the motor pool take them to other work-related locations.

More PLAN personnel are trying to purchase vehicles for personal use and to acquire government driver's licenses to be able to drive motor-pool vehicles for work-related travel. However, this has led to an increase in the number of vehicle accidents, because the drivers do not receive adequate training.

Work Conditions

To help retain personnel, the PLAN claims to have spent millions of dollars on upgrading work facilities, especially for its grassroots units located in rural and coastal areas, as well as on islands. The money is being spent on water, electricity, heating, bathing, medical, and transportation facilities.

Morale, Welfare, and Recreation

The PLAN has also focused on building and renovating morale, welfare, and recreation (MWR) facilities throughout the force. These types of facilities include soccer fields, basketball courts, indoor recreation areas, NCO and officer clubs, cultural centers, computer labs, and theaters. The units are also stocking the libraries with thousands of books of all types.

To help PLAN personnel communicate better with their families, the PLAN and some local

telecommunication companies help arrange for free telephones and video conferencing.

Marriage

Both the national Marriage Law and an additional set of stipulations issued by the General Political Department in late 2001 entitled the "Regulations on Certain Issues Concerning the Military's Implementation of the 'Marriage Law of the People's Republic of China'" govern marriages in the PLAN. Although the legal age for marriage in China is 22 for males and 20 for females, the PLA "advocates and encourages" its servicemen to marry later, at age 25 for males and 23 for females.

Because PLAN conscripts are all younger than the legal marrying age, they are not permitted to marry. Both officers and NCOs, however, may marry provided they are older than the legal marrying age and have the permission of the political organization at the regiment level and above.

When a serviceman becomes engaged, he must report the courtship to his unit's Party organization at least one month before the marriage occurs. A political organization at the regiment level or above then begins the background investigation on the intended spouse. During this investigation, special attention is paid to the prospective spouses of PLAN personnel stationed on naval vessels or who work with classified information.

Although the PLAN has the restrictions above, it sometimes sets them aside for older officers and NCOs. Specifically, each year, various PLAN units, including PLAN Headquarters, arrange matchmaking events with local females for single personnel who are over 30 years old. PLAN spouses must be citizens of the PRC residing on the mainland. Citizens of Hong Kong and Macao are not permitted to marry PLA servicemen. Although not technically illegal, the GPD regulations also state that when a Han Chinese serviceman seeks to marry someone from one of China's many ethnic minority groups, efforts should be made to persuade the couple to abandon their wedding plans.

Generally speaking, NCOs are not permitted to marry within their unit or find a spouse in the vicinity of where they are stationed. This stipulation is probably rooted in the fact that once NCOs are demobilized, they must return home to their home of record where they are officially registered to live from that point forward. One exception to this involves NCOs at the level of grade-3 and above stationed in rural or remote areas. These individuals may marry locally, provided the marriage is approved by the political organization at the division level or higher. Once demobilized, these NCOs are resettled locally with their spouse.

Housing

The housing situation for the PLA Navy is more complex than for the US Navy. In the USN, active duty personnel can live in base housing if it is available, or they can purchase or rent off-base civilian housing and receive a housing allowance to help offset the cost. When USN officers or enlisted personnel retire, they can no longer live in base housing. Regardless of their rank, they must find off-base civilian housing, for which they do not receive a housing allowance.

PLA regulations state that PLA officers must meet four criteria in order to have their family join them: the officer must have 15 years

in the service, must have the grade of battalion leader or above, on-base housing must be available, and the unit must find a job for the spouse. Available schooling for children is also a consideration. However, these criteria do not apply to pilots, who can get married and have their family join them at any time.

Within the PLAN, on-base housing for married personnel is limited, and PLAN personnel must meet certain grade criteria to be authorized to live in base housing. PLAN regulations either forbid or discourage families from joining their spouses and living in off-base housing when on-base housing is not available. As a result, a high percentage of PLAN officers, especially in non-urban areas, live in cities and towns other than that of their spouse and child. The situation is even more restrictive for married NCOs, who, prior to 1999, had only limited base housing available.

If married PLAN personnel do choose to live in off-base housing due to a lack of available on-base housing, the PLAN does not provide a housing allowance. Therefore, the PLAN discourages them from doing this.

This situation is further complicated by China's residency system (户口制度) under which every citizen of the PRC has an official place of residency. Designed to control the movements of the population, citizens who live in a place other than their official home of residency can be denied employment opportunities, housing, health care, and education.

As China has abolished many of the travel restrictions once imposed on its citizens, many spouses have begun to relocate to the vicinity where the military member happens to be stationed to reduce the distance between them. That said, their subsequent inability to find housing and employment opportunities often creates additional complications for both the family and the PLAN. In other instances, however, some spouses have managed to find work off base earning more than their military partner.

Today, all unmarried personnel, as well as married officers and NCOs who are not accompanied, live in the barracks.

To help alleviate the problems associated with the lack of permanent housing, the PLAN has spent millions of dollars to build apartment buildings to be used as temporary housing for visiting family members. To allow for a maximum amount of visitors, the PLAN has certain restrictions on how long they can remain in the temporary housing. It also discourages them from visiting during certain times of the year, especially when exercises are taking place. For example, PLA regulations state that spouses are allowed to visit once a year, staying in temporary housing for no more than 45 days under normal circumstances.

As the number of married NCOs has increased, the shortage of temporary housing for both officers and NCOs has received more attention from PLAN Headquarters.

One reason on-base housing is in short supply is because some senior PLAN officers are allowed to retain their on-base housing after they retire. The PLAN is attempting to alleviate this problem by building subsidized public housing near the base for some active-duty and retired officers, civilian cadre, and NCOs.

The type of public housing is allocated based on several criteria, including the person's grade. For example, division-grade officers are limited to apartments with 92 square me-

ters and battalion-grade officers are limited to 54 square meters.

Family Member Employment

Unlike US Navy bases that are fully integrated into the surrounding community by having personnel live in civilian housing and local civilians working on base, PLAN bases and units remain somewhat isolated from the community. As noted above, only a few PLAN personnel live in off-base public housing.

Furthermore, a high percentage of civilian personnel who work on the bases and other PLAN support facilities are spouses of PLAN officers and enlisted personnel. Having spouses work on PLAN facilities helps justify providing on-base housing for the married military members.

One way the PLA as a whole has tried to help alleviate the problem of family separations for officers stationed in rural areas that have minimal employment opportunities for spouses is to directly commission them as officers and then assign them to the same unit. This also allows the unit to authorize on-base housing for them.

Military Leave

The rules covering leave for officers and NCOs differ depending on their grade, marital status, and where their parents live. Each year, officers have a choice of taking regular leave or leave to visit their parents as noted below:

- Officers who choose to take leave and have less than 20 years of active duty are authorized 20 days of leave per year.
- Officers with 20 or more years are authorized 30 days.
- Officers who are not married and choose to visit their parents are authorized 20 days of leave every two years.
- Married officers who live with their spouse are authorized 30 days of annual leave to visit their parents, if the parents live in another location.
- If a married officer does not live with his spouse, he is authorized 40 days of annual leave to visit his family.

As for NCOs, grade-1 NCOs get two 20-day home visits per service period, while unaccompanied and unmarried NCOs at any of the higher grades are granted additional leave. The duration of this visit varies depending on whether the NCO is married (40 days) or unmarried (30 days). Senior NCOs (grades 5-6) who live with their spouse but away from their parents are granted one 20-day home visit every four years. This increases to 30 days once the NCO exceeds 20 years of active-duty service. NCOs performing combat tasks are not accorded vacation time or family visits.

Although PLAN personnel are authorized annual leave based on their grade and marital status, a large percentage of personnel either do not take their leave or are not allowed to take it because of the unit's daily workload and training activities.

The PLAN has identified this as a morale problem and tried to solve it through various means. For example, the PLAN is trying to have its NCOs learn more than one technical skill, so they can fill in for someone who is on leave or is incapacitated during combat.

In addition, some units arrange for family members or parents to stay in temporary housing during Spring Festival if the military member is not able to take leave to visit his family.

Food

The PLA's regulations state that all division-leader grade officers (i.e., senior colonels) and below and all enlisted personnel must eat in the mess hall for breakfast, lunch, and dinner from Monday through Friday. Although the mess hall is open on the weekends, personnel can eat elsewhere at their own expense. However, for individuals stationed in isolated areas that lack other meal options, most meals are eaten in the mess hall. Furthermore, as noted above, because a high percentage of officers are not accompanied by their families, they eat in the mess hall. As shown in Figure 32, the PLA has four categories of mess halls.

All PLAN officers in the grade of *jun* leader and below and all enlisted personnel receive a monthly food subsidy. Officers above the grade of *jun* leader do not receive a monthly food subsidy and must pay for their food out of their salary.

PLA meal expenses have increased six times since the early 1990s. At the beginning of 2005, the PLA's meal expense standards were increased by an average of RMB 1.8 (USD 0.22) per person per day, raising the minimum meal expense per soldier to RMB 10 (USD 1.20) per day. The new adjustment of meal expense standards was the largest since the founding of the PRC. Figure 33 shows the new meal expense standards broken down by the four categories of mess halls in the PLA.

Figure 32—PLA Mess Hall Categories

Mess Hall Category	PLA Personnel
Category 1	Officers, civilian cadre, NCOs, and conscripts in battalion-level and below units
Category 2	Tank, self-propelled artillery, and repair units
Category 3	Vessel personnel and reconnaissance units
Category 4	Submarine crewmembers and aircrew

Figure 33—New Average Meal Expense Standards by Mess Hall Category Per Day

Mess Hall Category	New Expense Standards
Category 1	RMB 10 (USD 1.24)
Category 2	RMB 12 (USD 1.49)
Category 3	RMB 22 (USD 2.72)
Category 4	RMB 38 (USD 4.70)

The increase in subsidies has allowed the PLA to provide more nutritional dishes. For example, the latest rise in food subsidies allows soldiers to drink 250 grams of milk at breakfast and eat fruits at both lunch and dinner. Beef, lamb, fish, and other seafood are gradually being integrated into the diets of enlisted personnel, replacing the traditional reliance on pork. This constitutes a substantial change from years past when soldiers often complained about eating the "three same old things," namely, potatoes, radishes, and cabbage. Along with greater variety in the diet, new standards governing the amount of food have also been put in place.

In units where the technology exists, personnel are given a debit card to use in the mess hall. Otherwise, the amount is deducted from a ration card. The mess hall receives a maximum amount for each person per meal. However, the amount deducted from the debit or ration card is not a set amount but is based on a separate deduction for each item. Personnel who

travel for temporary duty may receive an additional amount on their ration card.

Members select the food and beverage they wish to consume and present their card to a cashier who deducts this amount from the balance remaining on the debit card. These debit cards were first introduced in units in the Beijing MR in 2003. Embedded in each card is a computer chip that contains basic information on the individual and can also be used by servicemen to receive their salary or allowance and obtain medical care and other services.

Much of the food consumed in the PLA is produced by the military itself. During the 9th Five-Year Plan (1996-2000), for example, the PLA produced a total of 3.4 billion kilograms of grain, 3.2 billion kilograms of fresh vegetables, and 1.3 billion kilograms of meat, fish, and eggs. Moreover, in the majority of company-level units, at least 70% of the meat and vegetables consumed were provided by the unit.

Most of the PLA's farms were created during the 1960s and 1970s and were consolidated into a single system in 1988. PLAN statistics show that 50% of the Naval Aviation units provide all of their own food, 60% of PLAN ground service units provide 72% of their own food, and 28% of surface and subsurface forces provide 28% of their own food.

Many PLAN coastal defense, radar, and observation sites are isolated on islands or mountains. Supplies such as fuel, food, water, and blankets are difficult to receive on a routine basis, especially during winter. However, the food situation is gradually improving in many of these hardship posts. For example, in the remote Spratly Islands, units have installed new refrigerators, are raising livestock, and are shipping in soil from the mainland to grow vegetables. Many units have combated the lack of drinking water on the reefs by building fresh-water storage ponds to ensure supply for several months.

Providing water for some naval vessels, especially smaller vessels such as speedboats, has also been a challenge. Several methods have been employed, including boiling the water in the same woks used to cook meals, using automated electromagnetic hot-water machines, and providing barrels of fresh water to each vessel.

Retirement and Demobilization Issues

Enlisted Force

Prior to the revised service law in 1999, enlisted "volunteers" were demobilized and sent back to their home of record, where all retirement expenses were borne by the local government. Prior to 1999, enlisted members did not retire from the military; they were only demobilized at the end of their service. As a result, the PLAN did not have to bear the same type of retirement costs and responsibilities it did for officers.

Today, when a conscript or NCO is not promoted to the next rank and is demobilized from the PLA, he receives a subsidy, as well as a medical subsidy if he suffers from a chronic illness. As in the past, once the soldier returns to civilian life, all expenses related to his demobilization and job placement are paid by the local government where he resides.

Because no grade-6 NCOs have yet to retire from the PLAN with a full 30 years of service, it is not clear what the retirement benefits will be.

Officer Corps

PLAN officers can either retire when they reach their mandatory retirement age or they can be demobilized if they are not promoted beyond a certain grade. In addition, they can transfer to a comparable state-controlled civilian job after they have served for a specified period but before they reach their mandatory retirement age. Each of these options entails different post-military benefits.

The PLAN has two types of retired officers. The first type (离休干部) joined the PLAN before 1949, and the second type (退休干部) joined after 1949. Each type receives different benefits today.

PLAN officers who joined before 1949 are allowed to live in a PLAN retirement home with their family. However, as the number of these officers dwindles, those retirement homes are slowly disappearing.

Depending on their grade and eligibility status, officers who joined the PLAN after 1949 can fully retire from the PLA, not take a civilian job, receive a full military pension, and remain in military housing.

Officers who are demobilized (复员) before reaching their mandatory retirement age receive a one-time compensation based on a fixed amount for each year served. The amount ranges from 1.5 months of their base salary for each year served under 10 years to 4.0 months of their base salary for each year served over 20 years. Once this money is paid, the PLAN is no longer responsible for them.

Officers who choose to retire before their mandatory retirement age based on their grade and transfer to a comparable job in a government-run organization (转业) also receive a one-time compensation to help relocate. The amount for division leader-grade and below officers consists of two categories: relocation and living expenses. The total amount varies from seven months of their base pay to more than two years of their base pay.

Chapter 15
Foreign Relations

Over the past decade, most Asian nations have taken advantage of naval diplomacy to further their foreign policy goals, and the region's naval activities have increasingly expanded from bilateral to multilateral in focus. The 17-member Western Pacific Naval Symposium (WPNS) has held 10 biennial meetings and multiple preparatory workshops since it was established in 1988. WPNS has 21 member countries, including China, plus four observer countries.

Beijing has taken full advantage of this trend in naval diplomacy by using the PLAN as a valuable, but small component of its robust worldwide, multilevel foreign relations program. Since Deng Xiaoping initiated a broad program of foreign military exchanges in the late 1970s, PLAN commanders have traveled abroad about 21 times to 34 different countries, and have hosted more than 70 counterparts from about 30 countries. The PLAN's political commissars have traveled abroad only a few times. In addition, the PLAN has conducted 25 ship visits abroad to 60 countries and territories. The PLAN conducted its first around-the-world voyage in 2002.

Within the context of its overall naval foreign relations program, the PLAN has taken a high-profile, dual-purpose posture in the South China Sea. On one hand, the PLAN has increased its physical presence in the South China Sea and East China Sea, while on the other hand it has increased the number of port calls as a form of confidence-building measures.

China's Military Diplomacy

Since China began to open to the outside world in the early 1980s, the PLA's foreign relations have evolved as a means to advance China's national defense policy in several ways. According to the PRC's 2004 defense white paper,

> *Adhering to the purposes and principles of the United Nations Charter, China persists in developing friendly relations and strengthening cooperation with other countries on the basis of the Five Principles of Peaceful Co-existence, and devotes itself to promoting international security dialogues and cooperation of all forms.*

Based on information from the PRC's five defense white papers and other PLA writings, the five general goals of the PLA's foreign exchange program are listed below. For all practical purposes, the PLA has been fairly successful in meeting each of these goals.

- Shape the international security environment to support key national security objectives
- Improve political and military relations with foreign countries
- Provide military assistance to developing countries
- Enhance China's military and defense industry modernization by acquiring tech-

nology and advancing key research and development programs through foreign assistance

- Help China's military leaders, younger officers, and civilian cadre acquire modern military knowledge, especially from the developed world, in doctrine, operations, training, military medicine, administration, and a host of non-combat-related areas.

PLAN Foreign Relations

As part of the PLA's overall foreign affairs program, the PLAN's interaction with foreign countries has four major components, including high-level exchanges, ship visits, functional exchanges, and arms sales and purchases.

High-Level Naval Exchanges

High-level naval exchanges by the PLAN and foreign naval officers can be divided into the following categories, some of which may overlap:

- International politics
- Arms purchases and technology transfer
- "Show the flag" and promote goodwill
- Regional security discussions

As Figures 34, 35, and 36 show, travel by the PLAN commander has been somewhat uneven. From 1991-2002, the PLAN commander averaged one trip abroad per year, involving one to four countries. Since early 2002, the three PLAN commanders have continued to host

Figure 34—PLA Navy Commander Visits Abroad: 1982-2006

Date	Country	Commander
Mar 1982	Thailand	Ye Fei
Nov 1983	Pakistan, Bangladesh	Liu Huaqing
Nov 1984	Britain, Yugoslavia, West Germany	Liu Huaqing
Nov 1985	France, United States	Liu Huaqing
Dec 1989	Thailand, Bangladesh, Pakistan	Zhang Lianzhong
Oct 1991	North Korea	Zhang Lianzhong
Jun 1992	Turkey, Tunisia	Zhang Lianzhong
Apr 1993	Russia	Zhang Lianzhong
Jul 1995	Italy	Zhang Lianzhong
Jul 1996	Pakistan, Chile, Brazil, Argentina	Zhang Lianzhong
Nov 1997	Pakistan	Shi Yunsheng
Sep 1998	United States	Shi Yunsheng
Nov 1999	Russia	Shi Yunsheng
Apr 2000	United States, Britain, Portugal	Shi Yunsheng
Apr 2001	France	Shi Yunsheng
Mar 2002	Brazil, Chile, Argentina, Australia	Shi Yunsheng
2003 -2006	None	

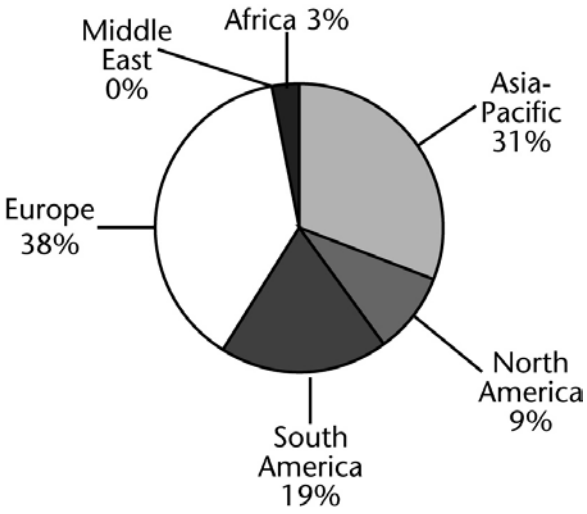
Figure 35—PLA Navy Commander Visits Abroad by Region and Country: 1982-2006

Asia-Pacific	North America	South America	Europe	Africa
Australia	United States (3)	Argentina (2)	Britain (2)	Tunisia
Bangladesh (2)		Brazil (2)	France (2)	
North Korea		Chile (2)	Germany	
Pakistan (4)			Italy	
Thailand (2)			Portugal	
			Russia (3)	
			Turkey	
			Yugoslavia	

several foreign naval counterparts each year, but no PLAN commander has traveled abroad. The last PLAN political commissar visit abroad was in early 2003, when Vice Admiral Yang Huaiqing visited Algeria and Mexico before he and Shi Yunsheng were replaced as a result of the Ming submarine accident.

These visits are not concentrated in any one geographical region, but are split almost evenly between Europe and the Asia-Pacific region, followed by South America and North America. A PLAN commander has only made one visit to Africa and zero visits to the Middle East. The commander has visited only one Southeast Asian country.

Figure 36—PLA Navy Commander Visits Abroad by Region: 1982-2006



Blending Diplomacy with Seamanship

As shown in Figures 37, 38, and 39, (on the following pages) China sent only 2 task groups abroad to 4 countries and hosted 23 port calls from 14 countries during the 1980s. During the 1990s, the PLAN dispatched 10 task groups for port calls to 20 countries and hosted 30 port calls from 17 countries. Since January 2000, the PLAN has sent 13 task forces on 37 country visits and hosted about 25 foreign naval ship visits. The PLAN has conducted all of its ship visits using 7 different destroyers, 7 frigates, 2 training ships, and 6 replenishment ships. As the program has progressed, the PLAN has used its port calls as an opportunity to show off its newest ships as well as to train its crews in open-ocean operations.

A typical PLAN port call abroad lasts 2-4 days in each country. The task force commander is usually one of the three fleet commanders. The

Figure 37—PLA Navy Ship Visits Abroad: 1985-2006

Dates	Countries Visited	Ships
Nov 1985	Pakistan, Sri Lanka, Bangladesh	Luda destroyer Hefei 132 and replenishment ship Fengcang 615
Mar 1989	United States (Hawaii)	Zhenghe training ship
Mar 1990	Thailand	Zhenghe training ship
Oct 1993	Bangladesh, Pakistan, India, Thailand	Zhenghe training ship
May 1994	Russia (Vladivostok)	Dajiang Sub Tender Changxingdao 121, Luda-II destroyer Zhuhai 166, and Jiangwei frigate Huainan 540
Aug 1995	Russia (Vladivostok)	Jiangwei frigate Huaibei 541
Aug 1995	Indonesia	Luda-II destroyer Zhuhai 166, Jiangwei frigate Huainan 540, and one replenishment ship
Jul 1996	North Korea	Luhu destroyer Harbin 112 and Luda destroyer Xining 108.
Jul 1996	Russia (Vladivostok)	Luhu destroyer Harbin 112
Feb 1997	United States (Hawaii, San Diego); Mexico, Peru, Chile	Luhu destroyer Harbin 112, Luda-II destroyer Zhuhai 166, Replenishment ship Nancang 953
Feb 1997	Thailand, Malaysia, Philippines	Luhu destroyer Qingdao 113, Jiangwei frigate Tongqing 542
Apr 1998	New Zealand, Australia, Philippines	Luhu destroyer Qingdao 113, Training Ship Shichang 82, Replenishment ship Nancang 953 (PI - Qingdao only)
Jul 2000	Malaysia, Tanzania, South Africa	Luhai destroyer Shenzhen 167, Replenishment ship Nancang 953
Aug 2000	United States (Hawaii, Seattle); Canada	Luhu destroyer Qingdao 113, replenishment ship Taicang 575
May 2001	India, Pakistan	Luhu destroyer Harbin 112, replenishment ship Taicang 575
Aug 2001	France, Italy, Germany, Britain, Hong Kong	Luhai destroyer Shenzhen 167, replenishment ship Fengcang 615
Sep 2001	Australia, New Zealand	Jiangwei frigate Yichang 564, replenishment ship Taicang 575
Nov 2001	Vietnam	Jiangwei frigate Yulin 565
May 2002	South Korea	Jiangwei frigate Jiaxing 521, Jiangwei frigate Lianyungang 522
May 2002	Singapore, Egypt, Turkey, Ukraine, Greece, Portugal, Brazil, Ecuador, Peru	Luhu destroyer Qingdao 113, replenishment ship Taicang 575
Oct 2003	Brunei, Singapore, Guam	Luhai destroyer Shenzhen 167, replenishment ship Qinghaihu 885
Nov 2003	New Zealand	Jiangwei frigate Yichang 564, replenishment ship Taicang 575
May 2004	Hong Kong	8 vessels
Nov 2005	Pakistan, India, Thailand	Luhai destroyer Shenzhen 167, replenishment ship Weishanhu 887
Aug 2006	United States, Canada, Philippines	Luhu destroyer Qingdao 113, replenishment ship Hongzehu 881

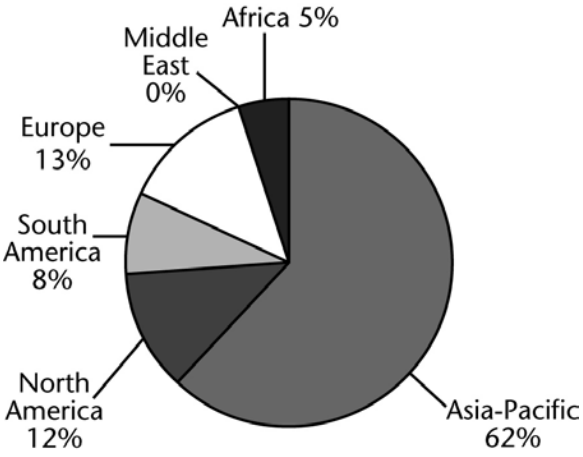
Figure 38—PLA Navy Ship Visits by Region and Country: 1985-2006

Asia-Pacific	North America	South America	Europe	Africa
Australia (2)	Canada (2)	Brazil	Britain	Egypt
Bangladesh (2)	Mexico	Chile	France	Tanzania
Brunei	United States (4)	Ecuador	Italy	South Africa
Guam		Peru (2)	Germany	
Hong Kong (2)			Greece	
India (3)			Portugal	
Indonesia			Turkey	
Malaysia (2)			Ukraine	
New Zealand (3)				
North Korea				
Pakistan (4)				
Philippines (3)				
Russia (3)*				
Singapore (2)				
South Korea				
Sri Lanka				
Thailand (4)				
Vietnam				

*Vladivostok

shortest voyage was to North Korea and the longest voyage covered more than 30,000 nautical miles and four months to circumnavigate the globe in 2002. Some of the visits have been arranged so that the PLAN could participate in various anniversaries, such as Indonesia's 50th anniversary, the 35th anniversary of the Sino-DPRK friendship treaty, the 30th anniversary of Sino-Canadian diplomatic relations, the 50th anniversary of Sino-Pakistan relations, the 100th anniversary of the Philippine Navy, and Russia's 50th anniversary of the end of World War II and 300th anniversary of the Russian Navy.

Figure 39—PLA Navy Ship Visits by Region: 1985-2006



Foreign ships have visited Shanghai, Qingdao, Zhanjiang, and Guangzhou. Of these, Shanghai has received the most visitors. For example, as of August 2006, Shanghai had hosted more than 60,000 people in 912 delegations and 87 port calls by foreign vessels from 120 countries.

In 2003, the PLAN conducted its first joint maritime search-and-rescue exercises during separate visits by vessels from Pakistan and India. Since then, it has conducted similar exercises with French, British, and Australian vessels. The PLAN also conducted search-and-rescue exercises during its ship visits to the United States, Canada, and the Philippines in late 2006.

For comparison purposes, the US Navy Seventh Fleet's official website states, "Seventh Fleet units conduct more than 100 exercises per year with nations throughout Asia. These exercises are an essential part of our overall engagement program, and are imperative to building friendships and maintaining interoperability."

The PLAN identifies the following three broad objectives for its ship visits:

- Improving political and military relations between China and the PLAN host country at the state-to-state level
- Learning lessons from foreign militaries that may prove useful in the PLAN's modernization efforts
- Improving relations between China and the PLAN host country at the person-to-person level

State-to-State Diplomacy

The primary objective of PLAN ship visits is to improve political and military relations between China and the PLAN host nation. While the total number of dispatched task forces and country visits is still relatively low, there has been a significant increase in the quantity of PLAN ship visits abroad since 1997. The first year China dispatched two task forces in a single year was 1997. It was also the first time a PLAN vessel visited South America. Indeed, this was the first time a PLAN vessel visited anywhere outside the Asia-Pacific region. The growing quantity and scope of PLAN voyages beginning in 1997 illustrates the increased foreign-policy role China assigns to its naval fleet.

During those 1997 voyages, the PLAN assigned precedence to showing the Chinese flag abroad at the expense of Chinese military readiness. The overriding goal was to illustrate to the people of those countries, including overseas Chinese who visited the ships in huge numbers during port calls, that China and the PLAN were both open to the outside world and no longer just a backward coastal navy. Significantly, China simultaneously deployed its only two relatively capable, reasonably modern warships, the two new *Luhu*-class guided-missile destroyers, away from Chinese waters. The readiness of these ships to participate in some potential crisis, such as in the Taiwan Strait, was effectively subordinated to the value of sending these ships to North and South America and to three ASEAN countries.

Second, the government and the PLAN expended the effort and resources to plan and conduct these extensive cruises, accepting the risk that its untested ships might break down or that other embarrassing circumstances might be encountered.

Finally, of the 60 country visits made by PLAN ships since 1985, 77% of those visits have taken place since 1997. Prior to 1997, PLAN vessels had conducted 14 country visits in the Asia-Pacific region, including the United

States (Hawaii). Since January 1997, PLAN vessels have conducted 46 country and territory visits, including 24 in the Asia-Pacific region, 6 in North America, 5 in South America, 8 in Europe and 3 in Africa.

Modernization Lessons

The next objective of PLAN ship visits is to provide the PLAN with an opportunity for observing foreign navies and gathering examples that may prove useful in its own modernization efforts. During such visits, they attempt to understand the profound differences between the PLAN's posture, doctrine, and attitudes as contrasted with other navies, especially the USN, which it sees as a world standard. The PLAN takes every advantage to learn as much as possible from foreign ship visits to China.

In an unprecedented move, Beijing accepted an invitation from Washington to send PLAN officers to observe RimPac 98, the major multinational Pacific Ocean naval exercise. Similar previous invitations had been rejected, due to China's general aversion to activities that might contribute towards the appearance or reality of an Asia-Pacific regional security architecture. Two Chinese representatives, the commanding officer of a PLAN destroyer and an associate professor at the Naval Command Academy, were sent to observe.

Person-to-Person Diplomacy

The final goal of PLAN ship visits is to improve relations between China and the private citizens of PLAN host nations. During the port calls abroad, the PLAN has engaged in several activities. Like the other PLA and PLAAF officers who have traveled abroad, the task force leaders have met with senior government and military officials of the host country and paid visits to naval schools and facilities. The PLAN delegation also opens their ships for visits by naval officials and the public. During the 1997 visit to the United States, Mexico, Peru, and Chile, more than 64,000 people visited the ships.

The Navy has also drawn the attention of local Chinese, such as during their visit to Seattle in 2000 where hundreds of overseas Chinese adults and students, as well as 100 children from a local Chinese-language school, participated in the open house. PLAN sailors have engaged in soccer and basketball competition with the host country's sailors. Meanwhile, the host country usually provides some type of honor ceremony and provides local entertainment for the crew, such as when Malaysian native tribes performed traditional singing and dance. During the training ship Zhenghe's visit to Hawaii in 1989, the local Chinese-American community in Honolulu held several special events for and in honor of the crew.

Functional and Educational Exchanges

Functional and educational exchanges are conducted primarily to benefit naval modernization efforts, but they also meet some criteria for supporting China's foreign policy. The PLAN's relations with other navies provide ideas for the badly needed PLAN reforms in areas such as personnel management, training, logistics, and equipment maintenance.

The PLAN has also adopted other concepts from foreign navies. Specifically, the PLAN is emulating programs for training students attending civilian universities to become Navy officers. China will increasingly look to its version of a Naval Reserve Officer Training program to supplement its naval academies

in supplying officers, especially officers with technical degrees who can function better in a navy adopting advanced technologies.

The PLAN has used various educational exchanges to support the broader goals of the Chinese Communist Party and the PLA. This is reflected in its small-scale undertakings involving other countries with which the Chinese government has pursued closer ties. The PLAN provided training for students from Cambodia and several African countries in PLAN facilities in Qingdao and Shanghai, but this apparently ended in the early 1980s.

The PLAN provided training for the Thai Navy in the early 1990s in connection with Thailand's purchase from China State Shipbuilding Corporation (CSSC) of four Jianghu frigates—two of which visited Shanghai in September 2002. Similar training has been provided to the Egyptian Navy. The training for Thailand and Egypt was conducted by the PLAN but funded by CSSC.

Between 1985 and 1993, the PLAN had only about 100 naval personnel take part in academic exchanges and/or study abroad. By the late-1990s, the PLAN had stopped, at least temporarily, sending officers abroad for training in military schools. This is in contrast to the other services that stepped up their student activities abroad. One possible reason is that former PLAN Commander Zhang Lianzhong's negative attitude toward foreign travel affected this aspect of the PLAN's foreign relations, but it may also be that the PLAN spends the majority of its foreign relations budget on ship visits.

Looking to the Future

The PLAN has become fairly predictable in its foreign relations cycle since the mid-1990s and will most likely continue at the same pace for the rest of this decade. Although China's commander and ship visits abroad have received attention over the past few years, they are remarkable primarily because they have occurred within the context of Chinese naval modernization. While both total numbers of commander and ship visits are small, they are noteworthy given the fact that the PLAN is an organization in flux; it is currently seeking a new doctrine and the capabilities to implement this as-yet undefined doctrine.

On the other hand, these exchanges are also noteworthy given the fact that they have increased at such a small pace and scale relative to high-level Chinese military visits from the PLA ground forces and Air Force.

Between now and 2010, the PLAN can be expected to average one annual voyage consisting of two to three port calls abroad and to host five to ten foreign ships per year. There are no discernible PLAN preferences for which months to conduct port calls, but none have taken place during January or February. Foreign ship port calls will take place equally throughout the year and will be an even mix between Shanghai and Qingdao, with an occasional visit to Guangzhou.

The PLAN commander has not traveled abroad since 2002. Initially, the reason was due to the fallout from the Ming submarine accident in early 2003 and commander Shi Yunsheng's subsequent replacement that summer. It is not clear why Zhang Dingfa did not travel during 2004 and 2005, but may have to do with health reasons that led to his removal from office in August 2006.

Now that Wu Shengli has become the commander, he and his successor will most likely continue to take one trip overseas to one to

four countries and to host an average of three to six counterparts per year. PLAN political commissars have led only four delegations abroad since 1990, so they are not expected to travel much over the next decade. Overall, the total number of PLAN flag officers who travel abroad is comparatively less than the Army or Air Force. This most likely reflects the Army's dominance of the program and that the PLAN spends most of its foreign relations budget hosting foreign ships and conducting its own ship visits abroad.

There are certain predictors for PLAN commander and ship visits abroad. One predictor for ship visits abroad is upcoming anniversaries, including five-year increments of diplomatic ties with the PRC or major host-country naval anniversaries. In addition, the PLAN dispatched its two *Luhu* destroyers (*Harbin* and *Qingdao*), its first *Luhai* destroyer (*Shenzhen*), and all of its *Jiangwei* frigates on port calls 18-48 months after they were commissioned. The question is whether the PLAN will follow the same pattern and use its new *Sovremenny* destroyers for port visits at some point in the near future.

Concerning visits by the PLAN commander, at least one trip to Pakistan and Thailand will most likely occur. Regionally, an equal number of trips to Asia and Europe will take place, with at least one to two visits including countries in South America. About one-half of the commander's visits will be reciprocal exchanges either the year before or the year after hosting his counterpart. He will most likely travel during April, July, or November, and will probably not travel between December and March.

Most of the PLAN's senior officer and ship visits with particular countries have taken place along with increased exchanges among senior political and military officials. These officials include the president, premier, foreign minister, Central Military Commission vice-chairmen, defense minister, and chief of the general staff. There is no discernible pattern as to whether the PLAN visits take place before or after any other official. This trend will most likely continue throughout the decade.

There are political and economic limitations, however, to the number of exchanges China and the region can handle in the future. Most countries in Asia, including China, limit themselves to the total number of military exchanges they can hold annually, and specific limits are placed on the number and types of relations they hold with individual countries. Besides political issues, there are limited funds for these exchanges. It is expensive, and getting more expensive every year, to send delegations abroad and to host foreign delegations in-country. In addition, the rising cost of fuel will limit what some navies can accomplish in the future.

Finally, the PLAN has military attachés assigned in only a couple of countries, including the United States and Britain.

Chapter 16

Weapon Systems and Equipment

This chapter provides information on the PLA Navy's weapon system and equipment development procedures and a short overview of the number of vessels in the inventory.

Weapons and Equipment Development Procedures

PLAN Headquarters is responsible for overseeing all naval weapon system and equipment development. The PLAN's development cycle for all of its weapon systems and equipment, regardless of how large or small, consists of the following five phases:

- Theoretical evaluation (论证)
- Program definition (方案)
- Engineering development (工程研制)
- Design finalization (设计定型)
- Production finalization (生产定型).

The main responsibilities during the theoretical evaluation phase are to begin examining the proposed technology to meet operational requirements, which includes the entire technology program, development cost, conditions to support the technology, and development time frame forecast. The final step is to report the requirements for the new project to higher authorities for approval.

Once the theoretical evaluation phase is completed, the program definition phase begins. In this phase, the comprehensive development project is implemented by assigning specific responsibilities to all organizations involved in the project. The three main tasks in the program definition phase are as follows:

- Conduct a theoretical evaluation of the development program
- Conduct testing that focuses on key technologies and new parts
- Conduct subsystem trial manufacturing and experimentation

A Design Finalization Committee is responsible for approving each milestone throughout this phase of the project and then reporting the findings to PLAN Headquarters.

During the engineering development phase, which can take several years, the factory and associated research institutes are responsible for designing the weapon and producing and testing a prototype.

The design finalization phase involves a comprehensive review and inspection of the new weapon system or equipment throughout the process, including systematic testing of each component of the prototype or prototypes. The PLAN Military Production Finalization Committee is responsible for reviewing and approving each step of the process.

During the production finalization phase, the new system is produced for delivery to the operational force. The PLAN also begins training personnel to use, support, and maintain the new system or equipment. Once the new system or equipment enters the operational force,

it can still take a lengthy period of time, possibly years, before the system and its personnel are considered combat capable.

PLAN Vessel Inventory

The PLAN does not openly publish information on the types and numbers of weapon systems and equipment in its inventory.

According to the US Department of Defense's Annual Report to Congress on The Military Power of the People's Republic of China for 2006,

> *"The PLA Navy has 70 principal combatants (25 destroyers and 45 frigates), 55 submarines (50 diesel and 5 nuclear), some 50 medium and heavy amphibious lift ships (an increase of over 14% since 2005), and about 45 coastal missile patrol craft."*

Appendix A

Chinese Terms

Pinyin	Chinese	English
Ban	班	Squad
Banzhang	班长	Squad leader
Baowei bumen	保卫部门	Security departments
Bei	北	North
Beihai jiandui	北海舰队	North Sea Fleet (NSF)
Biandui	编队	Task force; flight formation
Boshi	博士	Doctorate degree
Bu	部	Department
Budui daihao	部队代号	Military unit cover designator (MUCD)
Budui fanhao	部队番号	True unit designator
Bumen	部门	Branch (on a vessel)
Caolian	操练	Drills
Caoyan	操演	Demonstration
Chu	处	Division (administrative)
Chuan	船	Ship
Congnan congyan	从难从严	Implement strict discipline during training
Dadui	大队	Squadron (vessel); group (aviation, training, and ground-based)
Dagang	大纲	Outline of Military Training and Evaluation (OMTE)
Dang daibiao dahui	党代表大会	Party Congress
Dang jilü jiancha weiyuanhui	当纪律检查委员会	Party Discipline Inspection Commission
Dangwei	党委	Party committee
Dangwei changwei	党委常委	Party committee standing committee
Dangxiaozu	党小组	Party small group
Dangzhibu	党支部	Party branch
Dangzongzhi	党总支	Party general branch
Daodanting	导弹艇	Guided-missile boat
Daqu fuzhi	大区副职	Military region deputy leader grade
Daqu zhengzhi	大区正职	Military region leader grade
Daxue	大学	University

Dazhuan	大专	Senior technical degree
Dengluting	登陆艇	Landing craft
Dong	东	East
Donghai jiandui	东海舰队	East Sea Fleet (ESF)
Dongyuan bu	动员部	Mobilization Department
Duikang	对抗	Opposition force
Fang'an	方案	Program definition; plans
Fujun	副军	*Jun* deputy leader grade
Fulian	副连	Company deputy leader grade
Fushi	副师	Division deputy leader grade
Futuan	副团	Regiment deputy leader grade
Fuyuan	复员	Demobilized cadre
Fuying	副营	Battalion deputy leader grade
Ganbu	干部	Cadre (officer)
Ganbu bu	干部部	Cadre Department
Gangyao	纲要	Gangyao
Gongcheng yanzhi	工程研制	Engineering development
Gongqingtuan	共青团	Communist Youth League (CYL)
Gu	股	Branch (administrative)
Guofang	国防	National defense
Guofangsheng	国防生	National Defense Scholarship Program
Haihang	海航	Naval aviation
Haijun	海军	Navy; PLA Navy Headquarters
Haijun anfangbing	海军岸防兵	PLA Navy coastal defense forces
Haijun hangkongbing	海军航空兵	Naval aviation
Haijun luzhandui	海军陆战队	PLA Navy Marine Corps
Haishang	海上	At sea; maritime
Hetong	合同	Combined arms
Houbei junguan	后备军官	Reserve officer (National Defense Scholarship students)
Houqin	后勤	Logistics
Houqin junguan	后勤军官	Logistics officer (career track)
Hukou zhidu	户口制度	Residency system
Huweiting	护卫艇	Escort boat
Jian	舰	Ship
Jianchuan	舰船	Generic term for boats, ships, and vessels
Jianting	舰艇	Generic term for boats, ships, and vessels

Jianyan	检验	Inspection; evaluation
Jiao	交	Transport (character on PLAN transport vessels)
Jiaodao dui	教导队	Training unit
Jiaodaoyuan	教导员	Political director
Jiceng dangwei	基层党委	Grassroots Party committee
Jiefangjun	解放军	People's Liberation Army (PLA)
Jiefangjun Haijun	解放军海军	PLA Navy (PLAN)
Jiji fangyu	积极防御	Active defense
Jilü jiancha bu	纪律检查部	Discipline Inspection Department
Jin'an fangyu	近岸防御	Coastal defense
Jinhai fangyu	近海防御	Offshore defense
Jishu	技术	Technical; technology
Jishu junguan	技术军官	Technical officer (career track)
Jiu	救	Salvage (character on PLAN transport vessels)
Jishu xunlian	技术训练	Technical training
Jun	军	Army; corps
Jun	浚	Dredge (character on PLAN transport vessels)
Jundui dangyuan dahui	军队党员大会	Congress of military Party members
Junguan	军官	Officer
Junshi	军事	Military
Junshi fayuan	军事法院	Military court
Junshi jiancha yuan	军事检察院	Military procuratorate
Junshi junguan	军事军官	Military officer (career track)
Junshi xunlian yu kaohe dagang	军事训练与考核大纲	Outline of Military Training and Evaluation (OMTE)
Junshi xunlian zhidao sixiang	军事训练指导思想	Military training guidance concepts
Junwei fuzhuxi	军委副主席	Vice chairman, Central Military Commission
Junwei weiyuan	军委委员	Central Military Commission member
Junwei zhuxi	军委主席	Chairman, Central Military Commission
Junwu bu	军务部	Military Affairs Department
Junxun he bingzhong bu	军训和兵种部	Military Training and Service Arms Department
Kang	康	Hospital (character on PLAN transport vessels)
Kaohe	考核	Evaluation; examination
Ke	科	Office
Keji xingxun	科技兴训	Apply science and technology during training
Lian	连	Company

Lianhe	联合	Joint
Liebing	列兵	Private 2nd class
Lixiu ganbu	离休干部	Retired cadre (joined PLA prior to 1949)
Lü	旅	Brigade
Lunzheng	论证	Theoretical evaluation
Minbing	民兵	Militia
Mou	某	Certain (as in a certain unit)
Nan	南	South
Nanhai jiandui	南海舰队	South Sea Fleet (SSF)
Pai	排	Platoon
Qianting	潜艇	Submarine
Qianting budui	潜艇部队	Submarine forces
Renmin wuzhuang bu	人民武装部	People's Armed Forces Department (PAFD)
Renmin wuzhuang jingcha budui	人民武装警察部队	People's Armed Police (PAP)
Shangdengbing	上等兵	Private 1st class
Shengchan dingxing	生产定型	Production finalization
Sheji dingxing	设计定型	Design finalization
Shi	师	Division
Shibing	士兵	Enlisted soldier
Shibing shidan	实兵实弹	Live troops with live munitions
Shiguan	士官	Noncommissioned officer (NCO)
Shiji shiyong wuqi	实际使用武器	Live weapons
Shixi	实习	Practical application
Shiyan	示范	Demonstrate; demonstration
Shiyan	试验	Trial; test; evaluation
Shui	水	Water; water tanker (character on PLAN transport vessels)
Shuibing	水兵	Enlisted sailor
Shuijingqu	水警区	Naval garrison
Shuimian jianting budui	水面舰艇部队	Surface forces
Shuoshi	硕士	Master's degree
Tiejin shizhan	贴近实战	Closely adhere to actual combat situations
Ting	艇	Boat
Tuan	团	Regiment
Tuchu duikang	突出对抗	Stress training against opposition forces
Tuixiu ganbu	退休干部	Retired cadre (joined PLA after 1949)

Tuo	拖	Tug (character on PLAN transport vessels)
Wuzhuang liliang	武装力量	Armed forces
Xinbing	新兵	New soldier (conscript)
Xinxihua	信息化	Informationalization; informatization
Xiu	修	Repair (character on PLAN transport vessels)
Xuebing	学兵	Student
Xueshi	学士	Bachelor's degree
Xuexiao	学校	School
Xueyuan	学院	Academy; college
Xueyuan	学员	Cadet; student
Xunlian	训练	Training
Yanjiu	研究	Research
Yanlian	演练	Training event
Yanxi	演习	Exercise
Ying	营	Battalion
Yiwubing	义务兵	Conscript
You	油	Oil; fuel; oiler (character on PLAN transport vessels)
Yubei junguan	预备军官	Reserve officer
Zhanbei	战备	Combat readiness; alert
Zhandou	战斗	Battles
Zhanfa	战法	Combat methods
Zhanlue	战略	Strategy; strategic
Zhanshi	战士	Enlisted soldier
Zhanshu	战术	Tactics; tactical
Zhanshu qun	战术群	Tactical group
Zhanyi	战役	Campaign; operational
Zhanyifa	战役法	Campaign methods
Zhanzheng	战争	War
Zhengjun	正军	*Jun* leader grade
Zhenglian	正连	Company leader grade
Zhengpai	正排	Platoon leader grade
Zhengshi	正师	Division leader grade
Zhengtuan	正团	Regiment leader grade
Zhengwei	政委	Political commissar
Zhengying	正营	Battalion leader grade
Zhengzhi	政治	Political

Zhengzhi junguan	政治军官	Political officer (career track)
Zhidaoyuan	指导员	Political instructor
Zhidui	支队	Flotilla
Zhihui	指挥	Command
Zhihui junguan	指挥军官	Command officer (career track)
Zhiyuanbing	志愿兵	Volunteer (former NCO program)
Zhongdui	中队	Squadron (aviation)
Zhongguo renmin wuzhuang jingcha budui	中国人民武装警察部队	People's Armed Police (PAP)
Zhongzhuan	中专	Secondary technical degree
Zhuangbei	装备	Equipment
Zhuangbei junguan	装备军官	Equipment officer (career track)
Zhuanye	转业	Officer transferred to comparable civilian government job
Zong canmou bu	总参谋部	General Staff Department (GSD)
Zong houqin bu	总后勤部	General Logistics Department (GLD)
Zong zhengzhi bu	总政治部	General Political Department (GPD)
Zong zhuangbei bu	总装被部	General Equipment Department (GED) or General Armament Department (GAD)
Zuzhi bu	组织部	Organization Department
Zuozhan	作战	Combat; operations
Zuozhan zhiyuanjian zhidui	作战支援舰支队	Combat support vessel *zhidui*
Zuzhi xulie	组织序列	Protocol order

Appendix B

Suggested Reading List

Cole, Bernard D. "China's Maritime Strategy," in Susan M. Puska, ed., *People's Liberation Army After Next*. Carlisle, PA: Strategic Studies Institute, August 2000.

Cole, Bernard D. "The Organization of the People's Liberation Army Navy (PLAN)," in James C. Mulvenon and Andrew N.D. Yang, ed., *The People's Liberation Army as Organization*. Santa Monica, CA: RAND, 2002.

Cole, Bernard D. "The People's Liberation Army Navy After Half a Century: Lessons Learned in Beijing," in *The Lessons of History: The Chinese People's Liberation Army at 75*. Carlisle: Strategic Studies Institute, July 2003, pp. 157-192.

Cole, Bernard D. *The Great Wall at Sea: China's Navy Enters the Twenty-First Century.* Annapolis: Naval Institute Press, 2001.

Ge Dongsheng, ed., *National Security Strategy* (*Guojia Anquan Zhanlue Lun*; 国家安全战略论). Beijing, China: Academy of Military Science Press, July 2006.

Huang, Alexander. "The Chinese Navy's Offshore Active Defense Strategy: Conceptualization and Implications." *Naval War College Review* 47, no. 3 (Summer 1994):16ff.

Huang, Alexander. "The PLA Navy at War, 1949-1999: From Coastal Defense to Distant Operations," in Mark A. Ryan, David M. Finkelstein, and Michael A. McDevitt, eds., *Chinese Warfighting: The PLA Experience Since 1949*. Armonk, NY: M.E. Sharpe, 2003.

Kondapalli, Srikanth. *China's Naval Power*. New Delhi: The Institute for Defence Studies and Analyses, January 2001.

Lewis, John Wilson and Xue Litai. *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age,* Stanford: Stanford University Press, 1994.

Muller, David G. *China's Emergence as a Maritime Power*. Boulder, CO: Westview Press, 1983.

Shambaugh, David. *Modernizing China's Military: Progress, Problems, and Prospects*. University of California Press, 2002.

Shi Yunsheng, ed. *China Navy Encyclopedia* (*Zhongguo Haijun Baike Quanshu*; 中国海军百科全书). Beijing: Haichao Publishing House, December 1998.

Swanson, Bruce. *The Eighth Voyage of the Dragon: A History of China's Quest for Seapower.* Annapolis, MD: Naval Institute Press, 1982.

Yao Jun, ed. *A History of China's Aviation* (*Zhongguo Hangkong Shi;* 中国航空史). Zhengzhou: Dajia Publishers, September 1998.

You Ji. *The Armed Forces of China*. Australia: Allen & Unwin, 1999.

Zhang Xusan, ed. *Navy Dictionary* (*Haijun Da Cidian*; 海军大词典). Shanghai: Shanghai Dictionary Publishing House, October 1993.

Zhang Yongyi, ed., *Science of Naval Military Training* (*Haijun Junshi Xunlian Xue*; 海军军事训练学). Beijing, China: Academy of Military Science Press, April 2006.

Zhou Keyu, ed. *China Today: Navy*, (*Dangdai Zhongguo Haijun*; 当代中国海军). Beijing: China Social Sciences Publishing House, 1987.

NOTES:

TIMELY - RELEVANT - PREDICTIVE

WWW.NMIC.NAVY.MIL