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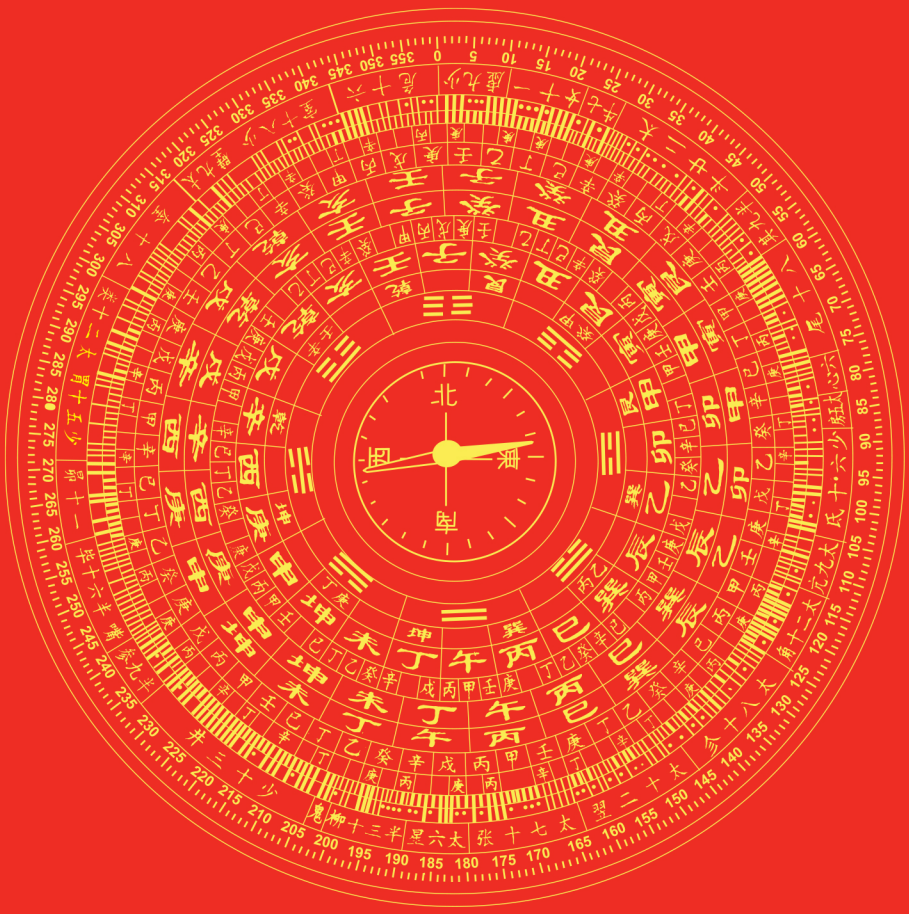
The Recruitment, Education, and Training of PLA Navy Personnel



Kenneth Allen and Morgan Clemens

The Recruitment, Education, and Training of PLA Navy Personnel

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CHINA MARITIME STUDIES INSTITUTE
U.S. NAVAL WAR COLLEGE
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List of Tables

TABLE 1 PLA Officer Grades and Ranks.....5

TABLE 2 PLA Navy Academic Institutions Providing Officer Education 7

TABLE 3 Universities with PLAN National Defense Student Programs 8

TABLE 4 PLAN Surface Branch Officer Career Track 13

TABLE 5 PLA Enlisted Grades and Ranks as of 2009..... 19

TABLE 6 Vocational Colleges Participating in Pilot Programs for the Directed Education of PLAN Direct-Recruitment NCOs 22

TABLE 7 Permanent PLAN Training Units for Conscripts of NCOs..... 23

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The Recruitment, Education, and Training of PLA Navy Personnel

Looking back at the parlous state of the People's Liberation Army Navy (PLAN) in the early 1980s, Liu Huaqing, its former commander, wrote, "All areas [of the navy] required significant strengthening, but I believed the key was developing capable personnel." Indeed, during Admiral Liu's tenure (1982–88), the PLAN embarked on a major effort to improve the quality of its officers and enlisted personnel—an effort that continues to this day.[1]

The purpose of this monograph is to examine the results of reforms of the way in which the PLAN recruits, educates, and trains its officers and enlisted personnel. Although these reforms began in the 1980s, they experienced a boost in the 1990s, when procurement of advanced weaponry (made possible by expanding national defense budgets) increased, creating an urgent need for a more highly educated force to operate, support, and maintain the new systems. To this end, the PLAN has gradually shifted from an officer force consisting primarily of graduates of PLAN academic institutions who were selected from high school graduates and outstanding enlisted personnel with high school educations to a combination of PLAN academic-institution graduates; officers who have graduated with science, technology, or engineering degrees from the newly created National Defense Student (Reserve Officer) Program; and directly recruited graduates of civilian colleges who have appropriate technical degrees. The PLAN is currently in the process of consolidating and reorganizing its officer academic institutions and professional military education (PME) structure to provide a continuum of education and training throughout an officer's career.

Reforms in the enlisted force continue to lag behind those of the officer corps. In 1999, the PLAN, like the rest of the People's Liberation Army (PLA), went from an enlisted force composed of four-year conscripts (who could then remain on active duty for a total of sixteen years as volunteers) to a two-year conscription period with the opportunity to remain on active duty for a total of thirty years, as members of a newly created noncommissioned officer (NCO) corps. The problem then was that the force was still composed primarily of personnel with only ninth-grade educations. In the mid-2000s, the PLAN began to recruit NCOs directly from among civilian college graduates and civilians with

certain technical skills. In 2009 the PLA made a dramatic shift from a primarily two-year conscription enlisted force to a volunteer force consisting of about one-third civilian college students and graduates. By 2011, however, the program had run into fairly significant problems and was being revised yet again.

Like the rest of the PLA, the PLAN has begun to recruit, educate, and train female enlisted sailors and officers in multiple career fields, including communications, nursing, maritime navigation, radar and sonar operation, and command-and-control functions on such platforms as destroyers, landing vessels, and the hospital ship *Peace Ark* (hull number 866).[2] During 2010 the training vessel *Zhenghe* (hull number 81) carried the vessel's first group of nine female officer cadets on a training mission to five countries, including Papua New Guinea, New Zealand, and Australia.[3] Another group of thirteen female cadets from the Dalian Naval Ship Academy participated in *Zhenghe*'s around-the-world voyage in 2012.[4]

The PLAN is now in the process of reforming its entire PME system, which consists of multiple levels of education and billet training, to accommodate a more educated officer and enlisted force. Some of these reforms will require decades to bear fruit. For example, it will be 2029 before anyone who entered service in 1999 will have served a full thirty years and 2039 before anyone who joined as a result of the 2009 reforms will have served that long. An NCO must now have a secondary technical degree (e.g., high school equivalent) to become a junior-grade NCO, a senior technical degree (e.g., associate's) to become an intermediate-grade NCO, or a bachelor's degree to become a senior-grade NCO. However, most NCO schools currently only provide two-year secondary technical or two- or three-year senior technical-degree PME for NCOs, making the institutions inadequate for educating enlisted personnel who already have bachelor's degrees.

To address these issues, after a brief discussion of terminology, this monograph is organized into five sections: officer recruitment, education, and specialty training; officer professional military education; two-year enlisted force recruitment, basic training, and specialty training; NCO recruitment, training, and education; and conclusions.

PLA Navy PME Terminology and Concepts

For those familiar with the U.S. Navy, understanding the PLAN personnel system can be complicated, because the terminology and concepts are different. For example, the PLA translates the term *xueyuan* (学员) as officer "cadet," but the term refers to not only cadets during their precommissioning undergraduate years at military academic institutions but also "students" who attend military academic institutions or training units as officers.[5] Meanwhile, students in the National Defense Student Program (discussed below) are called "national defense students" (*guofang sheng*—国防生), not cadets.[6] As

for the enlisted force, the PLA uses the term *xuebing* (学兵) for all enlisted personnel, including NCOs, who receive post–basic training specialty instruction at a training organization.[7]

Importantly, the PLA does not have a term that it translates as "professional military education." For purposes of this monograph, *peixun* (培训)—a combination of *peiyang* (培养) and *xunlian* (训练)—will be translated as PME. The PLA translates *peixun* as "development and training."[8] *Peiyang* is normally translated as to "cultivate," "nurture," "foster," "train," "develop," or "educate."[9] It is defined in this context as the process by which cadets master the system of scientific and cultural knowledge and skills, form moral characters, and develop perfect physiques. *Xunlian* is normally translated as "training."[10] "Military training" (*junshi xunlian*—军事训练), or simply "training," is defined as military personnel receiving education in military theory and related specialty knowledge and engaging in combat-skills education and training and in military training events.[11] Training includes "unit training" (*budui xunlian*—部队训练), "military academic institution education" (*junshi junxiao xunlian*—军事军校训练), and "reserve training" (*yubeiyi xunlian*—预备役训练). It is divided into "common training" (*gongtong xunlian*—共同训练), "skills training" (*jishu xunlian*—技术训练), and "strategic, campaign, and tactical training" (*zhanlue zhanyi zhanshu xunlian*—战略战役战术训练).

The Chinese notion of PME embraces cadets, young officers, and NCOs.[12] It can include "professional science and technology education" (*zhiye jishu jiaoyu*—职业技术教育), "on-the-job training" (*zaizhi xunlian* —在职训练), "specialty training" (*zaiye renyuan de zhuanmen xunlian*—在业人员的专门训练), "equipment specialty PME" (*zhuangbei zhuanye peixun*—装备专业培训), and "short-term reeducation" (*duanqi zaijiaoyu*—短期再教育), such as "cultivation and training for officers at every level" (*geji junguan de peixun*—各级军官的培训), as well as "billet training" (*gangwei xunlian*—岗位训练). A more detailed definition is the systematic cultivation and training of cadets/students at an academic institution.[13]

Officer Recruitment, Education, and Specialty Training

This section briefly discusses officer career tracks and categories, examines how officers are recruited, and describes how officers receive their education and specialty training.

Officer Career Tracks and Categories

The PLA has five officer career tracks for what it calls "active-duty officers" (现役军官): military (operational), political, logistics, equipment, and special technical.[14] All officers, regardless of career track, who serve in leadership billets (e.g., as directors or deputy directors of offices) are called "commanding officers" (指挥军官), which should

not be confused with "commanders" (指挥员/司令员). With the exception of political "commanding officers," officer career tracks are determined on the basis of the new cadets' college entrance scores, and the career tracks in turn determine which academic institutions they will attend.[15]

"Military (or operational) officers" (军事军官) serve as unit commanders or deputy commanders down to the platoon level, as well as chiefs of staff (e.g., directors) or staff officers in the General Staff Department (GSD) and in the headquarters departments of all services and branches down to the regiment level.[16]

"Political officers" (政治军官) serve as political officers (e.g., political commissars, political directors, or political instructors) or deputy political officers in all units down to the company level. They also serve as directors or deputy directors, as well as staff officers, in the General Political Department (GPD) and in political departments or divisions in all services and branches down to the regiment level, as well as political officers and staff officers at the battalion and company levels. There are no political officers at the platoon level.

"Logistics officers" (后勤军官) serve as directors or deputy directors, as well as staff officers, in the General Logistics Department and in lower-echelon joint logistics departments or logistics departments or divisions down to the regiment level, as well as logistics-related leadership and staff billets at the battalion, company, and platoon levels.[17]

"Equipment officers" (装备军官) serve as directors or deputy directors, as well as staff officers, in the General Armament Department and lower-echelon equipment departments or divisions down to the regiment level, as well as equipment-related leadership and staff billets at the battalion, company, and platoon levels.[18]

"Special technical officers" (专业技术军官) can serve in technical billets in any of the four departments but tend to be concentrated in organizations related to research and development and equipment. Their specialties are divided into sixteen "sets" (系列), with fifty-two categories.[19] Depending on their particular jobs, some officers move back and forth between billets as special technical officers and equipment or logistics officers. Some special technical officers also serve in leadership positions, such as directors of research laboratories.[20]

Unlike the U.S. military, the PLA does not have "military occupational specialties" for its officers or enlisted personnel. The PLA often combines its first four career tracks together to differentiate them from special technical officers, but there is no official collective term for those four tracks.[21]

The PLA's promotion system is a combination of fifteen "grades" (职务等级) and ten "ranks" (军衔), as shown in table 1. Because there are fifteen grades but only ten ranks, each grade up to military region leader has two ranks, of which one is primary and one

secondary. As shown in table 1, while the primary rank is often higher than the secondary, in some cases it is lower. The reason for this oddity is that regulations specify that naval officers from lieutenant to captain receive rank promotions every four years but that those with grades between platoon leader and division leader receive grade promotions every three years.[22] Accordingly, grade and rank promotions rarely coincide. At the same time, some ranks can comprise up to four grades. For example, a one-star flag officer (rear admiral) can have the grade of division leader, corps deputy leader, corps leader, or military region deputy leader. Therefore, when discussing PLAN promotions, one must clarify whether one is speaking of a promotion in grade or in rank; promotions in grade, which are linked to billets, are more important than those in ranks for climbing the career ladder. In addition, special technical officers are assigned numbered grades from 1 to 14 rather than billet grades; however, they are eligible for the same ribbons and ranks as military, political, equipment, and logistics officers in the equivalent grades.

Table 1. *PLA Officer Grades and Ranks*

Grade for Military, Political, Logistics, and Equipment Officers	Grade for Special Technical Officers	Primary Rank	Secondary Rank
CMC chairman (军委主席) Vice chairmen (军委副主席)	N/A	N/A GEN/ADM	N/A
CMC member (军委委员)	Grade 1 (1级)	GEN/ADM	N/A
MR leader (正大军区职)	Grade 2 (2级)	GEN/ADM	LTG/VADM
MR deputy leader (副大军区职)	Grade 3 (3级)	LTG/VADM	MG/RADM
Corps leader (正军职)	Grade 4 (4级)	MG/RADM	LTG/VADM
Corps deputy leader (副军职)	Grade 5 (5级)	MG/RADM	SCOL/SCPT
Division leader (正师职)	Grade 6 (6级)	SCOL/SCPT	MG/RADM
Division deputy leader (副师职)	Grade 7 (7级)	COL/CPT	SCOL/SCPT
Regiment leader (正团职)	Grade 8 (8级)	COL/CPT	LTC/CDR
Regiment deputy leader (副团职)	Grade 9 (9级)	LTC/CDR	MAJ/LCDR
Battalion leader (正营职)	Grade 10 (10级)	MAJ/LCDR	LTC/CDR
Battalion deputy leader (副营职)	Grade 11 (11级)	CPT/LT	MAJ/LCDR
Company leader (正连职)	Grade 12 (12级)	CPT/LT	1LT/LTJG
Company deputy leader (副连职)	Grade 13 (13级)	1LT/LTJG	CPT/LT
Platoon leader (排职)	Grade 14 (14级)	2LT/ENS	1LT/LTJG

The PLA further organizes its officers into three categories: "commanding officers" (指挥军官), which includes the commanders, political commissars, deputy commanders and deputy political commissars, and directors and deputy directors of all the first-, second-, and third-level departments within headquarters; "staff officers" (参谋长), who serve in each of the four first-level departments (headquarters, political, logistics, and equipment/armament) and their subordinate second- and third-level departments; and

special technical officers. Officers in the three categories receive different types of PME as they move up the career ladder.[23]

Officer Recruitment

Today, officers in the PLA are recruited from seven categories of personnel: high school graduates (普通高等中学毕业生); National Defense Student (国防生) Program graduates; directly recruited civilian college graduates (接收普通高等院校毕业生) with science, technology, and engineering degrees; specially recruited civilians who have desired technical skills (特招地方专业技术人员); outstanding enlisted personnel (优秀士兵) who do not already possess postsecondary education; outstanding enlisted personnel who already have senior technical (associate's) or bachelor's degrees (优秀大学毕业生士兵); and civilian cadres (文职干部) who become officers.[24]

High school graduates constitute the largest number of officer recruits. The National Defense Student Program is the second-largest source, followed by direct recruitment of civilian college graduates. The last four categories encompass only a small percentage of officer recruits. Although no statistics are available, the number of enlisted personnel with college degrees who become officers appears to be shrinking. The primary reason is that the available slots are being filled by national defense students; the PLAN apparently prefers to keep enlisted personnel with college degrees in the growing NCO corps.

Officer Recruit Education and Specialty Training

New officer recruits receive basic naval education and training at different locations, the choice of which is determined by their career tracks and college entrance examination (高考) scores.

Cadet Education at PLAN Academic Institutions. High school graduates and outstanding enlisted personnel without prior degrees receive basic education and specialty training at one of seven PLAN academic institutions (table 2).[25]

Not all cadets who attend military academic institutions receive bachelor's degrees; some receive only three-year senior technical (associate's) degrees. Also, time as a cadet in any military academic institution is included in total time in service.[26]

In addition to the PLAN's academic institutions, some PLAN cadets attend the General Armament Department's Academy of Equipment Command Technology (AECT, 装备指挥技术学院), where they wear navy uniforms, and the National University of Defense Technology (国防科学技术大学), where they wear army uniforms.[27] Basic cadet education consists of about two years of military common training (军事共同科目训练) and basic theory (基础理论). Once this work is completed, cadets receive specialty education and training (专业课). Upon graduation they either attend about ten months of professional education (任职教育) at a PLAN academic institution or are assigned

Table 2. *PLA Navy Academic Institutions Providing Officer Education*

Chinese Name	English Names	City, Province	Grade
海军指挥学院	Naval Command College	Nanjing, Jiangsu	corps leader
海军工程大学	Naval Engineering University	Wuhan, Hubei	corps leader
海军航空工程学院	Naval Aeronautical and Astronautical College / Naval Aviation Engineering Academy	Yantai, Shandong	corps deputy leader
海军大连舰艇学院	Dalian Naval Ship Academy/College	Dalian, Liaoning	corps deputy leader
海军陆战学院	Naval Marine (Corps) Academy/College[a]	Guangzhou, Guangdong	corps deputy leader
海军潜艇学院	Naval Submarine College/Academy	Qingdao, Shandong	corps deputy leader
海军航空兵学院	Naval Aviation Academy/College[b]	Huludao, Liaoning	div. leader

Notes:
a. This institution has changed names and missions several times since it was created in 1977 as the Naval Second Surface Vessel School (海军第二水面舰艇学校). In 1983, it changed its name to the Naval Surface Vessel School (海军水面舰艇学校). In 1986, it became the Naval Guangzhou Vessel Academy/College (海军广州舰艇学院). In 2004, it became the Naval Arms Command Academy/College (海军兵种指挥学院). Finally, in 2011, the name was changed to the Naval Marine Academy/College (海军陆战学院). See "中国人民解放军海军陆战学院" [People's Liberation Army Naval Marine Academy/College], available at zh.wikipedia.org/.

b. In 2001, the Naval Flight Academy/College (海军飞行学院) in Huludao, Liaoning Province, and two naval training bases (海军的两个训练基地) merged to become the Naval Aviation Academy/College (海军航空兵学院). "中国军校改革背后的战略指向" [The Strategic Direction behind Chinese Military Academic Institution Reforms], available at chn.chinamil.com.cn/ll/2012-01/09/content_4763254.htm.

directly to their permanent units, where they receive billet training.[28] In recent years the PLAN has attempted to address a major complaint about its education system, that the students spend too much time studying theory and not enough time on practical application.[29] 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 they will find in the PLAN's operational units.

To solve these problems the institutions have attempted to acquire advanced equipment for training purposes and to update their written training materials. They are also acquiring and making more use of simulators. Moreover, students in their final years spend a few weeks before graduation with operational units to gain practical experience. For example, a group of 110 cadets, including thirteen female cadets from the Dalian Naval Ship Academy, participated in *Zhenghe*'s around-the-world voyage from April to September 2012.[30]

National Defense Student Program. As mentioned above, the National Defense Student Program is the second-largest educator of PLAN officer recruits. The PLA initiated the program, also called the Reserve Officer (后备军官) Program, in a few civilian universities in 1998.[31] All students must be in degree programs for science and technology or engineering.[32] To date, the PLA has created such programs, thirteen of them for the PLAN, in 118 civilian universities (see table 3).[33]

Table 3. *Universities with PLAN National Defense Student Programs*

Chinese Name	English Name	City, Province
东华理工大学[a]	East China Institute of Technology	Nanchang, Jiangxi
哈尔滨工程大学[b]	Harbin Engineering University	Harbin, Heilongjiang
河南科技大学[c]	Henan University of Science and Technology	Luoyang, Henan
河海大学[d]	Hohai University	Nanjing, Jiangsu
华中科技大学[e]	Huazhong University of Science and Technology	Wuhan, Hubei
江苏科技大学[f]	Jiangsu University of Science and Technology	Zhenjiang, Jiangsu
南昌航空大学[g]	Nanchang Hangkong University	Nanchang, Jiangxi
南昌大学[h]	Nanchang University	Nanchang, Jiangxi
宁波大学[i]	Ningbo University	Ningbo, Zhejiang
中国海洋大学[j]	Ocean University of China	Qingdao, Shandong
南华大学[k]	University of South China	Hengyang, Hunan
西安理工大学[l]	Xi'an University of Technology	Xi'an, Shaanxi
燕山大学[m]	Yanshan University	Qinhuangdao, Hebei

Notes:
Information accessed at "国防生(后备军(警)官)" [National Defense Students (Reserve [People's Armed Police] Officers)], baike.baidu.com/view/3196.htm, and "海军国防生" [Naval National Defense Students], baike.baidu.com/view/5047801.htm.

a. University website: www.ecit.edu.cn/.
b. University website: www.hrbeu.edu.cn/.
c. University website: www.haust.edu.cn/.
d. University website: www.hhu.edu.cn/.
e. University website: www.hust.edu.cn/.
f. University website: www.ecsi.edu.cn/.
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h. University website: www.ncu.edu.cn/.
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j. University website: www.ouc.edu.cn/.
k. University website: usc.edu.cn/.
l. University website: job.xaut.edu.cn/index.aspx.
m. University website: www.ysu.edu.cn/.

In April 2007, the GPD's Cadre Department stated that the PLA's goal was to have 60 percent of all new officers come from the National Defense Student Program by 2010.[34] It does not appear, however, that the PLA met this goal. For example, a December 2009 *Jiefangjun Bao* article stated that the PLA's officer corps at that point received about a hundred thousand graduates per year, of which 70 percent came from military academic institutions and 30 percent from the National Defense Student Program.[35] No more recent statistics have been found. The PLA also has capped the maximum number of female national defense students at 15 percent.[36]

Every university with a National Defense Student Program branch has a recruiting office, subordinate to the relevant service's political Cadre Department, responsible for recruiting and selecting students for the program on the basis of scores on the National Unified College Entrance Examination (高考).[37] Although most students join during their first year, some begin during their second year, or even the third. Until 2009, participating students received scholarships of five thousand renminbi (RMB) per year, of

which three thousand RMB were for tuition and two thousand were for living expenses. The total was raised to ten thousand RMB in 2009, but it is not clear how it is divided. Other types of scholarships are available as well. The military provides the tuition directly to the university. Each university's selection and PME office pays the funds for living expenses directly to students. The amounts are adjusted according to the university's tuition fees and to market fluctuations. To become officers, students must complete military-political training and required studies and receive appropriate degrees. Upon graduation, they enter the military and are assigned to organizations. National defense student participants take the same courses as their civilian classmates with the same majors.

The students live in military dormitories and wear their uniforms to all military-related classes. All new students receive fifteen days of "military-political training" (军政训练), conducted at the university or a PLA facility. Altogether, students in the four-year program must complete 488 hours of classroom study plus fifty-nine days of military skills, physical, and integrated training. Integrated training occurs at the university's or a nearby PLA unit's training site; it includes physical training, boxing, skills, and tactics. In the summer, second- and third-year students receive group training off campus or at military units, including physical training, marching, field training, small arms training, and observing technical skills. Graduating students must complete rigorous physical training exams.[38]

Upon graduation, students have several options, including attending graduate school. For example, in 2010 about 40 percent of the students in Hunan University's National Defense Student Program chose to attend graduate school.[39] In 2011, the South Sea Fleet (SSF) had three hundred officers from the National Defense Student Program, of whom 29 percent (eighty-six officers) had received master's degrees.[40] Another ninety-four had taken additional courses in various locations.

If they do not attend graduate school, graduates are assigned either to training organizations for a few months to learn basic specialty skills before they report to their operational units, or they are assigned directly to the units. Once they arrive at their ultimate duty stations, they receive on-the-job training for their specialties. With the exception of those who serve in remote areas or attend graduate school, the first year for new graduates is considered a probationary (见习) period.[41] Almost all National Defense Student Program graduates serve in technical support, rather than in command, billets.[42]

According to a 2008 assessment, the program had five major shortcomings: (1) a lack of overall coordination, both within the PLA and between the PLA and the civilian universities; (2) incomplete policies and regulations governing the program; (3) generally low-quality recruits; (4) a lack of commitment by the students, resulting in a high dropout

rate; and (5) poor coordination between the military training schedules and academic schedules.[43] Two additional, more specific problems have also been identified.[44] First, the GPD's Cadre Department manages the overall National Defense Student Program and the PLAN's counterpart organization manages the PLAN's program, whereas the GSD's Military Training Department manages the PLA's academic institutions and the PLAN's counterpart manages the PLAN's institutions. Second, unlike the case for cadets who attend military academic institutions, time in service for the students in the National Defense Student Program does not start until they graduate and become active-duty officers.

Other Commissioning Programs. Almost no information is available about the PLAN's program to recruit civilian college graduates directly as officers (直接招收).[45] The program is governed by GPD regulations issued in 2003. As a basic rule, individuals are directly recruited by specific PLAN organizations to fill particular billets. For example, in May 2010 an East Sea Fleet (ESF) unit directly recruited seven males to serve as medical personnel in an operational unit and another ESF unit recruited additional medical personnel in May 2012.[46] Each applicant was required to have a bachelor's degree and to be age twenty-four or younger. Each new recruit must complete a one-year probationary period.

At the time of this writing, no public information was available concerning the recruitment, education, and training program for outstanding enlisted personnel with a post-secondary degree or on civilian cadres who become officers.[47]

Officer Professional Military Education

As noted above, PLAN officer PME covers cadet education and specialty training (outlined above), billet training, and additional education and training for officers moving up the career ladder, based on their grades. There appears to be a clear distinction between "commanding officers" and support officers. Specifically, commanding officers receive bachelor's degrees, followed by basic-, intermediate-, and senior-level certificates for their PME, while special technical and other support officers receive opportunities to complete postgraduate degrees.[48] Although at the time of this writing no information is available to shed light on this difference, the apparent reason is that the PLAN does not want to have commanding officers away from their posts for the two or three years required for a graduate degree.

As PLAN officers move up their career ladders, they receive various types of professional military education—much like U.S. Navy officers, who pursue a five-tiered PME structure. One of the biggest differences between Chinese and U.S. practice, however, is

that PLAN officers receive their intermediate PME at different locations depending on their career tracks.

PLAN officers receive their precommissioning, basic, and intermediate PME at one of three types of academic institutions: "command academic institutions" (海军指挥院校), "specialty academic institutions" (海军专业院校), and "comprehensive academic institutions" (海军综合性院校).[49] They also receive specialty training at academic institutions, as well as billet training at their operational units.[50]

The Naval Command College is apparently the PLAN's only remaining command academic institution. Prior to 2011 the Naval Arms Command College was also considered a command academic institution, but it is not clear whether its successor, the Naval Marine (Corps) College, is a command or specialty institution. Most likely, it is the latter. As a command academic institution, the Naval Command College is organized into three levels: basic (初级), intermediate (中级), and senior (高级). Basic-level command academic institutions provide three types of degrees: four-year bachelor's (本科), two-to-three-year "senior technical" (大专), and two-year "secondary technical" (中专). The students are recruited from among high school graduates and outstanding enlisted members who have already graduated from high school. Intermediate-level command academic institutions use PME and "rotational training" (轮训) to educate combined-arms personnel; service and branch regiment-grade military, political, logistics, and equipment commanding officers; and staff officers in division, brigade, and regiment headquarters departments. The primary senior-level command academic institution is the National Defense University (国防大学). It cultivates corps-and-above army, navy, and air force military, political, logistics, and equipment commanding officers, as well as military senior-level theory graduate students, with a focus on joint operations.

The PLAN currently has at least four specialty academic institutions: the Dalian Naval Ship Academy, Naval Submarine Academy, Naval Aviation Engineering Academy, and Naval Aviation Academy. As noted above, the new Naval Marine (Corps) Academy was probably converted to a specialty academic institution. The PLAN's specialty academic institutions are organized into two levels, intermediate (中等) and senior (高等). Together, they provide five tiers of PME: secondary technical degrees (e.g., high school equivalent), senior technical (associate's) degrees, bachelor's degrees, master's degrees, and doctorate degrees. Intermediate-level academic institutions primarily recruit middle school and high school graduates and outstanding enlisted personnel to cultivate them as basic-level technical and medical officers. Senior-level academic institutions primarily recruit outstanding enlisted personnel who possess high school diplomas and high school seniors, to cultivate them as senior engineers. They also recruit technical and medical personnel. These individuals receive two-to-three-year senior technical degrees or four-to-six-year bachelor's degrees. In addition, master's students are recruited from

the military and civilian personnel who already have bachelor's degrees. Their degree program lasts for two to three years. Doctoral students are selected from personnel who already have master's degrees, and their degree program lasts three years.

The Naval Engineering University is currently the PLAN's only comprehensive academic institution. No good definition of what it means to be a comprehensive university was found, but it apparently blends academic education and professional education.[51] The university offers cadet and postgraduate education and training. Students pursuing bachelor's degrees are selected from the pool of graduating high school students and outstanding enlisted personnel. The cadets all receive the same two years of foundational training, after which they enter one of the specialty academic institutions within the comprehensive academy for technical education and training. Candidates for graduate education at a comprehensive academy are recruited from military personnel who already have bachelor's or master's degrees, as well as from civilians with specialized knowledge. The comprehensive academy offers master's and doctorate degrees to senior special technical personnel, scientific researchers, and academic institution instructors.

Case Study: PME in the Surface Branch Officer Career Track

The *Handbook for Officers and Enlisted of the Chinese PLA Navy* provides diagrams showing the career path and required PME for commanding officers in each of the following nine branches: surface, submarine, aviation, marine corps, coastal defense, communications, political, logistics, and equipment. It shows the same information for staff officers in each of the four departments in PLAN headquarters at the division level and above. It appears that "commanding officers" in each career track are selected while they are still cadets. Upon graduation, they begin assuming leadership positions, first as deputies, then as directors/leaders of platoon-level subunits, such as operational units or maintenance organizations. As they advance they become deputies or leaders of operational units or first- or second-level administrative or functional departments—for example, a logistics department. Other officers upon graduation begin as staff officers in subunit or regiment-level headquarters. Some of them eventually fill second-level leadership billets—as, for example, directors of a propaganda branch under the political division in a regiment headquarters. But they will not become deputies or directors of political divisions or political officers at the brigade or division level. Table 4 shows the sequence for a ten-step career progression, which alternates between education and grade promotions from cadet to corps-leader grade for surface branch officers.[52] (No information was located that shows how support officers, who receive graduate degrees at the various PLAN and civilian academic institutions, move up their career ladders.)

It is clear from table 4 and from the career paths of the other branches and specialties that the PLAN places great emphasis on continuing PME for officers as they move up in

grade (not rank). However, it is unclear to what extent this system has been implemented. No biographies found for PLAN officers indicate that senior officers have actually received the PME noted in table 4. That is, the program still appears to be aspirational. It will most likely take another ten years to put the system into full practice. Officers are promoted in grade up to regiment-deputy-leader grade every three years. According to PLA regulations, those officers must receive passing grades (合格) in their intermediate-level PME course to receive promotion to the grades of regiment deputy leader, division deputy leader, and corps leader.[53] It is unclear whether officers must first complete correspondence courses and what proportion of officers has an opportunity to attend PME in residence. With very few exceptions, PLAN officers do not participate in joint PME until they are corps-level (one star / rear admiral) flag officers, at which time they attend a course at the National Defense University.

Table 4. *PLAN Surface Branch Officer Career Track*

Step 1	New officers who have graduated from a PLAN or civilian academic institution or were selected from outstanding enlisted personnel who already have college degrees receive ten months of professional education at a PLAN academic institution.
Step 2	The new officers are assigned to vessels and assume their initial billets at the platoon, company, and battalion levels.
Step 3	They attend a ten-month tactics command course at the Dalian Naval Ship Academy/College.
Step 4	They are assigned as executive officers on various vessels or as *dadui* (squadron) deputy commanders at the regiment level.
Step 5	They attend a ten-month combined-arms command course at the Naval Command College.
Step 6	They are assigned as commanding officers at the division deputy leader–grade level.
Step 7	They attend a five-month campaign command course at the Naval Command College.
Step 8	They are assigned as commanding officers at the division leader–grade level.
Step 9	They attend a ten-month joint campaign command course at NDU.
Step 10	They are assigned as commanding officers at the corps level and above.

Continuing Education

The PLAN invests considerably in continuing education for officers assigned to operational units. For example, some units have formalized agreements with local civilian universities to provide night classes focused on technical specialties. Certain civilian schools, such as the Jiangsu University of Science and Technology, have offered training classes for PLAN officers for decades. In addition, the PLAN has spent millions of RMB on reading rooms, online systems, computers, and libraries. Some units designate certain nights as periods for individual or group study.[54]

Several PLAN units have also created officer training centers, which provide simulation training and offer instruction on naval strategy.[55] In addition, the PLAN has a Navy Cadre Training Center (海军干部训练中心), associated with the Central Party School

in the Western Hills near Beijing, for the study of advanced naval and intermediate-level cadre theory.[56]

Unlike the PLA Air Force, which created the distance-learning, online Air Force Military Professional University (空军军事职业大学) in 2008 and subordinate branch campuses throughout the PLA Air Force, the PLAN has apparently not created a centralized system to provide online PME.[57] Rather, it has focused on the development of individual training courses and the formalization of its technical skills–evaluation system, as will be discussed in greater detail below in reference to the enlisted force.

Unit-Level Individual Training

Almost no information is publicly available about how and when officers receive unit-level individual training. The basic presumption, however, is that although these officers possess the necessary senior technical or bachelor's degrees and have learned the pertinent theory, their only practical experience is that received at operational units shortly before they graduate. For the most part thereafter, they receive on-the-job training from responsible personnel in the units during their probationary periods. At the end of that year, they assume their commanding officer, staff officer, or technical support officer billets. Under the current reforms, however, the PLAN is trying to provide more professional education for new officers before they are assigned to their permanent billets. They will continue, however, to receive on-the-job training upon their arrival until they are fully qualified to assume their posts. On-the-job training is also a key element of billet training for national defense students and directly recruited officers, who receive only limited specialty training before they are assigned to permanent billets.

Once they assume their billets, officers occasionally participate in "group training" (集训) for a particular subject.[58] For example, in April 2013, the South Sea Fleet held group training sessions to instruct officers and enlisted personnel in political work and new regulations.[59] Units also often hold specialty competitions, internally and against other units.[60] Competitions usually include events such as firing weapons under various conditions or taking weapons apart and putting them back together, blindfolded, within a time limit.

According to *Science of Naval Training,* once PLAN officers and enlisted personnel assume their operational billets, they receive "common subject" and "specialty" training.[61] Common subject training refers to the body of material that all PLAN officers and enlisted personnel must know, such as general naval knowledge, common regulations, service and branch knowledge, and maritime geography.

Specialty training is organized by branch and refers to training for PLAN units in the operation, use, and maintenance of weapons and other equipment. Almost all specialty training includes an introduction to what the PLAN calls "theory" (理论), which relates

to the science behind how certain categories of equipment work—for example, electronics or aircraft.

Two-Year Enlisted Recruitment, Basic Training, and Specialty Training

Over the past decade, the PLA has gradually moved from a primarily conscription (征兵) force to one that has both conscripts and volunteers (参加 or 志愿).[62] The proportion of personnel voluntarily joining the PLA is increasing, but the military still has a conscription system, to fill the holes and to maintain links with the people. All new two-year soldiers are called "new soldiers" (新兵) while in basic training but are then called "conscripts" (义务兵), regardless of whether they enlisted voluntarily or were drafted.[63] (In the PLAN, as in the U.S. Navy, only enlisted personnel are referred to as "sailors" [水兵].)

Two-Year Conscript/Enlistee Recruitment

Since 2011, the PLA's recruitment methods have undergone a number of reforms.[64] These include most prominently the modification of the former system of population-based quotas, by which as much as two-thirds of the armed forces' recruits came from the more populous rural areas, where well-educated and technically skilled individuals are comparatively scarce. Service-specific quotas continue to be assigned to individual localities, but they are no longer directly tied to population, which allows for a greater proportion of recruits from urban areas.[65] Historically, these quotas apparently served to connect People's Armed Forces Departments (PAFDs, 人民武装部, discussed below) with operational units or commands, making specific localities responsible for providing fixed numbers of men to particular units each year. The extent to which this practice continued after 2011 is unclear.[66]

Additionally, the PLA sought to make enlistment more attractive to students and graduates of vocational colleges and universities by increasing the recruitment-age limit to twenty-three for graduates of vocational colleges and twenty-four for university graduates (allowing them either to graduate or at least to progress farther in their studies prior to enlisting). The National People's Congress has also amended its active-duty military personnel laws, enabling students to resume their studies easily after two years' service as conscripts, with no loss of credit or time served as students.[67]

The actual recruitment process begins with a determination by each ship or unit of its need for new recruits in the coming year. The information is then passed up the chain of command until it is eventually compiled by the GSD's Military Affairs Department (军务部), which exercises overall responsibility for the PLA's table of organization and equipment and for managing enlisted personnel. The GSD then assigns each locality in China a quota (apparently, as noted, no longer based strictly on population size).

Historically, this process culminated in the entry of all new conscripts, of all services and all units, into basic training on or about 10 December. Beginning in 2013, however, the registration, evaluation, and recruitment process was moved forward several months. New conscripts now enter basic training at their respective units and training bases beginning on 1 September, with individual units staggered over the course of the month.[68] The reasons for this change are not clear. However, the change was likely motivated by at least two desires. First, the change brings forward the larger PLA-wide schedule of training to allow complex and large-scale exercises to be held earlier in the year instead of in the summer. Second, it allows for greater differences in the length of basic training for various units, specialties, and billets, especially as the latter two proliferate in number and deepen in complexity.

Where previously the PAFDs attached to each local government were charged with contacting for registration each eligible male within their respective areas of responsibility turning eighteen during the current calendar year, those interested in military service now voluntarily register online. However, there are no apparent penalties for those who fail to register.[69] The registration period, previously confined to October, now includes the summer and early spring. This facilitates recruitment of college and vocational students, either at graduation or on completion of an academic year. The local PAFDs prune the mass of registrants during August (previously this was done in October and November), removing individuals with criminal records or who are otherwise barred from service and subjecting the remaining candidates to physical, political, and psychological examinations and to personal interviews. Upon the basis of these results, by the month of September conscripts and volunteers are selected for service and allocated to specific units. Unit allocation is based on a combination of personal preference and educational level.[70]

Although there are no explicit educational requirements for male conscripts and enlistees, recruits from rural areas are generally required to have at least a middle school education, and in the cities the standards are higher. The navy, the air force, and the independent Second Artillery, as the more technically oriented services, dispatch special conscription teams to support the local PAFDs and to represent their interests during the evaluation, selection, and distribution of candidates for conscription. In effect, these services handpick their conscripts from among available candidates in given areas.

Many of the most recent reforms in the PLA's conscription system raise the question whether the process should still be deemed "conscription." Registration for service is essentially voluntary in most or all cases, even though every man is legally liable for immediate military service. That all recruits continue to be referred to as conscripts demonstrates the oxymoronic nature of the system and suggests a reluctance to abandon it, for political or practical reasons. Further, though local quotas are no longer tied

directly to population, they nonetheless still exist. Perhaps it is also significant that the Chinese terms used to describe the system have never changed—only their officially prescribed English translations were altered. Nonetheless, it is incontrovertible that the PLA recruits very actively and that entrance into military service is often a competitive process, one not uncommonly helped along by bribes. Ultimately, there is insufficient publicly available information on the actual workings of the conscription system at the grassroots level to support a definitive judgment whether an active element of conscription remains in certain localities or under specific conditions.

New-Soldier Training

By 1 September (previously 10 December), new soldiers begin reporting to their basic training (入伍训练) locations. In the PLAN, many new enlisted personnel are sent directly to the shore-based operational units and support bases to which they will be permanently assigned. There they are segregated into ad hoc "training units" (教导队), attached to divisional-, brigade-, and regimental-level units. Others are sent to "specialized training bases" (训练基地) for submarine and logistics personnel, where they receive their basic training and technical training before being sent on to their permanent units.[71] New enlisted personnel assigned to aviation units are sent either to the Naval Aviation Training Base (海军航空兵训练基地) near Qingdao or to one of the training units associated with the naval aviation component of each fleet, the latter bearing primary responsibility for training new soldiers.[72] Finally, each of the three fleets has a training base (舰队训练基地) that primarily conducts basic training and some technical training for new soldiers. After completion of their training, the new soldiers are assigned to vessels (舰艇部队).[73] It appears that these fleet training bases account for nine to ten thousand new enlisted personnel per year, since the ESF and SSF bases each trained approximately three thousand new soldiers during the 2012–13 training cycle. In addition, basic training at these bases increasingly involves actual shipboard experience with frontline units.[74] The instructors are primarily junior officers and NCOs who are temporarily assigned from operational units and return to their regular duties when the training is complete. During the rest of the year, the bases used for basic training provide NCO and officer training courses, employing a combination of permanent and ad hoc instructors.[75]

Depending on the branch (e.g., surface, subsurface, aviation, coastal defense, or marines), basic training lasts from two to three months, formerly often ending around the beginning of the Spring Festival in late January or early February, though the length of basic training under the new schedule remains unclear. Its program encompasses political/patriotic indoctrination and basic military knowledge and discipline.[76] Once their basic training is complete, sailors receive the rank of private second class (列兵) and are formally assigned to specific billets within their operational units. While it is likely that

this decision is largely made for the majority of new enlisted personnel without regard for their preferences, in some cases personal input is allowed, primarily from individuals who have distinguished themselves in some way or who already possess technical qualifications (sometimes referred to as *techangbing*—特长兵).[77]

According to official sources, the majority of new personnel are then sent as "students" (学员) to appropriate "training organizations" (训练机构) or "schools" (院校) for three to six months of "specialty skills training" (专业技能训练) to prepare them for service in such areas as submarines, aircraft maintenance, communications, logistics, health care, and vehicle maintenance.[78] It is unclear, however, how much this process is actually followed, especially as six to nine months of combined basic and specialty training would leave comparatively little service time for the new personnel in twenty-four-month enlistments. It is more likely that most new conscripts initially receive only on-the-job training at their assigned units and that more formalized specialty training is reserved for second-year conscripts, especially those being selected for NCO service (discussed below). Indeed, the shortening of service periods and ever-increasing emphasis on NCO training and education indicate that two-year enlisted service in the PLAN may be increasingly viewed as an apprenticeship of sorts. Such apprenticeships could serve to determine the suitability and capacity of individuals for further NCO service, during which time greater resources and effort would be expended on their professional and technical development.

NCO Recruitment, Training, and Education

The PLA recognizes that a technically proficient NCO corps capable of exercising effective leadership and oversight is critical to sustaining the combat capability of any modern military force.[79] Thus, the PLA is developing an increasingly complex and intricate system for the recruitment, training, education, and professional development of its NCOs.

NCO Roles and Positions

The PLA generally requires that its NCOs be competent in multiple technical specialties in addition to their one or two primary specialties, thereby creating redundancy in personnel capability critical to unit effectiveness in wartime. Table 5 shows the PLA's thirty-year enlisted-force grade structure, following reforms in 2009. (Note that the PLAN uses army terminology for its enlisted personnel.)

The higher an NCO's grade, the more specialties he must master or in which he must at least achieve competence.[80] Further, since 2005 promotion to higher grades has been explicitly tied to the successful completion of educational or training programs, the general requirements (or at least overall goals) being that a junior NCO should attain a

Table 5. *PLA Enlisted Grades and Ranks as of 2009*

Grade	Service Period	Rank	Time in Rank
Conscript (义务兵)	1st year	private second class (列兵)	~9 months
	2nd year	private first class (上等兵)	1 year
Junior-grade NCO (初级士官) (6 years)	3rd–8th years	corporal (下士)	3 years
		sergeant (中士)	3 years
Intermediate-grade NCO (中级士官) (8 years)	9th–16th years	sergeant first class (上士)	4 years
		master sergeant grade four (四级军士长)	4 years
Senior-grade NCO (高级士官) (14 years)	17th–30th years	master sergeant grade three (三级军士长)	4 years
		master sergeant grade two (二级军士长)	4 years
		master sergeant grade one (一级军士长)	6 years

secondary technical degree, an intermediate NCO a senior technical degree, and a senior NCO an undergraduate degree, or equivalent.[81] This pairing basically corresponds with the prescribed roles for the different NCO grades, whereby junior NCOs assume an "expertise role" (能手型), intermediate NCOs a "teaching and training role" (教练型), and senior NCOs a "specialist role" (专家型).[82] Essentially, junior NCOs are to develop expertise in their particular billets, intermediate NCOs to teach and coach their subordinates, and senior NCOs to be masters of whole specialties, providing critical oversight and management. This, of course, is an ideal end state, far from reflecting present reality. But it is nonetheless the objective toward which the PLA is striving and which guides the structure and reform of its NCO recruitment, training, and education systems.

NCO Recruitment and Selection

At present, the large majority of noncommissioned officers come from the two-year-conscript pool. Second-year conscripts apply to become NCOs, achieving that status either by selection by their units or through admission to an NCO course run by one of the PLAN's academic institutions.

Recruitment from Second-Year Conscripts. "Unit selection" (部队选取) is the primary method of selecting junior NCOs (初级士官), and its primary targets are suitable conscripts finishing their service periods. Selection takes place simultaneously with the demobilization of conscripts who will be leaving the service. The basic requirements for unit selection are two years of active service and completion of associated training.[83] This preparation includes "command management NCO training" (指挥管理士官训练), which is a three-month program for second-year conscripts administered within the unit.[84] Preference is given to individuals with experience as squad leaders or deputy squad leaders (班长, 副班长), those already possessing "vocational qualifications certificates" (职业资格证书), and those already possessing senior technical educations. Following application, conscripts are subjected to three levels of evaluation: "360-degree

evaluations" (群众评议) by their superiors, peers, and subordinates; an evaluation by the party branch responsible for them; and "relevant testing" (机关考核). Final approval of applications takes place at the regimental level.[85]

"Academic institution training" (院校培训) is the second means of obtaining personnel for NCO service. It is conducted at the PLAN Bengbu NCO School (海军蚌埠士官学院) or one of the PLAN's officer academic institutions that offer NCO training programs.[86] In June of each year, second-year conscripts and junior NCOs seeking promotion take navy-wide NCO student-recruitment examinations (士官学员招生考试). The minimum service requirements for conscripts is one year and for NCOs at least one year at the junior (初级) level.[87] Aside from satisfying various standard political and moral requirements, those taking examinations for courses awarding secondary technical degrees must already possess middle school–level educations (初中), while those seeking to enter senior technical degree programs must already possess high school–level educations (高中) or equivalents.

Additionally, as part of the broader effort to align classroom instruction more closely with actual experience and unit requirements, NCO students seeking graduation from their programs must pass regular subject tests, intensive training programs, and comprehensive exercises in their specialties (专业综合演练), all designed to ensure that they will be able to satisfy their units' requirements.[88] If a student is unable to pass these final tests and assessments, his graduation (or the granting of a completion certificate) is deferred and he is not promoted.[89] All students successfully graduating from NCO student programs return to their original units, except a small number directly overseen by the Navy NCO Student Recruitment Office.[90]

Direct Recruitment from the Civilian Population. A minority of NCOs are directly recruited from the civilian population by individual units to fill specific billets to which they are suited by prior tertiary education at civilian schools or work experience. The primary targets of direct recruitment are university students in their year of graduation, graduates of vocational technical schools, and others possessing advanced technical "vocational qualifications certificates" (高级职业资格证书). Such persons must satisfy the same physical, psychological, and political requirements as conscripts and can be no older than twenty-four.[91] Their initial ranks and grades upon entry depend on the extent of their previous education and experience but can theoretically run the gamut from corporal (下士) to master sergeant grade one (一级军士长).[92]

Though this is a potentially useful means of quickly obtaining technically qualified NCOs, the total numbers involved appear to be comparatively small; only 260 university graduates entered service as NCOs during 2012.[93] Additionally, directly recruited NCOs may well be diverted from their original technical billets to heavier management

and administrative responsibilities for which a university education would make them better suited than NCOs risen from among conscripts.[94] It is reasonable to question the sheer practicability, in social and command-authority terms, of directly promoting men in their early twenties into intermediate or senior NCO billets while at the same time attempting to create a sizable NCO corps whose members would have an initial educational (and attendant social) status equivalent to that of many commissioned officers.

Recently, however (and perhaps in response to such concerns), the PLAN has introduced a new variation on direct NCO recruitment. Beginning in the summer of 2012 the PLAN entered into bilateral agreements with a number of vocational schools to run pilot programs for the "directed education of directly recruited NCOs" (定向培养直招士官). Under this system, graduating high school seniors who are less than twenty years of age as of 31 August of each year may apply to one of the schools in the program through a common online application system. The top 150 applicants (determined by college entrance exam scores) are interviewed for fifty slots in a single specialty or area of study (see table 6).[95] The course of study runs for three years and students receive a senior technical degree at the end. The first two and a half years of education are the responsibility of the schools, with each entering into a formal agreement with the PLAN concerning curriculum and standards. The final half-year is spent in service, undergoing basic training alongside conscripts and then serving in an operational unit for final evaluation. Only at the end of this period of service do graduation and promotion to NCO grade take place.[96]

Primary oversight of the program seems to rest with the PLAN Headquarters Department's Military Affairs Department (海军军务部), with subsidiary responsibility for curriculum guidance and support belonging to the fleet training bases.[97] This is in contrast to the National Defense Student Program for officers, which is overseen by the General Political Department (all officers being considered cadres first and foremost). The size of this pilot program is uncertain. Chinese sources give conflicting information. For instance, a July 2012 description of the program in *Renmin Haijun* indicates that it encompasses 390 students studying seven specialties at eight schools.[98] However, a news article describing the program at a school in Shandong indicates that it involves 830 students nationally, studying at an unspecified number of schools in seven provinces (including fifty from Shandong, selected from approximately a thousand applicants).[99] The latter source also indicates that despite its present overall size, the program clearly represents a potentially rich source of technically proficient NCOs and one that could be readily expanded in size. It is unclear the degree to which this new means of direct recruitment is meant to serve as either a supplement to or replacement for the traditional approach.

Table 6. *Vocational Colleges Participating in Pilot Programs for the Directed Education of PLAN Direct-Recruitment NCOs*

Chinese Name	English Name	Program Focus	City, Province
湖北交通职业技术学院[a]	Hubei Communications Technology College	turbine engineering (轮机工程技术)	Wuhan, Hubei
江苏海事职业技术学院[b]	Jiangsu Maritime Institute	vessel engineering (船舶工程技术)	Nanjing, Jiangsu
南昌航空大学[c]	Nanchang Hangkong University	aircraft manufacturing (飞机制造技术专业)	Nanchang, Jiangxi
山东交通职业学院[d]	Shandong Transport Vocational College	navigation technology (航海技术专业)	Weifang, Shandong
武汉航海职业技术学院[e]	Wuhan Marine College	turbine engineering (轮机工程技术), vessel engineering (船舶工程技术)	Wuhan, Hubei

Notes:
This table includes only those schools positively identified as participating; several others remain unidentified.

a. School website: www.hbctc.edu.cn/.
b. School website: www1.jmi.edu.cn/.
c. School website: www.nchu.edu.cn/.
d. School website: www.sdjtzyxy.com/.
e. School website: whhhxy.sinotrans-csc.com/.

Continuing NCO Training and Education

Until very recently, the large majority of NCOs in the PLA achieved certification and promotion through on-the-job billet training and ad hoc local testing. The PLA recognizes that such unsystematic training is problematic for personnel with complex specialties, and it now views the development of a fully systematized NCO training and education structure as imperative.[100] NCO training in the PLA as a whole now comprises two primary categories. The first category involves vocational standards education (including secondary technical, senior technical, and bachelor's degrees) and pre-billet training (岗前任职训练), both provided by officer academic institutions and NCO schools. The second involves all types of short-term (短期) specialty training provided by NCO training *dadui* (大队), or unit training organizations.[101] For its part, the PLAN operates NCO training programs at the PLAN Bengbu NCO School, the PLAN's seven officer academic institutions, the three fleet training bases, and the various submarine, aviation, and logistics training bases discussed above. Table 7 lists the schools and bases involved in NCO and conscript training.

These organizations are engaged in a variety of training and education activities focused on shaping various facets of the NCO corps. The training structure is likely more complex and convoluted than the official description would have it, with multiple types of education and training taking place at each institution and each type of training and education spread across various types of institutions.

Table 7. *Permanent PLAN Training Units for Conscripts and NCOs*

Chinese Name	English Name	City, Province
北海舰队训练基地	North Sea Fleet Training Base	Liugong Island, Shandong
东海舰队训练基地	East Sea Fleet Training Base	Shanghai
南海舰队训练舰队	South Sea Fleet Training Base	Dongguan, Guangdong
海军航空兵训练基地	Naval Aviation Training Base	Qingdao, Shandong
海军航空工程学院某训练基地	Naval Aviation Engineering Academy Training Base	near Qingdao, Shandong
海军潜艇兵训练基地	Naval Submarine Training Base	near Qingdao, Shandong
海军后勤训练基地	Naval Logistics Training Base	Handan, Hebei

PLAN regulations require that conscripts promoted to junior NCO and junior NCOs taking up new duties (任职) undergo five to six months of "specialty technical NCO training" (专业技术士官训练). The source of training depends on the complexity of the specialty; personnel with more complex specialties attend schools or training bases, while those with less complex specialties remain in their units, training under their superiors and visiting instructors from the academic institutions and training organizations.[102] Personnel in designated "complex specialty technology billets" (复杂专业技术岗位) receive formal vocational technical education. The primary targets of such training are second-year conscripts or third-year junior NCOs already in possession of secondary technical or higher degrees, though the service-length restrictions can be relaxed according to the needs of units. Intermediate-level training entails a year of study at a naval academic institution and a year of practical work or apprenticeship (实习) back in the unit; advanced training entails two years in a school and one in the unit. Those successfully fulfilling requirements receive a "vocational technology education graduate certificate" (职业技术教育毕业证书).[103]

In addition, PLAN academic institutions have joined with civilian academic institutions in collaborative relationships focused on the joint educational development of NCOs (联合士官培养). The Bengbu NCO School, for instance, in 2012 entered into a partnership of an unspecified extent with Qingdao Agricultural University (青岛农业大学).[104] The Naval Aviation Engineering Academy (海军航空工程学院) and Nanchang Hangkong University (南昌航空大学) established a partnership in 2013 to educate several dozen directly recruited NCOs in aircraft manufacturing technologies and processes.[105]

Those seeking promotion to either intermediate or senior NCO must undergo "promotion training" (升级培训) according to the requirements of their specific billets, allowing them to obtain and demonstrate the skills necessary to serve at the next rank or grade within their billets. The primary targets of promotion training are men with at least two to three years of service as NCOs. Training lasts one to three months. Again, training for more technically complex specialties takes place at schools or training

facilities attached to military region–level units, while training for less technical specialties takes place at the units. For technically simpler specialties or those held by very few people, promotion training can be combined with annual specialty training organized by units.[106]

In addition, the increasing complexity and rapid development of the PLA's weapons and equipment have caused a renewed focus on "refresher training" (复训) and "new billet training" (上岗训练), which in the PLAN is conducted in short (one or two months) programs at both academic institutions and training bases.[107] Ultimately, the proliferation of various types of training affords (or even dictates) more frequent opportunities for formal training and education over the course of a sailor's career—a critical factor in building up and maintaining a technically proficient force.

The PLAN also seeks to enhance the quality and effectiveness of NCO training and education by means of a number of other, smaller-scale efforts. To improve the verisimilitude of training received in the schools, the PLAN is requiring students to train with frontline units at "student practice bases" (学员实习基地). This allows units to take joint responsibility for training and creates a mechanism to guarantee that students receive practical experience relevant to their actual duties.[108] In addition, schools have begun to track former students at their units to ensure that units are properly employing them in the billets for which the students were trained.[109] Of course, distance education and self-study also constitute useful means of education for NCOs; moreover, they do not excessively disrupt unit manning. In each fleet several hundred NCOs each year engage in long-term self-study programs that often provide senior technical or bachelor's degrees.[110] The PLAN is also concerned with improving the NCO corps's leadership capacity, especially in operational contexts, and seeks to provide NCOs with opportunities to exercise such leadership during their training and education.[111] All in all, these represent potentially critical supplements to the main efforts in expanding and systematizing NCO training and education, as described above.

NCO Skills Evaluation

In the interest of systematizing training and education, the PLA is developing a more structured and formalized system for evaluating the skills of individual personnel, to identify candidates for both promotion and further training and education. Until recently, it did so primarily through "military skills competitions" (比武竞赛), which, in the PLAN at least, were not organized on a regular basis and produced only service-record entries that would reflect credit on personnel in consideration for promotion. Moreover, PLAN skills competitions are increasingly associated with anniversaries and other celebrations, as are such nontechnical skills as camping, indicating that the importance of these competitions in assessing technical skills and suitability for promotion

has declined. It appears that the PLAN is now conducting more of its technical-skills evaluation within a system of formal centers and stations (技能鉴定中心 and 技能鉴定站), dedicated to skills evaluation in specific specialties and awarding formal "vocational skills evaluation certificates" (职业技能鉴定证书). This system has apparently been in development since approximately 2009, though implementation for many specialties began only in 2011–12; the intervening years were devoted to developing standards, publishing texts, and building organizations.[112]

A January 2013 article in *Renmin Haijun* gives a basic description of the evaluation infrastructure for the "ordnance equipment safeguard specialty" (军械装备保障专业), which includes missiles, torpedoes, and other ordnance types.[113] Top-level oversight is provided by the Navy Equipment Department, which established an "evaluation guidance office" (鉴定指导办公室) dedicated to the specialty within the Bengbu NCO School's Weapons Department (武器系). This office is charged with developing qualified instructors, publishing necessary instructional texts and standards, and establishing evaluation centers with the equipment departments of the three fleets, the NCO School's Weapons Department, the Naval Engineering University's Weapons Department, and Naval Aviation Engineering Academy's conversion training *dadui*.[114] The centers depend, in turn, on approximately eighteen evaluation stations established by the PLAN's eight "equipment technology quality monitoring stations" (装备技术质量监测站), on the two "submarine base missile technology central stations" (潜艇基地导弹技术总站), and on the three academic institutions mentioned above. Though the precise roles of each component in this system are not explicitly stated, it seems reasonable to infer the existence of a three-tiered structure (one that might be extended, in its general structure, to other specialties). Evaluation stations are at the bottom, conducting initial, basic, and junior NCO evaluations in support of local units and feeding evaluations for more advanced qualifications and senior NCOs to evaluation centers, and then on to the specialty's central evaluation office, likely located at an academic institution. This model gains credence from the fact that the source article describes a senior NCO successfully passing an evaluation at the Bengbu central office and thereby ensuring his smooth promotion to master sergeant grade two.[115]

The Central Military Commission and the four general departments view this formalized skills-evaluation system for enlisted personnel as a critical element of the overall drive to improve the NCO corps.[116] It is also bound up with an effort to integrate more closely military with civilian education opportunities, by means of the skills certificates that the evaluation system awards, which are considered legally equivalent to those issued by the civil government for satisfying "national advanced vocational evaluation standards" (国家高级职业鉴定标准) in various fields and trades.[117] Thus, in addition to providing more discrete criteria for qualifications based on merit, the examination

system affords individual enlisted men a set of formal qualifications that will aid them in finding civilian employment upon demobilization, thereby making the long-term prospects of NCO service more attractive and (ideally) attracting higher-quality personnel.[118] The PLAN's skills-evaluation and certification system may also represent a unique service response to a PLA-wide organizational challenge, distinct from the PLA Air Force's apparent response represented by the Air Force Military Professional University, which had its origins in the same 2008–2009 period.

Conclusions

The recruitment, training, and education of the PLA Navy's officer corps and enlisted force are components of and basically mirror the overall PLA personnel system. However, there are some differences.

Concerning the officer corps, the PLAN has historically recruited officers among high school graduates and outstanding enlisted personnel, who then attend a three- or four-year PLAN academic institution. Although the PLA's overall goal, and apparently that of the PLAN as well, was to take in by 2010 40 percent of all new officers from the National Defense Student Program, along with a small percentage of directly recruited civilian college graduates, it appears the PLA/PLAN fell short. The primary reason for expansion of the National Defense Student Program and direct recruitment of graduates was that the PLA and PLAN were not providing adequate education for new officers. At the same time, the PLAN has reformed some of its academic institutions to focus more on undergraduate education, which is followed by postgraduation specialty training, rather than mixing them together during the undergraduate years. Although the initiative appears to be largely aspirational at this point, the PLAN has laid out a fairly detailed PME system for officers as they move up the grade-promotion ladder. It will take several more years, however, for the PLAN to implement the reforms fully and have all its officers at each level participate. Further adjustments are expected over the next decade as the PLAN experiences positive and negative results of the PME reforms, including the lack of joint professional military education below the corps level at the National Defense University.

Whereas the army and air force have reduced their post–basic training specialty training, the PLAN still continues to emphasize it for a significant portion of two-year conscripts, primarily those in their second years of service and likely to continue as NCOs. On the basis of the information available, it appears that the PLAN will most likely continue to emphasize skills training for its entire enlisted force, with greater emphasis on its NCOs, over the next several years. Perhaps the most critical aspects are the twin efforts to formalize skills training and education and to increase the frequency and regularity with which that training occurs over the course of an enlisted individual's career. Both initiatives are critical to developing an enlisted force capable of manning and fighting

increasingly sophisticated ships, aircraft, and systems. Finally, the PLAN, along with the rest of the PLA, will continue to seek new and effective means of harnessing China's extensive and well-developed civilian education system in an effort to improve rapidly the quality, education, and technical training of officers and enlisted personnel. Though the quality of education in both China's military and civilian schools can and should be questioned in individual instances, it must nonetheless be recognized that the civilian education system has been critical to the country's rapid economic and technological development and may prove equally critical to the development of the armed forces' organizational and personnel strength.

Of course, it must be recognized also that while the recruitment, training, and education systems described here are, in principle, well suited to the task of developing the sort of highly proficient officer corps and enlisted force the PLAN desires, their effective implementation at the middle and lower bureaucratic levels remains the chief stumbling block to success. In particular, it remains to be seen whether corruption and favoritism in the NCO selection and promotion process can be effectively controlled at the regimental and divisional levels, thereby allowing the extensive enlisted training, education, and certification system described herein to have its full intended effect. In addition, the PLAN, along with the rest of the PLA, has yet to make clear the place of directly recruited NCOs (who often possess associate's or bachelor's degrees upon entry). What is the role of a directly recruited NCO in a professional education military system geared to conscripts and junior NCOs with middle or high school educations and bringing the conscripts up to the bachelor's degree level over the course of twenty or so years? The PLAN has yet to design educational programs or tracks specifically for those already possessing higher qualifications, a shortfall that could prove a serious detriment to retaining such personnel in the long run.

Ultimately, though the recruitment, training, and education structures of the People's Liberation Army have been steadily reformed over the past decade, the efficacy of these centrally mandated reforms, as in so many of China's civil and military reform efforts, will be decided by numerous individual bureaucratic struggles at the grassroots level. The schools, the bases, the evaluation centers, and the units all have roles to play. This is especially true for the PLA Navy. Many of the basic structural and functional reforms have been made. It now remains to make them stick and to bring reality into line with the ideal that has been laid out.

Notes

1. 刘华清 [Liu Huaqing], 刘华清回忆录 [Memoirs of Liu Huaqing] (Beijing: PLA Press, 2004), p. 440. Liu also writes, "A strong modern navy not only needs modern weapons and equipment; it also needs a cadre of personnel well versed in naval theory, strategy and tactics; and capable of skillfully commanding and deploying modern weapons and equipment. An organic fusion of

capable people and modern equipment is the only means to create a powerful fighting force."

2. 凌竹 [Ling Zhu], "女兵上舰" [Women at Sea], 中国舰队 [China Armed Forces] 5, no. 17 (2012), pp. 74–77; 查春明 [Zha Chunming], "女舰员" [Women Sailors on the International Stage], *China Armed Forces* 1, no. 9 (2011), pp. 88–91; 冯凯旅 [Feng Kailu], "我是浪花一朵" [I Am a Spray], *PLA Pictorial,* issue A (June 2013), pp. 14–25, special report on new female enlisted sailors on the destroyer *Lanzhou*.

3. "中国海军有意培养女舰长 女学员登上战斗舰艇实习" [China's Navy Is Interested in Female Vessel Commanding Officers: Female Students Are Obtaining Experience aboard Combatant Ships], 中国青年报 [China Youth Daily], 31 October 2010, available at news.ifeng.com/mil/2/detail_2010_10/31/2954950_0.shtml.

4. The English version of the 2013 PRC defense white paper, "The Diversified Employment of China's Armed Forces," available at news.xinhuanet.com/english/china/2013-04/16/c_132312681.htm; Li Qinwei and Cao Jinping, "'Zheng He' Training Ship's Round-the-World Navigation Boasts Four Features," *PLA Daily* (in English), 19 April 2012, english.peopledaily.com.cn/90786/7792075.html.

5. 董会瑜 [Dong Huiyu] and 牟显明 [Mou Xianming], eds., 现代军校教育辞典 [Dictionary of Contemporary Military Academic Institution Education] (Beijing: National Defense Univ. Press, July 2009), p. 108. The book does not have an official English title; this is the best translation. See also "不达标不达辨不合格不毕业海军指挥学院严把研究生培养'出口关'" [Naval Command Academy Graduate Students Who Do Not Meet the Requirements Are "Shown the Exit"], *Jiefangjun Bao,* 23 May 2011, p. 5. The PLAN also uses the term *shengzhang ganbu* (生长干部) for "cadet."

6. 李玉平 [Li Yuping], ed., 中国国防生 [China National Defense Students] (Beijing: PLA Press, January 2008).

7. 菜吕良 [Cai Luliang] and 李纬 [Li Wei], "海军某训练基地建立全程考核淘汰机制" [A Particular Navy Training Base Establishes a Full Assessment and Elimination Mechanism], *Jiefangjun Bao,* 17 June 2013, p. 5.

8. The definition for *peixun* was found in 中国人民解放军军语 [PLA Military Terminology] (Beijing: Academy of Military Science Press, September 2011), p. 323. Note that the characters for "education" (教育) are not included in the Chinese term *peixun*. Although the PLAN normally uses *peixun,* it also uses the term *jixu jiaoyou* (继续教育), which is best translated as "continuing education" and includes *peixun*. 杜景臣 [Du Jingchen], ed., 中国海军军人手册 [Handbook for Officers and Enlisted of the Chinese PLA Navy] (Beijing: Haichao, 2012) [hereafter *Naval Handbook*], p. 143. The PLA has published two versions of 中国人民解放军军语 *(PLA Military Terminology)*. The September 1997 version did not have any English translations; however, in December 2011 the PLA published an updated version with English translations for each term. Neither version has an official English title or an editor; English-language publications often refer to them as the *PLA Military Terminology,* or simply as the *Junyu* (军语). Both publications are "For Internal Distribution Only" (内部发行). Hereafter cited as *Junyu,* with year.

9. Wu Guanghua, ed., 汉英辞典 [Chinese–English Dictionary] (Shanghai: Shanghai Jiao Tong Univ. Press, September 1998), p. 1218; Dong Huiyu and Mou Xianming, eds., *Dictionary of Contemporary Military Academic Institution Education,* pp. 192–93.

10. Dong Huiyu and Mou Xianming, eds., *Dictionary of Contemporary Military Academic Institution Education,* p. 193.

11. *Junyu,* 2011, p. 299.

12. Dong Huiyu and Mou Xianming, eds., *Dictionary of Contemporary Military Academic Institution Education,* p. 563; *Naval Handbook,* pp. 134–35. For *peixun,* see *Junyu,* 2011, p. 323.

13. "培训" [Cultivation and Training] and "军队院校培训体制" [Training System in Military Colleges and Schools], in *China Military Encyclopedia,* 2nd ed. (Beijing: Encyclopedia of China, June 2008), 军事训练 [Military Training] series, vol. 32, pp. 562–63; "军队院校学历教育" [Academic Credential Education] and "军队院校任职教育" [Professional Education in Military Colleges and Schools], in ibid., pp. 538–40; 屠恒章 [Tu Hengzhang], ed., 军事认知教育论 [Military Professional Education Training Theory] (Beijing: Academy of Military Science Press, March 2007). Note that *renzhi* (任职) can be translated as "professional" or "vocational."

14. Information on these career tracks and terminology was accessed at "中国人民解放军军官军衔条例 (修正)" [China People's Liberation Army Officer Rank Regulations (Revision)], *Baidu Online Encyclopedia,* 20 December 2002, baike.baidu.com/link?url=hNqfYIQw-yLt9DJHw5Cqxcs-ZvQz1kl3q9R9Lu0XMYo6GH6qcmdKsUo8-a7Ywgej. See also "干部等级制度" [System of Cadre Grades], in *China Military Encyclopedia,* 2nd ed. (Beijing: Encyclopedia of China, December 2006), 军队干部工作 [Military Cadre Work] series, vol. 39, pp. 48–50. This encyclopedia does not have an official English

name but is referred to in English publications as the *China Military Encyclopedia* and is the successor to a 1997 version that had eleven volumes. From 2006 to 2008, the PLA published a revised set of encyclopedias consisting of about a hundred volumes. Of these, the three in the PLA's Military History series (中国人民解放军军史) have profiles on each of the PLAN's academic institutions at that time. This series was published in December 2007.

15. Kenneth Allen, Brian Chao, and Ryan Kinsella, "China's Military Political Commissar System in Comparative Perspective," and Kenneth Allen et al., "Assessing PLA Navy and Air Force Political Commissar Career Paths," Jamestown Foundation *China Brief* 13, no. 5 (4 March 2013). Whereas political staff officers attend a military political academic institution, political "commanding officers" are selected primarily from officers in the military (command) track at the company (lieutenant) level; however, political officers can also be selected from the logistics and equipment career tracks and remain as political officers in those systems for the rest of their careers.

16. Reference to an individual as a "military officer" indicates that he or she is specifically in the military (operational) career track.

17. *Junyu,* 2011, p. 340.

18. Ibid.

19. Dennis J. Blasko, *The Chinese Army Today: Tradition and Transformation for the 21st Century,* 2nd rev. ed. (New York: Routledge, 2012), p. 64. Information about the sixteen sets and fifty-two categories is scarce. The authors have identified ten of the sets: education, scientific research, engineering technology, health technology, economics and accounting, the arts, sports education, interpreting, agricultural technology, and that of news, publishing, and broadcast. Presumably most sets comprise multiple categories.

20. The PLA also has a civilian cadre (文职干部), found in a wide variety of jobs in research, engineering, medicine, education, publishing, archives, culture, and sports. The group can be categorized as "special technical civilian cadre" (专业技术文职干部) and "nonspecial technical civilian cadre" (非专业技术文职干部).

21. Some PLA dictionaries and encyclopedias combine military, political, logistics, and equipment officers as "non–special technical officers" (非专业技术军官).

22. See Kenneth Allen, "Assessing the PLA's Promotion Ladder to CMC [Central Military Commission] Member Based on Grades vs. Ranks: Part 1," Jamestown Foundation *China Brief* 10, no. 15 (22 July 2010); 中国人民解放军空军军官手册 [People's Liberation Army Air Force Officer's Handbook] (Beijing: Blue Sky, November 2006), p. 162.

23. 于大清 [Yu Daqing], ed., 中国人民解放军军官手册 [PLA Officer Handbook] (Beijing: PLA General Political Department Cadre Department, December 2011), p. 21. This book has no official English title; hereafter *PLA Officer Handbook,* the best translation.

24. Ibid., pp. 22–39.

25. *Xueyuan* (学院) can also be translated as "college" or "academy." The PLAN has seven officer academic institutions and one NCO school. Some have no official English names and are identified differently in various publications. None of the PLAN's academic institutions seem to have official websites, and only a handful of them apparently have English acronyms. Besides providing cadet education and specialty training, some of the PLAN's academic institutions offer postgraduate education, including master's, doctorate, and postdoctorate degrees. For example, cadets at the Dalian Naval Ship Academy/College can receive either senior technical or bachelor's degrees and then return for postgraduate education.

26. "中国人民解放军海军大连舰艇学院" [Dalian Naval Ship Academy of the CPLA], in *China Military Encyclopedia,* PLA's Military History series, vol. 3, pp. 742–43.

27. 毕业留念 [Video: Graduation Pictures], v.youku.com/v_show/id_XODg1NjQyMTI=.html, a 2006 video yearbook for AECT graduates showing cadets in army, navy, and air force uniforms.

28. *PLA Officer Handbook,* pp. 22–39; *Junyu,* 2011, pp. 305–306.

29. U.S. Navy Dept., *China's Navy 2007* (Washington, D.C.: Office of Naval Intelligence, 2007), chap. 11.

30. "Diversified Employment of China's Armed Forces"; Li Qinwei and Cao Jinping, "'Zheng He' Training Ship's Round-the-World Navigation Boasts Four Features."

31. 军队院校及普通高校国防生班报考指南 [A Guide for Applicants to Military Academic Institutions and Civilian College National Defense Student Program] (Beijing: PLA Press for the 总政治部干部部培训局 [Department's Professional Military Education Bureau] and 石家庄陆军指挥学院军事教育研究所 [Shijiazhuang Army Command Academy's Military Education Research Institute], January 2005).

32. In May 2000, the State Council and Central Military Commission of the Chinese Communist Party issued the "Decision Concerning Establishing a System for Civilian Colleges to Educate and Train Military Officers" (关于建立依托普通高等教育培养军队干部制度的决定). The document noted that the National Defense Student Program had been created because the PLA had been unable to educate or train personnel to operate or support new high-tech weapons and equipment. See *CNR,* www.cnr.cn/wcm/military/junlv/t20040325_146439.html.

33. "海军国防生" [Naval National Defense Students], *Baidu Online Encyclopedia,* baike.baidu.com/view/5047801.htm, and "国防生" [National Defense Students], *Baidu Online Encyclopedia,* baike.baidu.com/view/3196.htm. Each university has its own national defense student website. See, for instance, Nanchang University's, at chgf.ncu.edu.cn/.

34. 李选清 [Li Xuanqing] and 胡春华 [Hu Chunhua], "全军依托普通高校培养国防生呈现良好发展势头" [Whole Military Sees Good Trend of Development in Relying on Ordinary Colleges, Universities to Cultivate National Defense Students], *Jiefangjun Bao,* 14 December 2007.

35. 孙志 [Sun Zhi], "培育国防生当代革命军人核心价值观综述" [Summary of Nurturing National Defense Students as the Core of Today's Military Personnel], *Jiefangjun Bao,* 1 December 2009.

36. 福建省教育厅阳光高考信息平台 [Fujian Province Education Department Yangguang Entrance Examination Information Platform], available at gaokao.fjedu.gov.cn/htm/teshuzhaosheng/guofangsheng/20110629/41984.shtml, and 新东方 [New East], gaokao.xdf.cn/201109/869579.html.

37. *Guide for Applicants to Military Academic Institutions and Civilian College National Defense Student Program.* The PLA has two terms for reserve officers. Students are referred to as *houbei junguan* (后备军官); once graduated and assigned to their permanent duty stations, they lose this designation. Reserve officers who are serving on active duty are called *yubeiyi junguan* (预备役军官).

38. Multiple sources, including 兰州交通大学 [Lanzhou Jiaotong University], xpb.lzjtu.edu.cn/html/gfsgl/2008/18392884.htm.

39. "湖南大学2007－2008学年度总结表彰大会" [Hunan University 2007–2008 Academic Year Awards Ceremony], 湖南大学 [Hunan University], kjxpb.hnu.cn/index.php?option=com_content&task=view&id=822.

40. 张海文 [Zhang Haiwen] and 李立德 [Li Lide], "昔日, 他们是大学校园里的优秀学子; 今朝, 他们是祖国蓝色方阵中的'蛟龙'. 他们究竟是如何实现从国防生向'一线带兵人'的精彩转身? 请看来自南海舰队的报道— 把国防生干部送上成才'快车道,'" [Olden Days, They Are Outstanding Students from the University; Today, They Are "Flood Dragons" in the Fatherland's Blue Front Line. So How Did They Go from Being National Defense Students to "Firstline Soldiers"? Please See the Report from the South Sea Fleet Entitled National Defense Students on the "Fast Track."], *Jiefangjun Bao,* 15 February 2011, p. 10.

41. "2010年西安电子科技大学国防生招生计划" [Xidian University 2010 Year National Defense Student Plan], 25 May 2010, available at 西安电子科技大学 [Xidian University], xpb.xidian.edu.cn/trans.aspx?id=944.

42. "2010年军队院校和普通高校国防生招生政策解读" [Deciphering the 2010 Recruitment Policies for Military Schools and Civilian Schools' National Defense Students], 解放军报 [PLA Daily], 11 June 2010, available at www.csust.edu.cn/pub/kjxpb/notice/t20100611_126804.htm.

43. Bo Zhiyue, "The PLA's Young Cadet Development: Defense Student Program" (paper presented at the Chinese Council of Advanced Policy Studies and the Institute of Chinese Communist Studies' "PLA in the Next Decade" Conference in Taipei, 31 October–1 November 2011). The original source for the five problems is He Zongfa, Dong Jinhai, and Wang Zhanhe, "对进一步提高国防生选拔培养质量的几点思考" [Some Reflections on Further Improvement on Selection and Cultivation of Students for National Defense], *Jiaoxue Yanjiu* [Research in Teaching] 31, no. 3 (May 2008), pp. 211–14.

44. Author interviews with PLA officers.

45. *Naval Handbook,* p. 143.

46. "海军东海舰队92118部队接收大学毕业生简章" [Brochure about Navy East Sea Fleet 92118 Unit Recruits College Graduates], 12 May 2010, available at www.career.zju.edu.cn/news/127362354967235680.html; "浙江温州海军部队接收地方高校毕业生入伍" [Zhejiang Wenzhou Navy Unit Directly Recruits Civilian College Graduates to Enter the Military], 湖南中医药大学 [Hunan University of Traditional Chinese Medicine], 11 May 2012, www.hnctcm-zsjy.com/News_View.asp?NewsID=786.

47. The PLAN uses the term *tigan* (提干) for the process wherein enlisted personnel and civilian cadres become officers *(ganbu)*.

48. For comparison purposes, PLAN officers attend the Naval Command College course for ten

months, but unlike graduates of the U.S. Naval War College, they receive only certificates instead of master's degrees.

49. Unless otherwise noted, the information in this section comes from 张永义 [Zhang Yongyi], ed., 海军军事训练学 [*Science of Naval Training*] (Beijing: Academy of Military Science Press, April 2006) pp. 200–219.

50. "Training System in Military Colleges and Schools," pp. 562–63.

51. In 1999, the Central Military Commission designated five PLA universities as "comprehensive universities" (综合大学), with programs in science, engineering, military science, social science, management, economics, philosophy, literature, education, law, and history. The PLAN refers to as "comprehensive universities" those that provide senior technical, bachelor's, master's, and doctorate degrees in a wide variety of technology and engineering areas. One goal is to provide a high proportion of the students opportunities to receive two science and technology bachelor's degrees and then move on to master's and doctorate degrees; 苗宝今 [Miao Baojin], "双学位学员展英姿" [Exhibit Heroic Double Bachelor's Degree Cadets], *Jiefangjun Bao,* 11 June 2001. The five universities, each of which has several subordinate *xueyuan* (i.e., colleges), are Air Force Engineering University (AFEU, 空军工程大学), the National University of Defense Technology, the Naval Engineering University (NAE, 海军工程大学), the PLA Information Engineering University (PLAIEU, 解放军信息工程大学), and PLA Science and Engineering University (PLAUST, 解放军理工学院). 西陆网 [Xilu Network], club.xilu.com/emas/msgview-821955-4656460.html; *Contemporary Military Academic Institution Education Dictionary* (现代军校教育辞典), s.v. "Comprehensive University (综合大学)" (Beijing: National Defense Univ. Press, July 2009).

52. *Naval Handbook,* p. 144.

53. 苏树波 [Su Shubo], 俞志勇 [Yu Zhiyong], 汤奇 [Tang Qi], and 蔺承 [Lin Cheng], 军队干部工作手册 [Military Cadre Work Handbook] (Beijing: National Defense Univ. Press, May 2011), chap. 4, pp. 115–38.

54. Ibid.

55. Ibid.

56. 人民海军 [Renmin Haijun], 2 April 2002, p. 1. The PLA Navy's Political Department publishes the newspaper *Renmin Haijun* (hereafter *RMHJ*) for a public readership four times per week. It has no official English title but is often referred to in English-language publications as *People's Navy*.

57. Wei Yinhai and Zhang Jinyu, "Air Force Military Professional University Established," 4 July 2008, english.chinamil.com.cn/site2/news-channels/2008-07/04/content_1348728.htm. "The PLA's First Military Professional University Is Established in the Air Force" [全军第一家军事职业大学在空军挂牌成立], 3 July 2008, www.go81.net/news/shownews_12454.html.

58. *Junyu,* 2011 (p. 308), translates *jixun* (集训) as "intensive training," specifically as short-term training for personnel within a given specialty.

59. "南海舰队引导官兵献身强军实践" [The South Sea Fleet Guides Officers and Enlisted Members toward a Stronger Path], *Jiefangjun Bao,* 19 April 2013, p. 1.

60. "'雄狮文化'砥砺三栖劲旅" ["Lion Culture" Powers an Amphibious Brigade], *Jiefangjun Bao,* 2 February 2013, p. 8.

61. *Science of Naval Training,* pp. 236–52.

62. However, the PLA continues to use *zhengbing* (征兵) for conscription and recruitment.

63. *Naval Handbook,* pp. 123–24. For example, the 2004 defense white paper used *zhengbing* for "conscription" and *yiwubing* (义务兵) for "conscripts," in reference to the PLA's then-new program of two-year enlisted personnel. The 2006 and 2008 white papers did not use either term; the 2010 white paper translated *zhengbing* as "recruitment" and did not use *yiwubing* at all. This usage reflects the PLA's overall attempt to move away from a draft/conscript to a volunteer system for enlisted personnel.

64. This section is based in part on *Naval Handbook,* pp. 121–23.

65. "东莞市寮步镇403人争22空军征兵名额" [403 Men Vie for Twenty-Two Slots in the Air Force's Conscription Quota in Liaobu Village, Dongguan], 东莞日报 [Dongguan Daily], 8 November 2010.

66. 陆家嘴 [Lujiazui], lujiazui.pudong.gov.cn/2006_nj_info/2007-12-19/Detail_168898.htm, describes a local district in Shanghai as providing ninety-one recruits per year to units in the Nanjing Military Region.

67. 陈四林 [Chen Silin], "当前 '征兵难,' '征集高素质兵员难'的主要原因及对策" [The Principal Causes of and Remedies for Present "Difficulties with Conscription" and "Difficulties in the Recruitment of High-Quality Military Personnel"], 国防 [National Defense] (August 2011), pp. 60–65. Apparently height and weight requirements have also been relaxed; 玛沁县人民政府征兵办公室 [Maqin County People's Government Recruitment Office], "2013年度夏季征兵公告" [2013 Annual Summer Recruitment

Announcement], 6 June 2013, available at 玛沁县人民政府 [Maqin County People's Government], www.maqin.gov.cn/html/155/189353.html. For men with a middle school education, the upper age limit is twenty years, for high school graduates twenty-one years, for students at colleges and universities twenty-two, for graduates of vocational schools twenty-three, and for graduates of universities twenty-four. For women with middle school educations, the upper age limit is nineteen years, female students at colleges and universities twenty, and female graduates of colleges and universities twenty-two.

68. 哈密市国防教育办公室 [Hami National Defense Education Office] and 中共哈密市委宣传部 [Hami Party Committee Propaganda Office], "关于扎实开展'征兵宣传月'活动的通知" [Notice on Practical Development of "Recruitment Propaganda Month" Activities], 26 April 2013, available at 哈密政府网 [Hami Government Website], www.hami.gov.cn/10038/10038/10553/12617/2013/274115.htm.

69. "安排部署2012年冬季征兵工作" [Arrangements for the 2012 Winter Recruitment Work], 解放军报 [PLA Daily], 14 September 2012. Registration must be completed by 31 October.

70. Details of the actual allocation process and rules are unclear.

71. "新兵连, 好一个温暖的家" [New Soldier Companies: What a Warm Home], *RMHJ,* 18 December 2012, p. 4.

72. 第三媒体 [Third Media], 1 April 2013, ido.3mt.com.cn/Article/200707/show789263c30p1.html. Prior to 2010–12, each fleet had its own aviation training base, but it appears likely that their functions have since been consolidated into that of the ESF, near Qingdao.

73. Men assigned to shore-based units stationed in the South Sea Fleet are also sent to the SSF training base. In terms of basic training, the fleet bases appear to be primarily intended for men assigned to units that cannot undertake their own basic training (e.g., ships and units on small islands). Training bases are located at Liugong Island (刘公岛), Shandong, for the North Sea Fleet (NSF), Shanghai for the ESF, and Dongguan (东莞), Guangdong, for the SSF.

74. "水兵初长成: 海军某训练基地举行新兵授衔仪式" [Sailors' Initial Progress: Naval Training Base Holds Rank-Conferral Ceremony], 中国军网 [China Military Online], 8 February 2013, military.people.com.cn/n/2013/0208/c1011-20468336.html. During the 2011–12 training cycle, the SSF base trained three thousand "new soldiers," of whom some 92 percent underwent "tempering" (锻炼) on board vessels at sea or with marine units; *RMHJ,* 6 March 2012, p. 2.

75. U.S. Navy Dept., *China's Navy 2007,* pp. 77–79. The PLAN is seeking to increase the prevalence of NCO instructors in basic and other forms of training, seeing such duty as a critical means of developing their staff, management, and leadership skills; "士官参谋显威组训一线" [NCO Staff Work Group Training], *RMHJ,* 29 June 2012, p. 1.

76. *Naval Handbook,* pp. 121–23.

77. "出发! 我们一起守西沙" [Setting Off! Together We're Defending the Paracels], *RMHJ,* 20 February 2012, p. 1. In this particular case, three hundred outstanding conscripts from the SSF training base were allowed to visit vessels at sea and shore-based units in the South China Sea to observe real-life conditions of various billets so as to make informed choices. At training units, *techangbing* (roughly, "specially skilled soldiers") engage in competitive testing to determine which are to be assigned to highly desired billets; "定岗, 特长兵人尽其才" [Assigning Billets, Using Specially Skilled Troops to the Fullest], *RMHJ,* 20 February 2012, p. 1. It should be noted that *techangbing* can refer not only to technically trained but to entertainment and cultural personnel as well.

78. *Naval Handbook,* pp. 125–26. According to the same source, prior to the completion of either basic or specialty training, conscripts undergo further educational, physical, and psychological tests to determine their billets on board their eventual units or vessels. Apparently, each billet has specific educational, physical, and psychological standards.

79. The PLA uses identical terminology for enlisted ranks across all services, including the PLAN. Occasionally official articles published in English by the PLA and Xinhua use Western naval ranks, such as "petty officer," to relate to foreign audiences; however, even those translations are not consistent. A search of all available PLA sources failed to identify an official English list of PLAN enlisted ranks that equate to Western naval ranks. Ultimately, there being no single authoritative set of translations for enlisted ranks, the authors have chosen to refer to naval noncommissioned officers as simply "NCOs."

80. Yu Daqing, ed., *PLA Officer Handbook,* p. 30. See also *Baidu Online Encyclopedia,* baike.baidu.com/view/2090591.htm.

81. *Naval Handbook,* p. 133.

82. *PLA Officer Handbook,* pp. 65–67.

83. This training is discussed further in the section on NCO training.

84. *Naval Handbook,* pp. 133–34. Whether this training takes place prior to or after application for NCO service is not explicitly stated.

85. Ibid., pp. 131–32.

86. The Bengbu NCO School, which *China Military Encyclopedia* identifies in English as the Bengbu Naval Petty Officers Academy of the PLA, offers senior technical degrees in up to forty specialties. Its yearly intake of secondary and senior technical-degree students is approximately nine hundred men, who enter the school each October, a date used to fall immediately before the yearly demobilization/conscription process began. The entry date for the school will likely be modified to reflect that of the conscripted force in the near future. 吕海华 [Lv Haihua], "海军士官培养整体步入高等职业技术教育" [Naval NCO Development's Integral Steps toward Advanced Vocational Technical Education], 解放军报 [PLA Daily], 7 October 2012, available at news.mod.gov.cn/headlines/2012-10/07/content_4403740.htm. The school has five academic departments: maritime navigation, electromechanical, information technology, weapons, and machinery; *China Military Encyclopedia,* PLA's Military History series, vol. 3, pp. 746–47.

87. Although sources are not explicit, there are presumably various forms of the test for personnel in different grades. Additionally, an applicant who has previously been awarded second- or third-class service honors, has received regimental-level approval, has passed a divisional-level investigation, and has received approval from the Navy NCO Student Recruitment Office (海军士官学员赵审办公室) can be admitted to a school or program relevant to his specialty or billet without sitting for the examination.

88. NCO students are subjected to individual, overall quality assessments prior to graduation, measuring once again their physical and leadership qualities as well as their capacity to translate theory and instruction into actual practice.

89. Presumably if an NCO student fails and is nearing the end of his present period of service, he would be demobilized, along with all other NCOs in his grade not being promoted.

90. *Naval Handbook,* p. 132. It remains unclear what distinguishes students under the direct responsibility of this office.

91. They have also been eligible, since 2009, for up to twenty-four thousand RMB in tuition reimbursement or other compensation for the cost of a civilian education. 大学生士官网 [Civilian College Student NCO Network], www.shiguan8.com/Article/bm/557.html.

92. Direct recruitment of junior NCOs requires regimental-level approval, of intermediate NCOs divisional-level approval, of master sergeants grade three the approval of the group army, and of master sergeants grades one and two the approval of the military region. Direct-recruitment NCOs undergo basic training alongside conscripts at the training bases, though are segregated into separate units; "模型给力排故教学" [Model of Troubleshooting Teaching], *RMHJ,* 24 February 2012, p. 1. They apparently often stay on at technical training bases until the fall to receive further billet training before proceeding to units; "海军航空训练基地岗位练兵掠影" [A Glimpse of Billet Training at the Naval Aviation Training Base], Xinhua, 9 September 2011, available at pic.cnr.cn/jskt/201109/t20110909_508483673.shtml.

93. "2012年大学生士兵提干,优秀士兵报送入学和专业体育单位优秀学员提干对象名单" [Lists for 2012 of Civilian College Student Enlisted Personnel Who Became Officers, Outstanding Enlisted Personnel Who Enrolled as Cadets in Officer Academic Institutions, and Outstanding Cadets in Specialty Sports Units Who Became Officers], *RMHJ,* 4 November 2012, p. 2.

94. "潘士兵的'士兵之路'" [Soldier Pan's "Road of the Soldier"], *RMHJ,* 31 August 2012, p. 2. In the case described here, a direct-commission NCO and university graduate serving in a geographically detached element of the maintenance section of an ESF communications station essentially became its logistics coordinator because no one else physically present had the requisite education. His position was later formalized, which effectively transformed him into an administrative cadre.

95. It remains unclear whether students are individually selected by specific units, as are standard directly recruited NCOs, or are allocated to units only after their entry into military service.

96. 湖北省征兵办公室 [Hubei Provincial Conscription Office] and 湖北省高等学校招生委员会 [Hubei Provincial University and College Recruitment Committee], "关于做好定向培养直招士官试点工作的通知" [Notice Concerning Successfully Carrying Out the Directed Education of Directly Recruited NCOs Pilot Program Work], 洪山高中 [Hong Shan High School], www.hsgz.cn/uploads/zsg.doc.

97. 王福霞 [Wang Fuxia], "海军军务部领导来院访问就联合培养海军士官生工作进行洽谈" [Navy Military Affairs Department Leadership Paid a Visit to Discuss Carrying Forward Direct Education of Direct-Recruitment NCOs], 3 July 2012, 山东交通职业学院 [Shandong Transport

Vocational College], www.sdjtzyxy.com/html/redianxinwen/20120703/1072.html. The source describes a visit to a school involved in the program in order to finalize the curriculum agreement and inspect the program facilities. The leaders of the navy delegation were the director of an unspecified office in the Navy Military Affairs Department and the deputy commander of the NSF training base, the junior officer (i.e., director) from the department apparently taking the lead in both discussions and the inspection. Additionally, and according to the official circular from Hubei, only the NSF and ESF training bases are participating in the pilot program.

98. "海军定向培养直招士官试点工作展开" [Pilot Program Initiates for Directed Education of Directly Recruited Navy NCOs], *RMHJ,* 9 July 2012, p. 1.

99. 张蓓 [Zhang Bei], "50名直招士官　千余考生来抢" [Thousands of Candidates Compete for 50 Direct-Recruitment NCO Slots], 潍坊晚报 [Weifang Evening News], 17 July 2012, available at zs.sdjtzyxy.com/html/meitijujiao/20120718/223.html.

100. *PLA Officer Handbook,* p. 73.

101. Dong Huiyu and Mou Xianming, eds., *Dictionary of Contemporary Military Academic Institution Education,* p. 128. The 2011 *Junyu* (p. 331) translates *dadui* (大队) as "group"; however, depending on the context, a *dadui* can be either a regiment leader– or battalion leader–grade organization. Each service has several regiment leader–grade training groups (*xunlian dadui,* or 训练大队). The PLAN also has regiment leader–grade vessel *dadui,* (舰艇大队), which the 2011 *Junyu* (p. 886) translates as "ship group." For comparison purposes, Western publications often translate "ship group" as "squadron." The air force and naval aviation have battalion leader–grade flight groups (*feixing dadui*—飞行大队) and a single maintenance group (*jiwu dadui*—机务大队).

102. *Naval Handbook,* pp. 133–34; *PLA Officer Handbook,* pp. 73–74. Some sense of the size of this yearly training effort is given by the fact that in 2012 the ESF alone gave specialty training to two thousand new junior NCOs; captioned photo by 陈鹏鹏 [Chen Pengpeng], *RMHJ,* 7 September 2012, p. 2. The training begins immediately after the end of the basic training cycle in February and runs through August, using the same bases and facilities.

103. *Naval Handbook,* p. 135. It is not clear how the intermediate and advanced programs relate to *zhongzhuan* and *dazhuan* degrees, especially whether the certificates of completion can serve as equivalents to those degrees.

104. 刘晓华 [Liu Xiaohua], "青岛农大拟与海军蚌埠士官学校联合培养士官" [QAU Agrees to Jointly Develop NCOs with Bengbu NCO School], 13 April 2012, 校园在线 [Campus Online], news.qau.edu.cn/n13600c1.aspx.

105. "海军航空工程学院与我校联合培养士官生签约仪式举行" [Opening Ceremony Held for Joint NCO Development between Naval Aviation Engineering Academy and Our School], 11 April 2013, 南昌航空大学 [Nanchang Hangkong University], news.nchu.edu.cn/NewsDetail.aspx?className= percentb2 percentfd percentba percentbd percentd2 percentaa percentce percentc5&id=11386. This would appear to be separate from the direct-education program described elsewhere, as the NCOs in this instance appear to be simply attending classes, rather than being enrolled as full students.

106. *Naval Handbook,* pp. 133–34.

107. *PLA Officer Handbook,* p. 33.

108. "军中脊梁 '淬火成型'" [The Backbone of the Armed Forces "Formed by Tempering"], *RMHJ,* 20 June 2012, p. 2. In the particular case described, the Bengbu NCO School established ten such bases during the course of 2012. The article also describes the NCO School's organizing field exercises for fifty radar students, allowing them to apply their learning in a "complex electronics environment." The overall intent is to bring the students' training and education more closely in line with the requirements of operational units and bases.

109. "让个人成才对接部队需要" [Getting Individual Capacity to Align with Unit Requirements], *RMHJ,* 24 October 2012, p. 1. Training elements are also described as giving guidance directly to units to ensure that students are properly utilized.

110. "东海舰队依托自学考试提升官兵素质" [The ESF Depends on the Quality of Officers and Men Engaged in Self-Study and Testing], *RMHJ,* 12 January 2012, p. 1. In the ESF, some 1,300 officers and NCOs per year engage in distance learning and formal self-study courses. Of course, the objective quality of these courses is unclear and certainly open to question.

111. Approximately twenty NCOs acted as team and squad leaders in an ESF electronic-warfare exercise led by and solely consisting of enlisted men. "20名士官当上代理排长" [Twenty NCOs Take Up Duty as Acting Platoon Leaders], *RMHJ,* 29 June 2012, p. 1.

112. "83名士兵喜获执业资格证" [Eighty-Three Enlisted Men Are Awarded Vocational Qualifications Certificates], *RMHJ,* 17 October 2012, p. 2; "首批29名士兵获国家职业资格证书" [The

First Batch of Twenty-Nine Enlisted Men Obtain National Vocational Qualification Certificates], *RMHJ,* 27 September 2012, p. 1.

113. "校园淬火砺精兵" [Campus Tempers Elite Troops], *RMHJ,* 4 January 2013, p. 3.

114. Specifically, this entailed the office's also formulating six major specialties and vocational standards for twenty-seven trades, and, in cooperation with the three schools, publishing sixty-two instructional texts, as well as various "test banks" for online or remote testing. The office has also organized three consecutive training courses for evaluators, producing 235 evaluators by January 2013.

115. Also, other specialties are establishing a dozen or more evaluation stations of their own, a figure that gives some idea of their intended extent. "Eighty-Three Enlisted Men Are Awarded Vocational Qualifications Certificates," p. 2.

116. "First Batch of Twenty-Nine Enlisted Men Obtain National Vocational Qualification Certificates," p. 1.

117. "42名士兵获国家高级职业技能证书" [Forty-Two Enlisted Men Obtain National Advanced Vocational Skills Certificates], *RMHJ,* 29 September 2012, p. 1.

118. "多项联合缩短课堂与战场距离" [Bringing Classroom Instruction Closer to the Battlefield], *RMHJ,* 24 August 2012, p. 2.

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