



# THE PEOPLE'S LIBERATION ARMY'S 37 ACADEMIC INSTITUTIONS



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# PREFACE

The basis for any military is education and training. Without this foundation, we would just be armed groups of men, marauding our local areas. Education and training allow tactics, techniques, and procedures to be transmitted as lessons learned from one generation to the next. These eventually form the basis for the doctrine and strategy that guides modern militaries. To this end, CASI was tasked with investigating the academic system of the Chinese Communist Party's People's Liberation Army.

The PLA's academic system has undergone a number of transformations through its history, not least of which occurred as a result of the 2015/16 PLA reforms. Each reform reveals how the PLA and the Communist Party view the world at the time, and where they need to place emphasis on educating their armed wing. This round of reforms is no different.

To that end, CASI has thoroughly investigated the current structure of the PLA's academic system and compiled this 'encyclopedia' of sorts as a response to the task, and to assist others in parsing out what each part of the system does and how it fits in to the whole. Of note, we did not look into the 'counterpart' to education, that is to say the training system. This, as in the United States military, varies greatly based on service, job, and at times location, and deserves a study in its own right. For this volume, we focused just on the academic portion of the PLA.

One of the most significant findings is that, despite the massive reorganization with an emphasis on what we in the West would call 'joint warfighting', the only place within the PLA academic system that officers receive any 'joint' training is still at their National Defense University. While this may change, and based on a number of recent PLA exchange visits to the U.S is likely under consideration as we write this, to this day NDU maintains the keys to joint education, which means that one must first be promoted to a high enough military grade in order to receive this training. From an American point of view, that poses severe limitations on the ability to 'grow and nurture' joint leaders and commanders.

While not intended to be read cover to cover, we hope this study serves as the definitive reference for anyone interested in how the PLA educates its members.

Brendan S. Mulvaney  
Director, China Aerospace Studies Institute

# ABSTRACT

In June 2017, China's People's Liberation Army (PLA) conducted a massive reorganization of its officer and noncommissioned officer (NCO) academic institution structure. It reduced the number of officer academic institutions from 63 down to 34 and NCO institutions from four to three. Several of the officer institutions also have subordinate NCO schools. It did this by downgrading, resubordinating, merging, reorganizing, and/or abolishing existing institutions and creating new ones. For example, the National Defense University was downgraded and the Navy's Marine Corps College and Air Force's Airborne Force College were abolished. It also began abolishing the National Defense Student Program that was created in 1999 in 118 civilian science, technology, and engineering universities. That program, which is not discussed in the report, will cease to exist when the last class of students graduate in summer 2020. It is still not clear what program will replace it. This report provides relevant background material on the overall PLA academic institution program and provides profiles of the current 37 academic institutions. Given the overall history of the academic institutions, more major changes can be expected to occur over the next decade.

# INTRODUCTION

The purpose of this report is to provide profiles and an overall analysis for the People's Liberation Army's (PLA) 34 officer (cadre) and three noncommissioned officer (NCO) academic institutions (院校) that the Chinese Communist Party's (CCP) Central Military Commission (CMC) identified in June 2017 when it reduced the number from 63 officer and four NCO institutions. The academic institution reforms are part of the PLA's 11th force adjustment that began in 2016 and included a downsizing of the PLA from 2.3 million to 2.0 million of which one-half (150,000) were officer and civilian cadre billets and one-half were enlisted force billets.

Shortly after the reorganization of the academic institutions, the PLA published detailed information about 26 of the 37 institutions based on visits to each organization in 2017 and 2018, which have been incorporated into the profiles. The report provides a list of the previous 67 academic institutions, but it does not provide any further information about them. Although the People's Armed Police (PAP), which is part of China's Armed Forces but not part of the PLA, has five officer and one NCO academic institutions, they are not included in the report.

In order to understand what is going on today, however, it is important to know how the PLA got to this point.<sup>1</sup> As such, the current reduction is just one more step in the PLA's process of downsizing its force since the People's Republic of China (PRC) was established in 1949. Given the history of numerous organizational structure changes over the past 70 years, more major changes can be expected over the next decade. The PLA has had 16 Conferences of PLA Military Educational Institutions (全军院校会议) from 1950 to 2011<sup>2</sup> (See Appendix G) and 11 force adjustments (编制体制调整) from 1949 to 2016<sup>3</sup> (See Appendix F), which are clearly linked. Of note, although the reduction is linked to the 11<sup>th</sup> force adjustment, the PLA has not had a Conference of PLA Military Educational Institutions since Xi Jinping took office as the head of the Party, government, and military in 2012.

The Key Findings Section provides 25 key issues based on the information in the report. The Background Section examines the history of the academic institutions to include their organizational structure, Ministry of Education (MOE) codes, academic degrees, majors, and specialties, types of institutions, and personnel (leadership, staff, and students). The report also discusses inconsistencies in PLA official translations into English of the names of the institutions and their subordinate organizations. Section 3 provides a separate profile for each of the 37 institutions based on a template. The report is organized into the following four sections and ten appendices:

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# SECTION 1: KEY ISSUES

This section provides 25 key issues (KIs) concerning the PLA's academic institutions.

KI-1: In June 2017, the PLA reduced the number of academic institutions from 67 institutions (63 officer and four NCO) to 37 (34 officer and three NCO). This report does not include the six People's Armed Police (PAP) institutions, since they are not part of the PLA). This report provides significant background on the overall history of the PLA academic institutions going back to the 1950s. As can be seen in Table 1 below, there will most likely be more changes that occur over the next decade, including a further reduction in the number of institutions by merging, abolishing, and/or renaming current institutions.

**Table 1: Number of PLA Academic Institutions from 1950-2017**

Year	Number
1950	57
1956	246
1965	116
1968	125
1969	43
1977	115
1998	67
2017	37

KI-2: One of the biggest challenges for this project was that there was not a single authoritative source that provides official English names for the 37 academic institutions. In some cases, more than one official English name was found from different sources, while in other cases no official name was found. This reports attempts to provide the best guess for the English names of these academic institutions.

KI-3: Only a few of the 37 academic institutions have an official website and only a couple have an English version.

KI-4: The PLA uses the term cadre (干部, *ganbu*) and officer (军官) synonymously. However, for purposes of this report, the term “cadre” is used only if the name of the organization clearly uses *ganbu*, but all other references will use “officer” for continuity sake. The PLA does have civilian cadre, who are not considered civilian officers, so the word “cadre” is used throughout the report for civilian cadres.

KI-5: Since 1956, the PLA has held 16 Conferences of PLA Military Educational Institutions, each of which have laid out important guidance for all academic institutions. Although the PLA reduced the number of institutions from 67 to 37 in 2017, the last conference was held in 2011 under then CMC Chairman Hu Jintao. No conferences have been held under the current CMC Chairman, Xi Jinping.

KI-6: Under then CMC Chairman Jiang Zemin, in 1998, the PLA reduced the number of PLA academic institutions to 67 and implemented the National Defense Student Program (国防生) to educate undergraduates as officers in 122 civilian engineering, science, and technology universities.<sup>4</sup> This report does not discuss the National Defense Student Program; however, the eventual goal laid out in 2006 was to have 40 percent of all PLA AF



officers come from this program in 2010.<sup>5</sup> Apparently, the program did not meet the goals and, as a result, the PLA did not recruit any new students in 2017.<sup>6</sup> As such, when the remaining students who began the program in 2016 graduate in 2020, the program will cease to exist. Although the program was apparently replaced by direct recruitment of civilian university/college graduates, no details were found.<sup>7</sup> In addition, there is a possibility that that program may also fail.

KI-7: The PLA has had 11 force adjustments since 1950, including a 200,000-man force reduction (85 percent officers) in 2004 and a 300,000-man force reduction (50 percent officers) in 2016. The next force reduction will most likely occur within the next decade and will affect the academic institutions.

KI-8: The PLA has two levels of officer academic institutions. The first level includes universities, which include subordinate officer *xueyuan* (学院), and, in some cases, noncommissioned officer (NCO) schools. The second level includes *xueyuan*, which the PLA translates inconsistently as “academy” or “college.” Prior to 1986, almost all officer academic institutions were “schools” (学校), but they were all upgraded to *xueyuan* or universities in 1986.

KI-9: Concerning noncommissioned officer (NCO) academic institutions, the PLA did not have any NCO schools until 1986. Since then, the number has changed multiple times. Today, there are only three standalone NCO schools and several schools that are subordinate to officer academic institutions. Each NCO school is dedicated to a particular specialty. NCOs schools offer only two-year secondary professional education programs/diplomas and two- to three-year post-secondary education programs/diplomas, which are roughly equivalent to a U.S. associate’s degree. No NCO schools offer a bachelor’s degree.

KI-10: Over the past 20 years, one of the PLA’s primary goals has been to create a more educated and well trained officer and NCO corps.

KI-11: In 2017, the overall administrative and functional organizational structure for almost all of the PLA academic institutions changed. The exception is the three Air Force Flight Academies, which remained the same because they are organized like operational units.

KI-12: Every academic institution, like all PLA organizations, is assigned one of the PLA’s 15 grades. Today, the 37 institutions are assigned one of four grades: Theater Command deputy leader, corps leader, corps deputy leader, or division leader (NCO schools). For example, the National Defense University was reorganized and downgraded from Theater Command leader to deputy leader, which affected almost every leadership and functional and administrative department billet.

KI-13: Since the 2016 reorganization began, many academic institutions have been resubordinated to new organizations, including the CMC, which is most likely the CMC’s Education and Training Department, the PLA Army HQ, PLA Navy HQ, PLA Air Force HQ, PLA Rocket Force HQ, and PLA Strategic Support Force HQ. No institutions are subordinate to a Theater Command HQ.

KI-14: The PLA has categorized its academic institutions as either academic education or professional education institutions. In some cases, they are only one type, while in some cases they are considered both types. In addition, five technology and engineering universities are considered comprehensive universities.

KI-15: Some, but not all, academic institutions have a Graduate School, which offers master’s and doctoral degrees.

KI-16: During the 1950s until 1980 the PLA provided direct promotions for a high percentage of officers from enlisted personnel who had from one to three years of active duty but did not even have a high school education. In 1980, the PLA abolished the program for direct promotions of enlisted personnel as officers and required all new officers, including enlisted personnel selected to become officers, to receive basic college-level education at a PLA academic institution.

KI-17: The first bachelor’s degree programs began in 1982, the first master’s degree programs began in 1985, and the first doctoral degree programs began in 1989; however, the year fluctuated depending on the service (Army, Navy, and Air Force), Second Artillery Force, and specialty. It appears that the first Post-doctoral research stations were established around 1990 and were created at multiple institutions through the 1990s and into the early 2000s.

KI-18: Of the 37 institutions, the PLA conducted detailed interviews in 2017 and, in some cases, in 2018 for 23 institutions. The interviews, along with detailed information from Baidu and Wikipedia websites provided the base for the current profiles. In addition, two authoritative PLA publications from 2007 (*PLA Military History*) and 2011 (*Dictionary of Modern Military Education* (sic)) provided solid background material for the profiles.

KI-19: All PLA officers have one of five career paths: military, political, logistics, equipment, or special technical. They are also categorized as commanding officers, which means anyone who has any leadership role, such as the deputy director of an office, and non-commanding officers, which means they have no leadership role. Unlike the U.S. military, the PLA does not assign military operational specialties (MOS) or air force specialty codes (AFSC) to personnel.

KI-20: Information concerning some academic institutions, such as the Air Force Medical University, which has both a detailed Chinese and English website, is quite transparent, while many of them lack transparency.

KI-21: During the early 2000s, the Ministry of Education (MOE) created the *National Code List for Institutions that Award Degrees* as a foundation to assign a five-digit code to most, but not all, civilian and military college degree awarding academic and research institutions. Each code has an official name, which is the name of the organization. The list was updated in January 2008 to add institutions that were omitted from the earlier list, especially military institutions, and to make the necessary changes to the names of existing institutions. Following the 2017 reorganization, each of the 37 PLA academic institutions, including the three NCO schools for the first time, received a new code (91001 to 91037).

KI-22: Whereas all military academic institutions have MOE codes assigned to them, the exact opposite is true for military unit cover designators (MUCD). In this case, it appears that no military academic institutions except for the PLAAF's three flight academies are assigned an MUCD. The reason that the three flight academies have MUCDs is because they are organized like and treated as operational units.

KI-23: China has four direct-administered municipalities (直辖市), 22 provinces, and five autonomous regions. Each year, every academic institution recruits a certain number of new cadets from across China. A review of the information provided for 2017 recruitment indicates that, overall, the PLA did recruit a roughly equivalent number of personnel from all 31 locations; however, not every academic institution recruited from all 31 locations. The lowest number of new cadets recruited from one location was one and the highest number was 58. Although no information was provided concerning ethnicity, the assumption is that the majority, if not all, of the recruits are Han Chinese, even when they came from the autonomous regions. All officer cadet recruits are subject to a thorough political background check.

KI-24: The PLA published extensive interviews in 2017 and 2018 for 23 of the 34 officer academic institutions, which included the number of new cadets (8,744) recruited for 2017, their specialties, and their home municipality, province, or autonomous region. Of the total number, the average was 380 cadets per institution, the highest number was 1,064 for the National University of Defense Technology, and the lowest number was 112 for the Navy Submarine Academy; however, the number did not include 1,400 new pilot cadets at the Air Force Aviation University.

KI-25: Finally, one of the challenges for this report is that the US military tends to look at the PLA through a US military lens, so it likes to use US military terms. Therefore, one of the goals of this report is to allow US military personnel to understand the PLA through a PLA lens.

## SECTION 2: BACKGROUND

This section provides a solid background of the PLA's academic institutions going back to 1949 by discussing the 16 conferences and the shift in the number of academic institutions organized into six periods.

To help lay the foundation for the 16 conferences, according to one PLA article in 2000, “It is important to compare the ratio of our military officers’ educational levels during several different periods. Specifically, in the period between the founding of the Army (1927) and the founding of the People’s Republic of China (1949), there were many officers who were recently extricated from illiteracy or were still illiterates. In the late 1960s, 93.4 percent had lower than a high-school educational level. Before the Third Plenum of the 11<sup>th</sup> Chinese Communist Party (CCP) Central Committee (December 1978), there were still 91.9 percent of officers with less than a high-school educational level. The situation underwent quite a tremendous change in the late 1980s, when 42.3 percent of officers had a college educational level (i.e., a three-year post-secondary (大专) and or four-year bachelor’s degree) or above. In 2000, that figure had risen as high as 71.8 percent.”<sup>8</sup>

To address this key issue of education, the PLA has held 16 Conferences of PLA Military Educational Institutions since 1950 that implemented major reforms to the entire PLA academic structure. The PLA has organized the reforms into six periods: 1) 1949-1958, 2) 1958-1966, 3) 1966-1976, 4) 1976-1985, 5) 1985-1999, and 6) 1999-present.<sup>9</sup> The PLA organizes its academic institutions into five categories—command (指挥), political (政治), technical (技术), flight (飞行), and enlisted force (士兵)—which are further organized by level (General Departments) and service/branch. The key information concerning the number of institutions at any given time is shown in Table 2 and the following bullets.<sup>10</sup>

**Table 2: PLA Academic Institutions: 1950-2017<sup>11</sup>**

Year	Number
1950	57
1956	246
1965	116
1968	125
1969	43
1977	115
1998	67
2017	37

- Period 1 (1949-1958): At the first conference in 1950, the PLA had 57 officer institutions that rose to 246 in 1956 when the sixth conference was held.<sup>12</sup> During the 1950s, most officers were still illiterate or barely literate.<sup>13</sup> As such, the primary focus was to relieve them of illiteracy. At that time the main content of the training classes set up by the units was teaching people how to read and write.<sup>14</sup> Meanwhile, however, the enlisted force remained illiterate. From 1950 to roughly 1980, some officers only studied for six months to two years before they received a two-year secondary technical (中专) educational diploma or three-year post-secondary (大专) diploma, which focused on reading and writing. They then assumed their operational billet

without only a little specialty training. The PLA did not stop offering high school equivalency degrees for officers until 1995. Meanwhile, some academic institutions had three- to five-year programs. For example, the General Logistics Department's (GLD) Transportation School (运输学校), which was created in 1952, had a two-year course, the GLD's Quartermaster School (军需学校), which was created in 1952, had a three-year course, the General Political Department's Political College/Academy (政治学院), which was created under the CMC in 1951, had a four-year course, and the CMC's Engineering College/Academy (军事工程学院), which was created in 1953, had a five-year course.<sup>15</sup> Each institution averaged about 1,000 cadets at any time. It is not clear what degrees they received.

- Period 2 (1958-1966): From 1957 to 1965, the PLA had four Conferences of PLA Military Educational Institutions (院校会议), each of which involved adjustments that primarily revolved around reducing the number (减少数量) of institutions while increasing quality (提高质量). As such, the number was reduced from 246 in 1957 to 116 in 1965.<sup>16</sup> However, that number fluctuated during that period. Specifically, in 1962, there was a total of 111 academic institutions. In 1964, there was a total of 115 academic institutions and then to 116 in 1965.
- Period 3 (1966-1976): From 1966 to 1985, the number of institutions fluctuated dramatically in both directions as a result of the Cultural Revolution.<sup>17</sup> At the beginning of 1969, there was a total of 125 academic institutions, including 45 command and political, 65 technical, and 15 flight. However, by the end of 1969, a total of 82 academic institutions had been abolished (撤销), leaving only 43, including one political, 20 engineering and technical, six medical, and 15 flight. From 1966 to 1980, the majority of officers came from the direct promotion of enlisted personnel with one to three years of service.
- Period 4 (1976-1985): In early 1977, there were a total of 112 academic institutions, including those that were reestablished (恢复) and adjusted (调整) and that number increased to 115 at the end of 1977.<sup>18</sup> As noted later, the PLA provided direct promotions for a high percentage of officers from enlisted personnel who had from one to three years of active duty but did not even have a high school education.<sup>19</sup> In 1980, the PLA abolished the program for direct promotions of enlisted personnel as officers and required all new officers, including enlisted personnel selected to become officers, to receive basic college-level education at a PLA academic institution.<sup>20</sup> Based on a decision made at the 12th CCP Party Congress in 1982, the PLA began placing greater emphasis on education for its officer corps.<sup>21</sup> First, the number of PLA academies expanded to 115, and the number of officers with college degrees quickly rose to nearly 25 percent.
- In addition, in order to help make up for the shortfall of educated officers, the PLA began military-political training for 2,000 directly-recruited civilian college graduates in 1983 for one year in military academic institutions. Upon graduation, they were assigned as platoon commanders. As the number of military academies grew during the 1980s, fewer civilian college graduates were being assigned to command positions, but the education level was still not optimal. In May 1987, *Xinhua* reported that "only graduates from military academic institutions were eligible to be officers and these graduates made up 80 percent of the officers at the platoon and company levels. Furthermore, 75 percent of the officers at the division and corps levels had received advanced training [not necessarily college degrees]." This report indicates that the remaining officers at those levels were holdovers from the previous system of recruiting officers from the enlisted ranks. Based on various *Xinhua* reports, it appears that, by the end of the 1980s, civilian college graduates were no longer assigned to operational units, but were assigned as either civilian cadres [a system that was created in 1988] or as officers with technical skills. Discussions with PLAAF officers in the 2000s indicated that the program to bring in civilian college graduates as pilots was not successful due to friction between the civilian college graduates and the PLAAF flying academic institution graduates. Therefore, the PLAAF's program of training civilian college graduates as pilots was disbanded for the time being.
- Period 5 (1985-1999): By 1986, the PLA had increased the number back up to 117 academic institutions that were downsized yet again to 67 in 1998. During the 14th CCP Party Congress in 1992, the program of

recruiting civilian college graduates as officers was revived, but the emphasis was on graduates with technical skills. Part of the reason for reducing the number of civilian college graduates in operational units was that graduates from the PLA's academic institutions were filling those positions.<sup>22</sup> According to some reports, by the end of the 1990s, the Second Artillery Force had recruited 1,600 civilian college students, and the PLA Navy had recruited 2,700.<sup>23</sup> Other reports indicate that almost all of the civilian college graduates were assigned to civilian cadre or technical positions. In 1998, Jiang Zemin instructed the PLA to create the National Defense Student Program (国防生), organized by service, in 118 civilian science, technology, and engineering universities; however, the PLA began abolishing this program in 2017. As such, it did not recruit any freshmen in 2017.<sup>24</sup> The report does not discuss this program, which will cease to exist in mid-2020 when the final class of students who began in 2016 graduate. It is not clear what new program will replace this. There are differing reports on how the PLA has utilized these civilian college graduates, and there is an apparent difference between how the ground forces and the technical services (navy, air force, and second artillery) assign their civilian educated officers.

- Period 6 (1999–Present): Since the 14<sup>th</sup> Conference of PLA Military Educational Institutions in 1999 to 2017, the number of institutions remained fairly constant (ranging from 64–67), but there were still several changes that occurred. Although the number of civilian college graduates assigned to operational units in command positions from 1997 to 2000 was fairly small, the total number of civilian college graduates recruited by the PLA had grown considerably. According to *Liberation Army Daily* and *Xinhua* reports from June and November 2000, since the 14<sup>th</sup> Party Congress in 1992, the PLA had recruited 46,000 college graduates,<sup>25</sup> of which 6,200 were assigned to the General Staff Department. In 2000, 786 college graduates joined the PLA after only three months of military training, indicating that the earlier requirement for one year of military training had been reduced. Of the 786 graduates, 125 (16 percent) had master's or doctoral degrees, and 280 (35.8 percent) were females. At the end of 2000, the PLA employed 36,577 civilian college graduates, of which 2,740 (7.5 percent) had post-graduate degrees and 30,101 (82.3 percent) had undergraduate degrees. By the end of 2000, China had also sent military students to study in 22 foreign countries.<sup>26</sup>
- Although *Xinhua* reported that over 700 college graduates with master's or doctoral degrees had become regiment and division commanders between 1985 and 2000, the problem of an undereducated officer corps still faced the PLA in 2000.<sup>27</sup> Under Jiang Zemin's guidance to "strengthen the Army through science and technology," the PLA tried to push greater integration between the military and civilian academic institutions.
- Even though the Central Military Commission (CMC) ordered in 1997 that 70 percent of the officer force would be comprised of military academic institution-trained officers, according to an April 2000 *Xinhua* report, only 46 percent of the officers at or above regiment levels were college graduates. After three years of discussions following the 15<sup>th</sup> Party Congress in 1997, the State Council and CMC issued in June 2000 the "Decision on Establishing a Military Officer Cultivation System Relying on General High Level Education" as part of Jiang Zemin's overall guidance to merge military education into the national education program and to "train officers by both military and civilian schools." The "Decision" had two major components, including recruiting civilian college graduates for the PLA and training PLA officers in civilian colleges. The driving force for this program was that the military academies could not satisfy the PLA's requirements for qualified people in science and technology. Besides cultivating technical personnel, the program also allowed for an appropriate number of graduate students to be chosen to supplement command positions.
- The 16<sup>th</sup> Conference was held in July 2011, during Hu Jintao's tenure as Chairman of the Chinese Communist Party's (CCP) Central Military Commission (CMC). In June 2017, that number of academic institutions was reduced from 67 to 37 by abolishing, merging, or downgrading existing institutions or creating new ones.



## ACADEMIC DEGREE HISTORY

This subsection briefly discusses the history of when the PLA began secondary educational programs/diplomas (中专), post-secondary educational programs/diplomas (大专), bachelor's degree (本科), master's degree (硕士), doctoral degree (博士), and Post-doctoral (博士后) programs for its officers. Of note, not every service and academic institution began offering these programs and degrees at the same time. One key also is that, as discussed later, following the 13th Conference of PLA Military Educational Institutions in May 1986, the PLA upgraded its officer schools (学校) to colleges/academies (学院) in order to allow them to offer bachelor's, master's, and doctoral degrees.<sup>28</sup>

Although the PLA had from one- to three-year programs for officers at its academic institutions starting back in the 1950s, it appears that it did not begin providing a one- to two-year secondary educational program/diploma and a two- to three-year post-secondary educational program/diploma for special technical officers until the 1970s. However, officers attending command academic institutions for one year were still not receiving any type of degree in the 1970s.<sup>29</sup> It is not clear when officers who attended command academic institutions began receiving any type of degree, but it most likely began in the 1980s.

As shown below, the first bachelor's degree programs began in 1982, the first master's degree programs began in 1985, and the first doctoral degree programs began in 1989; however, the year fluctuated depending on the service (Army, Navy, and Air Force), Second Artillery Force, and specialty. The only remaining schools were enlisted schools, which the CMC officially approved in August 1985 but did not open until June 1986.<sup>30</sup> NCO schools provided only officer two-year secondary professional programs/diplomas (中专学历) and three-year post-secondary educational programs/diplomas (大专学历). NCO schools have not had and most likely will not have any bachelor's degree programs.

Of note, concerning NCOs, the PLA did not use the characters shiguan (士官), which is best translated as noncommissioned officer (NCO) but is also translated as sergeant for the Army, Navy, and Air Force or petty officer for the Navy, until 1988.<sup>31</sup> The 1988 "Regulations of the Chinese People's Liberation Army on the Active-Duty Service of Enlisted Personnel" (中国人民解放军现役士兵服役条例) established the system of preferential treatment for both conscripts and volunteer soldiers, and contained stipulations governing their work arrangements following demobilization.<sup>32</sup> These regulations also reestablished the system of grades and ranks for the enlisted force. Soldiers serving as volunteers in the PLA became known as noncommissioned officers (士官)<sup>33</sup> and were accorded the rank of either sergeant (军士) or specialist sergeant (专业军士).<sup>34</sup>

Given that many academic institutions were abolished during the Cultural Revolution, from 1966 until at least 1980, a high proportion of officers received direct promotions as an officer from within the enlisted force based on political reliability rather than operational capabilities.<sup>35</sup> According to official PLA publications, prior to being selected, enlisted personnel who received these direct promotions averaged one to three years of service. In addition, "intellectuals," "technical officers," and anyone with a college education were looked down on. This was especially true for the PLA AF, which was considered a technical service. Under Deng Xiaoping's guidance, the situation gradually began to change during the early 1980s. For example, during an interview in 1985, PLA AF commander Zhang Tingfa, who was a career political officer, discussed changes by saying, "People throughout our country are talking about respecting knowledge and talented people and taking loving care of intellectuals. So is the PLA AF, because knowledge and talented people are indispensable for the modernization of our troops." The PLA ceased the direct promotion system in 1980, when it began requiring all officers to receive education at one of the PLA's academic institutions, which included either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program or a four-year bachelor's degree. A high proportion of those officers still came from outstanding enlisted personnel, but they had to attend an academic institution before they received their officer promotion.

In response to new operational concepts in the 1980s, the senior PLA AF leadership joined other services in placing a greater emphasis on officer training and education.<sup>36</sup> Qualitative improvements were introduced for academic education, flight training, combined arms training, and joint exercise training. Academic excellence was

increasingly stressed in the PLAAF, as it was throughout the military. To support this objective, the PLAAF, like the rest of the PLA, closed some schools to consolidate resources and upgraded many schools into academies/colleges around 1986. For the first time, new pilots were expected to graduate from PLAAF academies with college-level degrees. For example:

- From 1987 through July 2013, the PLAAF had recruited a total of 32,000 cadets, which appears to include all categories.<sup>37</sup> In terms of academic degrees, the PLAAF did not begin bachelor's degree programs for non-aviation cadets until 1982.<sup>38</sup> The first PLAAF pilots to receive a bachelor's degree was in 1987.<sup>39</sup> Seven PLAAF academies/colleges also began master's degree programs in 1985 in technical fields, and the PLAAF began programs for doctoral degrees in 1992.<sup>40</sup>
- The Naval Submarine Academy was granted the right to issue bachelor's degrees in 1985 but did not start recruiting students until 1987.<sup>41</sup> It was also granted the right to issue master's degrees in 1989.
- In addition, the Second Artillery Engineering Academy/College was given the right to issue masters and Ph.D. degrees in 1986 and 1993, respectively.<sup>42</sup>

It appears that the first Post-doctoral research stations (博士后流动站) were established around 1990 and were created at multiple institutions through the 1990s and into the early 2000s.<sup>43</sup>

#### TYPES OF MILITARY ACADEMIC INSTITUTIONS

Since the June 2017 reorganization into 37 academic institutions, there has been a consistent list of the academic institutions in the education and training system (教育训练系统) in multiple official PLA reports. The institutions are almost always listed in the same protocol order based on their subordination – CMC, Army, Navy, Air Force, Rocket Force, and Strategic Support Force. The official English name is oftentimes found on the institution's official website, the name of a journal, a published paper, a uniform patch (shown below), a PLA encyclopedia or dictionary, a Ministry of National Defense (Chinamil.com) media article, or even at the entry gate to the institution, as shown below for the PLA Strategic Support Force's Information Engineering University.<sup>44</sup> However, the PLA is not always consistent. For example, some websites have one English name on the frontpage banner and use a different name in the "About" tab.





One of the biggest challenges for this project is how to translate the four terms *yuanxiao* (院校), *xuexiao* (学校), *xueyuan* (学院), and *daxue* (大学), because the PLA is not consistent as shown below. For example, the PLA's *Dictionary of Modern Military Education* (sic) (现代军校教育辞典)<sup>45</sup> and *PLA Military History* (中国人民解放军军史)<sup>46</sup> do not have a single entry for any of the three terms; however, specific institutions with these terms are translated as shown in the bullets below. In general, the problem is not the Chinese term but the English translation, which sometimes uses British English instead of American English, such as “defence” versus “defense.” The best place to find the “official” English name is the institutions’ website; however, not every institution has its own website, and many of those that do have one do not have an English translation. Even though several PLA dictionaries and encyclopedias have entries for some or all of the institutions, there is oftentimes a lack of consistency in the translation. One good source is China National Knowledge Infrastructure (CNKI) database; however, even articles in CNKI are not necessarily consistent or accurate. For example, *gongcheng xueyuan* (工程学院) has been noted as the College of Engineering, Engineering Academy, Institute of Engineering, and School of Engineering. Therefore, do not necessarily take any of these as the official name. As a result, you will have to make a decision on which one to use based on all of the sources you have.

- *Yuanxiao*: This is the generic term for all of the military’s education organizations. It is often translated as universities and colleges, universities and schools, colleges and schools, or academies and schools, etc.<sup>47</sup> However, this report uses “academic institutions,” as the term encompasses the following three types or institutions.
- *Xuexiao*: In the mid-1980s, the PLA upgraded all of its existing officer *xuexiao* to *xueyuan*. Since 1986, this term only refers to NCO schools, such that the only remaining *xuexiao* today are the three standalone noncommissioned officer (NCO) schools (士官学校)— Naval, Air Force, and Rocket Force— and several NCO schools that are either subordinate to an officer university or *xueyuan*, such as the Air Force Aviation Maintenance NCO School that is subordinate to the Air Force Engineering University and the Air Force Radar NCO School that is subordinate to the Early Warning College. However, the PLAAF translates the name for 空军大连通信士官学校 as Air Force Communication NCO Academy.<sup>48</sup> In addition, as noted later, the PLA sometimes translates the term *xi* (系) as school, even though it is an academic department. Each NCO school specializes in only a few areas, such as the Air Force’s Communications NCO School and the Army’s Wuhan Ordnance NCO School, and offers only Secondary professional programs/diplomas and Post-secondary educational programs/diplomas, not bachelor’s degrees.
- *Xueyuan*: This is the most complicated term, because the PLA translates it as academy, college, and institute.<sup>49</sup> In some cases, the PLA also translates it as university.<sup>50</sup> Two official PLA publications will also translate the same name as college in one and as academy in the other.<sup>51</sup> In addition, the PLA often changes the English name. For example, the PLAAF officially called its three flight *xueyuan* as colleges until 2014 and then changed the English name to academy.<sup>52</sup> Although the majority of officer academic institutions during the 1950s to 1986 were schools, some of them were academies/colleges, such as the Xi’an Political College

(西安政治学院), which was created in 1952.<sup>53</sup> As a general rule, a *xueyuan* is smaller than a university. It can be a standalone institution or can be subordinate to a university. It is also larger than an NCO school, but can often have a subordinate NCO school. Therefore, for purposes of this report, the term college or academy will be used based on either an official English name or a best guess.

- *Daxue*: As a general rule, the term *daxue* is translated as university.<sup>54</sup> In some cases, the PLA also translates it as college.<sup>55</sup> Also, as a general rule, these institutions are called *daxue* because they are the largest institutions and have subordinate *xueyuan* and, in some cases, an NCO school. The use of the term *daxue* goes back to the 1950s, such as the 1<sup>st</sup> Military Medical University (第一军医大学), which was created in 1952 under the General Logistics Department's predecessor the General Rear Area Department (总后方勤务部).<sup>56</sup>

#### DIFFERENCES BETWEEN UNIVERSITIES (*DAXUE*), COLLEGES/ACADEMIES (*XUEYUAN*), AND SCHOOLS (*XUEXIAO*)

Besides the size differences noted above, in terms of organizational structure, the biggest differences between a PLA university, College/Academy, and school are shown below. Each of the components will be discussed in detail later.

- Universities
  - Command staff (commandant, political commissar, and deputies)
  - Administrative and functional departments
  - Possible subordinate Graduate School
  - Subordinate colleges/academies and possible subordinate NCO school
    - Command staff
    - Administrative and functional departments
    - Academic departments
    - Key labs
- Colleges/Academies
  - Command staff
  - Administrative and functional departments
  - Academic departments
  - Possible subordinate Graduate School
  - Possible subordinate NCO school
  - Key labs
- NCO Schools
  - Command staff
  - Administrative and functional departments
  - Academic departments

#### COMPREHENSIVE UNIVERSITIES

In 1999, the Central Military Commission (CMC / 中央军委) 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. No good definition was found for a comprehensive university, but the PLA Navy discusses its program as one that provides senior technical, bachelor's, master's, and doctoral degrees in a wide variety of technology and engineering areas. The five universities, each of which has several subordinate *xueyuan*, are:<sup>57</sup>

- National University of Defense Technology (NUDT / 国防科学技术大学) subordinate to the CMC
- PLA Information Engineering University (PLAIEU / 解放军信息工程大学) subordinate to the former General Staff Department



- PLA Science and Engineering University (PLAUST / 解放军理工学院) subordinate to the former General Staff Department
- Naval Engineering University (NAE / 海军工程大学) subordinate to the PLA Navy
- Air Force Engineering University (AFEU / 空军工程大学) subordinate to the PLA Air Force.

Because the comprehensive universities were created by merging existing *xueyuan* and sometimes creating new *xueyuan*, each university had several compounds or areas (院区). For example, NUDT had the following compounds:<sup>58</sup>

- Compound 1 (一号院), which is also known as the base compound (本院), is located in the city and houses third- and fourth-year students, as well as graduate (研究生) and doctoral students (博士生). It houses the following five colleges: 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 7<sup>th</sup>.
- Compound 2 (二号院) previously housed the College of Artillery, but currently houses the College of Computer (6<sup>th</sup> College).
- Compound 3 (三号院) is located in the suburbs. It previously housed the Engineering Troop College, but now houses first-, second-, and third-year students, as well as the College of Mechatronic Engineering and Automation (3<sup>rd</sup> College).
- Compound 4 (四号院) is located in an urban area and houses third- and fourth-year students who attend the 8<sup>th</sup> College (College of Humanities and Social Sciences). Compound 4 previously housed the Artillery Troop College (炮兵学院); however, it was abolished during the early 2000s and the College of Basic Education of Commanding Officers (9<sup>th</sup> College) now occupies that compound. The compound also previously housed the Political College (政治学院), but it was merged into the College of Humanities and Social Sciences, which also assumed responsibility for teaching English.<sup>59</sup>

When the reorganization to 37 academic institutions took place in June 2017, the PLA retained five comprehensive universities but they are now the institutions shown below.<sup>60</sup> Although no information was found concerning the numbered campuses, the same system most likely still exists.

- National University of Defense Technology (NUDT / 国防科学技术大学) subordinate to the CMC
- Army Engineering University (陆军工程大学) subordinate to the PLA Army
- Naval Engineering University (NAE / 海军工程大学) subordinate to the PLA Navy
- Air Force Engineering University (AFEU / 空军工程大学) subordinate to the PLA Air Force
- PLA Information Engineering University (解放军信息工程大学) subordinate to the PLA Strategic Support Force

#### PLA CONFERENCES OF PLA MILITARY EDUCATIONAL INSTITUTIONS

Since 1950, the PLA has held 16 Conferences of PLA Military Educational Institutions (全军院校会议), which implemented major reforms to the entire PLA academic structure.<sup>61</sup> Most recently, the 16<sup>th</sup> Conference was held in July 2011, during Hu Jintao's tenure as CMC Chairman. Table 3 below shows the conferences and the number of academic institutions represented (Note: for the 4<sup>th</sup> Conference, only 15 institutions that were directly subordinate to the CMC were represented) and the number of representatives. The number of academic institutions includes both PLA and People's Armed Police (PAP) institutions as well as both officer and NCO institutions. Of note, there has yet to be a conference held under Xi Jinping, even though major changes to the military academic structure occurred in 2017. As noted in the report, the conferences often implemented new policies based on guidance from the CCP Party Congress. No single organization was in charge of all of the conferences, but senior leaders from the General Staff Department either chaired the conferences or were keynote speakers. Other keynote speakers included senior leaders from the General Political Department, General Logistics Department, and General Armament Department. Each conference issued guidance for the future. For example, the 16<sup>th</sup> Conference issued "Military Academic Institution Education Reforms and Development Plan Guidance 2011-2020" (军队院校教育改革和发展规划纲要 2011-2020).<sup>62</sup>



**Table 3: Conferences of PLA Military Educational Institutions: 1950-2011**

Number	Date	Academic Institutions Represented	Representatives
1 <sup>st</sup>	Nov 1950	33	70
2 <sup>nd</sup>	Sep 1951	34	150
3 <sup>rd</sup>	Jan 1953	93	123
4 <sup>th</sup>	Mar 1954	15 (CMC)	115
5 <sup>th</sup>	Feb 1955	(Unknown)	131
6 <sup>th</sup>	Apr 1956	126	248
7 <sup>th</sup>	Dec 1957	109	284
8 <sup>th</sup>	Aug 1960	139	313
9 <sup>th</sup>	Oct 1961	134	211
10 <sup>th</sup>	Oct 1964	(Unknown)	558
11 <sup>th</sup>	Oct 1980	118	451
12 <sup>th</sup>	Feb 1983	117	353
13 <sup>th</sup>	Feb 1986	(Unknown)	460
14 <sup>th</sup>	Jun 1999	(Unknown)	322
15 <sup>th</sup>	Nov 2003	71	(Unknown)
16 <sup>th</sup>	Jul 2011	68	300

#### ACADEMIC EDUCATION AND PROFESSIONAL EDUCATION INSTITUTIONS

During the 14<sup>th</sup> Conference of PLA Military Educational Institutions (第十四次全军院校会议) in June 1999, the decision was made to separate academic and professional education and to switch from academic education (学历教育) as the primary (为主) to having professional education (任职教育) as the primary. As such, the education focus (教育重心) was shifted from engineering and technology (工程技术) to education for command and staff officers (指挥与参谋军官培养). During the 15<sup>th</sup> Conference of PLA Military Educational Institutions (第十五次全军院校会议) in November 2003, the decision was made to change the organizational structure of the PLA's academic institutions by creating two types (类) with professional education institutions as the main form (主体).<sup>63</sup> The implication is that academic institutions were the second form.

According to the Modern Military Academic Institution Education Dictionary, academic education institutions are responsible for providing bachelor's degrees to new officers (生长军官本科学历教育). At the same time, they are responsible for providing graduate student education (研究生教育). Professional education institutions are responsible for providing professional military education (PME / 培训) for billets for all categories of officers and NCOs (各级各类军官和士官岗位任职培训).<sup>64</sup>

Prior to July 2011, the PLA categorized its existing 67 academic institutions by subordination into eight responsible units (主管单位), each of which is, in turn, organized into two categories—academic education institutions and professional education institutions—as shown in Table 4 below (See Appendix C for the full list):

**Table 4: The PLA's 67 Academic Institutions**

Responsible Unit	Academic Education Institutions	Professional Education Institutions
CMC (2)	1	1
General Staff Department (18)	6	12
General Political Department (3)	0	3
General Logistics Department (9)	6	3
General Armament Department (5)	2	3
Navy (8)	3	5
Air Force (15)	3	12
Second Artillery (3)	1	2
Military Regions (4)	0	4
Total (67)	22	45

In the list of 67 institutions, only the primary academic institution is identified. For example, the Air Force Engineering University was formed in 1999 by combining three existing *xueyuan* (Aero-Engineering, Surface-to-Air Missiles, and Telecommunications Engineering) and creating a new Science *Xueyuan*, but they are counted as only one institution. The number also included the PLA's six standalone NCO schools that existed at that time. [Note: At that time, at least 29 officer academic institutions incorporated NCO programs that offered secondary professional programs/diplomas (中专) and/or post-secondary educational programs/diplomas (大专).]

#### OFFICER (CADRE) CAREER TRACKS<sup>65</sup>

All PLA officers serve in one of the following five career tracks for what it calls active duty officers (现役军官). Note: The PLA does not have Air Force Specialty Codes (AFSC) like the USAF or Military Operations Specialties (MOS) like the US Army, Navy, and Marine Corps. Each PLA billet has a name but not a number. The PLA also has civilian cadre / *wenzhi ganbu* (文职干部) who can be categorized as special technical civilian cadre (专业技术文职干部) and non-special technical civilian cadre (非专业技术文职干部).

- Military officer (军事军官) track: Military officers serve as unit commanders, deputy commanders, and staff officers in the Headquarters Department. They are responsible for operations, intelligence, training, unit organizational structure, enlisted force records, and communications. All pilots are also designated as military officers.
- Political officer (政治军官) track: Political officers serve as unit political commissars, deputy political commissars, and staff officers in the Political Department. They are responsible for conducting political work, which includes officer personnel records, propaganda, security, cultural activities, civil-military relations, Party discipline, and Party organizations. Most political officers begin their career in the military track and become a political officer at the company level.
- Logistics officer (后勤军官) track: Logistics officers serve as the director, deputy director, and staff officers in the unit's Logistics Department. They are responsible for managing logistics support, which includes overseeing transportation, finances, materials and supplies, POL, housing, airfields, and medical care.
- Equipment officer (装备军官) track: Equipment officers serve as the director, deputy director, and staff officers in the unit's Equipment Department. They are responsible for managing the development, acquisition, maintenance, and repair of all equipment and weapon systems. They also serve as representatives in civilian factories that produce aviation systems and equipment.
- Technical officer (技术军官) track: Technical officers serve primarily as engineers, weapon systems and equipment maintenance and repair officers, computer technicians, academics, and doctors. A high percentage of civilian college graduates who join the PLA as officers serve in this track.

Officers within each of the military, political, logistics, and equipment officer career tracks who serve in leadership positions, such as a department, bureau, division, or office director or deputy director are further identified as commanding officers / cadre (指挥官 / 指挥干部).

#### COMMANDING OFFICER

According to interviews, any officer, regardless of which of the five tracks they belong to or whether they are a civilian cadre, who occupies one of the following billets (岗位) is considered a commanding officer / cadre (指挥官 / 指挥干部). As with everything in the PLA, however, there are exceptions to the rule.

- Commander, unit commander, director, commandant (司令员, X长, 主任, 所长) [Note: X = corps, division, brigade, regiment, battalion, company, platoon, etc.]
- Political commissar, political instructor, political director (政委, 教导员, 指导员)
- Deputy commander, director, commandant (副司令员, 副X长, 副主任, 副所长)
- Deputy political commissar, political instructor, political director (副政委, 副教导员, 副指导员)
- Anyone who holds a leadership (领导) billet in an administrative or functional department (机关 / 部门) at any level within the organizational structure
  - Department director and deputy director (部长, 副部长)
  - Bureau director and deputy director (局长, 副局长)
  - Division director and deputy director (处长, 副处长)
  - Office director and deputy director (科长, 副科长)
  - Branch director and deputy director (股长, 副股长)

In the PLA, commanding officers who hold one of the billets above can have a lower grade than special technical officers or civilian cadre who work for that officer. For example, according to the interviews, senior ranking special technical maintenance officers in the PLAAF, such as a lieutenant colonel, colonel, or senior colonel shown at the right, can work for a captain who is a repair shop (company leader grade organization) commanding officer.



In addition, PLAAF, Naval Aviation, and Army Aviation pilots who are military track officers with the grade of regiment deputy leader and regiment leader and who have no additional duties are subordinate to a flight squadron (company leader grade) or flight group (battalion leader grade) officer. Non-commanding pilots are called “regular pilots” (普通飞行员).

#### COMMAND TRACK OFFICER EDUCATION AND TRAINING

Although the PLA has focused on providing education and training for its support/technical officers, it had reportedly fallen behind during the 2000s in educating its command track officers.<sup>66</sup> Specifically, starting in 1986 when the officer schools were upgraded to colleges/academies and bachelors’ degrees were awarded, command track officers received four years of education and all received a bachelor’s degree, which focused on education and theory; however, they did not receive professional education for their specialty, nor did they have any science and/or engineering background, which would allow them to take command of a platoon upon graduation. As a result, since the early 2010s, all command track officers are now enrolled in what the PLA calls the “4+1” program and is also identified as “combined academic education with separate professional training” (学历教育合训, 任职培训分流). What this means is that at least some command track officers are supposed to receive a bachelor’s degree at their original academic institution and then attend one more year of professional education/training at a command college and receive a second bachelor’s degree before being assigned to their operational unit as a platoon commander (排长). Upon graduation from the command college, they are called double-bachelor’s (双学士) officers. It is not clear, however, if all command track officers actually attend a command college for one year upon graduation from their

primary academic institution. For example, most officers who complete their four years of undergraduate education and training are assigned directly to their operational unit, where they are considered on probation (见习) for their first year. The exceptions include all new officers who are assigned to remote areas or Air Force pilots who attend one of the three flight academies upon graduating from the Air Force Aviation University.

Regardless of their specialty or where they attended their cadet education and training, commanding officers attend their service’s Command College for mid-level and senior-level education; however, unlike the U.S. Military, they do not receive a master’s degree. They only receive a certificate. See the relevant profiles.

### MINISTRY OF EDUCATION CODES

The Ministry of Education (MOE / 教育部) assigns two types of codes to all civilian and military academic institutions. Concerning the first type, during the early 2000s, the MOE created the National Code List for Institutions that Award Degrees (全国各学位授予单位代码) as a foundation to assign a five-digit code (单位代码) to most, but not all, civilian and military degree awarding academic and research institutions. Each academic institution is assigned a five-digit code and an official Chinese name. Unfortunately, no official English names have been assigned. See Appendix C for an overview of the codes that were assigned in 2008 and were changed in 2017.

The second type of code, which is organized into two-, four-, and six-digit codes, is assigned to degree specialties. The two-digit subject specialty code (学科专业代码) has numbers from 01 to 13 and an official name (学科专业名称) for each number that are organized into the following 13 categories and are applicable to all civilian and military college-level academic institutions. Table 5 below provides a list of the 13 two-digit general categories. See Appendix D for a full list of the codes.

**Table 5: MOE 2-Digit Subject Specialty Codes**

Code	Chinese Name	English Name
01	哲学	Philosophy
02	经济学	Economics
03	法学	Law
04	教育学	Education
05	文学	Literature
06	历史学	History
07	理学	Science
08	工学	Engineering
09	农学	Agronomy
10	医学	Medicine
11	军事学	Military Science
12	管理学	Management
13	艺术学	Art

### OFFICIAL CHINESE AND ENGLISH NAMES AND WEBSITES

The best place to look for the official Chinese and English name for an academic institution is on the institution’s official website. However, not every academic institution has a website. In some cases, a university will have a website but its subordinate *xueyuan* do not. For example, the Air Force Engineering University (AFEU), which was formed in 1999, has its own website ([www.afeu.cn](http://www.afeu.cn)), but none of its subordinate *xueyuan* (Natural Science, Engineering, Telecommunications Engineering, and Missile) has its own website.

As shown in Figure 1, for those institutions that do have a website, the official Chinese and sometimes the official English name is shown along with a logo at the top of the page. Furthermore, for those institutions that

have an official website, some, but not all, have a tab that takes you to an English version. Unfortunately, the English version usually does not have all of the information that is on the Chinese version and sometimes contradicts the Chinese information. In addition, the official English name is not always consistent in each part of the website.

Figure 1: National University of Defense Technology (NUDT) Website



Finding an official English name becomes even more difficult for the subordinate *xueyuan* in a university and the subordinate academic departments.

Depending on the institution, it can use several combinations of characters. For example, the National University of Defense Technology has the following three combinations of characters. As a result, you need to do searches using each combination.

- Guofang Kexue Jishu Daxue (国防科学技术大学)
- Guofang Keji Daxue (国防科技大学)
- Guofang Keda (国防科大)

#### ACADEMIC INSTITUTION ACRONYMS

It appears that some, but not all, academic institutions have an official acronym. Most official acronyms are based on the English name, such as NUDT for the National University of Defense Technology. It appears, however, that a few acronyms are based on the Pinyin version of the institution. For example, PBGC (*paobing gongcheng* / 炮兵工程) was noted for Second Artillery Engineering Academy (第二炮兵工程学院), but this does not appear to be used that often.<sup>67</sup> In many cases, no acronym has been found, such as for the Naval Submarine Academy (海军潜艇学院).

In most cases, the acronym is part of the website, such as [www.nudt.edu.cn/](http://www.nudt.edu.cn/). In some cases, an institution may have more than one acronym that uses the English and/or Chinese name. For example, the Air Force Engineering University is usually identified as AFEU, but it also uses KJGC for *Kongjun Gongcheng* (空军工程). In some cases, however, the acronym does not match the website. For example, the acronym for the Naval Engineering University



(海军工程大学) is NAE, which stands for Naval Academy of Engineering (海军工程学院). The reason for this is that the university was upgraded from an academy (*xueyuan*) in 1999 but kept the old acronym. In addition, NAE had an official website, [www.nae.edu.cn/](http://www.nae.edu.cn/), but it disappeared off the web in mid-2010.

You should not rely on information in CNKI for the official name in English or the acronym, as they are inconsistent and not necessarily accurate, especially if no official English name exists.

If you cannot find an official English name for an institution and use a direct translation in your report, and/or if you cannot find an official acronym and make one up yourself, be sure that you state this in a footnote.

As shown in Figure 2 below, one of the most obvious examples of inconsistent Chinese names and acronyms can be found for the Ministry of National Defense, which can be found translated as Ministry of Defense and Defense Ministry and uses the acronyms MND and MOD.

Figure 2: Inconsistent Names



## Defense Ministry's Regular Press Conference on January 25

**Senior Colonel Wu Qian:** Dear friends from the press, good afternoon! Welcome to the first regular press conference in the year of 2018 of the Ministry of National Defense (MND) of the People's Republic of China (PRC). Hereby I'd like to welcome my colleagues from the Central Committee of the Communist Party of China (CPC) and Departments of the State Council.

### PROTOCOL ORDER

As with everything in the PLA, the PLA's academic institutions apparently have a protocol order, which appear to match the MOE list of institutions shown in Appendix C.

In addition to the protocol order for the academic institutions, the people and organizations within each institution are almost always listed in protocol order. This is extremely helpful, as discussed below, in finding the link between the name and number assigned to institutions and academic departments.

### ORGANIZATIONAL GRADE STRUCTURE

Every academic institution has a grade (职务等级) assigned to it, which is the same grade as the commandant (院长) and political commissar (政委). In 2003, the CMC determined that all military academic institutions would have one of five grades: Military Region (MR) leader (正大军区职) that became theater command leader (正大战区职) in 2016, MR deputy leader (副大军区职) that became theater command deputy leader (副大战区职) in 2016, corps leader (正军职), corps deputy leader (副军职), or division leader (正师职).<sup>68</sup> Until March 2018, the National Defense University was the only MR/TC leader grade organization and the National University of Defense Technology was the only MR/TC deputy leader institutions; however, in March 2018, both of them were downgraded one grade and are the only academic institutions in those grades.<sup>69</sup> With the exception of the three remaining NCO

school, which are division leader-grade organizations, the remaining 32 are either corps leader or corps deputy leader-grade organizations. See Appendix C that shows the grade for each institution.

In addition, each subordinate *xueyuan*, administrative and functional department, academic department, laboratory, and student team has a grade assigned. Finally, every officer and civilian cadre billet has a grade assigned. Civilian cadre are NOT assigned military ranks (军衔), but are assigned one of up to 14 levels (级) according to whether they are non-specialized technical or specialized technical personnel. Specialized technical civilian cadre may be assigned levels from the lowest (14) to the highest (1). Non-specialized technical civilian cadre are assigned levels equating from 14 to 3, but use names similar to the civilian cadre grade structure (up to bureau level, equivalent to division level) and then corps deputy, corps leader, and MR deputy leader for the most senior non-specialized technical civilian cadre. These levels *correspond/are equivalent* to the grade (职务等级) system for military (operational), political, logistics, and equipment officers. Civilian cadre are also assigned one of ten levels (级别) (in this case the words “grade” or “rank” are not appropriate, but could be called “level” or “step”) for pay purposes, but these distinctions are not visible by their epaulets or ribbons.

#### MILITARY UNIT COVER DESIGNATORS (MUCDs)

Every PLA platoon and above operational unit (*budui*; 部队 and *fendui*; 分队) has a true unit designator (部队番号), such as the PLAAF’s 36<sup>th</sup> Air (Bomber) Division. However, the PLA rarely reveals the true unit designators publicly in the media or on official letterhead. Rather, it either vaguely refers to a unit as a “certain unit” (某部队) or refers to it by a five-digit “unit designator code” (部队代号) assigned to corps-, division-, brigade-, and regiment-level organizations. English-language sources refer to the “unit code designator” as a Military Unit Cover Designator or MUCD. The former PLA General Staff Department’s Military Affairs Department (总参谋部军务部) was responsible for assigning the numbers; however, it is not clear if a second-level department under the new CMC Joint Staff Department or the first-level CMC Training and Administration Department is responsible for this. For example, the MUCD for the 36<sup>th</sup> Air (Bomber) Division is 94028 (94028部队).

Grassroots combat and support organizations (battalion, company, and platoon) below the regiment level are not assigned MUCDs; however, they are assigned a one-, two- to three-digit *fendui* number that follows the MUCD number for their regiment and/or above headquarters organization.<sup>70</sup> For example:

- 66311部队1分队
- 65583部队80分队
- 77625部队102分队

In addition, every vessel in the PLA Navy is assigned a grade, such as regiment leader-grade for destroyers, but only those vessels with the grade of regiment leader and above are assigned an MUCD. For example, the MUCD for the North Sea Fleet’s Destroyer 107 (Yinchuan) is 92132.

Whereas all military academic institutions including the current three NCO schools appear to have codes assigned to them by the Ministry of Education, the exact opposite is true for MUCDS. In this case, it appears that no military academic institutions except for the PLAAF’s three flight academies are assigned an MUCD. The reason that the three flight academies have MUCDs is because they are organized like and treated as operational units. Other military organizations that do not appear to have MUCDs include the service headquarters, military region headquarters, military region air force (MRAF) headquarters, naval fleet headquarters, research institutes, hospitals, and factories. The reason that they do not have MUCDs is because they are NOT considered units (部队).

#### CLASS YEAR IDENTIFICATION

All new cadets are identified by the year they enter their education and training, not the year they graduate. They use one of two designators, such as 11级 or 2011级 for cadets beginning in 2011. In addition, officers who

attend a military academic institution include their cadet time as part of their total time in service. Therefore, a profile of someone who has 20 years in the service includes his cadet time. Keep in mind that not all older officers attended an academic institution for four years.

#### LEADERSHIP

Universities, *xueyuan*, and schools have the following leaders. Note that the commandant and political commissar often have different ranks, which differ by one rank, such as colonel and senior colonel or senior colonel and major general. Although they may have different ranks, they always have the same grade, which is the same grade as the institution.

- Commandant: University and school commandant are identified as a *xiaozhang* (校长), and *xueyuan* commandant, including *xueyuan* subordinate to a university, are identified as *yuanzhang* (院长). Note that the 2011 *Dictionary of Modern Military Education* translates *yuanzhang* as dean; however, most Western publication use commandant.<sup>71</sup>
- Political commissar (PC): The PC for all academic institutions, including *xueyuan* subordinate to a university, is identified as the *zhengzhi weiyuan* (政治委员) or simply the *zhengwei* (政委)
- Deputy commandants: Depending on the type of institution, they are identified as *fuxiaozhang* (副校长) or *fuyuanzhang* (副院长). Depending on the institution's level, there are usually 2-3 deputy commandants, each with different responsibilities.
- Deputy political commissars: The deputy PCs are identified as *fuzhengwei* (副政委). Depending on the institution's level, there are usually 1-2 deputy PCs.
- Professors (教授) and associate professors (副教授): Every academic institution has professors and associate professors, some of whom are also considered graduate degree advisors (导师).
- Academicians (院士) and Distinguished Professors (特聘教授): Several of the academic institutions have one or two academicians from the Chinese Academy of Engineering (中国工程院) and/or the Chinese Academy of Sciences (中国科学院), who serve as advisors and faculty members. Some institutions also have one or two of Changjiang Scholar Distinguished Professors (“长江学者”特聘教授).

#### PARTY COMMITTEES

Each academic institution has a Party committee (党委) with a standing committee (常委). The political commissar is usually the secretary (书记), and the commandant is the deputy secretary (副书记). The standing committee usually consists of the political commissar, commandant, director of each of the administrative and functional departments, as well as the deputy commandants and deputy political commissars.

Each subordinate *xueyuan* within a university also has its own Party committee and standing committee, whose members mirror those on the university's Party committee. Each of the members of the *xueyuan*'s Party committee is also a member of the university's Party committee.

Each academic department, in turn, has its own Party committee and standing committee, and its members are members of the *xueyuan*'s Party committee. Because academic departments do not have a political commissar, the director usually serves as the secretary and one of the deputy directors serves as the deputy secretary.

#### ADMINISTRATIVE AND FUNCTIONAL DEPARTMENTS

Until the PLA reorganization that began in 2016, military academic institutions had at least the following three administrative (行政) and functional (业务) departments (机关/ 部门), which are always listed in protocol order:<sup>72</sup>

- Training Department (训练部): The Training Department served the same purpose as a Headquarters Department in other organizations. It is also responsible for all policy issues as well as managing all training matters. Every university has a Training Department, and most, but not all, of its subordinate *xueyuan* have their own Training Department. Each Training Department has various subordinate organizations, such as:

- o Communications Station (通信站)
- o Cooperation/Coordination Center (协作中心)
- o Education Technology Center (教育技术中心)
- o Information Center (信息中心)
- o National Security and Military Strategy Research Center (国家安全与军事战略研究中心)
- o Policy Research Lab (政策研究室)
- o Strategy Simulation Teaching and Research Lab (战略模拟教研室)
- o Teaching/Education Services Division (教务处)
- o Teaching/Education Support Division (教保处)
- o Virtual Simulation Research Academic Department (虚拟仿真研究系)
- Political Department (政治部): The Political Department was organized the same as all other PLA Political Departments and serves the same functions. Every university has a Political Department, and most, but not all, of its subordinate *xueyuan* have their own Political Department.
- *Xueyuan*/School Affairs (院务部 or 校务部): It is not clear what the *Xueyuan*/School Affairs Department was responsible for, but it was most likely in charge of managing the facilities and logistics issues for all academic institutions, including universities, standalone *xueyuan*, and NCO schools. While every university had this department, some, but not all, of their subordinate *xueyuan* had their own department as well.

However, based on interviews with separate visiting delegations from the PLAAF's Command College and PLA National Defense University in 2018, as well as an authoritative PLA book, this structure has now changed as shown below:

- National Defense University has the following five administrative and functional departments, each of which is corps leader grade (正军职)<sup>73</sup>
  - o General Office (办公室)
  - o Education and Training Department (教育训练部)
  - o Scientific Research Department (科研部)
  - o Political Work Department (政治工作部)
  - o Management/Administration Support Department (管理保障部)

Concerning the PLAAF Command College, based on the organization changes that began when the PLA as a whole implemented a major reorganization in early 2016.<sup>74</sup> The Command College is a corps leader-grade organization, which is the same grade for the commandant and political commissar. Its deputy commandants and deputy political commissar are corps deputy grade officers. The Command College's previous administrative and functional structure consisted of four major departments – Training Department (训练部) (which served as the Headquarters Department, Political Department (政治部), College Affairs Department (院务部) (which managed all facilities), and the Military Science Research Department (军事科学部)—as well as a General Office (办公室). Each of those organizations was a division leader-grade organization. The new structure, however, consists of the what the PLA calls the “seven divisions and one office” (七处一办) as shown below in protocol order, all of which are also division leader-grade organizations:

- General Office (办公室)
- Teaching Affairs Division (教务处)
- Teaching and Support Division (教育保障处 / 教保处)
- Scientific Research Academic Division (科研学术处)
- Political Work Division (政治工作处)
- Discipline Inspection and Supervision Division (纪检监察处)
- Security Management/Administration Division (安全管理处)
- Supply Support Division (供应保障处)



Based on the interview and the PLA book, the new structure applies to all PLAAF academic institutions except the three flight academies, which are organized like an operational unit and have a Staff Department, Political Work Department, and Support Department.<sup>75</sup> As noted earlier, each flight academy also has an MUCD. Prior to the 2011 reorganization of the flight academies, each flight academy was a division leader grade organization with subordinate training regiments. Under the new structure, each flight academy is a corps deputy leader grade organization with subordinate training brigades. Rather than academic departments, each flight academy has a subordinate basic trainer aircraft brigade for the third-year students and one or more advanced trainer aircraft brigades for the fourth-year students.

Depending on the institution's mission and curriculum, it also has a Scientific Research Department (科研部), which is responsible for overseeing all of the institution's technical training curricula and systems research work.<sup>76</sup> The Scientific Research Department also has subordinate classrooms and laboratories, where personnel from the department provide training to the cadets. For example, the National University of Defense Technology's Scientific Research Department has a Weapons and Equipment Development Research Center (武器装备发展研究中心).

The Graduate School (研究生院) is also considered an administrative and functional organization but not a department. It provides overall guidance for the graduate programs in each subordinate college. It does not have any students assigned to it. It is a corps deputy-leader grade organization.

Each university most likely has all of the above departments. Depending on their size, specialty, and location, each of the university's subordinate *xueyuan* has some, but not all, of the departments. *Xueyuan* not subordinate to a university have most likely also changed their administrative and functional structure to match that of the university or a standalone *xueyuan* similar to the PLAAF Command College.

#### ACADEMIC DEPARTMENTS AND SPECIALTIES

Each institution has several academic departments (*xi*/系) and associated specialties (*zhuan ye*/专业), which prepare graduates to assume their operational duties. For example, the Air Force Engineering University's Air and Missile Defense College (空军工程大学防空反导学院) has six academic departments—Command Engineering, Computer Engineering, Electro-Mechanical Engineering, Radar Engineering, Guided Missile Engineering, and Systems Engineering—and 12 academic specialties. The subordinate departments and specialties are usually listed in protocol order in books, media articles, and on the web.

One of the problems encountered, however, is that the PLA also tends to translate the term *xi* as a school. In particular, the PLA Medical Universities each have a Nursing Department (护理系), which they translate as Nursing School.<sup>77</sup>

The Basic Department (基础部) is considered an academic department not an administrative and functional department. It is responsible for providing instruction in certain required basic education courses that all undergraduates must take regardless of their specialty. In some cases, however, the Basic Department no longer exists. For example, NUDT's Basic Department was replaced by a computer center (计算机中心), which is also responsible for the university's library. It is a corps deputy-leader grade organization.

#### ORGANIZATION NAMES AND NUMBER DESIGNATORS

Depending on the institution, at least some, but not necessarily all, of the subordinate organizations, including *xueyuan* and academic departments, are assigned a name and a number designator, such as NUDT's College of Aerospace and Materials Engineering is also identified as the 1<sup>st</sup> College (一院). In most cases, only the name or the number designator is used. Therefore, you must search for either the name or the number designator; however, certain websites provide a list of both.<sup>78</sup> PLA websites and information in news articles, blogs, and books almost always list the organizations and subordinate entities in protocol order. Therefore, it is easier to link the names and number designators. Table 6 provides a good example of National University of Defense Technology from 2011, which shows the ten colleges at that time, their assigned college number, grade, and number of subordinate



academic departments as they are listed in NUDT's official website, other websites, and PLA books. For example, you would search for 国防科技大学航天与材料工程学院 or 国防科技大学一院 in Chinese or for National University of Defense Technology 1<sup>st</sup> Department in English.

**Table 6: National University of Defense Technology Organizational Structure**

Chinese Name	English Name	College Number (院)	Grade (等级)	Academic Departments (系)
航天与材料工程学院	College of Aerospace and Materials Engineering	1	Division leader (正师)	3
理学院	College of Science	2	Division leader	2
机电工程与自动化学院	College of Mechatronic Engineering and Automation	3	Division leader	3
电子科学与工程学院	College of Electronic Science and Engineering	4	Corps deputy leader (副军)	3
信息系统与管理学院	College of Information Systems and Management	5	Division leader	3
计算机学院	College of Computer	6	Corps deputy leader	2
光电科学与工程学院	College of Opto-Electronic Science and Engineering	7	Division leader	2
人文与社会科学学院	College of Humanities and Social Sciences	8	Division leader	3
指挥军官基础教育学院	College of Basic Education for Commanding Officers	9	Division leader	4
继续教育学院	College of Continuing Education	None	Corps deputy leader	0

Most, but not all, academic departments also have a name and a number designator. Table 7 provides a previous example for the Air Force Engineering University's Air Force Engineering College, which had nine academic departments and 15 specialties:

**Table 7: Air Force Engineering College Organizational Structure**

Chinese Name	English Name	English Number	Chinese Number
飞机于发动机工程系	Aircraft and Engine Engineering Department	1 <sup>st</sup> Department	一系
航空兵器工程系	Aviation Weapons Engineering Department	2 <sup>nd</sup> Department	二系
航空自动控制工程系	Aviation Automatic Control Engineering Department	3 <sup>rd</sup> Department	三系
航空电子工程系	Aviation Electronics Engineering Department	4 <sup>th</sup> Department	四系
机场建筑工程系	Airfield Construction Engineering Department	5 <sup>th</sup> Department	五系
航空装备管理工程系	Aviation Equipment Management Engineering Department	6 <sup>th</sup> Department	六系
外语系	Foreign Languages Department	None	None
新装备训练系	New Equipment Training Department	None	None
外训系	Foreign Training Department	None	None

#### LABORATORIES AND CENTERS

Military academic institutions have a wide variety of labs (实验室). Each lab is subordinate to a *xueyuan*, administrative and functional department, or academic department. For example, NUDT's National Key Lab of Automatic Target Recognition (自动目标识别国家重点实验室), also identified as ATR Key Lab (ATR重点实验室 / ATR国家重点实验室), is subordinate to the College of Electronic Science and Engineering.

Information about whether key labs are assigned a grade is inconsistent. For example, the grade for various labs and centers at NUDT can be found at <http://tieba.baidu.com/f?kz=550615678>. Based on the information on the website, the ATR Lab noted above is a division-grade (师级) organization, and is most likely a division leader-grade (正师职) organization because it is subordinate to the College of Electronic Science and Engineering, which is a corps deputy leader-grade organization. [Note: 师级 refers to both the division leader (正) and division deputy leader (副) grade, so you need to be careful in how you identify it.]

However, based on an interview with a knowledgeable PLA officer, the departments and key labs are independent of each other and are co-equals, such that no key labs are subordinate to a department. In terms of grades, the departments and labs are not assigned a grade because each department director (系主任) and lab director (室主任) is a technical officer not a regular officer, and only organizations headed by a regular officer are given a grade. As such, they are not considered part of the Table of Organization (不在编制系列). However, if each were assigned a grade, they would be division leader-grade or division deputy leader-grade organizations (副师), depending on whether the college is a corps deputy leader-grade or division leader-grade organization, respectively.

In some cases, labs have a number and name, such as the 204室 is the Basic Education and Research Lab (基础教育研究室); however, they are usually not identified together, so identifying key personnel from the lab helps provide the link. Examples of various labs, including key labs (重点建设实验室), are as follows:

- Air Force Key Lab (空军重点建设实验室)
- All-Army Academic Institution Key Lab (军队院校重点建设实验室)
- All-Army Key Lab (全军重点实验室 / 全军重点建设实验室)
- Education and Research Lab (教研室)
- Foreign Language Lab (外语室)
- Military Key Lab (军队重点实验室 / 军队重点建设实验室)
- Navy Key Lab (海军重点建设实验室)
- Research Lab (研究室)

- State/National Key Lab (国家重点建设实验室)
- Teaching and Research Lab (教研室)
- Teaching Lab (教学实验室)

Military academic institutions also have various types of centers (中心), such as the following examples:

- Computer research center (计算机研究中心)
- Education center (教育中心)
- Education and technology/technical center (教育技术中心)
- Operations/combat training center (作战训练中心)
- Research center (研究中心)
- Scientific research center (科学研究中心)

#### STUDENT ORGANIZATIONAL STRUCTURE

Depending on the academic institution, undergraduate students/cadets (学员) and graduate students (研究生) are organized into the following organizations, which are usually subordinate to the academic department to which they are affiliated.

- Student joint training brigade (学员合训旅) is subordinate to the university or *xueyuan*, is the largest student unit, and has subordinate numbered teams (队), such as the 1<sup>st</sup> Team (一队). It does not appear that every university and/or *xueyuan* has a student brigade.
- Student group (学员大队) is a numbered battalion-level organization, such as the 5<sup>th</sup> Group (五大队), and has subordinate numbered teams. It is not clear if every university and/or *xueyuan* has student groups. Some academic institutions also have a Graduate Student Management Group (研究生管理大队) that is associated with the Graduate School.
- Student company (学员连) is a numbered company, such as the 2<sup>nd</sup> Company (二连), has subordinate numbered teams. It is not clear if every university and/or *xueyuan* has student companies.
- Student team (学员区队) is a numbered organization, such as 1<sup>st</sup> Team (一区队), that is unique to academic institutions and is somewhere between a company and platoon. It is not clear if every university and/or *xueyuan* has this type of student teams.
- Student team (学员队) is a numbered platoon-level organization, such as the 3<sup>rd</sup> Team (三队), each of which has subordinate squads. Every military academic institution has student teams. It is not clear how the students are assigned to the teams, such as by specialty within the academic department or by class year.
- Student squad (学员班) is the smallest organization, each of which has a number such as the 1<sup>st</sup> Squad (一班). It is not clear how the students are assigned to the squads, such as by specialty within the academic department or by class year.
- Graduate student team (研究生队) is a platoon-level organization, which are occasionally identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, teams (研究生一队, 二队)
- Doctoral student team (博士生队) is a platoon-level organization
- Master's student team (硕士生队) is a platoon-level organization

Examples of different student units include the following:

- NUDT Command Officer Basic Education College 5<sup>th</sup> Group (国防科技大学指挥军官基础教育学院五大队)
- NUDT 5<sup>th</sup> College 4<sup>th</sup> Team (国防科技大学五院四队)
- NUDT 5<sup>th</sup> College Master's Student Team (国防科技大学五院硕士生队)

## NUDT STUDENT ORGANIZATION

The following bullets provide an example of how students are organized at NUDT by college into a permanent staff composed of active duty cadre (军衔干部) and cadets (学员干部) as shown below. Of note, this is merely a representative example that most likely applies to each of the 37 academic institutions; however, given the scope of the project and time allotted, the report does not provide this amount of detailed information for each of the 37 institutions.

- The NUDT headquarters does not have a student organization, but the Graduate School helps coordinate activities for all of the graduate student teams.
- Each college has at least one numbered student *dadui*/group (学员大队), such as the 1<sup>st</sup> Student Dadui (第一学员大队/ 第一大队), which is a deputy division leader-grade organization. The commander (大队长) is an active duty deputy division leader-grade officer (colonel or senior colonel). Besides the commander, there is a political commissar (政委), who is the same grade as the commander, and a deputy commander (副大队长) who is a regiment leader-grade (正团) officer (colonel).
- Each student *dadui* has four student *dui*/teams (学员队), numbered from one to four (学员一队, 二队, 三队, and 四队), which are regiment leader-grade organizations. Each commander is an active duty regiment leader-grade officer. Besides the commander, there is a political commissar, who is the same grade as the commander, and a deputy commander (副队长) who is a regiment deputy leader-grade (副团) officer (lieutenant colonel). Each student *dui* represents the undergraduate student's class year, such that the 1<sup>st</sup> Dui is the freshman class and the 4<sup>th</sup> Dui is the senior class. [Note: In the PLA and China's civilian academic institutions, a person's class year is the year they begin school, not the year they graduate.]
- Each *dui*/team has at least three student *qudui*/teams (学员区队), and each *qudui* is composed of students from a particular academic department. Each *qudui* has a commander (区队长) and a deputy commander (副区队长), both of whom are cadets.
- Each *qudui* is, in turn, organized into at least three numbered *ban*/squads (班), such as the 1<sup>st</sup> Ban (一班), with 8-10 students each. Each *ban* has a commander (班长) and a deputy commander (副班长).
- Each student *dadui* also has a graduate student *dui*/team (研究生队), which is divided into a master's student *qudui*/team (硕士区队) and a doctoral student *qudui* (博士区队). The commander and deputy commander are also students.

## FUNDING CODES

Some, but not all, research in PLA academic institutions is funded by one or more sources. Table 8 provides the name of seven funding sources, which is followed by a brief explanation of the National Natural Science Foundation and the 863 Program. Given the scope of the project, this report does not discuss the funding sources for each academic institution.

**Table 8: Funding Sources**

Chinese Name	English Name
国家部委创新基金	China [State Council] Ministries and Commissions Pre-Research Foundation
国家杰出青年基金	China National Fund for Distinguished Young Scientists
中国博士后科学基金	China Post-doctoral Science Fund
总装国防预研项目	GAD National Defense Pre-research Fund
国家“863”计划	National 863 Program // National High-Tech Research and Development Program
国家“973”计划国家重点基础研究发展规划	National 973 Program // National Program on Key Basic Research
国防基础科研基金	National Defense Basic Research Program
国防预研究演示验证资助项目	National Defense Preparatory Research Demonstration Fund Program
国防科技攻关项目	National Defense S&T Project
国家自然科学基金	National Natural Sciences Foundation
武器装备预先研究基金	Weapons and Equipment Pre-Research Fund

The National Natural Sciences Foundation (NSFC / NNSF / 国家自然科学基金) is directly affiliated with China's State Council. The NSFC supports all levels of scientific research at selected Chinese universities and institutes, including the Chinese Academy of Sciences (CAS / 中国科学院).

China's 863 Program/Project (National High-Tech Research and Development Program of China) (国家863计划, 国家“863”高技术研究发展计划, and 国家高技术研究发展计划), which was conceived in March 1986, is part of the Chinese government's efforts to develop a national system of dual-use innovation that will concurrently spur the civilian economy and raise the level of China's strategic technology. This program funds R&D in six civilian areas (biotechnology, information technology, automation, energy, new materials, resources/environment) and two military areas (space and lasers). The program provides funding to four major types of organizations: the Chinese Academy of Sciences, other government institutes, university laboratories, and civilian enterprises involved in technological innovation.

China's 973 Program (National Program on Key Basic Research) (国家重点基础研究发展规划项目 / 973计划) was conceived in 1997 and is funded by China's Ministry of Science and Technology.

## JOURNALS

Each PLA academic institution publishes at least one journal, some of which are not available publicly (军内发行 or 内部发行). Several Chinese terms are used for periodicals, including: 期刊, 报刊, 月刊, 双月刊, 杂志. Given the scope of the project and the limited information available on this topic, only a few journals are noted in the report.



## SECTION 3:

# PROFILES OF THE 37 ACADEMIC INSTITUTIONS IN 2017

This section provides a profile for the 37 remaining academic institutions that were identified in June 2017. Each profile is based on a standard template that includes the following information. Of note, however, not every profile has all of the information. In addition, the three PLAAF flight academies were merged together.

### NAMES

- Chinese Name and Acronym (院校名称 / 简称):
- Official English name(s):
- Translated English name if no official name was found:
- English Acronym:

### MINISTRY OF EDUCATION (MOE) CODE (院校代码):<sup>79</sup>

In 2017, a new code of was assigned to each institution. The previous code from 2008 was XXXXX.

### TYPE OF INSTITUTION:

Academic Education (学历教育) or Professional Education (任职教育)

### OFFICIAL WEBSITE (官方网站网址)

### BACKGROUND

### CAMPUSES (校园 / 校区) AND LOCATIONS (地点)

### GRADE (职务等级)<sup>80</sup>

### SUBORDINATION (主管部门 / 隶属)

### FACILITIES (基础条件) [Note: 1 mu = 0.165 acres]

### ORGANIZATIONAL STRUCTURE (组织体制)

- Subordinate *Xueyuan* (学院)
- Subordinate NCO School (士官学校)
- Administrative and functional departments (部门)
- Academic departments (系)
- Key labs (重点实验室)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室)
- Graduate School (研究生院)
- Cadet/student teams (队 / 区队) and groups (大队). Each group is a numbered regiment-level organization, such as Cadet 2<sup>nd</sup> Group (学员二大队), and is normally assigned to a class year, which implies there are four

cadet numbered groups. Each cadet group is further organized into subordinate battalions. The Graduate School also normally has at least one Graduate Student Group (研究生大队) assigned to it.

#### LEADERSHIP AND STAFF:<sup>81</sup>

[Note: Keep in mind that the commandant and political commissar for each institution are always the same grade but may have different ranks.]

- Commandant (院长)
- Political Commissar (政委)
- Professors (教授) and Staff

#### DEGREES (学位), MAJORS/DISCIPLINES (学科), AND SPECIALTIES (专业):

- Either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs (士官职业技术教育)
- Bachelor's degree (本科) majors and specialties: four years
- Master's degree (硕士) majors and specialties
- Doctoral degree (博士) majors and specialties
- Post-doctoral Specialties (博士后)

#### 2017 UNDERGRADUATE RECRUITMENT (招生):

- Number of Specialties (专业)
- Gender (男,女)
- Total number of personnel recruited (合计)
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from X number of them
- Foreign language requirements (外语语种)
- Specialty categories (专业类别) – commanding officer (指挥) or non-commanding officer (非指)

#### INTERNATIONAL EXCHANGES AND COOPERATION (国际交流与合作):

- Foreign students (外军留学生)
- Study abroad (留学)
- Other interaction.

## SECTION 3-I: NATIONAL DEFENSE UNIVERSITY

### CHINESE NAME AND ACRONYM:

国防大学 (中国人民解放军国防大学). No acronym was found.

- Official English name(s):<sup>82</sup> PLA National Defense University; PLA National Defence University; National Defence University of the Chinese People's Liberation Army.
- English Acronym:<sup>83</sup> NDU; PLA NDU

### MOE CODE:

In 2017, a new code of 91001 was assigned.<sup>84</sup> The previous code from 2008 was 90001.

### TYPE OF INSTITUTION:

Professional Education (任职教育).<sup>85</sup> It is identified as the only comprehensive joint command university for senior-level professional education in the Chinese military (中国军队高级任职教育的一所综合性联合指挥大学).<sup>86</sup> As such, NDU is the PLA's only joint commanding officer academic institution, which begins at the corps level (major general).

### OFFICIAL WEBSITE:

None found. However, one of the colleges under NDU has an official website which oftentimes do not work: <http://www.cdsndu.org/>.

### BACKGROUND:<sup>87</sup>

The roots of the NDU can be traced back to a Red Army officer training program/school which Mao Zedong established in 1927. The school was renamed a number of times since then to: Central Military and Political School in 1931 (中央军事政治学校), China Workers' and Peasants' Red Army School in 1932 (中国工农红军学校), China Workers' and Peasants' Red Army University in 1933 (中国工农红军大学), Anti-Japanese University of the Red Army in 1936 (中国人民抗日红军大学), Anti-Japanese Military and Political University in 1937 (中国人民抗日军事政治大学), PLA Military College in 1950 (中国人民解放军军事学院), PLA Senior Military College in 1955 (中国人民解放军高等军事学院), and PLA Military and Political College in 1969 (解放军军政大学). After the Cultural Revolution, the PLA Military and Political University was dissolved in 1977, and Military College (军事学院), Political College (政治学院), and Logistics College (后勤学院) became three independent academic institutions.

In December 1985, the State Council and the Central Military Commission (CMC) issued a plan to merge the PLA Military College, PLA Political College, and the PLA Logistics College to form the PLA National Defense University (NDU). The NDU was formally established on 15 January 1986. The CMC exercised direct leadership over the NDU, which had the grade of Military Region leader (正大军区) since its founding, but was downgraded to Theater Command deputy leader grade in 2018.



PLA NDU logo



PLA NDU main entrance

The NDU is considered the most prominent academic institution for military education in China—a “Project 2110” institution<sup>88</sup>—that trains senior-level military commanding officers and other personnel for the PLA Army, Navy, and Air Force, as well as Rocket Force, Strategic Support Force, and People’s Armed Police senior-level provincial and central government officials. It originally had four administrative and functional departments (四部): Training, Political, Scientific Research, and School Affairs Departments (训练部, 政治部, 科研部, 校务部) and one university office (校办公室). In addition, there were 13 teaching and research units/departments (教研部门): Military Strategy; Military Campaign; Military Command; Armed Service Branches; Foreign Military; Marxist Theory; Chinese Communist Party’s History, Party Building, and Political Work; World Economy and Politics; Logistics; Foreign Training; Science and Technology; Foreign Language Teaching and Research Lab; and Electrochemical Teaching Center (战略, 战役, 军队指挥, 军兵种, 外军, 马克思主义理论, 中共党史党建政治工作, 世界经济政治, 后勤, 外训, 科技, 外语教研室和电化教学中心). There were six “Management Institutions” (管理机构) for NDU students: The National Defense Research Department, the Basic First Department, the Basic Second Department, the Advanced Education Department, the Foreign Training Department, and the Graduate School (国防研究系, 基本一系, 基本二系, 进修系, 外训系和研究生院).

Due to impact of the military personnel reduction in 2003, the NDU consolidated its 13 teaching and research units into six departments: Military Strategy, Military Campaign, Marxism, Information Warfare and Command Training, Military Building and Political Work, Military Logistics and Scientific and Technological Equipment (战略, 战役, 马克思主义, 信息作战与指挥训练, 军队建设与军队政治工作, 军事后勤与军事科技装备).

Starting in 2004, the NDU went through a series of reorganization efforts. The Foreign Training Department was reorganized into the “College of Defense Studies” (防务学院) in May 2004. In 2012, the National Defense Research Department was renamed to “Defense Security College” (国防安全学院) and was promoted from deputy corps leader to corps leader grade, it was tasked with training military officers at the corps level and above as well as provincial level government officials. The Basic departments became the “Joint Command and Staff College” (联合指挥与参谋学院). The Advanced Education Department became the “Advanced Education College” (进修学院) and maintained its deputy corps leader grade, and it was tasked with training mid- to high-level military officers as well as central and local government officials.

In July 2017, as part of the PLA’s 11th military reform, the PLA NDU merged with Shijiazhuang Army Command College (石家庄陆军指挥学院), Nanjing Political College (南京政治学院), Xi’an Political College (西安政治学院), Arts College (解放军艺术学院), Logistics College (后勤学院), Chinese People’s Armed Police Political College (武警政治学院), and parts of the Equipment College (装备学院) to form a new NDU. As a result, the NDU’s structure has changed. See below for more detailed information on the NDU’s current structure.

#### CAMPUSES AND LOCATIONS:

The NDU has campuses located in Beijing, Shanghai, Shijiazhuang (Hebei Province), Nanjing (Jiangsu Province), and Xi’an (Shaanxi Province). Location information for the NDU’s main campus and its six current colleges are as follows:

- Main Campus (本部):<sup>89</sup> No. 3, Hongshankou Jia, Haidian District, Beijing (北京市海淀区红山口甲3号)
- International College of Defense Studies (国际防务学院):<sup>90</sup> No. 15, Fuxue Road Jia, Changping District, Beijing (北京市昌平区府学路甲15号)
- National Security College (国家安全学院):<sup>91</sup> No. 3, Hongshankou Jia, Haidian District, Beijing (北京市海淀区红山口甲3号)
- Military Management College (军事管理学院):<sup>92</sup> No. 3, Hongshankou Jia, Haidian District, Beijing (北京市海淀区红山口甲3号)
- Joint Services College (联合勤务学院):<sup>93</sup> No. 28, Wanshou Road, Haidian District, Beijing (中国北京市海淀区万寿路28号)

- Joint Operations College (联合作战学院):<sup>94</sup> No. 777, Zhongxi Road, Shijiazhuang, Hebei Province (河北省石家庄市中山西路777号)
- Political College (政治学院):<sup>95</sup> No. 252, Zhongshanbei Road, Nanjing, Jiangsu Province (江苏省南京市中山北路252号)
- College of Military Culture (军事文化学院):<sup>96</sup> No. 18, Nanda Street, Zhongguan Village, Haidian District, Beijing (北京市海淀区中关村南大街18号)
- Graduate School (研究生院):<sup>97</sup> Beijing北京市

#### GRADE:<sup>98</sup>

Theater Command deputy leader (副大战区级), which was downgraded from Theater Command leader (正大战区级) in May 2018

#### SUBORDINATION:<sup>99</sup>

Central Military Commission (中央军事委员会)

#### FACILITIES:<sup>100</sup>

According to Baidu, as of September 2018, the main NDU campus occupies 409 acres (2482.5 mu) of land. The University has complete teaching and research facilities and modernized audio-visual equipment. In addition, NDU has built modernized language laboratories (语言实验室), a research building for computerized combat simulation (计算机作战模拟), a ground satellite receiving station (卫星地面接收站), and other structures for teaching and research. As of September 2015, NDU's Training and Simulation Center can accommodate 120 people for strategic and campaign simulation training at the same time. Campus intranet connects administrative and functional departments, teaching and research units, and student dorms for online teaching. The NDU teaching building has a lecture hall, and language and professional classrooms. The NDU library boasts 1.5 million books, most of which are digitized.



(PLA NDU Teaching Building)

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院):<sup>101</sup> NDU has seven colleges plus the graduate school after the 2017 merger and reorganization.
  - o International College of Defense Studies (国际防务学院)
  - o National Security College (国家安全学院)
  - o Military Management College (军事管理学院)
  - o Joint Services College (联合勤务学院)
  - o Joint Operations College (联合作战学院)
  - o Political College (政治学院)



- o College of Military Culture (军事文化学院)
  - o Graduate School (研究生院)
- Subordinate NCO School (士官学校): None
- Administrative and functional departments (部门):<sup>102</sup>
  - o General Office (办公室)
  - o Education and Training Department (教育训练部)
  - o Political Work Department (政治工作部)
  - o School Affairs Department (校务部)<sup>103</sup>
  - o Scientific Research Department (科研部)
  - o Discipline Inspection Commission (纪律检查委员会)
- Academic departments (系)<sup>104</sup>
  - o Research Department (研究系):
    - Specialties (专业方向): Military Doctrine, Military Theory, National Defense Research, Academic Institution and Education Management, Military and Political Theories (军事思想, 军事理论, 国防研究, 院校教育管理, 军事与政治理论等).
    - Training duration: six months
    - Student qualifications: corps leader level military officers and above; provincial-level government officials, as well as ministry and bureau level government officials of the central government and above. [Note: graduates receive a certificate not a master's degree.]
  - o Basic Department (基本系):
    - Specialties: Combined-arms Campaign Command (合同战役指挥)
      - Command Cultivation and Training 指挥培训:
        - o Training duration: one year;
        - o Qualification: for corps leader and above
      - Staff Cultivation and Training 参谋培训:
        - o Training duration: one year;
        - o Qualification: Battalion level staff
      - Teachers Cultivation and Training 师资培训:
        - o Training duration: two years
        - o Qualification: College graduates of PLA military command and technical colleges
    - o Advanced Studies Department (进修系):
      - Training duration: six months
      - Qualification: Division-level military, political, and logistics officers
    - o Graduate School (研究生院):
      - Specialties: 13 specialties including: Military Studies, Law, Philosophy, Economics (军事学, 法学, 哲学, 经济学等13个专业)
      - Duration: 2.5–3 years
      - Qualification: Cades who have served in the military for at least two years, college graduates who have been trained at a military academy.
    - o International College of Defense Studies (国际防务学院)
      - Advanced Studies 高级进修: five months for foreign military officers
      - Defense Research 防务研究: one year for foreign military officers
      - International Affairs Seminar 国际问题研讨: one month for foreign military officers
  - Key labs (重点实验室):<sup>105</sup> War Simulation Laboratory (战争模拟实验室); War Game Exercise Center Laboratory (兵棋演习中心实验室); Language Laboratory (语言实验室).
  - Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>106</sup>

- o The NDU Research Center (国防大学研究中心)
- o In December 2017, the CCP Central Committee approved and established the “Research Center for Xi Jinping’s Socialist Thoughts with Chinese Characteristics in the New Era” (习近平新时代中国特色社会主义思想研究中心).
- o In 2003, the NDU consolidated 13 teaching and research units into 6: Military Strategy, Military Campaign, Marxism, Information Warfare and Command Training, Military Building and Political Work, Military Logistics and Scientific and Technological Equipment (战略, 战役, 马克思主义, 信息作战与指挥训练, 军队建设与军队政治工作, 军事后勤与军事科技装备).

#### LEADERSHIP AND STAFF:<sup>107</sup>

- Commandant: GEN Zheng He (郑和)
- Political Commissar: LGEN Wu Jieming (吴杰明)
- Professors and Staff:
  - o Source indicated that as of the end of 2017, the NDU has over 280 professors, associate professors, researchers, and associate researchers.
  - o There are 15 scientific research experts chosen for the Millions Talent Project (国家百千万人才工程). There were 308 people who received national and military “Professional Technical Personnel” awards. At least nine experts have direct connection to the CCP central committee.
  - o Notable experts include: National defense strategy experts Jin Yinan (金一南) and Wang Baofu (王宝付); military history expert Xu Yan (徐焰); Marxist Theory expert Zhang Bin (张彬); and Defense Economist Jiang Luming (姜鲁鸣).
  - o In addition, source also identified the following younger professors who work at the NDU: Meng Xiangqing; Xu Hui; Li Li; and Shu Jian (孟祥青, 徐辉, 李莉, 舒健).

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:<sup>108</sup>

- It appears that the NDU confers Master’s and Doctoral degrees and issues graduate-level certificates.
- As of April 2018, NDU has completed over 100 training programs; trained 5,844 graduate students, including: 794 doctoral students, 651 Master’s students, 236 foreign graduate students. Over 1,000 NDU graduates are now commanding officers at corps, division, and regiment levels. Over 200 of NDU graduates have become generals, and over 20 of them are Theater Command (former Military Region) level generals.
- First-level doctoral degrees (一级学科博士学位) have 13 specialties, including: Military Thought; Military History; Military Strategy Studies; and Joint Campaign Studies (军事思想, 军事历史, 军事战略学, 联合战役学等13个)
- Second-level doctoral degrees (二级学科博士学位) have three specialties, including: Combat Command Studies and Military Operations Studies (战指挥学, 军事运筹学)
- First-level master’s degrees have 18 specialties, including: military thought; Military History; Military Strategy Studies; and Joint Campaign Studies (军事思想, 军事历史, 军事战略学, 联合战役学等18个)
- Second-level master’s degrees have nine specialties, including: Defense economics, Marxist theory, ideological and political education (二级学科硕士学位授权点国防经济, 马克思主义理论, 思想政治教育等9个)

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>109</sup>

There are at least 3, according to a semi-official source The Paper.

**Table 9: Academic Master's Specialties (学术硕士专业) Full-time<sup>110</sup>**

Subject	Specialty Direction	Specialty Code	Specialty
Philosophy 哲学	Philosophy 哲学	10101	Marxist Philosophy 马克思主义哲学
Economics 经济学	Applied Economics 应用经济学	20210	Defense Economics 国防经济
Jurisprudence 法学	Jurisprudence 法学	30100	Jurisprudence 法学
	Political Science 政治学	30200	Political Science 政治学
	Marxist Theory 马克思主义理论	30500	Marxist Theory 马克思主义理论
		30501	Basic principles of Marxism 马克思主义基本原理
Literature 文学	Chinese Language and Literature 中国语言文学	50100	Chinese Language and Literature 中国语言文学
Military Affairs 军事	Military Thought and Military History 军事思想及军事历史	110100	Military Thought and Military History 军事思想及军事历史
	Military Strategy 战略学	110200	Military Strategy 战略学
	Military Campaign 战役学	110300	Military Campaign 战役学
	Military Tactics 战术学	110400	Military Tactics 战术学
	Military Command 军队指挥学	110500	Military Command 军队指挥学
		110501	Combat Command 作战指挥学
		110503	Military Operations 军事运筹学
		110504	Military Informatics 军事信息学
	Military Management 军事管理学	110600	Military Management 军事管理学
		110602	Military Management 军队管理学
	Military Political Work 军队政治工作学	110700	Military Political Work 军队政治工作学
	Military Logistics 军事后勤学	110800	Military Logistics 军事后勤学
		110801	Military Logistics Construction 军事后勤建设学
		110802	Rear Professional Logistics 后方专业勤务
		110803	Military Logistics 军事物流学
	Military Training 军事训练学	111000	Military Training 军事训练学
		111001	Joint Training 联合训练学
		111002	Military Branch Training 军兵种训练学
		111003	Military Education 军事教育学
Management 管理学	Library Information and Archives Management 图书情报与档案管理	120500	Library Information and Archives Management 图书情报与档案管理
Arts 艺术学	Music and Dance 音乐与舞蹈学	130200	Music and Dance 音乐与舞蹈学
	Drama, Film, and Television 戏剧与影视学	130300	Drama, Film, and Television 戏剧与影视学
	Fine Arts 美术学	130400	Fine Arts 美术学

**Table 10: Professional Master's Specialties (专业硕士专业) Part-time)<sup>111</sup>**

Subject	Specialty Direction	Specialty Code	Specialty
Law 法学	Legal 法律	35101	Law 法律
Education 教育学	Applied Psychology 应用心理	45400	Applied Psychology 应用心理
Literature 文学	News and Communication 新闻与传播	55200	News and Communication 新闻与传播
Military Affairs 军事学	Military Affairs 军事	115100	Military Affairs 军事
		115101	Military Command 军事指挥
		115102	Military Political work 军队政治工作
		115103	Military Logistics 军事后勤
		115104	Military Equipment 军事装备
Arts 艺术学	Arts 艺术	135101	Music 音乐
		135102	Drama 戏剧
		135106	Dance 舞蹈
		135107	Fine Arts 美术

2019 MASTER'S STUDENTS RECRUITMENT GUIDE (国防大学2019年硕士研究生招生简章):<sup>112</sup>

- Number of Master's level graduate student recruitment anticipated: 594
- Recruitment of candidates:
  - o Military candidates: who are current military officers, graduates from military academies, and reserve officer candidates.
  - o Admission criteria/requirements include: political loyalty, good moral character, law-abiding, good physical and mental health. Military officer applicants must be Chinese Communist Party member with three years of military experience.
  - o Non-military candidates: no specific information provided.

INTERNATIONAL EXCHANGE AND COOPERATION (国际交流与合作):<sup>113</sup>

The PLA NDU is actively engaged in international exchanges and cooperation. According to a December 2018 official source, since 1985, the NDU has received over 1,300 foreign delegations, over 120,000 foreign military personnel, government officials and other experts from over 90 countries. The PLA NDU also has sent 400 delegations to visit over 30 countries. Over 900 NDU research and teaching staff have studied, lectured, participated in academic conferences overseas.

The PLA NDU have contacts with over 140 foreign militaries, maintains regular interactions and cooperation with prominent military academic institutions in over ten countries. The PLA NDU has also signed formal inter-university exchange and cooperation memos with foreign military academic institution, including the National Defense University of the United States.

According to an August 2018 People's Liberation Army Daily news report, the PLA NDU has trained in recent years over 500 foreign military cadets from over 100 countries. Several dozens of PLA NDU's teaching and research officers have participated in international peacekeeping and served as military observers.

Since 2002, the NDU has held 16 conferences on international security (国际安全研讨会), which were aimed at strengthening academic exchange with the international military community. The conference has been “upgraded” to the “International Defense Forum” (国际防务论坛), in order to better strengthen military exchanges and cooperation with countries around the world and jointly discuss major international or regional security issues. In June 2019, NDU’s International College of Defense Studies held the second International Defense Forum in Beijing, with senior-level military officers from 88 countries participated. The theme of the 2019 forum was “New Changes in the Form of War, New Challenges of Peaceful Development” (战争形态新变化, 和平发展新挑战). Three major topics were discussed: “The Impact of the International Security Environment on the Form of War”; “New Developments in Modern War Forms and Combat Styles”; and “The Ways to Resolve Conflicts and Maintain World Peace, the Plans: China’s Plan, and the World’s Plan” (“国际安全环境对战争形态的影响”; “现代战争形态与作战样式的新发展”; “解决冲突与维护世界和平的途径与方案: 中国方案, 世界方案”).



(Source: Xinhua)



## SECTION 3-2: NATIONAL UNIVERSITY OF DEFENSE TECHNOLOGY

### CHINESE NAME AND ACRONYM:<sup>114</sup>

国防科技大学 / 国防科学技术大学. No acronym was found.

- Official English name(s): National University of Defense Technology<sup>115</sup>
- English Acronym: NUDT<sup>116</sup>
- Chinese Acronym: 国防科大<sup>117</sup>

### MOE CODE:<sup>118</sup>

In 2017, a new code of 91002 was assigned. The code in 2008 was 90002.

### TYPE OF INSTITUTION:

Academic Education (学历教育).<sup>119</sup> No information was found identifying it as a Professional Education (任职教育) institution.

### OFFICIAL CHINESE WEBSITE (官方网站网址):

[http://www.nudt.edu.cn/index\\_eng.htm](http://www.nudt.edu.cn/index_eng.htm).

### OFFICIAL ENGLISH WEBSITE:

<https://english.nudt.edu.cn/>

### BACKGROUND:<sup>120</sup>

National University of Defense Technology (NUDT) was founded in 1953 as the People's Liberation Army (PLA) Military Academy of Engineering or Harbin (Heilongjiang Province) Military Academy of Engineering (哈尔滨的中国人民解放军军事工程学院). In 1970, the main body of the school moved to Changsha, Hunan Province, and was renamed Changsha Institute of Technology (长沙工学院). In 1978, the school's name was changed to National University of Defense Technology (国防科学技术大学) under direct care of Deng Xiaoping, who was then the Chairman of the Central Military Commission (CMC). In 2017, the university was rebuilt on the basis of National University of Defense Technology, University of International Relations (国际关系学院), National Defense Information Institute (国防信息学院), Xi'an Communication Institute (西安通信学院), College of Electronic Engineering (电子工程学院), and the PLA University of Science and Technology's College of Meteorology and Oceanography (理工大学气象海洋学院).

It has a unique status. It is under the direct leadership of the Central Military Commission, and has been a key university heavily invested by the state and the military. It was one of the 156 key construction projects in the first five-year plan. It was one of the 20 key universities in China designated by the Chinese Communist Party's (CCP) Central Committee in 1959. It was also one of the first batch of institutions authorized by the State Council to confer master's and doctor's degrees, and one of the first batch of universities to run pilot graduate schools in China. It was one of the first batch of universities and colleges to be included in the national "211 Project" (211



工程), the only military university to be included in the national “985 Project” (985工程), and the only military university to be included in the national “double first-class” (双一流) project.

#### CAMPUSES AND LOCATIONS:<sup>121</sup>

NUDT has campuses located in Changsha (Hunan Province), Nanjing (Jiangsu Province), Wuhan (Hubei Province), Hefei (Anhui Province), and other places. Prior to the 2017 academic institution reorganization, NUDT had four campuses located in Changsha as shown below. It is not clear if, other than the main campus, the other three still exist:<sup>122</sup>

- Number 1 (一号院) was/is the main campus (学校本部): No. 109, Deya Road, Kaifu District, Changsha (长沙市开福区德雅路109号)
- Number 2 (二号院) was the campus of the former Changsha Artillery Academy (长沙炮兵学院) located at No. 1186 New Kaipu Road, Tianxin District, Changsha (长沙市天心区新开铺路1186号). The Artillery Academy was created in 1978 and merged with NUDT in 1999. It was abolished in 2004.
- No 3 (三号院) was the campus of the former Changsha Engineer Corps College (长沙工程兵学院) located at No. 1 Fuyuan Road, Kaifu District, Changsha (长沙市开福区福元路1号). The Engineer Corps College was created in 1950, was abolished in 1969 during the Cultural Revolution, was reestablished in 1978, and became part of NUDT in 1999. In 2004, it was merged with three other NUDT institutions to become the Command Officer Basic Education College (指挥军官基础教育学院); however, this institution is not currently listed in the official NUDT website.
- Number 4 (四号院) the campus of the former Changsha Political College (长沙政治学院) located at No. 869 Furong Middle Road, Tianxin District, Changsha (长沙市天心区芙蓉中路869号). The Political College was created in 1949 and was merged under NUDT in 1999. In 2004, it was abolished and its curriculum was merged into the College of Humanities and Social Sciences (人文与社会科学学院), which does not appear to exist today.

#### GRADE:

Corps leader (正军级 / 正军职).<sup>123</sup> In 1992, NUDT had the grade of corps leader but was upgraded to Military Region deputy leader-grade (副大军区级) in 1999 when it was selected as one of the PLA's five comprehensive universities (综合大学).<sup>124</sup> Following the PLA's reorganization in early 2016, the grade was renamed Theater Command deputy leader (副战区级). In March 2018, NUDT was downgraded to corps leader at the same time that the National Defense University and Academy of Military Science were downgraded from Theater Command leader to Theater Command deputy leader.<sup>125</sup>

#### SUBORDINATION:

Central Military Commission (CMC / 中央军委).<sup>126</sup> It is most likely under the CMC's Training and Management Department's (训练管理部) Military Academic Institutions Bureau (军队院校局).

#### FACILITIES:

NUDT is home to advanced teaching and research laboratories, such as state key labs, national defense science and technology key labs, and national experimental teaching demonstration centers.<sup>127</sup>

The NUDT library was originally set up in Harbin in 1953. At present, it comprises three branches which lie on Campus 1, 3 and 4 respectively, covering a total area of over 47,000 m<sup>2</sup> with 4,300-odd seats open 90 hours a week.<sup>128</sup> It has established a system of literature resources that focuses on key disciplines in science, engineering, military, literature, management, economics



and philosophy. It now boasts over 3,300,000 printed documents (copies), including over 2,300,000 Chinese and foreign books, 900,000 microfiches and 100,000 copies of paper-based sci-tech reports and unpublished data. It subscribes to more than 3,400 journals and periodicals from home and abroad each year. The established digital library, constituted of 98 large comprehensive databases and 160 special databases or sub-databases, has achieved international synchronized retrieval among SCI, EI, CPCI-S (formerly called ISTP) and other foreign literature databases. The Library has built extensive resources-sharing and cooperative relationships with domestic and foreign libraries and information sectors. The photo above shows the library on Campus 1.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院)<sup>129</sup>
  - College of Liberal Arts and Sciences (文理学院)
  - College of Computer Science and Technology (计算机学院)
  - College of Electronic Science and Technology (电子科学学院)
  - College of Advanced Interdisciplinary Studies (前沿交叉学科学院)
  - College of Intelligence Science and Technology (智能科学学院)
  - College of Systems Engineering (系统工程学院)
  - College of Aerospace Science and Engineering (空天科学学院)
  - College of International Studies (国际关系学院)
  - College of Information and Communication (信息通信学院)
  - College of Electronic Engineering (电子对抗学院)
  - College of Meteorology and Oceanography (气象海洋学院)
  - Undergraduate School (军事基础教育学院)
- Subordinate NCO school (士官学校): None
- Administrative and functional departments (部门): According to Wikipedia, the following departments existed for the NUDT;<sup>130</sup> however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>131</sup> (aka Basic Department / 基础部).
- Academic departments (系): No information was found concerning the number or type of academic departments.
- Key labs (重点实验室): NUDT is the home to an unidentified number of advanced teaching and research laboratories, including State Key Labs (国家重点实验室) and , National Defense Science and Technology Key Labs (国防科技重点实验室).<sup>132</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): NUDT is the home to an unidentified number of research labs and National Experimental Teaching Demonstration Center(s) (国家级实验教学示范中心).<sup>133</sup> Although no current information was found concerning the number of research labs, NUDT had 13 in 1979.<sup>134</sup> Concerning the teaching and research labs, no current information was found; however, in 1979 there were 39 teaching and research labs.<sup>135</sup>
- Graduate school (研究生院):<sup>136</sup> No specific information was found concerning its organizational structure.
- Student teams (队 / 区队) and groups (大队): No specific information was found, but they most likely exist as they do in other academic institutions.

#### LEADERSHIP AND STAFF:<sup>137</sup>

- Commandant: MGEN Deng Xiaogang (邓小刚)
- Political Commissar: LGEN Liu Nianguang (刘念光)
- Professors and staff: No specific information was found concerning the current number of professors and staff.

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):<sup>138</sup>

- NUDT has the following eight majors, but it is not clear which levels each of them is applied to:<sup>139</sup>
  - Philosophy (哲学), Economics (经济学), Law (法学), Literature (文学), Science (理学), Engineering (工学), Military Science (军事学), Management (管理学)
- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified
- Bachelor's degree specialties (本科高等教育): 42 (42个本科学历教育专业)<sup>140</sup>
- Master's degree specialties (硕士): 33 (33个硕士学位一级学科授权点); in 2017, NUDT also had 1,494 master's degree advisors (硕士生导师1494人)<sup>141</sup>
- Doctoral degree specialties (博士): 25 (25个博士学位一级学科授权点); in 2017, NUDT had 537 PhD advisors (博士生导师537人)<sup>142</sup>

#### POST-DOCTORAL SPECIALTIES (博士后):

- 17 (17个博士后科研流动站)<sup>143</sup>

#### SPECIALTIES:

Table 11 provides NUDT's 42 specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) were found for 2017:<sup>144</sup>

**Table 11: National University of Defense Technology Specialties**

Specialty Code	Specialty	Direction	Training Type
0839	Network Space Security 网络空间安全	General Communication Technology and Command 通用通信技术与指挥	Non-CO & CO
1201	Management Science & Engineering 管理科学与工程类	Command Service & Support 指挥勤务保障	CO
030203	Diplomacy 外交学	Military Diplomacy 军事外交	Non-CO & CO
030204	International Affairs & International Relations 国际事务与国际关系	International Relations 国际关系	Non-CO & CO
		Military Diplomacy 军事外交	Non-CO
050202	Russian 俄语	Military Diplomacy 军事外交	Non-CO
070101	Mathematics & Applied Mathematics 数学与应用数学	Task Planning 任务规划	CO
		Data Support 数据保障	Non-CO
070201	Physics 物理学	Test Evaluation Technology 试验评估技术	Non-CO & CO
070601	Atmospheric Science 大气科学	Meteorological Ocean Forecast 气象海洋预报	Non-CO
070602	Applied Meteorology 应用气象学	Meteorological and Hydrological Observation & Equipment Maintenance 气象水文观测与设备维护	CO

070702	Marine Technology 海洋技术	Ocean Survey Technology & Support 海洋调查技术与保障	Non-CO
		Meteorological and Hydrological Observation & Equipment Maintenance 气象水文观测与设备维护	CO
070704	Military Oceanography 军事海洋学	Meteorological Ocean Forecast 气象海洋预报	Non-CO
		Meteorological and Hydrological Observation & Equipment Maintenance 气象水文观测与设备维护	CO
070802	Space S&T 空间科学与技术	Battlefield Situation Integration 战场态势融合	CO
070903	Earth Information S&T 地球信息科学与技术	Battlefield Situation Fusion 战场态势融合	CO
071202	Applied Statistics 应用统计学	Data Support 数据保障	CO
080201	Mechanical Engineering 机械工程	Unmanned Aerial Vehicle Technical Support & Maintenance 无人机技术保障与维修	Non-CO & CO
080301	Measurement Control Technology & Instruments 测控技术与仪器	Measuring Technology 计量技术	Non-CO & CO
080401	Material Science & Engineering 材料科学与工程	Test Evaluation Technology 试验评估技术	Non-CO & CO
080701	Electronic Information Engineering 电子信息工程	General Communication Technology and Command 通用通信技术与指挥	Non-CO & CO
080702	Electronic S&T 电子科学与技术	Electromagnetic Spectrum Technology and Management 电磁频谱技术与管理	Non-CO & CO
080703	Communication Engineering 通信工程	Data Link Technology & Command 数据链技术与指挥	CO
		General Communication Technology and Command 通用通信技术与指挥	CO
		Command Information Systems Application and Support 指挥信息系统运用与保障	Non-CO & CO
080705	Photoelectric Information Science & Engineering 光电信息科学与工程	Electronic Warfare Technology & Command 电子对抗技术与指挥	CO
		Test Evaluation Technology 试验评估技术	Non-CO
080706	Information Engineering 信息工程	Command Information Systems Application and Support 指挥信息系统运用与保障	Non-CO & CO
080901	Computer S&T 计算机科学与技术	Command Information Systems Application and Support 指挥信息系统运用与保障	Non-CO & CO
080902	Software Engineering 软件工程	Meteorological Ocean Forecast 气象海洋预报	Non-CO
		General Communication Technology and Command 通用通信技术与指挥	CO
080903	Network Engineering 网络工程	General Communication Technology and Command 通用通信技术与指挥	Non-CO & CO
080904	Information Security 信息安全	General Communication Technology and Command 通用通信技术与指挥	CO
		Command Information Systems Application and Support 指挥信息系统运用与保障	Non-CO
080905	Internet of Things Engineering 物联网工程	Command Information Systems Application and Support 指挥信息系统运用与保障	Non-CO & CO
081203	Navigation Engineering 导航工程	Electronic Countermeasures Technology and Command 电子对抗技术与指挥	CO
082002	Aircraft Design and Engineering 飞行器设计与工程	Test Evaluation Technology 试验评估技术	Non-CO & CO
082107	Information Countermeasures Technology 信息对抗技术	Electronic Countermeasures Technology and Command 电子对抗技术与指挥	Non-CO & CO



082201	Nuclear Engineering & Nuclear Technology 核工程与核技术	Test Evaluation Technology 试验评估技术	Non-CO
110103	Reconnaissance Intelligence/Information 侦察情报	Military Intelligence/Information 军事情报	Non-CO & CO
		Network Intelligence/Information Analysis 网电情报分析	CO
110104	Operational & Task Planning 运筹与任务规划	Task Planning 任务规划	CO
110105	Target Engineering 目标工程	Target Support 目标保障	CO
110107	Network Power Command & Engineering 网电指挥与工程	Electronic Countermeasures Technology and Command 电子对抗技术与指挥	Non-CO & CO
110109	Unmanned Systems Engineering 无人系统工程	Unmanned Aerial Vehicle Technical Support & Maintenance 无人机技术保障与维修	CO
110111	Big Data Engineering 大数据工程	Electronic Countermeasures Technology and Command 电子对抗技术与指挥	CO
		Data Projection 数据保障	Non-CO & CO
110301	Command Information Systems Engineering 指挥信息系统工程	Command Information Systems Application and Support 指挥信息系统运用与保障	Non-CO & CO
110305	Radar Engineering 雷达工程	Electronic Countermeasures Technology and Command 电子对抗技术与指挥	CO
110306	Missile Engineering 导弹工程	Equipment Simulation Technology 装备仿真技术	Non-CO & CO
110307	Unmanned Equipment Engineering 无人装备工程	Unmanned Aerial Vehicle Technical Support & Maintenance 无人机技术保障与维修	CO
110309	Simulation Engineering 仿真工程	Task Planning 任务规划	CO

#### 2017 RECRUITMENT (招生):<sup>145</sup>

- Number of undergraduate specialties: 41
- Degrees and number of years: All are four-year bachelor's degrees
- Gender (男, 女): Males are involved in all 41 specialties, but females are only involved in 25 specialties.
- Total number of personnel recruited (合计): 1,064
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from all of them
- Foreign language requirements (外语语种): Proficiency in English is a requirement for all 41 specialties. Although Russian is one of the specialties, English is still a requirement
- Specialty categories (专业类别)—commanding officer (指挥) or non-commanding officer (非指). Table 11 above shows which specialties are for commanding officers, non-commanding officers, and for both categories.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

NUDT maintains a strong commitment to globalization and is actively engaged in international exchanges and collaboration.<sup>146</sup> NUDT has established academic ties with hundreds of universities and research institutions from more than 40 countries and regions. It has signed formal collaborative agreements with over 20 renowned universities in Korea, USA, UK, and France. Each year the university employs foreign language teachers and scientific experts to teach or take part in joint research programs on campus, invites over four hundred scholars of international standing to give lectures and academic seminars, holds five to ten large-scale international academic conferences, grants more than seven hundred teaching or research staff requests for short-term international visitors to study, to conduct joint research, or to pay academic visits. The following bullets provide some specific examples:

- International originations that NUDT is participating with:
  1. OSDL (Open Source Development Lab): Responsible for the standardization of Linux in the world.
  2. OW2 Consortium: As an international organization, OW2 aims to start from OSS project, nurture an interactive chain of international communities and industries, and promote Sino-French cooperation in many fields including middleware. With members from Europe, Asia, South America and North America, OW2 consists of 12 strategic members, 27 organization members, and over 400 individual members.
- Cooperation Projects that NUDT has established:
  1. Sixth Framework Program - Sino-European Grid Technology Exchange
  2. Sino-French Cooperation Project - Pervasive Computing Middleware Based on Component Technology
  3. In cooperation with the Hong Kong Polytechnic University - Joint Laboratory of Mobile Computing and Sensors
  4. In cooperation with the Chinese University of Hong Kong - Joint Research Center of Intelligent Sensing System

## SECTION 3-3: ARMY COMMAND COLLEGE

### CHINESE NAME AND ACRONYM:

陆军指挥学院.<sup>147</sup> No acronym was found.

- Official English name: None was found, but it is most likely Army Command College (former Nanjing Army Command College)
- English Acronym: None found

### MOE CODE:

In 2017, a new code of 91003 was assigned.<sup>148</sup> The previous code as of 2008 was 90003.<sup>149</sup>



南京陆军指挥学院  
NANJING ARMY COMMAND COLLEGE

### TYPE OF INSTITUTION:

The college is both an Academic Education (学历教育) and Professional Education (任职教育) institution.<sup>150</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

The history of the college is as follow:<sup>151</sup>

- In 1938, the college was initially established in Fujizhen, Kaifeng, Henan Province as The New Fourth Army Guerrilla Detachment Camp-Following School (新四军游击支队随营学校).
- In 1940, the camp-following school was expanded and became The Fourth Branch School of the Counter-Japanese Military and Political University (抗日军政大学第四分校).
- In 1944, the school was renamed as the Xuefeng Military and Political University (雪枫军政大学) after its Dean, General Peng Xuefeng (彭雪枫将军), who also served as the commander of The New Fourth Army guerrilla detachment and had been killed in action.
- In April 1946, the Xuefeng Military and Political University, Central Jiangsu Public School (苏中公学), and Central China Field Army (华中野战军) Camp-Following Officer School underwent a merger and became the Central China Xuefeng University (华中雪枫大学). In November 1946, the Central China Xuefeng University, Shandong Military Region Military and Political School (山东军区军政学校), East River Column and Huainan Camp-Following School (东江纵队以及淮南随营学校), and Shandong Provincial Military

District Communication School (山东军区通信学校) uniformly restructured into the East China Military and Political University (华东军事政治大学).

- In July 1949, the Central Military Commission (CMC) merged the East China Military and Political University and Third Field Army Military and Political Officer School (三野军政干学校) into a brand-new East China Military and Political University in the aftermath of Yangtze River Crossing Campaign (渡江战役) victory.
- In 1951, the CMC restructured all military institutions in East China into the Third Advanced Infantry School of the Chinese People's Liberation Army (中国人民解放军第三高级步兵学校). Shortly after that, the school was upgraded into the General Advanced Infantry School (总高级步兵学校) and undertook the responsibility for training infantry battalion and group-assigned military and political commanding officers.
- In February 1959, three remaining departments of the Military College of the CPLA (军事学院) merged with the General Advanced Infantry School to form the Nanjing Military College (南京军事学院). The college shouldered the responsibility of training mid-level commanding officers, staff officers, and foreign military students.
- In February 1969, the college was abolished.
- In January 1978, Nanjing Advanced Infantry School (南京高级步兵学校) was established based on the foundation of the Nanjing Military Region Military and Political Cadre School (南京军区军政干部学校). It was subordinated to the CMC and assumed the duties of training battalion-level and group-level military and political officers.
- In January 1981, the school was renamed as the Nanjing Advanced Army School (南京高级陆军学校) and underwent major reforms in terms of its training missions and task organizations.
- In June 1986, the school had been renamed as the Army Command College (陆军指挥学院) that was subordinated to the General Staff Department (GSD), it became the first Army mid-level command institution.
- In 1995, the school was identified as the all-Army key focus institution.
- In 1999, the school was renamed as the Nanjing Army Command College.
- In 2005, the college was highly rated as a progressive institute of ideological and political learning for students of military cadets (全军学员思想政治教育先进院校).
- In 2006, the school was rated as an excellent educational entity of the full force. The CMC authorized it as one of the key focus institutes under the Phase II of the "Project 2110."
- In 2017, it was renamed the Army Command College.

#### CAMPUSES AND LOCATIONS:

The Army Command College is a mid-level combined-arms command academic institution; it offers degrees of all educational levels, vocational training, and foreign military student education. The college is part of the Project 2110, and covers 160,000 square meters of area.<sup>152</sup> The campus is located at No. 1 Longpan Street, Pukou District, Nanjing, Jiangsu Province (江苏省南京市浦口区龙盘路1号).<sup>153</sup>

#### GRADE:<sup>154</sup>

Corps deputy leader (副军级) (former corps leader grade (正军级)<sup>155</sup>

#### SUBORDINATION:<sup>156</sup>

PLA Army HQ (former General Staff Department)<sup>157</sup>

#### FACILITIES:<sup>158</sup>

The campus has a wide range of facilities, from campus teaching facilities, sports complex, to cultural and recreational center, and living amenities. There are tactical training complex (战术训练场), field training complex (野外驻训场), and synthetic training complex (综合训练场). In its specialized teaching complex, which integrated

tactical training simulation systems (战术训练模拟系统), combined arms tactics specialized classroom (合同战术专修室), foreign army studies specialized classroom (外军研究专修室), combat command specialized classroom (作战指挥专修室), People's Armed Police command specialized classroom (人武指挥专修室), audio laboratory (语音实验室), technology enhanced learning center (电化教学中心), and indoor simulated field command post (室内模拟野战指挥所). The state-of-the-art field tactical training site (野外战术驻训点), training complex (综合战术训练场), and teaching management center (教学管理中心) provide a supportive environment for learning and scientific research purposes. The college also publishes its Journal of Command (指挥学报) and disseminates to the full force. The well-equipped library has over 300,000 collections. Since 1979, the college has completed over 20 national-level and military-level scientific research and planning projects. Furthermore, it has published over 50 course materials for the full force, along with over 80 books and over 6,000 academic papers. Among them, 150 articles received awards from international, national and all-Army colloquiums. Numerous teaching and scientific research projects received national-level rewards. In particular, their "combined arms force commander tactical training simulation system" (合成军队指挥员战术训练模拟系统) received All-Army Science and Technology Progress First Class Award (全军科技进步一等奖) and State Science and Technology Progress Second Class Award (全国科技进步二等奖).

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None were found.
- Subordinate NCO School (士官学校): None were found
- Administrative and Functional Departments (系): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each college/academy. Although this information was found in a 2007 source,<sup>159</sup> these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部 / 院务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
- Academic departments (系):<sup>160</sup>
- The following academic departments are identified:
  - Joint Combat Department (联合作战系)
  - Information Warfare and Command Department (信息作战与指挥系)
  - Military Training and Management Department (军事训练与管理系)
  - Military Political Work Department (军队政工系)
  - War Mobilization Department (战争动员系)
  - Command Cadre Advanced Course (指挥干部进修班)
  - Foreign Military Student Department (外军留学生系)
- Teaching and research labs (教研室):
- The campus has the following facilities:<sup>161</sup>
  - Combat Testing Center (作战实验中心)
  - Eight research centers (研究所)
  - 22 teaching and research laboratories (教研室)
  - Three laboratories (实验室)
  - Simulated Division and Regiment Field Combat Command Post (模拟师团野战指挥所)
  - Audio room (语音室)
  - Multi-media classroom (多媒体教室)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室)
- Student teams (队/区队) and groups (大队):



- o The Nanchang campus has a graduate student management group (研究生管理大队) and 22 cadet groups (学员队).

#### LEADERSHIP AND STAFF:<sup>162</sup>

- Commandant: MGEN Wang Pei (王培)
- Political Commissar: MGEN Xiao Dongsong (肖冬松)

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified.
- Bachelor's degree (本科): four years
  - o Bachelor's degree majors and specialties
  - o Specialties: Table 12 provides a list of specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:

**Table 12: Army Command College Specialties<sup>163</sup>**

Specialty Code	Specialty	Direction	Training Type
1105	Science of Command 军队指挥	Combat Command 作战指挥 Military Thought and Military History 军事思想及军事历史 Military Science (professional master's degree) 军事 (专业硕士)	CO
1107	Science of Military Political Work 军队政治工作学	Science of Military Political Work 军队政治工作学 Education in Ideology and Politics 思想政治教育 National Defense Economics 国防经济 Military Science (professional master's degree) 军事 (专业硕士)	CO
1103 1104	Science of Campaigns and Tactics 战役战术	Science of Campaigns 战役 Science of Tactics 战术	CO
110203	National Security Mobilization 国防动员	Science of Strategy 战略学	CO
110602	Military Management 军队管理	Military Management 军队管理	CO
111000	Military Training 军事训练	Military Training 军事训练	CO
110502	Military Operation Research 军事运筹	Military Operation Research 军事运筹	CO

- Master's degree (硕士)<sup>164</sup>
  - o The college offers two professional master's degree in Military Science (军事).
  - o The college offers eight first-level master's degree conferring units for the following specialties:
    - Military Thought and Military History (军事思想及军事历史)
    - Science of Strategy (战略)
    - Science of Campaigns (战役)

- Science of Tactics (战术)
- Science of Military Command (军队指挥)
- Military Management (军事管理)
- Science of Military Political Work (军队政治工作)
- Military Training (军事训练)
- Doctoral degree (博士)<sup>165</sup>
  - o The school offers these five majors offer first-level PhD degree conferring units:
    - Science of Strategy (战略)
    - Science of Tactics (战术)
    - Science of Military Command (军队指挥)
    - Science of Military Political Work (军队政治工作)
    - Military Training (军事训练)
- Post-doctoral Specialties (博士后): The school has four post-doctoral research stations for these specialties:
  - o Science of Strategy (战略)
  - o Science of Tactics (战术)
  - o Science of Military Command (军队指挥)
  - o Science of Military Political Work (军队政治工作)

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生):<sup>166</sup> As of December 2013, the college has graduated over 3,300 foreign military students from over 100 countries. Among all the alumni, five became presidents, one became a vice president, one became prime minister, and eight became secretary of defense in their respective countries.
- Study abroad (留学): no information found
- Other interaction:

## SECTION 3-4: ARMY ENGINEERING UNIVERSITY

### CHINESE NAME AND ACRONYM:<sup>167</sup>

陆军工程大学 / 陆工大.

- Official English name(s): Army Engineering University of PLA<sup>168</sup> or simply Army Engineering University
- Official English Acronym: None found

### MOE CODE:

In 2017, a new code of 91004 was assigned.<sup>169</sup>

### TYPE OF INSTITUTION:

No available information was found.

### OFFICIAL WEBSITE (网络):

None found.

### BACKGROUND:

Established in June 2017 by combining the former PLA University of Science and Technology (PLAUST / AKA PLA Technology University / 解放军理工大学), which was created in 1999 by merging three existing academic institutions and a research institute, and the Ordnance Engineering College (军械工程学), which was originally established in 1973.<sup>170</sup>

The university's primary cultivation and training mission is based on the fields of Army communications, engineering, and ordnance equipment. It has 19 first-level and four second-level master's degree programs, as well as 11 first-level and two second-level doctoral degree programs. There are 20 post-doctoral research stations with six national key disciplines, seven military key disciplines, and 12 provincial key disciplines.

### CAMPUSES AND LOCATIONS:

The main campus is in Nanjing, Jiangsu Province, which was the main campus for PLAUST, but there are additional campuses in 1) Shijiazhuang, Hebei Province, which was the main campus for the Ordnance Engineering College, 2) Chongqing, which is the campus for the university's subordinate Communications NCO School (通信士官学校), 3) Wuhan, Hubei Province, which is the campus for the subordinate Wuhan Ordnance NCO School (军械士官学校), 4) and Xuzhou, Jiangsu Province, which has a training base (训练基地).<sup>171</sup>

### GRADE:

Corps deputy leader (副军级)<sup>172</sup>



SUBORDINATION:  
PLA Army HQ<sup>173</sup>

FACILITIES:

The university covers an area of 1,882 acres (11,422 mu), with 679 classrooms, 684 laboratories (specialized rooms), ten swimming pools, 14 athletics fields, and eight indoor comprehensive training halls, including underground shooting ranges.<sup>174</sup> The total area is 50,000 square meters. The university has seven national-level experimental teaching platforms (国家级实验教学平台), four national-level scientific research platforms (国家级科研平台), 13 Military Key Labs (军队重点实验室), two All-Army Key Labs (全军重点实验室), and National Defense Science and Technology Key Labs (国防科技重点实验室), which are all divided among the subordinate officer *xueyuan*.

ORGANIZATIONAL STRUCTURE:

The university, whose main campus is located in Nanjing, Jiangsu Province, has four subordinate officer *xueyuan*, a graduate school, two NCO schools, and a training base as shown below.<sup>175</sup> There is also a separate campus in Shijiazhuang, Hebei, but it is not clear what institutions are there.

- Officer *xueyuan* [Note: These are not official translations]
  - Communications Engineering *Xueyuan* (通信工程学院), Nanjing, Jiangsu<sup>176</sup>
  - Field Engineering *Xueyuan* (野战工程学院), Nanjing<sup>177</sup>
  - Command and Control Engineering *Xueyuan* (指挥控制工程学院), Nanjing<sup>178</sup>
  - National Defense College of Engineering (国防工程学院), Harbin, Heilongjiang<sup>179</sup>
- Graduate School (研究生院), Nanjing
- NCO schools
  - Communications NCO School (通信士官学校), Chongqing
  - Ordnance NCO School (军械士官学校), Wuhan, Hubei
- Training base, Xuzhou, Jiangsu

The university and each subordinate *xueyuan* and school have an administrative and functional department (部门) structure as well as academic departments (系); however, nothing was found for either of these organizations.

- Key Labs (重点实验室): The university has 13 Military Key Labs (军队重点实验室), two All-Army Key Labs (全军重点实验室), and a few National Defense Science and Technology (S&T) Key Labs (国防科技重点实验室), including a National Defense S&T Key Laboratory for Electromagnetic Environment and Electro-optical Engineering (电磁环境效应与光电工程国防科技重点实验室) and a National Defense S&T Key Laboratory for Electromagnetic Protection (电磁防护国防科技重点实验室).<sup>180</sup> The photo at the right below shows an unidentified National Defense S&T Key Lab.
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): As noted above, the university has research labs and research centers; however, no information was found concerning their names or responsibilities.



LEADERSHIP AND STAFF:

No information was found concerning who the current Commandant and Political Commissar for the university or any of the subordinate *xueyuan* and schools. Concerning the staff, altogether, the university has are about 1,000 special technical staff members, including about 700 who have a doctorate or master's degree and serve as advisors (具有高级专业技术职务的教员1000余名, 博士生, 硕士生导师700余名).<sup>181</sup> For example, information concerning the Communications and Electronics Information Discipline Group (通信与电子信息学科群) is shown below, which is similar to the other five disciplines discussed in the Specialty Code section:<sup>182</sup>

- There are two national key disciplines (国家重点学科), two military key disciplines (军队重点学科), four Jiangsu provincial key disciplines (江苏省重点学科), and five post-doctoral research stations (博士后科研流动站).
- There are more than 220 teaching and research personnel (教研人员). Among them, there are more than 100 professors and associate professors (教授, 副教授), 16 doctoral advisors (博士生导师) and 76 master's program advisors (硕士生导师).

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):<sup>183</sup>

- Either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs (士官职业技术教育) in the Communications NCO School and Wuhan Ordnance NCO School.
- Bachelor's degrees (本科高等教育): The university has undergraduate degrees in communications (通信), engineering (工程), and ordnance equipment (军械装备) for the following troops: army communications troops (陆军通信兵), engineering troops (工程兵), unmanned aerial vehicles (无人机), and weapons and equipment support (武器装备保障) for infantry, artillery, and air defense troops (步兵, 炮兵, 防空兵), as well as some new specialties (部分新兴专业军官培养) including army pilots (陆航飞行员) and aircraft maintenance (航空机务). The university offers 48 different bachelor's specialties, of which seven are for civil air defense (人防), including Communications Engineering (通信工程), Command Information System Engineering (指挥信息系统工程), Mechanical Engineering (机械工程), Civil Engineering (土木工程), Weapons Systems And Engineering (武器系统与工程), Radar Engineering (雷达工程), Missile Engineering (导弹工程), and Unmanned Aerial Vehicle System Engineering (无人系统工程).
- Master's degrees (硕士):<sup>184</sup> The university has as 19 first-level master's degree specialties organized into Mathematics (数学), Electronics Science and Technology (电子科学与技术), and Optical Engineering (光学工程) degrees (一级学科硕士学位授权点), as well as four second-level master's degree categories (二级学科硕士学位授权点), including Systems Analysis And Integration (系统分析与集成), Design and Manufacture of Ships and Marine Structures (船舶与海洋结构物设计制造), Environmental Engineering (环境工程), and Military Management (军队管理学). There are two types of degrees shown below:
  - 10 Master's in Engineering (工程硕士) degrees: Electronics and Communications Engineering (电子与通信工程), Computer Technology (计算机技术), Architecture and Civil Engineering (建筑与土木工程), Mechanical Engineering (机械工程), Optical Engineering (光学工程), Weapons Engineering (兵器工程), Control Engineering (控制工程), Electrical Engineering (电气工程), Software Engineering (软件工程), and Transportation Engineering (交通运输工程).
  - 3 Master's in Military Science (军事硕士) degrees: Military Command (军事指挥), Military Political Work (军队政治工作), and Military Equipment (军事装备).
- Doctoral degrees (博士): The university has 14 first-level doctoral stations (一级学科博士点); however, no information was found about the specific degrees but they are most likely extensions of the master's degree programs.
- Post-doctoral degrees (博士后): There are 20 post-doctoral research stations (博士后科研流动站(工作站))

#### SPECIALTIES:

Table 13 provides the 32 specialties for the Army Engineering University, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) were found for 2017:<sup>185</sup> The specialties are further organized into the following discipline groups (学科群):

- Communication and Electronic Information Discipline Group (通信与电子信息学科群)
- Network and Command Information System Discipline Group (网络与指挥信息系统学科群)
- Combat Engineering Support Discipline Group (作战工程保障学科群)
- National Defense Engineering and Protection Discipline Group (国防工程与防护学科群)
- Equipment Information Technology Subject Group (装备信息技术学科群).



**Table 13: 32 Army Engineering University Specialties**

Specialty Code	Specialty	Direction	Training Type
080201	Mechanical Engineering 机械工程	Combat Support Engineering & Command/Engineering Equipment Maintenance & Management 战斗支援工程与指挥/工程装备维修与管理	CO & Non-CO
080207	Vehicle Engineering 车辆工程	Equipment Technology Support & Sub-unit Command 装备技术保障与分队指挥	CO
080601	Electrical Engineering and Automation 电气工程及其自动化	Aviation Maintenance Technology & Command 航空机务技术与指挥	CO
080701	Electronic Information Engineering 电子信息工程	Aviation Maintenance Technology & Command	CO
080703	Communications Engineering 通信工程	Battlefield Mobile Communication Technology & Command / Command Information System Application & Support 战场机动通信技术与指挥	CO
080705	Optoelectronic Information Science and Engineering 光电信息科学与工程	Equipment Technology Support & Sub-unit Command	Non-CO
080903	Network Engineering 网络工程	Battlefield Mobile Communication Technology & Command / Command Information System Application & Support	CO
080904	Information Security 信息安全	Command Information System Utilization & Support 指挥信息系统运用与保障	CO
080905	Internet of Things Engineering 物联网工程	N/A	CO
081001	Civil Engineering 土木工程	Site Engineering & Command 阵地工程与指挥	CO
081006	Road Bridge and Fording Engineering 道路桥梁与渡河工程	Mobile Support Engineering & Command 机动保障工程与指挥	CO
081401	Geological Engineering 地质工程	Field Combat Water Supply 野战给水	CO
081805	Flight Technology 飞行技术	N/A	CO
082002	Aircraft Design and Engineering 飞行器设计与工程	Aviation Maintenance Technology & Command	CO & Non-CO
082101	Weapons System and Engineering 武器系统与工程	Equipment Technology Support & Sub-unit Command	CO
082104	Munition Engineering and Explosives Technology 弹药工程与爆炸技术	Combat Support Engineering & Command 战斗支援工程与指挥 Ammunition Technology 弹药技术	CO & Non-CO
110101	Combat Command 作战指挥	N/A	CO
110106	Fire Command and Control Engineering 火力指挥与控制工程	Equipment Technology Support & Sub-unit Command	CO
110109	Unmanned System Engineering 无人系统工程	Unmanned Aircraft Utilization & Command 无人机运用与指挥	CO
110110	Combat Environment Engineering 作战环境工程	Field Combat Water Supply	CO
110111	Big Data Engineering 大数据工程物理	N/A	CO
110113	Mine Clearing and Obstacle Clearing Engineering 地雷爆破与破障工程	Combat Support Engineering & Command	CO
110203	Military Facility Engineering 军事设施工程	National Defense Engineering & Command 国防工程与指挥	CO
110204	National Defense Engineering and Its Intelligentization 国防工程及其智能化	National Defense Engineering & Command	CO
110301	Command Information System Engineering 指挥信息系统工程	Battlefield Mobile Communication Technology & Command / Command Information System Application & Support	CO

U/I	场站管理工程	Aviation Service Technology & Command 航空勤务技术与指挥	CO
110305	Radar Engineering 雷达工程	Equipment Technology Support & Sub-unit Command	CO
110306	Missile Engineering 导弹工程	Equipment Technology Support & Sub-unit Command	CO
110311	Camouflage and Protective Equipment Engineering 伪装与防护工程	Camouflage Engineering & Command 伪装工程与指挥	CO
110312	Equipment Support Engineering 装备保障工程	Equipment Technology Support & Sub-unit Command	CO
110314	Equipment Economic Management 装备经济管理	Equipment Procurement Management 装备采购管理	CO

#### 2017 RECRUITMENT (招生):<sup>186</sup>

The following information comes from a chart found for recruitment of new cadets in the 2017:

- Number of specialties (专业): 32
- Degrees and number of years: four-year bachelor's degrees for each specialty
- Gender (男, 女): Although males are recruited for all 32 specialties, females are recruited for only three of the specialties – Communications Engineering (080703), Network Engineering (080903), and Big Data Engineering (110111) [Note: A high proportion of enlisted personnel involved in communications are females, who are organized into all-female companies with female commanders and political officers.]
- Total number of personnel recruited (合计): 813
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from every one of them. The lowest number was five and the highest number was 50.
- Foreign language requirements (外语语种): English proficiency was required for all 32 specialties
- Specialty categories (专业类别) – commanding officer (指挥) or non-commanding officer (非指): Of the 32 specialties, all but four of them are for commanding officers

#### INTERNATIONAL EXCHANGES AND COOPERATION:<sup>187</sup>

- Foreign students (外军留学生): The university has hosted about 3,800 foreign students from over 80 countries study at the university (为80多个国家培养军事留学生3800余名) [Note: This most likely includes multiple years of students at the various academic institutions that comprise the university, which was established in 2017.]
- Study abroad (留学) and visits abroad (访学): The university has sent more than 210 students abroad for visits (选派210余名学员访学). [Note: This also most likely includes students from the previous academic institutions that now comprise the university.]
- Other interaction: The university has had regular exchanges with 14 foreign military elite schools, such as the United States' West Point Military Academy and the British Royal Military Academy. It has engaged in ten consecutive "Jingwu Cup" military competitions at home and abroad (军内外连续举办10届“精武杯”军事项目对抗赛) and has participated in West Point's Sandhurst Competition. It has hosted about 100 foreign military delegations.

## SECTION 3-5: ARMY INFANTRY COLLEGE

### CHINESE NAME AND ACRONYM:

陆军步兵学院. No acronym was found.

- Official English name(s): Army Infantry College<sup>188</sup>
- English Acronym: None was found

### MOE CODE:<sup>189</sup>

In 2017, a new code of 91005 was assigned when the college was created. The previous code from 2008 was 90062 for the Nanchang Military Academy and 90060 for the Shijiazhuang Mechanized Infantry Academy that merged into the new college.

### TYPE OF INSTITUTION:

It is both an Academic Education (学历教育) and a Professional Education (任职教育) institution.<sup>190</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

The Army Infantry College is subordinate to the PLA Army HQ. It was part of the original China Workers' and Peasants' Red Army School of the 1930s. The college has participated in nine (9) military parades during the PRC National Day. In 2017, the college came into existence as the PLA merged its Nanchang Military Academy and Shijiazhuang Mechanized Infantry Academy under multifaceted reforms as shown below.<sup>191</sup>

### NANCHANG MILITARY ACADEMY AKA NANCHANG ARMY COLLEGE (南昌陆军学院)<sup>192</sup>

- In August 1949, the Nanchang-based Central China Military and Political University Jiangxi campus (华中军事政治大学江西分校) was established.
- In January 1950, the university was renamed as the Central South Military and Political University Jiangxi Province campus (中南军事政治大学江西分校).
- In August 1950, it was renamed as the Central South Military and Political University, Fourth campus (中南军事政治大学江西分校)
- In March 1951, it became an independent institution and renamed as the 23<sup>rd</sup> Infantry School (第二十三步兵学校) and designated as a Corps-level institution.
- In 1952, the 23<sup>rd</sup> Infantry School, East China 3<sup>rd</sup> Air Defense School Training Division (华东第三防空学校训练处), and the 4<sup>th</sup> Training Battalion (第四军教导营) were merged into the PLA Air Defense School (中国人民解放军防空学校). In September 1958, the Air Defense School merged with the Air Force Radar School (空军雷达学校).



- In 1953, a branch of the 23<sup>rd</sup> Infantry School (第二十三步兵学校) became the PLA Central South Military Region (MR) Normal School (中南军区师范学校).
- In 1955, it was renamed as the Nanchang Infantry School (中国人民解放军南昌步兵学校) and was assigned to the Nanjing MR. In 1960, it was reassigned under the Fuzhou MR.
- In January 1963, it was renamed as the PLA Fuzhou MR Infantry School (中国人民解放军福州军区步兵学校).
- In 1968, the school was abolished.
- In February 1974, the PLA Fuzhou MR Political Cadre School (中国人民解放军福州军区军政干部学校) was officially opened at the Wangchenggang Village, Nanchang City, Jiangxi Province (江西省南昌市望城岗) based on the former PLA Fuzhou MR Infantry School campus.
- In January 1978, it was renamed as the PLA Fuzhou MR Infantry School (中国人民解放军福州军区步兵学校).
- In February 1981, the school was renamed as the PLA Nanchang Army School (中国人民解放军南昌陆军学校). In 1985, it was reassigned under the Nanjing MR.
- In June 1986, it was upgraded to the PLA Nanchang Military Academy (中国人民解放军南昌陆军学院).
- In 1992, it was downgraded from corps leader to corps deputy leader grade.
- In late 2015, it was reassigned from the Nanjing MR to the newly created PLA Army HQ.

#### THE SHIJIAZHUANG MECHANIZED INFANTRY ACADEMY AKA SHIJIAZHUANG MECHANIZED INFANTRY COLLEGE (石家庄机械化步兵学院)<sup>193</sup>

- In March 1951, the People's Revolutionary Military Committee of the Central People's Government (中央人民政府人民革命军事委员会) ordered the PLA to rename all military political schools in all major MRs as PLA Advanced Infantry Schools (中国人民解放军高级步兵学校) and branch campus as PLA Infantry Schools (中国人民解放军步兵学校). In the interim, the designation and quantity of all infantry schools had been unified. During this reform, the North China Military Political University (华北军事政治大学) was renamed as the PLA 6<sup>th</sup> Advanced Infantry School (中国人民解放军第六高级步兵学校), and the North China Military Political University Huolu Campus (华北军事政治大学获鹿分校) and the 67<sup>th</sup> Army Military Department (第六十七军军部) became the PLA 32<sup>nd</sup> Infantry School (中国人民解放军第三十二步兵学校).
- In June 1952, the CMC published the "Order Regarding Reorganizing National-wide Military Institutes" (关于调整全国军事院校的命令), the school was renamed as the PLA 9<sup>th</sup> Infantry School (中国人民解放军第九步兵学校) and relocated to Shijiazhuang City, Hebei Province.
- In April 1955, the CMC also ordered the PLA to establish an armor school based on the foundation of Nanjing Military School's Armor [Academic] Department (南京军事学校装甲兵系). In May 1955, the Ministry of National Defense (MND) ordered the renaming of all infantry schools and titled them with their geographic locations. As such the school was renamed as the PLA Shijiazhuang Infantry School (中国人民解放军石家庄步兵学校).
- In August 1955, the MND ordered the establishment of a corps-level armor school in Datong City, Shanxi Province based on the foundation of the Military School's Armor Department.
- In June 1958, the PLA Armor School (中国人民解放军装甲兵学院) was formally established. It became the first advanced armor institute of the PLA. The campus is located in Datong city of Shanxi province. In March 1959, the PLA Armor School held its opening ceremony.
- In September 1962, the PLA General Staff Department (GSD) and General Political Department (GPD) published a directive to change the names of infantry schools based on their assigned MRs. The school was renamed as the PLA Beijing MR Infantry School (中国人民解放军北京军区步兵学校).
- In 1969, the CMC published a restructuring proposal that abolished the Beijing MR Infantry School.
- In September 1975, the CMC authorized the establishment of the corps-level Armored Force Military Political Cadre School (中国人民解放军装甲兵军政干部学校) in Yuanshi County, Hebei Province (河北省元氏县).
- In January 1978, the school was upgraded to bingtuan level (兵团级) and renamed as the Armored Force School (中国人民解放军装甲兵学院).

- In May 1983, it was upgraded from bingtuan leader to corps level (军级).
- In 1977, the Beijing MR Infantry School was reestablished.
- In December 1980, the school was renamed as The PLA Shijiazhuang Infantry School (中国人民解放军石家庄陆军学校).
- In June 1986, it was upgraded to the Shijiazhuang Mechanized Infantry Academy (中国人民解放军石家庄陆军学院).
- In June 1986, it was renamed as the Armored Force Command College and assigned under the GSD as a corps deputy leader-grade entity.
- In August 1992, it was downgraded to division leader grade and renamed as the Armor Force College.
- In June 1993, it was upgraded to deputy corps leader grade as the Armored Command College.
- In July 1999, chairman of the CMC, Jiang Zemin, signed the order to merge the Armored Force College and Army Command College into the Shijiazhuang Army Command College (中国人民解放军石家庄陆军指挥学院). As such, the Armored Force College became the Shijiazhuang Army Command College's Yuanshi campus (中国人民解放军石家庄陆军指挥学院元氏分院).
- In May 2004, a merger of the Shijiazhuang Army College and Shijiazhuang Army Command College took place, which created the Shijiazhuang Mechanized Infantry Academy. It is a corps deputy leader-grade institution. It did not accept high school graduates and only offered vocational training. The purpose of the school was to serve as a training base and research institute for junior-level leaders.
- In 2015, during the national defense and armed forces reform, the colleges were transferred from the Beijing MR to the PLA Army HQ when it was established.

#### THE ARMY INFANTRY COLLEGE

- In 2017, the PLA merged the Nanchang Military Academy (南昌陆军学院) with Shijiazhuang Mechanized Infantry Academy (石家庄机械化步兵学院) to form the Army Infantry College.
- On 1 August 2017, People's Liberation Army Day (中国人民解放军建军纪念日), plaque unveiling ceremonies were held in the Nanchang campus and Shijiazhuang campus, respectively.

#### CAMPUSES AND LOCATIONS:

The main campus (本部) is located in Nanchang, Jiangxi Province. The branch campus (分院) is in Shijiazhuang, Hebei Province. In 2017, the PLA merged the Nanchang Military Academy (南昌陆军学院) with Shijiazhuang Mechanized Infantry Academy (石家庄机械化步兵学院) to form the Army Infantry College. The former Nanchang Military Academy has a rich history since the existence of the PLA. The college is also known as the "cradle of generals", as over 140 alumni became military generals. To date, the college has graduated over 200 graduate students, nearly 300,000 military and political leaders, and over 5,000 international students of military studies from 106 countries.<sup>194</sup>

#### GRADE:

Corps deputy leader (副军级)<sup>195</sup>

#### SUBORDINATION:

PLA Army HQ<sup>196</sup>

#### FACILITIES:

The Nanchang-based campus covers 3229 acres (19,600 mu), it has state-of-the-art teaching complex (教学大楼), information technology complex (信息大楼), cultural and sports training center (文体训练中心), library and other teaching establishments. Along with over 40 training sites for military physical fitness (军事体育训练), military skill



training (军事技能训练), and unit tactics training (分队战术). Those sites are well-equipped with the cutting-edge infantry combat vehicles and light weapons and equipment.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None found.
- Subordinate NCO school (士官学校): None found
- Administrative and functional departments (部门)
- Academic departments (系): The following departments are identified: Combat Command, Command Information Systems Engineering, Armored Vehicle Engineering, and Weapon Systems and Engineering
- Teaching and research labs (教研室): It has a laboratory complex (实验大楼) and combat experimentation center (作战实验中心), teaching complex (教学大楼), information technology complex (信息大楼), cultural and sports training center (文体训练中心).<sup>197</sup>
- Graduate school (研究生院): The academy has a graduate school.
- Student teams (队 / 区队) and groups (大队): none identified

#### LEADERSHIP AND STAFF:

- Commandant (院长):<sup>198</sup> Major General Xu Jinhua (徐金华)
- Political Commissar (政委):<sup>199</sup> Major General Liu Yong (刘勇)
- Professors and staff: No information found.

#### DEGREES, MAJORS, AND SPECIALTIES:

The school is responsible for the training of junior-level commanding officers, combined arms battalion staff officer (合成营参谋军官), Military Science graduate students, as well as foreign army's company and platoon-level military officers, along with their staff officers.<sup>200</sup>

- Special technical (associate's) degrees (大专) degrees: 2-3 years for NCOs (士官职业技术教育)
- Bachelor's degree (本科): The following degrees are offered
  - Bachelor's degree majors and specialties
- Combat Command (作战指挥)
- Command Information Systems Engineering (指挥信息系统工程)
- Armored Vehicle Engineering (装甲车辆工程)
- Weapon Systems and Engineering (武器系统与工程)
- Master's degree (硕士): There are two master's degree majors:
  - Military Command (军事指挥)
  - Military Equipment (军事装备)
- Doctoral (PhD) degree (博士)
  - Doctoral degree majors and specialties: None were identified.

#### POST-DOCTORATE SPECIALTIES (博士后):

None found.

#### SPECIALTIES:

The following table provides a list of the number of specialties for the Army Infantry College, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:<sup>201</sup>

**Table 14: Army Infantry College Specialties**

Specialty Code	Specialty	Direction	Training Type	Student Accepted
110101	Combat Command 作战指挥	Command of Motorized Infantry Units 摩托化步兵分队指挥 Command of Mountain Infantry Units 山地步兵分队指挥 Command of 警卫勤务分队指挥 Command of Mechanized Infantry Battalion Artillery Detachment 机械化步兵营属炮兵分队指挥	CO	26
110301	Command Information Systems Engineering 指挥信息系统工程	Command of Air Assault Units 空中突击步兵分队指挥 Command of Light High Mobility Infantry Unit 轻型高机动步兵分队指挥	CO	10
082106	Armored Vehicle Engineering 装甲车辆工程	Command of Armored Infantry Units 装甲步兵分队指挥 Command of Mechanized Infantry Reconnaissance Detachment 机械化步兵侦察分队指挥	CO	130
082101	Weapon Systems and Engineering 武器系统与工程	Command of Motorized Infantry Units Artillery Detachment 摩托化步兵营属炮兵分队指挥	CO	193

#### 2017 UNDERGRADUATE RECRUITMENT:<sup>202</sup>

- Number of Specialties (专业): four majors for Bachelor's degrees and two majors for Master's degree.
- Gender (男, 女): Male only
- Total number of personnel recruited (合计): 359
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): Commanding officers (指挥) only. No non-commanding officer (非指) specialties.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生):<sup>203</sup> The college has foreign military students from 106 countries.
- Study abroad (留学): None was found
- Other interaction: None was found.

## SECTION 3-6: ARMY ACADEMY OF ARMORED FORCES

### CHINESE NAME AND ACRONYM:

陆军装甲兵学院. No acronym found.

- Official English name(s): Army Academy of Armored Forces<sup>204</sup>
- English Acronym: None found

### MOE CODE:<sup>205</sup>

91006 assigned in 2017.

### TYPE OF INSTITUTION:

The school offers both Academic Education (学历教育) and Professional Education (任职教育).<sup>206</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>207</sup>

The timeline of the Army Academy of Armored Forces is as follow:

#### PLA ACADEMY OF ARMORED FORCES (中国人民解放军装甲兵学院)

- In 1950, the PLA Tank School (中国人民解放军坦克学校) was established on Machang Road, Tianjin City (天津市马场道) and Dawangzhuang (大王庄). Eventually, it was relocated to Changxindian, Beijing (北京市长辛店).
- In May 1951, it was renamed as the PLA First Combat Vehicle School (中国人民解放军第一战车学校).
- In March 1953, it was renamed as the PLA First Tank School (中国人民解放军第一坦克学校).
- In February 1969, the PLA First Tank School was abolished.
- In December 1978, the Central Military Commission (CMC) restructured the school as the PLA Tank School (中国人民解放军坦克学校) in Su County, Anhui Province (安徽省宿县).
- In July 1982, it was relocated to Bengbu City, Anhui Province (安徽省蚌埠市).
- In June 1986, it was upgraded to the Bengbu Tank Academy of the CLPA (中国人民解放军蚌埠坦克学院).
- In November 2011, it was renamed the PLA Academy of Armored Forces (中国人民解放军装甲兵学院).
- In 2016, during the national defense fortification and armed forces reform, the school was reassigned from the General Staff Department (GSD) to the PLA Army.

#### ARMORED FORCE ENGINEERING COLLEGE OF THE CPLA OR ARMORED CORPS ENGINEERING COLLEGE (中国人民解放军装甲兵工程学院)<sup>208</sup>

- In 1961, the Armored Force Engineering College of the CPLA (中国人民解放军装甲兵工程学院) was created.



- In 1969, the PLA merged its Armored Forces Engineering College (装甲兵工程学院), The Second Tank School (第二坦克学校), and part of The Fifth Tank Technical School (第五坦克技术学校) into the PLA Tank Technical School (中国人民解放军坦克技术学校) in Beijing.
- In 1971, the PLA Tank Technical School opened enrollment for foreign students.
- In 1976, it was renamed as the Armored Forces Technical School of the CPLA (中国人民解放军装甲兵技术学校).
- In 1978, it was upgraded to Armored Forces Technical College of the CPLA (中国人民解放军装甲兵技术学院).
- In 1986, it was renamed as Armored Forces Engineering College of the CPLA (中国人民解放军装甲兵工程学院).
- In May 1999, the school was transferred from the PLA General Staff Department (GSD) to the PLA General Armament Department (GAD).
- In 2004, the Armored Forces Research Institute was integrated into the college (装甲兵技术研究所).
- In 2016, the college was transferred from the GAD to the PLA Army under the armed forces reform.

#### CAMPUSES AND LOCATIONS:<sup>209</sup>

The Army Academy of Armored Forces is located by the Marco Polo Bridge, Beijing. The academy is subordinate to the PLA Army as part of the Project 2110 key development institute. It is also highly regarded as the “Cradle of the King of land combat.”

The academy is a comprehensive institution that trains Armored Forces commanding officers (装甲兵指挥军官), staff officers (参谋军官), and technical support officers (技术保障军官), along with command and management (指挥管理士官) noncommissioned Officers (NCOs), and maintenance and Support NCOs (维修保障士官). The academy is primarily responsible for advanced education of pre-commissioned officers (生长军官高等教育), training of pre-commissioned officers (生长军官任职培训), training of active-duty officer (现职军官任职培训), rotational training of active-duty officers (现职军官轮训), NCO cultivation and training (士官培训), graduate student education (研究生教育), civilian personnel cultivation and training (文职人员培训), and foreign military student cultivation and training (外军留学生培训). In the interim, the academy undertakes the responsibility of scientific research and development of Army weapons and equipment. The academy serves as a base of developing combat arms leaders who are tactically and technically proficient, innovation of military theory concepts and technologies, as well as research and experiment of cutting-edge equipment and training methods.

#### GRADE:

Corps deputy leader (副军级).<sup>210</sup> The previous Bengbu Tank Academy was a division leader-grade organization and the Armored Forces Engineering College was corps deputy leader grade.<sup>211</sup>

#### SUBORDINATION:<sup>212</sup>

PLA Army HQ

#### FACILITIES:<sup>213</sup>

The Bengbu campus (蚌埠校区) is the main campus (本部), and there is a Noncommissioned Officer School (士官学校) in Changchun, Jilin Province. The campus covers an area of 1,105 acres (6,700 mu) with a wide range of instruction, scientific research, living and cultural amenities. As such, there is a state-of-the-art instructional complex, scientific and technological activity center, library, military physical training center, swimming hall, and integrated laboratory. There are over 200 laboratories and specialized classrooms, plus 28 integrated training establishments.

#### ORGANIZATIONAL STRUCTURE:<sup>214</sup>

- Subordinate *Xueyuan* (学院): None
- Subordinate NCO school (士官学校): It is located in Changchun, Jilin Province

- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for the institute;<sup>215</sup> however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部 / 院务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>216</sup> (aka Basic Department / 基础部).
- Academic departments (系): The following academic departments were identified
  - Mechanical Engineering (机械工程)
  - Control Engineering (控制工程)
  - Arms Engineering (兵器工程)
  - Equipment Command and Management (装备指挥与管理系)
  - Technical Sustaining Engineering (技术保障工程)
  - Information Engineering (信息工程)
  - Equipment Remanufacturing Engineering (装备再制造工程)
  - Foreign Military Training (外训系)
- Key labs (重点实验室) The following key labs were identified:<sup>217</sup>
  - Two Key Laboratories of National Defense Technology (国防科技重点实验室)
  - Three all-Army Key Laboratories (全军重点实验室)
- Research labs (研究室) and centers (研究中心)
  - One National Engineering Research Center (国家工程中心)
  - One National Experimental Teaching Demonstrating Center (国家级实验教学示范中心)
  - Two post-doctoral research stations (博士后科研流动站) for Armament Science and Technology (兵器科学与技术) and Materials Science and Engineering (材料科学与工程)<sup>218</sup>
- Teaching and research labs (教研室): none identified
- Graduate school (研究生院): There is a graduate school
- Student teams (队/区队) and groups (大队): none identified

#### LEADERSHIP AND STAFF:<sup>219</sup>

- Commandant (院长): Major General Xu Hang (徐航少将)
- Political Commissar (政委): Major General Yang Ge (杨戈少将)
- Professors and staff: The academy has over 650 faculties and over 400 specialized scientific researchers.<sup>220</sup>

#### DEGREES, MAJORS, AND SPECIALTIES:

- Special technical (associate's) degrees (大专) degrees: 2-3 years for NCOs (士官职业技术教育)
- Bachelor's degree (本科): 4 years
- Master's degree (硕士):<sup>221</sup>
  - Six *first-level* Disciplines for Master's Degree
  - 29 Second-level Disciplines for Master's Degree
    - Engineering (工学)
    - Science (理学)
    - Management (管理学)
    - Military Science (军事学)
    - Philosophy (哲学)



- Doctoral (PhD) degree (博士):<sup>222</sup>
  - o Two First-level Disciplines for Doctoral Degree
  - o Ten Second-level Disciplines for Doctoral Degree

#### POST-DOCTORATE SPECIALTIES (博士后):

None found.

#### SPECIALTIES:

The following table provides a list of the number of specialties for the Army Academy of Armored Forces, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2019:<sup>223</sup>

**Table 15: Army Academy of Armored Forces Specialties**

Specialty Code	Specialty	Direction	Training Type
080201	Mechanical Engineering 机械工程	Armored Forces Unit Command 装甲兵分队指挥	CO
080401	Materials Science & Engineering 材料科学与工程	Armored Forces Unit Command 装甲兵分队指挥	
080601	Power System and its Automation 电力系统及其自动化	Armored Forces Unit Command 装甲兵分队指挥	
080703	Communication Engineering 通信工程	Armored Forces Unit Command 装甲兵分队指挥	
080705	Opto-Electronics Information Science and Engineering 光电信息科学与工程	Armored Forces Reconnaissance Unit Command 装甲兵侦察分队指挥	
082101	Weapon Systems & Utilization Engineering 武器系统与运用工程	Armored Equipment Maintenance & Management 装甲装备维修与管理	
082106	Armored Vehicle Engineering 装甲车辆工程	Armored Equipment Maintenance & Management 装甲装备维修与管理	
110101	Battle Command 作战指挥	Armored Forces Unit Command 装甲兵分队指挥	
110103	Reconnaissance Information 侦察情报	Armored Forces Reconnaissance Unit Command 装甲兵侦察分队指挥	
110106	Fire Control & Command Control Engineering 火力与指挥控制工程	Armored Forces Unit Command 装甲兵分队指挥	
110109	Unmanned Systems Engineering 无人系统工程	Armored Forces Reconnaissance Unit Command 装甲兵侦察分队指挥	
110301	Command Information Systems Engineering 指挥信息系统工程	Armored Forces Unit Command 装甲兵分队指挥	
110309	Simulation Engineering 仿真工程	Armored Forces Unit Command 装甲兵分队指挥	
110313	Equipment Remanufacturing Engineering 装备再制作工程	Armored Equipment Maintenance & Management 装甲装备维修与管理	
1201	Management Science & Engineering 管理科学与工程	Armored Forces Unit Command 装甲兵分队指挥	

#### 2019 UNDERGRADUATE RECRUITMENT:<sup>224</sup>

- Number of Specialties (专业)
  - o Mechanical Engineering (机械工程)
  - o Power System and its Automation (电气工程及其自动化)
  - o Fire Command & Control Engineering (火力指挥与控制工程)
  - o Command Information Systems Engineering (指挥信息系统工程)
  - o Management Science & Engineering (管理科学与工程)

- o Simulation Engineering (仿真工程)
- o Combat Command (作战指挥)
- o Communication Engineering (通信工程)
- o Materials Science & Engineering (材料科学与工程)
- o Opto-Electronics Information Science and Engineering(光电信息科学与工程)
- o Unmanned Systems Engineering (无人系统工程)
- o Reconnaissance & Intelligence (侦察情报)
- o Armored Vehicle Engineering (装甲车辆工程)
- o Weapon Systems Engineering (武器系统与工程)
- o Equipment Remanufacturing Engineering (装备再制造工程)
- Gender (男,女): Male only
- Total number of personnel recruited (合计): 483
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): Commanding officer (指挥) only

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): <sup>225</sup>The institution offers education and training for foreign students. As of 2017, the academy had provided training for about 2,400 students from more than 50 countries.
- Study abroad (留学): no information was found
- Other interaction: no information was found

#### JOURNALS<sup>226</sup>

- Readiness Standardized Manual (战备标准手册)
- Combat Operations Manual (作战行动手册)

## SECTION 3-7: ARMY ACADEMY OF ARTILLERY AND AIR DEFENSE

### CHINESE NAME AND ACRONYM:

陆军炮兵防空兵学院. No acronym was found.

- Official English name(s):<sup>227</sup> PLA Army Academy of Artillery and Air Defense as shown in the logo at the right.
- English Acronym: None found



### MOE CODE:

In 2017, a new code of 91007 was assigned.<sup>228</sup> Since this academy was created in 2017 by merging other institutions, it was not just renamed and did not have a previous code from 2008.

### TYPE OF INSTITUTION:<sup>229</sup>

The academy is an Academic Education (学历教育) institution. No references to it as a Professional Education (任职教育) institution were found.

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

The academy was created in 2017 by merging the following former academic institutions under a single organization, but some former institutions still exist as separate subordinate campuses, which will be discussed on the Campuses subsection later. The following bullets provide a brief overview of the former four officer academic institutions and one NCO academic institution.<sup>230</sup>

- The Army Command College (陆军军官学院) was created in 1977 in Zhengzhou, Henan Province, as the Artillery Technical Academy (炮兵技术学院). In 1978, it moved to Hefei, Anhui Province and was subordinate to the General Staff Department.<sup>231</sup> In 1986, it was renamed the Anhui Artillery Academy (合肥炮兵学院). In July 1999, it was merged with the Nanjing Artillery Academy (南京炮兵学院) noted below to become the Artillery Academy (炮兵学院) with the main campus in Hefei and a branch campus in Nanjing. In August 2011, it was renamed the Army Command College. At the beginning of 2016, it was resubordinated from the former General Staff Department to the PLA Army HQ. No 2008 MOE code was found.
- The Nanjing Artillery Academy (南京炮兵学院) had its origins as an artillery unit during World War II and became an artillery school in Nanjing in 1949. Over the years, it was renamed multiple times and was abolished from December 1969 until it was reestablished in 1974 and was subordinated to the General Staff Department's Artillery Department. In 1977 it was renamed the First Ground Artillery School (第一地面炮兵学校). In July 1986, it was upgraded to an academy and was renamed the Nanjing Artillery Academy. In 1999, it was merged under the Hefei Artillery Academy and became a branch campus in Nanjing. The 2008 MOE code was 90013.

- The Air Defense Academy (防空兵学院) had two predecessors. One was created in September 1949 as the Air Defense School (防空学校) in Shenyang, Liaoning Province. In June 1951, it was renamed the Antiaircraft Artillery School (高射炮兵学校). In 1959, it moved to Nanjing. In 1962, it moved again to Wuhan, Hubei Province. A second predecessor also created in May 1951 as the Fourth Artillery School (第四炮兵学校) in Zhengzhou, Henan Province. In September 1969, both schools were abolished. In April 1970, the Artillery Technical School (炮兵技术学校) was created in Nanjing and moved to Zhengzhou in November. In January 1974, the school was renamed as the Antiaircraft Artillery School (高射炮兵学校). In July 1986, it was renamed as the Antiaircraft Artillery Academy (高炮学院). In 1999, it was renamed yet again as the Zhengzhou Air Defense Force Academy (郑州防空兵学院). In May 2004, using the Air Defense Force Academy as the base, the Artillery Command Academy (炮兵指挥学院) and Langfang Army Missile College (廊坊陆军导弹学院) were merged together as the Air Defense Force Command College (防空兵指挥学院) and was upgraded from division leader grade to corps deputy leader. In September 2011, it was renamed as the Air Defense Forces College (防空兵学院). In early 2016, it was resubordinated from the former General Staff Department to the PLA Army HQ. The 2008 MOE code was 90018.
- The Shenyang Artillery Academy (沈阳炮兵学院) was created in 1978 as the Second Ground Artillery School (第二地面炮兵学校) in Shenyang, Liaoning Province. In June 1986, it was upgraded and renamed as the Shenyang Artillery Academy. In June 2017, it became the Army Artillery and Air Defense Academy's NCO School (炮兵防空兵学院士官学校).
- NCO School (士官学校) was created in June 2017 when the Shenyang Artillery Academy discussed above was reorganized as the NCO School.

#### CAMPUSES AND LOCATIONS:<sup>232</sup>

The academy consists of the following main campus (本部), two branch campuses (分院), and a subordinate NCO school (士官学校):

- The main campus, shown at the left below, is located at No. 451, Huangshan Road, Laoshan District, Hefei, Anhui Province (安徽省合肥市蜀山区黄山路451号)
- The Nanjing branch campus, shown in the middle below, is located at No. 3, Zuochang, Jiangning District, Nanjing, Jiangsu Province (江苏省南京市江宁区作厂3号)
- The Zhengzhou campus, shown at the right below, is located at No. 24, Jianshe East Road, 17 District, Zhengzhou, Henan Province (河南省郑州市二七区建设东路24号)
- The NCO School is located at No. 31, East Daying Street, Dongling District, Shenyang, Liaoning Province (辽宁省沈阳市东陵区东大营街31号)



#### GRADE:<sup>233</sup>

Corps deputy leader (副军级)

#### SUBORDINATION:<sup>234</sup>

PLA Army HQ

#### FACILITIES:<sup>235</sup>

Overall, the academy covers 14,000 acres (84,798 mu), including 560 acres (3,400 mu) for the main campus; 8,200 acres (49,600 mu) for a field combat-oriented comprehensive training base (野战化综合军事训练基地) that integrates military basic training (军事基础训练), military professional training (军事专业训练), tactical comprehensive training events (战术综合演练), and scientific research experiments (科研实验); 380,000 square meters of teaching and living infrastructure (教学生活基础设施); 3,500 square kilometers of flying space (飞行空域). Altogether, the campuses have four libraries with more than 1.3 million books. The Nanjing campus is adjacent to the largest artillery range (炮兵靶场) in Asia, the Tangshan Shooting Range (汤山靶场). The cannons can be set up in the yard to shoot live ammunition. The gymnasium is equipped with combat physical and professional skills training grounds (战斗体能和专业技能训练场), artillery field simulation shooting range (炮兵野外模拟射击场), and an artillery simulation training center (炮兵模拟训练中心). The Artillery Field Training Center meets the needs of combat physical fitness, professional skills and tactical training. The Zhengzhou Campus has military basic comprehensive training grounds (军事基础综合训练场), weapons and equipment comprehensive training grounds (武器装备综合训练场), portable air defense missile training grounds (便携式防空导弹训练场), and individual tactics and communication training grounds (单兵战术与通信训练场). There are four professional technical training grounds (专业技术训练场) outside the hospital to meet the professional weapons operation of the air defense training, ground-to-air training, and tactical training needs. There are 23 training grounds (训练场) in the NCO School. There are more than 165 acres (1,000 mu) of comprehensive training grounds (综合训练场) in Kaiyuan, Liaoning Province and more than 3,300 acres (20,000 mu) of training bases in Arong Banner, Inner Mongolia.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): The academy, as a *xueyuan*, does not have any subordinate *xueyuan*.
- Subordinate NCO school (士官学校):<sup>236</sup> The academy has one subordinate NCO School, which is located in Shenyang, Liaoning Province, and is merely identified as the NCO School.
- Administrative and functional departments (部门): As a new organization in 2017, it most likely has the structure discussed in the intro section to this report.
- Academic departments (系):<sup>237</sup> The following five academic departments were identified:
  - Artillery Subunit Command Department (炮兵分队指挥系)
  - Antitank Missile Subunit Command Department (反坦克导弹分队指挥系)
  - Air Defense Missile Technology and Command Department (防空导弹技术与指挥系)
  - Air Defense Force Support Specialty Subunit Command Department (防空兵保障专业分队指挥系)
  - Missile and Artillery Integrated Weapons Technology and Command Department (弹炮一体武器技术与指挥系)
- Key labs (重点实验室):<sup>238</sup> The following key labs were identified:
  - 1 unidentified National Defense Science Key Lab (国防科技重点实验室)
  - 2 unidentified Army-level (Provincial Ministry-level) Key Labs (军队级(省部级)重点实验室)
- Research labs (研究室), centers (研究中心), and teaching and research labs (教研室): No information was found.
- Graduate school (研究生院): No information was found concerning a graduate school
- Student teams (队 / 区队) and groups (大队): No information was found

#### LEADERSHIP AND STAFF:<sup>239</sup>

- Commandant: MGEN Zhao Tianxiang (赵天翔)
- Political Commissar: MGEN Wang Zhian (王志安)
- Professors and Staff:<sup>240</sup> The academy has 1 academician of the Chinese Academy of Engineering (中国工程院院士), four special technical major generals (专业技术少将), 184 professors (教授) and 305 associate professors (副教授). The academy has an unidentified number of graduate (master's and PhD) advisors (导师).



DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified.
- Bachelor's degree (本科): four years
  - o Concerning the bachelor's degree program, the academy has the following six majors and 21 specialties:<sup>241</sup>
    - 6 Majors: Military Science (军事学), Engineering (工学), Science (理学), Management (管理学), Philosophy (哲学), and Literature (文学)
    - Table 16 provides a list of specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017.<sup>242</sup>

**Table 16: Army Academy of Artillery and Air Defense Specialties**

Specialty Code	Specialty	Direction	Training Type
080201	Mechanical Engineering 机械工程	Artillery Subunit Command 炮兵分队指挥	CO
080301	Measurement & Control Technology & Instrument 测控技术与仪器	Artillery Support Specialty Subunit Command 炮兵保障专业分队指挥	CO
080601	Electrical Engineering & Automation 电气工程及其自动化	Artillery Subunit Command 炮兵分队指挥	CO
080703	Communications Engineering 通信工程	Artillery Support Specialty Subunit Command 炮兵保障专业分队指挥 Air Defense Force Support Specialty Subunit Command 防空兵保障专业分队指挥	CO
080705	Optoelectronic Information Science & Engineering 光电信息科学与工程	Artillery Subunit Command 炮兵分队指挥 Air Defense Force Support Specialty Subunit Command 防空兵保障专业分队指挥	CO
080706	Information Engineering 信息工程	Artillery Subunit Command 炮兵分队指挥 Air Defense Missile Technology & Command 防空导弹技术与指挥	CO
080901	Computer Science & Technology 计算机科学与技术	Artillery Subunit Command 炮兵分队指挥 Antiaircraft Artillery Subunit Command 高炮分队指挥	CO
082101	Weapon Systems & Engineering 武器系统与工程	Artillery Subunit Command 炮兵分队指挥 Antitank Missile Subunit Command 反坦克导弹分队指挥 Missile and Artillery Integrated Weapons Technology & Command 弹炮一体武器技术与指挥	CO
082104	Munition Engineering & Explosives Technology 弹药工程与爆炸技术	Missile and Artillery Integrated Weapons Technology & Command 弹炮一体武器技术与指挥	CO
110106	Fire Power Command & Control Engineering 火力指挥与控制工程	Artillery Subunit Command 炮兵分队指挥 Antiaircraft Artillery Subunit Command 高炮分队指挥 Air Defense Missile Technology & Command 防空导弹技术与指挥 Antitank Missile Subunit Command 反坦克导弹分队指挥	CO
110109	Unmanned System Engineering 无人系统工程	Artillery Support Specialty Subunit Command 炮兵保障专业分队指挥	CO

110301	Command Information System Engineering 指挥信息系统工程	Artillery Support Specialty Subunit Command 炮兵保障专业分队指挥 Missile and Artillery Integrated Weapons Technology & Command 弹炮一体武器技术与指挥	CO
110305	Radar Engineering 雷达工程	Air Defense Force Support Specialty Subunit Command 防空兵保障专业分队指挥 Air Defense Missile Technology & Command 防空导弹技术与指挥	CO
110306	Missile Engineering 导弹工程	Air Defense Missile Technology & Command 防空导弹技术与指挥 Antitank Missile Subunit Command 反坦克导弹分队指挥	CO

- Master's degree (硕士)
  - o Master's degree majors and specialties: No information was found concerning the majors and specialties; however, the academy has nine master's first-level programs (硕士学位授权一级学科), one master's second-level program (硕士学位授权二级学科), and eight master's specialty degree programs (硕士专业学位授权).
- Doctoral degree (博士)
  - o Doctoral degree majors and specialties: No information was found concerning the majors and specialties; however, the academy has one PhD first-level program (博士学位授权一级学科)

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>243</sup>

The academy has three post-doctoral research stations (博士后流动站).

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 9
- Gender (男, 女): All male
- Total number of personnel recruited (合计): 426
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 22 of them
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): All specialties were for commanding officers (指挥). None of them were for non-commanding officers. (非指)

#### INTERNATIONAL EXCHANGES AND COOPERATION:<sup>244</sup>

- Foreign students (外军留学生): According to one article, over an unidentified period of time (most likely during 2016), the academy trained about 600 cadets from more than 20 countries (为20多个国家培养军事留学生600余名).<sup>245</sup> One other article stated that, in 2017, the academy trained about 400 foreign students from more than 30 countries (现有30多个国家, 共400余名军事留学生在培养).<sup>246</sup>
- Study abroad (留学): Over an unidentified period of time, the academy has sent an unidentified number of students abroad for study (多批次选派学员出国访学).<sup>247</sup>
- Other interaction: In March 2017, the academy sent cadets to Chile to compete in the International Patrol Competition (智利国际巡逻比赛).<sup>248</sup>

## SECTION 3-8: ARMY AVIATION ACADEMY

### CHINESE NAME AND ACRONYM:

陆军航空兵学院. No acronym found.

- Official English name(s): Army Aviation Academy<sup>249</sup>
- English Acronym: None found

### MOE CODE:

In 2017, a new code of 91010 was assigned.<sup>250</sup> The previous code from 2008 was 90001.



### TYPE OF INSTITUTION:

It offers both Academic Education (学历教育) and Professional Education (任职教育).<sup>251</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>252</sup>

- In June 1999, the academy was established as a deputy corps-level entity and subordinated to the General Staff Department by merging three Army Aviation training regiments and one maintenance training regiment that were located in Shanxi Province and Sichuan Province.
- In March 2001, the Central Military Committee authorized the establishment of the Army Aviation Academy (陆军航空兵学院) in Taihu Town, Tongzhou District, Beijing City (北京市通州区台湖镇).
- In June 2002, campus construction began.
- In November 2003, the academy was designated as an in-service vocational academy.
- In 2016, the academy was transferred from the General Staff Department to the PLA Army.

### CAMPUSES AND LOCATIONS:<sup>253</sup>

The campus covers an area of 86 acres (520 mu), the campus is divided into eight (8) functional areas. As such, there is an administrative and office area (行政办公区), instructional and experimental area (教学实验区), training area (训练区), physical fitness and sports area (体育运动区), cadre residential area (干部生活区), cadet residential area (学员生活区), logistics sustainment area (后勤保障区), and open house area (对外开放区). The academy has multiple locations, the main training programs offered are aviation instruction (air services), 飞行教学(空勤) and ground instruction (ground services), which incorporate command, flight (飞行), and aircraft maintenance (机务) studies. In 2006, the academy started to enroll high school graduates. As of 2015, the academy a Basic Department (基础部), Flight Theory (飞行理论), Command (指挥), Helicopter Mechanical Engineering (直升机机械工程), and Helicopter Airborne Equipment (直升机机载设备系) departments.<sup>254</sup>

The academy offers two master's degree conferring units in Military Command (军事指挥) and Military Equipment (军事装备), in the area of Aviation Corps Command (航空兵指挥), Helicopter Flight Instruction

(直升机飞行), Aircraft Maintenance Management (航空机务), Aeronautical Service (航空勤务), and Unmanned Aerial Vehicle (无人机). The academy is part of the Project 2110, its foremost mission is pre-commissioned officer advanced education (生长军官高等教育), pre-commissioned officer in-service vocational training (生长军官任职培训), pre-commissioned officer in-service vocational training (生长军官任职培训), graduate student education (研究生教育), civilian cadre training (文职人员培训), noncommissioned officer vocational and technical education (士官职业技术教育), pre-selected NCO and NCO promotion training (预选士官和士官升级培训), new [enlisted] soldier training (新兵训练), and foreign military student training (外军留学生培训). In the interim, the school also undertakes the responsibility of all-dimensional scientific research mission of Army Aviation.<sup>255</sup>

GRADE:

Corps deputy leader (副军级)<sup>256</sup>

SUBORDINATION:

PLA Army HQ<sup>257</sup>

FACILITIES:

The campus has 82 multi-purpose laboratories and specialized classrooms, plus two (2) libraries and 36 training centers.<sup>258</sup>

ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None
- Subordinate NCO school (士官学校): No information was found regarding NCO school but there is NCO vocational and technical training and NCO professional military education programs.<sup>259</sup>
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each college/academy. Although this information was found in a 2007 source,<sup>260</sup> these changed in 2017. See the introduction to this report for further information about the new structure. Of note, this is a different structure than the three PLAAF flight academies, which have always been organized like an operational unit.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部 / 院务部), which was responsible for all facilities and logistics
- Scientific Research Department (科研部)
- Academic departments (系)<sup>261</sup>
  - Flight Vehicle Systems and Engineering (飞行器系统与工程)
  - Electrical Engineering & Automation (电气工程及其自动化)
  - Navigation Engineering (导航工程)
  - Arms Engineering (兵器工程)
  - Aviation Mid-Level Command (航空兵中级指挥)
  - Aviation Flight & Command (航空飞行与指挥)
- Key labs (重点实验室): No information was found.
- Research labs (研究室) and centers (研究中心): No information was found.
- Teaching and research labs (教研室): There are 200 laboratories of different purposes and specialized classrooms.<sup>262</sup>
- Graduate school (研究生院): No information was found.
- Student teams (队/区队) and groups (大队); No information was found.

#### LEADERSHIP AND STAFF:

- Commandant (院长): Major General Li Dexiu (李德修)<sup>263</sup>
- Political Commissar (政委): Major General Zhang Dehui (张德辉)<sup>264</sup>
- Professors and staff: None identified.

#### DEGREES, MAJORS, AND SPECIALTIES:

- Special technical (associate's) degrees (大专) degrees: vocational and technical training, along with professional development training programs for NCOs.<sup>265</sup>
- Bachelor's degree (本科): four years
  - o Bachelor's degree majors and specialties<sup>266</sup>
- Aircraft Engine Engineering (飞机与发动机工程)
- Aerospace Communication and Navigation (航空通信与导航)
- Aircraft Radar Maintenance & Engineering (航空雷达维修工程)
- Aviation Ordnance Maintenance & Engineering (航空军械维修工程)
- Aviation Fire Control System Maintenance & Engineering (航空火控系统维修工程)
- Aeronautical Missile Maintenance & Engineering (航空导弹维修工程)
- Avionics Maintenance Engineering (航空仪电维修工程)
- Airborne Communications and Navigation (航空通信与导航)
- Master's degree (硕士):<sup>267</sup>
  - o Master's degree majors and specialties
- Military Command (军事指挥)
- Military Equipment (军事装备)
- Doctoral (PhD) degree (博士)
  - o Doctoral degree majors and specialties: No information was found.

#### POST-DOCTORATE SPECIALTIES:

None found.

#### SPECIALTIES:

The following table provides a list of the number of specialties for the Army Aviation Academy, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:<sup>268</sup>

**Table 17: Army Aviation Academy Specialties**

Specialty Code	Specialty	Direction	Training Type
160831	Flight Vehicle Systems Engineering 飞行器系统与工程	N/A	Non-CO
080601	Electrical Engineering & Automation 电气工程及其自动化	N/A	
160810	Navigation Engineering 导航工程	N/A	
160833	Arms Engineering 兵器工程	N/A	



#### 2019 UNDERGRADUATE RECRUITMENT:<sup>269</sup>

- Number of Specialties (专业):<sup>270</sup> There are 13 specialties.

The institute gears towards career-oriented education, while retaining its degree education programs. It offers eight degree education specialties, 14 career-oriented specialties, and two Noncommissioned Officer (NCO) training specialties.

- Gender (男, 女): Male only<sup>271</sup>
- Total number of personnel recruited (合计): Unknown
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Unknown
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别) – commanding officer (指挥) or non-commanding officer (非指): Not identified

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): The school hosts foreign military students; however, no details were found.<sup>272</sup>
- Study abroad (留学): no information found
- Other interaction: no information found

#### JOURNALS:

Army Aviation Academy Journal (陆军航空兵学院学报)

## SECTION 3-9: ARMY SPECIAL OPERATIONS ACADEMY

### CHINESE NAME AND ACRONYM:

陆军特种作战学院. No acronym was found.

- Official English name(s): Army Special Operations Academy.<sup>273</sup> It has also been identified as the Special Services' Operations College.<sup>274</sup>
- English Acronym: None found



### MOE CODE:

The new code identified in 2017 is 91009.<sup>275</sup> The previous organizations each had their own code.

### TYPE OF INSTITUTION:<sup>276</sup>

Academic Education (学历教育) and Professional Education (任职教育).

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>277</sup>

In 2011, the Institute of International Relations Reconnaissance and Special Operations Command department (国际关系学院侦察与特种作战指挥专业) and Military Physical Fitness Integrated Training Base (军事体育综合训练基地) were merged into the Army Special Operations Academy. The following bullets provide the history of the academy:

- In November 1949, the Guangdong Military and Political University (广东军政大学) was established.
- In August 1950, the university was named as the Central South Military and Political University 6<sup>th</sup> branch campus (中南军政大学第六分校).
- In March 1951, it was restructured as the 25<sup>th</sup> Infantry School (中国人民解放军第二十五步兵学校).
- In July 1953, it was restructured as the Military Physical Education School (军事体育学校).
- In August 1957, the school was abolished and some cadres formed the General Staff Department (GSD) Physical Education Cadre Training Group (体育干部训练大队).
- In January 1961, the group was expanded and became the Physical Education Academy (体育学院).
- In 1966, the academy was broken up due to the Cultural Revolution.
- In April 1969, the academy was abolished. The Guangzhou Military Region Physical Education Training Group (广州军区体育训练队) was created and granted with regiment-level authority.
- In April 1973, the group was expanded and became the Military Physical Education Training Group (军事体育训练大队) as a division-level entity.
- In September 1974, it was reinstated as the Physical Education Academy (体育学院).
- In 1986, the Guangzhou Communications Academy (广州通信学院) was created as a branch campus.
- In October 1992, the academy was restructured and divided into the GSD Physical Education Department (参谋学院体育系) and the Communications and Command Academy (通信指挥学院).

- In June 1993, the Physical Education Academy (体育学院) was reestablished and became a corps-level entity.
- In 1993, the academy started to admit graduate students.
- In June 1999, a major restructuring of all PLA academic institutions occurred and the communication specialized training was reassigned to other units, while the Bayi Military Physical Fitness Team (八一军体大队) was integrated into the academy. The academy was renamed as the Physical Education Academy (体育学院) as a corps-level entity and assigned under the GSD.
- In 2003, the Physical Education Academy was abolished. The campus became the Military Physical Exercise Integrated Training Base (军事体育综合训练基地). It also served as the Military Physical Exercise Continuing Education Academy (军事体育进修学院) and opened enrollment for graduate students.
- In June 2011, the Institute of International Relations<sup>278</sup> Reconnaissance and Special Operations Command Department (中国人民解放军国际关系学院侦察与特种作战指挥专业) and Military Physical Exercise Integrated Training Base underwent a merger and became the Special Operations Academy (特种作战学院). The academy undertakes the responsibilities of training personnel in the scope of special operations, unit reconnaissance (部队侦察), military physical fitness (军事体育), and classified documents (保密档案).
- In 2016, the Special Operations Academy was reassigned under the PLA Army HQ as part of the overall PLA reorganization.

PLA SOUTHERN THEATER COMMAND ARMY GUILIN INTEGRATED TRAINING BASE (中国人民解放军南部战区陆军桂林综合训练基地)

- In April 1955, the Beibei Infantry School (北碚步兵学校) was established in Chongqing City, Sichuan Province (四川省重庆市).
- In May 1958, the school was relocated to Guilin City of Guangxi Zhuang Autonomous Region (广西桂林市), it was renamed as the Guilin Infantry School (桂林步兵学校). It was assigned under the GSD Academic Institution Department (总参谋部院校部) and managed by the Guangzhou Military Region (广州军区).
- In August 1961, it was renamed as the Guangzhou Military Region Infantry School (广州军区步兵学校), subordinated to the Guangzhou Military Region HQ.
- In July 1968, the school was abolished.
- In October 1973, the Guangzhou Military Region Military and Political Cadres School (广州军区军政干校) was established at the same location.
- In January 1978, it was renamed back to Guangzhou Military Region Infantry School.
- In February 1981, it was renamed as the Guilin Army School (桂林陆军学校).
- In September 1986, it was renamed as the Guilin Army Academy (桂林陆军学院).
- In 1992, the academy was demoted from corps-level to division-level.
- In 2005, the former Guilin Army Academy and Guangzhou Military Region Communications Training Group (广州军区通信训练大队) underwent a merger and became the deputy corps-grade Guangzhou Military Region Integrated Training Base (广州军区综合训练基地).
- In January 2016, it was reassigned under the Southern Theater Command and renamed as Southern Theater Command Army Guilin Integrated Training Base (南部战区陆军桂林综合训练基地).

ARMY SPECIAL OPERATIONS ACADEMY (中国人民解放军陆军特种作战学院)

- In June 2017, the Army Special Operations Academy was established based on the foundation of the Special Operations Academy and Guilin Integrated Training Base (former Guilin Army Academy) as a deputy corps leader-grade entity with its main campus located in Guilin.

#### CAMPUSES AND LOCATIONS:<sup>279</sup>

In 2011, the Institute of International Relations' Reconnaissance and Special Operations Command Department underwent a merger with the former Military Physical Fitness Integrated Training Base and became the Army Special Operations Academy in 2017. The main campus is located in Guilin City of Guangxi Zhuang Autonomous Region, as a deputy corps leader-grade entity, it covers an area of over 1977 acres (12,000 mu).

The main campus is located at No.33 Chongxin Road, Xiangshan District, Guilin City, Guangxi Zhuang Autonomous Region (广西壮族自治区桂林市象山区崇信路33号).<sup>280</sup>

#### GRADE:

Corps deputy leader (副军级)<sup>281</sup>

#### SUBORDINATION:<sup>282</sup>

PLA Army HQ

#### FACILITIES:

- 90 joint forces specialized technical training sites (军事共同专业技术训练场)
- Four multiple combat terrain integrated training sites (多种作战地形综合训练场)
- Instructional complex (教学楼)

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None found
- Subordinate NCO school (士官学校): the academy does not have an NCO school but it does provide unidentified training for some NCOs.<sup>283</sup>
- Administrative and functional departments (部门): No information was found; however, see the introduction section for the most likely structure.
- Academic departments (系)<sup>284</sup>
  - Special Operations (特种作战)
  - Intelligence and Reconnaissance (情报侦察)
  - Sniper Operations (狙击作战) Military Physical Fitness (军事体育)
- Key labs (重点实验室): No information was found concerning this.
- Research labs (研究室) and centers (研究中心)<sup>285</sup>
  - All-Army Advanced and Intermediate Sniper Training Center (全军高中级狙击手培训中心)
  - Army Chinese Communist Party Innovation Theory Learning Research Center (陆军党的创新理论学习研究中心)
  - Military Physical Education Development and Strategy Research Center (军事体育发展战略研究中心)
  - Physical Fitness Training Center (体能训练中心)
  - All-Army Reconnaissance Special Warfare Professional Training and Cultivation Base (全军侦察特战人才培养基地)
- Teaching and research labs (教研室)<sup>286</sup>
  - Military and Political Work Teaching and Research Laboratory (军队政治工作教研室)
- Graduate school (研究生院): No information was found concerning this.
- Student teams (队 / 区队) and groups (大队): No information was found.

#### LEADERSHIP AND STAFF:

- Commandant (院长): Senior Colonel Xiao Qiulian (肖秋良大校)<sup>287</sup>
- Political Commissar (政委): Major General Xie Yiping (谢贻平少将)
- Professors and staff: No information was found.

#### DEGREES, MAJORS, AND SPECIALTIES:

- Special technical (associate's) degrees (大专) degrees: 2-3 years for NCOs (士官职业技术教育): No information was found concerning degrees for NCOs.
- Bachelor's degree (本科): 4 years
  - Bachelor's degree majors and specialties
- Master's degree (硕士) 2.5 years for full-time, 3 to 4 years for part-time
  - Master's degree majors and specialties: Master's in Military Science (军事硕士) with a specialty in Military Command (军事指挥)<sup>288</sup>
  - The first master's degrees were proffered in 1993<sup>289</sup>

As of 2014, the academy started to offer the following master's degree specialties:<sup>290</sup>

- First-Level Master's Degree Authorization (一级学科硕士学位授权点)
  - Physical Education (体育)
  - Professional Degree Authorization (专业学位授权点)
  - Physical Education (体育)
- Doctoral (PhD) degree (博士)
  - Doctoral degree majors and specialties: No information was found concerning the majors or specialties. Only one reference was found concerning a doctoral degree advisor.<sup>291</sup>

#### POST-DOCTORATE SPECIALTIES (博士后):

No information was found.

#### SPECIALTIES:

The following table provides a list of the four bachelor's degree specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:<sup>292</sup>

**Table 18: Army Special Operations Academy Specialties<sup>293</sup>**

Specialty Code	Specialty	Direction	Training Type
115101	Master's in Military Science (Military Command) 军事硕士 (军事指挥)	None	CO
045200	Master of Physical Education (MPE) 体育硕士学	None	
110101	Combat Command 作战指挥	Command of Airborne Detachments 空降分队指挥 Command of Marine Corps Detachments 陆战分队指挥 Command of Special Operations Detachments 特种作战分队指挥	
110103	Reconnaissance & Intelligence 侦察情报	Command of Reconnaissance & Intelligence Detachments 侦察分队指挥	
	Command Information System Engineering 指挥信息系统工程	Command of Special Operations Detachments 特种作战分队指挥 Command of Reconnaissance & Intelligence Detachments 侦察分队指挥	



#### 2017 UNDERGRADUATE RECRUITMENT:<sup>294</sup>

- Number of Specialties (专业):<sup>295</sup>
  - o Combat Command (作战指挥)
  - o Reconnaissance and Intelligence (侦察情报)
  - o Command Information System Engineering (指挥信息系统工程)
- Gender (男,女): both males and females<sup>296</sup>
- Total number of personnel recruited (合计): 212
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 22 of them
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别) – only commanding officer (指挥) specialties. No non-commanding officer (非指) specialties.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): The university hosts foreign students; however, no further information was provided.<sup>297</sup>
- Study abroad (留学): No information was found.
- Other interaction: No information was found.

#### JOURNALS:<sup>298</sup>

- Journal of Military Physical Education and Sports (軍事體育學報)

# SECTION 3-10: ARMY ACADEMY OF BORDER AND COASTAL DEFENCE

## CHINESE NAME AND ACRONYM:

陆军边海防学院. No acronym was found.

- Official English name(s): Army Academy of Border and Coastal Defence<sup>299</sup>
- English Acronym: None found

## MOE CODE:<sup>300</sup>

91005. As a new institution, it did not have any previous MOE codes.

## TYPE OF INSTITUTION:<sup>301</sup>

It offers both Academic Education (学历教育) and Professional Education (任职教育).

## OFFICIAL WEBSITE:

None found.

## BACKGROUND:<sup>302</sup>

The academy had its origins from three different organizations and was created as a new institution in June 2017.

## ARMY ACADEMY OF BORDER AND COASTAL DEFENCE (中国人民解放军陆军边海防学院)<sup>303</sup>

- In July 1941, the Counter-Japanese Military and Political University 7<sup>th</sup> campus was established (中国人民抗日军政大学第七分校) in Xing county, Shanxi province (山西省兴县).
- In September 1948, Northwestern Military Region Military and Political University (西北军区军政大学), which was later renamed as the Northwestern Military Region Military Officer School (西北军区军官学校).
- In 1951, the school was renamed as the PLA First Infantry School (第一步兵学校).
- In 1955, the school was renamed as the PLA Tianshui Infantry School (天水步兵学校).
- In 1962, the school was renamed as the PLA Lanzhou Infantry School (兰州步兵学校).
- In 1969, the school was abolished.
- In January 1974, the school was reestablished, and was renamed as the Lanzhou Military Region Military and Political Cadre School (兰州军区军政干部学校) and settled in Chang'an District, Shaanxi Province.
- In February 1978, the school was renamed as the Lanzhou Military Region Infantry School (兰州军区步兵学校).
- In January 1981, it was renamed as the Xi'an Army School (西安陆军学校).
- In December 2004, the Urumqi Army Academy (乌鲁木齐陆军学院) and Urumqi Military Hospital Academy (乌鲁木齐军医学院) were merged into the Xi'an Army Academy Urumqi Border Defense Cadre Training Group (西安陆军学院乌鲁木齐边防干部训练大队).
- In September 2011, the school was renamed as the Border Defense Academy (边防学院).
- In 2016, the school was reassigned from the Lanzhou Military Region to the PLA Army.



#### URUMQI ETHNIC CADRE ACADEMY (中国人民解放军乌鲁木齐民族干部学院)<sup>304</sup>

- In November 1949, the Xinjiang Military District Military and Political Cadre School (新疆军区军政干部学校) was established.
- In July 1951, the PLA Second Infantry School was established (第二步兵学校).
- In April 1952, the Bayi Agricultural Academy (八一农学院) was established.
- In June 1953, the Xinjiang Military District Cultural Express Middle School (新疆军区文化速成中学) was established to retrain retiring platoon, company, and battalion cadre.
- In September 1954, it was renamed as the Northwestern Military District Fourth Cultural Express Middle School (西北军区第四文化速成中学).
- In October 1954, it was renamed as the Fourth Cultural Express Middle School (第四文化速成中学).
- In February 1958, the school was abolished.
- In November 1958, the Cultural Express Middle School (速成中学) and Military District Cadre Training Group (军区干部训练队), and Yili Military Region Ethnic Cadre Training Group (伊犁军区民族干部训练队) were merged as the Xinjiang Military District Cadre School (新疆军区干部学校).
- In November 1962, it was renamed as the Xinjiang Military District Infantry School (新疆军区步兵学校) with Corps-level authority.
- In February 1969, the Central Military Commission abolished the school amid the Cultural Revolution.
- In March 1975, the Xinjiang Military District Military and Political Cadre School (新疆军区干部学校) was established with Corps-level authority.
- In January 1978, the school was restructured as the Xinjiang Military District Infantry School (新疆军区军政步兵学校) and retained its Corps-level authority.
- In 1979, it was renamed as the Urumqi Military District Infantry School (乌鲁木齐军区步兵学校).
- In February 1981, it was renamed as the Urumqi Army School (乌鲁木齐陆军学校).
- In August 1986, during the force reduction, the school and Urumqi Military District Military Medical School (乌鲁木齐军区军医学校), Urumqi Military District Communication Training Group (乌鲁木齐军区后勤训练大队), Urumqi Military District Logistics Training Group (乌鲁木齐军区后勤训练大队), Urumqi Military District Military Armament Mechanic and Vehicle Mechanic Training Group (乌鲁木齐军区军械技工及汽车技工训练大队), designated as a Brigade-level entity and assigned under Xinjiang Military Region (新疆军区).
- In March 1993, it was restructured and became the Xi'an Army Academy Urumqi Campus (西安陆军学院乌鲁木齐分院).
- In July 1999, the academy underwent a merger with the Lanzhou Medical Advanced Specialized School Hutubi Campus (兰州医学高等专科学校呼图壁分校) and became the Urumqi Military Medical College (乌鲁木齐军医学院). It was designated as a Corps-level entity and assigned to the Lanzhou Military Region.
- In November 2004, the school was abolished. In December 2004, the school was reorganized into the Xi'an Army Academy Border Defense Cadre Training Group and designated as a deputy corps-level entity and assigned to the Xinjiang Military Region.
- In September 2011, it was upgraded as the Urumqi Ethnic Cadres Academy (乌鲁木齐民族干部学院).
- In 2016, during the Ethnic defense fortification and armed forces reform, the academy was reassigned under the Southern Theater Command from the Lanzhou Military Region.

#### THE PLA KUNMING ETHNIC CADRE ACADEMY (昆明民族干部学院)<sup>305</sup>

- In June 1949, all camp-following schools of the New Fourth Army underwent a merger and became the Second Field Army Military and Political University 4<sup>th</sup> campus in Nanchang, Jiangxi Province.
- In 1949, the university was renamed as the Second Field Army Military and Political University Jiangxi campus.
- In March 1950, the university was relocated from Nanchang to Kunming, Yunnan Province. It was renamed as the Southwestern Military and Political University Yunnan Campus (西南军事政治大学云南分校).

- In 1951, the Yunnan campus gained independence and became the Yunnan Military Region Basic Infantry School.
- In 1951, the school was expanded into the Fifth Infantry School (第五步兵学校) and Seventh Infantry School (第七步兵学校).
- In 1953, these two schools underwent a merger and became the Third Infantry School (第三步兵学校).
- In 1955, the school was renamed as the Kunming Infantry School (昆明步兵学校).
- In 1963, the school was renamed as the Kunming Military Region Infantry School (昆明军区步兵学校).
- In 1965, the Kunming Military Region Foreign Language Specialized School (昆明军区外国语专科学校) was established and shared its campus with the Kunming Military Region Infantry School.
- In 1969, both schools were abolished.
- In 1974, the Kunming Military Region Infantry School was reinstated, and it was renamed as the Kunming Military Region Military and Political Cadre School.
- In 1978, the school was renamed as the Kunming Military Region Infantry School (昆明军区步兵学校).
- In 1981, it was renamed as the Kunming Army School (昆明陆军学校).
- In June 1986, the school was upgraded as the Kunming Army Academy (昆明陆军学院).
- In September 1986, the school merged with the Chengdu Army School (成都陆军学校).
- In 2011, it was restructured and became the Kunming Ethnic Cadre Academy (昆明民族干部学院) and was assigned under the Chengdu Military Region as a non-academic education institute for junior commanding officers.
- In 2016, during the reform and reorganization, it was reassigned from the Chengdu Military Region to the Southern Theater Command Army as the Kunming Ethnic Cadres Academy.

#### CAMPUSES AND LOCATIONS:<sup>306</sup>

The academy is part of the Project 2110. The academy is comprised of the Xi'an-based main campus, Urumqi campus, and Kunming campus. The total campus area is over 6,589 acres (40,000 mu).

#### GRADE:

Corps deputy leader (副军级)<sup>307</sup>

#### SUBORDINATION (主管部门 / 隶属):

PLA Army HQ<sup>308</sup>

#### FACILITIES:<sup>309</sup>

The academy has a reception building, administration building, cadet residential hall, and cadet dining hall, plus a library that has over 700,000 collections.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None found.
- NCO School: None found and no references were found for any NCO training.
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each college/academy. Although this information was found in a 2007 source,<sup>310</sup> these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部 / 院务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)

- Academic departments (系)<sup>311</sup>
  - Command Information & Systems Engineering (指挥信息系统工程)
  - Chinese Literature (中国语言文学类)
  - Combat Command (作战指挥)
  - Firepower Command & Control Engineering (火力指挥与控制工程)
- Key labs (重点实验室): No information was found.
- Research labs (研究室) and centers (研究中心): No information was found for research labs, but the name of one center—China Border Security and Development Research Center (中国边疆安全与发展研究中心)—was found.<sup>312</sup>
- Teaching and research labs (教研室): No information was found.
- Student teams (队 / 区队) and groups (大队) and cadet groups (学员大队): No information was found.

#### LEADERSHIP AND STAFF:

- Commandant (院长):<sup>313</sup> Major General Ma Qinglei (马庆雷)
- Commissar (政委):<sup>314</sup> Major General Xia Yang (夏阳) [former Navy Rear Admiral]
- Professors and staff: About 160 professors and assistant professors.<sup>315</sup>

#### DEGREES, MAJORS, AND SPECIALTIES:<sup>316</sup>

- Bachelor's degree (本科): 4 years
- Command Information & Systems Engineering (指挥信息系统工程)
- Chinese Literature (中国语言文学类)
- Combat Command (作战指挥)
- Firepower Command & Control Engineering (火力指挥与控制工程)
- Command Information Systems Engineering (指挥信息系统工程)

#### SPECIALTIES:

The following table provides a list of the number of specialties for the Army Academy of Border and Coastal Defense, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2019.<sup>317</sup>

**Table 19: Army Academy of Border and Coastal Defense Specialties**

Specialty Code	Specialty	Direction	Training Type
110301	Command Information & Systems Engineering 指挥信息系统工程	Command of Infantry Units 步兵分队指挥	CO
0501	Chinese Literature 中国语言文学类	Command of Infantry Units 步兵分队指挥	
110101	Combat Command 作战指挥	Command of Infantry Units 步兵分队指挥	
110101	Combat Command 作战指挥	Command of Light Artillery Units 轻便炮兵分队指挥	
110106	Firepower Command & Control Engineering 火力指挥与控制工程	Command of Light Artillery Units 轻便炮兵分队指挥	
110301	Command Information Systems Engineering 指挥信息系统工程	Command of Infantry Units 步兵分队指挥	

#### 2017 UNDERGRADUATE RECRUITMENT:<sup>318</sup>

- Number of Specialties (专业): Three
  - Chinese Literature (中国语言文学类)



- o Firepower Command & Control Engineering (火力指挥与控制工程)
  - o Command Information Systems Engineering (指挥信息系统工程)
- Gender (男,女): Males only
- Total number of personnel recruited (合计): 151
- Number of Provinces/Autonomous Regions/Municipality and Quotas: new cadets were recruited from 18 of the 22 provinces, five autonomous regions, and four municipalities. Of note, the largest number of personnel were recruited from Shaanxi Province (58) and Yunnan Province (55). The other provinces and ARs only averaged one to four recruited cadets.
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): Commanding officer (指挥) only. No non-commanding officer (非指) specialties.

#### 2019 UNDERGRADUATE RECRUITMENT:<sup>319</sup>

- Number of Specialties (专业)
  - o Command Information & Systems Engineering(指挥信息系统工程)
  - o Chinese Literature (中国语言文学类)
  - o Command Information Systems Engineering (指挥信息系统工程)
- Gender (男,女): The academy accepts both male and female<sup>320</sup>
- Total number of personnel recruited (合计): 62
- Foreign language requirements (外语语种): English, students are required to learn several foreign languages such as Kazakh language (哈萨克语) and Russian.<sup>321</sup>
- Specialty categories (专业类别): Commanding officer (指挥) only

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): no information was found.
- Study abroad (留学): no information was found
- Other interaction: no information was found

## SECTION 3-10: ARMY INSTITUTE OF NBC DEFENCE

### CHINESE NAME AND ACRONYM:

陆军防化学院. No acronym was found.

- Official English name: Army Institute of NBC Defence<sup>322</sup>  
[Note: NBC stands for nuclear, biological, and chemical (核生化).]
- English Acronym: None found

### MOE CODE:

In 2017, a new code of 91011 was assigned.<sup>323</sup> The previous code from 2008 was 90018.<sup>324</sup>



### TYPE OF INSTITUTION:<sup>325</sup>

The school offers both Academic Education (学历教育) and Professional Education (任职教育).

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

The timeline of history of the institute is shown below:<sup>326</sup>

- In December 1950, Mao Zedong authorized the establishment of the first NBC school in the history of the People's Republic of China named the Chemical Defense School of the CLPA (中国人民解放军化学兵学校), which was located in Sichuan Province.
- In 1958, the school was renamed as the Chemical Corps School (中国人民解放军化学兵学校).
- In 1961, the Chemical Corps Command and Engineering College (中国人民解放军防化兵指挥工程学院) was created in Changchun, Jilin Province, and the 2<sup>nd</sup> Chemical Defense School (第二防化学校) was created in Zhejiang Province.
- In 1969, both institutions were abolished and Chemical Defense Technical School (中国人民解放军防化技术学校) was created in Beijing.
- In 1975, the school was renamed as the Chemical Defense School (中国人民解放军防化学校).
- In 1978, the school was upgraded to the Chemical Defense College (中国人民解放军防化学院) and moved to Beijing's Changping District.
- In 1986, the school was renamed as the Chemical Defense Command and Engineering College (中国人民解放军防化指挥工程学院) with the grade of deputy corps leader and was subordinated under the General Staff Department (GSD).
- In 2011, it was renamed as the Chemical Defense College (中国人民解放军防化学院).
- In 2015, the college was reassigned under the newly created PLA Army HQ.
- In 2017, based on the logo shown above, the college became the Army Institute of NBC Defense (中国人民解放军陆军防化学院).

#### CAMPUSES AND LOCATIONS:

The Institute of NBC Defense is located at Changping District, Beijing. It covers an area of approximately over 495 acres (3,000 mu). The school was established under the directive of Mao Zedong and Zhou Enlai in 1950. The mission of the institute is to develop NBC professionals for commanding and engineering operations. Meanwhile, it also oversees international NBC weapon compliance, Japanese abandoned chemical weapons handling, NBC emergency response, and NBC counter-terrorism. The institute is a top-notch school that integrates military commanding and engineering technology. It is known as “the cradle of NBC troops.”<sup>327</sup> The institute centers on engineering and military studies, it offers seventeen (17) master’s degree conferring units, two (2) doctoral degree conferring units, three (3) joint doctoral degree conferring units, two (2) all-Army key primary disciplines, and one (1) all-Army key laboratory.<sup>328</sup>

It has two (2) key development academic disciplines as part of the Project 2110. The school mainly offers mid-level vocational education while maintaining its academic education, there are six (6) academic education disciplines, fourteen (14) professional education disciplines, and two (2) noncommissioned officers (NCO) training specialties. There is one (1) military-level key laboratory, as well as a Nuclear, Biological, Chemical (NBC) and anti-terrorism innovation and technology workstation (反恐科技创作工作站).<sup>329</sup> Other on-campus teaching and sustainment facilities include office buildings (办公楼), Command Building (指挥楼), Teaching Building (教学楼), Equipment Building (装备楼), Chemistry Building (化学楼), Physics Building (物理楼), and cadet residential hall, to name a few.<sup>330</sup>

The institute is responsible for advanced education of pre-commissioned officers (生长军官高等教育) and vocational training of pre-commissioned officers (生长军官任职培训). Equally, the institute provides in-service training for commissioned officers (现职军官任职培训), vocational and technical training for NCOs (士官职业技术教育). In addition, the institute offers basic training for new enlisted personnel (新兵训练), education for graduate students (研究生教育) and training for foreign military students (外国留学生培训). In the interim, the school is responsible for the protection and command of Nuclear, Biological and Chemical (NBC) missions (核生化防护指挥), as well as NBC protective education (核生化防护教育) for schools of the full force, as well as domestic NBC emergency response and relief (地方核生化应急救援) training missions. Among the 50,000 alumni, twenty-eight (28) of them became PLA Generals.<sup>331</sup>

#### GRADE:

Corps deputy leader (副军级)<sup>332</sup>

#### SUBORDINATION:

PLA Army HQ

#### FACILITIES:

None were identified.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None
- Subordinate NCO school (士官学校). Yes, there is vocational and technical training for NCOs.
- Administrative and functional departments (部门).<sup>333</sup> The following bullets show the historical structure for PLA academic institutions’ administrative and functional departments for the institute;<sup>334</sup> however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部 / 院务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)

- o Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>335</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>336</sup>
  - o Command (指挥)
  - o Nuclear Protection (核防护)
  - o Chemical Protection (化学防护)
  - o Chemical Defense Equipment (防化装备)
- Key labs (重点实验室):<sup>337</sup>
  - o Military-level key laboratory
- Research labs (研究室) and centers (研究中心):<sup>338</sup>
  - o Organization for the Prohibition of Chemical Weapons (OPCW)-approved recordable 10kg Schedule 1 chemicals Synthesis Laboratory (国际禁化武组织认可备案的10Kg附表-1化学品合成实验室)
  - o Nationally accredited special chemical laboratory (国家认证认可的特种化学品实验室)
  - o Nuclear Radiation Monitoring laboratory (核辐射监测实验室)
  - o Special chemical laboratory for national anti-terrorism chemical inspection and identification appointing authority (国家反恐化学检测鉴定指定机构的特种化学品实验室)
  - o Armed Forces support center (国家军队支持中心)
  - o Nuclear emergency response operational and technical support center (核应急行动技术支持中心)
- Teaching and research labs (教研室): The college has twenty-one (21) teaching and research laboratories, including the following:
  - o Chemical Defense Command (防化指挥)
  - o Nuclear Explosion Monitoring (核爆监察)
  - o Military Chemistry (军事化学)
- Graduate school (研究生院): No information was found concerning a graduate school.
- Student teams (队 / 区队) and groups (大队)<sup>339</sup>
  - o Graduate Student Management Group (研究生管理大队)
  - o Education Services Group (教勤大队)

#### LEADERSHIP AND STAFF:<sup>340</sup>

- Commandant: MGEN Hu Xiaoping (呼小平)<sup>341</sup>
- Political Commissar: MGEN Liu Guosheng (刘国胜)<sup>342</sup>
- Professors and staff: Among all faculties, five (5) serve as Organization for the Prohibition of Chemical Weapons (OPCW) experts.<sup>343</sup>

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):<sup>344</sup>

- No two-year secondary technical educational program (中专) or three-year post-secondary program (大专) for NCOs were identified
- Bachelor's degree (本科): four years
  - o Bachelor's degree majors and specialties
- Master's degree (硕士)
  - o seventeen (17) master's degree conferring units
- Doctoral degree (博士)
  - o two (2) doctoral degree conferring units
  - o three (3) joint doctoral degree conferring units
- Post-doctoral Specialties (博士后): none

SPECIALTIES: Table 20 provides a list of specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2019:<sup>345</sup>

**Table 20: Army Institute of NBC Defence Specialties**

Specialty Code	Specialty	Direction	Training Type
081704	Applied Chemistry 应用化学	Protection & Decontamination 防护与洗消 Biological Protective Technology 生物防护技术 Specialty Chemicals Process 特种化学品工艺 Engineering & Chemical Defense 工程防化	Non-CO
082604	Military Chemical and Pyrotechnics 军事化学与烟火技术	Toxicity Detection & Analysis 毒剂侦检分析 Toxicology & Chemistry 毒物化学 Pyrotechnics 烟火技术 Adsorption & Catalysis 吸附与催化	Non-CO
083002	Environmental Engineering 环境工程	Controlled Chemicals & Chemistry 监控化学品化学 Monitoring & Assessment of Environment with Specific Pollutants 特种污染环境监测与分析 Stimulation and Evaluation of Environment with Specific Pollutants 特种污染环境模拟与评价 Control of Specific Pollutants & Environmental Rehabilitation 特种污染控制与环境修复	Non-CO
082703	Nuclear Technology and Applications 核技术及应用	Nuclear Explosion Monitoring 核爆监测 Nuclear Radiation Monitoring 核辐射监测 Radiological Emergency Preparedness Technology 核应急技术	Non-CO
082704	Radiation and Environmental Protection 辐射防护及环境保护	Radiation Dosimetry 辐射剂量学 Nuclear Electronics & Detection Technology 核电子学与探测器	Non-CO
082601	Weapon Systems and Utilization Engineering 武器系统与运用工程	Weapon Systems Simulation & Assessment. 武器系统仿真与评估 Weapon Systems Employment & Integrated Sustaining Engineering 武器系统运用与综合保障工程 Weapon Systems Exploration & Damage Effect Analysis 武器系统探测与毁伤效应分析 Equipment Test Theory & Technology 装备试验理论与技术	Non-CO
110102	Military History 军事历史	History of Nuclear Armament & Nuclear Disarmament 核军备与核裁军史	
110201	Science of Military Strategy 军事战略学	National Nuclear Biological & Chemical (NBC) Safety 国家核生化安全 Military NBC Defense 军队核生化防御 NBC Arms Control & Disarmament 核生化军控与裁军	Non-CO
110502	Military Operations Research 军事运筹学	NBC Battle Simulation 防化作战模拟 Performance Analysis & Assessment of NBC Sustainment 防化保障效能分析与评估 Decision-making Methodology & NBC Supported Decision-making 决策方法与防化辅助决策	Non-CO
110402	Branch Tactics 兵种战术学	NBC Defense Tactics 防化战术 Smoke-screen Sustainment & Tactics 烟幕保障与烟火战术 NBC Troop Engagement of NBC Emergency Response 防化兵参加核化生应急	Non-CO



110501	Combat Command 作战指挥学	NBC Defense Command 防护指挥 NBC Sustainment 防化保障 NBC Defense Command Automation 防化指挥自动化	CO
110803	Military Equipment 军事装备学	NBC Equipment Sustainment Command & Management 防化装备保障指挥与管理 NBC Equipment Construction and Development 防化装备建设与发展 Technological Sustainment and Employment of NBC Equipment 防化装备技术保障与运用	Non-CO
110700	Science of Military Political Work 军队政治工作学	Research on Political Work of NBC Troops during Sustainment Operations 防化兵保障行动中的政治工作研究 Research on Organizational Work of the Armed Forces 部队组织工作研究 Research on Ideological & Cultural Development of the Armed Forces 部队思想文化建设研究	Non-CO
030503	Research on Sinification of Marxism 马克思主义中国化研究	The Basic Principles of Marxism 马克思主义基本原理 The History of the Development of Marxism 马克思主义发展史 Research on Sinification of Marxism 马克思主义中国化研究 Ideological & Political Education 思想政治教育	

#### 2019 UNDERGRADUATE RECRUITMENT:<sup>346</sup>

- Number of Specialties (专业)

The institute gears towards career-oriented education, while still retaining its degree education programs. It offers eight-degree education specialties, 14 oriented specialties, and two NCO training specialties to include the following specialties:

- o Applied Chemistry (应用化学)
- o Military Chemical and Pyrotechnics (军事化学与烟火技术)
- o Environmental Engineering (环境工程)
- o Nuclear Technology and Applications (核技术及应用)
- o Radiation and Environmental Protection (辐射防护及环境保护)
- o Weapon Systems and Utilization Engineering (武器系统与运用工程)
- o Military History (军事历史)
- o Science of Military Strategy (军事战略)
- o Military Operations Research (军事运筹)
- o Branch Tactics (兵种战术)
- o Combat Command (作战指挥)
- o Military Equipment (军事装备)
- o Science of Military Political Work (军队政治工作)
- o Research on Sinification of Marxism (马克思主义中国化研究)
- Gender (男, 女): Accepts both male and female
- Total number of personnel recruited (合计): In 2018, reportedly, the school accepted 121 applicants.
- Foreign language requirements (外语语种): English

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): The institute trains foreign military students. It graduated military professionals from seven (7) countries.<sup>347</sup>
- Study abroad (留学): no information was found
- Other interaction: none

## SECTION 3-12: ARMY MEDICAL UNIVERSITY

### CHINESE NAME AND ACRONYM:

陆军军医大学(第三军医大学). No acronym was found.

- Official English name(s):<sup>348</sup> In June 2017 the PLA officially changed the name of the PLA Third Military Medical University to become the PLA Army Medical University;<sup>349</sup> however, it is still identified in some media as the PLA Third Military Medical University and as the Army Medical University (Third Military Medical University).<sup>350</sup>
- English Acronym: TMMU

### MOE CODE:

In 2017, a new code of 91012 was assigned.<sup>351</sup> The previous code from 2008 was 90031.

### TYPE OF INSTITUTION:<sup>352</sup>

It is both an Academic Education (学历教育) and Professional Education (任职教育) institution.

### OFFICIAL WEBSITE:

<https://www.tmmu.edu.cn/default.aspx>. No English version was found.

### BACKGROUND:<sup>353</sup>

Overview: In 1951, the PLA created five Military Medical Colleges (军医学院) identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 6<sup>th</sup> Military Medical College. By the end of the 1950s, they had been reorganized into five Military Medical Universities (军医大学) identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 7<sup>th</sup> Military Medical University.<sup>354</sup> Until 2016, they were all subordinate to the General Logistics Department. In 2016, they were resubordinated to the CMC Training and Administration (Management) department. In June 2017, they were resubordinated to their respective service headquarters. Over the years, they have been merged, abolished, changed locations, and been renamed, such that, as of 2017, there are three remaining Military Medical Universities as shown below:

- Army Medical University (陆军军医大学), which is also known as the PLA 3<sup>rd</sup> Military Medical University (解放军第三军医大学), and is located in Chongqing
- Air Force Medical University (空军军医大学), which is also known as the PLA 4<sup>th</sup> Military Medical University (解放军第四军医大学), and is located in Xi'an, Shaanxi Province
- Naval Medical University (海军军医大学), which is also known as the PLA 2<sup>nd</sup> Military Medical University (解放军第二军医大学), and is located in Shanghai.

The Army Military University was part of the first batch of doctoral authorized units in the country and the first batch of eight-year medical education institutions. The predecessor of the university can be traced back to



the National Zhongzheng Medical College (国立中正医学院), founded in 1937, the Second Field Army Military Medical University (第二野战军医科大学) in 1941, and the Fourth Field Army Military Medical School (第四野战军医学校) in 1946. In 1954, the former Sixth Military Medical University (第六军医大学) (Nanchang, Jiangxi) and the Seventh Military Medical University (第七军医大学) (Chongqing) merged to form the Seventh Military Medical University (第七军医大学). In 1975, it was renamed the Third Military Medical University (第三军医大学) located in Chongqing.

In 2017, according to the reform plan of the Central Military Commission and the Army's reorganization order, the Third Military Medical University (Chongqing) and the Bethune Medical NCO School (白求恩医务士官学校) (Shijiazhuang, Hebei) formed the base for the Army Medical University (陆军军医大学), which also includes the Army Comprehensive Training Base's Army [Regiment-grade] Training Group in the Western Theater Command (西部战区陆军综合训练基地军医训练大队) (Hutubi, Xinjiang) and the PLA Eighth Hospital (解放军第八医院) (Shigatse, Tibet), and the PLA 260<sup>th</sup> Hospital (解放军第二六〇医院) (Shijiazhuang, Hebei). In 2018, the Army Medical University's Third Affiliated Hospital (陆军军医大学第三附属医院), which includes the Field Combat Surgery Research Institute (野战外科研究所), was reorganized into the Army's Characteristic Medical Center (陆军特色医学中心), which was managed by the Army Medical University; the PLA 324<sup>th</sup> Hospital (解放军第三二四医院) was converted into the Army's 958 Hospital (陆军第九五八医院), which is managed by the Army Medical University's First Subsidiary Hospital Leadership (由陆军军医大学第一附属医院领导管理); The Shigatse Branch of the university's Second Affiliated Hospital was reorganized as the 953<sup>rd</sup> Hospital (陆军军医大学第二附属医院日喀则分院改建为陆军第九五三医院).

The university is a medical higher education institution. It mainly trains medical and health officers and civilian personnel for the Army, Rocket Force, and People's Armed Police. At the same time, it trains medical and health NCOs for the entire PLA. The main training task is to educate and train officers' higher education and the basic training of current officers, new medical professionals, post-graduate education, NCO vocational and technical education, and civilian personnel training.

#### CAMPUSES AND LOCATIONS:<sup>355</sup>

The main campus (本部) is located at No. 30, Gaotanyanzheng Street, Shapingba District, Chongqing (重庆市沙坪坝区高滩岩正街30号). See the Facilities subsection below for more information.



#### GRADE:<sup>356</sup>

Corps deputy leader (副军级)

#### SUBORDINATION:

Since 2017, it has been directly subordinate to the newly created PLA Army HQ.<sup>357</sup> Prior to 2016, it was subordinate to the General Logistics Department and then to the CMC Training and Administration (aka Training Management) Department when it was created in 2016.<sup>358</sup>

#### FACILITIES:<sup>359</sup>

The university covers 1,385 acres (8,399 mu). The main campus is in Chongqing. It also has two affiliated hospitals (附属医院) shown in the bullets below plus the Army's Specialty Medical Center (陆军特色医学中心), which, prior to December 2018, was the university's Third Affiliated Hospital (第三附属医院).<sup>360</sup> It is also located in Chongqing.

- Southwest Hospital (西南医院), which includes the Army 958 Hospital (陆军第九五八医院), and is collocated with the university.<sup>361</sup>
- Xinqiao Hospital (新桥医院), which includes the Army 953 Hospital (陆军第九五三医院) (Shigatse, Tibet), and is located at No. 83, New Qiaozheng Street, Shapingba District, Chongqing (重庆市沙坪坝区新桥正街83号)<sup>362</sup>

#### ORGANIZATIONAL STRUCTURE:

Like the other two profiles on military medical universities, this is somewhat complicated because there are no official or consistent translations for subordinate organizations. It did not help that there was no official English tab on the website. As such, the following translations are our best take.

- Subordinate *Xueyuan* (学院):<sup>363</sup> The Chinese website notes that the university is organized into “one Office and seven Divisions” (大学机关编设“一办七处”),<sup>364</sup> whereby the *jichu xueyuan* (基础学院), which is most likely translated as Basic School, represents the Office. The “7 Divisions” are listed under the Academic Departments subsection below. To further confuse the situation, however, the *huli xi* (护理系) is most likely translated as both Nursing School and Nursing Department. See the Academic Department subsection for more information on this organization.
- Subordinate NCO School (士官学校):<sup>365</sup> Of the three military medical universities, the Army Medical University has the only NCO School, which is also known as Norman Bethune Medical NCO School (白求恩医务士官学校) and is located in Shijiazhuang, Hebei Province. It also controls the 260<sup>th</sup> Hospital (含第二六〇医院) and is most likely either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program. So far, the university has trained about 2,500 health NCOs (卫生士官).
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school. Although several academic institutions have changed their structure, as discussed in the Introduction Section, it appears that the three medical universities have retained the former structure.
  - Training Department (训练部) that served as the Headquarters Department<sup>366</sup>
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>367</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>368</sup> The university has the following seven *xi* (系). As noted in the Air Force Medical University profile, the PLA translates this term as both school and department. Although the term *xi* is used for all seven organizations, the profile on the Air Force Medical University had official translations



for the School of Military Preventive Medicine and the School of Nursing, so those translations are used here. However, the remaining five organizations are translated as department. In addition to the following seven organizations, there is also a Political Theory and Humanities and Social Science Department (政治理论与人文社科系)

- o School of Military Preventive Medicine (军事预防医学系)
- o Pharmacy and Laboratory Medicine Department (药学与检验医学系)
- o Biomedical Engineering and Imaging Medicine Department (生物医学工程与影像医学系)
- o Plateau Military Medicine Department (高原军事医学系)
- o General Medicine Department (全科医学系)
- o Military Medical Psychology Department (医学心理系)
- o School of Nursing (护理系)
- Key labs (重点实验室):<sup>369</sup> The university has six State Key Labs (国家重点实验室) and Engineering Labs (工程实验室), as well as 32 Ministry of Education (教育部) and Military Key Labs (军队重点实验室).
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):
  - o Three identified research labs:<sup>370</sup> Digital Medicine (数字医学研究室), Plateau Special Needs Medicine and Sanitation Equipment (高原特需药品与卫生装备研究室), Field Operations/Combat Surgery (野战外科研究室)
  - o Three identified research centers:<sup>371</sup> National/State Immunization Student Products Engineering Technology Research Center (国家免疫学生物制品工程技术研究中心), Chongqing Drug Efficiency Evaluation Engineering Technology Research Center (重庆市药效评价工程技术研究中心), and Chongqing Peptide Drug Engineering Technology Research Center (重庆市多肽药物工程技术研究中心)
  - o 20 identified teaching and research labs:<sup>372</sup> Chemistry (化学教研室), Analytical Chemistry and Pharmaceutical Analysis (分析化学与药物分析学教研室), Medicinal Chemistry (药物化学教研室), Pharmacology (药理学教研室), Pharmacy (药剂学教研室), Biopharmaceutical and Natural Medicine Chemistry (生药学与天然药物化学教研室), Microbiology and Biochemistry (微生物与生化药学教研室), Clinical Pharmacy (临床药学教研室), Management of Pharmaceutical Affairs (药事管理学教研室), Medical Psychology (医学心理学教研室), Nursing Psychology (护理心理学教) that changed its name in 2005 to just Psychology (心理学教研室), Plateau Physiology and Plateau Biology (高原生理学与高原生物学教研室), Pathophysiology and Plateau Pathology (病理生理学与高原病理学教研室), Plateau Health (高原卫生学教研室), Military Medical Geography (军事医学地理学教研室), Marxist Basic Principles (马克思主义基本原理教研室), Marxist Chinese Theory (马克思主义中国化理论教研室), Ethics and Law (伦理学与法学教研室), History (历史学教研室), and Medical Humanities (医学人文教研室).
- Graduate School (研究生院):<sup>373</sup> The university has a Graduate School, but no specific information was found about it except for the Graduate School Management Group discussed below.
- Cadet/student teams (队 / 区队) and groups (大队):<sup>374</sup>
  - o The university's cadets and graduate students are organized into regiment-grade training groups (训练大队), including a Medical Training Group under the Western Theater Command Army's Comprehensive Training Base (西部战区陆军综合训练基地军医训练大队) in Hutubi, Xinjiang Uyghur Autonomous Region (新疆呼图壁), a Border Defense Health Services Training Group (边防卫勤训练大队), a Cadre Rotation Training Group (干部轮训大队), and a Health Service Training Group (卫勤训练大队). In addition, foreign students are organized into a Foreign Training Group (外训大队).
  - o The university's Graduate Student Management Group (研究生管理大队) was created following the 16<sup>th</sup> Conference of PLA Military Educational in 2011. In January 2013, it was re-named as the Graduate Student Management 1<sup>st</sup> Group (研究生管理一大队). The group currently has three student teams (学员队), which are identified as the 1) Graduate Student 1<sup>st</sup> Team (研究生一队) aka the PhD New Student and Current PhD Team (博士新生和校直博士队); 2) Graduate Student 2<sup>nd</sup> Team (研究生二队) aka the



Military Master's New Student and Current Master's Team (军队硕士新生和校直硕士队); and 3) Graduate Student 3<sup>rd</sup> Team (研究生三队) aka the Local (Civilian) Master's Degree Graduate Students (地方硕士研究生). Since the 9<sup>th</sup> Five-Year Plan (1996-2000), a total of 12,000 PhD and master's degree students have been part of the management group as graduate students or outside students who were taking courses at the university.

#### LEADERSHIP AND STAFF:<sup>375</sup>

- Commandant: MGEN Wang Yungui (王云贵)
- Political Commissar: MGEN Gao Zhanhu (高占虎)
- Professors and Staff: Each school/department has several professors (教授), associate professors (副教授), PhD advisors (博士生导师), and master's degree advisors (硕士生导师); however, no figures were found for the total number for the university.

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified; however, the university most likely provides these programs for the NCO students.
- Bachelor's degree (本科): four, five, and eight years
  - o Bachelor's degree majors and specialties:<sup>376</sup> The university has the following four bachelor's degrees:
    - Bachelor of Medicine (医学学士学位)
    - Bachelor of Science (理学学士学位)
    - Bachelor of Management (管理学学士学位)
- Bachelor of Engineering (工学学士学位)
  - o The university has the following 11 undergraduate specialties (本科专业), including the codes that were found for six of them; however, as shown in Table 21, cadets were only recruited for five of them in 2017:<sup>377</sup>
    - 100101 Biomedical Science (基础医学)
    - 100201 Clinical Medicine (临床医学)
    - 100209 Nursing (护理学)
    - 1003 Stomatology (口腔医学)
    - 100401 Preventive Medicine (预防医学)
    - 100701 Pharmacy (药学)
    - Biomedical Engineering (生物医学工程)
    - Biotechnology (生物技术)
    - Medical Imaging (医学影像)
    - Medical Testing Technology (医学检验技术)
    - Public Service Management (公共事业管理)
  - o Table 21 provides a list of the university's five specialties for undergraduate cadet recruitment in 2017, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), the number of years required (学制X年), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017.<sup>378</sup>

**Table 21: Army Medical University Specialties**

Specialty Code	Specialty	Direction	Years	Training Type
100101	Biomedical Science 基础医学	Biomedical Science Teaching & Research Personnel 基础医学教学科研人员	8	Non-CO
100201	Clinical Medicine 临床医学	Clinical Medical Physicians 临床医疗通科医师 Senior Clinician 高级临床医师 Psychologist 心理医师	5, 8	
100401	Preventive Medicine 预防医学	Epidemic Physicians & Researchers 防疫医师和研究人员 Epidemic Physicians 防疫医师		
100701	Pharmacy 药 学	Pharmacist 药剂师	4	
101001	Medical Test Technology 医学检验技术	Clinical Laboratory Technician 临床检验技师		

- Master's degree (硕士学位): The university has the following 26 master's degrees plus 86 authorized disciplines (授权点):<sup>379</sup>

1. Anesthesiology (麻醉学)
2. Biomedical Engineering (生物医学工程)
3. Biomedical Science (基础医学)
4. Biology (生物学)
5. Clinical Laboratory Diagnostics (临床检验诊断学)
6. Clinical Medicine (临床医学)
7. Dermatology and Sexual Disease (皮肤病与性病学)
8. Emergency Medicine (急诊医学)
9. Geriatric Medicine (老年医学)
10. Gynecology (妇产科学)
11. Image Medicine and Nuclear Medicine (影像医学与核医学)
12. Military Equipment Science (军事装备学)
13. Military Logistics (军事后勤学)
14. Neurology (神经病学)
15. Nursing (护理学)
16. Oncology (肿瘤学)
17. Ophthalmology (眼科学)
18. Otorhinolaryngology (耳鼻咽喉科学)
19. Pediatrics (儿科学)
20. Pharmaceutical (药学)
21. Public Health (公共卫生)
22. Public Health and Preventive Medicine (公共卫生与预防医学)
23. Public Management (公共管理学)
24. Rehabilitation Medicine and Physiotherapy (康复医学与理疗学)
25. Stomatology (口腔医学)
26. Surgery (外科学)

- Doctoral degree (博士学位)
  - o Doctoral degree majors and specialties:<sup>380</sup> The university has 73 PhD authorized disciplines (授权点)

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>381</sup>

The university has nine post-doctoral research stations (博士后流动站).

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 5
- Number of years: four, five, and eight
- Gender (男, 女): Male and female cadets for each specialty
- Total number of personnel recruited (合计): 316
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 22 of them
- Foreign language requirements (外语语种): English for each specialty
- Specialty categories (专业类别) – commanding officer (指挥) or non-commanding officer (非指).

#### INTERNATIONAL EXCHANGES AND COOPERATION:<sup>382</sup>

The university has an extensive research cooperation relationship with multiple Chinese and foreign universities, to include the following foreign institutions: Stanford University, Emory University, Georgia Institute of Technology, University of Pittsburgh, Technische Universität München, University of Manitoba, Harvard Medical School, University of Michigan School of Psychology, The University of Alberta, Flinders University of Australia, Christopher University of Japan, School of Nursing of the Hong Kong Polytechnic University, Macao Mirror Lake School of Nursing, University of Hong Kong, the University of Michigan School of Nursing, and others. It successfully applied for the NIH-National Natural Science Fund international cooperation project and established stable cooperation with six foreign high-level universities, has invited more than 50 foreign Nobel Prize winners to attend lectures, and has held life science frontiers and new drugs. It has held or co-hosted multiple international conferences, including the National Organic Chemistry Conference, the Academic Conference of the Military Psychology Professional Committee, the 2<sup>nd</sup> Chongqing International Nursing Frontier Forum, the 4<sup>th</sup> Hong Kong Nursing Forum, the 17<sup>th</sup> World Disaster and Emergency Medicine Conference, and the Overseas Scholars Life Science and Medical Academic Reporting Conference. The university hosts multiple foreign scholars and has sent hundreds of staff and students abroad for studies. For example, 30% of the Pharmacy Department has studied abroad.

## SECTION 3-13: ARMY LOGISTIC UNIVERSITY

### CHINESE NAME AND ACRONYM:

陆军勤务学院

- Official English name(s): Although the literal translation is Army Service Academy/College and a Wikipedia article translated it as Army Service Academy, it appears that the PLA has translated the name as Army Logistic University, which was found in several articles in the China National Knowledge Infrastructure (CNKI) database.<sup>383</sup> As such, even though it is not actually a university, the profile will call it a university.
- English Acronym: none



### MOE CODE:

The new code identified in 2017 is 91014.<sup>384</sup> Each of the institution's predecessors had separate codes.

### TYPE OF INSTITUTION:

Professional Education (任职教育)<sup>385</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>386</sup>

In August 2017, the Army Logistic University was established based on the foundation of the Logistic Engineering College aka Logistical Engineering University (后勤工程学院) and Military Economics College (军事经济学院).

LOGISTIC ENGINEERING COLLEGE AKA LOGISTICAL ENGINEERING UNIVERSITY (后勤工程学院)<sup>387</sup>

- In 1954, the 8<sup>th</sup> Artillery Preparatory School (第八炮兵预备学校) was established.
- In 1956, it was renamed as the 3<sup>rd</sup> Ordnance Preparatory School (第三军械预备学校), located in Xinxiang City (新乡市), Henan Province (河南省).
- In 1961, the Logistic College (后勤学院), Armored Corps Engineering College (装甲兵工程学院), Artillery Engineering College (炮兵工程学院), and 3<sup>rd</sup> Ordnance Preparatory School (第三军械预备学校) underwent a merger and became the Logistic Engineering College.
- In 1969, the Tong County Ordnance School (通县军械学校), Nanjing Ordnance School (南京军械学校), and Shenyang Service and Technical School (沈阳后勤技术兵学校) were integrated into the campus, and became the Ordnance Training Group (军械训练大队).
- In 1969, the college was renamed as the Logistic Higher Vocational Training School (后勤高级专科学校).
- In 1973, the Logistic Higher Vocational Training School gained independency and became the Ordnance Technical School (军械技术学校).
- In July 1974, the Shijiazhuang Ordnance Training Group was reassigned under the Ordnance Technical School (石家庄军械技术学校), and later became the Ordnance Engineering College (后成为军械工程学院).

- In 1973, the Logistic Higher Vocational Training School's Automotive Department became part of the Transportation Technology School (运输技术学校), which later became the Military Transportation College (军事交通学院).
- In 1975, it was upgraded as the Logistic Engineering College (后勤工程学院).
- In 2009, the Logistic Engineering College was relocated to Chongqing University City (重庆大学城). At that time, the college's MOE code was 90025 and it was a corps leader-grade (正军级) organization.

MILITARY ECONOMICS COLLEGE (军事经济学院)<sup>388</sup>

- The Military Economics College was formerly known as the Northeast China Democratic United Army Supply School (东北民主联军供给学校), which was established in July 1946 in Jiamusi City, Heilongjiang Province (黑龙江省佳木斯市).
- In September 1952, it was transformed into the Quartermaster School (军需学校).
- In February 1984, the school was restructured as the Advanced Logistic School (高级后勤学校).

In 1986, it was renamed as the Military Economics College. In 2008, its MOE code was 90026 and it was a corps deputy leader-grade (副军级) organization.

#### CAMPUSES AND LOCATIONS:

The university is an advanced educational institution that trains logistics professionals. The primary mission is to offer bachelor's degrees in logistics integrated operations (后勤综合业务), logistics base-level management (后勤基层管理), petroleum, oil and lubricants (POL) services (油料勤务), quartermaster services (军需勤务), military infrastructure services (军事设施勤务), military logistics management (军事物流管理), military materials procurement management (军事物资采购管理), and financial auditing (财务审计). In addition, it offers in-service vocational training, graduate student education, noncommissioned officer training, civilian personnel training (文职人员培训), foreign military student training, national economic mobilization (国家国民经济动员), and cadre training. In August 2017, the university was established by merging the Logistic Engineering College and Military Economics College.<sup>389</sup>

GRADE:<sup>390</sup>

Corps deputy leader (副军级)

SUBORDINATION:<sup>391</sup>

Both predecessors (Engineering College and the Military Economics College) were originally subordinate to the General Logistics Department until the reorganization in 2016. At that time, they were both resubordinated to the CMC Training and Administration Department. In August 2017, the new university was resubordinated under the PLA Army HQ.

#### FACILITIES:

The main campus is located in Chongqing University City. It covers an area of over 494 acres (3,000 mu) with advanced instructional and research facilities and abundant teaching resources. The campus has wireless internet coverage with intellectualized upgrade in all of its classrooms, libraries, and residential halls.<sup>392</sup>

The campus has a track-and-field ground (田径场), military physical fitness center (军体馆), equipment complex (器械场), obstacle course (障碍场), and sports complex for balls (球类运动场), along with other facilities for military science studies. The eastern district integrated training complex covers an area of 132 acres (800 mu) and is well-equipped to fulfill the training requirements of a multitude of military skills and live exercises.<sup>393</sup>



#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None identified
- Subordinate NCO School (士官学校): Although no NCO school was identified, the university does provide education and training for NCOs (士官培训).<sup>394</sup>
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school; however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>395</sup> (aka Basic Department / 基础部).
- Academic departments (系)<sup>396</sup>
  - Military Supply Service Unit Command (军需勤务分队指挥)
  - Military Facility Service (军事设施勤务)
  - Petroleum, Oil and Lubricants (POL) Service Subunit Command (油料勤务分队指挥)
- Key labs (重点实验室):<sup>397</sup> There are eight armed forces and provincial-city level key laboratories key laboratories.
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>398</sup>
  - One national-level Virtual Simulation Experimental Teaching Center (虚拟仿真实验教学中心)
  - Over 160 basic laboratories and specialized laboratories
  - Ten national, armed forces, and Provincial-Ministerial level (省部级) research and development centers
  - Six technology transfer and commercialization platforms (科技成果转化平台)
  - Graduate School (研究生院): There is a graduate school.
- Cadet/student teams (队 / 区队) and groups (大队): None were identified.

#### LEADERSHIP AND STAFF:

- Commandant (院长): Major General Zhou Yanming (周炎明少将)<sup>399</sup>
- Political Commissar (政委): Major General Zhou Jianxin (周建新少将)<sup>400</sup>
- Professors and Staff: As of 2017, the school has 419 professors and associate professors.<sup>401</sup>

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- Special technical (associate's) degrees (大专) degrees: 2-3 years for NCOs (士官职业技术教育)
- Bachelor's degree (本科): 4 years
  - Bachelor's degree majors and specialties
  - Specialties: The following table provides a list of the specialties for the university, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:<sup>402</sup>
    - Chemistry (化学)
    - Special Energy Technology & Engineering (特种能源工程与技术)
    - Military Energy Engineering (军事能源工程)
    - Military Infrastructure Engineering (军事设施工程)
    - National Defense Engineering & its Intellectualization (国防工程及其智能化)
    - Management Science & Engineering (管理科学与工程)

**Table 22: Army Logistic University Specialties<sup>403</sup>**

Specialty Code	Specialty	Direction	Training Type
070301	Chemistry 化学	Petroleum, Oil and Lubricants (POL) Service Unit Command 油料勤务分队指挥	CO
080906	Internet of Things (IoT) Engineering 物联网工程	Logistics Integrated Services 后勤综合勤务	
	Internet of Things (IoT) Engineering 物联网工程	Military Logistics Management 军事物流管理	
082105	Special Energy Technology & Engineering 特种能源技术与工程	Petroleum, Oil and Lubricants (POL) Service Unit Command 油料勤务分队指挥	Non-CO
082801	Architecture 建筑学	Military Facility Service 军事设施勤务	
110116	Operational Environment Engineering 作战环境工程	Military Facility Service 军事设施勤务	
110201	Military Energy Engineering 军事能源工程	Petroleum, Oil and Lubricants (POL) Service Unit Command 油料勤务分队指挥	CO
110203	Military Facilities Engineering 军事设施工程	Military Infrastructure Services 军事设施勤务	Non-CO
110204	National Defense Engineering & Its Intellectualization 国防工程及其智能化	Military Infrastructure Services 军事设施勤务	
1201	Management Science & Engineering 管理科学与工程类	Logistics Integrated Services 后勤综合勤务	CO
	Management Science & Engineering 管理科学与工程类	Military Logistics Management 军事物流管理	
	Management Science & Engineering 管理科学与工程类	Military Material Procurement Management 军事物资采购管理	Non-CO
	Management Science & Engineering 管理科学与工程类	Military Supplies Logistics Unit Command 军事后勤勤务分队指挥	
1206	Logistics Management & Engineering 物流管理与工程类	Logistics Integrated Services 后勤综合勤务	CO
	Logistics Management & Engineering 物流管理与工程类	Military Logistics Management 军事物流管理	
	Logistics Management & Engineering 物流管理与工程类	Military Material Procurement Management 军事物资采购管理	Non-CO

**Table 23: Master's degree specialties:<sup>404</sup>**

Specialty Code	Specialty	Direction	Training Type
020200	Applied Economics 应用经济学	National Defense Economics Theory & Policy 国防经济理论与政策 National Defense Resource Planning & Allocation 国防资源统筹与配置 National Defense Investment & Military Industry Economy 国防投资与军工经济 National Economic Mobilization 国民经济动员	Unknown
081400	Civil Engineering 土木工程	Geotechnical Engineering 岩土工程 Structural Engineering 结构工程 Military Engineering Emergency Maintenance & Emergency Construction 军事工程抢修抢建 Disaster Prevention and Reduction Engineering and Protective Engineering 防灾减灾与防护工程 Water Supply & Heating Engineering Technology & Equipment 军事水暖工程技术与装备	

082000	Oil and Natural Gas Engineering 石油与天然气工程	All Directions	Unknown
110800	Military Logistics 军事后勤	Military Logistics Theory 军事后勤理论 Military Logistics Infrastructure 军队后勤建设 Operational Logistics Sustainment 作战后勤保障 Military Logistics 军事物流 Military Logistics Engineering 军事物流工程 Logistics Informatization 后勤信息化 Military Finance 军队财务	
110900	Military Equipment 军事装备	All Directions	

• Master's degree (硕士)<sup>405</sup>

- o First-level Master's Degree authorization (学术学位一级学科硕士点):
  - Instrument Science & Technology (仪器科学与技术)
  - Civil Engineering (土木工程)
  - Environmental Science & Engineering (环境科学与工程)
  - Chemical Engineering & Technology (化学工程与技术)
  - Computer Science & Technology (计算机科学与技术)
  - Oil and Natural Gas Engineering (石油与天然气工程)
  - Architecture (建筑学)
  - Science of Military System (军制学)
  - Military Logistics (军事后勤学)
  - Military Equipment (军事装备学)
  - Applied Economics (应用经济学)
  - Management Science & Engineering (管理科学与工程)
- o Second-level Master's Degree authorization (学术学位二级学科硕士点):
  - Materialogy (材料学)
  - Power System & its Automation (电力系统及其自动化)
  - Detection Technology & Automatic Equipment (检测技术与自动化装置)
  - Computer Applied Technology (计算机应用技术)
  - Architectural Design & Theory (建筑设计及其理论)
  - Oil-Gas Storage & Transportation Engineering (油气储运工程)
  - Military Logistics (军事后勤)
  - Military Equipment (军事装备)
  - Military Management (军队管理)
  - Rear Special Service(后方专业勤务)
  - Applied Mathematics (应用数学)
  - National Economics (国民经济)
  - Public Finance (财政学)
  - National Defense Economics (国防经济)
- o Professional Master's Degree authorization (专业硕士学位点):
  - Oil & Natural Gas Engineering (石油与天然气工程)
  - Architecture (建筑学)
  - Logistics Engineering (物流工程)

- Architecture & Civil Engineering (建筑与土木工程)
- Electrical Engineering (电气工程)
- Materials Engineering (材料工程)
- Chemical Engineering (化学工程)
- Environmental Engineering (环境工程)
- Project Management (项目管理)
- Control Engineering (控制工程)
- Military Logistics (军事后勤)
- Military Equipment (军事装备)
- Engineering Management (工程管理)
- Accounting (会计)
- Auditing (审计)
- Doctoral (PhD) degree (博士):<sup>406</sup>
  - o First-Level Discipline Doctorate authorization (学术学位一级学科博士点):
  - o Civil Engineering (土木工程)
  - o Oil & Natural Gas Engineering (石油与天然气工程)
  - o Military Equipment (军事装备)
  - o Second-level Discipline Doctorate authorization (学术学位二级学科博士点):
    - Applied Chemistry (应用化学)
    - Military Logistics (军事后勤)
- Post-doctorate Specialties (博士后):<sup>407</sup>
  - o Post- Doctoral Scientific Research Station (博士后科研流动站):
    - Applied Economics (应用经济)
    - Military Logistics (军事后勤)
    - Military Equipment (军事装备)
    - Civil Engineering (土木工程)
    - Chemical Engineering & Technology (化学工程与技术)
    - Oil & Natural Gas Engineering (石油与天然气工程)

#### 2017 UNDERGRADUATE RECRUITMENT: <sup>408</sup>

- Number of Specialties (专业): The university offered academy offers six bachelor' degree specialties.
- Gender (男, 女): males only<sup>409</sup>
- Total number of personnel recruited (合计): 141
- Number of Provinces/Autonomous Regions/Municipality and Quotas: new cadets were recruited from 18 of the 22 provinces, five autonomous regions, and four municipalities
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): Commanding officer (指挥) and non-commanding officer (非指)

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): The school hosts about 200 foreign military students.<sup>410</sup>
- Study abroad (留学): No information was found.
- Other interaction: No information was found.

## SECTION 3-14: ARMY MILITARY TRANSPORTATION UNIVERSITY

### CHINESE NAME AND ACRONYM:

陆军军事交通学院.<sup>411</sup> No acronym found.

- Official English name(s): Army Military Transportation University<sup>412</sup>
- English Acronym: JJXY, which stands for Jun Jiao Xue Yuan (军交学院)

### MOE CODE:

In 2017, a new code of 91013 was assigned.<sup>413</sup> The previous code from 2008 was 90027.<sup>414</sup>



### TYPE OF INSTITUTION:

The university is a Professional Education (任职教育) institution.<sup>415</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>416</sup>

- In October 1973, the Transportation Technical School (运输技术学校) was established under the General Logistics Department (GLD).
- In June 1986, the school was renamed as the Transportation Engineering College (运输工程学院).
- In June 1999, the college was renamed as the PLA Military Transportation College (中国人民解放军军事交通学院). At some point thereafter, it was renamed in English as the Military Transportation University, even though the Chinese character *xueyuan* (学院) was retained.



- In June 2017, it was renamed the Army Military Transportation University when it was resubordinated under the newly created Army HQ.





#### CAMPUSES AND LOCATIONS:

The university is a strategic projection supporting institute, it is the highest academic institution of military transportation disciplines. The main campus is located in Tianjin, the branch campus is located in Zhenjiang, Jiangsu Province, the Automobile Noncommissioned Officer School (汽车士官学校), is located in Bengbu, Anhui province, and the Military Traffic and Transportation Institute (军事交通运输研究所) is located in Tianjin. The primary missions of the university centers on command, management, and development of technical personnel, as well as scientific research on military traffic and transportation, national defense transportation, vehicle and vessels, plus military logistics. The university fosters junior commanding officers and provide professional, knowledge, technology and decision supporting services to the new combat force of strategic projection.<sup>417</sup>

The predecessor academic institution was the Jinnan-based Northwest Military Region Logistics School Motor Vehicle Studies Department (西北军区后勤学校摩托科). Subsequently, the First Automotive School was established in Lanzhou, which later relocated to Tianjin-based Dongjuzi district. In June 2017, it was reassigned under the PLA Army HQ, and was merged with the former Zhenjiang Watercraft College (镇江船艇学院), Automobile Noncommissioned Officer School (蚌埠汽车士官学校), and Military Traffic and Transportation Research Institute (军事交通运输研究所).<sup>418</sup>

In 2001, the General Staff Department (GSD) endorsed Military Equipment (军事装备) as a “military key academic discipline” (军队重点学科). In the interim, Rear Special Services (后方专业勤务) and Military Vehicle Engineering (军用车辆工程) became the key focus academic disciplines and professional fields (重点建设学科专业领域) under the Project 2110.

The primary mission of the school is to provide pre-commissioned officers with academic education and in-service training, as well as rotational training for commissioned officers and graduate student instruction.<sup>419</sup>

#### GRADE:

Deputy corps leader (副军级)<sup>420</sup>

#### SUBORDINATION:

PLA Army HQ since 2017.<sup>421</sup> It was originally subordinate to the GLD until 2016 when it was resubordinated to the CMC Training and Administration Department.<sup>422</sup>

#### FACILITIES:

The university has well-established infrastructure. It covers an area of 848 acres (5,150 mu), there are three (3) instructional wings (教学区) and three training bases. There are over 150 research laboratories (specialized classroom) (专修室), plus over 50 types of training facilities. The library has nearly 900,000 collections. The digital library has over 140,000 collections of eBooks and multi-media materials, including 155 terabytes (TB) of information resources. The campus has high-speed internet coverage in all instructional complex (教学), scientific and research complex (科研), office premise (办公场所), as well as cadet residential hall (学员宿舍楼). Outdoor facilities wise, the campus has track and field (田径运动场), indoor sports complex (室内体育馆), standard swimming pool (标准游泳池), small arms range (轻武器射击馆), and vehicle and vessel training complex (车船训练场). The vehicle and vessel training complex possesses the latest and primary type of model of vehicles and vessels of the full force, which provides favorable conditions for training military transportation professionals. As such, the university has thousands of special vehicles (特种车), training vehicles (教练车), vessels (船艇), and cargo plane flight simulator (模拟运输机).<sup>423</sup>

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院). None were found.
- Subordinate NCO School (士官学校). None were found.

- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school, which also existed under the former institution;<sup>424</sup> however, these changed in 2017. See the introduction to this report for further information about the new structure.<sup>425</sup>
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部) (aka Basic Department / 基础部).
- Academic departments (系)<sup>426</sup>
  - Military Transportation (军事交通)
  - Vehicle Command (军事指挥)
  - Equipment Sustainment (装备保障)
  - Automobile Engineering (汽车工程)
  - Loading/Unloading Machinery (装运机械)
  - Foreign Military Student Training (外训)
- Key labs (重点实验室): No information was found.
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): There are 46 research labs and eight research centers. There are also 118 academic and scientific research laboratories, including Electronic Design Automation (电子设计自动化), Computer Simulation (计算机仿真), mathematical modeling (数学建模) centers and labs, along with environmental simulation laboratories (环境模拟试验室), including High/Low Temperature Laboratory (高低温实验室) and Artificial Climate Test Laboratory (淋雨日照试验室). In addition, there is a dozen more highly specialized laboratories, such as Military Transportation Service (军事交通运输勤务), Military Vehicle Electro-technology (军用汽车电子技术), Vehicle Off-road Capabilities (汽车越野性能), Internal Combustion Emission Control and Purification (内燃机排放控制与净化), automobile trimmed body vibration (车辆TB振动).<sup>427</sup>
- Graduate School (研究生院): No information was found.
- Cadet/student teams (队 / 区队) and groups (大队): The university has a graduate student management team group and (研究生管理大队) and vehicle instructor group (汽车教练大队), plus 27 cadet groups (学员队).

#### LEADERSHIP AND STAFF:

- Commandant (院长): Li Mingchu (李明出)<sup>428</sup>
- Political Commissar (政委): Unknown
- Professors and Staff: The university has 300 professors and assistant professors.<sup>429</sup>

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- Bachelor's degree majors and specialties:<sup>430</sup> four years
  - Bachelor's degree majors and specialties
  - Military Traffic Command & Engineering (军事交通指挥与工程)
  - Automobile Transportation & Command (汽车指挥)
  - Equipment Sustainment Command (装备保障指挥)
  - Mechanical Engineering & Automation (机械工程及其自动化专业)
  - Automobile Application Engineering (车辆运用工程)
  - Command Automation Engineering (指挥自动化工程)
  - Management Engineering (管理工程)
  - System Engineering (系统工程)

- Specialties: The following table provides a list of the number of specialties for the Army Military Transportation University, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:<sup>431</sup>

**Table 24: Army Military Transportation University Specialties**

Specialty Code	Specialty	Direction	Training Type
080201	Mechanical Engineering 机械工程	Transportation and Airlift Command 运输投送指挥 Transportation and Airlift Loading/Unloading Sustainment 运输投送装卸保障	CO
080207	Vehicle Engineering 车辆工程	Vehicle Equipment Sustainment 车辆装备保障 Vehicle Convoy Command 汽车分队指挥	
081803	Marine Navigation 航海技术	Warship and Maritime Transportation Command 舰艇航通指挥	
081804	Marine Engine Engineering 轮机工程	Warship and Electro-Mechanics Command 舰艇机电指挥	
110101	Combat Command 作战指挥	Vessel Command 船艇指挥 Vehicle Convoy Command 汽车分队指挥	
110202	Military Transportation Engineering 军事交通工程	Transportation and Airlift Command 运输投送指挥	
1206	Logistics Management and Engineering 物流管理与工程	Military Logistics Management 军事物流管理	

**Table 25: Master's Degree Specialties**

Degree Programs	Specialty Code	Direction	Training Type
Academic Degree	1108	Science of Military Logistics 军事后勤学	Non-CO & CO
	0802	Mechanical Engineering 机械工程	
Professional Degree: Master of Engineering	085201	Mechanical Engineering 机械工程	
	085206	Power Engineering 动力工程	
	085222	Transportation Engineering 交通运输工程	
	085234	Automotive Engineering 车辆工程	
	085240	Logistics Engineering 物流工程	CO
Professional Degree: Master of Military	115103	Military Logistics 军事后勤	
	115104	Military Equipment 军事装备	

- Master's degree (硕士):<sup>432</sup>
  - Rear Special Services (后方专业勤务)
  - Military Management (军队管理)
  - Military Equipment (军事装备)

- o Military Operations Research (军事运筹)
- o Traffic Information Engineering & Control (交通信息工程及控制)
- o Transportation Planning & Management (交通运输规划与管理)
- o Highway and Railway Engineering (道路与铁道工程)
- o Vehicle Operation Engineering (载运工具运用工程)
- o Vehicle Engineering (车辆工程)
- o Mechatronic Engineering (机械电子工程)
- o Power Machinery & Engineering (动力机械及工程)
- Doctoral (PhD) degree (博士)<sup>433</sup>
  - o Military Logistics (军事勤务)
- Mechanical Engineering (机械工程)

POST-DOCTORATE SPECIALTIES (博士后):

No information was found.

#### 2017 UNDERGRADUATE RECRUITMENT:<sup>434</sup>

- Number of Specialties (专业): seven
- Gender (男, 女): The school accepts males only.
- Total number of personnel recruited (合计): 161
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 22 of them
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): Commanding officers (指挥) only. No non-commanding officer (非指) specialties.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): The school trains foreign military students, but no specifics were found.<sup>435</sup>
- Study abroad (留学): No information found.
- Other interaction: No information found.

#### JOURNALS<sup>436</sup>

- Journal of Military Transportation University (军事交通学院学报)
- Automobile Applications (汽车运用)
- Military Vehicles (军用汽车)

## SECTION 3-15: NAVAL COMMAND COLLEGE

### CHINESE NAME AND ACRONYM:

海军指挥学院. No acronym was found.

- Official English name(s): Naval Command College;<sup>437</sup> Although one official PLA dictionary uses the term Naval Commanding College, this does not appear to be correct.<sup>438</sup>
- English Acronym: NCC<sup>439</sup> as shown in the photo below

### MOE CODE:

In 2017, a new code of 91015 was assigned.<sup>440</sup> The previous code from 2008 was 90037.

### TYPE OF INSTITUTION:

Professional Education (任职教育) institution.<sup>441</sup> It is identified as a mid-level and senior-level commanding officer and high-level teaching and research personnel mid-level professional education academic institution (中, 高级指挥军和高层次教学, 研究人员中级任职教育院校).

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>442</sup>

[Note that no interviews were done for the Naval Command College in 2017 or 2018.] The college began in 1952 as the Naval Department of the PLA Military College (中国人民解放军军事学院海军系) in Nanjing, Jiangsu Province, and became the Naval Military College (海军军事学院) in October 1957 as a separate institution in Nanjing. In October 1960, it was renamed the Naval College (海军学院). In 1973, the CMC expanded the campus by adding a Naval Military-Political Cadre School (海军军政干部学校). In January 1978, the school was incorporated into the Naval College. In June 1986, the name was changed to the Naval Command College.

### CAMPUSES AND LOCATIONS:<sup>443</sup>

No. 21, Banshan Park, Xuanwu District, Nanjing (南京市玄武区半山园21号).

### GRADE:

Corps deputy leader (副军级);<sup>444</sup> however, it appears to have been downgraded from corps leader grade (正军级).<sup>445</sup>

### SUBORDINATION:

PLA Navy HQ<sup>446</sup>





#### FACILITIES:<sup>447</sup>

The college occupies 480,000 square meters of property, which includes 3,000 square meters for the library that has 425,000 books.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None identified.
- Subordinate NCO School (士官学校): The college does not appear to have any programs for NCOs.
  - Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each college/academy. Although this information was found in a 2015 source,<sup>448</sup> these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部 / 院务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>449</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>450</sup> The following eight academic departments were identified but it is not clear if they all still exist. In addition, a Campaign Training Class/Course (战役训练班) was also identified.
  - Campaign Command Department (战役指挥系)
  - Tactics Command Department (战术指挥系)
  - Combined-arms Tactics Command Department (合同战术指挥系)
  - Politics Command Department (政治指挥系)
  - Logistics Command Department (后勤指挥系)
  - Logistics and Equipment Command Department (后勤和装备指挥系)
  - Information Warfare Research Department (信息战研究系)
  - Foreign Training Department (外训系)
- Key labs (重点实验室)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>451</sup> Altogether, the college has (had) nine research labs, six research centers, and 14 teaching and research labs.
- Graduate School (研究生院):<sup>452</sup> No Graduate School was not identified; however, given that the college has master's and PhD programs, one most likely exists
- Cadet/student teams (队 / 区队) and groups (大队): Although no Graduate School was identified, the college has a Graduate Student Management Group (研究生管理大队).<sup>453</sup> The college also has (had) 12 cadet teams (学员队).<sup>454</sup>

#### LEADERSHIP AND STAFF:<sup>455</sup>

- Commandant: RADM Gao Feng (高峰)
- Political Commissar: RADM Tong Haibin (佟海滨)
- Professors and Staff: No information was found concerning the number of professors, associate professors, or master's and PhD advisors.

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

The PLA's three Command Colleges (Army, Navy, and Air Force) are basically organized the same way and have similar programs. Unfortunately, little information was found concerning undergraduate programs and non-degree programs for officers. See the Introduction Section in this report for some basic information.

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified.
- Bachelor's degree (本科): four years
  - o Bachelor's degree majors and specialties: As noted in the Introduction Chapter, little information was found concerning four-year bachelor's degree programs for the three Command Colleges; however, each college does have undergraduate programs for pre-commissioned cadets (生长干部) who will become non-commanding officer (非指挥军官) military-track (军事) staff officers (参谋). As such, no information was found concerning the recruitment of cadets, including the degree majors' or specialty programs.
- Once a cadet graduates from any of the academic institutions and becomes a commanding officer, they can attend the Command College for one of three different programs:
  - o A 10-month mid-level (中级) Combined-Arms Command Course at the regiment (captain) level and a 5-month advanced-level (高级) Campaign Command Course at the brigade/division level (senior captain), where they only receive a certificate.<sup>456</sup> Upon completion of their course, they are normally assigned to their next billet.
  - o A master's degree program and then possibly a PhD program at some point in the future. It is not clear what billets personnel with a master's degree or PhD assume, but very few profiles for any service have been found showing a unit commander who has a master's degree or PhD, so most of them probably assume an academic or research billet.
- Master's degree (硕士)
  - o Master's degree majors and specialties:<sup>457</sup> The college offers a three-year Master's Degree in Military Science (军事硕士 / 军事硕士专业学位) with the following 11 specialties (专业) that are offered in full-time (全日制) and part-time (非全日制) programs. The bullets also include the number of new students identified for 2016.
    1. Military Thought (军事思想): three students
    2. Military Strategy (军事战略学): ten students
    3. Service Campaigns (军种战役学): six students
    4. Combined-arms Tactics (合同战术学): 11 students
    5. Branch/Arms Tactics (兵种战术学): six students
    6. Combat/Operations Command (作战指挥学): eight students
    7. Operational Command (军事运筹学): three students
    8. Military Information (军事信息学)
    9. Military Intelligence (军事情报学)
    10. Military Logistics (军事后勤学): four students
    11. Military Political Work (军队政治工作学): four students
- Doctoral degree (博士)
  - o Doctoral degree majors and specialties: The college has only three discipline specialties (博士学位授权专业).<sup>458</sup> In 2017, a total of 14 students were admitted for the three specialties, including Military Strategy (3), Service Campaign (6), and Combined Arms Tactics (5).<sup>459</sup> Of these, only two were female students.

#### POST-DOCTORAL SPECIALTIES (博士后):

No information was found concerning any Post-doctoral programs.

#### 2017 UNDERGRADUATE RECRUITMENT:

No information was found.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

As noted earlier, the college has a Foreign Training Departments. According to the 2007 PLA encyclopedia, the college inaugurated a foreign student training program (外国留学生培训任务) in 2000. By 2007, it had provided cultivation for military students from 25 countries.<sup>460</sup> However, only one current article was found concerning any international exchanges or cooperation. According to the article, the college had students from Bangladesh and Egypt in January 2019.<sup>461</sup>

## SECTION 3-16: NAVAL UNIVERSITY OF ENGINEERING

### CHINESE NAME AND ACRONYM:<sup>462</sup>

海军工程大学. The acronym is 海工大.

- Official English name(s): Naval University of Engineering<sup>463</sup> and Naval Engineering University<sup>464</sup>
- English Acronym: Currently NUE and formerly NAE<sup>465</sup>



### MOE CODE:

In 2017, the code was changed to 91016.<sup>466</sup> The code in 2008 was 90038.<sup>467</sup>

### TYPE OF INSTITUTION:

NUE began as an Academic Education (学历教育) institution that included professional cultivation and training (任职培训),<sup>468</sup> but it shifted completely to a Professional Education (任职教育) institution in 2004.<sup>469</sup>

### OFFICIAL WEBSITE:

<http://www.nue.edu.cn/index.aspx>. No english website is available.

### BACKGROUND:

The Naval University of Engineering was created in April 1999 by merging the former Naval Engineering Academy (海军工程学院) with the Naval Electronic Engineering Academy (海军电子工程学院). In 1999, NUE also became one of the PLA's five comprehensive universities (综合大学).<sup>470</sup> The Naval Engineering Academy was created in November 1949 as the Mechanical Engineering Department (机械系) of the PLA Navy's Dalian Naval School (大连海军学校) in Liaoning Province.<sup>471</sup> In 1961 it was expanded and renamed as the Naval Engineering Academy (海军工程学院). In 1969, it moved from Dalian, Liaoning Province, to Wuhan, Hubei Province. The Naval Electronic Engineering Academy was created in 1950 as a communications branch campus of the Huadong (Eastern China) Naval School (华东海军学校). In 1957, it expanded and became the Naval Communications School (海军通信学校). In 1986, it was renamed as the Naval Electronic Engineering Academy. In 2003, the Naval Logistics Academy (海军后勤学院), which was created in 1952, was abolished and its components became subordinate academic departments in NUE.

### CAMPUSES AND LOCATIONS:<sup>472</sup>

NUE is located in seven different locations in Wuhan and Tianjin as shown below:

- The main campus (本部) is located at: No. 717, Jiefang (Liberation) Avenue,<sup>473</sup> Qiaokou District, Wuhan, Hubei Province (湖北省武汉市硚口区解放大道717号)
- The Service Academy/College (勤务学院) is located at: No. 1058 Shandong Road, Binhai New District, Tianjin (天津市滨海新区山东路1058号)
- The Mulan Lake Water Training Base (木兰湖水训练基地) is located at Mulan Lake, Huangpi District, Wuhan (湖北省武汉市黄陂区木兰湖)

- Shanwei Maritime Training Base (汕尾海上训练基地) located in Shanwei, Guangdong Province (广东省汕尾市)
- Sichuan Nuclear Power Operations Intern Facility (四川核动力运行实习所) located in Sichuan Province
- Hong'an Revolutionary Traditional Education Base (红安革命传统教育基地) located in Qiliping Township, Hong'an County, Hubei Province (湖北省红安县七里坪镇)
- Naval Qingdao Equipment Technology Support Talent Workstation (海军青岛装备技术保障人才工作站) located in Qingdao, Shandong Province (山东省青岛市) that was co-built with the Navy Qingdao Support Base (海军青岛保障基地) in 2006
- In addition, in September 2007, the Type 051 Luda I destroyer (旅大I型驱逐舰) Xi'an (西安) with hull number 153 was decommissioned and transferred to the university as training facility at an unidentified location.<sup>474</sup>

#### GRADE:

Corps deputy leader grade (副军级).<sup>475</sup> Prior to 2017, it was a corps leader-grade (正军级) organization but was apparently downgraded.<sup>476</sup>

#### SUBORDINATION:

PLA Navy Headquarters<sup>477</sup>

#### FACILITIES:

Altogether, the campuses occupy 516 acres (3129.2 mu).<sup>478</sup> As of 2014, the university's main library had about 600,000 Chinese and foreign printed books, more than 2.6 million e-books, more than 1,000 paper journals, and more than 13,000 electronic journals. There are Tsinghua academic journals and Chinese full-text databases. Ten full-text databases and 75 abstract databases, including the Wanfang database group, have a total of 103,000 gigabytes of digital resources. They have basically formed a collection system with a clear disciplinary system and a distinctive naval character.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): The university has the following subordinate *xueyuan*.<sup>479</sup> Each of these *xueyuan* are subordinate to the Basic Department (基础部). [Note: No official translations of the *xueyuan* were found, so they could be academies and the primary name could be different.]
  - Power Engineering College (动力工程学院)
  - Electronic Engineering College (电子工程学院)
  - Electrical Engineering College (电气工程学院)
  - Arms/Weapons Engineering College (兵器工程学院)
  - Ship/Vessel and Marine/Maritime College (舰船与海洋学院)
  - Information Security College (信息安全学院)
  - Service College (勤务学院) aka Naval Service College (海军勤务学院) is located in Tianjin.<sup>480</sup> Students from the University spend their fourth year at this campus to learn about ship replenishment.
- Subordinate NCO school (士官学校): None
- Administrative and functional departments (部门): In 2005 and 2011, the following departments existed for NUE, and some of the departments also existed for each subordinate college/school, but these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>481</sup> (aka Basic Department / 基础部). This department still exists as noted above.<sup>482</sup>



- Academic departments (系): The following four academic departments exist under NUE.<sup>483</sup>
  - Information Security Department (信息安全系)
  - Management Engineering and Equipment Economics Department (管理工程与装备经济系)
  - Combat Operations and Planning Department (作战运筹与规划系)
  - Political Theory Department (政治理论系)
- Key Labs (重点实验室): NUE has two National Key Labs (国家级重点实验室), including the Ship Integrated Power Technology National Defense Key Lab (舰船综合电力技术国防科技重点实验室), and six unidentified Military Key Labs (军队重点实验室).<sup>484</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): NUE has one National Experimental Teaching Demonstration Centers (国家级实验教学示范中心) and one National Energy New Energy Access Equipment Research and Development (Experiment) Center (国家能源新能源接入设备研发(实验)中心).<sup>485</sup> It has six teaching and research labs (教研室)—mathematics (数学), physics (物理), chemistry and materials (化学与材料), mechanics (力学), foreign languages (外语), and military foundation (军事基础).<sup>486</sup>
- Graduate school (研究生院). This school exists but no information was found about its content.<sup>487</sup>
- Student teams (队 / 区队) and groups (大队): NUE has an unidentified number of student groups (学员大队), which are most likely organized into student teams.

#### LEADERSHIP AND STAFF:<sup>488</sup>

- Commandant: RADM Han Xiaohu (韩小虎)
- Political Commissar: RADM Xia Kewei (夏克伟)
- Professors and staff: NUE has more than 500 professors and associate professors, of which more than 90% have a master's degree and more than 50% have a PhD.<sup>489</sup>

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):

- No NCO special technical degrees
- Bachelor's degree specialties (本科高等教育): two majors organized into 34 specialties
  - Majors: Physics (物理学) and Material Science and Engineering (材料科学与工程)
  - NUE has two unidentified undergraduate-level National Key Disciplines (全国重点学科), which are organized into 34 bachelor's degree specialties, including the 28 shown below:<sup>490</sup>
    1. Mechanical Engineering (机械工程)
    2. Material Science and Engineering (材料科学与工程)
    3. Energy and Power Engineering (能源与动力工程)
    4. Electrical Engineering and Automation (电气工程及其自动化)
    5. Communication Engineering (通信工程)
    6. Photoelectric Information Science and Engineering (光电信息科学与工程)
    7. Water Acoustic Engineering (水声工程)
    8. Automation (自动化)
    9. Information Security (信息安全)
    10. Navigation Engineering (导航工程)
    11. Turbine Engineering (轮机工程)
    12. Ship Electrical and Electronic Engineering (船舶电子电气工程)
    13. Ship and Ocean Engineering (船舶与海洋工程)
    14. Weapon Systems and Engineering (武器系统与工程)
    15. Weapon Launch Engineering (武器发射工程)
    16. Information Countermeasure Technology (信息对抗技术)
    17. Nuclear Engineering and Nuclear Technology (核工程与核技术)

18. Radiation Protection and Nuclear Safety (辐射防护与核安全)
  19. Safety Engineering (安全工程)
  20. Fire Command and Control Engineering (火力指挥与控制工程)
  21. Big Data Engineering (大数据工程)
  22. Command Information System Engineering (指挥信息系统工程)
  23. Radar Engineering (雷达工程)
  24. Missile Engineering (导弹工程)
  25. Unmanned Equipment Engineering (无人装备工程)
  26. Electromagnetic Emission Engineering (电磁发射工程)
  27. Equipment Economic Management (装备经济管理)
  28. Management Science and Engineering (管理科学与工程类).
- Master's degree majors and specialties (硕士): three majors organized as shown below:
    - o 1 first-level degree (1个一级学科): Material Science and Engineering (材料科学与工程)
    - o 1 second-level degree (1个二级学科): Applied Mathematics (应用数学)
    - o 1 Engineering master's degree (1个工程硕士): Material Engineering (材料工程)
  - Doctoral degree majors and specialties (博士): N/A

POST-DOCTORAL SPECIALTIES (博士后):  
N/A

DISCIPLINES (学科门类):

- NUE also has the following disciplines:<sup>491</sup>
- 6 unidentified military key construction disciplines (军队重点建设学科专业)
- 5 master's degree first-level academic degree authorization points (硕士一级学科学术学位授权点)
- 1 master's degree authorization point that includes six master's degree authorization categories (硕士专业学位授权类别) which, in turn, includes 25 second-level disciplines (含25个二级学科).
- 7 doctoral first-level disciplines (博士一级学科)
- 7 postdoctoral research stations (博士后科研流动站) that includes five first-level disciplines (一级学科) and 25 second-level disciplines (含25个二级学科)
- 1 doctoral academic degree authorization point (博士学位授权点) with three independent second-level authorization points (独立二级学科博士学位授权点) that include five first-level disciplines, which, in turn include 15 second-level disciplines (含15个二级学科)

SPECIALTY CODES (专业代码):

Table 28 shows the 19 undergraduate specialty codes that were found for the 2017 recruitment process to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO).<sup>492</sup> Unfortunately, no information was found for the remaining specialties. [Note: The PLAN uses the terms *jianting* (舰艇) and *jianchuan* (舰船), both of which are translated as “ship”.]

**Table 26: Naval University of Engineering Specialties**

Specialty Code	Specialty	Direction	Training Type
080201	Mechanical Engineering 机械工程	Ship Maintenance and Management 舰船维修与管理	Non-CO
080401	Material Science and Engineering 材料科学与工程	Ship Maintenance and Management	Non-CO
080501	Energy and Power Engineering 能源与动力工程	Ship Electric Power Command 舰艇电力指挥	CO
080601	Electrical Engineering and Automation 电气工程及其自动化	Ship Electromechanical Command 舰艇机电指挥	CO
		Submarine Electromechanical Command 潜艇机电指挥	CO
		Comprehensive Electric Power Technology & Management 综合电力技术与管理	CO
080703	Communication Engineering 通信工程	Shore-to-Sea Communications Technology & Command 岸海通信技术与指挥	Non-CO & CO
		Database Technology & Command 数据库技术与智慧	CO
080705	Photoelectric Information Science and Engineering 光电信息科学与工程	Ship Maintenance and Management	Non-CO
080708	Water Acoustic Engineering 水声工程	Ship Maintenance and Management	Non-CO
		Water Acoustic Technology & Command 水声技术与指挥	CO
		Earl Warning Intelligence Processing & Application 预警情报处理与运用	CO
080801	Automation 自动化	Ship Electromechanical Command 舰船机电指挥	CO
080904	Information Security 信息安全	Ship Cryptographer 舰艇译电	Non-CO & CO
081203	Navigation Engineering 导航工程	Shore-to-Sea Communications Technology & Command 岸海通信技术与指挥	CO
		Navigation Technology & Command 导航技术与指挥	CO
081804	Turbine Engineering 轮机工程	Ship Electromechanical Command 舰艇机电指挥	CO
		Submarine Electromechanical Command	CO
081808	Ship Electrical and Electronic Engineering 船舶电子电气工程	Ship Degaussing Technology & Command 舰船消磁技术与指挥	CO
081901	Ship and Ocean Engineering 船舶与海洋工程	Shipping Supply Service 海运补给勤务	CO
		Ship Service 舰船勤务	CO
		Ship Maintenance & Management 舰船维修与管理	Non-CO
082101	Weapon Systems and Engineering 武器系统与工程	Ship Armament Maintenance & Management 舰船军械维修与管理	CO
		Equipment Technology Support & Sub-unit Command 装备技术保障与分队指挥	CO
082102	Weapon Launch Engineering 武器发射工程	Ship Armament Maintenance & Management	CO
082107	Information Countermeasure Technology 信息对抗技术	Electronic Countermeasure Technology & Command 电子对抗技术与指挥	CO
082201	Nuclear Engineering and Nuclear Technology 核工程与核技术	Nuclear Reaction Maintenance & Management 核反应维修与管理	Non-CO
		Submarine Nuclear Power Command 潜艇核动力指挥	CO

082202	Radiation Protection and Nuclear Safety 辐射防护与核安全	Nuclear Safety Support & Nuclear Emergency Command 核安全保障与核应急指挥	Non-CO
		Nuclear Biochemical Protection Technology 核生化防护技术	CO
082901	Safety Engineering 安全工程	Aircraft Carrier Cabin Command 航母舱段指挥	CO

#### 2017 UNDERGRADUATE RECRUITMENT:<sup>493</sup>

- Number of Specialties (专业): 20
- Gender (男, 女): Males were eligible for all 21 specialties, but females were eligible for only two specialty directions, both of which are communications related
  - o Communications Engineering's Shore-to-Sea Communications Technology & Command
  - o Information Security's Ship Cryptographer
- Total number of personnel recruited (合计): 420
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 21. No one was recruited from Shanxi, Inner Mongolia, Shanghai, Jiangxi, Guangxi, Xizang (Tibet), Gansu, Qinghai, Ningxia, or Xinjiang.
- Foreign language requirements (外语语种): English was required for every specialty
- Specialty categories (专业类别): Commanding officer (指挥) or non-commanding officer (非指): See Table 28 above.

#### INTERNATIONAL EXCHANGES AND COOPERATION:<sup>494</sup>

NUE has established good partnerships with domestic universities such as Tsinghua University and Huazhong University of Science and Technology to jointly cultivate master's and doctoral students and carry out scientific research cooperation. More than 150 people have visited or studied abroad in Russia, South Korea, the United States, and other countries. More than 200 faculty members and cadets have visited the United States, Singapore, Russia, and other countries on the Zhenghe Training Ship. Several dozen foreign military delegations have visited NUE. NUE has also trained nearly 1,000 international students from Bangladesh, Vietnam, Tanzania, Congo, and other countries.

## SECTION 3-17: DALIAN NAVAL ACADEMY

### CHINESE NAME AND ACRONYM:

海军大连舰艇学院. No acronym was found.

- Official English name(s): As shown in the badge at the right, the graphic below, and a China Daily English article in 2018, it appears that the official English name is Dalian Naval Academy;<sup>495</sup> however, the following two names were also found in official PLA publications published in 2007 and 2011, all of which have the same Chinese name:
  - Dalian Naval Ship Academy of the CPLA (Chinese People's Liberation Army)<sup>496</sup>
  - Naval Dalian Ship College<sup>497</sup>
- English Acronym: None found



### MOE CODE:

In 2017, a new code of 91017 was assigned.<sup>498</sup> The previous code from 2008 was 90040.<sup>499</sup>

### TYPE OF INSTITUTION:

It is an Academic Education (学历教育) institution.<sup>500</sup> No references were found to it being a Professional Education (任职教育) institution.

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

The following bullets provide information concerning the history of the academy.<sup>501</sup>

- 22 November 1949: Created as the Naval School (海军学校) by Mao Zedong as the first PLA academic institution.
- September 1952: It was renamed the First Naval School (第一海军学校)
- September 1957: It was renamed as the Naval Command School (海军指挥学校)
- June 1986: It was renamed the Naval Dalian Ship College (海军大连舰艇学院)



- June 1999: The former Naval Political College (海军政治学院),<sup>502</sup> which was also located in Dalian, was merged with the Ship College and became the Department of Politics (政治系)
- 2012: Took the responsibility for mid-level command training for vessel officers (海军舰艇中级指挥培训任务)
- Date Unknown but probably 2017: Although the Chinese name remained the same (海军大连舰艇学院), the English name changed to Dalian Naval Academy.

#### CAMPUSES AND LOCATIONS:

The academy only has one campus (本部), which is located at No. 667 Jiefang Road, Zhongshan District, Dalian, Liaoning Province (辽宁省大连市中山区解放路667号)<sup>503</sup>

#### GRADE:<sup>504</sup>

Corps deputy leader (副军级). Unlike other academic institutions noted in this report that were downgraded in 2017, this academy has always been a corps deputy leader-grade organization.<sup>505</sup>

#### SUBORDINATION:

PLA Navy HQ<sup>506</sup>

#### FACILITIES:<sup>507</sup>

The academy has more than 20 training facilities (训练场地), including comprehensive physical skill training grounds (综合体能技能训练场), military physical education training gym (军体训练馆), windsurfing training grounds (风帆训练场), surface warship damage training grounds (水面舰艇损管训练场), swimming pool (游泳馆), and beach observation fields (海滨观测场). There are two libraries (图书馆), one information management center (信息管理中心), and one internship library for naval academies (海军院校实习图库). With a professional and complete simulation training system, there are more than 60 kinds of training simulators, thousands of pieces of different teaching equipment. The academy also has large-scale modern ocean-going training ships, such as the *Zhenghe* (郑和舰), *Shichang* (世昌舰), and *Qijiguang* (戚继光舰), that are used to train cadets on long-distance voyages on actual operational ships (实习). It also has ten ships, rafts, and sailboats (舰艇, 舢舨, 帆船) that are organized into the PLA's only academic institution that has a *zhidui* (支队 / flotilla).

#### ORGANIZATIONAL STRUCTURE:

- Subordinate NCO school (士官学校): The academy does not have a subordinate NCO School. Only one reference was found concerning NCOs, which stated that the academy was responsible for pre-selected NCO cultivation and training (预选士官培训). Based on research on this issue, multiple academic institutions and training bases in the PLA have small organizations that provide a short amount of specialty training for two-year conscripts/enlistees who have been selected as an NCO, since most two-year enlisted personnel rarely receive any group specialty training. Since about 85% of the enlisted force on PLA Naval frigates and destroyers are NCOs, it makes sense that the Dalian Naval Academy would provide some type of specialty training for them. It is not clear how long the training lasts.
- Administrative and functional departments (部门): In 2007, the following departments existed for the academy, but these most likely changed in 2017.<sup>508</sup> See the introduction to this report for further information about the possible new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
- Academic departments (系): The only information concerning any academic departments was about

the Political Academic Department of Politics (政治系); however, according to the 2007 PLA History Encyclopedia, at that time, the academy had the following departments. The best guess is that most, if not all, of them still exist.<sup>509</sup>

- o Equipment Systems and Automation Department (装备系统与自动化系)
- o Information and Communications Engineering Department (信息与通信工程系)
- o Navigation Department (航海系)
- o Shipborne Weapons Department (舰载武器系)
- o Combat/Operations Command Department (作战指挥系)
- o Oceanography and Surveying Science Department (海洋与测绘科学系)
- o Foreign Training Department (外训系)
- Key Labs (重点实验室): Military Navigation Laboratory (军事航海实验室) and Marine Surveying Engineering Laboratory (海洋测绘工程实验室) are both Military Key Labs (军队重点实验室).<sup>510</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): There are more than 200 laboratories of various types.<sup>511</sup> No information was found concerning teaching and research labs.
- Graduate school (研究生院): Although the academy has graduate programs, no information was found about a Graduate School; however, references were found to a subordinate Graduate Student [Administrative] Division (研究生处)<sup>512</sup> that manages the graduate student programs. It is not clear which organization this is subordinate to.
- Student teams (队 / 区队) and groups (大队): No information was found.

#### LEADERSHIP AND STAFF:<sup>513</sup>

- Commandant: RADM Yan Zhengming (严正明)
- Political Commissar: SCPT Yu Wenbing (喻文兵)
- Professors and Staff:<sup>514</sup> The academy has 200-250 specialists (专家), professors (教授), and associate professors (副教授), and about 170 PhD and master's degree advisors (博士, 硕士研究生指导教师). It also has one academican of the Chinese Academy of Engineering (中国工程院院士) and one academican of the Chinese Academy of Sciences (中国科学院院士).

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified.
- Bachelor's degree (本科): four years<sup>515</sup>
  - o Bachelor's degree majors and specialties: The academy has the following four majors and seven specialties:
- Four Majors: Military Science (军事学), Engineering (工学), Science (理学), and Law (法学)<sup>516</sup>
- Seven Specialties:<sup>517</sup>

**Table 27: 7 Dalian Naval Academy Specialties**

Specialty Code	Specialty	Direction	Training Type
00704	Military Oceanography 军事海洋学	Ocean Survey Technology & Support 海洋调查技术与保障	Non-CO
080701	Electronic Information Engineering 电子信息工程	Ship Power Command 舰艇机电指挥	CO
080703	Communications Engineering 通信工程	Ship Communications Command 舰艇通信指挥	CO
081201	Surveying Engineering 测绘工程	Surveying Technology & Support 测绘技术与保障	Non-CO

081803	Navigation Technology 航海技术	Ship Navigation Command 舰艇航海指挥 Ship Navigation Communications Command 舰艇航通指挥 Ship Command 船艇指挥	CO
082101	Weapon Systems & Engineering 武器系统与工程	Ship Gun Command 舰艇枪炮指挥 Ship Missile Command 舰艇导弹指挥 Ship Water Weapons Command 舰艇水武指挥 Ship Aviation Command 舰艇航空指挥	CO
082103	Detection Guidance & Control Technology 探测制导与控制技术	Ship Water Weapons Command 舰艇水武指挥	CO

- Master's degree (硕士)
  - o Master's degree majors and specialties:<sup>518</sup> The academy provides master's degrees in three areas—Military Science (军事学), Engineering (工学), and Law (法学). Although the information is not consistent, the academy apparently has 9-15 specialty master's degree programs (硕士学位授权点). Table 23 below shows the programs that were offered in 2018. Although not shown, some Law major programs were offered within the academy's Political Academic Department(政治系).

**Table 28: Master's Degree Programs for 2018**

Major	Specialty Code	Direction
Engineering 工学	081000	Information & Communications Engineering (First level) 信息与通信工程 (一级学科)
	082600	Weapons Science & Technology (First level) 兵器科学与技术 (一级学科)
Military Science 军事学	110400	Science of Tactics (First Level) 战术学 (一级学科)
	110500	Science of Military Command (First Level) 军队指挥学 (一级学科)
Engineering Master's Degree 工程硕士	085208	Electronics & Communications Engineering 电子与通信工程
	085215	Surveying Engineering 测绘工程
Military Master's Degree 军事硕士	115101	Military Command 军事指挥

- Doctoral degree (博士)
  - o Doctoral degree majors and specialties:<sup>519</sup> The academy has 2-3 PhD degree programs (博士学位授权点).

POST-DOCTORAL SPECIALTIES (博士后):<sup>520</sup>

The academy has five Post-doctoral scientific research stations (博士后科研流动站).

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 7
- Gender (男, 女): All seven specialties include male cadets, while three of them also include female cadets (080701, 080703, and 081803)
- Total number of personnel recruited (合计): 364

- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 18 of them
- Foreign language requirements (外语语种): English capability is required for all seven specialties
- Specialty categories (专业类别): five commanding officer (指挥) specialties of which none include non-commanding officers, and two non-commanding officer (非指) specialties (070704 and 081201) of which neither one also includes commanding officers.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

The academy has one of the PLA's largest programs for interaction with foreign militaries.<sup>521</sup> Training vessels also pay port calls to foreign countries as part of PLAN diplomatic efforts. The PLAN's only officer cadet training ship, the Zhenghe (郑和号训练舰), has been an especially prolific traveler since it became operational and was assigned to the Dalian Naval Academy in April 1987. Since its first port call to the United States (Hawaii) in 1989, it has visited at least 25 different countries, including multiple visits to several countries, and sailed over 300,000 nautical miles. The Zhenghe routinely welcomes foreign military cadets as part of its friendly port calls: journeys in 2012, 2013, and 2014 welcomed cadets from both various PLAN academies as well as maritime students from India, Myanmar, Indonesia, Vietnam, and others. The Zhenghe's 2014 voyage, conducted with the guided-missile frigate Weifang (潍坊舰), featured exchanges at the Indonesian Naval Academy and welcomed students from Australia, New Zealand, Singapore, Thailand, and Bangladesh. While visiting Indonesia, the PLAN task force and the Indonesian Navy's Patrol Ship 813 conducted a combined exercise in the Java Sea. The exercise included task force maneuvering, communications, and employing the Code for Unplanned Encounters at Sea, a first for the PLAN in a combined exercise. Besides the countries noted above, the Zhenghe has also visited Russia, Japan, and South Korea. Of note, the academy has not had any interaction with North Korea.

- Foreign students (外军留学生): In 2012, the academy was identified as having the first batch of Chinese and foreign students training classes in the same class and currently recruits undergraduate cadets from around the world.
- Study abroad (留学): No information was found concerning any study abroad.
- Other interaction: The Navy Sailing Team consisting of cadets has repeatedly represented the PLA Navy in various international sailing competitions such as Italy, Turkey, and the "China Cup"(中国杯), and has repeatedly won the gold medal.<sup>522</sup>

## SECTION 3-18: NAVY SUBMARINE ACADEMY

### CHINESE NAME AND ACRONYM:

海军潜艇学院.<sup>523</sup> No acronym was found.

- Official English name(s):<sup>524</sup> Although the official name appears to be Navy Submarine Academy, as shown in the photo at the right of the front gate to the academy, other official PLA publications have identified it as the Naval Submarine College.
- English Acronym: None was found

### MOE CODE:

In 2017, a new code of 91018 was assigned.<sup>525</sup> The previous code from 2008 was 90042.

### TYPE OF INSTITUTION:

No information was found identifying it as an Academic Education (学历教育) institution; however, information was found identifying it as a Professional Education (任职教育) institution.<sup>526</sup>

OFFICIAL WEBSITE: None found.

### BACKGROUND:

The following bullets provide information about the history of the academy:<sup>527</sup>

- August 1953: Created as the Fourth Naval School (第四海军学校) in Qingdao, Shandong Province
- September 1957: Renamed as the Naval Submarine School (海军潜艇学校)
- February 1969: Abolished during the Cultural Revolution
- December 1973: Reestablished and absorbed the existing Naval Submarine [Enlisted] Soldier's School (海军潜艇士兵学校), which was created in 1960 in Qingdao
- June 1983: Renamed as the Navy Submarine Academy (海军潜艇学院).

### CAMPUSES AND LOCATIONS:<sup>528</sup>

Prior to 2009, the main campus (本部) was located at No. 10, Shandong Road, Southern District, Qingdao (青岛市市南区山东路10号) when the campus was sold and it moved to No. 1, Jinshui Road, Licang District, Qingdao (青岛市李沧区金水路1号). The academy also has a submariner training base (潜艇兵训练基地), which is located at No. 9A, Dasha Road, City Northern District, Qingdao (山东省青岛市市北区大沙路9号甲).

### GRADE:<sup>529</sup>

Corps deputy leader (副军级), which appears to have always been its grade.





## SUBORDINATION:<sup>530</sup>

PLA Navy HQ

## FACILITIES:<sup>531</sup>

The main campus covers an area of 264 acres (1,600 mu). The academy has a fully equipped gymnasium, swimming pool, fencing hall, boxing hall, track and field, laundry room, supermarket and cafe, which fully meet the training and daily life needs of the students. The library has a rich collection of books, including 520,000 books of various types and more than 800 Chinese and foreign periodicals. The academy has more than 300 teaching and research institutes (教学与科研相结合), laboratories (实验室), training rooms (训练室), operation rooms (操作室), and simulation rooms (模拟室). It also has an advanced submarine comprehensive simulation training center (潜艇综合模拟训练中心).

## ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): As an academy, it does not have any subordinate *xueyuan*.
- Subordinate NCO school (士官学校):<sup>532</sup> Although the academy does not appear to have a subordinate NCO school, it does have an education program for NCOs that includes 17 NCO two-year secondary technical (中专) educational program or three-year post-secondary (大专) program (士官职业技术教育大专专业). It is not clear how it is managed; however, in 2007 the academy had a Submarine Specialty NCO and Technical [Enlisted] Soldier Cultivation and Training Department (潜艇专业士官与技术兵培训系), which most likely still exists.
- Administrative and functional departments (部门):<sup>533</sup> In 2007, the following departments existed for the academy, but these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
- Academic departments (系):<sup>534</sup> No information was found concerning any academic current academic departments; however, according to the 2007 PLA History Encyclopedia, at that time, the academy had the following six departments. Based on the current specialties and cadet/student content discussed below, the best guess is that most, if not all, of them still exist:
  - Combat/Operations Command Department (作战指挥系)
  - Navigation Observation and Communication Department (航海观通系)
  - Strategic Missile Under Water Weapons Department (战略导弹水中兵器系)
  - Salvage Department (防险救生系)
  - Submarine Specialty NCO and Technical Soldier Cultivation and Training Department (潜艇专业士官与技术兵培训系)
  - Foreign Training Department (外训系)
- Key Labs (重点实验室): The academy has two unidentified military key labs (军队重点实验室)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>535</sup> None were identified.
- Graduate school (研究生院):<sup>536</sup> Although the academy began a master's degrees program in 1987 (1987年开始培养硕士研究生) and a PhD program in 2003 (2003年开始培养博士研究生), no information was found concerning a graduate school.
- Student teams (队 / 区队) and groups (大队): no information was found.

#### LEADERSHIP AND STAFF:<sup>537</sup>

- Commandant: RADM Wang Yu 王宇
- Political Commissar: RADM Zhou Mingui (周名贵)
- Professors and Staff: No information was found concerning the number of professors (教授) and assistant professors (副教授).

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified
- Bachelor's degree (本科): four years
  - o Bachelor's degree majors and specialties: The first bachelor's degree program began in 1956.<sup>538</sup> The academy has 17 bachelor's degree specialties (7个本科教育专业).
  - o Table 29 provides a list of the seven specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:

**Table 29: Navy Submarine Academy Specialties**

Specialty Code	Specialty	Direction	Training Type
080701	Electronic Information Engineering 电子信息工程	Navigation Observation & Communication Command 潜艇观通指挥	CO
080708	Hydroacoustic Engineering 水声工程	Aviation Antisubmarine Technology & Command 航空反潜技术与指挥	CO
081803	Marine Navigation Technology 航海技术	Submarine Navigation Marine Navigation Command 潜艇航海指挥	CO
081807	Rescue & Salvage Engineering 救助与打捞工程	Salvage Technology & Command 防险救生技术与指挥	CO
081901	Ship & Marine Engineering 船舶与海洋工程	Diving Technology & Command 潜水技术与指挥	CO
082101	Weapon Systems & Engineering 武器系统与工程	Submarine Strategic Missile Command 潜艇战略导弹指挥	CO
082102	Weapon Launch Engineering 武器发射工程	Submarine Mine Command 潜艇雷弹指挥	CO

- Master's degree (硕士)
  - o Master's degree majors and specialties:<sup>539</sup> No information was found concerning the majors and specialties, but the academy has 12 master's degree programs (硕士学位授权点)
- Doctoral degree (博士)
  - o Doctoral degree majors and specialties:<sup>540</sup> No information was found concerning the majors and specialties, but the academy has two PhD programs (博士学位授权点)
- Other programs:<sup>541</sup> The academy also has the following three programs, but it is not clear what they all consist of or how long the programs are:
  - o 3 Active-duty Officer Cultivation and Training Specialties (现职军官培训专业)
  - o As noted earlier, there are 17 NCO two-year secondary technical (中专) educational programs or three-year post-secondary (大专) programs (士官职业技术教育大专专业).
  - o 19 specialties for Technical [Enlisted] Soldier Cultivation and Training (技术兵培训专业)<sup>542</sup>
- Other identified specialties:<sup>543</sup> Besides the seven bachelor's degree specialties noted above, the academy also identified the following specialties, which apparently apply to the other programs noted above:

- o [Submarine] Branch Tactics (兵种战术), Combat/Operations Command (作战指挥), Electronic Information Engineering (电子信息工程), Combat/Operations Simulation (作战仿真), Hydroacoustic Engineering (水声工程), Marine Navigation Technology (航海技术), Underwater Combat Environment (水下作战环境), Underwater Target Recognition (水下目标识别), Remote Sensing Military Applications (遥感军事应用), Weapon Systems and Engineering (武器系统与工程), Weapon Launch Engineering (武器发射工程), Ship and Ocean Engineering (船舶与海洋工程), Rescue and Salvage Engineering (救助与打捞工程), and Underwater Blasting (水下爆破).

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>544</sup>

The academy has two Post-doctoral scientific research stations (博士后科研流动站)

#### 2017 UNDERGRADUATE RECRUITMENT:<sup>545</sup>

- Number of Specialties (专业): 7
- Gender (男, 女): There were no female cadets.
- Total number of personnel recruited (合计): 112
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from only nine of them
- Foreign language requirements (外语语种): English for all of seven specialties
- Specialty categories (专业类别): All seven specialties are for commanding officers (指挥). None of them included non-commanding officers (非指).

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生):<sup>546</sup> Over the past 60+ years, the academy has provided cultivation for about 1,000 foreign cadets/students and surface salvage management officials from 70 countries.
- Study abroad (留学): No information was found.

## SECTION 3-19: NAVAL AVIATION UNIVERSITY

### CHINESE NAME AND ACRONYM:

海军航空大学. No acronym was found.

- Official English name(s): Naval Aviation University<sup>547</sup>
- English Acronym: None found

### MOE CODE:

In 2017, a new code of 91019 was assigned.<sup>548</sup> The code for the previous Navy Flight College/Academy was 90043.<sup>549</sup>

### TYPE OF INSTITUTION:

Academic Education (学历教育) and Professional Education (任职教育)<sup>550</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

The Naval Aviation University, whose main campus is located in Yantai, Shandong Province (山东省烟台市), was created in July 2017 by merging the former Naval Flight College/Academy (海军航空兵学院) and the Naval Aeronautical and Astronautical College (海军航空工程学院), which is also identified as the Navy Aviation Engineering Academy.<sup>551</sup> The following paragraphs provide background information on each of those two institutions.

The Naval Flight College was established in November 1950 in Qingdao, Shandong Province, by merging the 1<sup>st</sup> and 2<sup>nd</sup> Flight Schools (航空学校) to educate and train basic- and intermediate-level commanding officers, pilots, staff officers, and aviation support personnel.<sup>552</sup> At that time, it was known as the Naval Flight School (海军航空学校). In 1987, it was renamed the Naval Flight College (海军飞行学院).<sup>553</sup> In 2012, the Chinese name changed again but was still called the Naval Flight College (海军航空兵学院) and incorporated the former Flight College plus two naval training bases. Its primary responsibilities included education for naval aviation mid-level commanding officer and shore-based and shipborne officer pilots, combat training for staff officers, and anti-submarine reconnaissance for airborne combat service officers, as well as parachute training on land and at sea. Over the years, the institution had facilities that moved around among various locations, including Qingdao (Shandong / 山东青岛), Wei County (Shandong / 山东潍县), Huludao (Liaoning / 辽宁葫芦岛市), and Changzhi (Shandong / 山西长治市).

The Naval Aeronautical and Astronautical College / Navy Aviation Engineering Academy was created in August 1950 in Qingdao as the Naval Sea Coast Artillery School (海军海岸炮兵学校).<sup>554</sup> In March 1951, the name changed to the Naval Artillery School (海军炮兵学校) and moved to Yantai in September 1952, but the original campus remained as a branch campus and training base. In 1957, it merged with the Naval Technical/Technology School (海军技术学校). In 1959, it merged with the PLA Air Force's 15<sup>th</sup> Flight School's Naval Aviation Department and with a naval training base and was renamed as the Naval Special Technical School (海军特种技术学校) with the



responsibility of training missile technical officers. In 1960, it was renamed the Naval Advanced Specialty School (海军高级专科学校). In 1961, it was upgraded to corps [deputy leader] level. In 1970, it moved to Nanjing, Jiangsu Province (江苏南京) and was renamed the Third Naval School (第三海军学校). In 1974, it moved to Jinxi, Liaoning Province (辽宁锦西). In 1975, it changed its name yet again to the Naval Second Artillery School (海军第二炮兵学校), which included training for enlisted personnel [Note: From the 1960s through the 1990s, the Navy and Air Force referred to its antiaircraft artillery as First Artillery and surface-to-air missiles as Second Artillery in order to hide the use of missiles.] In 1986, it began its first master's degree programs. In June 1986, the school merged with the Navy's First and Second Aviation Maintenance Schools (海军第一, 第二航空机务学校) and became the Naval Aeronautical and Astronautical College (海军航空工程学院) located in Yantai and the Naval Aviation Technical Specialty School (海军航空技术专科学校) in Qingdao. In 1999, the Naval Aviation Technical Specialty School was merged with the Naval Aeronautical and Astronautical College and became a branch campus in Qingdao. In 2000, doctoral programs were added, and the first post-graduate programs were added, in 2003.

#### CAMPUSES AND LOCATIONS:<sup>555</sup>

Altogether, the university has facilities in six provinces/municipalities and 11 locations (横跨6省11地办学). The main campus (校本部) is in Yantai, Shandong Province and is located at No. 188 Erma Road in the Zhimu District (芝罘区二马路188号). One additional campus (校区) and an enlisted specialist training base (专业兵训练基地) are located in Qingdao, Shandong Province at No. 2 Siliu Center Road in the Licang District (李沧区四流中路2号). In addition, the university has flight training bases (飞行训练基地) in four other locations—Huludao, Liaoning Province (辽宁葫芦岛), Changzhi, Shanxi Province (山西长治), Qinhuangdao, Hebei Province (河北秦皇岛), and Jiyuan, Henan Province (河南济源)—as well as a simulator flight training center (模拟飞行训练中心) in Beijing.

#### GRADE:

Corps deputy leader (副军级)<sup>556</sup> [Note: The previous Navy Flight Academy was a division leader-grade (正师级) organization and the Navy Aviation Engineering Academy / Naval Aeronautical and Astronautical College was a corps deputy leader-grade organization.<sup>557</sup>]

#### SUBORDINATION:

PLA Navy Headquarters<sup>558</sup>

#### FACILITIES:<sup>559</sup>

The university currently has full-featured and well-equipped teaching and research, training, and life support facilities, organized into 13 fields and one building (13场1馆), including two track and field facilities, an indoor shooting range, a comprehensive training ground, an international obstacle training ground, a maritime training ground, a tactical training ground, a windsurfing training ground, and a swimming pool, as well as other military training facilities. It also has a peripheral field comprehensive training base, shooting and bombing training ground, vessel dock and alternate flight runway. The university is also equipped with fighters, bombers, transports, helicopters, and other airframes.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院) three unidentified second-level colleges/academies (下辖3个二级学院)<sup>560</sup>
- Subordinate NCO school (士官学校): None
- Administrative and functional departments (部门)
  - Historically, the Navy Aviation Engineering Academy had the following administrative and functional departments.<sup>561</sup>

- Training Department (训练部) that served as the Headquarters Department and was still noted in 2017<sup>562</sup>
- Political Department (政治部)
- School Affairs Department (校务部), which was responsible for all facilities and logistics
- Scientific Research Department (科研部)
- o In addition, the former Navy Flight Academy/College was organized like an operational unit with the following departments:<sup>563</sup>
  - Headquarters Department, which changed to a Staff Department in 2016
  - Political Department, which changed to a Political Work Department in 2016
  - Logistics Department and Equipment Department
- o It is not clear what the new structure looks like following the 2017 reorganization; however, since it is an aviation university, it is most likely organized like the Air Force Aviation University, which is organized like an operational unit with a Staff Department, Political Work Department, and Support Department.
- Academic departments (系): None were identified
- Key labs (重点实验室): Although no names were given, the information ranges from a total of eight all-army and Shandong Province key labs (8个全军和山东省重点实验室)<sup>564</sup> to one Shandong Province key lab and either two or three all-army key labs (1个山东省重点实验室, 2个全军重点实验室; 3个军队级重点实验室, 1个山东省重点实验室).<sup>565</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): None were identified
- Graduate school (研究生院): Although one was not identified, it most likely exists
- Student teams (队 / 区队) and groups (大队): None were identified but most likely exist

#### LEADERSHIP AND STAFF:<sup>566</sup>

- Commandant: RADM Wang Tianlin (王天林)
- Political Commissar: RADM Wang Jundong (王军东)
- Professors and staff:<sup>567</sup> The university has two academicians of the Chinese Academy of Engineering (中国工程院院士2名), four academicians serving two organizations (双聘院士4名), one national outstanding teacher (全国优秀教师1名), nine all-army outstanding teachers (全军优秀教师9名), three outstanding national science and technology workers (全国优秀科技工作者3名), six national-level candidates for the “100 million talent project” (“百千万人才工程”国家级人选6名), two personnel affiliated with Program for New Century Excellent Talent (NCET / 新世纪人才支持计划2名), seven experts from the Taishan Scholar Program (“泰山学者”特聘专家7名), 580 professors, associate professors and equivalent titles (教授 副教授及相当职称580余名), 67 doctoral advisors (博士生导师67名), 257 master’s advisors (硕士生导师257名), and five national “excellent doctoral thesis awards” (获“全国百篇优秀博士学位论文奖”5名).

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified
- Bachelor’s degree (本科): four years
  - o 4 Bachelor’s degree majors: Engineering (工学), Science (理学), Military Science (军事学), and Management (管理学)<sup>568</sup>
  - o The university apparently has 23 bachelor’s degree specialties (23个本科专业); however, only 16 specialties and 16 directions have been identified as shown in Table 30.<sup>569</sup>
  - o Master’s degree (硕士):<sup>570</sup> The first master’s degrees were created in 1986. As of 2017, the university has 12 first-level disciplines (12个硕士学位授权一级学科), 50 master’s degree programs (50个硕士学位授权点),



and six engineering master's degree fields (6个工程硕士授权领域); however, no specifics were found for the names. It appears the programs fit into the same four majors as noted above.

- o Doctoral degree (博士):<sup>571</sup> The first doctoral degree program was created in 2000. As of 2017, the university has four first-level doctoral disciplines (4个博士学位授权一级学科) and 18 doctoral programs (18个博士学位授权点). It appears the programs fit into the same four majors as noted above.

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>572</sup>

As of 2017, the university has six Post-doctoral scientific research stations (6个博士后科研流动站).

#### SPECIALTIES:

Table 30 provides a list of the 16 Naval Aviation University's specialties that were identified out of the 23 total, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) were found for 2017:

**Table 30: Naval Aviation University Specialties**

Specialty Code	Specialty	Direction	Training Type
110205	Airfield Management Engineering 场站管理工程	Aviation Service Technology & Command 航空勤务技术与指挥	CO
110306	Missile Engineering 导弹工程	Shore-based Defense Missile Technology & Command 岸防导弹技术与指挥	CO
081203	Navigation Engineering 导航工程	Navigation Technology & Command 导航技术与指挥	CO
080601	Electrical Engineering & Automation 电气工程及其自动化	Aviation Maintenance Technology & Command 航空机务技术与指挥	CO
080701	Electronic Information Engineering 电子信息工程	Aviation Maintenance Technology & Command / Aerial Combat Service 航空机务技术与指挥/空中战勤	CO
082002	Aircraft Design & Engineering 飞行器设计与工程	Aviation Maintenance Technology & Command	CO & Non-CO
110116	Air Traffic Control & Navigation Engineering 航空管制与领航工程	Ground-based Navigation / Air Traffic Control 地面领航 / 航空管制	CO
110106	Firepower Command & Control Engineering 火力指挥与控制工程	Shore-based Defense Missile Technology & Command	CO
080204	Mechatronic Engineering 机械电子工程	Aviation Service Shore Technology & Command / Carrier- based Aircraft Takeoff & Landing Support & Command 航空勤务技术与指挥 / 舰载机起降保障与指挥	CO
081807	Rescue & Salvage Engineering 救助与打捞工程	Aviation Rescue 航空救生	CO
082103	Detection Guidance & Control Technology 探测制导与控制技术	Shore-based Defense Missile Technology & Command 岸防导弹技术与指挥	CO
110109	Unmanned Aerial Vehicle System Engineering 无人系统工程	Unmanned Aerial Vehicle Utilization & Command 无人机运用与指挥	CO
110307	Unmanned Aerial Vehicle Equipment Engineering 无人装备工程	Unmanned Aerial Vehicle Technical Support & Maintenance 无人机技术保障与维修	CO
082102	Weapons Launch Engineering 武器发射工程	Island Reef Guard Sub-unit Command 岛礁守备分队指挥	CO
082101	Weapon Systems Engineering 武器系统工程	Aviation Maintenance Technology & Command 航空机务技术与指挥	CO
110101	Combat/Operations Command 作战指挥	Unit Group Training Management 部队组训管理	CO

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 12
- Gender (男, 女): Males were eligible for all 12 specialties, but females were only eligible for three (110101, 110109, and 110205)
- Total number of personnel recruited (合计): 312
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 17 of them
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): Commanding officer (指挥) or non-commanding officer (非指): All 12 specialties included commanding officers, while only one (082002) included non-commanding officers.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

No information was available about any study abroad (留学) or foreign students (外军留学生) at the university.

## SECTION 3-20: NAVAL MEDICAL UNIVERSITY

### CHINESE NAME AND ACRONYM:

海军军医大学 (第二军医大学). No acronym was found.

- Official English name(s): In June 2017 the PLA officially changed the name of the PLA Second Military Medical University to become the Naval Medical University;<sup>573</sup> However, it is still identified in some media as the PLA Second Military Medical University and as the Naval Medical University (Second Military Medical University).<sup>574</sup> Unfortunately, no logo for the Naval Medical University was found.
- English Acronym: SMMU<sup>575</sup>

### MOE CODE:

In 2017, a new code of 91020 was assigned.<sup>576</sup> The previous code from 2008 was 90030.<sup>577</sup>

### TYPE OF INSTITUTION:

The university is both an Academic Education (学历教育) institution and a Professional Education (任职教育) institution.<sup>578</sup>

### OFFICIAL WEBSITE:

<http://www.smmu.edu.cn/> header shown at top right. Although the website has an English tab at the top, it doesn't work.

### BACKGROUND:<sup>579</sup>

Overview: In 1951, the PLA created five Military Medical Colleges (军医学院) identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 6<sup>th</sup> Military Medical College. By the end of the 1950s, they had been reorganized into five Military Medical Universities (军医大学) identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 7<sup>th</sup> Military Medical University.<sup>580</sup> Until 2016, they were all subordinate to the General Logistics Department. In 2016, they were resubordinated to the CMC Training and Administration (Management) department. In June 2017, they were resubordinated to their respective service headquarters. Over the years, they have been merged, abolished, changed locations, and been renamed, such that, as of 2017, there are three remaining Military Medical Universities as shown below:

- Army Medical University (陆军军医大学), which is also known as the PLA 3<sup>rd</sup> Military Medical University (解放军第三军医大学), and is located in Chongqing
- Air Force Medical University (空军军医大学), which is also known as the PLA 4<sup>th</sup> Military Medical University (解放军第四军医大学), and is located in Xi'an, Shaanxi Province
- Naval Medical University (海军军医大学), which is also known as the PLA 2<sup>nd</sup> Military Medical University (解放军第二军医大学), and is located in Shanghai.



The university was created in September 1949 as the Huadong (East China) Military Region People's Medical College/Academy (华东军区人民医学院). The name changed to the Shanghai Military Medical University (上海军医大学) in 1950 and to the PLA Second Military Medical University (中国人民解放军第二军医大学) in July 1951.

#### CAMPUSES AND LOCATIONS:<sup>581</sup>

The university has a single campus located at No. 800, Xiangyin Road, Yangpu District, Shanghai (上海市杨浦区翔殷路800号). The building is adjacent to Fudan University and Tongji University.

#### GRADE:<sup>582</sup>

Corps deputy leader (副军级)

#### SUBORDINATION:<sup>583</sup>

In 2015, the university was resubordinated from the former General Logistics Department to the CMC Training and Management (aka Training and Administration) Department (2015年由原总后勤部转隶中央军委训练管理部). In June 2017, it was resubordinated under the PLA Navy HQ.



#### FACILITIES:<sup>584</sup>

The campus covers 445 acres (2,685 mu). No other information was found. The campus buildings have a total floor space of over 670,000 square meters, including a complex of modern teaching buildings, a library, an experiment building and teaching hospitals of the first rate in China. The library itself covers an area over 11,000 square meters with a collection of over 500,000 book volumes.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): The university has the following three subordinate *xueyuan* [Note: Given that one subordinate *xueyuan* shown at the right is identified as a school implies the others are also identified as schools]:<sup>585</sup>
  - Marine Military Medical School (海洋军事医学院)
  - Pharmacy School (药学院)
  - School of Nursing (护理学院)
- Subordinate NCO School (士官学校): The university does not have a subordinate NCO School or any other NCO programs.
- Administrative and functional departments (部门):<sup>586</sup> As of August 2017, the university had the following six departments:
  - Training Department (训练部)
  - Political Department (政治部)
  - School Affairs Department (校务部)
  - Scientific Research Department (科研部)
  - Basic Department (基础部)
  - Basic Medicine Department (基础医学部)
- Academic departments (系):<sup>587</sup> The following seven academic departments were identified:
  - Health Services Department (卫生勤务学系 aka 卫勤系)
  - Psychology and Mental Health Department (心理与精神卫生学系)
  - Tropical Medicine and Public Health Department (热带医学与公共卫生学系)
  - Chinese Medicine Department (中医系)
  - Foreign Training Department (外训系)



- o Naval Medicine Department (海军医学系 aka 海医系). Since the Naval Medicine Department was created in 1958, it has had total of 4,000 undergraduate students, 280 master's degree students, and 62 PhD students.
- o Pharmacy Studies Department (药理学系)
- Key labs (重点实验室):<sup>588</sup> The university has several key labs that are organized into six categories as shown below:
  - o 1 State Key Lab (国家重点实验室): Medical Immunology (医学免疫学国家重点实验室)
  - o 2 Ministry of Education Key Labs (教育部重点实验室): Molecular Neurobiology (分子神经生物学重点实验室) and Molecular Network Regulation and Targeting Intervention for Liver Cancer (肝癌分子网络调控与靶向干预重点实验室)
  - o 1 Ministry of Health Key Lab (卫生部重点实验室): Professional Laboratory of Cryptococcus from the Chinese Medical Fungi Preservation Management Center (卫生部中国医学真菌保藏管理中心隐球菌专业实验室)
  - o 6 Shanghai Key Labs (上海市重点实验室): Medical Bioprotection (上海市医学生物防护重点实验室), Medical Fungal Molecular Biology (上海市医学真菌分子生物学重点实验室), Metabolic Products of Drugs (Chinese Medicine) (上海市药物 (中药) 代谢产物研究重点实验室), Cell Engineering (上海市细胞工程重点实验室), Immunology Research (上海免疫学研究重点实验室), and Hepatobiliary Oncology (上海肝胆肿瘤学重点实验室)
  - o 10 All-Army Key Labs (全军重点实验室): Medical Immunology (医学免疫学实验室), Pharmaceutical Chemistry (药物化学实验室), Biosignal Transduction (生物信号转导实验室), Molecular Level Biology (分子级生物学实验室), Hepatobiliary Oncology Research (肝胆肿瘤研究实验室), Clinical Immunology (临床免疫实验室), Digestive Disease Research (消化病研究实验室), Heart Surgery (心脏外科实验室), Pharmaceutical Analysis (药物分析实验室), and Medical Microbiology (医学微生物学实验室)
  - o 1 Military Academic Institution Key Lab (军队院校重点实验室): Marine Special Environmental Medical Protection Laboratory (航海特殊环境医学防护实验室)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>589</sup> Although no research labs were identified, the university has several research centers and 20 teaching and research labs as shown below. The university also has four All-Army Research Institutes (全军医学研究所), two Shanghai Clinical Medical Centers (上海市临床医学中心), one National Drug Clinical Research Base (国家药品临床研究基地), and one Military Drug Clinical Research Base (军队药品临床研究基地).
  - o Research Centers: six All-Army Medical Specialist Technology Centers (全军医学专科技术中心)
  - o State Research Centers (国家级研究中心): National Center for Clinical Research in Digestive Diseases (国家消化系统疾病临床医学研究中心) and National Center for Liver Cancer Science (国家肝癌科学中心)
  - o World Health Organization in China Combined Center (世界卫生组织在华合作中心): World Health Organization/Tropical Diseases Research Special Program Clinical Data Management Center (世界卫生组织/热带病培训研究特别规划署临床数据管理中心) and World Health Organization Cooperation Center for Gene Synthesis and Expression (世界卫生组织基因合成与表达合作中心)
  - o Shanghai "Most Important of All" Clinical Medical Center (上海市“重中之重”临床医学中心): Shanghai Hepatobiliary Surgery Clinical Medicine Center (上海市肝胆外科临床医学中心), Shanghai Minimally Invasive Clinical Medicine Center (上海市微创临床医学中心), Shanghai Spinal Surgery Clinical Medical Center (上海市脊柱外科临床医学中心), Shanghai Pancreatic Disease Clinical Medical Center (上海市胰腺疾病临床医学中心), Shanghai Burns Surgery Clinical Medical Center (上海市烧伤外科临床医学中心), and Shanghai Nephrology Clinical Medical Center (上海市肾脏病学临床医学中心)
  - o Shanghai Engineering Technology Research Center (上海市工程技术研究中心): Shanghai Cell Technology Engineering Research Center (上海细胞治疗工程技术研究中心), Shanghai Active Natural Product Preparation Engineering Technology Research Center (上海活性天然产物制备工程技术研究中心), and Shanghai Oceanic Bureau Marine Biomedical Engineering Technology Research Center (上海市海洋局海洋生物医药工程技术研究中心)
  - o 20 Teaching and Research Labs

- Graduate School (研究生院):<sup>590</sup> The university has a Graduate School.
- Student teams (队 / 区队) and groups (大队):<sup>591</sup> Two groups were identified as shown below:
  - o Graduate Student Management Group (研究生管理大队)
  - o Cadre Rotational Training Group (干部轮训大队)

#### LEADERSHIP AND STAFF:<sup>592</sup>

- Commandant: RADM Sun Yinghao (孙颖浩)
- Political Commissar: (RADM) Zhu Mingzhe (朱明哲)
- Professors and Staff:<sup>593</sup> The staff includes academicians (院士) from the Chinese Engineering Academy (中国工程院) and Chinese Academy of Science (中国科学院). No numbers were found for the total number of professors (教授) or associate professors (副教授); however, the number of advisors for master's programs ranged from 67 to 452 and for PhD programs from 28 to 294.

#### DEGREES (学位), MAJORS (学科), AND SPECIALTIES (专业):

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified
- Bachelor's degree (本科): four, five, and eight years
  - o The university has two first-level (一级学科) and 26 second- and third-level (二, 三级学科) bachelor's degree programs shown in Table 31 below.<sup>594</sup>

**Table 31: 1<sup>st</sup>- and 2<sup>nd</sup>-Level Naval Medical University Specialties**

First-Level Programs 一级学科		Second- & Third-level Programs 二, 三级学科	
Name 名称	Number 数量	Name 名称	Number 数量
Basic Medicine 基础医学 Pharmacy Studies 药学	2	Human Anatomy & Histology 人体解剖与组织胚胎学	26
		Immunology 免疫学	
		Pathogenic biology 病原生物学	
		Pathology & pathophysiology 病理学与病理生理学	
		Forensic Medicine 法医学	
		Radiology 放射医学	
		Aviation, aerospace & marine medicine 航空, 航天与航海医学	
		Medicinal chemistry 药物化学	
		Pharmaceutics 药剂学	
		Pharmacy 生药学	
		Pharmaceutical analytical chemistry 药物分析化学	
		Microbiology & Biochemical Pharmacy 微生物与生化药学	
		Pharmacology 药理学	



Basic Medicine 基础医学 Pharmacy Studies 药学	2	Physiology 生理学	26
		Genetics 遗传学	
		Internal medicine (digestive diseases) 内科学 (消化系病)	
		Imaging Medicine & Nuclear Medicine 影像医学与核医学	
		Surgery (general) 外科学 (普外)	
		Surgery (outside) 外科学 (骨外)	
		Surgery (urological) 外科学 (泌尿外)	
		Surgery (outside the chest) 外科学 (胸心外)	
		Surgery (external) 外科学 (神外)	
		Surgery (plastic) 外科学 (整形)	
		Surgery (burn) 外科学 (烧伤)	
		Surgery (outside the combat field) 外科学 (野战外)	
		Integrated Chinese & Western Medicine 中西医结合临床	

- o Table 32 provides a list of the university's ten bachelor's degree specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), the number of years required (学制X年), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017.<sup>595</sup>

**Table 32: Naval Medical University Specialties**

Specialty Code	Specialty	Direction	Years	Training Type
071002	Biotechnology 生物技术	Military Medicine 军事医学	4	Non-CO
100201	Clinical Medicine 临床医学		8, 5	
100202	Anesthesiology 麻醉学		5	
100203	Medical Imageology 医学影像学		5	
100205	Psychiatry 精神医学(心理医师)	Psychologist 心理医师	5	
100401	Preventive Medicine 预防医学	Military Medicine 军事医学	5	
100501	Traditional Chinese Medicine 中医学		8	
100701	Pharmacy 药 学		4	
101101	Nursing 护理学		4	
120401	Public Service Administration 公共事业管理	Health Services Subunit Command 卫勤分队指挥	4	

- Master's degree (硕士)
  - o Master's degree majors and specialties:<sup>596</sup> Information was found concerning three different majors—Basic Medicine (基础医学), Biology (生物学), and Public Health and Preventive Medicine (公共卫生与预防医学). Concerning the number of degree programs (硕士学位授权点), the numbers ranged from 22 to 33 to 93 to 106, which were divided into first-level, second-level, and third-level programs. However, one article identified the following 8-degree programs (专业硕士学位授权点): Clinical Medicine (临床医学硕士), Stomatology (口腔医学硕士), Public Health (公共卫生硕士), Nursing (护理硕士), Pharmacy (药学硕士), Chinese Pharmacy (中药学硕士), Public Administration (公共管理硕士), and Military Studies (军事硕士).
- Doctoral degree (博士)
  - o Doctoral degree majors and specialties:<sup>597</sup> The number found for PhD programs (博士学位授权点) ranged from 19 to 28 to 83.

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>598</sup>

The number of post-doctoral research stations ranged from seven to 28.

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 10
- Number of years: four, five, and eight
- Gender (男, 女): Male and female in six specialties, male only in three specialties, and female only in one specialty (Nursing)
- Total number of personnel recruited (合计): 313
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 17 of them
- Foreign language requirements (外语语种): English for all of the specialties
- Specialty categories (专业类别): All specialties were for non-commanding officers (非指). None were for commanding officers (指挥)

#### INTERNATIONAL EXCHANGES AND COOPERATION:<sup>599</sup>

The university has a rich history of engaging in foreign relations.

- Foreign students (外军留学生): The university has trained more than 1,300 military personnel from more than 100 countries for periods of up to six years to get their bachelor's degree. The university has a Foreign Training Department (外训系) and the PLA's only Military Medical Foreign Student Training Base (军事医学外国留学生培训基地 / 外军医学留学生培养基地). Training of foreign students began in 1961.
- Study abroad (留学): Every year, the university sends about 30 undergraduate students abroad to study for periods up to six years to get their bachelor's degree.
- Other interaction: The university has had mutual interaction with many countries and regions such as the University of Cambridge Medical School, the Cleveland Medical Center, the University of Queensland, and the Royal Thai Army Medical School. The university also invites many academic professionals, including Nobel Prize winners, to come to the school to give lectures and to serve as honorary professors. Over an unknown period of time, the university has received more than 200 leaders from foreign ministerial level and above as guests. The university also cooperates with Fudan University to train eight-year students and to engage in mutual recognition of credits, teacher mutual recruitment, curriculum intercommunication and degree mutual recognition with other domestic first-class colleges and universities.

## SECTION 3-2 I: NAVAL SERVICE ACADEMY

### CHINESE NAME AND ACRONYM:

海军勤务学院. No acronym was found.

- Official English name(s):<sup>600</sup> Naval Service Academy
- English Acronym: None found

### MOE CODE:

In 2017, a new code of 91021 was assigned.<sup>601</sup>

### TYPE OF INSTITUTION:<sup>602</sup>

Academic Education (学历教育) and Professional Education (任职教育).

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>603</sup>

The Naval Service Academy was founded in 1952 as the People's Liberation Army Naval Logistics School (中国人民解放军海军后勤业务学校) in Qingdao, Shandong Province. In 1953, the school was moved to Tanggu, Tianjin. In 1958, the school was incorporated into the Naval Senior Professional School (海军高级专科学校) as the No. 5 Department (Logistics Department) and later in 1960 it became the Wuhan Logistics School Naval Department (武汉后勤学校海军系), as a part of the PLA General Logistics Department (中国人民解放军总后勤部). In 1977, the Naval Logistics School was reestablished in Tanggu, Tianjin and Qinghuangdao, Hebei Province.<sup>604</sup> In 1980, the school again had only one campus in Tianjin. In 1986, the Naval Logistics School was upgraded to become the Naval Service Academy (海军勤务学院). The Academy was abolished in 1992 and was reestablished in 1993 as the Naval Logistics Academy (海军后勤学院). In 2004, the Naval Logistics Academy was incorporated into the Naval Engineering University (海军工程大学) as the University's Tianjin campus, assuming the grade of Division Deputy Leader (副师级) and the role of professional education (任职教育).<sup>605</sup> With the Central Military Commission's approval in 2012, the Tianjin Campus was upgraded to become the Service Academy (勤务学院), remaining as a part of Naval Engineering University and its grade was upgraded to division leader (正师级). As part of the 2017 Military Reform, the Service Academy became the Naval Service Academy.

### CAMPUSES AND LOCATIONS:<sup>606</sup>

The academy appears to have only one campus located at: No. 1, Hebei Road, Tanggu, Binhai New Area, Tianjin (天津市滨海新区塘沽河北路一号)

### GRADE:<sup>607</sup>

Corps deputy leader (副军级)



#### SUBORDINATION:<sup>608</sup>

PLA Navy

#### FACILITIES:<sup>609</sup>

No current information found. But information on the previous “Naval Logistics Academy” (海军后勤学院) showed that the campus occupies over 100,000 square meters of land (approximately over 25 acres).

#### ORGANIZATIONAL STRUCTURE:

Subordinate *Xueyuan* (学院): None

- Subordinate NCO School (士官学校): The academy offers vocational training for NCOs in logistics (后勤领域士官职业技术培训), but no information was found about a subordinate NCO school.
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions’ administrative and functional departments for each university and their subordinate academies/colleges/school; however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>610</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>611</sup>
  - A June 2019 source indicates that the Naval Service Academy has two academic departments, but it does not name what those two departments are.
  - The following two departments existed in 2003 when the former Naval Logistics College became part of the Naval Engineering University.
    - Logistics Command Department (后勤指挥系)
    - Engineering Department (工程系)
- Key labs (重点实验室):<sup>612</sup> No key labs found. But a source indicates that the Naval Service Academy has over 30 labs, specialization rooms, and simulation rooms (实验室, 专修室, 模拟室30多个).
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>613</sup> Source indicates that there are 18 research labs, but no specific information was found on research labs and research centers.
- Graduate School (研究生院):<sup>614</sup> The academy does not appear to have a subordinate graduate school, but it does recruit military officers for graduate-degree programs.
- Cadet/student teams (队 / 区队) and groups (大队):<sup>615</sup> Source indicates that there are ten cadet teams (10个学员队) at the academy.

#### LEADERSHIP AND STAFF:<sup>616</sup>

- Commandant: SCPT Zhou Xiangming (周向明)
- Political Commissar: SCPT Duan Guangkai (段广凯)
- Professors and Staff: over 30 professors and associate professors, as well as about 300 teaching and research staff.

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:<sup>617</sup>

- The academy offers four majors:
  - Military Science (军事学)
  - Engineering (工学)
  - Economics (经济学)
  - Management (管理学)
- The academy offers three-year post-secondary (大专) and two-year secondary technical (中专) educational programs; as well as a bachelor degree program (本科).
  - For the three-year post-secondary educational programs, following specialties are offered:
    - Naval Financial Management (海军财务管理)
    - Naval Materials (海军军需)
    - Oil Management and Technology (油料管理与技术)
    - Marine Materials(舰用物资)
    - Military Port Management (军港管理)
    - Sailing Paint Management (帆缆涂料管理)
  - For the two-year technical programs, following specialties are offered:
    - Naval Materials (海军军需)
    - Oil Management and Technology (油料管理与技术)
  - For the four-year Bachelor's degree program: one specialty is offered:
    - Military Port Engineering (军港工程)
- Master's degree programs (硕士):<sup>618</sup>
  - Master of Military Science (军事硕士)
  - Master of Engineering Management (工程管理硕士)
- Doctoral degree (博士):<sup>619</sup> Only one unnamed PhD program observed (1个博士点)

#### POST-DOCTORAL SPECIALTIES (博士后):

None

#### 2020 MASTER'S STUDENTS RECRUITMENT (招生):<sup>620</sup>

- Total number of Master's level graduate student recruitment anticipated: 40
  - 0 students for the Masters of Military Science degree program (15 of whom would be part-time 非全日制15名)
  - 10 students for the Masters of Engineering Management degree program (5 of whom would be part-time students 非全日制5名)
  - Part-time studies would take 3.5-4 years; and full-time studies would take 2.5-3 years.
- Number of Specialties (专业):
  - Master of Military Science (军事硕士) specialties include the following:
    - Logistics Command Management (后勤指挥管理)
    - Military Financial Audit (军队财务审计)
    - Military Supplies and Oil Security (军需物资油料保障)
    - Military Transportation Guarantee (Marine Supply) (军交运输保障 (海运补给))
    - Camp Infrastructure Protection (Military Port and Coastal Defense Project Protection) (基建营房保障 (军港及海防工程保障))
  - Master of Engineering Management (工程管理硕士) specialties include the following:
    - Coastal Defense Engineering Development Policy (海防工程建设决策)
    - Coastal Defense Engineering Development Management (海防工程建设管理)

- Costal Defense Engineering Development Risk Management (海防工程建设风险管理)
- Costal Defense Engineering Development Evaluation (海防工程建设评价)

ADMISSION CRITERIA:

- Current military officers who have at least three years of working experience. Candidates for the Master's Military Science degree program must be a commanding officer with the rank of Lieutenant or above. The degree program to which one seeks admission must be closely related to his or her work. New college graduates with a bachelor's degree are not eligible to apply.

INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): No information available
- Study abroad (留学): No information available
- Other interaction: No information available



## SECTION 3-22: NAVAL NCO SCHOOL

### CHINESE NAME AND ACRONYM:

海军士官学校. No acronym was found.

- Official English name(s): None found
- Translated English name:<sup>621</sup> Naval NCO School
- English Acronym: None found.

### MOE CODE:

In 2017, a new code of 91022 was assigned.<sup>622</sup>



### TYPE OF INSTITUTION:<sup>623</sup>

No specific information was found. However, prior to the 2017 military reform, the school—formerly known as Naval Bengbu Sergeant School (海军蚌埠士官学校) and the Bengbu Naval Petty Officer Academy of the CPLA (中国人民解放军蚌埠士官学校)—was an institution for Academic Education and (学历教育) and Professional Education (任职教育).

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>624</sup>

The roots of the Naval NCO School can be traced back to the No. 4 Naval Aviation School (海军航空兵第四学校), which was established in 1961. The school was abolished in 1969, and was reestablished in 1977 as the Second Naval Aviation Maintenance School (海军第二航空机务学校). In 1986, the Naval Bengbu Sergeant School (海军蚌埠士官学校) was built on the basis of the Second Naval Aviation Maintenance School, which was one of the first two PLA NCO schools ever established and the first school specifically dedicated to training Navy NCOs. In 2011, the School was upgraded to become the Naval Bengbu NCO Academy (海军蚌埠士官学院). As part of the 2017 military reform, the Academy was renamed to Naval NCO School (海军士官学校).

### CAMPUSES AND LOCATIONS:<sup>625</sup>

No. 1454, Yanshan Road, Yuhui District, Bengbu, Anhui Province (安徽省蚌埠市禹会区燕山路1454号)

### GRADE:<sup>626</sup>

Division leader (正师级)

### SUBORDINATION:<sup>627</sup>

PLA Navy HQ

#### FACILITIES:<sup>628</sup>

The Naval NCO School occupies nearly 165 acres of land (1,000 mu), divided into family living area, administrative teaching area, and student dormitory area. The administrative teaching area has an office building, a teaching building, a simulation building, and a cultural and sports hall. There are specialized facilities for weapons and electromechanical equipment, a light weapons shooting training ground, a 400-meter standard track and field stadium, a swimming pool, and other basic training facilities. The library covers an area of over 8,000 square meters and boasts nearly 200,000 books.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): Not applicable
- Subordinate NCO School (士官学校): Not applicable
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school; however, these most likely changed in 2017. The school had the same organizations in 2007.<sup>629</sup> See the introduction to this report for further information about the possible new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>630</sup> (aka Basic Department / 基础部).
- Academic departments (系): In 2007, the school had five departments—Navigation (航海), Electromechanical (机电), Information Technology (信息技术), Weapons (兵器), and Machinery (机械). It is very likely the school maintains the same departments after the 2017 military reform.
- Key labs (重点实验室): None found
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): None found
- Graduate School (研究生院): None found
- Cadet/student teams (队 / 区队) and groups (大队): There were five cadet groups in 2007 (学员大队). No current information available on how many such groups exist as of 2019.

#### LEADERSHIP AND STAFF:<sup>631</sup>

- Commandant (校长): Mao Guojie (毛国杰)
- Political Commissar: Unknown
- Professors and Staff: No information found

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- Very limited information was found on the degrees, majors, and specialties offered by the school. A 2013 China Military Online article indicates that the former Naval Bengbu Sergeant School provided professional education training for NCOs who were enrolled in the three-year post-secondary (大专) and two-year secondary technical (中专) education programs.<sup>632</sup>
- One May 2019 source indicates that the school offers six majors—Navigation, Electromechanical, Communications, Electronics, Weapons, and Management (航海, 机电, 通信, 电子, 兵器和管理)—and 32 unspecified specialties.<sup>633</sup> Another source stated that the former Naval Bengbu Sergeant School had over 40 specialties.<sup>634</sup>
- A 2019 civilian employee recruitment announcement indicates that the school was hiring lecturers and teaching assistants for the following specialties:<sup>635</sup>

- o Political Theory (政治理论)
- o Weapon Engineering (兵器工程)
- o Ship Auxiliary Machinery (舰船辅助机械)
- o Fluid Machinery (流体机械)
- o Marine Survey (海洋测量)
- o Military Sports (军事体育)
- o Command Information System (指挥信息系统)
- o Ship Internal Combustion Engine (船舶内燃机)
- o Circuits (电路)
- o Simulation (模拟)
- o Digital Electronic Technology (数字电子技术)
- o Electrical Engineering (电气工程)
- o Electronics and Communication Engineering (电子与通信工程)
- o Air Defense Missile Weapon System (防空导弹武器系统)
- o Radar (雷达)
- o Radar Principle (雷达原理)
- o Navigation Technology (航海技术)
- o Underwater Acoustics (水声)
- o Seamanship (船艺)
- o Ammunition Engineering (弹药工程)
- o Military Chemistry and Pyrotechnics (军事化学烟火)
- o English (英语)
- o Computer (计算机)
- o Navigation (导航)
- o Engineering Drawing (工程图学)
- o Machinery (机械)
- o Engineering Mechanics (工程力学)
- o Marine Instruments (海洋仪器)
- o Military Management (军队管理学)
- o Education (教育)
- o Undergraduate Teaching Management (本科教学管理)
- o Plumbing, Heating, and Electric Engineering Cost (水暖电工程造价)
- o Engineering Construction and Management (工程建设与管理)
- o News Editing (新闻编辑)
- o Library Network (图书馆网络)
- o Computer Maintenance (计算机维护)
- o Archival (档案管理)

#### POST-DOCTORAL SPECIALTIES (博士后):

No information found.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): No information found
- Study abroad (留学): No information found
- Other interaction: No information found

## RELEVANT PHOTOS



2019 Naval NCO School Graduation Ceremony  
(Source: Jiangsu Maritime Institute)

## SECTION 3-23: AIR FORCE COMMAND COLLEGE

### CHINESE NAME AND ACRONYM:

空军指挥学院. No acronym was found.

- Official English name(s):<sup>636</sup> Air Force Command College. The name Air Force Commanding College has also been noted, but it does not appear to be correct.<sup>637</sup>
- English Acronym:<sup>638</sup> AFCC

### MOE CODE (院校代码):<sup>639</sup>

In 2017, a new code of 91023 was assigned. The previous code from 2008 was 90044.

### TYPE OF INSTITUTION:<sup>640</sup>

Professional Education (任职教育)

### OFFICIAL WEBSITE:

None found. Although some online articles have used the acronym kjzh and refer to <http://www.kjzh.com.cn> as the college's official website, the website does not work.<sup>641</sup> The college also previously had the website shown at the right for recruiting graduate students, which was found at <http://www.kjzh.net/>; however, it is no longer accessible.

### BACKGROUND:<sup>642</sup>

The Air Force Command College is the highest academic institution for the PLA Air Force. Its roots can be traced back to the PLAAF College (中国人民解放军空军学院), which was built on the basis of the PLA Military College Air Force Department (中国人民解放军军事学院空军系) in 1958. The college was abolished in 1969. In 1974, the Air Force Military and Political Cadre School (空军军政干部学校) was established at the original site of the Air Force College, under the direct leadership of the PLAAF HQ with grade of corps leader or deputy leader (军级). At that time, the Cadre School was tasked with training Air Force commanding officers who were responsible for military, political, and logistics affairs at the battalion, regiment, and division levels. In 1978, the Cadre School was renamed again as the Air Force College, which was tasked with training commanding officers in charge of military, political, logistics, and aviation at the battalion, regiment, and division levels. In 1986, the Air Force College was renamed as the Air Force Command College. The college had a grade of corps leader and was tasked with training mid- to senior-level Air Force commanding and staff officers as well as graduate-level personnel involved in research and teaching for Military Operations and Tactics. As part of the 2017 military reform, a "new" Air Force Command College was formed after implementing some unspecified "adjustments."



#### CAMPUSES AND LOCATIONS:<sup>643</sup>

No. 88, North Sihuan [4<sup>th</sup> Ring] West Road, Haidian District, Beijing (北京市海淀区北四环西路88号)

#### GRADE:<sup>644</sup>

Corps deputy leader (副军级), which was downgraded from corps leader (正军级) in 2017.

#### SUBORDINATION:<sup>645</sup>

PLAAF HQ

#### FACILITIES (基础条件):<sup>646</sup>

The AFCC occupies approximately 102 acres of land (621 mu). It has four teaching buildings, an auditorium, a sports field, swimming pools, an Air Force Campaign Training Center (空军战役训练中心), and other facilities. The college's library has over 300,000 volumes of books and shares digitalized library resources with other Air Force and PLA academic institutions.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): None
- Subordinate NCO School (士官学校): The college does not have any programs for NCOs.
- Administrative and functional departments (部门):<sup>647</sup>
  - Based on the organization changes that began when the PLA as a whole implemented a major reorganization in early 2016. Prior to 2016, the college's administrative and functional structure consisted of four major departments—Training Department (训练部) (which served as the Headquarters Department, Political Department (政治部), College Affairs Department (院务部) (which managed all facilities), and the Military Science Research Department (军事科学部)—as well as a General Office (办公室). Each of those organizations was a division leader-grade organization. The new structure consists of the following seven organizations, all of which are also division leader-grade organizations:
    - General Office (办公室), first in protocol order
    - Political Work Division (政治工作处), which is second in protocol order
    - Teaching and Support Division (教育保障处 / 教保处)
    - Teaching Affairs Division (教务处)
    - Management/Administration Division (管理处)
    - Supply Support Division (供应保障处)
    - Discipline Inspection and Supervision Division (纪检监察处)
- Academic departments (系):<sup>648</sup> Depending on the source, since the end of the 1990s, the college has had six to seven academic departments. The order of the list below is the same as it is in the various publications.
  - Campaign and Tactics Department (战役战术系)
  - Combat Command Department (作战指挥系)
  - Military Political Work Department (军队政治工作系)
  - Logistics and Equipment Department (后勤与装备系)
  - Graduate Student Management Group (研究生管理大队)
  - Foreign Training Department (外训系)
  - Foreign Language Department (外语系)
  - The college also identifies the following organizations as part of the academic department system:
    - Campaign Training and Theory Research Course (战役训练与理论研究班), but no further information or length for the course was identified
    - Teaching Support Team (教学保障队)



- In addition to the academic departments note above, the college has a Campaign Training Course (战役训练班) that is almost always identified directly after the academic departments to indicate that it is a special course, but no specific information was found to identify what it does, how long it lasts, or who the students are.
- Key labs (重点实验室):<sup>649</sup> There is one Key Lab—Joint Operations Simulation and Research on Major Topics (联合作业推演和重大课题研究)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>650</sup>
  - There are 15 teaching and research labs, including: Military Theory, Military Strategy, Military Campaigns, Military Tactics, and Combat Command (军事理论, 战略, 战役, 战术, 作战指挥等十五个教研室)
  - There are nine Research labs, including: Military Strategy, Military Campaigns and Tactics, and Combat Operations (战略, 战役战术, 作战运筹等九个研究室)
- Graduate School (研究生院):<sup>651</sup> There is no separate graduate school, but there is a Graduate Student Management Group (研究生管理大队) that oversees all graduate programs available.
- Cadet/student teams (队 / 区队) and groups (大队):<sup>652</sup> In 2007, the college had 12 cadet/student teams (学员队), which is most likely about the same today.

#### LEADERSHIP AND STAFF:<sup>653</sup>

- Commandant: LGEN Yu Qingjiang (俞庆江)
- Political Commissar: MGEN Wang Zhixue (王志学)
- Professors and Staff: The college has 120 professors and over 30 researchers.

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:<sup>654</sup>

- The college offers two-year post-secondary education (大专) for Air Force aviation cadres at the platoon and company level to become staff members (参谋人员) at the regiment and division level.
- Bachelor's degree (本科): four years
  - The college does offer bachelor's degree education to staff officers who will serve in the Staff Department as "military career track" officers.
- Master's degree (硕士):<sup>655</sup>
  - According to a 2018 graduate recruitment guide, the college offers two military Master's degrees and 12 majors and specialties (学科专业), which likely include the following: [Note: The college offered 12 majors and specialties in 2007, which are most likely the same ones.]
    - Air Force Campaigns (空军战役学), Air Force Tactics (空军战术学), Air Force Combat Command (空军作战指挥学), Air Force Logistics (空军后勤学), Military History (军事历史), Military Operations (军事运筹), Military Management (军队管理), and Military Political Work (军队政治工作), etc.
- Doctoral degree (博士):<sup>656</sup>
  - As of 2018, four unspecified military PhD degree majors were offered. This is an increase from three degrees in 2007.

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>657</sup>

In total, three Post-doctoral research stations (2个博士后科研流动站, 1个博士后科研工作站).

#### 2018 GRADUATE STUDENT RECRUITMENT (招生):<sup>658</sup>

- Number of Specialties (专业): four doctoral-level specialties and 12 graduate Master's-level specialties.
- Application requirements (报考条件):
  - Support the leadership of the Chinese Communist Party, with a firm political stand and good moral character; loves military work and consciously devote themselves to national defense and construction of the military; abide by the Constitution, laws, regulations, and military regulations, obey orders and commands.

- o Be a Chinese Communist Party member and obtained a state-recognized bachelor's degree, and met the physical and mental health standards.
- o Possess more than three years of military work experience. The results of periodic evaluation for commanding staff officers or professional and technical cadres must meet satisfactory standards or above. The major of study must be closely related to the work they are engaged in or meet the urgent needs of military construction.
- o General Master's-level graduate students (普通硕士研究生) must have a rank of captain or above (except those who apply for first-level disciplines of Military Thought and Military History). applicants for general master's degree must have the rank of captain or above. For military master's degree postgraduate student, only commanding and staff officers with ranks above captain are recruited. Military Science Master's degree graduate students (军事硕士专业学位研究生) must be commanding and staff officers with the rank of captain or above.
- o Female trainees shall not have children while they are studying in school.
- Master's degree programs:
  - o Students who pursue the general Master's degree program are enrolled full time. Total time to complete the degree program is 2.5 years. The first 1.5 years will be spent on completing course work, and the last year will be spent on writing a thesis. Upon completion of the degree program and passing oral defense, they will be awarded a graduation diploma and a Master's degree in Military Science (军事硕士学位).
  - o Students who pursue the Military Science Master's degree programs can be enrolled either full-time or part-time. The part-time program takes three years, and the full-time programs is structured similarly as the General Master's degree program. Upon completion of the degree program and passing oral defense, they will be awarded a graduation diploma and a Master's degree in Military Science specialty (军事硕士专业学位).

#### INTERNATIONAL EXCHANGES AND COOPERATION:

The 15 March and 5 April 2010 issues of *Air Force News*, and the March 2010 issue of the PLAAF's publicly available monthly journal, *China Air Force* (中国空军), each had detailed articles about the PLAAF Command College's 10<sup>th</sup> Anniversary of its Foreign Student Training Program.<sup>659</sup> Of note, no US Air Force officers have participated in this program.

The program, which the Four General Departments authorized as an All-Army Test Point in early 2000, began training students in March 2001. From then until March 2010, it held 35 courses. During this period, the college has trained 511 officers from 62 countries, most of which are Third World countries, but some from developed countries have participated. The limit for attendance in any single course is just over 20 countries. According to statistics, 22 of the 511 officers who have attended the course have achieved flag rank, serving as deputy commanders, unit chiefs of staff, and base commanders.

The college held a ceremony on 31 March 2010 to celebrate the 10<sup>th</sup> anniversary since the program was approved in 2000, even though it did not start training students until 2001. PLAAF deputy commander Lieutenant General He Weirong [who is responsible for PLAAF training], represented PLAAF Headquarters at the anniversary, along with representatives from the Four General Departments and other relevant PLAAF Headquarters departments.

According to the articles, the Command College is responsible for training foreign Air Force intermediate- and advanced-level officers. The courses are taught in three languages (Chinese, English, and one unidentified language, which is probably Russian), and focus on four unidentified academic areas and seven unidentified specialties. The only country mentioned that has had a long-term two-way exchange program is Pakistan.

Of note, a few PLAAF officers have had the opportunity to study abroad. For example, PLAAF officers have studied in military colleges in Britain, Russia, Pakistan, Italy, and France.<sup>660</sup> Since the late 1970s, more than 2,000

PLA officers have reportedly studied abroad. According to a PRC website, as of early 2009, about 300 PLA officers were studying abroad in more than 30 countries.<sup>661</sup>

Each year, the PLAAF also sends students from its Command College's Campaign Command Course (战役指挥班), which is the college's advanced course, abroad for two weeks to allow them to gain first-hand knowledge of foreign air forces. For example, about 30 students visited the United States in July 1998; 41 students visited Australia and New Zealand in June 1999; and 58 students, including eight major generals, visited India in November 2003.<sup>662</sup> One of the PLAAF's deputy chiefs of staff led each of these delegations.

The Command College's Foreign Training Academic Department (外训系), which occupies a 7-story building, manages the program. Previously, the courses were held with students from only one country, one language, or one specialty at a time, but that model has been replaced, whereby students from multiple countries, languages, and specialties attend together. The new model was implemented in March 2009, when PLAAF students participated for the first time in the course.

In September 2009, the college initiated a four-month command specialty course for 31 pilots.<sup>663</sup> For the first time, the course included students from multiple countries and the PLAAF. Specifically, the 21 foreign students came from 12 countries, including Bangladesh (major, Mig-29 pilot), Malaysia (lieutenant colonel), Uganda, Nigeria, Myanmar, Sri Lanka (lieutenant colonel, administrative officer), Egypt (lieutenant colonel, F-16 pilot), Singapore (major), and Tanzania. Of the 21 foreign students, 11 were pilots. In addition, ten PLAAF pilot students were included in the class. The PLAAF officers ranged from majors to colonels and served as flight group (battalions) commanders, combat and transport air regiment deputy commanders (lieutenant colonels and colonels), and at least one division-level command post commander (colonels). It appears that each PLAAF pilot was paired with a foreign counterpart during the course, and they all speak English.



On 15 January 2010, a ceremony was held at the college for the graduating class. Attendees in the audience included representatives from several embassies in Beijing as well as military attachés from 11 countries. Each graduate received a certificate from the college's commandant, Major General Ma Jian (马健), and political commissar, [Major General] He Liguó (何立国). Of the 21 foreign and PLAAF pilots, 11 were squadron commanders who completed the Command Specialty English Language Combined Course. While attending the course, the students study Sunzi's *The Art of War* and learn about Chinese culture. During the course, they spend time in the college's Campaign Training Center. They also visit Shanghai, Nanjing, Hangzhou, Shaoxing, Yiwu, and other historical sites. One of the Command College instructors had previously studied at the United Kingdom's Royal Navy Academy.



From early September 2011 to late January 2012, the Command College's Foreign Training Department held another course that included foreign and PLAAF pilots with a focus on tactics and combat methods, including simulated training. Besides six PLAAF pilots from operational units, a total of 69 officers, including several pilots, from 41 countries participated in the training. The countries included Venezuela, the Philippines, Pakistan, Chile, Singapore, and Saudi Arabia. During the training, the pilots held models and simulated various tactics and techniques, including close-in engagements, as well as reconnaissance and counter-reconnaissance. To date, the Command College has had air force participants from 75 countries attend the course over the past decade.<sup>664</sup>

In addition to hosting the foreign officer course, the Command College has also sent faculty abroad to several countries, including Russia and Italy, to study abroad for at least one year.<sup>665</sup> For example, the 10 February 2004 issue of Air Force News had a half-page article covering interviews with four members of the PLAAFs Command College who had the opportunity to study abroad. The four members are as follows: (1) Zhou Zhongping (周中

平) was the director of the college's Communications Command Automation Teaching and Research Office and studied at the Italian Air Force's War College; (2) Fan Wu (范武) was an instructor in the college's Aviation Troop Tactics Teaching and Research Office and studied at the British Royal Naval Academy; (3) Jin Cunxian (靳存现) was an instructor in the Foreign Language Teaching and Research Office and studied at the Pakistani National Modern Language University, and (4) Ye Jianghua (叶江华) was director of the college's Combat Simulation Center and studied at Russia's Gagarin Air Force Academy for three years.<sup>666</sup>

The Command College also has longer courses for foreign students. For example, on 15 July 2005, a total of 88 foreign students from 25 countries graduated from an unidentified one-year course.<sup>667</sup>

In July 2014, the Command College for the first time awarded a Master's in Military Command degree to 20 two-year students from 16 unidentified countries.<sup>668</sup> The degree was available in five specialties and three languages (English, French, and Russian). This was the first time for any foreign military officer students to be conferred with a master's degree in military at any Chinese military academy. The ceremony also celebrated the completion of the 15<sup>th</sup> group of foreign students.

- Other interaction:<sup>669</sup> The International Military Cooperation Office of the Ministry of National Defense organizes on an annual basis tours for foreign military attachés to visit the college.

#### RELEVANT PHOTOS:



Air Force Command College foreign student graduation ceremony

(Source: *Xinhua*, <https://mil.huanqiu.com/gallery/9CaKrNQH5xd>)



## SECTION 3-24: AIR FORCE ENGINEERING UNIVERSITY

### CHINESE NAME AND ACRONYM:

空军工程大学. The acronym is 空工大.<sup>670</sup>

- Official English name(s): Air Force Engineering University<sup>671</sup>
- English Acronym: AFEU<sup>672</sup>

### MOE CODE:

In 2017, a new code of 91024 was assigned.<sup>673</sup> *Baidu* identifies the code as 90052, which does not appear to be correct.<sup>674</sup> The code in 2008 was 90045.



### TYPE OF INSTITUTION:

Academic Education (学历教育).<sup>675</sup> It is not a Professional Education (任职教育) institution.

### OFFICIAL WEBSITE:

<http://www.afeu.cn/web/afeu/index.html>. No English-language website available.

### BACKGROUND:

AFEU was created in Xi'an, Shaanxi Province in July 1999 by merging three existing colleges, each of which was retained as a subordinate college.<sup>676</sup> The three colleges were:<sup>677</sup> 1) the Air Force Engineering College (空军工程学院), which was created in 1959; 2) the Air Force Missile College (空军导弹学院), which was created in 1958 at Sanyuan Campus (三原校区) in Sanyuan County (三原县), Shaanxi Province; and 3) the Air Force Telecommunication Engineering College (空军电讯工程学院), which was created in 1957. AFEU also became one of the PLA's five comprehensive universities (综合大学) that were identified in 1999.<sup>678</sup> In 2004, AFEU added the Natural Science College (理学院) as a new college. In 2012, the three colleges noted above were renamed as the Aeronautics and Astronautics Engineering College (航空航天大学学院), which was again renamed as the Aviation Engineering College (航空工程学院) in 2017, the Air and Missile Defense College (防空反导学院), and the Information and Navigation College (信息与导航学院).<sup>679</sup> It also created the Air Traffic Control (ATC) and Navigation College (空管领航学院) and the Equipment Management and Unmanned Aerial Vehicle (UAV) Engineering College (装备管理与无人机工程学院). In 2017, it also incorporated the former Air Force 1<sup>st</sup> Aviation College (空军第一航空学院), which was responsible for noncommissioned officer (NCO) aircraft maintenance education and training, into the university and renamed it as the Aviation Maintenance NCO School (航空机务士官学校). AFEU also has a Graduate School (研究生院), which was created in 2017.<sup>680</sup>

### CAMPUSES AND LOCATIONS:

The location for each of AFEU's five campuses is shown below:<sup>681</sup>

- AFEU's main campus (中心校区) is located at Jiazi No. 1, Changle Dong (East) Road, Baqiao District, Xi'an, Shaanxi Province (陕西省西安市灞桥区长乐东路甲字1号). The contact phone number (联系电话) is 029-84786226. This campus houses the Aviation Engineering College, Air and Missile Defense College, Air

Traffic Control and Navigation College, Equipment Management and UAV Engineering College, and Natural Science College, as well as the Graduate School.

- The Luyuan Campus (鹿塬校区), which is also located in Xi'an's Baqiao District, houses the Air Force Aerospace Engineering College.
- The Taoyuan Campus (桃园校区) is located in Xi'an's Lianchao District (莲湖区) and houses the Information and Navigation College
- The Sanyuan Campus (三原校区) is located in Sanyuan County (三原县), Shaanxi Province and previously housed the Air Force Missile College. Although it appears this campus still exists, the Air Defense Missile College was moved to the main campus, so it is not clear what is still located at this campus.
- The Aviation Maintenance NCO School is located in Xinyang, Henan Province (河南省信阳市).

#### GRADE:

Corps deputy leader grade (副军级).<sup>682</sup> Prior to 2017, when it was downgraded, it was a corps leader-grade (正军级) organization.<sup>683</sup>

#### SUBORDINATION:

PLAAF HQ<sup>684</sup> [Staff Department]

#### FACILITIES:

The five campuses occupy over 1,650 acres (10,000 mu), which includes combat aircraft (作战飞机), surface-to-air missile (地空导弹), communication navigation (通信导航), and air traffic control (航空管制) practice training areas (实习训练场所) as well as 29 practice bases outside the campuses (以及29个校外实习基地).<sup>685</sup> Altogether, the campuses have 453 research labs (实验室) and 53 training fields (训练场地).<sup>686</sup>

#### ORGANIZATIONAL STRUCTURE:

Note: no official English translations were found for the subordinate institutions, so these are best guesses.

- 6 Subordinate *Xueyuan* (学院)<sup>687</sup>
  - Aviation Engineering College (航空工程学院)
  - Air and Missile Defense College (防空反导学院)
  - Air Traffic Control and Navigation College (空管领航学院)
  - Equipment Management and UAV Engineering College (装备管理与无人机工程学院)
  - Natural Science College (理学院)
  - Information and Navigation College (信息与导航学院)
- Subordinate NCO school (士官学校)<sup>688</sup>
  - Aviation Maintenance NCO School (航空机务士官学校)
- Graduate School (研究生院):<sup>689</sup> Created in 2017 and is organized into four research groups (研究生大队), which are further organized into 14 research student teams (研究生学员队)
- Administrative and functional departments (部门).<sup>690</sup> In 2005 and 2011, the following departments existed for the AFEU, and some of the departments also existed for each subordinate college/school, but these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>691</sup> (aka Basic Department / 基础部).



- Academic departments (系): The following list of 24 academic departments for AFEU as a whole is from 2001.<sup>692</sup> The departments are divided among the subordinate colleges. The list is in the order they were identified in the original source. Although no list was found for 2017, most, if not all, of them likely still existed at that time.
  1. Aircraft and Motor Engineering (飞机与发动机系)
  2. Aviation Armament Engineering (航空兵器工程系)
  3. Airport Construction Engineering (机场建筑工程系)
  4. Aviation Equipment Management Engineering (航空装备管理工程系)
  5. Guided Radar Engineering zhidao (指导雷达工程系)
  6. Computer Engineering (计算机工程系)
  7. Guided Missile Engineering (导弹工程系)
  8. Navigation (航空系)
  9. Network Engineering (网络工程系)
  10. Command Automation (指挥自动化系)
  11. Information Countermeasures信息对抗系 ()
  12. Selected Teaching and Research Offices Political Theory (政治理论)
  13. Foreign Languages (外语)
  14. Armaments (军械)
  15. Electricity (电气)
  16. Equipment Systems Engineering (装备系统工程)
  17. Microwave (微波)
  18. Electronic Countermeasures (电子对抗)
  19. Computers (计算机)
  20. Guided Missile Testing (导弹测试)
  21. Tactics (战术)
  22. Information Warfare (信息战)
  23. Digital Communication (数据通信)
  24. Network Technology (网络技术)
- Key labs (重点实验室): one unidentified State Key Lab (国家级重点实验室)<sup>693</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): No specific information was found about research labs; however, AFEU most likely has a lot of them. On the other hand, only one reference was found to a research center, which is the Aerospace Combat and Equipment Application Research Center that is subordinate to the Equipment Management and UAV Engineering College's Scientific Research Department (科研部空天作战与装备运用研究中心).<sup>694</sup> Only one reference was found for a teaching and research lab, which is the Computer Teaching and Research Lab in the Equipment Management and UAV Engineering College.<sup>695</sup>
- Teaching Demonstration Centers: three unidentified National Experimental Teaching Demonstration Centers (国家级实验教学示范中心)<sup>696</sup>
- Student teams (队 / 区队) and groups (大队): Other than the Graduate School, no other references were found to student teams and groups.

#### LEADERSHIP AND STAFF:<sup>697</sup>

- Commandant: MGEN Ma Jun (马军)
- Political Commissar: Unknown
- Professors and staff: AFEU has about 700 professors, associate professors, and senior experimenters (教授, 副教授, 高级实验师700余人).<sup>698</sup>

- Students: AFEU has about 10,000 students total, including 1,500 graduate students (规划在校学员10000余名, 其中研究生1500余名).<sup>699</sup> Since it began, AFEU has had about 130,000 graduates, including about 120 who became flag officers.<sup>700</sup>

#### DEGREES, MAJORS, AND SPECIALTIES:

Today, AFEU has 28 undergraduate academic specialties, 31 master's degree specialties, and 28 PhD academic specialties.<sup>701</sup>

- Either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs (士官职业技术教育) in the Aviation Maintenance NCO School
- Bachelor's degree (本科高等教育): AFEU has two undergraduate majors organized into 21 specialties and 28 directions (方向): Engineering (工程) and Military Science (军事学) Table 33 below provides information concerning AFEU's 21 undergraduate specialties, including the major (学科), specialty type (专业类别), specialty code (专业代码), specialty name (专业名称), direction (方向), and subordinate college / department (所属院系).<sup>702</sup> Of the 21 specialties, 13 are only for commanding officers (指挥官), six of them (080204, 082102, 110108, 110301, 110305, and 110306) are for both commanding officers and non-commanding officers (非指挥官), and two of them (110203 and 110307) are only for non-commanding officers.

**Table 33: Air Force Engineering University Specialties**

Major	Specialty Type	Specialty Code	Specialty Name	Direction	Subordination
Engineering 工学	Mechanical 机械类	080201	Mechanical Engineering 机械工程	Aviation Inspection Technology & Command 航空检测技术与指挥	Aviation Engineering College
		080204	Mechatronic Engineering 机械电子工程	Air Defense Missile Support Technology & Command 防空导弹保障技术与指挥	Air & Missile Defense College
	Electrical 电气类	080601	Electrical Engineering & Automation 电气工程及其自动化	Aviation Special Equipment, Measurement Technology & Command 航空特设, 计量技术与指挥	Aviation Engineering College Air & Missile Defense College
	Electronic & Information 电子信息类	080701	Electronic & Information Engineering 电子信息工程	Aviation Electronic Countermeasures, Integrated Avionics Technology & Command 航空电子对抗, 综合航电技术与指挥	Aviation Engineering College
		080703	Communications Engineering 通信工程	Air Communication Technology & Command/ Data Link Technology & Command 对空通信技术与指挥 / 数据链技术与指挥	Information & Navigation College
	Mapping 测绘类	081203	Navigation Engineering 导航工程	Navigation Technology & Command 导航技术与指挥	Information & Navigation College
	Aerospace 航空航天类	082004	Flight Vehicle Propulsion Engineering 飞行器动力工程	Aviation Machinery Technology & Command 航空机械技术与指挥	Aviation Engineering College
		082007	Aircraft Airworthiness Technology 飞行器适航技术	Air Safety Technology & Command 航空安全技术与管理	Equipment Management & UAV Engineering College
		082101	Weapon Systems & Engineering 武器系统与工程	Aviation Machinery Technology & Command	Aviation Engineering College

Engineering 工学	Armament 兵器类	082102	Weapons Launch Engineering 武器发射工程	Air Defense Missile Launch Control Technology & Command 防空导弹发射控制技术与 指挥	Air & Missile Defense College
Military Science 军 事学	Combat/ Operations 作战类	110104	Operations & Mission Planning 运筹与任务规划	Aviation 航空	ATC & Navigation College
		110106	Firepower Command & Control Engineering 火力指挥与控制工程	Aviation Fire Power Control Technology & Command 航空火控技术与指挥	Aviation Engineering College Air & Missile Defense College
		110108	Aerospace Defense Command & Control Engineering 空天防御指挥与控制工程	Aerospace Defense Technology & Command 空天防御技术与指挥	Air & Missile Defense College
		110116	Air Traffic Control & Navigation Engineering 航空管制与领航工程	Air Traffic Control 航空管制 Ground Navigation 地面领航	ATC & Navigation College
	Logistics 后勤类	110203	Military Facility Engineering 军事设施工程	Military Facility Service 军事设施勤务	Aviation Engineering College
		110205	Airfield Station Management Engineering 场站管理工程	Aerial Ammunition Technology & Command 航空弹药技术与指挥 Aviation Quartermaster Technology & Command 航空军需技术与指挥 Aviation Material Technology & Command 航空器材技术与指挥 Aviation 4-Stations Technology & Command 航空四站技术与指挥 Aviation Fuel, Pipeline Technology & Command 航空油料,管线技术与指挥	
	Equipment 装备类	110301	Command Information System Engineering 指挥信息系统工程	Air Defense Missile Support Technology & Command 防空导弹指控技术与指挥 Command Information System Implementation & Support 指挥信息系统运用与保障	Air & Missile Defense College Information & Navigation College
		110303	Aviation Equipment Engineering 航空装备工程	Aviation Quality Control Technology & Command / Aerospace Equipment Procurement Management 航空质量控制技术与指挥 / 航空装备采购管理	Equipment Management & UAV Engineering College
		110305	Radar Engineering 雷达工程	Aviation Radar Technology & Command 航空雷达技术与指挥 Air Defense Missile Radar Technology & Command 防空导弹雷达技术与指挥	Aviation Engineering College Air & Missile Defense College
		110306	Missile Engineering 导弹工程	Air Defense Missile Overall Technology & Command 防空导弹总体技术与指挥	Air & Missile Defense College
	Equipment 装备类	110307	Unmanned Equipment Engineering 无人装备工程	Unmanned Aerial Vehicle Maintenance Support Technology & Command 无人机维护保障技术与 指挥	Equipment Management & UAV Engineering College

- Master's degree (硕士): AFEU has five master's degree majors, 31 specialties, and 63 master's degree authorized programs (硕士学位授权点)<sup>703</sup>
  - o Majors: Natural Science (理学), Engineering, Military Science, Management (管理学), and Literature (文学).
  - o Table 34 provides information concerning AFEU's 31 master's degree specialties, including the major, specialty type, specialty code, specialty name, and subordinate college / department.<sup>704</sup>

**Table 34: Master's Degree Specialties**

Major	Specialty Type	Specialty Code	Specialty Name	Subordination
Natural Science 理学	Mathematics 数学	070100	Mathematics 数学	Basic Department
Engineering 工学	Mechanical Engineering 机械工程	080200	Mechanical Engineering 机械工程	Air & Missile Defense College
	Optics Engineering 光学工程	080300	Optics Engineering 光学工程	Basic Department
	Electrical Engineering 电气工程	080800	Electrical Engineering 电气工程	Aviation Engineering College Air & Missile Defense College
	Information & Communications Engineering 信息与通信工程	081000	Information & Communications Engineering 信息与通信工程	Aviation Engineering College Air & Missile Defense College Information & Navigation College
	Control Science & Engineering 控制科学与工程	081100	Control Science & Engineering 控制科学与工程	Aviation Engineering College Air & Missile Defense College Information & Navigation College ATC & Navigation College Equipment Management & UAV Engineering College
	Civil Engineering 土木工程	081400	Civil Engineering 土木工程	Aviation Engineering College
	Roads & Railway Engineering 道路与铁道工程	082301	Roads & Railway Engineering 道路与铁道工程	Aviation Engineering College
	Astronavigation S&T 航空宇航科学与技术	082500	Astronavigation S&T 航空宇航科学与技术	Aviation Engineering College Air & Missile Defense College
	Armament S&T 兵器科学与技术	082600	Armament S&T 兵器科学与技术	Aviation Engineering College 航空工程学院 Air & Missile Defense College 防空反导学院
	Internet Security 网络空间安全	083900	Internet Security 网络空间安全	Air & Missile Defense College Information & Navigation College Basic Department
Military Science 军事学	Tactics 战术学	110400	Tactics 战术学	Air & Missile Defense College Information & Navigation College
	Military Equipment 军事装备学	110900	Military Equipment 军事装备学	Aviation Engineering College Air & Missile Defense College Information & Navigation College Equipment Management & UAV Engineering College
	Military Training 军事训练学	111000	Military Training 军事训练学	Aviation Engineering College Air & Missile Defense College
Management 管理学	Management Science & Engineering 管理科学与工程	120100	Management Science & Engineering 管理科学与工程	ATC & Navigation College Equipment Management & UAV Engineering College
Literature 文学	Translation 翻译	055101	English Written Translation 英语笔译	Basic Department
		055102	English Spoken Translation 英语口语译	Basic Department
		055103	Russian Written Translation 俄语笔译	Basic Department

Engineering 工学	Engineering 工程	085201	Mechanical Engineering 机械工程	Air & Missile Defense College
		085207	Electrical Engineering 电气工程	Aviation Engineering College Air & Missile Defense College
		085208	Electronics & Communications Engineering 电子与通信工程	Aviation Engineering College Air & Missile Defense College Information & Navigation College
		085209	Integrated Electric Network Engineering 集成电路工程	Air & Missile Defense College
		085210	Control Engineering 控制工程	Aviation Engineering College Air & Missile Defense College Information & Navigation College ATC & Navigation College Equipment Management & UAV Engineering College
		085211	Computer Technology 计算机技术	Air & Missile Defense College Information & Navigation College
		085213	Civilian Construction & Building Engineering 建筑与土木工程	Aviation Engineering College
		085225	Armament Engineering 兵器工程	Aviation Engineering College Air & Missile Defense College
		085232	Aviation Engineering 航空工程	Aviation Engineering College
		085239	Project Management 项目管理	Equipment Management & UAV Engineering College
Military Science 军事学	Military 军事	115101	Military Command 军事指挥	Air & Missile Defense College Information & Navigation College ATC & Navigation College
		115104	Military Equipment 军事装备	Aviation Engineering College Air & Missile Defense College Equipment Management & UAV Engineering College
Management 管理学	Engineering Management 工程管理	125600	Engineering Management 工程管理	Equipment Management & UAV Engineering College

- Doctoral degree (博士): AFEU has three majors, ten primary specialties divided into 28 specialties, and three disciplines 36 PhD authorized programs (博士学位授权点)<sup>705</sup>
  - o Majors: Engineering, Military Science, and Management
- Key Disciplines (重点科学): AFEU has two unidentified State Key Disciplines (国家重点学科) and five unidentified Military Key Disciplines (军队重点学科).<sup>706</sup>
- Table 35 provides information concerning AFEU's ten PhD primary specialties, which are further organized into a total of 28 specialties, including the major, specialty type, specialty code and year initiated (in parenthesis), specialty name, and subordinate college / department.<sup>707</sup>

**Table 35: PhD Specialties**

Major	Specialty Type	Specialty Code	Specialty Name	Subordination
Engineering 工学	Electronics S&T 电子科学与技术	0809 (2003)	Electronics S&T 电子科学与技术	Air & Missile Defense College  Information & Navigation College  Basic Department
		080901 (2003)	Physical Electronics 物理电子学	
		080902 (2003)	Circuits & Systems 电路与系统	
		080903 (2003)	Microelectronics & Book Electronics 微电子学与图书电子学	
		080904 (1996)	Electromagnetic Field & Microwave Technology 电磁场与微波技术	
		0809Z1 (2011)	Complex Electronic System Integration 复杂电子系统综合化	
	Information & Communications Engineering 信息与通信工程	0810 (2003)	Information & Communications Engineering 信息与通信工程	Aviation Engineering College  Air & Missile Defense College  Information & Navigation College
		081001 (2000)	Communications & Information System 通信与信息系统	
		081002 (2003)	Communications & Information Processing 通信与信息系处理	
		0810Z1 (2011)	Detection Warning & Electronic Countermeasures 探测预警与电子对抗	
		0810Z2 (2011)	Command Information Systems & Engineering 指挥信息系统与工程	
	Control Science & Engineering 控制科学与工程	081100 (2005)	Control Science & Engineering 控制科学与工程	Aviation Engineering College  Air & Missile Defense College  Information & Navigation College  ATC & Navigation College  Equipment Management & UAV Engineering College  Basic Department
		081101 (2005)	Control Theory & Control Engineering 控制理论与控制工程	
		081102 (2005)	Detection Technology & Automation 检测技术与自动化装置	
		081103 (1990)	Systems Engineering 系统工程	
		081105	Navigation, Guidance, & Control 导航, 制导与控制	
		0811Z1 (2011)	Aerospace Defense Systems & Engineering 空天防御系统与工程	
		081203 (2003)	Computer Application Technology 计算机应用技术	
	Transportation Construction 交通运输工程	082301 (2003)	Roads & Railway Engineering 道路与铁道工程	Aviation Engineering College



Engineering 工学	Astronavigation S&T 航空宇航科学与技术	082500 (2003)	Astronavigation S&T 航空宇航科学与技术	Aviation Engineering College
		082501 (2003)	Aircraft Design 飞行器设计	
		082502 (1998)	Aerospace Propulsion Theory & Engineering 航空宇航推进理论与工程	
		082503 (2003)	Aerospace Manufacturing Engineering 航空宇航制造工程	
		99J1 (2011)	Aerospace Plasma Dynamics & Portable Engineering 航天等离子体动力学与随身工程	
	Armament S&T 兵器科学与技术	082600 (2005)	Armament S&T 兵器科学与技术	Aviation Engineering College  Air & Missile Defense College
		082601 (2003)	Weapons Systems & Application Engineering 武器系统与运用工程	
		082602 (2005)	Armament Development Theory & Technology 兵器发射理论与技术	
		082603 (2011)	UAV Combat Systems & Technology 无人飞行器作战系统与技术	
	Internet Security 网络空间安全	083900 (2016)	Internet Security 网络空间安全	Air & Missile Defense College Information & Navigation College Basic Department
Military Science 军事学	Military Equipment 军事装备学	110900 (2010)	Military Equipment 军事装备学	Aviation Engineering College
		110901 (2003)	Military Equipment Development 军事装备建设学	Air & Missile Defense College
		110902 (2003)	Military Equipment Support 军事装备保障学	Information & Navigation College
		1109Z1 (2011)	Equipment Security Science & Engineering 装备安全科学与工程	Equipment Management & UAV Engineering College
	Military Training 军事训练学	111000 (2011)	Military Training 军事训练学	Air & Missile Defense College
		111003 (2005)	Military Education 军事教育学	
Management 管理学	Management Science & Engineering 管理科学与工程	120100 (2005)	Management Science & Engineering 管理科学与工程	ATC & Navigation College  Equipment Management & UAV Engineering College

#### POST-DOCTORAL SPECIALTIES (博士后):

- Post-doctoral degree specialties (博士后): AFEU has eight Post-doctoral scientific research programs (博士后科研流动站)<sup>708</sup>

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of specialties (专业): 21
- Degrees and number of years: four-year bachelor's degree
- Gender (男, 女):
  - Of the 21 specialties, males can take all 21, but females can only take two – 080703 (Communications and Engineering) and 110301 (Command Information System Engineering)
- Total number of personnel recruited (合计): 2,072 including 2,019 males and 53 females

- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from all but three of them—Hainan, Suzhou, and Tibet.
- Foreign language requirements (外语语种): English
- Specialty categories (专业类别): commanding officer (指挥) and non-commanding officer (非指)

#### INTERNATIONAL EXCHANGES AND COOPERATION:

AFEU's official website has a tab that shows 39 photos of interaction with foreign militaries; however, none of the photos have any text.<sup>709</sup> The photos are a combination of students' activities and meetings with senior foreign leaders.

- Foreign students (外军留学生): In 2017, AFEU had 20 foreign students, including students at the Information and Navigation College and the Aviation Maintenance NCO School.<sup>710</sup>
- Study abroad (留学): No information was found.

#### JOURNALS (学术期刊):<sup>711</sup>

Since 2000, AFEU has published the *Journal of Air Force Engineering (Natural Science Edition)* (空军工程大学学报 (自然科学版)) on a bimonthly basis. The ISSN number is 1009-3516.

## SECTION 3-25: AIR FORCE AVIATION UNIVERSITY

### CHINESE NAME AND ACRONYM:

空军航空大学. No acronym was found.

- Official English name(s): Air Force Aviation University<sup>712</sup> and Aviation University of Air Force<sup>713</sup>
- English Acronym: AUAF<sup>714</sup>

### MOE CODE:

In 2017, a new code of 91025 was assigned.<sup>715</sup> The previous code as of 2008 was 90046.<sup>716</sup>

### TYPE OF INSTITUTION:

Academic Education (学历教育)<sup>717</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

AUAF was created in June 2004 by merging the Air Force's 2<sup>nd</sup> Aviation College (空军第二航空学院), which was responsible for educating and training aircraft maintenance personnel, the Air Force Changchun Flight College (空军长春飞行学院), and the Air Force 7<sup>th</sup> Flight College (空军第七飞行学院).<sup>718</sup> In August 2011, the Air Force 13<sup>th</sup> Flight College in Bengbu, Anhui Province was subordinated to AUAF and renamed the Flight Instructor Training Base (飞行教官训练基地).<sup>719</sup> AUAF was created as part of the Central Military Commission's (CMC) 2110 Project (2110工程).<sup>720</sup>

The three original colleges were created in Changchun starting in 1946 when the Northeast Old Aviation School (东北老航校) was established. Since the 1950s, each one changed their names a few times before being merged in 2004. As of 2017, a total of 140,000 personnel had been educated and trained in all of the institutions, including about 80,000 pilot cadets. Of these, more than 300 have become corps (deputy leader and/or leader) grade or above leading cadre. It has a total collection of more than 510,000 books.<sup>721</sup>

As of 2006, AUAF had provided education and training for at least 1,200 foreign pilot cadets from 13 unidentified countries.<sup>722</sup> No updated information was found. It has also hosted visits from foreign air force cadets from the United States, France, England, Brazil, India, and North Korea, as well as other countries, for the Air Force International Trainees Week (空军国际学员周) and the Chinese and Foreign Air Force Academic Institution Commandants Forum (中外空军院校长论坛).<sup>723</sup>

AUAF is organized into three basic teaching patterns of basic education, professional education and flight training (形成了基础教育, 专业教育, 飞行训练三大教学格局).<sup>724</sup>



#### CAMPUSES AND LOCATIONS:

From 2004-2017, AUAF had 12 campuses divided among six provinces and seven cities.<sup>725</sup> In 2017, AUAF was reduced to ten campuses divided among four provinces and five cities.<sup>726</sup> It is not clear which campuses disappeared and whether they were merged with other campuses. The main campus is in Changchun, Jilin Province.<sup>727</sup> The Flight Instructor Training Base is now considered the Bengbu Campus of AUAF (See the discussion later in this section). The base is responsible for providing combined training for new flight controllers (飞行指挥员) in the tower, new flight instructors (飞行教员), and teaching management cadre (教学管理干部) for all of the PLAAF's flight academies. It is also responsible for teaching various courses to operational aviation unit flight instructors.<sup>728</sup> It is not clear where the remaining campuses are located.

#### GRADE:

Corps deputy leader<sup>729</sup>

#### SUBORDINATION:

PLAAF HQ<sup>730</sup>

#### FACILITIES:

AUAF has research labs (实验室), specialized labs (专修室), physical training field (军体训练场), firing range (射击场), Flight Simulator Technology Research Center (飞行仿真技术研究中心), scientific research and experiment/testing center (科研实验中心), technical education center (技术教育中心), and library (图书馆).<sup>731</sup>

#### ORGANIZATIONAL STRUCTURE:

- Administrative and functional departments (部门):
  - Historically, AUAF had the following administrative and functional departments:
    - Training Department (训练部) that served as the Headquarters Department
    - Political Department (政治部)
    - School Affairs Department (校务部), which was responsible for all facilities and logistics
    - Scientific Research Department (科研部)
  - The Training Department—which has a Graduate Student Division (空军航空大学训练部研究生处)—still existed in September 2017, but it appears that the old structure no longer exists.<sup>732</sup> Based on an interview with a PLAAF Command College delegation in Washington, DC, in April 2018, the head of the delegation noted that, at that time, the university was organized like an operational unit, which includes a Staff Department, Political Work Department, and Support Department. As such, the Training Department most likely no longer exists. In addition, as noted below, the Basic College has a Staff Department, which implies it does not have a Training Department.
  - Of note, the three PLAAF Flight Academies have a Staff Department and Political Work Department, because they are organized like operational units rather than academic institutions. Therefore, this might imply that the Basic College, like the Basic Trainer Training Base discussed below, most likely is organized more like an operational unit than AUAF.
- Subordinate Basic Trainer Training Base (初训基地 / 初教机训练基地), which prior to 2018 was known as the Flight Basic Training Base (飞行基础训练基地) and is a division leader-grade organization, has two subordinate training regiments (训练团) numbered 1<sup>st</sup> and 2<sup>nd</sup> regiment. The base, which is organized like operational bases within each Theater Command Air Force, has a Staff Department (参谋部) and Political Work Department (政治工作部). The head of the base is a director (主任), not a commander. Each regiment is organized like an operational unit with a subordinate Staff Department and Political Work Division (政治工作处).<sup>733</sup>
- Subordinate Flight Training Base (飞行训练基地) with subordinate regiments.<sup>734</sup>

- Subordinate *Xueyuan* (学院)
  - AUAF Aviation Basic College (航空基础学院).<sup>735</sup> It is not clear what this college is responsible for, but the Commandant and a Deputy Chief of Staff in the Staff Department, attended a meeting at Beijing University of Aeronautics and Astronautics (BUAA / Beihang) on 18 May 2018 to discuss the basics of the program for the BUAA students who would transfer to AUAF after their third year.<sup>736</sup> The college also has a Political Work Department (政治工作部).<sup>737</sup>
  - AUAF Aviation Combat Service College (航空作战勤务学院 / 航空战勤学院), which was created on 31 October 2017, is primarily responsible for providing specialized training for the tower-based flight controllers.<sup>738</sup> Beginning in 2018, this College took on the cultivation and training of flight group political instructors.<sup>739</sup> These political instructors had ample experience and a deep understanding of the new structure and system, and were a valuable resource for the new pilots. It was also useful for them to get a better grasp of the academic institution stage of pilot development. The pairs meet and hold talks in which the political instructors impart their knowledge about unit characteristics, operations missions, equipment functions, and other important topics. The College has continued to expand the program by bringing it to a flight training regiment, where political instructors pair off with basic trainer students.
- No subordinate NCO school (士官学校) but provides training and education for NCOs in special programs.
- Academic departments (系)
  - Historically, AUAF has had eight unidentified subordinate academic departments as well as an unidentified number of teaching and scientific research organizations (教学和科研机构).<sup>740</sup>
- Key labs (重点实验室): None identified
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):
  - Military Simulator Technology Research Institute (军事仿真技术研究所)<sup>741</sup>
  - Flight Simulator Technology Research Center (飞行仿真技术研究中心)<sup>742</sup>
- Graduate school (研究生院) that offer master's degrees<sup>743</sup>
- Student teams (队 / 区队) and groups (大队)
  - AUAF has one Transition Training Group (改装训练大队)<sup>744</sup>

#### LEADERSHIP AND STAFF:<sup>745</sup>

- Commandant (校长): MGEN Tang Weizhong (唐维忠)<sup>746</sup>
- Political Commissar: MGEN Xue Hongwei (薛宏伟)<sup>747</sup>
- Chief of Staff, Director of the Staff Department<sup>748</sup>
- Director, Political Work Department
- Professors and staff: AUAF has nearly 300 professors and associate professors, more than 100 special-grade pilots, nearly 100 doctoral and post-graduate advisors, and several tens of people who have received awards and honors.<sup>749</sup>

#### DEGREES, MAJORS, AND SPECIALTIES:

- Either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs (士官职业技术教育) with professional technical education (士官职业技术教育) specialties in aviation engineering technology (航空工程技术), airborne electronic countermeasures (空中电子对抗), and aerospace imagery intelligence technology (航空航天图像情报技术).<sup>750</sup>
- Bachelor's degrees (本科高等教育): Majors in Military Science (军事学) and Engineering (工学) with specialties in:<sup>751</sup>
  - Aviation Flight and Command (航空飞行与指挥)
    - Reconnaissance and Intelligence (侦察情报)
      - Aviation Reconnaissance and Intelligence Analysis (航空侦察情报分析整编)
      - Intelligence Fusion Processing and Analysis (情报融合处理分析整编)
    - Combat Target Engineering (作战目标工程)
      - Combat Target Support (作战目标保障)

- o Airborne Combat Services (空中战勤)
- o Aviation Rescue (航空救生)
- o Electronic Countermeasures Technology and Command (电子对抗技术与指挥)
- o UAV Application and Command (无人机运用与指挥)
- o Equipment Simulation Technology (装备仿真技术)
- o Intelligence Analysis and Integration (情报分析整编)
- o Combat Objectives Support (作战目标保障)
- o Unit Group Training Management (部队组训管理)
- The four years of education are known as pre-commissioning officer academic credential education (生长军官学历教育) and consists of the following components:<sup>752</sup>
  - o Aircraft systems and Engineering (飞行器系统与工程), Military Intelligence (军事情报), Remote Sensing Science and Technology (遥感科学与技术), Military Photoelectric Engineering (军事光电工程), Fire Power Command and Control Engineering (火力指挥与控制工程), Electrical Engineering and Automation (电气工程及其自动化), Navigation Engineering (导航工程), Radar Engineering (雷达工程), Electronic Countermeasures Command and Engineering (电子对抗指挥与工程), Simulator Engineering (仿真工程), Aviation Flight and Command (航空飞行与指挥), Aviation Rescue (航空救生), and Aviation Military Training (航空军事训练).
  - o Master's degrees (硕士): AFUA offers master's degrees (See 2018 Master's Degree section below)
- Doctoral degrees (博士):
  - o The only information found concerning doctoral degree programs is that AUAF has one Post-doctoral scientific research workstation (博士后科研工作站) plus an unidentified number of doctoral graduate student advisors (博士研究生导师). However, no information was found concerning the actual doctoral programs.

#### POST-DOCTORAL SPECIALTIES (博士后):

- Post-doctoral degrees (博士后): No information was found concerning any Post-doctoral programs

#### PILOT RECRUITMENT:

The issue of pilot recruitment is quite complicated and has been covered in three previous reports shown below:

- Kenneth Allen “PLA Air Force, Naval Aviation, and Army Aviation Aviator Recruitment, Education, and Training,” *China Brief, Jamestown Foundation*, 8 April 2016, <https://jamestown.org/report/pla-air-force-naval-aviation-and-army-aviation-aviator-recruitment-education-and-training/>
- Marcus Clay, *China's “Little Eagles”: People's Liberation Army Developing Its Next-Generation Pilots* (Montgomery AL: China Aerospace Studies Institute, 2019).
- Kenneth Allen and Emma Kelly, “China's Air Force Female Aviators: Sixty Years of Excellence (1952-2012),” *China Brief, Jamestown Foundation*, 12, no. 12 (June 2012): 12–17, <https://jamestown.org/program/chinas-air-force-female-aviators-sixty-years-of-excellence-1952-2012/>.

The bottom line is that the PLAAF has tried several different methods to recruit, educate, and training new pilots, of which some did not work and were abolished. The current program includes four primary components:

1. High school graduates
2. About 100 college students per year in a special program at three universities in Beijing who are part of what is known as the “Dual-Enrollment” (双学籍) program
3. A program that targets male high school students, aged 14-17, and is loosely organized under an umbrella structure named Teenagers Aviation Schools (TAS), which began in 2015 at 16 schools.
4. The PLAAF recruits about 35 females only every few years but the program is changing.

New pilots recruited out of high school undergo two years of basic education, one and a half years of professional studies, and six months of flight training before graduating from AUAF.<sup>753</sup> They then move on to a flight academy for one to two years of advanced trainer aircraft training, depending on their end assignment as a fighter, bomber,



or transport pilot. Once completed they receive a second bachelor's degree in military science. In July 2017, the PLAAF's first group of "double bachelor's degrees" flight cadets graduated from the 5<sup>th</sup> brigade of the Air Force Harbin Flight Academy.<sup>754</sup> Upon graduation, they immediately went into fighter aircraft transition training at an Air Force air brigade. In the short period before transition training begins, they wait at the training brigade and carry out aviation theory transition training. Of note, all new second lieutenants who graduate from one of the PLAAF's officer academic institutions also assume their operational billet in early July, and almost none of them have any operational experience. With the exception of officers who are assigned to remote areas, all other new officers are on probation for one year before they receive their rank as second lieutenant. In addition, because it is a seven-year process for pilot training – from becoming a cadet to completing two years of flight training at one of the three flight academies to one year of transitioning into their operational aircraft—every air brigade and regiment receive 7-8 new pilots at the same time every year, which is about 20-25% of the unit's pilots. They have no operational experience and it takes at least 10-12 years to achieve the status of special-grade pilot.<sup>755</sup>

Normally, the PLAAF has not published information about the washout rate for its male cadets; however, according to a PLAAF book published in 2010, the washout rate for male cadets from the time they started at AUAF until they assumed their billet in their operational aircraft was 50 percent.<sup>756</sup> A high percentage of those people washed out occur during their time at AUAF. The percentage is reduced once they begin attending one of the flight academies. For example, according to an October 2012 article in Air Force News, one Lanzhou MRAF flight academy started with 49 students and graduated with 31 in 2002, which was a graduation rate of 63 percent.<sup>757</sup> In 2010, 70 of the initial 84 students graduated with a graduation rate of 81 percent. Since the PLAAF began training female pilots, their washout rate from their first year at AUAF until they assume their permanent billet has averaged about 50 percent.<sup>758</sup> Based on available information, the flight academies do everything possible to have cadets graduate. Those who do not graduate are sent to another PLAAF college to finish their education and training in a different specialty.<sup>759</sup>

The following two sections discuss the recruitment of high school students for the 2017 and 2018 classes.

#### 2017 PILOT CADET RECRUITMENT (招飞):

In 2017, a total of nearly 130,000 high school graduates participated in the pilot cadets' primary selection.<sup>760</sup> After the first rounds, more than 3,600 participated in the final test (定选检测). The test at this stage included a physical exam, psychological evaluations and a political background check. Out of the 1,600 that passed the final round, a total of 1,110 students, including 1,075 males and 35 females, were eventually accepted to become pilot cadets involved in a seven-year program before they begin training in their operational aircraft.

#### 2018 PILOT CADET RECRUITMENT:

In 2018, more than 123,000 students, including high school seniors and students in the TAS program, applied to become pilots.<sup>761</sup> In the end, the PLAAF admitted a total 1,480 individuals from a list of around 2,400 qualified candidates. The number and the quality of accepted candidates is the highest since the PLAAF started to recruit pilots on its own in 1988.

As a result of the creation of TAS programs starting in 2015 at 16 schools, the first group of 728 high school graduates from these schools entered pilot selection in 2018, and 379 were admitted, equating to 25%. The percentage will most likely increase each year.

#### 2018 MASTER'S DEGREE PROGRAM

In late 2017, AUAF recruited an unidentified number of personnel as graduate students for a Master's Degree program that started in 2018. The program was organized into two basic categories—scientific and military.<sup>762</sup> The program is managed through AUAF's Training Department's Graduate Student Division (空军航空大学训练部研究生处). The bullets below show the two different programs and the 4-digit MOE code (代码) for each specialty. Note that each specialty within the Scientific Programs has a separate code, while the Military Specialty program has only a single code, even though it has three separate components. See Table 36 for the original list.

- Scientific Programs – Academic Degrees for Master’s Graduate Students (学科招收学术学位硕士研究生)
  - o 1110: Science of Military Training (军事训练学),
  - o 0825: Aviation and Astronautics Science and Technology (航空宇航科学与技术)
  - o 0811: Control Science and Engineering (控制科学与工程)
- 1151: Military Specialty Master’s Graduate Students (专业领域招收军事硕士专业学位研究生)
  - o Military Command (军事指挥)
  - o Military Political Work (军队政治工作)
  - o Military Equipment (军事装备)

**Table 36: 2018 Master’s Degree Programs**

Major	First Level Specialty	Discipline Direction
Academic Degree 学术学位	Control Science & Engineering 控制科学与工程 0811	Detection Technology and Automatic Equipment 检测技术与自动化装置
		System Engineering 系统工程
		Pattern Recognition and Intelligent Systems 模式识别与智能系统
		Navigation, Guidance, and Control 导航, 制导与控制
		Military-use UAVs & Application Engineering 军用无人机与运用工程
	Aeronautical and Astronautical Science and Technology航空宇 航科学与技术 0825	Flight Vehicle Design 飞行器设计
		Aerospace Propulsion Theory & Engineering 航空宇航推进理论与工程
		Man-Machine & Environmental Engineering 人机与环境工程
		Flight Vehicle Simulation 飞行器仿真
	Military Training 军事训练学 1110	Flight Education & Training 飞 行教育训练
		Flight Simulation Training 飞行模拟训练
		Flight Psychology 飞行心理
		Flight Safety 飞 行安全
Specialty Degree 专业学位	Military 军事 1151	Military Command 军事指挥 Aviation Branch Operations Command (航空兵作战指挥)
		Military Command 军事指挥 Aerospace Reconnaissance Intelligence Application (空天侦察情报运用)
		Military Command 军事指挥 UAV Operations Command (无人机作战指挥)
		Military Command 军事指挥 Aviation Information Opposition Command (航空信息对抗指挥)
		Military Political Work 军队政治工作 Political Work Command (政治工作指挥)

Specialty Degree 专业学位	Military 军事 1151	Military Equipment 军事装备 Equipment Command Management (装备指挥管理)
		Military Equipment 军事装备 Equipment Demonstration Management (装备论证管理)

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): As of 2006, AUAF had provided education and training for at least 1,200 foreign pilot cadets from 13 unidentified countries.<sup>763</sup> It has also hosted visits from foreign air force cadets from the United States, France, England, Brazil, India, and North Korea, as well as other countries, for the Air Force International Trainees Week (空军国际学员周).<sup>764</sup>
- Study abroad (留学): No information was found concerning any students studying abroad.
- Other interaction: AUAF has hosted the Chinese and Foreign Air Force Academic Institution Commandants Forum (中外空军院校长论坛).<sup>765</sup>

#### AIR FORCE FLIGHT INSTRUCTOR TRAINING BASE

According to baidu.com and a 6 June 2012 Air Force News article, the 13<sup>th</sup> Flight College was renamed the Air Force Flight Instructor Training Base (空军飞行教官训练基地) on 28 April 2012 and was re-subordinated to the Air Force Aviation University, but it remains in Bengbu.<sup>766</sup> According to the *Air Force News* article, which is accompanied by four photos showing aircraft with 7xx7x bort numbers, the new training base is responsible for providing combined training for new flight controllers (飞行指挥员) in the tower, new flight instructors (飞行教员), and teaching management cadre (教学管理干部) for all three of the PLAAF's flight academies. It is also responsible for teaching theory education to operational aviation unit flight instructors.

Prior to the change, the 13<sup>th</sup> Flight College had been an anomaly within the system concerning its location, subordination, and training responsibilities as discussed below:

- First, this college is located in Bengbu, Anhui Province, and was responsible for training new fighter cadets in a basic trainer for one year and in an advanced trainer for one year after they complete their 30 months of basic education at the Air Force Aviation University.<sup>767</sup> Although Bengbu is located in Anhui Province, which was part of the Nanjing MRAF, it appears that the college switched from being subordinate to the Nanjing MRAF to the Jinan MRAF sometime between July 2003 and February 2004. This information is based on a review of 90 *Air Force News* articles from January 2002 through December 2006 plus several articles since January 2012.<sup>768</sup>
- Second, there are no indications that the new training base converted its training regiments to brigades.<sup>769</sup> The primary reason for this is that the base is most likely a division leader-grade organization, and the PLAAF does not have brigades subordinate to divisions.

## SECTION 3-26: AIR FORCE EARLY WARNING ACADEMY

### CHINESE NAME AND ACRONYM:

空军预警学院. No acronym was found.

- Official English name(s): Air Force Early Warning Academy;<sup>770</sup> other name found was Air Force Prewarning College<sup>771</sup>
- English Acronym: None found

### MOE CODE:

In 2017, a new code of 91026 was assigned.<sup>772</sup> The former code was 90047.<sup>773</sup>

### TYPE OF INSTITUTION:

Officer Academic Education (学历教育) and Professional Education (任职教育) and Noncommissioned Officer (NCO) Education (士官教育)<sup>774</sup>

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:

It was created in 1952 as the Air Force Radar School (空军雷达学校) in Nanjing, Jiangsu Province.<sup>775</sup> In 1955, it was subordinate to the Air Defense Force (防空军), which was a separate service until it was merged with the PLAAF in 1957, and it was renamed the Air Force Radar Technical Specialty School (空军雷达技专专科学校). In 1958, it was merged with the former Air Defense School (防空学校) and was renamed the Air Force Radar Branch School (空军雷达兵学校) and was moved to Wuhan, Hubei Province. In 1969, it was renamed the Air Force 4<sup>th</sup> Specialty School (空军第四专科学校). In 1975, it was renamed the Air Force Radar School (空军雷达学校). In 1983, it was renamed the Air Force Radar Academy (空军雷达学院).<sup>776</sup> In 1992, it was upgraded from division leader grade to corps deputy leader grade. In 2004, the organizational structure changed such that the Air Force Radar Branch Training 4<sup>th</sup> Regiment (空军雷达兵4团) and the Air Force 1<sup>st</sup> Aviation Academy/College's Suizhou (Hubei Province) NCO Group (空军第一航空学院随州士官大队) were merged into the academy. In August 2011, the name changed to its current name—Air Force Early Warning Academy.<sup>777</sup>

### CAMPUSES AND LOCATIONS:

The academy has four campuses (校区/ 一院四地) shown below, all of which are in Hubei Province (湖北省):<sup>778</sup>

1. The main campus (本部) is in Wuhan's Jiang'an District (武汉市江岸区) at No. 288 Huangpu Road (黄浦大街288号)
2. The second campus, which is identified as the Huangpi NCO School (黄陂士官学校), is also located in Wuhan but it is in the Huangpi District (黄陂区) at No. 3 Qiangjun Road Wuhu Street (武湖街道强军路3号)
3. The third campus, which is identified as the Yichang Training Dadui/Group (宜昌训练大队), which implies it is a battalion-level organization, is located in Longquan Township, Yiling District, Yichang (宜昌市夷陵区龙泉镇), which is about 200 miles west of Wuhan.



4. The fourth campus, which is identified as the Suizhou Branch Campus (随州分校), is located in Suizhou (随州市), which is about 80 miles northwest of Wuhan and about 120 miles northeast of Yichang. Although it is not clear which campus houses a radar training site, it is reportedly the largest such site in China.<sup>779</sup>

GRADE:

Corps deputy leader (副军级)<sup>780</sup>

SUBORDINATION:

PLAAF HQ<sup>781</sup> [Staff Department]

FACILITIES:

Altogether, the campuses occupy more than 2.3 million square meters (568 acres).

ORGANIZATIONAL Structure:

- Subordinate *Xueyuan* (学院): None
- Subordinate NCO school (士官学校): Huangpi NCO School in Wuhan.
- Administrative and functional departments (部门).<sup>782</sup> In 2005, the following departments existed, but these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>783</sup>
- Academic departments (系)
  - The following academic departments existed in 2003:<sup>784</sup>
    - Command Department (指挥系)
    - Radar Systems Engineering Department (雷达系统工程系)
    - Microwave Engineering Department (微波工程系)
    - Information Engineering Department (信息工程系)
    - Radar Equipment Management and Applications Engineering Department (雷达装备与应用工程系)
    - Command Automation Engineering Department (指挥自动化工程系)
    - Transition Training Department (改装训练系)
  - The following academic departments existed in 2005:<sup>785</sup>
    - Early Warning Command Department (预警探测指挥系)
    - Early Warning Equipment Department (预警探测装备系)
    - Electronic Countermeasures Department (电子对抗系)
    - Information and Command Automation Department (信息与指挥自动化系)
    - Mechanical and Electrical Engineering Department (机电工程系)
    - Mechanical General Equipment Department (机械通用装备系)
  - It is not clear which departments exist today, but they most likely match up with the five specialties noted above.
- Student Structure<sup>786</sup>
  - The Academy received 340 new cadets in 2017.<sup>787</sup>
  - Cadets and graduate students are organized into Graduate Student Management Group(s) (研究生管理大队) and the Yichang (Hubei Province) Training Group(s) (宜昌训练大队), which are further organized into 30 cadet teams (学员队), 16 [graduate] student teams (学兵队) and 49 teaching and research offices (教研室), including testing labs (实验室), research labs (研究室), and [testing and research] centers (中心)

- Key labs (重点实验室): There are three Military / Provincial Key Labs (3个军队 (省) 级重点实验室), including the Radar Weapons Application Engineering Key Lab (雷达兵器运用工程实验室) and the Early Warning Key Lab (预警实验室)<sup>788</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): In 2004, the Radar Electronics Research Lab's Post-graduate Research Station was created (雷达电子工程研究所"博士后科研工作站").<sup>789</sup> 49 teaching and research offices/labs.
- Graduate school (研究生院) [Note: non-commanding officers return to the Academy for graduate studies and graduate degrees. Commanding officers attend the PLAAF Command College, where they receive a certificate.]

#### LEADERSHIP AND STAFF:

- Commandant (院长): MGEN Ma Xiaoyan (马晓岩)<sup>790</sup>
- Political Commissar: SCOL Shang Jianliang (商建亮)<sup>791</sup>
- Professors and staff:<sup>792</sup> The staff includes an unidentified number of Chinese Academy of Science academicians (中国科学院院士), 20 personnel who have been identified as outstanding military leaders and top military talents, and about 200 professors (教授) and associate professors (副教授).

#### DEGREES, MAJORS, AND SPECIALTIES:

- Either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs (士官职业技术教育).<sup>793</sup> It does not appear that any NCOs receive a bachelor's degree.
- Bachelor's degrees (本科高等教育):
  - o Four-year for each officer specialty with a major in Military Science (军事学) or Engineering (工学). Table 37 shows the five specialties.
- Master's degrees (硕士):
  - o Three first-level discipline master's degree authorization points (3个一级学科硕士学位授权点); one second-level master's degree authorization point (1个二级学科硕士学位授权点); two professional master's degree points (including four granting directions) (2个专业硕士授权点(包含4个授予方向)).
- Doctoral degrees (博士):
  - o Three first-level doctoral degree authorization points (3个一级学科博士学位授权点).

#### POST-DOCTORAL SPECIALTIES (博士后):

Three post-doctoral research stations (3个博士后科研流动站) and one post-doctoral research station (1个博士后科研工作站).

#### SPECIALTIES:

Table 37 provides the academy's five specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) were found for 2017:<sup>794</sup>



**Table 37: 5 Air Force Early Warning Academy Specialties**

Specialty Code	Specialty	Direction	Training Type
110102	Early Warning 预警探测	Radar Technology and Command 雷达技术与指挥	CO
		Early Warning Technology and Command 预警技术与指挥	
110305	Radar Engineering 雷达工程	Radar Technology and Command 雷达技术与指挥	Non-CO
		Early Warning Technology and Command 预警技术与指挥	
		Early Warning Technology Support 预警技术保障	
110301	Command Information System Engineering 指挥信息系统工程	Early Warning Intelligence Processing and Application 预警情报处理与运用	CO & Non-CO
110107	Network Command and Engineering 网电指挥与工程	Electronic Countermeasures Technology and Command 电子对抗技术与指挥	CO
110109	Unmanned System Engineering 无人系统工程	Unmanned Aerial Vehicle / Drone Application and Command 无人机运用与指挥	CO

#### RECRUITMENT FOR THE 2017 CLASS OF CADETS (招生):

- Number of specialties (专业): five specialties and eight specialty directions
- Number of years: four
- Gender (男, 女): Only male cadets were recruited [Note: Although no female cadets were recruited for 2017, the Academy apparently does have some female cadets as shown in the photos at the right. The bottom photo has three females in the front row on the left.]
- Total number of personnel recruited (合计): 340 new cadets
- D
- Number of Provinces/Autonomous Regions/Municipality and Quotas: new cadets were recruited from 21 of the 22 provinces, five autonomous regions, and four municipalities
- Foreign language requirements (外语语种): Unknown
- Specialty categories (专业类别) – commanding officer (指挥) and non-commanding officer (非指)



#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): No information available
- Study abroad (留学): No information available
- Other interaction: no information available

#### 2014 RECRUITMENT FOR MASTER'S DEGREE AND PhD PROGRAMS:

In 2014, the Academy recruited students for master's degree and PhD programs as shown below.<sup>795</sup> All students must pass an English language test to be accepted. No other foreign languages were required. No mention of male versus female.

- 2 PhD programs (11 students): Military Studies (军事学) and Engineering Studies (工学)
  - Program #1
    - Category (学科门类): Military studies

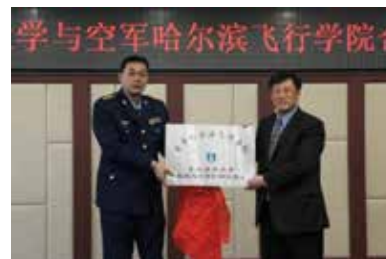


- Specialty #1
    - Specialty Code and Name (专业代码名称): 110504 Military Intelligence Studies (军事情报学)
    - Recruitment Plan (招生计划): three students
  - Specialty #2
    - Specialty Code and Name: 1109 Military Equipment Studies (军事装备学)
    - Recruitment Plan: three students
- Program #2
  - Category: Engineering Studies
    - Specialty #1
      - Specialty Code and Name: 0810 Information and Communications Engineering (信息与通信工程)
      - Recruitment Plan: five students
- 2 master's degree programs (84 students): Military Studies and Engineering Studies
  - Program #1
    - Category: Military Studies
      - Specialty #1
        - Specialty Code and Name: 110402 Branch Tactical Studies (兵种战术学)
        - Recruitment Plan: eight students
      - Specialty #2
        - Specialty Code and Name: 1105 Military Command Studies (军事指挥学)
        - Recruitment Plan: eight students
      - Specialty #3
        - Specialty Code and Name: 1109 Military Equipment Studies
        - Recruitment Plan: eight students
      - Specialty #4
        - Specialty Code and Name: 1110 Military Training Studies (军事训练学)
        - Recruitment Plan: four students
  - Program #2
    - Category: Engineering Studies
      - Specialty #1
        - Specialty Code and Name: 080804 Power Electronics and Power Drives (电力电子与电力传动)
        - Recruitment Plan: five students
      - Specialty #2
        - Specialty Code and Name: 0809 Electronics Science and Technology (电子科学与技术)
        - Recruitment Plan: 15 students
      - Specialty #3
        - Specialty Code and Name: 0810 Information and Communications Engineering
        - Recruitment Plan: 18 students
      - Specialty #4
        - Specialty Code and Name: 0812 Computer Science and Technology (计算机科学与技术)
        - Recruitment Plan: six students
      - Specialty #5
        - Specialty Code and Name: 082601 Weapon Systems and Application Engineering (武器系统与运用工程)
        - Recruitment Plan: four students
      - Specialty #6
        - Specialty Code and Name: 085225 Arms Engineering (兵器工程)
        - Recruitment Plan: three students
      - Specialty #7
        - Specialty Code and Name: 085208 Information and Communications Engineering
        - Recruitment Plan: five students

## SECTIONS 4-27, 4-28, AND 4-29: AIR FORCE HARBIN, SHIJIAZHUANG, AND XI'AN FLIGHT ACADEMIES

Because the Air Force's three flight academies (飞行学院)—Harbin, Shijiazhuang, and Xi'an—are organized the same and do not include cadet education and training, their profiles have been merged into this single section and organized differently than the other profiles. In addition, the organizational structure for the three Air Force flight academies are similar to each other but are different than the other 34 PLA academic institutions for the following key reasons:<sup>796</sup>

- The flight academies are not cadet academic institutions.
- The flight academies are responsible for training future pilots who have already graduated from the Air Force Aviation University (AFAU) with a bachelor's degree. Upon graduation from their flight academy, they receive a second bachelor's degree.
- Although the Chinese use the same characters for *xueyuan* (学员) for both AFAU and the flight academies, the English translation is “cadet” for AFAU and “student” for the flight academies.
- Each flight academy is organized like an operational unit, such that they have a Staff Department, Political Work Department, and a Support Department.
- Each flight academy has subordinate numbered training brigades, which are also organized like operational units. Prior to 2012, all of the brigades were regiments.
- The academies do not have academic departments (系) or specialties (专业).
- The flight academies do not offer any post-graduate degrees (master's or PhD). Only a few pilots receive a master's degree, which are received at other military or civilian academic institutions.
- No information was found concerning international exchanges and cooperation.



### CHINESE AND ENGLISH NAMES

All three institutions were established in August 2011 by merging six previous flight academies together. At that time, they were identified in English as the Air Force Harbin Flight College (空军哈尔滨飞行学院), Air Force Shijiazhuang Flight College (空军石家庄飞行学院), and Air Force Xi'an Flight College (空军西安飞行学院).<sup>797</sup> In 2013, the PLAAF changed the official English name of the Shijiazhuang Flight College to Flight Academy, and in 2017 it changed the names of the Harbin and Xi'an Flight Colleges to Flight Academies as well.<sup>798</sup>

### TYPE OF INSTITUTION:<sup>799</sup>

The Harbin and Shijiazhuang academies are Professional Education (任职教育) institutions. The Xi'an academy is identified as a Command Academic (指挥院校) institution; however, like the other two flight academies, it is most likely a Professional Education (任职教育) institution.

#### OFFICIAL WEBSITE:

None found for any of the flight academies.

#### PERSONNEL:

Because each academy is organized like an operational air unit, the key personnel include the Party Standing Committee members—the commander, political commissar, deputy commanders, deputy political commissar(s), secretary of the Discipline Inspection Committee, chief of staff (director, Staff Department), director of the Political Work Department, and the director of the Support Department—as well as the Party Standing Committee members for each training brigade. In addition, instead of professors and associate professors, the other key personnel are flight instructors (飞行教员).

#### BACKGROUND:

All three academies had their origins in 1949-1952, when the PLAAF created ten aviation schools (航空学校).<sup>800</sup> By 1966, there were 16 aviation schools, which included some that only trained support personnel. Several of the schools began as a flight preparatory school (航空预备学校)<sup>801</sup> before becoming the numbered aviation school. Starting in the 1960s, the 16 schools were merged, abolished, reestablished, moved to new locations, renamed, and/or given new missions. Table 38 below shows the 16 numbered aviation schools, their location, mission, and when they were created.<sup>802</sup>

**Table 38: Original 15 PLAAF Aviation Schools**

Aviation School Number	Location	Mission	Year
1 <sup>st</sup>	Changchun, Jilin	Bomber pilots	1949
2 <sup>nd</sup>	Changchun, Jilin	Bomber pilots	
3 <sup>rd</sup>	Qinzhou, Liaoning	Fighters, attack aircraft	
4 <sup>th</sup>	Shenyang, Liaoning		
5 <sup>th</sup>	Jinan, Shandong		
6 <sup>th</sup>	Beijing Nanyuan		
7 <sup>th</sup>	Mudanjiang, Heilongjiang		1951
8 <sup>th</sup>	Shenyang, Liaoning	Fighter support personnel	
9 <sup>th</sup>	Changchun, Liaoning	Bomber maintenance personnel	
10 <sup>th</sup>	Taiyuan, Shanxi	Maintenance personnel	
11 <sup>th</sup>	Yanliang, Shaanxi	Fighter pilots	1952
12 <sup>th</sup>	Linfen, Shaanxi	Fighter pilots	
13 <sup>th</sup>	Chengdu, Sichuan		1956
14 <sup>th</sup>	No information found		
15 <sup>th</sup>	Sanyuan, Shaanxi	Aircraft missile engineering	1958
16 <sup>th</sup>	Huxian, Shaanxi	Bomber pilots, navigators, and communications personnel	
17 <sup>th</sup>	Jilin	Enlisted ground crew personnel	1959

In 1968, the number was reduced from 16 to 14. In 1986, the number was reduced to ten and they were upgraded from schools to *xueyuan* (学院), which, as noted above, were originally translated as “colleges” but have been renamed as “academies.” Of the four other schools, the 16<sup>th</sup> School was reorganized as the Air Force Navigation College (空军领航学院) in Xi’an,<sup>803</sup> the 11<sup>th</sup> School became the Air Force Flight Test and Training Center (空军飞行实验训练中心) at Xi’an Yanliang,<sup>804</sup> and two were abolished. As shown in Table 39, the PLAAF had seven flight academies

prior to the merger in 2011.<sup>805</sup> Concerning military unit cover designators (MUCDs), the only PLAAF's flight academies are the only PLA academic institutions who are assigned an MUCD. The reason for this is they are organized like and treated as operational units. Table 39 shows the flight college number, city, province, and Military Region Air Force (MRAF) subordination, the Ministry of Education code, grade, MUCD, and the mission.

**Table 39: Pre-2012 PLAAF College Academies<sup>806</sup>**

Flight College	City, Province (MRAF)	MOE Codes	Grade	MUCD <sup>807</sup>	Mission
1 <sup>st</sup>	Harbin, Heilongjiang (Shenyang)	90051	Division Leader	93163	Transport, bomber, and tanker crews
2 <sup>nd</sup>	Huxian, Shaanxi (Lanzhou) and Jiajiang, Sichuan (Chengdu)	90052		95588	
3 <sup>rd</sup>	Jinzhou, Liaoning (Shenyang)	90053		93356	Fighter and ground attack pilots
4 <sup>th</sup>	Shijiazhuang, Hebei (Beijing)	90054		93670	
5 <sup>th</sup>	Wuwei, Gansu (Lanzhou)	90055		94129	
6 <sup>th</sup>	Zhuozhou, Hebei (Beijing)	90056		93706	
13 <sup>th</sup>	Bengbu, Anhui (Nanjing)	90057		94580	

#### CURRENT FLIGHT ACADEMY BACKGROUND:

The following paragraphs and Table 40 provide information about the history of the three current flight academies, each of which was reorganized in August 2011 by merging six existing flight academies. The table includes their current name, former flight colleges, current subordination, MOE code, grade, and their current mission.<sup>808</sup> It is not clear what the current MUCDs are. [Note: The 13<sup>th</sup> Flight College was renamed the Air Force Flight Instructor Training Base (空军飞行教官训练基地) on 28 April 2012 and was re-subordinated to the Air Force Aviation University, but it remains in Bengbu.<sup>809</sup>]

**Table 40: Current Flight Academies**

Flight Academy	Former Colleges	Subordination	MOE Code	Grade	Mission
Harbin	Merged 1 <sup>st</sup> and 3 <sup>rd</sup> Flight Colleges	Northern Theater Command Air Force	91027	Corps deputy leader	Transport, bomber, and tanker crews; fighter and ground attack pilots
Shijiazhuang	Merged 4 <sup>th</sup> and 6 <sup>th</sup> Flight Colleges	Central Theater Command Air Force	91028		Fighter and ground attack pilots
Xi'an	Merged 2 <sup>nd</sup> and 5 <sup>th</sup> Flight Colleges	Western Theater Command Air Force	91029		Transport, bomber, and helicopter crews

No information was found concerning the campuses associated with each of the three flight academies; however, even though two former colleges were merged to form a current academy and the former 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> colleges form the current main campuses (本部), the other three former campuses most likely still exist as branch campuses (分院).

#### ORGANIZATIONAL STRUCTURE:

Concerning the administrative and functional departments, since the beginning in the 1950s, each college, which was a division leader-grade organization subordinate to their respective MRAF HQ, was organized like an operational air division with a Headquarters Department (司令部), Political Department (政治部), Logistics Department (后勤部), and a Maintenance Division (机务处).<sup>810</sup>

It appears that the current structure is still the same as operational air units, which includes a Staff Department (参谋部), Political Work Department (政治工作部), and a Support Department (保障部).<sup>811</sup> In addition, each academy is now subordinate to their respective Theater Command Air Force (TCAF) HQ, as shown in Table 40.



Whereas each college previously had a basic trainer regiment(s) (初级教练团) and an advanced trainer regiment(s) (高级教练团), the current colleges now have subordinate training brigades (训练旅) shown below. Altogether, there are 14 identified training brigades, which are identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> training brigades.<sup>812</sup> Each brigade has three subordinate flight groups (飞行大队), each of which is considered a “class” (班).

#### AVIATOR CADET EDUCATION AND TRAINING SYSTEM, 2004-2012:<sup>813</sup>

When the PLAAF created the AFAU in 2004, it continued what it called the “Three Levels and Five Phases” training program, but several adjustments were made, including introducing two new training programs, known as the “2.5 + 1.5” model and the “4+1” model.

The “Three Levels and Five Phases” training program referred to the training pipeline for high school graduate and outstanding enlisted aviation cadets.<sup>814</sup> The three levels included: (1) education and training at aviation academic institutions, after which cadets received a bachelor’s degree, (2) one year of transition training at a transition training base, and (3) training at an operational unit in the unit’s aircraft. The five phases included: (1) basic education, (2) 110 hours of flight training in a basic trainer, (3) advanced trainer training, (4) combat aircraft transition training, and (5) combat application training.

The “2.5+1.5” model referred to receiving 30 months (two and a half years, or the “2.5” component) of basic education and aviation theory at the AFAU.<sup>815</sup> Some cadets also received six months of follow-on training in a basic trainer (CJ-6) at the university’s Flight Basic Training Base. During those six months—much of which occurred on sod runways—cadets conducted cockpit familiarization and simulator training as well as takeoffs, landings, navigation, aerobatics, and instrument flying before and after they flew their first solo. At the end of 30 months, aviators were assigned to one of the existing flight academies for 18 months (one and a half years, or the “1.5” component), where they spent the first half in a basic trainer regiment and then shifted to an advanced trainer regiment. Although not stated, the cadets were most likely assigned to a fighter/attack or bomber/transport flight college based on their academic rating. The percentage of cadets assigned for each aircraft was also most likely based on the percentage of each aircraft in the overall PLAAF order of battle.

Once cadets moved to a basic trainer regiment and then to an advanced trainer regiment in one of the flight academies, fighter and attack cadets conducted the same type of skills training as in the CJ-6. After conducting their first solo, they flew two-ship formations, barrel rolls, diving, loops, Immelmans, and high- and low-altitude flights plus flying at night and in inclement weather. Of note, even after they flew their first solo, instructors continued to fly with the cadets. Fighter and attack cadets only recently began conducting any type of tactics training in the K-8 trainer, such as four-ship formations and dropping bombs and firing guns at ground targets. Bomber cadets conducted training in night optical bombing, radar bombing, and deploying to other airfields.

During the 18 months of flight training under this model, cadets flew approximately 200 to 220 hours. Cadets were allowed to fly multiple sorties per day for a maximum of five hours. Inclement weather affects how often the cadets can fly.

In 2004, the PLAAF introduced a “4+1” test program, which was officially implemented in 2009 and initially overlapped the “2.5+1.5” program. The “4+1” program refers to increasing the basic education to three and one-half years plus six months of basic trainer (CJ-6) education and training at the AFAU (a total of four years), which is followed by one year of intermediate (K-8) and advanced flight training at one of the PLAAF’s flight academies.

As discussed earlier, in 2011, the PLAAF instituted a program to provide some cadets with the first three years of education at three PLAAF National Defense Student programs in three Beijing universities. It is not clear what their requirements are after returning to the AFAU for their fourth year, but they most likely receive their basic flight training (CJ-6) along with parachute and survival training. They are most likely separated from the high school graduate cadets during this period. In addition, on completing their final year at the AFAU, they receive the rank of first lieutenant and the grade of company leader (正连职) before transitioning to one of the three flight academies.<sup>816</sup>



Following the merging of the six flight academies into three in 2011, the PLAAF implemented a new “four-phase” system, which is called the “4+1+1 model” and the “4+1 model,” where each number refers to the number of years it takes to complete the program.<sup>818</sup> The “four phases” are: academic education (学历教育), professional education (任职教育), combat aircraft transition training (作战飞机改装训练), and combat application training (作战应用训练). (Note: Even though the model has been identified as 4+1+1 and 4+1, since 2012 the second phase can last from one to two years depending on the type of unit and aircraft.)

Of particular note, historically, it has taken new pilots a total of ten years, including basic education, flight college training, transition training, and unit training, to become an experienced pilot with the ability to independently carry out every type of combat mission. The goal of implementing the revised four-phase education and training cycle is to cut the total time down to seven years, so that new pilots are better prepared once they enter their operational aircraft.<sup>819</sup> The four phases are discussed in more detail as follows:

#### *PHASE 1*

Phase 1, which is identified as the academic education phase, is organized into two categories. The first category, which is organized separately into education and training, includes male and female high school graduates and outstanding male enlisted personnel. The second category includes male cadets who spend their first three years in one of the PLAAF’s National Defense Student Programs and their fourth year at the AFAU. Upon graduation from the university, the National Defense students receive two bachelor’s degrees (双学)—one from the National Defense Student Program university and one from AFAU—and then begin their flight training at one of the three flight academies. There is little information concerning the National Defense students; however, it appears that they are separated from the high school graduate cadets once they return to the AFAU for their final year and, most likely, during their flight training at one of the flight academies.

Education and training for the first category consist of academic education and basic flight training, which all male and female aviation cadets receive for four years at the AFAU. The goal is to have “high school graduates transition to military cadets, who then transition to aviator cadets.” The first three and one-half years of education and training is divided into two types. The first type includes basic training, drill training, small arms training, chemical defense training, and physical training. Cadets also receive parachute training and survival training during their first year. The second type consists of political education, cultural education, military theory, and, most important, aviation basic theory. Cultural education includes physics, English, computer programming, and cultural knowledge. Aviation theory and military theory education includes aerodynamics, aircraft flight mechanics, airborne navigation, air force weather, aircraft structure and systems, aircraft power plants, aircraft instruments, electronics, communications, and navigation instruments, flight rules, flight training psychology, flight safety, and aviation electronic countermeasures.

The last six months includes 70 flight hours in the CJ-6 basic trainer at the university’s Flight Basic Training Base. It is not clear when the decision is made for certain cadets to transition from the pilot cadet track to crew member cadet track to become navigators, communicators, aircrew mechanics, or gunners on transports/bombers. Any cadets who wash out for either physical or technical reasons are offered the opportunity to transition to one of the PLAAF’s other academic institutions. During this phase, cadets receive special treatment compared to other academic institution cadets, including aviation specialty billet allowance (航空飞行专业岗位津贴), aircrew meal (空勤伙食), and special equipment (特种装具).<sup>820</sup> The graduates from category one receive a bachelor’s degree in engineering.<sup>821</sup> Upon graduation, cadets from both categories are assigned the grade of company deputy leader (副连长) with the rank of first lieutenant before transitioning to one of the three flight academies.

## PHASE 2

Since 2012, Phase 2, which is identified as the professional education phase, takes place for one to two years at one of the PLAAF's three flight academies and is organized based on the final operational aircraft the new pilots will fly—fighter, ground attack, multirole, bomber, transport, or helicopter. (Note: They are still called *xueyuan* (学员), but the translation for this phase is “student” versus “cadet”.)

After the students arrive at the flight academy, they spend two to three months receiving transition aviation theory education before they begin their flight technique training in intermediate and advanced trainers. Flight technique training, which is normally the last step and the most important, is divided into the following three phases: (1) ground-based training, including sitting in a cockpit and simulator training; (2) flying with a flight instructor, and (3) solo flight training. Each phase is implemented according to the flight training subjects (飞行科目) and quality requirements within the necessary Outline of Military Training and Evaluation (OMTE/军事训练与考核大纲). In order to move to the next phase, the students must pass the necessary examination(s). Flight training subjects normally consist of the following components: takeoff and landing routes, airspace, instruments, formation flying, simple aerobatics, and navigation.

Each student averages 150 to 200 flight hours (飞行小时). The hours are organized as shown below:

- Fighter pilots fly 150 hours in a K-8 intermediate trainer, which is broken down into 112.3 hours with a flight instructor (74.9 percent) and 37.7 solo hours (25.1 percent); and 103 hours in a JJ-7 advanced trainer. (Note: Prior to the 2011 restructuring, the K-8 was identified as an advanced trainer.) The PLAAF's goal is to incorporate the L-15 trainer into this phase.
- Ground attack pilots fly 150 hours in a K-8 and 103 hours in a Q-5 trainer.
- Bomber and transport pilots fly 140 hours in a Y-7 trainer. In April 2015, the PLAAF assigned bombers to the Harbin Flight academy for the first time since they were removed in 2007, which indicates that bomber aviator students will begin training in the bombers as well as in the Y-7.<sup>822</sup>
- Bomber and transport navigation crew members spend one year receiving theory education and training, after which they then train with bomber and transport pilots in a Y-7 trainer.
- Helicopter pilots receive training in a Z-9 helicopter.

Upon completion of the program, each pilot receives a bachelor's degree in military science and is called a “double bachelor's” (双学) officer.

## PHASE 3

During Phase 3, which is identified as the combat aircraft transition training phase, the new graduates are deployed to their operational unit, where they are assigned to a transition training flight group and receive combat aircraft transition training in an advanced trainer for six months. They are no longer called students.

During this phase, the pilots receive flight technique training, “four-weather” training (e.g., day and night in different weather conditions), instrument flight regulations (IFR) and visual flight regulations (VFR), instruction in combat basic training subjects, special situation training, and campaign and tactics flight training.

In addition, some pilots are selected for training as a WSO, where they receive five months of theory education and training, which is followed by transitioning into the unit's aircraft. Of note, the PLAAF did not begin specialized training for WSOs in two-seat multirole aircraft (JH-7) at operational units until early 2011.<sup>823</sup> Previously, and in many cases today, pilots merely switch between the front and rear seats without specialized training as a WSO. It is not clear how far this program has progressed, but it appears that not all aircraft have designated WSOs who do not also fly the aircraft, and that some pilots who have not received dedicated WSO training still shift between the front and back seats.

#### PHASE 4

Phase 4, which is identified as the combat application training phase, occurs in the transition training flight group and consists of combat application training, which takes an additional six months. This phase includes basic tactics, tactics application, combined-arms combat, and joint combat training in the unit's operational aircraft. Upon completion of this phase, the pilots are assigned to their permanent flight squadrons, where they finally transition into their operational aircraft.

Once they complete this phase, they are then allowed to become part of the unit's combat Table of Organization (战斗序列) and begin to train for the unit's missions.

#### FACILITIES:

Although no information was found concerning the current facilities, historically, the previous colleges had airfields, research and teaching labs (教研室), testing labs (实验室), practice labs (实习室), libraries, physical fitness centers and fields, as well as the relevant basic, intermediate, and advanced trainer aircraft.<sup>824</sup>

#### PILOT CADET RECRUITMENT:

The following bullets show the number of new pilot cadets the Air Force recruited during 2017 and 2018 from about 120,000 high school graduates who applied each year:

- 2017: 1,100 new cadets, including 1,075 male and 35 female cadets, who were part of the 11<sup>th</sup> group of female cadets since the first group was recruited in 1951.<sup>825</sup>
- 2018: 1,480 new male cadets<sup>826</sup>

#### LEADERSHIP AND STAFF:<sup>827</sup>

- Commandant:
  - o Harbin (Wu Huiming (吴惠明))
  - o Shijiazhuang (Unknown)
  - o Xi'an (Unknown)
- Political Commissar:
  - o Harbin (MGEN Liu Mengyou (刘梦友))
  - o Shijiazhuang (MGEN Ge Shanbin (葛善斌))
  - o Xi'an (MGEN Wang Wei (王伟))

## SECTION 3-30: AIR FORCE MEDICAL UNIVERSITY

### CHINESE NAME AND ACRONYM:

空军军医大学 (第四军医大学). No acronym was found.

- Official English name(s): In June 2017 the PLA officially changed the name of the PLA Fourth Military Medical University to become the Air Force Medical University.<sup>828</sup> However, it is still identified in some media as the PLA Fourth Military Medical University and as the Air Force Medical University (Fourth Military Medical University).<sup>829</sup> It is also identified as the Military Medical University of the Air Force.<sup>830</sup>
- English Acronym: AFMU<sup>831</sup> and FMMU<sup>832</sup>



### MOE CODE:

In 2017, a new code of 91030 was assigned.<sup>833</sup> The previous code from 2008 was 90032.

### TYPE OF INSTITUTION:<sup>834</sup>

It is identified as both an Academic Education (学历教育) and Professional Education (任职教育) institution.

### OFFICIAL WEBSITE:

<https://www.fmmu.edu.cn/>; English website is <https://www.fmmu.edu.cn/en/>.

[Note: Given that this institution has both an official Chinese website and an official English tab, we were able to find much more information than for most of the other institutions. In addition, given the amount of information, the format for this profile includes additional information and merges some of the information that is divided in other profiles.]



### BACKGROUND:<sup>835</sup>

Overview: In 1951, the PLA created five Military Medical Colleges (军医学院) identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 6<sup>th</sup> Military Medical College. By the end of the 1950s, they had been reorganized into five Military Medical Universities (军医大学) identified as the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 7<sup>th</sup> Military Medical University.<sup>836</sup> Until 2016, they were all subordinate to the General Logistics Department. In 2016, they were resubordinated to the CMC Training and Administration (Management) department. In June 2017, they were resubordinated to their respective service headquarters. Over the years, they have been merged, abolished, changed locations, and been renamed, such that, as of 2017, there are three remaining Military Medical Universities as shown below:

- Army Medical University (陆军军医大学), which is also known as the PLA 3<sup>rd</sup> Military Medical University (解放军第三军医大学), and is located in Chongqing
- Air Force Medical University (空军军医大学), which is also known as the PLA 4<sup>th</sup> Military Medical University (解放军第四军医大学), and is located in Xi'an, Shaanxi Province
- Naval Medical University (海军军医大学), which is also known as the PLA 2<sup>nd</sup> Military Medical University (解放军第二军医大学), and is located in Shanghai.

The university is a national key university with the responsibility of training senior- and mid-level medical professionals for the Air Force. In 1954, it was established in Xi'an, Shaanxi Province, by merging the former Fourth Military Medical University (第四军医大学) in Xi'an with the former Fifth Military Medical University (第五军医大学) in 1954 in Nanjing, Jiangsu Province. In 2017, it was then resubordinated under the Air Force after incorporating the Air Force Aeromedicine Institute (空军航空医学研究所) located in Beijing and renaming it as the Air Force Medical University (空军军医大学). The University was accredited nationally as one of the first batch of 20 key universities by the Chinese Communist Party's (CCP) Central Committee in 1959, one of key academies under construction by the PLA in 1995, one of first batch of 22 key academies under construction of "Project 211" in 1997, and one of the academies under construction of the national first-rate disciplines in 2017. The university is located in the ancient city of Xi'an.

The university presently has three education levels, i.e. bachelor's degree, master's degree and professional education. As the first batch of units with doctoral and master degree authorization approved by the State Council, the University has 11 first-level disciplines authorized for doctoral degree, 12 first-level disciplines authorized for master's degree, and ten postdoctoral research stations.

#### CAMPUSES AND LOCATIONS:<sup>837</sup>

The main campus (本部) is located at No. 169, Changle West Road, Xi'an, Shaanxi Province (西安市长乐西路169号). Although the university absorbed the Air Force Aeromedicine Institute in Beijing in 2017, no references to the institute were found calling it a branch campus.



#### GRADE:<sup>838</sup>

Corps deputy leader (副军级)

#### SUBORDINATION:<sup>839</sup>

PLA Air Force HQ

#### FACILITIES:<sup>840</sup>

The main campus covers over 165 acres (1,000 mu). The library with an area of more than 12,000 square meters has a collection of over 600,000 books, nearly 1,000 printed journals in Chinese and English, and 40 databases in variety. At present, it has four sets of wired networks and one wireless network, covering the whole campus. It has teaching facilities such as the Teaching Specimen Exhibition Hall (教学标本陈列馆), the Computer Teaching Laboratory (计算机教学实验室), the Foreign Language Teaching Center (外语教学中心), the Basic Medicine Teaching Experiment Center (基础医学教学实验中心), the Sports Venue (体育场馆), and the Swimming Pool (游泳馆), and a number of advanced facilities, including digital interactive teaching system, virtual experiment teaching system, clinical skill simulation training system, dual source spiral CT, intra-operative NMR, surgical robot, PET/CT, PET/MR, helical tomotherapy system, and stereotactic radiotherapy system (拥有数码互动教学系统, 虚拟实验教学系统, 临床技能模拟训练系统, 双源螺旋CT, 术中核磁, 手术机器人, PET/CT, PET/MR, 螺旋断层放射治疗系统, 立体定向放射治疗系统等大批先进的设施设备).



#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院):<sup>841</sup> The university has the following single subordinate *xueyuan*, which normally translates as academy or college, but the Chinese have translated it as school. Note that the entire English website for this university is somewhat confusing. Specifically, as will be discussed for each entry below, the English website uses the term School but the Chinese term is *xi* (系), which translates as department. As such, the schools and departments have been divided according to the Chinese term not the English term.
  - The School of Basic Medicine aka Basic Medical School (基础医学院), which is the unit mainly responsible for the teaching and research of basic medicine and basic courses, as well as the educational administration of officers and short-term trainees. It is composed of 23 sub-units, including 17 departments and six cadet regiments. The school administrative institution contains teaching and research office and political work office. There are two national first-level disciplines with the post-doctoral research stations, namely, basic medicine and biology, which are among those disciplines that were first authorized to confer the master's and doctoral degree. Besides, there are nine national second-level disciplines in the school, of which six are national key disciplines. The school possesses a national transformational center of molecular medicine and a national teaching demonstration center. All these disciplines have developed into four superior disciplinary groups featuring neuroscience, systemic medical biology, molecular medicine, as well as immunity and anti-infection.
- Subordinate NCO School (士官学校): No information was found concerning any training or education for NCOs.
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school. The same departments were identified in 2018.<sup>842</sup> It is surprising, however, that the Political Department has not changed to a Political Work Department (政治工作部). It is also surprising that the departments have not been adjusted to those of NDU, as discussed in the Introduction Section.
  - Training Department (训练部) that serves as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which is responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>843</sup> (aka Basic Department / 基础部).
- Academic departments (系): With the exception of the first two entries for the Department of Aerospace Medicine and the Department of Military Medical Psychology, the entries for the remaining four academic departments are somewhat confusing because the English website uses School throughout the entry, but the Chinese title uses the Chinese term *xi* (系), which is a department.
  - The Department of Aerospace Medicine (航空航天医学系):<sup>844</sup> This entry is somewhat confusing because the English website uses School of Aerospace Medicine as the title for the entry, but the entire article uses department, which coincides with the Chinese term *xi* (系), which is a department.
    - The Department of Aerospace Medicine was founded in 1960 in the Fourth Military Medical University. It was originally named the Department of Aviation Medicine and was renamed twice as the Department of Air Force Medicine in 1963 and the Department of Aerospace Medicine in 1999. The Department is the only higher education institution in China which is qualified to confer Bachelor's, Master's and Doctoral degrees in Aerospace Medicine.
    - The department owns a Key Laboratory of the Ministry of Education, a PLA Key Laboratory, and a PLA Key Medical Laboratory. It has the only innovation team in the field of Aerospace Medicine, namely The Innovation Team of the Ministry of Education. In 2014, the Army Aviation Medical Research Institute was jointly founded by the Department and Army Aviation Department of the former PLA General Staff. In 2018, Shaanxi Technology Collaborative Innovation Center for Aerospace Medical Service was established.



- It has two comprehensive buildings covering an area of over 9,000 square meters, mainly used for teaching, researching, medical care, training and medical evaluation. The buildings contain 38 classrooms and laboratories, including the Lab for Anti-G Physiological Training, Lab for Visual Training and Medical Evaluation, Pilots Physiological and Psychological Training Lab, Space Cellular and Molecular Biology Lab and High-Altitude Protection Lab, occupying an area of more than 4,700 square meters. Also installed are some large equipment such as explosive decompression of the low temperature composite tank, hyperbaric oxygen chamber, ejection trainers, short arm centrifuge, three-dimensional roller, which are worthy of more than 70 million RMB. In 2016, the department received the title as Experimental Teaching Demonstration Center for Aerospace Medicine of Shaanxi Province.
- The Department has a team of outstanding faculty, including 21 advisors of graduates, among whom eight are advisors of PhD candidates.
- The Department has made remarkable achievements in training medical professionals and is always considered the cradle of national and military aerospace medical professionals. Over these years, a multi-level and multi-track personnel training system has taken shape, which incorporated three levels of students including undergraduates, post-graduates and PhD candidates in Aerospace Medicine. To supplement this system, the department also launched a series of professional training programs, including the National Aerospace Medical Professional Training Course, Army-wide Air Transport Evacuation Training Course, Army Joint Logistics Hospital and Sanatorium Aircrew Identification Backbone Training Course and Naval Vessel Medical Aviation Professional Training Course. Up to now, it has trained over 5,600 undergraduates, 300 post-graduates and 130 doctoral students majoring in Aerospace Medicine. In addition, it has enrolled over 4,500 aviation medical students from Air Force, Navy, Army and Civil Aviation for on-the-job training and 19 military medical students from oversea countries.
- o The Department of Military Medical Psychology (军事医学心理学系):<sup>845</sup>
  - The former Department of Military Medical Psychology can be traced back to the Psychology Teaching and Research Office of the Aerospace Medical Department of the Fourth Military Medical University, founded in 1960. It was renamed as the Psychology Department of the School of Aeronautics and Astronautics Medicine, Fourth Military Medical University; Department of Medical Psychology, Fourth Military Medical University; and Department of Medical Psychology, Air Force Medical University. In November 2017, it was officially renamed as Department of Military Medical Psychology, Air Force Medical University.
  - It was the first to establish a systematic psychological teaching and research institute (1960), and the first to offer undergraduate psychology courses (1963). It was also the earliest authorized discipline for a Master's Degree in Psychology in the PLA's (1993), and the PLA's only key laboratory of Military Medical Psychology (2001). In addition, it was the only authorized discipline of the doctoral Degree in Psychology in the PLA (2003), and the ministry of national defense's recruitment psychological testing technology center (2006). It also served as the only first-level discipline of psychology (2010) and the only post-doctoral research station of psychology in the PLA (2012). In the latest news of the fourth round of national discipline assessment announced by the Ministry of Education Degree and Graduate Student Education Development Center, our department as the only military educational institution on the list, ranked fourth among the eight grades assessed, and ranked 11th out of 51 institutions (23 doctorates and 28 master's degrees) that participated in the assessment.
  - The Department of Military Medical Psychology has one administrative office, four teaching and research offices (namely, Basic Psychology Office, Clinical Psychology Office, Aerospace Psychology Office, and Military Psychology Office), and one teaching and experimental center. Laboratories

of the department cover an area of 1,500 square meters, serving the experimental functions of psychological evaluation, psychological training. There are also brain electrical physiological labs, eye movement laboratories, biofeedback laboratory, virtual reality laboratory, flight illusion laboratory, laboratory for psychological counseling, psychotherapy and behavior observation, with a collection of instruments and equipment which worth more than 13 million RMB.

- Currently, the department has 26 staff members, including four professors, four associate professors, three doctoral advisors and seven master's degree advisors. More than 80% of the advisors have a PhD in either applied psychology or medicine. More than 75% have the experience of studying abroad in the United States, Britain, Japan, Australia, and Sweden, etc. Two people went to Israel for short-term training in military psychology.
  - The Department of Military Medical Psychology has enrolled undergraduate students in Clinical Medicine (or Psychology) since 2012. At the same time, it cultivated Applied Psychology majors, Medical Psychology master's and doctoral candidates. It undertook educational tasks and training tasks of approximately 2,000 hours per year. A total of five postdocs (including postdocs within working period), 79 doctoral candidates, 259 master's degree candidates (1 has won the award of National Excellent Master's Degree Thesis), 29 bachelor's degree candidates were cultivated here, and more than 12,000 psychological professionals have been trained for the state and the PLA.
  - The main research directions of the Department of Military Medical Psychology are psychological selection, post classification of military personnel, combat psychology and information trauma protection, and mental health maintenance in special military environment. Since the tenth Five-Year Plan period (2001-2005) of the country, the Department of Military Medical Psychology has presided over and undertaken the National Science and Technology Support Plan and the National Key Basic Research Development Plan (Project 973), National High-tech Research and Development Plan (Project 863), Chinese Manned Space Program (Project 921), the State Natural Science Foundation and other national scientific research projects, as well as more than 30 military scientific research projects at various levels, including major and key research projects on logistics medicine, special projects on defense science and technology innovation special zones. A total of more than 170 million RMB was received as funds for scientific researches. It also presided over the development of China's first psychological selection and recruitment testing system, the first military cadets' psychological selection system, and presided over and participated in the formulation of eight national military implementation standards for the psychological selection of pilots, astronauts, enlisted citizens, cadets and recruits. In recent years, 90 academic papers and 15 monographs have been published in SCI/SSCI/EI journals. Research groups of the department have won the First Prize of National Science and Technology Progress Award (2010) and the First Prize of Military Science and Technology Progress Award (2005 and 2008) as the first contribution unit. It also won the Chinese Industry-Institution-Research Cooperation Innovation Award (2014) and have won 17 national software copyright.
- o The School of Military Preventive Medicine (MPM / 军事预防医学系):<sup>846</sup> This entry is somewhat confusing because the Chinese name uses the term *xi* (系), which is a department, but the official English website calls it a school.
- The School of Military Preventive Medicine (MPM) traces its root to the Department of Public Health of the Fifth Military Medical University. The Department was established in 1954 when the Fourth and Fifth Military Medical University were merged. It was renamed the School of Military Medical Service and Statistics, and the School of Military Preventive Medicine in 1992 and 2002, respectively. The MPM is a State Key Discipline, a key construction discipline of "211 Project", an authorized unit of doctoral degree of national first-level Public Health and Preventive Medicine, a

- postdoctoral station of Public Health and Preventive Medicine, and a “Research Station of Talents” of the former General Logistics Department. The school has one “Innovative Research Team of the Ministry of Education”, one “Key Laboratory of the Ministry of Education”, three “Key Medical Laboratories of PLA”, three “Key Construction Disciplines of PLA”, two key construction disciplines of “530 Project” of the former General Department of Logistics, PLA, and one “Shaanxi Provincial Key Laboratory.” The school ranks B+ in the latest evaluation of national first-level disciplines in “Public Health and Preventive Medicine.”
- The school has seven departments (教研室), including Department of Military Occupational and Environmental Health (军队劳动与环境卫生学教研室), Department of Military Epidemic Prevention and Epidemiology (军队防疫与流行病学教研室), Department of Radiation Medical Protection (辐射防护医学教研室), Department of Military Toxicology and Medicine of Chemical Defense (军事毒理学与防化医学教研室), Department of Military Health Statistics (军队卫生统计学教研室), Department of Military Health Education and Management (军队健康教育与管理教研室), and Department of Health Care Management and Medical Education (生事业管理与医学教育教研室). It also has laboratories with a total area of 5,260 square meters. It is a school of public health with comparatively complete disciplines and well-equipped research facilities. Currently, the school has 94 full-time faculty members (military and civilian), including 16 professors, 27 associate professors, 15 doctoral advisors and 23 master’s degree advisors. To date, it has established international partnerships with famous universities and research institutions, including Columbia University, New York University, Purdue University, and Kyoto University, etc. Over 40 members have more than one year of experience of overseas training.
  - The school has three undergraduate specialties, including Preventive Medicine, Nutriology, and Health Service Management; and seven post-graduate specialties, including Occupational and Environmental Health, Nutrition and Food Hygiene, Epidemiology and Health Statistics (research interest in both Health Statistics and Epidemiology), Hygiene Toxicology, Military Preventive Medicine, Radiation Medicine, Social Medicine and Health Service Management. In recent years, the school has cultivated more than 400 students.
  - Since the 12th “Five-Year” plan (2011-2015), it has received over 170 research projects at the national, ministerial, and provincial levels, with a total amount of funding of 250 million CNY, including one project of Chief Scientist for national “973 Project,” 77 projects of National Natural Science Foundation of China (including four key programs), two key programs of National Science and Technology Support Project, six State Key Science and Technology Special Projects, six National High Tech R&D (863) Program projects and four major or key projects of Military 12th “Five-Year” plan.
- o The School of Biomedical Engineering (军事生物医学工程学系):<sup>847</sup> This entry is somewhat confusing because the Chinese name uses the term xi (系), which is a department, but the official English website calls it a school throughout the entry.
- The School of Biomedical Engineering was originally established in 1986 as the Department of Medical Electronic Engineering, offering four-year programs for undergraduates majoring in medical electronic engineering. In 1993, it was expanded and renamed as the School of Biomedical Engineering. The school was authorized to offer master’s degree in 1990 and doctoral degree in 1998 and was accredited to be a postdoctoral research station in the field of Biomedical Engineering (BME) in 2000.
  - The school consists of five departments (教研室), including Department of Military Medical Information Technology (军事医学信息技术教研室), Department of Medical Electronics (医学电子学教研室), Department of Medical Electronic Engineering (医学电子工程学教研室), Department

- of Military Medical Equipment and Metrology (军事医学装备与计量学教研室), and Experiment Teaching Center (军事生物医学工程教学实验中心).
- The school’s faculty members include an academican of China Engineering Academy, strategic planning consultants for the nation and the military, special allowance recipients of the State Council, teaching and research experts with outstanding contributions to the PLA and to Shaanxi Province. The School offers undergraduate and post-graduate courses for bachelor’s, master’s and doctoral degrees, in Biomedical Engineering.
  - In the past five years, the School has gained projects supported by such funds as Special Fund for Research on National Major Research Instruments of NNSFC, the national key technology specialty program, key technologies R&D program, and medical technology program of PLA, worth over 160 million RMB yuan in total.
- o The School of Pharmacy (药理学系):<sup>848</sup> This entry is somewhat confusing because the English website uses School of Pharmacy as the title for the entry, but the entire article uses department, which coincides with the Chinese term *xi* (系), which is a department.
- The School of Pharmacy was founded in October 2004. It is composed of eight departments (教研室), including the Department Office (系机关), Department of Medicinal Chemistry and Pharmaceutical Analysis (药物化学与药物分析学教研室), Pharmacology (药理学教研室), Chemistry (化学制药学教研室), Chinese Materia Medica and Natural Medicines (中药与天然药物学教研室), Biopharmaceutics (生物制药学教研室), and Pharmaceutics and Pharmacy Administration (药剂学与药事管理学教研室).
  - The School of Pharmacy was in the first batch of organizations involved in the “211 Project”, the “2110 Project” of the Army, and the “530 Project” of the General Logistics Department. It also involves the “2011 Plan” and national “Double First-class” plan. There are eight national, military, and provincial key laboratories and engineering centers, which cover a total area of 12,000 square meters and equipment value of 120 million yuan.
  - Since the School of Pharmacy was approved as a doctoral discipline in Pharmacology in 1986, a postdoctoral research station in 2007, the first batch of professional master degrees in Pharmacy and Chinese Materia Medica in 2010 and doctoral degree discipline in Pharmacy and Chinese Materia Medica in 2011. As such, it has formed a multi-level training system including all of these programs for undergraduates, masters, doctoral students and continuing education. Overall, the program includes nearly 600 bachelor’s students, 400 graduate students, and more than 30 visiting scholars.
  - It has formed an innovative academic team led by academicians, guided by respected senior professors, and characterized by outstanding young and middle-aged scholars. There are more than 40 professors and associate professors, of which 81.5% are under 45 years old, 87% are doctors, and 38.6% have overseas study experience.
  - The School has invited many domestic and overseas scholars and academicians to give lectures or as guest professors. The School hosted the China Pharmacology Conference, the World Pharmacological Conference-Xi’an, the International Conference on Drug Metabolism, the National Pharmacology Teaching Reform Seminar, the National Industrial Biochemistry and Molecular Biology Academic Conference, the National Medical and Pharmaceutical College Teaching Reform and Micro-course seminar, Qinba Mountain Area Chinese Medicine Development Collaborative Innovation Center kick-off meeting and many other provincial academic annual conferences.
- o The School of Nursing (护理系):<sup>849</sup> This entry is somewhat confusing because the English website uses School of Nursing throughout the entry, but the Chinese title uses the Chinese term *xi* (系), which is a department.
- The School of Nursing was established in 1992, whose history can be traced back to the nursing course of Medicine School in the Central University from 1935. It is the home of advanced nursing talents, which has trained more than 15,000 excellent nurses for the state and the PLA. It is one of



- the first batch of nationally authorized master's degree as a first-level discipline, and an important component in the construction of the national "project 211" and the military "project 2110."
- At present, the School of Nursing has four disciplines: Basic Nursing, Military and Disaster Nursing, Clinical Nursing, and Humanistic Nursing, including two provincial experimental teaching demonstration centers and three affiliated hospitals, carrying out the teaching of undergraduate, post-graduate and continuing education. There are 43 professors, more than 20 of whom have served in various academic organizations at the national and military levels (including 14 vice-chairmen), and four of whom are the owners of the silver award of military education. The School of Nursing has the following departments: Department of Clinical Nursing, Department of Nursing Management, and Department of Basic Nursing.
  - In recent years, the School of Nursing has undertaken or participated in 30 national, military, and provincial scientific research projects and received over one million yuan of scientific research funding.
  - Key labs (重点实验室):<sup>850</sup> The university has at least two State Key Labs (国家重点实验室), 15 All-Army Medical Specialty Key Labs (全军医学专业重点实验室), 13 All-Army Medical Key Labs (全军医学重点实验室), and one Shaanxi Province Key Lab (陕西省重点实验室).
  - Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>851</sup> The university has multiple research labs, two National Clinical Research Centers (国家临床医学研究中心), and multiple teaching and research labs.
  - Graduate School (研究生院)<sup>852</sup>
    - o AFMU launched its graduate programs in 1962 and 31 graduate students were trained between 1962 and 1965. After the restoration of China's graduate education in 1978 following a 13-year break, the university restarted its graduate programs. It became one of the first batch of national universities authorized to confer master's and doctoral degrees in 1981. A pilot Graduate School was founded with the approval of the Ministry of Education in June 2000. The official Graduate School was founded in June 2001 and was accredited by the Ministry of Education in June 2004. The Graduate School is composed of admission and teaching division, discipline construction and academic degree division, and three regiments of graduates. The main tasks of the Graduate School consist of admission of post-graduates, career guidance, teaching and academic development, conferment of academic degree, post-doctoral administration, discipline construction, construction of "World-top Disciplines and Universities," and construction of "Key Disciplines and Universities," "211 Project," "2110 Project," and "530 Project."
    - o The Graduate School has created a favorable environment for graduate education with the solid foundation of AFMU. At the university there are ten centers for post-doctoral researchers, 12 first-level disciplines with the certified conferment of academic doctoral degrees, 12 first-level disciplines with the certified conferment of academic master's degree, ten second-level disciplines beyond national directory, six interdisciplines, and 65 second-level or third-level disciplines. The university confers professional doctorate in two fields and professional master's degree in nine fields. The academic degree authorization system of AFMU is mainly based on medicine, covering such disciplines as pedagogy, science, engineering and management and it mainly confers academic degrees as well as professional degrees. It also covers some unspecified non-medical disciplines. At the university there are 15 national key disciplines, four national key cultivation disciplines, two national key laboratories, five construction programs of "Key Disciplines and Universities," 12 key disciplines supported by Phase III of "211 Project," four key disciplines supported by Phase III of military "2110 Project," and four key disciplines supported by Phase II of "530 Project" from the General Logistics Department. At the university there are two national research centers for clinical medicine, 20 military construction programs of national key clinical specialties, 28 specialized medical centers of PLA, 14 logistics laboratories of PLA, and 15 key medical laboratories of PLA.

- o AFMU has a high-caliber faculty, with 339 advisors for doctoral candidates and 579 advisors for post-graduates for master's degree. Among them there is one academican of the Chinese Academy of Sciences, four academicians of the Chinese Academy of Engineering, 33 Cheung Kong Scholars, seven chief scientists of "973 Project," 20 awardees of National Science Fund for Distinguished Young Scholars, and five members of discipline appraisal group of Academic Degree Commission of the State Council.
- o The Graduate School has cultivated more than 15,000 graduates for the PLA and China by July 2018, including over 4,200 graduates with doctoral degrees. A total of 1,042 graduate students are currently studying at the university, among whom 336 are doctoral candidates.
- Student teams (队 / 区队) and groups (大队):<sup>853</sup> The university's School of Basic Medicine has at least six student groups (学员大队), which it translates as regiments.

#### LEADERSHIP AND STAFF:<sup>854</sup>

- Commandant: MGEN Zhou Xianzhu (周先志)
- Political Commissar: SCOL Ji Zhihong (季志宏)
- Professors and Staff:<sup>855</sup> The university has about 200 professors (教授) and an unidentified number of associate professors (副教授). Of these, the School of Military Preventive Medicine has 16 professors and 27 assistant professors, and the Department of Military Medical Psychology has four professors and four assistant professors. Altogether, the university has 583 master's degree advisors (硕士生导师) and 312 PhD advisors (博士生导师). Additional information is available in the subsections for some of the schools and departments.

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified.
- Bachelor's degree (本科): four, five, and eight years<sup>856</sup>
  - o Bachelor's Degree Majors and Specialties: The university has the following programs: Eight-Year Programs (八年制) for Basic Medicine (基础医学), Clinical Medicine (临床医学), Aerospace Medicine (航空航天医学), and Stomatology (口腔医学); Five-Year Programs (五年制) for Clinical Medicine, Aerospace Medicine, Stomatology, Preventive Medicine (预防医学), Nutrition (营养学), Medical Psychology (医学心理学), General Medicine (全科医学); and Four-Year Programs (四年制) for Public Service Management (公共事业管理), Biomedical Engineering (生物医学工程), Biotechnology (生物技术), Pharmacy (药学), and Nursing (护理). Altogether, it has 16 undergraduate majors (本科专业). There are more than 2,500 undergraduates in the university. Approved by the Ministry of Education and the CMC, the school began recruiting students without military status in 2018.
  - o Table 41 provides a list of the university's five specialties for cadet recruitment in 2017, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), the number of years required (学制X年), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) that were found for 2017:<sup>857</sup>



**Table 41: Air Force Medical University Specialties**

Specialty Code	Specialty	Direction	Years	Training Type
071002	Biotechnology 生物技术	Military Medicine 军事医学	4	Non-CO
082601	Biomedical Engineering 生物医学工程	Military Medicine 军事医学 Aerospace Clinical Medicine 航空航天临床医学 Aerospace Clinical Medicine 航空航天临床医学 Psychologist 心理医师		
100201	Clinical Medicine 临床医学	Military Medicine 军事医学	5, 8	
100301	Oral Medicine 口腔医学			
100701	Pharmacy 药学			

- Master's degree (硕士)
  - o Master's degree majors and specialties:<sup>858</sup> The university confers professional master's degrees in nine unidentified fields. The university has 13 first-level disciplines authorized for master's degrees (硕士学位一级授权学科) and 77 second- and third-level disciplines (硕士学位二级 (三级) 学科)
- Doctoral degree (博士)
  - o Doctoral degree majors and specialties:<sup>859</sup> The university confers professional doctoral degrees in two unidentified fields. The university has 12 first-level disciplines authorized for PhD degrees (博士学位一级授权学科).

#### POST-DOCTORAL SPECIALTIES (博士后):<sup>860</sup>

The university has ten postdoctoral research stations (博士后流动站).

#### CONTINUING EDUCATION (继续教育):<sup>861</sup>

Continuing Education Department (继续教育组) is under the Office of Academic Affairs (教务处) and mainly responsible for Military Post Education (军队任职培训), Military Professional Education (军事职业教育),<sup>862</sup> Remote Education (远程教育), Adult Education (成人教育), and Foreign Exchange and Training (对外交流与培训). The Continuing Education Department was formed in 1999 as the Continuing Education Division (年更名为远程和继续教育处), which was renamed the Office of Correspondence Instruction (函授处) in 2004. It was renamed again as the Distance and Continuing Education Department (远程和继续教育处) in 2012. In 2017, it was renamed as the Office of Academic Affairs (教务处) according to the new staffing system. The ten main responsibilities are:

1. Responsible for the relevant work of Military Post Education;
2. To organize and guide related work of Military Professional Education;
3. Responsible for the declaration, planning, organization, implementation and supervision of Remote Education;
4. Responsible for military continuing medical education program and the management of credits;
5. Responsible for student status management and completion of education students in the military adult higher education;
6. Responsible for pre-job training of young teachers;
7. Responsible for the organization, implementation and management of military and civilian integration training programs;

8. Responsible for the management of the classroom of continuing education building;
9. Responsible for the application, use and management of Copy and play system;
10. Complete other tasks assigned by the superior.

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 5
- Number of years: four, five, and eight
- Gender (男, 女): Male and female for each specialty
- Total number of personnel recruited (合计): 313
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 22 of them
- Foreign language requirements (外语语种): English for all specialties
- Specialty categories (专业类别): All specialties were for non-commanding officers (非指). None were for commanding officers (指挥).

#### INTERNATIONAL EXCHANGES AND COOPERATION:<sup>863</sup>

The university's library has a Foreign Language Teaching Center. Over the past five years, the university successively assigned more than 2,000 persons to visit and attend international conferences, study abroad, or conduct academic exchanges in the international renowned teaching, medical and research institutes, and has received nearly 1,000 foreign experts and scholars for visiting the university. The university has established a cooperative relationship with nearly 30 academic institutions from America, England, Japan, France, Germany, Australia, and other countries. The Continuing Education Department has an Adult Education and Foreign Exchange and Training Teaching and Research Department. In addition, the Pharmacy School hosted the China Pharmacology Conference, the World Pharmacological Conference-Xi'an, the International Conference on Drug Metabolism, the National Pharmacology Teaching Reform Seminar, the National Industrial Biochemistry and Molecular Biology Academic Conference, the National Medical and Pharmaceutical College Teaching Reform and Micro-course seminar, Qinba Mountain Area Chinese Medicine Development Collaborative Innovation Center kick-off meeting and many other provincial academic annual conferences.

## SECTION 3-3 I: AIR FORCE LOGISTICS COLLEGE

### CHINESE NAME AND ACRONYM:

空军勤务学院. No acronym was found.

- Official English name(s): Based on multiple *CNKI* articles, it appears that the official English name is Air Force Logistics College even though the name best translates as Air Force Service College.<sup>864</sup> In addition, an entry for Air Force Duty College was found in the PLA's *Dictionary of Modern Military Education*, but this does not appear to be correct.<sup>865</sup> Of note, the Army and Navy use the same Chinese terms, but their institutions appear to be translated as Army Logistic University and Naval Service Academy.
- English Acronym: None was found



### MOE CODE:

In 2017, a new code of 91031 was assigned.<sup>866</sup> The previous code from 2008 was 90049.

### TYPE OF INSTITUTION:<sup>867</sup>

It is both an Academic Education (学历教育) and a Professional Education (任职教育) institution.

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>868</sup>

The following bullets provide information on the background of the college:

- October 1954: Created in Taiyuan, Shanxi Province, as the PLA Air Force Rear Service School (中国人民解放军空军后方勤务学校) and was subordinated to PLAAF HQ
- May 1958: Moved to Xuzhou, Jiangsu Province, and renamed the PLA Air Force Logistics School (中国人民解放军空军后勤学校)
- 1969: The school was abolished during the Cultural Revolution
- 1977: The school was reestablished with the same name
- June 1986: The name was changed to the PLA Air Force Service College (中国人民解放军空军勤务学院)
- August 1991: The name was changed to the Air Force Logistics Management Technical College (空军后勤管理技术学院) and it was subordinated to the General Logistics Department
- June 1993: The name was changed to the Air Force Logistics College (军空军后勤学院) and was resubordinated under PLAAF HQ
- 2003: The name was changed to the Xuzhou Air Force Logistics Academy/College (徐州空军后勤学院)
- August 2011: The name was changed to the Air Force Logistics College (空军勤务学院).

#### CAMPUSES AND LOCATIONS:<sup>869</sup>

The main campus (本部) is located at No. 85, Xige Street, Gulou District, Xuzhou, Jiangsu Province (江苏省徐州市鼓楼区西阁街85号). There does not appear to be any branch campuses.

#### GRADE:

Corps deputy leader (副军级).<sup>870</sup> It was apparently upgraded from division leader (正师级) when it was renamed in 2011.<sup>871</sup>

#### SUBORDINATION:

PLA Air Force HQ<sup>872</sup>

#### FACILITIES:<sup>873</sup>

The campus covers 215 acres (1,300 mu) and is divided into new and old teaching areas and living areas, with a total construction area of 329,000 square meters. It relies on cooperation between the Aviation POL Materials Department (航空油料物资系) and the POL Teaching and Training Base of the PLA's Shanghai Logistics Training Base (上海后勤训练基地). It also has the following facilities: a Comprehensive POL Training Field (油料综合训练场); 21 modern teaching specialization rooms (现代化教学专修室) that are equipped with 36 sets of simulation training systems (模拟训练系统); five virtual laboratories (虚拟实验室) such as "aircraft munitions" (航空机载弹药); 100 multimedia classrooms (多媒体教室); 19 teaching practice bases (教学实习基地); a logistics and equipment comprehensive training center(s) (后勤装备综合训练中心); academic lecture halls (学术报告厅); a military psychology training field (军人心理行为训练场); a sports field (塑胶运动场); a 400-meter obstacle training field (400米障碍训练场); a multi-variant aircraft flight support simulation training field (多机种飞行保障模拟训练场); a network training center (网训中心); 108 training fields and offices (实习场所); a light-weapons firing training range (轻武器射击训练场); and more than 100 modern classrooms (现代化教室). The total amount of information resources is 15 terabytes, the library area is 9,407 square meters with more than 400,000 books. All kinds of living facilities are advanced in function and complete in supporting facilities.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): It does not have any subordinate *xueyuan*.
- Subordinate NCO School (士官学校):<sup>874</sup> The college apparently provides some type of education training for NCOs (士官教育), including NCO professional technical education (士官职业技术教育) and cultivation training for recently selected NCOs (预选士官培训); however, no specific information was found.
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school as well as standalone academies/colleges and schools;<sup>875</sup> however, although some of them were noted in 2016, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department<sup>876</sup>
  - Political Department (政治部)<sup>877</sup>
  - School Affairs Department (院务部),<sup>878</sup> which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Social Science Department (社科部) identified in 2016<sup>879</sup>
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>880</sup> (aka Basic Department / 基础部).
  - Academic departments (系): The former Xuzhou Air Force Academy/College had eight unidentified academic departments.<sup>881</sup> In 2016 and 2018, the following ten departments were identified:<sup>882</sup>

- Air Materiel and Four Stations Dept (航材四站系), which includes oxygen generation, compressed air, battery charging, and power supply equipment
- Air Materiel Management Department (航材管理系)
- Airfield Engineering and Support Department (机场工程与保障系)
- Aviation Military Transportation Command Department (航空军交运输指挥系)
- Aviation Munitions Department (航空弹药系)
- Aviation Munitions Support Dept (航空弹药保障系)
- Aviation POL Department (航空油料物资系)
- Aviation Quartermaster and POL Dept (航空军需与燃料系 / 航空军需系)
- Finance Department (财务系)
- Flight Support Command Dept (飞行保障指挥系)
- Key labs (重点实验室):<sup>883</sup> It has 40 unidentified key labs associated with the 2110 Project (2110工程); however, one lab was identified as a Military Key Laboratory's Aviation POL Engineering Laboratory (航空油料工程实验室被评为军队重点实验室).
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>884</sup> No specific research labs were identified; however, the following research centers and teaching and research labs were identified:
  - o 3 research centers: Air Force Logistics Department's Party Committee's Innovation Theory Research Center (空后党的创新理论学习研究中心), Air Force Logistics Development Theory Research Center (空军后勤建设理论研究中心), Air Force Academic Institution Advanced New Theory Research Center (空军院校高新技术研究中心)
  - o 3 teaching and research labs: Basic Department's Mathematics Teaching and Research Lab (基础部数学教研室), Basic Department's Military Common Subject Teaching and Research Lab (基础部军事共同科目教研室), and the Social Science Department's Political Work Teaching and Research Lab (社科部政工教研室)
- Graduate School (研究生院):<sup>885</sup> The college has a Graduate School. It also has a Graduate Student Recruitment Office (研究生招生办公室).<sup>886</sup>
- Cadet/student teams (队 / 区队) and groups (大队):<sup>887</sup> The college has a Cadet 1<sup>st</sup> Group (学员一大队), 2<sup>nd</sup> Group (学员二大队), and 4<sup>th</sup> Group (四大队), each of which has a Political Commissar indicating it is a regiment-level organization. The 4<sup>th</sup> Group (四大队) has a subordinate 10<sup>th</sup> Battalion Large 1<sup>st</sup> Student Organization (四大队十营大一学员), which indicates each group has several subordinate battalions. Given that it has a 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> Group, indicates it most likely also has a Cadet 3<sup>rd</sup> Group (三大队). Each group is normally assigned to a class year. Each cadet group also has its own cadet club (俱乐部), which implies there is not a single club for the college. In addition, it has a Graduate Student Group (研究生大队), which most likely is also known as the Graduate Student Management Group (研究生管理大队).

#### LEADERSHIP AND STAFF:<sup>888</sup>

- Commandant: Zhang Xiaozhong (张晓钟)
- Political Commissar: Mu Shuqian (穆树乾)
- Professors and Staff:<sup>889</sup> It has about 200 professors (教授) and associate professors (副教授) and about 80 master's degree and PhD advisors (导师).

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

Overall, the college is responsible for merging command, management, and technology into a single location (空军勤务学院是一所集指挥, 管理, 技术于一体) with majors/disciplines (学科) in Military Science (军事学), Engineering (工学), Economics (经济学), and Management (管理学).<sup>890</sup>



- Either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs. It also appears to provide three-year post-secondary programs for non-commanding officer cadets. The nine post-secondary program specialties for cadets are shown below, but it is not clear if NCOs are involved in each program:<sup>891</sup>
  - o Aviation Troop Airfield Station Command (航空兵场站指挥)
  - o Vehicle Command (汽车指挥)
  - o Grassroots Logistics Management (基层后勤管事)
  - o Quartermaster Management (军需管理)
  - o Military Finance Management (军队财务管理)
  - o Airfield Barracks Construction and Management (机场营房建筑)
  - o Material Management (物资管理)
  - o Aviation Equipment Management (航空器材管理)
  - o Ordnance Storage and Management (军械储存与管理)
- Bachelor's degree (本科): four years
  - o Bachelor's degree majors and specialties: No information was found for undergraduate degrees or majors; however, the following information was found for eight specialties:<sup>892</sup>
    - Command Automation Engineering (指挥自动化工程)
    - Aviation Troop Airfield Station Command (航空兵场站指挥)
    - Vehicle Command (汽车指挥)
    - Management Engineering (管理工程)
    - Logistics Command (后勤指挥)
    - Military Finance Management (军队财务管理)
    - Munitions Engineering (弹药工程)
    - POL Quality and Measurement (油料质量与计量)
- Master's degree (硕士)

Master's degree majors and specialties: Table 42 has the college's seven master's degrees organized by type into three professional degrees (专业学位授权学科)<sup>893</sup> and four academic degrees (学术学位授权学科).<sup>894</sup> The table also includes their specialty codes plus the 45 students who were accepted in 2016 organized by specialty code.<sup>895</sup> In 2019, the college accepted ten students in the Control Science and Engineering degree and a total of 50 for the Military Logistics and Military Equipment degrees, of which 20 were full time (全日制) and 30 were part time (非全日), as well as five for the Accounting degree.<sup>896</sup>

**Table 42: Master's Degree Types and Directions**

Specialty Code	Degree Type	Degree Name	Direction	Students Accepted
115103	Professional	Military Logistics 军事后勤	Logistics Command Management 后勤指挥管理	6
115104		Military Equipment 军事装备	Equipment Command Management 装备指挥管理	6
125300		Accounting Master's 会计硕士	Military Accounting 军队会计	5

081100	Academic	Control Science & Engineering 控制科学与工程	System Pre-Decision Analysis & Computer Application 系统预决策分析与计算机应用 Military Logistics Command, Control, & Technology 军事后勤指挥控制与技术 Financial Management Decisions & Control 财务管理决策与控制 Quartermaster Support Decisions & Control 军需保障决策与控制 Airfield POL Supply Informatization & Automation 机场供油信息化与自动化 Airfield Equipment Automation & Informatization Technology 机场装备自动化与信息化技术 Air Materiel Support Decisions & Informatization 航材保障决策与信息化 Aviation Four Stations Support Technology & Informatization 航空四站保障技术与信息化	14
081405		Disaster Prevention & Mitigation Engineering & Protection Engineering 防灾减灾工程及防护工程	Airfield Protection Engineering 机场防护工程 Site Protection Engineering 阵地防护工程 Underground Engineering 地下工事	3
081704		Applied Chemistry 应用化学	Military Use New Material Technology 军用功能新材料技术 Aviation POL Application Technology 航空油料应用技术 Aviation POL Technology Supervision 航空油料技术监督	4
082601		Weapon System and Application Engineering 武器系统与运用工程	Airborne Weapon Systems and Application 机载武器系统与运用 Airborne Munitions Support & Security 机载弹药保障与安全 Airborne Munitions Detection & Training 机载弹药检测与训练 Transport Aircraft Application Engineering 运输机运用工程	7

- Doctoral degree (博士):<sup>897</sup> Although a couple of mentions were found concerning the fact that the college has a PhD program and PhD advisors, no other information was found.

#### POST-DOCTORAL SPECIALTIES (博士后):

No information was found.

#### 2017 UNDERGRADUATE RECRUITMENT:

No information was found for this.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

No information was found concerning international exchanges or cooperation.

## SECTION 3-32: AIR FORCE COMMUNICATION NCO ACADEMY

### CHINESE NAME AND ACRONYM:

空军通信士官学校 (former 空军大连通信士官学校). No acronym was found.

- Official English name: Air Force Communication NCO Academy as of June 2017.<sup>898</sup> As shown in the photo below from March 2017, it was known as the Dalian Airforce Communication NCO Academy.<sup>899</sup> In addition, it was also identified as the Dalian Air Force Communication Noncommissioned Officer School of the CPLA and the Dalian Communication Sergeant School of the Air Force.<sup>900</sup> [Note: As a general rule the PLA translates the term *xuexiao* (学校) as school, which applies only to NCO academic institutions; however, in this case it translates *xuexiao* as both a school and an academy, which normally is a *xueyuan* (学院).]
- English Acronym: No acronym was found



### MOE CODE:<sup>901</sup>

In 2017, a new code of 91032 was assigned. It does not appear that any NCO academic institutions had MOE codes prior to 2017.

### TYPE OF INSTITUTION:<sup>902</sup>

The academy is a Professional Education (任职教育) institution, which is specifically identified as a communications NCO professional education basic-level technical academy (通信士官的任职教育初级技术学校).

### OFFICIAL WEBSITE:

None found.

### BACKGROUND:<sup>903</sup>

The academy was created in June 1986 as the Air Force Dalian NCO School (空军大连士官学校), which was one of the PLA's first batch of NCO schools. In August 1992, the name changed to the Air Force Dalian Communication NCO School (空军大连通信士官学校). It is not clear when the PLAAF changed the English name from school to academy, but it was most likely in the 2010s. In June 2017, the name was changed to the Air Force Communication NCO Academy (空军通信士官学校).

#### CAMPUSES AND LOCATIONS:<sup>904</sup>

The main campus (本部) is located at No. 20, Shuangxing Road, Jinpu New District, Dalian, Liaoning Province (辽宁省大连市金普新区双兴路20号). It does not appear to have any branch campuses.

#### GRADE:<sup>905</sup>

Division leader (正师级)

#### SUBORDINATION:<sup>906</sup>

PLAAF HQ since 2001. Prior to that, it was subordinate to the Shenyang Military Region Air Force HQ.

#### FACILITIES:<sup>907</sup>

The campus covers 168 acres (1,020 mu). It has a simulated air force communication network (模拟空军通信网系), an aviation branch airfield communication navigation station (航空兵机场通信导航台站), a communication navigation integrated training field (通信导航综合训练场), a practical network (实装网) and a simulated network (模拟网), as well as radio navigation (无线电导航), satellite and ground-to-air communication (卫星与地空通信), radio communication (无线电通信), wired communication (有线通信), a command information system (指挥信息系统), a computer practical training center (计算机实训中心), and a total of 20 simulation stations (内含20个模拟台站).

#### ORGANIZATIONAL Structure:

- Administrative and functional departments (部门): The following bullets show the structure that was identified in 2012 and matches that of almost all other PLA academic institutions at that time;<sup>908</sup> however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部 / 院务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>909</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>910</sup> According to some information the academy had only three academic departments until 2011—Navigation (导航), Radio (无线电) and Wired Radio (有线电);<sup>911</sup> however, it appears that the number increased to the following five departments in 2012—Radio Navigation (无线电导航系), Command Automation and Satellite Communications (指挥自动化与卫星通信系), Radio Communications (无线电通信系), Wired Radio Communications (有线电通信系), and Student Training (学兵系).<sup>912</sup>
- Key labs (重点实验室): No information was found.
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): No information was found for research labs or research centers. When the academy was created, it had 13 teaching and research labs, which most likely still exist.<sup>913</sup>
- Graduate School (研究生院): As an NCO institution, it does not have a graduate school.
- Student teams (队 / 区队) and groups (大队): The academy's students were originally organized into three regiment-level student groups (学员大队); however, it appears that they are now organized into ten student teams (学员队), which are probably battalion level.<sup>914</sup>

#### LEADERSHIP AND STAFF:<sup>915</sup>

- Commandant: Unknown
- Political Commissar: Pan Hengwei (潘恒卫)

- Professors and Staff: In 2012, the academy had a total of 452 staff cadre (编制干部452人), including 270 instructors (其中教员270人) and 73 civilian personnel (编制文职人员73人).

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- Either a two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs.<sup>916</sup> The three-year program includes two years at the academy and one more year of practice (实习) at an operational unit. In 2012, the academy had 2,440 students, organized into three categories—1,360 NCO students (士官学员), 640 technical soldiers (技术兵), and 440 NCOs receiving promotion training (士官晋级培训).<sup>917</sup> At that time, it had already had 17,000 graduates (an average of 650 per year since 1986).
  - o Specialties: Concerning the number and types of specialties offered, the academy began with five specialties in 1986, which increased to 11 in 1994, and 18 in 1999.<sup>918</sup> In 2004, the academy had 12 specialties for three-year students and 11 specialties for three-year students. The total number of specialties for three-year students apparently rose to 20 around 2012, which were organized into three types (类) – Communications (通信), navigation (导航), and command and control (指挥控).<sup>919</sup>
  - o Grade and rank requirements: Although no information was found concerning what grade/rank NCOs must have in order to become a student, they are most likely junior-grade NCOs (初级士官) with the rank of corporal (下士) or sergeant (中士). The reason for this is that, since 2005, promotion to a higher grade has been explicitly tied to the successful completion of educational or training programs, with the general requirement (or at least overall goal) being that junior-grade NCOs should attain a three-year secondary technical degree, intermediate NCOs require a senior technical degree, and senior NCOs an undergraduate degree, or equivalent.<sup>920</sup>
  - o Civilian personnel employees: Civilian personnel who are recruited as employees at the academy can be up to 35 or 45 years of age depending on which grade they are assigned.<sup>921</sup>
- Four-year Bachelor's degree (本科): The academy does not offer any bachelor's degrees.
- Master's degree (硕士): The academy does not offer any master's degrees
- Doctoral degree (博士): The academy does not offer any PhD degrees.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

No information was found concerning any international exchanges or cooperation.



# SECTION 3-33: ROCKET FORCE COMMAND COLLEGE

## CHINESE NAME AND ACRONYM:

火箭军指挥学院. No acronym was found.

- Official English name(s): Rocket Force Command College<sup>922</sup>
- English Acronym: None found.

## MOE CODE (院校代码):

In 2017, a new code of 91033 was assigned.<sup>923</sup> The previous code for the former Second Artillery Force Command College from 2008 was 90058.



## TYPE OF INSTITUTION:<sup>924</sup>

Professional Education (任职教育)

## OFFICIAL WEBSITE:

None was found.

## BACKGROUND:<sup>925</sup>

The Rocket Force Command College is a “project 2110” academic institution (2110工程), an initiative aimed at developing certain military academic institutions for the purpose of strengthening national defense and modernizing China’s military. The college was established in 1977 as the Second Artillery School (第二炮兵学校). In 1979 it was renamed to Second Artillery College (第二炮兵学院) and had the grade of corps leader (正军级). In 1986, the college was renamed to Second Artillery Command College (第二炮兵指挥学院), also known as the Second Artillery Commanding College. The Command College began to offer Master’s degrees in Military Science (军事学硕士学位) in 1990 and doctoral degrees in 1993. In 2015, the college was renamed to Rocket Force Command College.

## CAMPUSES AND LOCATIONS:<sup>926</sup>

No. 145, 27 Road, Jiang’an District, Wuhan, Hubei Province (湖北省武汉市江岸区二七路145号)

## GRADE:<sup>927</sup>

Corps deputy leader (副军级), a downgrade from the grade of corps leader (正军级).

## SUBORDINATION:<sup>928</sup>

PLA Rocket Force HQ

## FACILITIES:<sup>929</sup>

The Command College occupies approximately 237 acres (1,437 mu) of land, which is divided into three major areas: living area, teaching area, and a comprehensive training area. The college has the following facilities: seven

teaching buildings, including: combat training simulation, missile test, civil engineering, installation engineering, engineering machinery, and communication equipment buildings (作战训练模拟, 导弹测试, 土建工程, 安装工程, 工程机械, 通信装备); eight training grounds for specialties, including: Military Tactics, Technology, Sports, Automobile Driving, Machinery, etc. (战术, 技术, 体育, 汽车驾驶, 机械专业等); 47 laboratory rooms (实验室); 36 professional classrooms (专业教室); an educational technology center, a network management center, and a simulation training center (教育技术中心, 网络管理中心和模拟训练中心). The college has a library covering an area of 5,400 square meters and boasts over 410,000 volumes of books and periodicals. The library has an academic lecture hall and a reading room that can accommodate 800 people.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): No information was available
- Subordinate NCO School (士官学校): No information was found concerning a subordinate NCO school or any education or training for NCOs
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school, as well as for the former Second Artillery Command College;<sup>930</sup> however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
- Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>931</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>932</sup> No current information is available. However, sources from 2011 and 2007 indicate that the former Second Artillery Command College had at least 6 academic departments, which include: 1<sup>st</sup> Command Department, 2<sup>nd</sup> Command Department, Communications Department, Engineering Department, and Combat Support Department (指挥一系, 指挥二系, 通信系, 工程系, 作战保障系).
- Key labs (重点实验室):<sup>933</sup> Combat Command Lab (作战指挥实验室)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): No current information is available. However, a 2007 source indicates that the former Second Artillery Command College had:
  - 20 teaching and research labs: Military Strategy (战略), Military Campaign (战役), Military Tactics (战术), Combat Command (作战指挥), Foreign Military (外军), Political Work (政工), Political Theory (政治理论), Foundations of Military (军事基础), Logistics (后勤), Equipment (装备), Staff Service (参谋勤务), Information Warfare (信息作战), Command Automation (指挥自动化), Communications (通信), Engineering Command (工程指挥), Engineering Support (工程保障), Battle Field Support (阵地保障), Management (管理), Intelligence Reconnaissance (情报侦察), Combat support (作战保障).
  - In addition, the Command College had a Military Academic Theory Institute (军事学术理论研究所), as well as a Higher Education Theory Research Lab (高教理论研究室).
- Graduate School (研究生院): No information available.
- Cadet/student teams (队 / 区队) and groups (大队):<sup>934</sup> The former Secondary Artillery Command College had 20 cadet/student teams and 4 graduate student management teams.

#### LEADERSHIP AND STAFF:<sup>935</sup>

- Commandant (院长): Major General Lan Jiyin (兰吉银少将)
- Political Commissar (政委): Major General Liu Zhihui (刘志辉少将)

- Professors and Staff:<sup>936</sup> The Command College has 306 instructors, including 24 professors, 71 associate professors, four senior engineers, and one senior lab instructor. Among the teaching faculty members, three received the distinction of “middle-age and young experts with outstanding contribution,” 13 receive special state allowances, three are three missile technology experts, four were admitted to “Second Artillery talent pool,” 13 were selected as outstanding instructors in the PLA, and five were rated as outstanding teachers in Hubei Province.

#### DEGREES, MAJORS/DISCIPLINES, AND SPECIALTIES:

- It appears that the Command College offers secondary (中专) and post-secondary (大专) programs and bachelor’s degree (本科), master’s degree (硕士), and doctoral degree (博士) programs for commanding officers.<sup>937</sup> According to the college’s 2020 doctoral program recruitment guide, it offers four first-level majors for doctoral degrees (博士学位授权一级学科 4 个) and nine first-level majors for master’s degrees (硕士学位授权一级学科 9 个).<sup>938</sup>
- A 2007 source indicates that the college offered 17 majors, including: Military Strategy (战略), Military Campaign (战役), Military Tactics (战术), Combat Command (作战指挥), Political Work (政治工作), Logistics (后勤), Equipment (装备), Communications (通信), and Engineering (工程); and 76 unspecified specialties.<sup>939</sup>
- Another Source indicates that the Command College offers the following key specialties:<sup>940</sup>
  - Communications Command (通信指挥)
  - Power Engineering and Automation (电力工程及其自动化)
  - Defense Engineering Command (国防工程指挥)
  - Mechanical Engineering and Automation (机械工程及其自动化)
  - Civil Engineering (土木工程)
  - Water Supply, Drainage, Heating, and Ventilation Engineering (给排水与采暖通风工程)
  - Wired Communications Command (有线通信指挥)
  - Wireless Communications Command (无线通信指挥)
  - Mobile Communications (移动通信)
  - Engineering Construction Management (工程建筑管理)
  - Engineering Equipment Installation (工程设备安装)
  - Construction Machinery Command (工程机械指挥)

#### POST-DOCTORATE SPECIALTIES (博士后):

Three post-doctorate research stations (博士后科研流动站)

#### 2020 DOCTORAL STUDENT RECRUITMENT:<sup>941</sup>

- The Command College recruits doctoral students from the entire PLA. It offers 4 first-level majors/disciplines for its doctoral program (see recruitment details below).
- Application requirements:
  - Must have firm political stance; consciously devote oneself to the building of national defense and the military; have good performance, with annual cadre evaluation results meeting satisfactory standard.
  - Be physically and mentally fit; health conditions meet standards set for PLA academic institution candidates.
  - Have a Master’s degree and three years of military work experience; have a rank of captain or above.
  - Those with equivalent academic ability (学力) must meet following requirements: 1). have six years of working experience after having obtained a bachelor’s degree and acquired academic ability equivalent to a master’s degree graduate; 2): pass level six of the national college student English language test.

- o Two recommendations from professors whose expertise are related to the program to which the candidate is seeking admission, one of whom must be an expert at the Command College.
- o A Candidate's master's degree specialty must be closely related to the doctoral program specialty to which he or she is seeking admission; there is an unidentified limit to the proportion of women seeking admission; female students are not allowed to have children during their academic studies at the Command College.
- Study format: Full-time, three years.
- Recruitment details:

Specialty Code	Specialty	Number of students
110200	Military Strategy 战略学	2
110300	Military Campaign 战役学	3
110500	Science of Command 军队指挥学	3
111000	Military Training 军事训练学	2

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): no information available
- Study abroad (留学): no information available
- Other interaction: no information available

#### RELEVANT PHOTOS



(source: 360kuai; <https://www.360kuai.com/mob/transcoding?url=974c3a5886f4b4e9c>)

## SECTION 3-34: ROCKET FORCE UNIVERSITY OF ENGINEERING

### CHINESE NAME AND ACRONYM:

火箭军工程大学. No acronym was found.

- Official English name(s): Rocket Force University of Engineering<sup>942</sup>
- English Acronym: The acronym EPGC was found as part of the official website noted below.<sup>943</sup> The acronym stands for Erpao Gongcheng (二炮工程), which is translated as Second Artillery Engineering. It does not appear that a new acronym, such as HJGC (Huojian Gongcheng / 火箭工程) was created when the Second Artillery Engineering University became the Rocket Force Engineering University in January 2016. As such, EPGC will be used throughout the report.



### MOE CODE:

In 2017, a new code of 91034 was assigned.<sup>944</sup> The previous code from 2008 was 90059.<sup>945</sup>

### TYPE OF INSTITUTION:

Academic Education (学历教育) and Professional Education (任职教育)



### OFFICIAL WEBSITE:

<http://www.epgc.net/>

### BACKGROUND:

The following bullets provide the history of the university.<sup>946</sup>

- January 1951: The Northwest Military Region's (西北军区) Artillery Training Regiment and the 1st Field Artillery Regiment merged to create the Northwest Military Region (MR) Artillery School (炮兵学校) at an unknown location.



- March 1951: The name was changed to the First Artillery School (第一炮兵学校).
- August 1955: Moved to Xi'an, Shaanxi Province
- February 1956: Name changed to the Xi'an Artillery School (西安炮兵学校)
- 1959: The school began teaching personnel for the PLA's strategic rockets
- January 1963: Name was changed to the Artillery Technical College (炮兵技术学院)<sup>947</sup> [Note: The Second Artillery Corps (第二炮兵), which was renamed the Second Artillery Force in English in the 1990s, was created in June 1966 as an independent branch of the PLA that was treated like a service.<sup>948</sup> The name second artillery was used for not only surface-to-surface missiles but also surface-to-air missiles to hide their purpose. The PLA Air Force received its first surface-to-air missiles from Russia in 1968 and called them second artillery. The PLA refers to antiaircraft artillery as first artillery.]
- October 1969: Resubordinated (转隶) to Second Artillery and in December was renamed the Second Artillery Technical College (第二炮兵技术学院)
- August 1975: Name changed to the Second Artillery School (第二炮兵学校)
- January 1978: Name changed to the Second Artillery Technical College (第二炮兵技术学院)
- June 1986: Name changed to the Second Artillery Engineering College (第二炮兵工程学院)<sup>949</sup>
- June 2011: Name changed to the Second Artillery Engineering University (第二炮兵工程大学)
- January 2016: Name changed to the Rocket Force University of Engineering (火箭军工程大学).

#### CAMPUSES AND LOCATIONS:<sup>950</sup>

The main campus is located at No. 2 Tongxin Road (同心路2号) in Xi'an's Yanqiao District (灞桥区), postal code (邮编) 710025, which is about 20 kilometers east of the center of Xi'an. The campus covers an area of nearly 297 acres (1,800 mu).

#### GRADE:

Corps deputy leader (副军级), which is the same grade as the former Second Artillery Engineering College.<sup>951</sup> Although one report noted it was a corps leader grade (正军级),<sup>952</sup> this does not appear to be the case. To further support this, the Army, Navy, and Air Force Engineering Universities are also all corps deputy leader-grade organizations.

#### SUBORDINATION:

Rocket Force HQ.<sup>953</sup>

#### FACILITIES:

The teaching and training facilities are well-equipped, and the auditorium, gymnasium, swimming pool, training shed, fighting hall, track and field training field, light weapons shooting range, and field missile comprehensive training ground are all available.<sup>954</sup> There are various types of missile weapons and equipment of the Rocket Army, and the teaching and experimental buildings are row upon row. There are 54 laboratories, one national experimental teaching demonstration center, one national virtual simulation experimental teaching center, and five military key laboratories. There are six experimental teaching demonstration centers and one provincial virtual simulation experimental teaching center. The digital library is listed in the National Torch Program. The information center computer room has reached the national B-level standard and has built a modern cloud data center with more than 12,000 network user terminals. The digital campus information system is fully covered.

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): The university has two subordinate academies/colleges, both of which were carried over from the Second Artillery Engineering University;<sup>955</sup> however, no information was found about either of them. They are most likely located on the main campus.

- o Science Academy/College (理学院), but no information was found
- o Basic-level Commanding Academy/College (初级指挥学院), but no information was found
- Subordinate NCO school (士官学校): Prior to 2017, the university had a subordinate NCO Professional Technical Education Academy/College (士官职业技术教育学院).<sup>956</sup> In January 2016, when the Rocket Force was created, it was renamed the NCO School (士官学校). In 2017 it became part of the Rocket Force NCO School (火箭军士官学校) that is located in Qingzhou, Shandong Province (山东省青州市) and was created in 1970.<sup>957</sup> See a separate profile on the school.
- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school; however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - o Training Department (训练部) that served as the Headquarters Department
  - o Political Department (政治部)
  - o School Affairs Department (校务部), which was responsible for all facilities and logistics
  - o Scientific Research Department (科研部)
  - o Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>958</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>959</sup> seven specialty academic departments (7个专业系), which are numbered 1 to 7 (一系, 二系, 三系, 四系, 五系, 六系, 七系)
- Key labs (重点实验室): five unidentified military key labs (军队重点实验室5个)
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): Only the Launch Targeting Teaching and Research Lab (发射瞄准教研室) was identified.
- The Graduate school (研究生院) is organized into two graduate student management groups (2个研究生管理大队) and one backbone student brigade (若干学员旅).<sup>960</sup> The two student management groups are most likely organized into master's degree and PhD students.
- Student teams (队 / 区队) and groups (大队): Other than the graduate student organizations noted above, no information was found for how the undergraduate students are organized.

#### LEADERSHIP AND STAFF:<sup>961</sup>

- Commandant: Lan Jiyin (兰吉银)
- Political Commissar: Unknown
- Professors and staff:<sup>962</sup> More than 94.3% of the faculty members have doctoral and master's degrees. There are 302 professors and associate professors (现有教授, 副教授), 200 master's advisors (硕士生导师), 60 doctoral advisors (博士生导师) and 23 missile experts (导弹专家). Among them, there are two academicians of the Chinese Academy of Engineering (中国工程院院士), one Distinguished Professor of Changjiang Scholars ("长江学者"特聘教授), and one evaluation expert of the Academic Degrees Committee of the State Council (国务院学位委员会评审专家), one winner of the "He Liang He Li" Fund Science and Technology Progress Award ("何梁何利"基金科学与技术进步奖), and one winner of the National Science Fund for Distinguished Young Scholars (国家杰出青年科学基金).

#### DEGREES, MAJORS, AND SPECIALTIES:

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified
- Bachelor's degree (本科): four years
- Concerning its bachelor's degree program, the university has four bachelor's degree majors as shown below and 16 specialties, each of which has one direction, and is shown in Table 43 below:

- o 4 Majors: Science (理学), Engineering (工学), Military Science (军事学), and Management (管理学)<sup>963</sup>
- o Specialties: Table 43 provides a list of the 16 of specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) were found for 2017.<sup>964</sup>

**Table 43: 16 Rocket Force Engineering University Specialties**

Specialty Code	Specialty	Direction	Training Type
080201	Mechanical Engineering 机械工程	Missile Equipment Maintenance & Management 导弹装备维修与管理	CO
080601	Electrical Engineering & Automation Physics 电气工程及其自动化	Missile Site Management 导弹阵地管理	CO
080701	Electronic Information Engineering 电子信息工程	Missile Battle Department Technology & Management 导弹战斗部技术与管理	Non-CO
080703	Communications Engineering 通信工程	Missile Communications Technology & Command 导弹通信技术与指挥	CO
081001	Civil Engineering 土木工程	National Defense Engineering & Command 国防工程与指挥	CO
082004	Aircraft Power Engineering 飞行器动力工程	Missile Engine Technology & Command 导弹发动机技术与指挥	CO
082102	Weapon Launch Engineering 武器发射工程	Missile Launch Technology & Command 导弹发射技术与指挥	CO
082105	Special Energy Technology and Engineering 特种能源技术与工程	Missile Propellant Technology & Management 导弹推进剂技术与管理	CO
082201	Nuclear Engineering & Nuclear Technology 核工程与核技术	Equipment Assembly Assessment 器材装配检测	Non-CO
082202	Radiation Protection & Nuclear Safety 辐射防护与核安全	Safety Support & Emergency Command 安全保障与应急指挥	Non-CO
110105	Target Engineering 目标工程	Missile Operations Support 导弹作战保障	Non-CO
110106	Firepower Command & Control Engineering 火力指挥与控制工程	Missile Operations Support 导弹作战保障	Non-CO
110301	Command Information System Engineering 指挥信息系统工程	Missile Communications Technology & Command 导弹通信技术与指挥	CO
110304	Detection Engineering 侦测工程	Missile Telemetry Technology & Command 导弹遥测技术与指挥	Non-CO
110306	Missile Engineering 导弹工程	Missile Launch Technology & Command 导弹发射技术与指挥 Missile Measurement & Control Technology & Command 导弹测控技术与指挥	CO
110308	Measurement & Control Engineering 测控工程	Missile Measurement Technology & Command 导弹测控技术与指挥	CO

- Concerning the master's degree program, although certain information notes that there are eight level-1 degree programs (一级学科硕士学位授权点) and 29 level-2 programs (二级学科硕士学位授权点),<sup>965</sup> Table 44 below shows five majors, 15 level-1 disciplines (一级学科), and 51 level-2 disciplines (二级学科).<sup>966</sup> It also has nine master's specialty degree fields (硕士专业学位授权领域).

**Table 44: Master's Degree Specialties**

Majors	Level-1 一级学科	Level-2 二级学科
Law 法学	Marxism Theory 马克思主义理论	Marxism Foundation Principles 马克思主义基本原理
		Marxism Development History 马克思主义发展史
		Marxism Research in China 马克思主义中国化研究
		Foreign Marxism Research 国外马克思主义研究
		Thought Political Education 思想政治教育
		Research on the Basic Issues of Modern and Contemporary Chinese History 中国近现代史基本问题研究
Science 理学	Physics 物理学	Theoretical Physics 理论物理
		Particle Physics & Nuclear Physics 粒子物理与原子核物理
		Nuclear & Molecular Physics 原子与分子物理
		Plasma Physics 等离子体物理
		Condensed Matter Physics 凝聚态物理
		Acoustics 声学
		Optics 光学
		Wireless Radio Physics 无线电物理
Engineering 工学	Mechanical Engineering 机械工程	Mechanical Manufacturing and Automation 机械制造及其自动化
		Mechatronic Engineering 机械电子工程
		Mechanical Design & Theory 机械设计及理论
		Vehicle Engineering 车辆工程
	Instrument Science & Technology 仪器科学与技术	Precision Instruments & Machinery 精密仪器及机械
		Measuring & Testing Technologies & Instruments 测试计量技术及仪器
	Information & Communications Engineering 信息与通信工程	Communications & Information Systems 通信与信息系统
		Signals & Information Processing 信号与信息处理

Engineering 工学	Control Science & Engineering 控制科学与工程	Control Theory & Control Engineering 控制理论与控制工程
		Detection Technology and Automation 检测技术与自动化装置
		Systems Engineering 系统工程
		Pattern Recognition & Intelligent Systems 模式识别与智能系统
		Navigation, Guidance, & Control 导航, 制导与控制
		Space Equipment Application Engineering 空间装备应用工程
	Computer Science & Technology 计算机科学与技术	Computer System Architecture 计算机系统结构
		Computer Software & Theory 计算机软件与理论
		Computer Application Technology 计算机应用技术
	Aerospace Science & Technology 航空宇航科学与技术	Aircraft Design 飞行器设计
		Aerospace Propulsion Theory and Engineering 航空宇航推进理论与工程
		Aerospace Manufacturing Engineering 航空宇航制造工程
		Man-machine & Environmental Engineering 人机与环境工程
	Weapon Science & Technology 兵器科学与技术	Weapon Systems & Application Engineering 武器系统与运用工程
		Weapon Launch Theory & Technology 兵器发射理论与技术
		Artillery, Automatic Weapons & Ammunition Engineering 火炮 自动武器与弹药工程
		Military Chemistry & Pyrotechnics 军事化学与烟火技术
	Nuclear Science & Technology 核科学与技术	Nuclear Science & Engineering 核能科学与工程
		Nuclear Fuel Cycle & Materials 核燃料循环与材料
		Nuclear Technology & Application 核技术及应用
		Radiation Protection & Environmental Protection 辐射防护及环境保护
	Environmental Science & Engineering 环境科学与工程	Environmental Science 环境科学
		Environmental Engineering 环境工程

Military Science 军事学	Science of Military Command 军队指挥学	Science of Operations Command 作战指挥学
		Science of Military Operations 军事运筹学
		Science of Military Communications 军事通信学
		Science of Military Intelligence 军事情报学
		Cryptography 密码学
		Science of Military Education and Training 军事教育训练学
	Science of Military Equipment 军事装备学	
	Science of Military Training 军事训练学	
Management 管理学	Management Science & Engineering 管理科学与工程	

- Concerning the PhD program, the university has four level-1 programs (一级学科博士学位授权点) and 20 level-2 programs (二级学科博士学位授权点)<sup>967</sup> as shown in the bullets below.<sup>968</sup>
  - o Engineering major: four level-1 and 19 level-2
  - o Military Science major: one level-2

#### POST-DOCTORAL SPECIALTIES (博士后):

The university has four Post-doctoral research stations (博士后科研流动站) and one post-doctoral research workstation (博士后科研工作站).

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 16
- Gender (男, 女): Males are involved in all specialties. Females are only involved in three specialties (080703, 110301, and 110308) of which each of them are for commanding officers.
- Total number of personnel recruited (合计): 526
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 24 of them
- Foreign language requirements (外语语种): English for every specialty
- Specialty categories (专业类别) – ten of the specialties involve only commanding officers (指挥) while six of them involve only non-commanding officers (非指).

#### INTERNATIONAL EXCHANGES AND COOPERATION:

No information available



## SECTION 3-35: ROCKET FORCE NCO SCHOOL

### CHINESE NAME AND ACRONYM:

火箭军士官学校. No acronym was found.

- Official English name(s): None found
- Translated English name:<sup>969</sup> Rocket Force NCO School
- English Acronym: None found



### MOE CODE:

In 2017, a new code of 91035 was assigned.<sup>970</sup> It did not have a code prior to 2017.

### TYPE OF INSTITUTION:<sup>971</sup>

Professional Education (任职教育)

### OFFICIAL WEBSITE:

None found

### BACKGROUND:<sup>972</sup>

The roots of the PLA Rocket Force NCO School can be traced back to the 814<sup>th</sup> Regiment of the Second Artillery Force (第二炮兵第八一四团) established in Shiping County, Yunnan Province (云南石屏) in 1970. In 1971, the regiment was moved to Xi'an, Shaanxi Province, and became a part of the Second Artillery Engineering College (第二炮兵工程学院). In 1976, it became the Secondary Artillery Training Regiment (第二炮兵训练团) and its location was moved to the Second Artillery Command College in Wuhan City, Hubei Province (武汉二炮指挥学院). In 1978, the regiment moved to its present location in Qingzhou City, Shandong Province. Beginning in 1986, the regiment assumed the task of training NCOs. In 1993, the regiment was reorganized and became the Qingzhou Branch of the Second Artillery Command College (第二炮兵指挥学院青州分院). It went through a reorganization and became the Qingzhou Second Artillery NCO School (第二炮兵青州士官学校) in 1999. In 2011, the school was renamed to Second Artillery NCO Vocational and Technical Education College, as part of the Second Artillery Engineering University (第二炮兵工程大学士官职业技术教育学院). During the 2017 military reform, the college became the Rocket Force NCO School (火箭军士官学校), a professional school designed specifically for training technical and application personnel (技术应用型人才的专业学校). The school is the seat of the NCO Education Committee of the PLA Military Education Society (全军军事教育学会士官教育委员会). It is the first NCO school to pass teaching evaluation requirements in the entire PLA as well as the first PLA academic institution to offer undergraduate education for NCOs.

### CAMPUSES AND LOCATIONS:<sup>973</sup>

Qingzhou City, Weifang, Shandong Province (山东省潍坊市青州市)

GRADE:<sup>974</sup>

Division leader (正师级)

SUBORDINATION:<sup>975</sup>

PLA Rocket Force HQ

FACILITIES:

No current information available. But a 2007 source indicates that the former Qingzhou Second Artillery NCO School had a library, an education and technology center, 111 classrooms, 41 multi-media classrooms, one laboratory center (实验中心), 60 laboratory classrooms (实验室), and 15 training grounds.

ORGANIZATIONAL STRUCTURE (组织体制):

- Administrative and functional departments (部门): The following bullets show the historical structure for PLA academic institutions' administrative and functional departments for each university and their subordinate academies/colleges/school; however, these changed in 2017. See the introduction to this report for further information about the new structure.
  - Training Department (训练部) that served as the Headquarters Department
  - Political Department (政治部)
  - School Affairs Department (校务部), which was responsible for all facilities and logistics
  - Scientific Research Department (科研部)
  - Teaching and Research Organizational Structure Basic Department (教学和科研机构设基础部)<sup>976</sup> (aka Basic Department / 基础部).
- Academic departments (系):<sup>977</sup>
  - Nuclear Missile Department (核导弹系)
  - Conventional Missile Department (常规导弹系)
  - Communications Department (通信系)
  - Engineering Department (工程系)
- Key labs (重点实验室): None found
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>978</sup>
  - No current information available. However, a 2007 source indicates that the former Qingzhou Second Artillery NCO School had 25 teaching and research labs, and one research lab for NCO education theories (士官教育理论研究室).
- Graduate School (研究生院): None found
- Cadet/student teams (队 / 区队) and groups (大队):<sup>979</sup> No current information available. However, a 2007 source indicates that the former Qingzhou Second Artillery NCO School had 22 cadet/student teams.

LEADERSHIP AND STAFF:<sup>980</sup>

- Commandant (校长): Li Hua (李华)
- Political Commissar (政委): Ning Luqiao (宁路桥)
- Professors and Staff: No information was found.

DEGREES (学位), MAJORS/DISCIPLINES (学科), AND SPECIALTIES (专业):<sup>981</sup>

- Source indicates that the NCO school offers secondary, post-secondary, and undergraduate-level education and training for low-, mid-, and senior-level NCOs (中专, 大专, 本科教育和初, 中, 高级士官资格培训).
- A 2007 source indicates that the former Qingzhou Second Artillery NCO School had 19 unspecified specialties for post-secondary education, 16 unspecified specialties for secondary education, and 9 unspecified specialties for short-term training. However, no information was found for the current school.

POST-DOCTORATE SPECIALTIES (博士后):

None found

INTERNATIONAL EXCHANGES AND COOPERATION (国际交流与合作):

- Foreign students (外军留学生): No information found
- Study abroad (留学): No information found
- Other interaction: No information found

RELEVANT PHOTOS



Rocket Force NCO School Political Commissar Ning Luqiao  
(Source: *Bilibili*; <https://www.bilibili.com/video/av67157214>)



Rocket Force NCO School Civilian Employees Swearing-in Ceremony.

This is the first batch of civilian employees who began working at the NCO school in September 2018.<sup>982</sup>  
(Source: *People's Daily*; <http://military.people.com.cn/n1/2018/0913/c1011-30291427.html>)

# SECTION 3-36: STRATEGIC SUPPORT FORCE SPACE ENGINEERING UNIVERSITY

## CHINESE NAME AND ACRONYM:

战略支援部队航天工程大学. No acronym was found.

- Official English name: Strategic Support Force Space Engineering University
- English Acronym: No official acronym was found

## MOE CODE:

In 2017, a new code of 91036 was assigned.<sup>983</sup> The previous code from 2008 was 90033, when it was the Institute of Command and Technology of Equipment of the CPLA (中国人民解放军装备指挥技术学院) and remained the same number in 2011 when it became the Equipment College (装备学院).<sup>984</sup>

## TYPE OF INSTITUTION:

In 2003, it became a Professional Education (任职教育) institution.<sup>985</sup> No information was found identifying it as an Academic Education (学历教育) institution.

## OFFICIAL WEBSITE:

None found.

## BACKGROUND:

The following bullets show the history for the university:<sup>986</sup>

- June 1978: The PLA National Defense Science and Technology Commission Cadre School (中国人民解放军国防科学技术委员会干部学校 / 国防科委干部学校) was created in Beijing's Huairou District and was subordinate to the National Defense Science Commission (国防科委)
- 1982: The name was changed to the Commission for Science, Technology and Industry (COSTIND) Cadre School (国防科工委干部学校) and was subordinate to COSTIND
- June 1986: The name was changed to the COSTIND Command and Technology College/Academy (国防科工委指挥技术学院)
- May 1999: The name was changed to the PLA Equipment Command and Technology College/Academy (中国人民解放军装备指挥技术学院) and was subordinate to the General Armament Department (GAD / 总装备部), which was created in 1998
- August 2011: The name was changed to the PLA Equipment College (装备学院) and remained subordinate to the GAD. The college's Noncommissioned Officer (NCO) Academic Department (士官系) that was located in Changping was renamed as the NCO School (士官学校)
- 2016: During the reorganization, the college was resubordinated from the GAD to the newly-created Central Military Commission (CMC / 中央军事委员会) Training and Administration Department (训练与管理部) aka the Training Management Department



- June 2017: The name was changed to the Strategic Support Force Space Engineering University and was subordinated to the Strategic Support Force's Space Systems Department.

#### CAMPUSES AND LOCATIONS:

The university has three campuses shown below:<sup>987</sup>

1. The main campus is in Huairou (怀柔), which is a district 50 kilometers north of central Beijing. The address is No. 221, No. 1, Bayi Road, Huairou District, Beijing (北京怀柔八一路1号221号).<sup>988</sup> The postal code is 101416 (信箱 邮编101416).
2. Changping (昌平) is a district situated in the northwest suburbs of Beijing, which houses the NCO School
3. Shahe (沙河) in Hebei Province located about 400 kilometers south of Beijing

#### GRADE:<sup>989</sup>

Corps deputy leader (副军级). Prior to 2017, when it was downgraded, it was a corps leader-grade (正军级) organization.<sup>990</sup>

#### SUBORDINATION:

Strategic Support Force Space Systems Department (隶属战略支援部队航天系统部).<sup>991</sup> The two predecessor organizations were subordinate to the Central Military Commission's General Armament Department (中央军委总装备部).<sup>992</sup>

#### FACILITIES:<sup>993</sup>

Overall, the three campuses, which cover 495 acres (3,000 mu), consist of two national key laboratories (国家级重点实验室), a space simulation training center (航天模拟训练中心), a space test and training center (航天试验训练中心), and a space monitoring and control station (航天测控站), as well as a group of key specialty laboratories (重点专业实验室). The university also has a digital campus system (数字校园系统).

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院):<sup>994</sup> The university has the following subordinate academies/colleges, but their locations are not identified and no information was provided about their content:
  - o Space Command Academy/College (航天指挥学院)
  - o Aerospace Technology Academy/College (宇航技术学院)
  - o Space Information Academy/College (航天信息学院)
  - o Space Service Academy/College (航天勤务学院)
- Subordinate NCO school (士官学校): In August 2011, the Equipment College's NCO Academic Department (士官系) that was located in Changping was renamed as the NCO School (士官学校) and remained in Changping. In 2017, it was renamed the Space NCO School (航天士官学校)
- Administrative and functional departments (部门): In 2007 the following departments existed for the university, and some of the departments also existed for each subordinate academy/college/school, but these most likely changed in 2017.<sup>995</sup> In 2017, the Basic Teaching Department (基础教学部) was identified as existing at that time.<sup>996</sup> See the introduction to this report for further information about the possible new structure.
  - o Training Department (训练部) that served as the Headquarters Department
  - o Political Department (政治部)
  - o School Affairs Department (校务部), which was responsible for all facilities and logistics
  - o Scientific Research Department (科研部)
- Academic departments (系)

- Key labs (重点实验室): two unidentified national key laboratories (国家级重点实验室) and a group of unidentified key specialty laboratories (重点专业实验室)<sup>997</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室): A space test and training center (航天试验训练中心) and a space monitoring and control station (航天测控站).<sup>998</sup> No information was found concerning teaching and research labs.
- Graduate school (研究生院),<sup>999</sup> which is most likely at the Huairou campus
- Student teams (队 / 区队) and groups (大队): None identified

#### LEADERSHIP AND STAFF:<sup>1000</sup>

- Commandant: Zhou Zhixin (周志鑫)
- Political Commissar: Zhang Changsheng (张长生)
- Professors and staff:<sup>1001</sup> The information concerning the number of key professors and staff personnel is provided below:
  - Professors and assistant professors (教授, 副教授): 230 – 300
  - Master's degree advisors (硕士研究生导师): 160
  - PhD advisors (博士研究生导师): 50
  - Chinese Academy of Engineering Academician (中国工程院院士)
  - Chinese Academy of Sciences Academician (中国科学院院士)

#### DEGREES, MAJORS, AND SPECIALTIES:

- No two-year secondary technical (中专) educational program or three-year post-secondary (大专) program for NCOs were identified
- Bachelor's degree (本科): four years
  - Bachelor's degree majors and specialties:
- 4 Majors: Military Science (军事学), Engineering (工学), Science (理学), and Management (管理学)<sup>1002</sup>
- Bachelor's Degree Specialties: The information found concerning the number and type of specialties and direction of each specialty was not consistent. For example, one article noted 24 specialties (本科专业)<sup>1003</sup> but did not list them, while another article noted 20 specialties directions (本科专业方向) but only listed 15 of them shown below.<sup>1004</sup>
  - Space Mission Planning (航天任务规划), Command Information System Engineering (指挥信息系统工程), Early Warning Detection (预警探测), Weapon Launch Engineering (武器发射工程), Weapon Systems and Engineering (武器系统与工程), Aircraft Power Engineering (飞行器动力工程), Space Equipment Engineering (航天装备工程), Space Monitoring and Control Engineering (航天测控工程), Radar Engineering (雷达工程), Optoelectronic Information Science and Engineering (光电信息科学与工程), Detection Guidance and Control Technology (探测制导与控制技术), Aerospace Targets Surveillance (空间目标监视), Remote Sensing Science and Technology (遥感科学与技术), Space Communications Engineering (航天通信工程), and Space Information Security (航天信息安全)
- Meanwhile, the list of specialties for the 2017 cadet recruitment only listed nine specialties, including their MOE specialty code. Each specialty had only one specialty direction identified. Table 45 provides a list of the nine specialties for the university's 2017 recruitment, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO):



**Table 45: 9 SSF Space Engineering University Specialties**

Specialty Code	Specialty	Direction	Training Type
080703	Communication Engineering 通信工程	Space Communications Technology & Command 航天通信技术与指挥	Non-CO
080705	Photoelectric Information Science & Engineering 光电信息科学与工程	Space Situational Awareness Basic Level management & Technology 太空态势感知初级管理与技术	Non-CO
081202	Remote Sensing Science & Technology 遥感科学与技术	Space Information Application Basic Level Management & Technology 航天信息应用初级管理与技术	Non-CO
082102	Weapon Launch Engineering 武器发射工程	Space Testing Technology & Command 航天测发技术与指挥	Non-CO
082107	Information Countermeasures Technology 信息对抗技术	Space Information Security Basic Level Management & Technology 航天信息安全初级管理与技术	Non-CO
110103	Reconnaissance & Intelligence 侦察情报	Intelligence Analysis Reorganization 情报分析整编	CO
1102301	Command Information System Engineering 指挥信息系统工程	Space Command Basic Level Management & Technology 航天指挥初级管理与技术	CO
110302	Space Equipment Engineering 航天装备工程	Space Technology Support & Sub-unit Command 装备技术保障与分队指挥	Non-CO
110308	Measurement & Control Engineering 测控工程	Space Measurement & Control Science and Command 航天测控技术与指挥	Non-CO

- Master's degree (硕士)
  - Master's degree majors and specialties: No majors were identified. One report noted 12 first-level master's degree stations (一级学科硕士点),<sup>1005</sup> while another report identified nine master's degree programs (学术学位硕士授权点) and seven master's degree specialties (专业学位硕士授权领域)<sup>1006</sup>
- Doctoral degree (博士)
  - Doctoral degree majors and specialties: No majors were identified, but there are 4-5 first-level PhD stations (一级学科博士点)<sup>1007</sup>

#### POST-DOCTORAL SPECIALTIES (博士后):

Three unidentified Post-doctoral research stations (博士后科研流动站)<sup>1008</sup>

#### 2017 UNDERGRADUATE RECRUITMENT:

- Number of Specialties (专业): 9
- Gender (男, 女): All nine specialties included males, while three specialties included females (080703, 081202, and 110308)
- Total number of personnel recruited (合计): 232
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from only 14 of them
- Foreign language requirements (外语语种): English for all specialties
- Specialty categories (专业类别)—commanding officer (指挥) or non-commanding officer (非指): Note: Only two of the nine specialties focus on commanding officers, which is unique for the six engineering universities profiled for this report.

#### INTERNATIONAL EXCHANGES AND COOPERATION:

- Foreign students (外军留学生): No information was found
- Study abroad (留学): No information was found
- Other interaction: No information was found.

# SECTION 3-37: STRATEGIC SUPPORT FORCE INFORMATION ENGINEERING UNIVERSITY

## CHINESE NAME AND ACRONYM:

战略支援部队信息工程大学 / 解放军信息工程大学 and aka 信息工程大学.<sup>1009</sup> No acronym was found.

- Official English name: Although it is primarily identified as the People's Liberation Army (PLA) Information University, it is also identified as the PLA Strategic Support Force Information Engineering University or simply the Information Engineering University.<sup>1010</sup>
- English Acronym: PLAIEU<sup>1011</sup>



## MOE CODE:

In 2017, a new code of 91037 was assigned.<sup>1012</sup> The previous code from 2008 was 90005.<sup>1013</sup>

## TYPE OF INSTITUTION:

It was only identified as an Academic Education (学历教育) institution.<sup>1014</sup> No information was found identifying it as a Professional Education (任职教育) institution.

## OFFICIAL WEBSITE:

None found.

## BACKGROUND:

The university was created in July 1999 in Zhengzhou, Henan Province,<sup>1015</sup> and assumed its current name by merging three existing academic institutions and the Central Military Commission (CMC / 中央军委) designated it as one of 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.<sup>1016</sup> The brief history of the three former academic institutions that were merged into the university are shown below:

- PLA Information Engineering Academy/College (解放军信息工程学院) was created in October 1971 in Luoyang, Henan Province, by merging a component of the PLA's First Foreign Language School (第一外国语学校) with the PLA Engineering Technical Academy/College (解放军工程技术学院) in Zhengzhou, Henan Province.<sup>1017</sup> In January 1981, components of the PLA Luoyang PLA Foreign Language University (解放军外国语学院)<sup>1018</sup> were also merged into the PLA Engineering Technical Academy/College. In July 1986, it was renamed as the PLA Information Engineering Academy/College.
- PLA Electronic Technology Academy/College (解放军电子技术学院) was created in 1952 in Changchun, Jilin Province, as the Confidential<sup>1019</sup> Young Cadre School (机要青年干部学校). In 1954, it became the PLA Second Confidential School (第二机要学校) and was renamed the PLA Confidential School in 1955. In 1962, it moved to Chongqing, Sichuan Province. In 1969, as part of the Cultural Revolution's major downsizing of PLA academic institutions, it was abolished. In April 1978, it was reestablished in Zhengzhou as the PLA Technical School (解放军技术学校). In June 1983, it was renamed the PLA

Electronic Technical Academy/College.

- PLA Surveying and Mapping College (解放军测绘学院)<sup>1020</sup> had its origins as the Surveying and Mapping School (测绘学校) in 1946 in Changchun but moved to Harbin, Heilongjiang Province and moved again in 1948 to Shenyang, Liaoning Province. In 1950, it was renamed the PLA Surveying and Mapping School and was subordinate to the General Staff Department (GSD / 总参谋部). In 1953, it was renamed the PLA Surveying and Mapping College and moved to Beijing. In 1969, it was abolished and then reestablished a few months later. In 1970, it moved from Beijing to Wuhan, Hubei Province. In 1974 a campus was also created in Zhengzhou. In 1975, two-year (中专) and three-year (大专) degree programs were created. In July 1976, the main campus moved from Wuhan to Zhengzhou. In 1978, it officially became the PLA Surveying and Mapping College.

#### CAMPUSES AND LOCATIONS:

The university has a total of three campuses as shown below:<sup>1021</sup>

- Main campus (本部): No. 7, Yuxue Street, Jinshui District, Zhengzhou, Henan Province (河南省郑州市金水区俭学街7号)
- Branch campus: No. 62, Science Avenue, Zhengzhou High-tech Industrial Development Zone, Zhengzhou (郑州高新技术产业开发区科学大道62号)
- Branch campus: No. 2, Guangwen Road, Yuxi District, Luoyang (洛阳市涧西区广文路2号), which previously was the main campus for the PLA Foreign Language University aka PLA University of Foreign Languages (解放军外国语学院)<sup>1022</sup>

#### GRADE:<sup>1023</sup>

The current grade is corps deputy leader (副军级), which appears is a downgrade from the previous corps leader grade (正军级)

#### SUBORDINATION:<sup>1024</sup>

From 1999 to 2016, the university was subordinate to the CMC General Staff Department. In 2016, however, it was resubordinated to the CMC Training and Administration Department (aka Training Management Department) (训练管理部)

#### FACILITIES:<sup>1025</sup>

Overall, the campuses cover 1,320 acres (8,000 mu), which includes more than 400 laboratories and teaching and training venues (各类实验室和教学训练场馆400余个). The State Key Laboratory of Mathematical Engineering and Advanced Computing (数学工程与先进计算国家重点实验室), the National Engineering Laboratory of Computer Virus Defense Technology (计算机病毒防御技术国家工程实验室), and the National Digital Program Control Exchange Technology Engineering Center (国家数字程控交换技术工程中心), as well as various national-level teaching and research experimental platforms (中国遥感定标场等国家级教学、科研实验平台) such as China Remote Sensing Calibration Field (中国遥感定标场). It also includes a network adversary training range (网络对抗训练靶场). In addition, it has training venues such as swimming pools, gymnasiums, underground shooting ranges, and car driving lots. The library with the largest single area of the whole army has been built, with more than 3.2 million books in the collection and 355 TB of digital literature resources (建有游泳馆, 体育馆, 地下射击场, 汽车驾驶场等训练场所. 建有全军单体面积最大的图书馆, 馆藏图书320余万册, 数字文献资源355TB).

#### ORGANIZATIONAL STRUCTURE:

- Subordinate *Xueyuan* (学院): The information concerning the number and names of subordinate *xueyuan* is not consistent.

- o According to one report in 2019, the university has five subordinate academies/colleges as shown below; however, no details were found for any of them:<sup>1026</sup>
  - Information System Engineering Academy/College (信息工程学院)
  - Geospatial Information Academy/College (地理空间信息学院)
  - Cryptography Engineering Academy/College (密码工程学院)
  - Internet Security Academy/College (网络空间安全学院)
  - Data and Target Engineering Academy/College (数据与目标工程学院)
- o According to another report, however, the university has the following four subordinate academies/colleges, none of which match the list above:<sup>1027</sup>
  - Information Engineering Academy/College (信息工程学院)
  - Surveying and Mapping Academy/College (测绘学院)
  - Electronic Technology Academy/College (电子技术学院)
  - Science Academy/College (理学院)
- Subordinate NCO school (士官学校): The university does not have any programs for NCOs.
- Administrative and functional departments (部门): In 2007, the following departments existed for the university, and some of the departments also existed for each subordinate college/school, but these most likely changed in 2017.<sup>1028</sup> See the introduction to this report for further information about the possible new structure.
  - o Training Department (训练部) that served as the Headquarters Department
  - o Political Department (政治部)
  - o School Affairs Department (校务部), which was responsible for all facilities and logistics
  - o Scientific Research Department (科研部)
- Academic departments (系): According to one list, the university has a total of 27 unidentified academic departments<sup>1029</sup>
- Key labs (重点实验室): The university has a State Key Laboratory of Mathematical Engineering and Advanced Computing (数学工程与先进计算国家重点实验室) as well as several Army-level and Provincial-level key labs (军队 (省级) 重点实验室)<sup>1030</sup>
- Research labs (研究室), research centers (研究中心), and teaching and research labs (教研室):<sup>1031</sup> The university has at least one research institute, the Information Technology Research Institute (信息技术研究所). The institute has one State-level Engineering Technology Research Center (国家级工程技术研究中心), a few Research and Teaching Centers (实验教学示范中心), two State-level Teaching and Research Centers (国家级实验教学示范中心). The institute has several unidentified teaching and research labs.
- Graduate school (研究生院): Only one reference was found for a graduate school<sup>1032</sup>
- Student teams (队 / 区队) and groups (大队). Only one reference was found for one of these organizations, which is a foreign training group (外训大队) affiliated with the Information Technology Research Institute noted above.

#### LEADERSHIP AND STAFF:<sup>1033</sup>

- Commandant: Unknown
- Political Commissar: Unknown
- Professors and staff:<sup>1034</sup> The university has more than 2,000 teaching and research personnel, with 153 doctoral tutors and 447 master tutors. Among them, there are one academician of the Chinese Academy of Sciences, three academicians of the Chinese Academy of Engineering, one academician of the International Eurasian Academy of Sciences, one member of the National Science and Technology Award Committee, five members of the State Council Disciplinary Review Group, and one member of the National Informationization Expert Advisory Committee.

## DEGREES, MAJORS, AND SPECIALTIES:

- Bachelor's degree (本科): four years
  - o Concerning its bachelor's degree program, the university has five bachelor's degree majors as shown below and 78 specialties, each of which has one direction, and is shown in Table 46 below:<sup>1035</sup>
  - o 5 Majors: Science (理学), Engineering (工学), Military Science (军事学), Management (管理学), and Culture (文化学)<sup>1036</sup>
  - o Specialties: Table 46 provides a list of 25 of the 78 of specialties, to include the specialty codes (专业代码), specialty (专业), the direction for each specialty (方向划分), and the training type (培养类型) (i.e., commanding officer (指挥类) identified as CO or non-commanding officer (非指挥类) identified as Non-CO) were found for 2017:<sup>1037</sup>

**Table 46: SSF Information Engineering University Specialties**

Specialty Code	Specialty	Direction	Training Type
080706	Information Engineering 信息工程	Intelligence Analysis & Integration 情报分析整编	Non-CO
080703	Communications Engineering 通信工程	Reconnaissance Intelligence Equipment Research Development & Support 侦察情报装备研发与保障	Non-CO
110304	Detection Engineering 侦测工程	Technical Reconnaissance Information Reconnaissance Detection 技侦信息侦察侦测	Non-CO
080708	Hydroacoustic Engineering 水声工程	Underwater Reconnaissance Detection 水下侦察探测	Non-CO
081201	Surveying Engineering 测绘工程	Surveying Sub-unit Command 测绘分队指挥 Surveying Technology & Support, Military-use Time & Space Benchmark Support 测绘技术与保障, 军用时空基准保障	CO & Non-CO
081202	Remote Sensing Science & Technology 遥感科学与技术	Surveying Technology & Support 测绘技术与保障 Reconnaissance Technology & Command, Battlefield Image Interpretation 侦察技术与指挥, 战场图像判读	CO & Non-CO
110112	Military Geographic Information Engineering 军事地理信息工程	Surveying Technology & Support 测绘技术与保障 Reconnaissance Technology & Command 侦察技术与指挥	CO & Non-CO
070501	Geographic Science 地理科学	Surveying Technology & Support 测绘技术与保障	Non-CO
110110	Combat Environment Engineering 作战环境工程	Surveying Technology & Support 测绘技术与保障	CO
110114	Cryptography 密码学	Cryptography Preparation & Management 密码编制与管理	Non-CO
080702	Electronic Science & Technology 电子科学与技术	Cryptography Equipment Technology & Support 密码装备技术与保障	CO
1201	Management Science & Engineering 管理科学与工程	Cryptography Preparation & Management 密码编制与管理	CO
080704	Microelectronics Science & Engineering 微电子科学与工程	Cryptography Equipment Technology & Support 密码装备技术与保障	Non-CO
082107	Information Countermeasures Technology 信息对抗技术	Network Information Defense 网络信息防御	CO
080901	Computer Science & Technology 计算机科学与技术	Reconnaissance Intelligence Equipment Research Development & Support 侦察情报装备研发与保障	Non-CO



080903	Network Engineering 网络工程	Internet Security Technology & Command 网络空间安全技术与指挥	Non-CO
110115	Cryptography Engineering 密码工程	Cryptography Research 密码研究	Non-CO
080904	Information Security 信息安全	Cryptography Notification 密码通报	CO
110111	Big Data Engineering 大数据工程	Data Support 数据保障	CO & Non-CO
081203	Navigation Engineering 导航工程	Navigation Technology & Command 导航技术与指挥 Military-use Time and Space Benchmark Support 军用时空基准保障	CO & Non-CO
110102	Early Warning Detection 预警探测	Reconnaissance Technology & Command 侦察技术与指挥	Non-CO
0502XX <sup>1038</sup>	Military Foreign Language (Combined) 军事外语类 (合)	Military Foreign Language Technology 军事外语类技术	Non-CO
110103	Reconnaissance & Intelligence 侦察情报	Korean, Russian, Japanese, English, Reconnaissance Intelligence Technology 朝鲜语/俄语/日语/英语/侦察情报技术	CO & Non-CO
030204	International Affairs & International Relations 国际事务与国际关系	Reconnaissance Intelligence Technology 侦察情报技术	Non-CO
0602	Foreign Language Culture 外国语言文学类	Language Intelligent Processing Technology 语言智能处理技术	Non-CO

- Master's degree (硕士)
  - Master's degree majors and specialties: It is not clear how many majors there are, but there are 17 first-level (一级学科硕士授权点) and seven second-level (二级学科硕士授权点) degree programs.<sup>1039</sup>
- Doctoral degree (博士)
  - Doctoral degree majors and specialties: It is not clear how many majors there are, but there are eight first-level (一级学科博士授权点) and one second-level (二级学科博士授权点) degree programs.<sup>1040</sup>

#### POST-DOCTORAL SPECIALTIES (博士后):

The university has eight first-level Post-doctoral programs (一级学科博士授权点).<sup>1041</sup>

#### 2017 UNDERGRADUATE RECRUITMENT:<sup>1042</sup>

- Number of Specialties (专业): 41 specialties, of which 15 are foreign language specialties
- Gender (男, 女): Of the 41 specialties, 68 specialties include males and 45 include females. Of these, all of the 15 language specialties are an even mix of males and females. In addition, ten of the specialties include females as commanding officers. Of the 894 new cadets, 799 were male and 95 were female.
- Total number of personnel recruited (合计): 894 cadets from high school graduates, which included 80 students with a humanities background (文科生).
- Number of Provinces/Autonomous Regions/Municipality and Quotas: Of the 22 provinces, five autonomous regions, and four municipalities, new cadets were recruited from 26 of them
- Foreign language requirements (外语语种): Although the university has language programs for 15 languages, the only language required for admission is English. Of note, however, is that English is not one of the languages taught as a specialty.
- Specialty categories (专业类别) – commanding officer (指挥) or non-commanding officer (非指): Of the 894 cadets, 413 were commanding officers and 481 were non-commanding officers.



#### INTERNATIONAL EXCHANGES AND COOPERATION:<sup>1043</sup>

Cadets have the opportunity to engage in international exchanges by participating in international academic conferences and academic competitions, short-term visits, joint training, and degree studies. Each year, the university sponsors some excellent graduate students to go abroad for joint training through the National Scholarship Fund (国家留学基金委), and fully subsidizes some excellent graduate students to study for degrees at foreign universities such as Munich University in Germany. Some outstanding cadets are selected to participate in international research and internship activities and to participate in various international academic conferences and academic competitions.

# APPENDIX A:

## ACRONYMS

ACRONYM	FULL TERM
AFEU	Air Force Engineering University
AFMU	Air Force Medical University
AUAF	Aviation University of the Air Force
BJMR	Beijing Military Region
BUAA	Beijing University of Aeronautics and Astronautics
CAE	Chinese Academy of Engineering
CAS	Chinese Academy of Science
CCP	Chinese Communist Party
CDMR	Chengdu Military Region
CMC	Central Military Commission
CO	Commanding Officer
CPC	Communist Party of China
CPLA	Chinese People's Liberation Army
EPGC	Erpao Gongcheng (Second Artillery Engineering)
FMMU	Fourth Military Medical University
GAD	General Armament Department
GEN	General
GLD	General Logistics Department
GPD	General Political Department
GSD	General Staff Department
GZMR	Guangzhou Military Region
HJGC	Huojian Gongcheng (Rocket Force Engineering)
HQ	Headquarters
IFR	Instrument Flight Regulations
ISSN	International Standard Serial Number
JNMR	Jinan Military Region
KF	Key Finding
LGEN	Lieutenant General
LZMR	Lanzhou Military Region
MGEN	Major General
MND	Ministry of National Defense
MOD	Ministry of Defense
MOE	Ministry of Education
MR	Military Region
MRAF	Military Region Air Force
MUCD	Military Unit Cover Designator

NAE	Naval Academy of Engineering
NBC	Nuclear, Biological, and Chemical
NCO	Noncommissioned Officer
NDU	National Defense University
NJMR	Nanjing Military Region
NNSF	National Natural Sciences Foundation
Non-CO	Non-Commanding Officer
NSFC	National Natural Sciences Foundation
NUDT	National University of Defense Technology
NUE	Naval University of Engineering
PAP	People's Armed Police
PC	Political Commissar
PLA	People's Liberation Army
PLAA	PLA Army
PLAAF	PLA Air Force
PLAIEU	PLA Information Engineering University
PLAN	PLA Navy
PLARF	PLA Rocket Force
PLASSF	PLA Strategic Support Force
PLAUST	PLA University of Science and Technology
PRC	People's Republic of China
RADM	Rear Admiral
SCOL	Senior Colonel
SCPT	Senior Captain
SMMU	Second Military Medical University
SYMR	Shenyang Military Region
TAS	Teenagers Aviation Schools
TC	Theater Command
TCAF	Theater Command Air Force
TMMU	Third Military Medical University
U.S.	United States
VADM	Vice Admiral
VFR	Visual Flight Regulations

# APPENDIX B:

## SOURCES

The primary sources for the report include PLA books, information from official Chinese websites, information from PLA newspapers and magazines, and relevant Western publications. Some, but not all, of the key sources are shown below:

- PLA Newspapers
  - *Air Force News* (空军报)
- PLA Books
  - Dong Huiyu and Mou Xianming, eds., *Dictionary of Modern Military Education* [现代军校教育辞典], First Edition (Beijing: National Defense University, 2009).
  - Dong Huiyu and Mou Xianming, eds., *Dictionary of Modern Military Education* [现代军校教育辞典], Second Edition (Beijing: National Defense University Press, 2011).
  - Du Jingchen, ed., *Handbook for Officers and Enlisted of the Chinese PLA Navy* [中国海军军人手册] (Beijing: Haichao Press, February 2012).
  - *PLA Air Force Enlisted Force Handbook* [中国人民解放军空军士兵手册] (Beijing: Lantian Press, 2006).
  - *People's Liberation Army Air Force Officer's Handbook* [中国人民解放军空军军官手册] (Beijing: Lantian Press, November 2006).
  - *PLA Terminology* [中国人民解放军军语] (Beijing: Academy of Military Sciences Press, December 2011).
  - *PLA Terminology* [中国人民解放军军语] (Beijing: Academy of Military Sciences Press, September 1997).
  - Hu Guangzheng, ed., *Modern Military Organizational Reform Research* [当代军事体制变革研究] (Beijing: Military Science Press, October 2007).
  - Jin Peng and Dong Ming, eds., *An Overview of Chinese Military Academic Institutions* [中国军事院校通览] (Beijing: Academy of Military Science Press, 2002).
  - Li Cheng'an, ed., *Education Reform in Military Academies in the New Situation* [新形势下军队院校教育改革] (Beijing: National Defense University Press, 2015).
  - Sun Yougui, ed., *A Brief History of the Development of Chinese PLA Academic Institutions* [中国人民解放军院校发展简史] (Beijing: Lantian Press, March 1996).
  - Xu Yaoyuan, Lin Xianghai, and Mu Song, eds., *Military Cadre Work* [军队干部工作], Second Edition, vol. 39 (Beijing: China Military Encyclopedia Press, 2006).
  - Yao Wei, et al., eds., *China Air Force Encyclopedia* [中国空军百科全书] (Beijing: Aviation Industry Press, November 2005).
  - Yuan Wei and Zhang Zhuo, eds., *History of the Development of China's Military Academic Institutions* [中国军校发展史] (Beijing: National Defense University Press, July 2001).
  - Zhao Yiping et al., eds., *PLA Military History* [中国人民解放军军史], Second Edition, Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007).
- PLA websites
  - <http://english.chinamil.com.cn/>
  - <http://www.81.cn/>
  - <http://eng.mod.gov.cn/>

- o <http://kj.81.cn/>
- o <https://www.cnki.net/>
- o Reputable blogs
- Defense White Papers
  - o State Council Information Office, “China’s National Defense in 2006” [2006年中国的国防], December 2006.
  - o State Council Information Office, “China’s National Defense in 2008” [2008年中国的国防], January 2009.
  - o State Council Information Office, “China’s Military Strategy” [中国的军事战略], May 2015, [http://www.mod.gov.cn/auth/2015-05/26/content\\_4586723.htm](http://www.mod.gov.cn/auth/2015-05/26/content_4586723.htm).
- Relevant Western publications
  - o “Directory of PRC Military Personalities 2019” (Washington, DC: United States Department of Defense, Defense Intelligence Agency, March 2019).
  - o Kenneth Allen “PLA Air Force, Naval Aviation, and Army Aviation Aviator Recruitment, Education, and Training,” *China Brief*, Jamestown Foundation, 8 April 2016.
  - o Kenneth Allen and Morgan Clemens, “The Recruitment, Education, and Training for PLA Navy Personnel,” *China Maritime Studies Institute Red Books*, no. 12 (2014): 1–35.
  - o Kenneth Allen and Mulvaney Brendan, “Changes in the PLA’s Military Education” (Annual Conference on The Chinese People’s Liberation Army, Carlisle, PA, 2018).
  - o Kevin McCauley, “Cultivating Joint Operations Talent” (Annual Conference on The Chinese People’s Liberation Army, Carlisle, PA, 2018).
  - o Andrew Scobell, Roy Kamphausen, and Travis Tanner, *The “People” in the PLA: Recruitment, Training, and Education in China’s Military* (Strategic Studies Institute (SSI), 2014).

## APPENDIX C: MOE CODES AND PLA ACADEMIC AND RESEARCH INSTITUTIONS

This appendix discusses the brief history of the Ministry of Education's (MOE / 教育部) codes assigned to civilian and military academic and research institutions since the early 2000s and which codes were assigned in 2008 and 2017. As is evident throughout this report, the PLA is not consistent in how it provides official English names for its organizations. There does not appear to be a single PLA source, including chinamil.com, with an official list of all previous or current PLA academic institutions. Part of the reason for this is that several *xueyuan* or academic departments have merged into universities or been subordinated to universities. Some lists include them, while others do not. Other *xueyuan* have changed their name or been abolished. In addition, the PLA's seven flight academies and six PLA NCO schools are sometimes but not always listed in part or in full. Even the two official PLA books used as a primary source for this report are not consistent in how they translated the names.

During the early 2000s, the Ministry of Education (MOE / 教育部) created the *National Code List for Institutions that Award Degrees* (全国各学位授予单位代码) as a foundation to assign a five-digit code (单位代码) to most, but not all, civilian and military degree awarding academic and research institutions.<sup>1044</sup> Each code has an official Chinese name (单位名称), which is the name of the organization. No English names were included. Appendix C (Table 47) provides a list of the 63 officer PLA academic institutions and available codes (90001 to 90063).<sup>1045</sup> At that time, there were four standalone NCO schools, but they were not listed nor were any codes assigned to them.

The list was updated in January 2008 to add institutions that were omitted from the earlier list, especially military institutions, and to make the necessary changes to the names of existing institutions.<sup>1046</sup> The four existing NCO schools were not included in the list, nor were any of them given a code. Some of the assigned numbers also changed. The most likely reason for this was that the first list did not have all of the PLA academic institutions, they were not in protocol order, some of the institutions have changed their name, and there were not enough empty spots left to accommodate changes.

Following the 2017 reorganization, each of the 37 PLA academic institutions (34 officer and three NCO) received a new code (91001 to 91037) as shown in Appendix C and Table 48. This is the first time that NCO schools were added to the list and given separate codes. Although each list also included codes for the People's Armed Police (PAP), they are not discussed in this report.

In addition to the academic institutions, the MOE has assigned codes (91101-91110) to the several PLA research institutions, including the Academy of Military Science (军事科学院).<sup>1047</sup> Although these organizations are not academic institutions, they do have programs for graduate students who are apparently linked to other PLA academic institutions. For example, although AMS has a Graduate Student Department (研究生部) that is responsible for cultivation and training (培训) for personnel at the master's and doctoral level, including post-graduate research stations, it does not have a Graduate School (研究生院).<sup>1048</sup> Table 49 shows the eight PLA research organizations that were assigned codes in 2008 and ten organizations that were assigned code in 2017.<sup>1049</sup>

Until 2017, the institutions were organized using a basic protocol order of their subordination, including joint (CMC and Four General Departments), Army, Navy, Air Force, Second Artillery, and Military Region.<sup>1050</sup> The "official" English names in Table 47 are taken from two official PLA sources – *China's Military Encyclopedia's PLA Military History* [中国人民解放军军史] (Second Edition, Volume 3), December 2007, and *Dictionary of Modern Military Education* [现代军校教育辞典] (First Edition), July 2009.<sup>1051</sup>



Table 47 below provides a list of the PLA's 67 academic institutions that were identified in 2011. The list comes from an official PLA encyclopedia that lists them in protocol order.<sup>1052</sup> The table includes the official Chinese name, official English name in 2007 and 2009, subordination, grade, and the MOE codes that were assigned in 2008.<sup>1053</sup> As noted earlier, the four NCO institutions were not assigned MOE codes until 2017. The official English names come from *PLA Military History* (2007) but do not always match the names found in *Dictionary of Modern Military Education* (2009). The Table includes the names from both publications, some of which are the same and others that are different.

**Table 47: 67 PLA Academic Institutions**

#	Chinese Name	English Name (2007)	English Name (2009)	Subor	Grade	MOE Code (2008)
1	国防大学	PLA National Defense University		CMC	MRL	90001
2	国防科学技术大学	PLA National Defense Science and Technology University		GSD	MRDL	90002
3	石家庄陆军指挥学院	Shijiazhuang Army Command College			CL	90003
4	南京陆军指挥学院	Nanjing Army Command College				90004
5	信息工程大学	PLA Information Engineering University				90005
6	解放军理工大学	PLA University of Science & Technology	PLA Technology University			90006
7	国际关系学院	PLA Institute of International Relations	PLA International Studies University		CDL	90007
8	解放军外国语学院	PLA University of Foreign Languages				90008
9	通信指挥学院	Communication Command College	Communication and Command College			90009
10	西安通信学院	Xi'an Communication College			DL	90011
11	重庆通信学院	Chongqing Communication College				90010
12	炮兵指挥学院	Artillery Command College	Artillery Commanding College	CDL	90012	
13	炮兵学院	Artillery Academy	Artillery College		90013	
14	沈阳炮兵学院	Shenyang Artillery Academy	Shenyang Artillery College	DL	90014	
15	防空兵指挥学院	Air Defense Forces Command College	Air Defence Forces Command College	CDL	90015	
16	蚌埠坦克学院	Bengbu Tank Academy	Bengbu Tank College	DL	90016	
17	工程兵指挥学院	Engineer Corps Command College	Engineer Corps Commanding College	CDL	90017	
18	防化指挥工程学院	Chemical Defense Command and Engineering College			90018	
19	解放军电子工程学院	Electronic Engineering College			90019	
20	陆军航空兵学院	Army Aviation College	Army Aerial Corps College		90020	
21	南京政治学院	Nanjing Political College	Nanjing Political Institute	GPD	CL	90021
22	西安政治学院	Xi'an Political College	Xian Political Institute			90022
23	解放军艺术学院	PLA Art College	PLA Art Institute		CDL	90023
24	后勤指挥学院	Logistics Command Academy	Logistic Command College	GLD	CL	90024
25	后勤工程学院	Logistical Engineering University	Logistic Engineering College			90025
26	军事经济学院	Military Economic College	Military Economics College		CDL	90026
27	军事交通学院	Military Communications College	Military Transportation College			90027
28	汽车管理学院	Vehicle Management College		DL	90028	
29	镇江船艇学院	Zhenjiang Ship College	Zhenjiang Vessels College		90029	
30	第二军医大学	Second Military Medical University		CDL	90030	
31	第三军医大学	Third Military Medical University			90031	
32	第四军医大学	Fourth Military Medical University			90032	

33	装备指挥技术学院	Institute of Command & Technology of Equipment	Equipment Commanding Technology College	GAD	CL	90033
34	装甲兵工程学院	Armored Force Engineering College	Armored Corps Engineering College		CDL	90034
35	军械工程学院	Ordnance Engineering College				90035
36	装甲兵技术学院	Armored Force Technical College			DL	
37	武汉军械士官学校	Wuhan Ordnance Noncommissioned Officer School	Wuhan Ordnance Sergeant School			
38	海军指挥学院	Naval Command College	Naval Commanding College	PLAN	CL	90037
39	海军工程大学	Naval Engineering University				90038
40	海军航空工程学院	Navy Aviation Academy	Naval Aeronautical and Astronautical College		CDL	90039
41	海军大连舰艇学院	Dalian Naval Ship Academy	Naval Dalian Ship College			90040
42	海军兵种指挥学院	Naval Arms Command Academy	Naval Arms Commanding College			90041
44	海军飞行学院	Navy Flight Academy	Naval Flight College		DL	90043
44	海军潜艇学院	Navy Submarine Academy	Naval Submarine College		CDL	90042
45	海军蚌埠士官学校	Bengbu Navy Petty Officers Academy	Bengbu Naval Sergeant School		DL	
46	空军指挥学院	Air Force Command College	Air Force Commanding College	PLAAF	CL	90044
47	空军工程大学	Air Force Engineering University	Air Force Engineer University			90045
48	空军航空大学	Air Force Aviation University			CDL	90046
49	空军雷达学院	Air Force Radar College				90047
50	桂林空军学院	Guilin Air Force College			DL	90048
51	徐州空军学院	Xuzhou Air Force Academy	Xuzhou Air Force College			90049
52	空军第一航空学院	First Aviation College of Air Force				90050
53	空军第一飞行学院	First Flight College of Air Force	First Aviation College of the Air Force			90051
54	空军第二飞行学院	Second Flight College of Air Force	First Aviation College of the Air Force			90052
55	空军第三飞行学院	Third Flight College of Air Force	Second Aviation College of the Air Force			90053
56	空军第四飞行学院	Fourth Flight College of Air Force	Third Aviation College of the Air Force			90054
57	空军第五飞行学院	Fifth Flight College of Air Force	Fourth Aviation College of the Air Force			90055
58	空军第六飞行学院	Sixth Flight College of Air Force	Fifth Aviation College of the Air Force			90056
59	空军第十三飞行学院	Thirteenth Flight College of Air Force	Sixth Aviation College of the Air Force			90057
60	空军大连通信士官学校	Dalian Air Force Communication Noncommissioned Officer School	Thirteenth Aviation College of the Air Force			
61	第二炮兵指挥学院	Second Artillery Command College	Second Artillery Commanding College	PLASAF	CL	90058
62	第二炮兵工程学院	Second Artillery Engineering College			CDL	90059
63	第二炮兵青州士官学校	Qingzhou Second Artillery Noncommissioned Officer School	Qingzhou Sergeant School of the Second Artillery Force		DL	
64	石家庄机械化步兵学院	Shijiazhuang Mechanized Infantry Academy	Shijiazhuang Mechanized Infantry College	BJMR		90060
65	西安陆军学院	Xi'an Military Academy	Xian Army College	LZMR		90061
66	南昌陆军学院	Nanchang Military Academy	Nanchang Army College	NJMR		90062
67	昆明陆军学院	Kunming Army Academy	Kunming Army College	CDMR		90063

Table 48 below provides a list of the PLA's 37 academic institutions that were identified in June 2017. The list comes from an official PLA MND media report and lists them in protocol order by subordination.<sup>1054</sup> The table includes the official Chinese name, official English name when found, official English acronym, subordination, grade, and whether there is an official website, which are identified with a “Y” for yes an “N” for none found, “C” for Chinese, and “E” for English. However, of the 37 institutions, only a few websites were found. The final column shows the MOE codes that were assigned in 2017.<sup>1055</sup> Note that none of the current institutions are subordinate to any of the five Theater Commands, which is unlike several of the previous 67 institutions that were subordinate to a Military Region command.

**Table 48: 37 PLA Academic Institutions in 2017**

#	English Name	Chinese Name	Acronym	Subor	Grade	Web	MOE Code (2017)
1	National Defense University	国防大学	NDU	CMC	TCDL	N	91001
2	National University of Defense Technology	国防科技大学	NUDT		CL	Y (C)	91002
3	Army Command College	陆军指挥学院		PLAA	CDL		91003
4	Army Engineering University	陆军工程大学				N	91004
5	Army Infantry College	陆军步兵学院				N	91005
6	Army Academy of Armored Forces	陆军装甲兵学院					91006
7	Army Academy of Artillery & Air Defense	陆军炮兵防空兵学院				N	91007
8	Army Aviation Academy	陆军航空兵学院					91008
9	Army Special Operations Academy	陆军特种作战学院					91009
10	Army Academy of Border and Coastal Defence	陆军边海防学院					91010
11	Army Institute of NBC Defence	陆军防化学院					91011
12	Army Medical University	陆军军医大学（第三军医大学）	TMMU			Y (C)	91012
13	Army Logistic University	陆军勤务学院					91014
14	Army Military Transportation University	陆军军事交通学院					91013
15	Naval Command College	海军指挥学院	NCC	PLAN		N	91015
16	Naval University of Engineering	海军工程大学	NUE			C	91016
17	Dalian Naval Academy	海军大连舰艇学院				N	91017
18	Navy Submarine Academy	海军潜艇学院				N	91018
19	Naval Aviation University	海军航空大学				N	91019
20	Naval Medical University	海军军医大学（第二军医大学）	SMMU			C	91020
21	Naval Service Academy	海军勤务学院					91021
22	Naval NCO School	海军士官学校			DL		91022
23	Air Force Command College	空军指挥学院	AFCC	PLAAF	CDL		91023
24	Air Force Engineering University	空军工程大学	AFEU			C	91024
25	Air Force Aviation University	空军航空大学	AUAF			N	91025
26	Air Force Early Warning Academy	空军预警学院				N	91026
27	Air Force Harbin Flight Academy	空军哈尔滨飞行学院				N	91027
28	Air Force Shijiazhuang Flight Academy	空军石家庄飞行学院				N	91028
29	Air Force Xi'an Flight Academy	空军西安飞行学院				N	91029
30	Air Force Medical University	空军军医大学（第四军医大学）	AFMU; FMMU			C/E	91030
31	Air Force Logistics College	空军勤务学院				N	91031
32	Air Force Communication NCO Academy	空军通信士官学校			DL	N	91032

33	Rocket Force Command College	火箭军指挥学院		PLARF	CDL		91033
34	Rocket Force University of Engineering	火箭军工程大学	EPGC			C	91034
35	Rocket Force NCO School	火箭军士官学校			DL		91035
36	Strategic Support Force Space Engineering University	战略支援部队航天工程大学		PLASSF	CDL	N	91036
37	Strategic Support Force Information Engineering University	战略支援部队信息工程大学	PLAIEU			N	91037

Table 49 provides the list of PLA Research Institutions that were assigned MOE codes in 2017. The table also shows what the codes were in 2008. Of note, the names changed for several of the institutions following the 2016 PLA reorganization, but the previous names are not shown.

**Table 49: 10 PLA Research Institution MOE Codes – 2008 and 2017**

MOE Code (2008)	MOE Code (2017)	Chinese Name (2017)	English Name (2017)
90101	91101	军事科学院	Academy of Military Science
90106	91102	解放军医学院	PLA Medical Academy
	91103	西北核技术研究所	Northwest Science and Technology Research Institute
	91104	中国空气动力研究与发展中心	China Aerodynamics Research and Development Center
90107	91105	海军研究院	Naval Research Academy
90109	91106	中国航天员科研训练中心	China Astronaut Research and Training Center
90110	91107	北京跟踪与通信技术研究所	Beijing Tracking and Communication Technology Research Institute
90102	91108	战略支援部队第五十六研究所	Strategic Support Force 56 <sup>th</sup> Research Institute
90103	91109	战略支援部队第五十七研究所	Strategic Support Force 57 <sup>th</sup> Research Institute
90104	91110	战略支援部队原第五十八研究所	Strategic Support Forces former 58 <sup>th</sup> Institute

# APPENDIX D:

## MOE 2-, 4-, AND 6-DIGIT SPECIALTY CODES:

### 2018 & 2019

#### Academic Institution Specialty Codes

The Ministry of Education (MOE) assigns a two-digit subject specialty code (学科专业代码) from 01 to 13 and an official name (学科专业名称) that are organized into the following 13 categories and are applicable to all civilian and military college-level academic institutions.<sup>1056</sup> Table 50 below shows only the two-digit codes.

**Table 50: MOE 2-Digit Subject Specialty Codes**

Code	Chinese Name	English Name
01	哲学	Philosophy
02	经济学	Economics
03	法学	Law
04	教育学	Education
05	文学	Literature
06	历史学	History
07	理学	Science
08	工学	Engineering
09	农学	Agronomy
10	医学	Medicine
11	军事学	Military Science
12	管理学	Management
13	艺术学	Art

The MOE also assigns a four-digit code (学科专业代码) and an official name (学科专业名称) to every graduate major/specialty (学科), and a six-digit code and official name to every graduate sub specialty, which is based on the four-digit code to which each sub specialty is related.<sup>1057</sup> The four-digit codes are identified as level-1 specialties (一级学科) and the six digit codes are identified as level two specialties (二级学科).<sup>1058</sup> These codes are uniform for all academic institutions, which allow you to search for a specific code and then see which institutions focus on this specialty. Table 51 provides the codes for specialties in military science (军事学).

Each two-digit code is further organized into four-digit bachelors, master's, and doctoral majors/specialties. Each four-digit code is further broken down into a six-digit code that identifies the graduate sub specialty.<sup>1059</sup> The four-digit codes are identified as level 1 (一级) and the six digit codes are identified as level-2 (二级) codes.<sup>1060</sup> These codes are uniform for all academic institutions, which then allow you to search for a specific code and then see which institutions focus on this specialty. For example, the code for an engineering specialty would apply to an engineering student at Tsinghua University in Beijing and a student in one of the PLA's engineering universities. Table 51 below shows the two-, four-, and six-digit codes.

**Table 51: MOE 2-, 4-, and 6-Digit Subject Specialty Codes**

2018	2018	Code
01	哲学	Philosophy
0101	哲学	Philosophy
010101	马克思主义哲学	Philosophy of Marxism
010102	中国哲学	Chinese Philosophy
010103	外国哲学	Foreign Philosophies
010104	逻辑学	Logic
010105	伦理学	Ethics
010106	美学	Aesthetics
010107	宗教学	Science of Religion
010108	科学技术哲学	Philosophy of Science & Technology
02	经济学	Economics
0201	理论经济学	Theoretical Economics
020101	政治经济学	Political Economy
020102	经济思想史	History of Economic Thought
020103	经济史	History of Economics
020104	西方经济学	Western Economics
020105	世界经济	World Economics
020106	人口、资源与环境经济学	Population, Resources & Environmental Economics
0202	应用经济学	Applied Economics
020201	国民经济学	National Economics
020202	区域经济学	Regional Economics
020203	财政学 (含税收学)	Public Finance (including Taxation)
020204	金融学 (含保险学)	Finance (including Insurance)
020205	产业经济学	Industrial Economics
020206	国际贸易学	International Trade
020207	劳动经济学	Labor Economics
020208	统计学	Statistics
020209	数量经济学	Quantitative Economics
020210	国防经济学	National Defense Economics
03	法学	Law
0301	法学	Science of Law
030101	法学理论	Jurisprudence
030102	法律史	Legal History
030103	宪法学与行政法学	Constitutional Law & Administrative Law
030104	刑法学	Criminal Jurisprudence
030105	民商法学(含劳动法学, 社会保障法学)	Civil Law & Commercial Law (including Science of Labour Law & Science of Social Security Law )
030106	诉讼法学	Science of Procedure Laws
030107	经济法学	Science of Economic Law
030108	环境与资源保护法学	Science of Environment & Natural Resources Protection Law
030109	国际法学(含国际公法学, 国际私法学, 国际经济法学,)	International law (including International Public law, International Private Law & International Economic Law)
030110	军事法学	Science of Military Law
0302	政治学	Political Science
030201	政治学理论	Political Theory
030202	中外政治制度	Chinese & Foreign Political Institution



030203	科学社会主义与国际共产主义运动	Scientific Socialism & International Communist Movement
030204	中共党史(含党的学说与党的建设)	History of the Communist Party of China (including the Doctrine of China Party & Party Building)
030206	国际政治学	International Politics
030207	国际关系学	International Relations
030208	外交学	Diplomacy
0303	社会学	Sociology
030301	社会学	Sociology
030302	人口学	Demography
030303	人类学	Anthropology
030304	民俗学(含中国民间文学)	Folklore (including Chinese Folk Literature)
0304	民族学	Ethnology
030401	民族学	Ethnology
030402	马克思主义民族理论与政策	Marxist Ethnic Theory & Policy
030403	中国少数民族经济	Chinese Ethnic Economics
030404	中国少数民族史	Chinese Ethnic History
030405	中国少数民族艺术	Chinese Ethnic Art
0305	马克思主义理论	[Marxist Theory]
030501	马克思主义基本原理	[Basic Principles of Marxism]
030502	马克思主义发展史	[History of the Development of Marxism]
030503	马克思主义中国化研究	[Research on the Sinicization of Marxism]
030504	国外马克思主义研究	[Foreign Research on Marxism]
030505	思想政治教育	[Ideological and Political Education]
030506	中国近现代史基本问题研究	[Research on the Basic Issues of Chinese Modern History]
0306	公安学	[Public Security]
04	教育学	Education
0401	教育学	Education Science
040101	教育学原理	Educational Principle
040102	课程与教学论	Curriculum & Teaching Methodology
040103	教育史	History of Education
040104	比较教育学	Comparative Education
040105	学前教育学	Pre-school Education
040106	高等教育学	Higher Education
040107	成人教育学	Adult Education
040108	职业技术教育学	Vocational & Technical Education
040109	特殊教育学	Special Education
040110	教育技术学	Education Technology
0402	心理学 (可授教育学, 理学学位)	Psychology
040201	基础心理学	Basic Psychology
040202	发展与心理学	Developmental & Educational Psychology
040203	应用心理学	Applied Psychology
0403	体育学	Science of Physical Culture & Sports
040301	体育人文社会学	Humane & Sociological Science of Sports
040302	运动人体科学	Human Movement Science
040303	体育教育训练学	Theory of Sports Pedagogy & Training
040304	民族传统体育学	Science of Ethnic Traditional Sports
0451	教育 (博士, 硕士)	[Education (PhD, Master's)]
045101	教育管理	[Education Management]
045102	学科教学 (思政)	[Subject Teaching (Ideology and Politics)]

045103	学科教学（语文）	[Subject Teaching (Chinese)]
045104	学科教学（数学）	[Subject Teaching (Mathematics)]
045105	学科教学（物理）	[Subject Teaching (Physics)]
045106	学科教学（化学）	[Subject Teaching (Chemistry)]
045107	学科教学（生物）	[Subject Teaching (Biology)]
045108	学科教学（英语）	[Subject Teaching (English)]
045109	学科教学（历史）	[Subject Teaching (History)]
043110	学科教学（地理）	[Subject Teaching (Geography)]
045111	学科教学（音乐）	[Subject Teaching (Music)]
045112	学科教学（体育）	[Subject Teaching (Physical Education)]
045113	学科教学（美术）	[Subject Teaching (Fine Arts)]
045114	现代教育技术	[Modern Educational Technology]
045115	小学教育	[Primary School Education]
045116	心理健康教育	[Mental Health Education]
045117	心理健康教育	[Mental Health Education]
045118	学前教育	[Preschool Education]
045119	特殊教育	[Special Education]
0452	体育硕士	[Master of Physical Education]
045201	体育教学	[Physical Education]
045202	运动训练	[Sports Training]
045203	竞赛组织	[Competition Organization]
045204	社会体育指导	[Social Sports Guidance]
0453	汉语国际教育硕士	[Master of Chinese International Education]
0454	应用心理硕士	[Master of Applied Psychology]
05	文学	Literature
0501	中国语言文学	Chinese Literature
050101	文艺学	Theory of Literature & Art
050102	语言学及应用语言学	Linguistics & Applied Linguistics
050103	汉语言文字学	Chinese Philology
050104	中国古典文献学	Study of Chinese Classical Text
050105	中国古代文学	Ancient Chinese Literature
050106	中国现当代文学	Modern & Contemporary Chinese Literature
050107	中国少数民族语言文学	Chinese Ethnic Language & Literature
050108	比较文学与世界文学	Comparative Literature & World Literature
0502	外国语言文学	Foreign Languages & Literatures
050201	英语语言文学	English Language & Literature
050202	俄语语言文学	Russian Language & Literature
050203	法语语言文学	French Language & Literature
050204	德语语言文学	German Language & Literature
050205	日语语言文学	Japanese Language & Literature
050206	印度语言文学	Indian Language & Literature
050207	西班牙语语言文学	Spanish Language & Literature
050208	阿拉伯语语言文学	Arabic Language & Literature
050209	欧洲语言文学	European Language & Literature
050210	亚非语言文学	Asian-African Language & Literature
050211	外国语言学及应用语言学	Linguistics & Applied Linguistics in Foreign Languages
0503	新闻传播学	Journalism & Communication
050301	新闻学	Journalism

050302	传播学	Communication
050321	广播电视学	[Radio and Television]
0551	翻译硕士	[Master of Translation]
055101	英语笔译	[English Translation]
055102	英语口译	[English Interpretation]
055103	俄语笔译	[Russian Translation]
055104	俄语口译	[Russian Interpretation]
055105	日语笔译	[Japanese Translation]
055106	日语口译	[Japanese Interpretation]
055107	法语笔译	[French Translation]
055108	法语口译	[French Interpretation]
055109	德语笔译	[German Translation]
055110	德语口译	[German Interpretation]
055111	朝鲜语笔译	[Korean Translation]
055112	朝鲜语口译	[Korean Interpretation]
0552	新闻与传播硕士	[Master of Journalism and Communication]
0553	出版硕士	[Master of Publishing]
06	历史学	History
0601	考古学	History
060101	史学理论与史学史	Historical Theories & History of Historical Science
060102	考古学及博物馆学	Archaeology & Museology
060103	历史地理学	Historical Geography
060104	历史文献学(含敦煌学、古文字学)	Studies of Historical Literature (including Paleography & Studies of Dunhuang)
060105	专门史	History of Particular Subjects
060106	中国古代史	Ancient Chinese History
0602	中国史	[Chinese History]
0603	世界史	[World History]
07	理学	Natural Science
0701	数学	Mathematics
070101	基础数学	Fundamental Mathematics
070102	计算数学	Computational Mathematics
070103	概率论与数理统计	Probability & Mathematical Statistics
070104	应用数学	Applied mathematics
070105	运筹学与控制论	Operational Research & Cybernetics
0702	物理学	Physics
070201	理论物理	Theoretical Physics
070202	粒子物理与原子核物理	Particle Physics & Nuclear Physics
070203	原子与分子物理	Atomic & Molecular Physics
070204	等离子体物理	Plasma Physics
070205	凝聚态物理	Condensed Matter Physics
070206	声学	Acoustics
070207	光学	Optics
070208	无线电物理	Radio Physics
0703	化学	Chemistry
070301	无机化学	Inorganic Chemistry
070302	分析化学	Analytical Chemistry
070303	有机化学	Organic Chemistry
070304	物理化学 (含化学物理)	Physical Chemistry (including Chemical Physics)

070305	高分子化学与物理	Chemistry & Physics of Polymers
0704	天文学	Astronomy
070401	天体物理	Astrophysics
070402	天体测量与天体力学	Astrometry & Celestial Mechanics
0705	地理学	Geography
070501	自然地理学	Physical Geography
070502	人文地理学	Human Geography
070503	地图学与地理信息系统	Cartography & Geography Information System
0706	大气科学	Atmospheric Sciences
070601	气象学	Meteorology
070602	大气物理学与大气环境	Atmospheric Physics & Atmospheric Environment
0707	海洋科学	Marine Sciences
070701	物理海洋学	Physical Oceanography
070702	海洋化学	Marine Chemistry
070703	海洋生物学	Marine Biology
070704	海洋地质学	Marine Geology
0708	地球物理学	Geophysics
070801	固体地球物理学	Solid Earth Physics
070802	空间物理学	Space Physics
0709	地质学	Geology
070901	矿物学, 岩石学, 矿床学	Mineralogy, Petrology, Mineral Deposit Geology
070902	地球化学	Geochemistry
070903	古生物学与地层学 (含古人类学)	Paleontology & Stratigraphy (including Paleoanthropology)
070904	构造地质学	Structural Geology
070905	第四纪地质学	Quaternary Geology
0710	生物学	Biology
071001	植物学	Botany
071002	动物学	Zoology
071003	生理学	Physiology
071004	水生生物学	Hydrobiology
071005	微生物学	Microbiology
071006	神经生物学	Neurobiology
071007	遗传学	Genetics
071008	发育生物学	Developmental Biology
071009	细胞生物学	Cell Biology
071010	生物化学与分子生物学	Biochemistry & Molecular Biology
071011	生物物理学	Biophysics
0711	系统科学	Systems Science
071101	系统理论	Systems Theory
071102	系统分析与集成	Systems Analysis & Integration
0712	科学技术史 (分学科, 可授理学, 工学, 农学, 医学学位)	History of Science & Technology
0714	统计学 (可授理学, 经济学学位)	[Statistics (Degrees available in sciences and economics)]
08	工学	Engineering
0801	力学 (可授工学, 理学学位)	Mechanics
080101	一般力学与力学基础	General & Fundamental Mechanics
080102	固体力学	Solid Mechanics
080103	流体力学	Fluid Mechanics
080104	工程力学	Engineering Mechanics

0802	机械工程	Mechanical Engineering
080201	机械制造及其自动化	Mechanical Manufacture & Automation
080202	机械电子工程	Mechatronic Engineering
080203	机械设计与理论	Mechanical Design & Theory
080204	车辆工程	Vehicle Engineering
0803	光学工程	Optical Engineering
0804	仪器科学与技术	Instrument Science & Technology
080401	精密仪器及机械	Precision Instrument & Machinery
080402	测试计量技术及仪器	Measuring & Testing Technologies & Instruments
0805	材料科学与工程（可授工学、理学学位）	Materials Science & Engineering
080501	材料物理与化学	Materials Physics & Chemistry
080502	材料学	Materialogy
080503	材料加工工程	Materials Processing Engineering
0806	冶金工程	Metallurgical Engineering
080601	冶金物理化学	Physical Chemistry of Metallurgy
080602	钢铁冶金	Ferrous Metallurgy
080603	有色金属冶金	Non-ferrous Metallurgy
0807	动力工程及工程热物理	Power Engineering & Engineering Thermophysics
080701	工程热物理	Engineering Thermophysics
080702	热能工程	Thermal Power Engineering
080703	动力机械及工程	Power Machinery & Engineering
080704	流体机械及工程	Fluid Machinery & Engineering
080705	制冷及低温工程	Refrigeration & Cryogenic Engineering
080706	化工过程机械	Chemical Process Equipment
0808	电气工程	Electrical Engineering
080801	电机与电器	Electric Machines & Electric Apparatus
080802	电力系统及其自动化	Power System & its Automation
080803	高电压与绝缘技术	High Voltage & Insulation Technology
080804	电力电子与电力传动	Power Electronics & Power Drives
080805	电工理论与新技术	Theory & New Technology of Electrical Engineering
0809	电子科学与技术（可授工学、理学学位）	Electronics Science & Technology
080901	物理电子学	Physical Electronics
080902	电路与系统	Circuits & Systems
080903	微电子学与固体电子学	Microelectronics & Solid State Electronics
080904	电磁场与微波技术	Electromagnetic Field & Microwave Technology
0810	信息与通信工程	Information & Communication Engineering
081001	通信与信息系统	Communication & Information Systems
081002	信号与信息处理	Signal & Information Processing
0811	控制科学与工程	Control Science & Engineering
081101	控制理论与控制工程	Control Theory & Control Engineering
081102	检测技术与自动化装置	Detection Technology & Automatic Equipment
081103	系统工程	Systems Engineering
081104	模式识别与智能系统	Pattern Recognition & Intelligent Systems
081105	导航、制导与控制	Navigation, Guidance & Control
0812	计算机科学与技术（可授工学、理学学位）	Computer Science & Technology
081201	计算机软件与理论	Computer Software & Theory
081202	计算机系统结构	Computer Systems Organization
081203	计算机应用技术	Computer Applied Technology

0813	建筑学	Architecture
081301	建筑历史与理论	Architectural History & Theory
081302	建筑设计及其理论	Architectural Design & Theory
081303	城市规划与设计 (含风景园林规划与设计)	Urban Planning & Design (including Landscape Planning & Design)
0814	土木工程	Civil Engineering
081401	岩土工程	Geotechnical Engineering
081402	结构工程	Structural Engineering
081403	市政工程	Municipal Engineering
081404	供热、供燃气、通风及空调工程	Heating, Gas Supply, Ventilating & Air Conditioning Engineering
081405	防灾减灾工程及防护工程	Disaster Prevention & Reduction Engineering & Protective Engineering
081406	桥梁与隧道工程	Bridge & Tunnel Engineering
0815	水利工程	Hydraulic Engineering
081501	水文学及水资源	Hydrology & Water Resources
081502	水力学及河流动力学	Hydraulics & River Dynamics
081503	水工结构工程	Hydraulic Structure Engineering
081504	水利水电工程	Hydraulic & Hydro-Power Engineering
081505	港口、海岸及近海工程	Harbor, Coastal & Offshore Engineering
0816	测绘科学与技术	Surveying & Mapping
081601	大地测量学与测量工程	Geodesy & Survey Engineering
081602	摄影测量与遥感	Photogrammetry & Remote Sensing
081603	地图制图学与地理信息工程	Cartography & Geographic Information Engineering
0817	化学工程与技术	Chemical Engineering & Technology
081701	化学工程	Chemical Engineering
081702	化学工艺	Chemical Technology
081703	生物化工	Biochemical Engineering
081704	应用化学	Applied Chemistry
081705	工业催化	Industrial Catalysis
0818	地质资源与地质工程	Geological Resources & Geological Engineering
081801	矿产普查与勘探	Mineral Resource Prospecting & Exploration
081802	地球探测与信息技术	Geodetection & Information Technology
081803	地质工程	Geological Engineering
0819	矿业工程	Mineral Engineering
081901	采矿工程	Mining Engineering
081902	矿物加工工程	Mineral Processing Engineering
081903	安全技术及工程	Safety Technology & Engineering
0820	石油与天然气工程	Oil & Natural Gas Engineering
082001	油气井工程	Oil-Gas Well Engineering
082002	油气田开发工程	Oil-Gas Field Development Engineering
082003	油气储运工程	Oil-Gas Storage & Transportation Engineering
0821	纺织科学与工程	Textile Science & Engineering
082101	纺织工程	Textile Engineering
082102	纺织材料与纺织品设计	Textile Material & Textiles Design
082103	纺织化学与染整工程	Textile Chemistry & Dyeing & Finishing Engineering
082104	服装设计与工程	Clothing Design & Engineering
0822	轻工技术与工程	The Light Industry Technology & Engineering
082201	制浆造纸工程	Pulp & Paper Engineering
082202	制糖工程	Sugar Engineering
082203	发酵工程	Fermentation Engineering



082204	皮革化学与工程	Leather Chemistry & Engineering
0823	交通运输工程	Communication & Transportation Engineering
082301	道路与铁道工程	Highway & Railway Engineering
082302	交通信息工程及控制	Traffic Information Engineering & Control
082303	交通运输规划与管理	Transportation Planning & Management
082304	载运工具运用工程	Vehicle Operation Engineering
0824	船舶与海洋工程	Naval Architecture & Ocean Engineering
082401	船舶与海洋结构物设计制造	Design & Construction of Naval Architecture & Ocean Structure
082402	轮机工程	Marine Engine Engineering
082403	水声工程	Underwater Acoustics Engineering
0825	航空宇航科学与技术	Aeronautical & Astronautical Science & Technology
082501	飞行器设计	Flight Vehicle Design
082502	航空宇航推进理论与工程	Aerospace Propulsion Theory & Engineering
082503	航空宇航器制造工程	Manufacturing Engineering of Aerospace Vehicle
082504	人机与环境工程	Man-Machine & Environmental Engineering
0826	兵器科学与技术	Armament Science & Technology
082601	武器系统与运用工程	Weapon Systems & Utilization Engineering
082602	兵器发射理论与技术	Armament Launch Theory & Technology
082603	火炮、自动武器与弹药工程	Artillery, Automatic Gun & Ammunition Engineering
082604	军事化学与烟火技术	Military Chemistry & Pyrotechnics
0827	核科学与技术	Nuclear Science & Technology
082701	核能科学与工程	Nuclear Energy Science & Engineering
082702	核燃料循环与材料	Nuclear Fuel Cycle & Materials
082703	核技术及应用	Nuclear Technology & Applications
082704	辐射防护及环境保护	Radiation & Environmental Protection
0828	农业工程	Agricultural Engineering
082801	农业机械化工程	Agricultural Mechanization Engineering
082802	农业水土工程	Agricultural Water-Soil Engineering
082803	农业生物环境与能源工程	Agricultural Biological Environmental & Energy Engineering
082804	农业电气化与自动化	Agricultural Electrification & Automation
0829	林业工程	Forestry Engineering
082901	森林工程	Forest Engineering
082902	木材科学与技术	Wood Science & Technology
082903	林产化学加工工程	Chemical Processing Engineering of Forest Products
0830	环境科学与工程（可授工学、理学、农学学位）	Environmental Science & Engineering
083001	环境科学	Environmental Science
083002	环境工程	Environmental Engineering
0831	生物医学工程（可授工学、理学、医学学位）	Biomedical Engineering
0832	食品科学与工程（可授工学、农学学位）	Food Science & Engineering
0833	城乡规划学	[Urban and Rural Planning]
083201	食品科学	Food Science
083202	粮食、油脂及植物蛋白工程	Cereals, Oils & Vegetable Protein Engineering
083203	农产品加工及贮藏工程	Processing & Storage of Agriculture Products
083204	水产品加工及贮藏工程	Processing & Storage of Aquatic Products
0834	风景园林学（可授工学、农学学位）	[Landscape Architecture (Degrees available in Engineering and Agriculture)]
0835	软件工程	[Software Engineering]
0836	生物工程	[Bioengineering]
0837	安全科学与工程	[Safety Science and Engineering]

0838	公安技术	[Public Security Technology]
0839	网络空间安全	[Cyberspace Security]
0851	建筑学 (硕士、学士)	[Architecture (Master's, Bachelor's)]
0852	工程 (博士、硕士)	[Engineering (Phd, Master's)]
085201	机械工程	[Mechanical Engineering]
085202	光学工程	[Optical Engineering]
085203	仪器仪表工程	[Instrument and Meter Engineering]
085204	材料工程	[Materials Science and Engineering]
085205	冶金工程	[Metallurgical Engineering]
085206	动力工程	[Power Engineering]
085207	电气工程	[Electrical Engineering]
085208	电子与通信工程	[Electronics and Communication Engineering]
085209	集成电路工程	[Integrated Circuit Engineering]
085210	控制工程	[Control Engineering]
085211	计算机技术	[Computer Technology]
085212	软件工程	[Software Engineering]
085213	建筑与土木工程	[Architecture and Civil Engineering]
085214	水利工程	[Hydraulic Engineering]
085215	测绘工程	[Surveying and Mapping Engineering]
085216	化学工程	[Chemical Engineering]
085217	地质工程	[Geological Engineering]
085218	矿业工程	[Mining Engineering]
085219	石油与天然气工程	[Petroleum and Natural Gas Engineering]
085220	纺织工程	[Textile Engineering]
085221	轻工技术与工程	[Light Industry Technology and Engineering]
085222	交通运输工程	[Traffic and Transportation Engineering]
085223	船舶与海洋工程	[Naval Architecture and Ocean Engineering]
085224	安全工程	[Safety Engineering]
085225	兵器工程	[Arms Engineering]
085226	核能与核技术工程	[Nuclear Energy and Nuclear Technology Engineering]
085227	农业工程	[Agricultural Engineering]
085228	林业工程	[Forestry Engineering]
085229	环境工程	[Environmental Engineering]
085230	生物医学工程	[Biomedical Engineering]
085231	食品工程	[Food Engineering]
085232	航空工程	[Aeronautical Engineering]
085233	航天工程	[Aerospace Engineering]
085234	车辆工程	[Automobile Engineering]
085235	制药工程	[Pharmaceutical Engineering]
085236	工业工程	[Industrial Engineering]
085237	工业设计工程	[Industrial Design Engineering]
085238	生物工程	[Bioengineering]
085239	项目管理	[Project Management]
085240	物流工程	[Logistics Engineering]
0853	城市规划硕士	[Master of Urban Planning]
09	农学	Agriculture
0901	作物学	Crop Science
090101	作物栽培学与耕作学	Crop Cultivation & Farming System

090102	作物遗传育种学	Crop Genetics & Breeding
0902	园艺学	Horticulture
090201	果树学	Pomology
090202	蔬菜学	Olericulture
090203	茶学	Tea Science
0903	农业资源与环境	Utilization Science of Agricultural Resources
090301	土壤学	Soil Science
090302	植物营养学	Plant Nutrition
0904	植物保护	Plant Protection
090401	植物病理学	Plant Pathology
090402	农业昆虫与害虫防治	Agricultural Entomology & Pest Control
090403	农药学	Pesticide Science
0905	畜牧学	Animal Science
090501	动物遗传育种与繁殖	Animal Genetics, Breeding & Reproduction Science
090502	动物营养与饲料科学	Animal Nutrition & Feed Science
090503	草业科学	Practaculture Science
090504	特种经济动物饲养学 (含蚕, 蜂等)	The Rearing of Special-type Economic Animals (including Silkworm, Honeybees, etc.)
0906	兽医学	Veterinary Medicine
090601	基础兽医学	Basic Veterinary Medicine
090602	预防兽医学	Preventive Veterinary Medicine
090603	临床兽医学	Clinical Veterinary Medicine
0907	林学	Forestry
090701	林木遗传育种学	Forest Tree Genetics & Breeding
090702	森林培育学	Silviculture
090703	森林保护学	Forest Protection
090704	森林经理学	Forest Management
090705	野生动植物保护与利用	Wildlife Conservation & Utilization
090706	园林植物与观赏园艺	Ornamental Plants & Horticulture
090707	水土保持与荒漠化防治	Soil & Water Conservation & Desertification Combating
0908	水产	Fisheries Science
090801	水产养殖学	Aquaculture Science
090802	捕捞学	Fishing Science
090803	渔业资源学	Science of Fisheries Resources
10	医学	Medicine
1001	基础医学 (可授医学, 理学学位)	Basic Medicine
100101	人体解剖与组织胚胎学	Human Anatomy, Histology & Embryology
100102	免疫学	Immunology
100103	病原生物学	Pathogenic Organisms
100104	病理学与病理生理学	Pathology & Pathophysiology
100105	法医学	Forensic Medicine
100106	放射医学	Radiation Medicine
1002	临床医学	Clinical Medicine
100201	内科学 (含心血管病学, 血液病学, 呼吸系病学, 消化系病学, 内分泌与代谢病学, 肾脏病学, 风湿病学, 传染病学)	Internal medicine (including Cardiology, Hematology, Respiratory, Gastroenterology, Endocrinology & Metabolism, Nephrology, Rheumatology, Infectious Diseases)
100202	儿科学	Pediatrics
100203	老年医学	Geriatrics
100204	神经病学	Neurology

100205	精神病与精神卫生学	Psychiatry & Mental Health
100206	皮肤病与性病学	Dermatology & Venereology
100207	影像医学与核医学	Imaging & Nuclear Medicine
100208	临床检验诊断学	Clinical Laboratory Diagnostics
100209	护理学	Nursing
100210	外科学（含普通外科学, 骨外科学, 泌尿外科学, 胸心血管外科学, 神经外科学, 整形外科学, 烧伤外科学, 野战外科学）	Surgery (General Surgery, Orthopedics, Urology, Cardiothoracic Surgery, Neurosurgery, Plastic Surgery, Burn Surgery, Field Surgery)
100211	妇产科学	Obstetrics & Gynecology
100212	眼科学	Ophthalmic Specialty
100213	耳鼻咽喉科学	Otolaryngology
100214	肿瘤学	Oncology
100215	康复医学与理疗学	Rehabilitation Medicine & Physical Therapy
100216	运动医学	Sports Medicine
100217	麻醉学	Anesthesiology
100218	急诊医学	Emergency Medicine
1003	口腔医学	Stomatology
100301	口腔基础医学	Basic Science of Stomatology
100302	口腔临床医学	Clinical Science of Stomatology
1004	公共卫生与预防医学（可授医学, 理学学位）	Public Health & Preventive Medicine
100401	流行病与卫生统计学	Epidemiology & Health Statistics
100402	劳动卫生与环境卫生学	Occupational & Environmental Health
100403	营养与食品卫生学	Nutrition & Food Hygiene
100404	儿少卫生与妇幼保健学	Maternal, Child & Adolescent Health
100405	卫生毒理学	Hygiene Toxicology
100406	军事预防医学	Military Preventive Medicine
1005	中医学	Chinese Medicine
100501	中医基础理论	Basic Theories of Chinese Medicine
100502	中医临床基础	Clinical Foundation of Chinese Medicine
100503	中医医史文献	History & Literature of Chinese Medicine
100504	方剂学	Formulas of Chinese Medicine
100505	中医诊断学	Diagnostics of Chinese Medicine
100506	中医内科学	Chinese Internal Medicine
100507	中医外科学	Surgery of Chinese Medicine
100508	中医骨伤科学	Orthopedics of Chinese Medicine
100509	中医妇科学	Gynecology of Chinese Medicine
100510	中医儿科学	Pediatrics of Chinese Medicine
100511	中医五官科学	Ophthalmology & Otolaryngology of Chinese Medicine
100512	针灸推拿学	Acupuncture & Moxibustion & Tuina of Chinese medicine
100513	民族医学	Ethnomedicine
1006	中西医结合	Chinese & Western Integrative Medicine
100601	中西医结合基础医学	Basic Discipline of Chinese & Western Integrative
100602	中西医结合临床医学	Clinical Discipline of Chinese & Western Integrative Medicine
1007	药学（可授医学, 理学学位）	Pharmaceutical Science
100701	药物化学	Medicinal Chemistry
100702	药剂学	Pharmaceutics
100703	生药学	Pharmacognosy
100704	药物分析学	Pharmaceutical Analysis
100705	微生物与生化药学	Microbial & Biochemical Pharmacy
100706	药理学	Pharmacology

1008	中药学（可授医学, 理学学位）	Science of Chinese Pharmacology
100800	Unknown	[Unknown]
1009	特种医学	[Medical Aspects of Specific Environments]
100901	Unknown	[Unknown]
1010	医学技术（可授医学, 理学学位）	[Medical Technology (Degrees available in medicine and science)]
1011	护理学（可授医学, 理学学位）	[Nursing (Degrees available in medicine and science)]
1051	临床医学（博士, 硕士）	[Clinical Medicine (PhD, Master's)]
105101	内科学	[Internal Medicine]
105102	儿科学	[Pediatrics]
105103	老年医学	[Geriatrics]
105104	神经病学	[Neurology]
105105	精神病学与精神卫生学	[Psychiatry and Mental Health]
105106	皮肤病与性病学	[Dermatology and Venereology]
105107	影像医学与核医学	[Imaging and Nuclear Medicine]
105108	临床检验诊断学	[Laboratory Medicine]
105109	外科学	[Surgery]
105110	妇产科学	[Obstetrics and Gynecology]
105111	眼科学	[Ophthalmology]
105112	耳鼻咽喉科学	[Otorhinolaryngology]
105113	肿瘤学	[Oncology]
105114	康复医学与理疗学	[Rehabilitation Medicine and Physiotherapy]
105115	运动医学	[Sports Medicine]
105116	麻醉学	[Anesthesiology]
105117	急诊医学	[Emergency Medicine]
105118	中医内科学	[Internal Medicine of Traditional Chinese Medicine]
105119	中医外科学	[Surgery of Traditional Chinese Medicine]
105120	中医骨伤科学	[Orthopedics of Traditional Chinese Medicine]
105121	中医妇科学	[Gynecology of Traditional Chinese Medicine]
105122	中医儿科学	[Pediatrics of Traditional Chinese Medicine]
105123	中医五官科学	[Ophthalmology and Otolaryngology of Chinese Medicine]
105124	针灸推拿学	[Acupuncture and Moxibustion and Tuina of Chinese Medicine]
105125	民族医学（含: 藏医学, 蒙医学等）	[Ethnomedicine (Including Tibetan and Mogolian Medicine)]
105126	中西医结合临床	[Integrated Chinese and Western Medicine]
1052	口腔医学（博士, 硕士）	[Stomatology (PhD, Master's)]
1053	公共卫生硕士	[Master of Public Health]
1054	护理硕士	[Master of Nursing]
1055	药学硕士	[Master of Pharmacy]
11	军事学	Military Science
1101	军事思想及军事历史	Military Thought & Military History
110101	军事思想学	Military Thought
110102	军事历史学	Military History
1102	战略学	Science of Strategy
110201	军事战略学	Military Strategy
110202	战争动员学	War Mobilization
1103	战役学	Science of Campaigns <sup>1061</sup>
110301	联合战役学	Joint Campaigns
110302	军种战役学（含第二炮兵战役学）	Service Campaigns (including Campaign of Strategic Missile Force)
1104	战术学	Science of Tactics

110401	合同战术学	Combined-Arms Tactics
110402	兵种战术学	Branch Tactics
1105	军队指挥学	Science of Command
110501	作战指挥学	Combat Command
110502	军事运筹学	Military Operation Research
110503	军事通信学	Military Communication
110504	军事情报学	Military Intelligence
110505	密码学	Cryptography
1106	军事管理学	Science of Military System
110601	军事组织编制学	Military Organizational System
110602	军队管理学	Military Management
1107	军队政治工作学	Science of Military Political Work
1108	军事后勤学	Science of Military Logistics & Military Equipment
110801	军事后勤学	Military Logistics
110802	后方专业勤务	Rear Special Service
110803	军事装备学	Military Equipment
1109	军事装备学	[Military Equipment]
1110	军事训练学	[Military Training]
12	管理学	Management Science
1201	管理科学与工程（可授管理学,工学学位）	Management Science & Engineering
1202	工商管理	Science of Business Administration
120201	会计学	Accounting
120202	企业管理学（含财务管理,市场营销学,人力资源管理学）	Corporate Management (including Financial Management, Marketing, & Human Resources Management)
120203	旅游管理学	Tourist Management
120204	技术经济及管理学	Technology Economy & Management
1203	农林经济管理	Agricultural & Forestry Economics & Management
120301	农业经济管理学	Agricultural Economics & Management
120302	林业经济管理学	Forestry Economics & Management
1204	公共管理	Science of Public Management
120401	行政管理学	Administration Management
120402	社会医学与卫生事业管理学	Social Medicine & Health Management
120403	教育经济与管理学	Educational Economy & Management
120404	社会保障学	Social Security
120405	土地资源管理学	Land Resource Management
1205	图书情报与档案管理	Science of Library, Information & Archival
120501	图书馆学	Library Science
120502	情报学	Information Science
120503	档案学	Archival Science



## APPENDIX E: EDUCATION AND TRAINING TERMS AND CONCEPTS

Terminology associated with the PLA's academic institutions is complicated. Two key terms are as follows:

- *Peiyang* (培养) is usually translated as “cultivation” and generally refers to the theory and basic education component. The PLA's Modern Military Academic Institution Education Dictionary translates this as “education and formation.”<sup>1062</sup>
- *Xunlian* (训练) is translated as “training” and refers to the basic military training and specialty training component.

In addition, the PLA has never used the term “professional military education” or the acronym PME. The closest term used for this foreign concept is *peiyang xunlian* (培养训练) or just *peixun* (培训), which the PLA translates as “cultivation and training,”<sup>1063</sup> “development and training,”<sup>1064</sup> or just “training.”<sup>1065</sup> At times it also uses *junshi jiaoyu* (军事教育), which is translated as “military education,” or *junshi zhiye jiaoyu* (军事职业教育), which it translates as “military professional education”<sup>1066</sup> and “education of military profession.”<sup>1067</sup> These terms refer to the education and training required for NCOs and officers to move up their career ladder. This includes billet training as well as an understanding of theory and technical issues. For purposes of this paper, the term “military education” or just “education” will be used.

The PLA defines “military professional education” as “education outside of military academic institutions.”<sup>1068</sup> Under this concept, the PLA system offers continuous education, including mostly internet-based long-distance learning, to all PLA personnel. It also includes the National Defense Student undergraduate and graduate program as well as some graduate programs at civilian academic institutions for certain officers. In other words, it does not involve education within the PLA academic institutions discussed in this paper.

The PLA also uses the terms *xueli jiaoyu* (学历教育) and *renzhi jiaoyu* (任职教育) that it translates as follows:<sup>1069</sup>

- *Xueli jiaoyu* is translated as “academic credential education,” “academic education,” or “education of officer candidates for academic credentials, which offers undergraduate education for pre-commissioned officers and graduate education for officers” in military academic institutions.<sup>1070</sup> In other words, this is the basic education component for theory, such as that which is received for four years at the Air Force Aviation University.
- *Renzhi jiaoyu* is translated as “professional education in military academic institutions” and “pre-assignment education”, which consists of basic-, intermediate-, and advanced-level officer institutions and NCO schools, and offers pre-assignment training and rotational training for active-duty officers and NCOs at each level (basic, intermediate, and advanced) of their career before they assume their billet. It is also translated as “vocational education.”<sup>1071</sup> For purposes of this paper, it is identified as “pre-assignment education.” Some pre-assignment educational institutions also offer graduate courses in military science as officers move up their career ladder.<sup>1072</sup> In other words, this component provides the technical and the command component of their pre-assignment education and training.

The PLA's academic education system also has two levels of education and training: basic and specialized education (基础与专业教育) and advanced education (深造教育). All PLA cadets receive both their basic education and specialty training before they graduate and are then assigned directly to their operational unit or begin graduate study.

Advanced education for intermediate- and senior-level officers (lieutenant colonels, colonels, senior colonels, and major generals) is conducted in only a few military academic institutions. It appears that only some officers

have the opportunity to receive advanced education or a graduate degree. For example, command track officers receive intermediate- and senior-level education at one of the PLA's Command Colleges, which does not appear to result in a graduate degree, while some technical officers attend specialized programs in various PLA *xueyuan* for two or more years to obtain graduate degrees. Command track officers can, however, attend certain graduate programs where they receive an advanced degree. Some officers (senior colonels and major generals) receive their senior-level education at the PLA's National Defense University; however, the one-year program does not result in a master's degree.

#### THE MEANING OF *ZHIHUI*:

To understand what the service Command Colleges do, it is important first to know what the term *zhibui* (指挥) means in the context of academic institutions, career tracks, organizational structure, and operations. With this as a basis, it is also important to know what the PLA's five career tracks are and how the PLA defines and organizes its "commanding academic institutions" (指挥院校).

Most importantly, no available PLA dictionary or encyclopedia has a single entry or translation for the term *zhibui* (指挥); however, every PLA dictionary and encyclopedia uses this term in multiple combinations, including *zhibuiyuan* (指挥员) *zhibui junguan* (指挥军官) and *zhibui yuanxiao* (指挥院校) discussed below. The best translation for *zhibui* is "command."

#### COMMANDER (指挥员):

*Zhibuiyuan* appears to be the generic term for commander compared to specific terms such as *silingyuan* (司令员) or *zhang* (长), as in division commander (师长). Based on how *zhibuiyuan* is used, it sometimes refers to a single person and other times it refers to the leaders (领导) and principal officers (主官) as a group, to include the commander, political commissar, deputy commanders, deputy political commissars, and directors of the four first-level departments (Headquarters, Political, Logistics, and Equipment). The *Air Force Dictionary* translates *zhibuiyuan* as commander and defines it as the leading cadre (领导干部) at each level who are responsible for combat/operations command (作战指挥). The commander's primary combat/operations responsibilities are: organizing intelligence and reconnaissance (情报侦察), issuing decisions (定下决心), clarifying missions/tasks (明确任务), formulating combat plans (制定作战计划), organizing coordinated actions and support (组织协同动作和各种保障) [within the PLAAF and with other services and branches], inspecting combat preparations situation (检查作战准备情况), and implementing battlefield coordination and control (实施战场协调与控制).<sup>1073</sup> According to the *PLA Military Dictionary*, which does not translate each term into English, *zhibuiyuan* is: 1) The principal military [track] officer(s) (军事主官) at every level in the military; 2) The leading cadre (领导干部) at each level who is/are responsible for combat/operations command (作战指挥) or military functional work (军事行政工作); 3) The general term (泛称) for military officer.<sup>1074</sup> It is also defined as the officer(s) who is/are responsible for all command of combat/operations at a particular level (对本级作战负责全部指挥负责的军官).<sup>1075</sup>

#### COMMANDING OFFICER(S)/CADRE (指挥军官 / 指挥干部):

According to various PLA publications, such as the *Military Cadre Work* volume of the *China Military Encyclopedia*, *zhibui junguan* is translated as "commanding officer" and is defined as officers who have the grade of platoon leader and above and are in one of the four PLA officer career tracks—military, political, logistics, and equipment—and are identified as military commanding officers (军事指挥军官), political commanding officers (政治指挥军官), logistics commanding officers (后勤指挥军官), and equipment commanding officers (装备指挥军官). These tracks are discussed later in Part 1. Commanding officers are categorized by their career track, grade, missions/tasks, and by their service and branch.<sup>1076</sup>

#### STAFF OFFICERS (参谋军官):

The term *canmou junguan* is the generic term for staff officers in all four departments (Headquarters, Political, Logistics, and Equipment); however, three other terms also refer to specific types of staff officers: *canmou* (参谋), *ganshi* (干事), and *zhuli* (助理). *Canmou* and *zhuli*, sometimes referred to as assistants, refer specifically to staff officers in the Headquarters Department, Logistics Department, and Equipment Department, while *ganshi* refers only to staff officers in the Political Department.<sup>1077</sup>

#### COMMANDING COLLEGE (指挥院校):

According to the *Modern Dictionary of Military Education Institutions*, a commanding college is an educational organization provides basic training and education for pre-commissioned cadets (生长干部) who will serve in commanding officer (指挥军官) and staff officer (参谋军官) billets and provides professional military education (PME / 培训) to post-cadet commanding officers and staff officers. Prior to the 14<sup>th</sup> Conference of PLA Military Educational Institutions in June 1999, the PLA had three levels of commanding academic institutions: senior/advanced-level, intermediate/mid-level, and basic level as shown below.<sup>1078</sup> [Note: Commanding colleges do not necessarily have to have the word “command” in their name but do have to provide training and/or education for commanding officers and staff officers.] Following the 14<sup>th</sup> Conference, however, all basic-level colleges were identified as specialty colleges (专业院校), leaving only two levels: senior/advanced- and intermediate/mid-level.

- Senior/advanced-level commanding college (高级指挥院校): The PLA National Defense University (国防大学) is the only institution that fits in this level.
- Intermediate/mid-level commanding college (中级指挥学院): Most, but not all, of these colleges have the word *zhihui* in their names, such as the Air Force Command College. Although various logistics colleges provide this level of command PME, they do not have *zhihui* in their name. These colleges are responsible for providing combined arms PME as well as individual service and branch PME for regiment-level military, political, logistics, and equipment track officers. They also provide PME for staff officers serving in the Headquarters Department at the group army, division, and brigade levels, as well as for political and logistics personnel working in the headquarters. Finally, they provide PME for combined arms combat, political, and logistics instructors.
- Senior/advanced- and intermediate/mid-level commanding colleges also provide graduate student degrees.
- Basic-level commanding college (初级指挥学院): This level includes each Army college; the PLA Navy’s surface vessel colleges, submarine college, and service colleges; and the PLAAF’s flight academies, navigation, AAA, and service colleges. They are divided according to institutions that provide four-year bachelor’s degrees (本科) and three-year post-secondary education programs (专科). They recruit high school graduates and enlisted personnel. Upon graduation, they serve as platoon and company commanders, vessel branch chiefs (部门长), and Air Force pilots and navigators. Even though this level was re-designated as specialty colleges in 1999, certain colleges still identify themselves as basic-level command colleges. Of note, not all officers, including pilots, who receive their bachelor’s degree have the opportunity to return to this level of college for PME.

The following bullets provide several other relevant terms for the report. The terms are organized in alphabetical order:

- Academic degrees (学术学位).<sup>1079</sup>
- Academic department (系),<sup>1080</sup> which is short for “学系” [Note: In some cases, this is translated as a school, such as the Nursing School (护理系)]<sup>1081</sup>
- Administrative and functional department (部 / 部门)
- Associate professor (副教授)<sup>1082</sup>
- Authorized disciplines (授权点)<sup>1083</sup>
- Bachelor’s degree majors (本科专业)<sup>1084</sup>

- Commanding officer (指挥类 / 指挥军官)<sup>1085</sup> refers to anyone who will serve in a leadership billet at any level, such as the deputy in an office
- Development and training (培训 / 培养训练)<sup>1086</sup>
- Defense vs Defence (国防):<sup>1087</sup> The PLA translates *Guofang* as both defense and defence and is not consistent between publications about which translation it uses.
- Degrees (学位):<sup>1088</sup> bachelor's (本科), master's (硕士), PhD/doctorate (博士)
- Diploma (学历):<sup>1089</sup> Educational experience, which means not a degree (学位)<sup>1090</sup>
- Direction for each specialty (方向划分)
- Discipline categories (科学门类)<sup>1091</sup>
- First-level master's degree authorized disciplines (一级学科硕士学位授权点)<sup>1092</sup>
- Full-time studies (全日制)<sup>1093</sup>
- Majors/Disciplines (学科):<sup>1094</sup>
  - Economics (经济学)
  - Engineering (工学)
  - Law (法学)
  - Literature (文学)
  - Management (管理学)
  - Military Science (军事学)
  - Philosophy (哲学)
  - Science (理学)
- Master's degree advisor (硕士导师)<sup>1095</sup>
- Master's degree authorized disciplines (硕士授权领域)<sup>1096</sup>
- Non-commanding officer (非指挥类 / 非指挥军官) is anyone who will not serve in any leadership billet
- Part-time studies (非全日制)<sup>1097</sup>
- PhD advisor (博士导师)<sup>1098</sup>
- Post-doctoral (博士后)<sup>1099</sup>
- Post-doctoral research station (博士后流动站)<sup>1100</sup>
- Post-secondary educational program/diploma (大专学历)<sup>1101</sup>
- Professional degrees (专业学位)<sup>1102</sup>
- Professor (教授)<sup>1103</sup>
- Secondary professional program/diploma (中专)<sup>1104</sup>
- Specialties (专业)<sup>1105</sup>
- Specialty codes (专业代码)
- Specialty master's authorized discipline (专业硕士授权点)<sup>1106</sup>
- Specialty types (专业类别)
- Teaching and research department (教研室), which is simply identified as a department<sup>1107</sup> and are subordinate to academic department (系)
- Training type (培养类型)

# APPENDIX F:

## I I PLA FORCE ADJUSTMENTS

When the PRC was established in 1949, the PLA had 5.5 million troops. At that time, the enlisted force consisted primarily of illiterate peasant volunteers and the officer to enlisted member ratio was about 1:1.<sup>1108</sup> The bulk of the force was the Army's infantry. The Navy, Air Force, and special forces were basically non-existent. Since then, it has implemented 11 force adjustments (编制体制调整), which occurred as shown in the following bullets.<sup>1109</sup> The primary focus of each force adjustment was to downsize a bloated leadership structure for the PLA as a whole (i.e., the General Departments) and each headquarters at the corps and above level and to downsize the Army branch.

1. May 1950: The CMC decided to reduce the size of the force by one million by downsizing the infantry branch and to begin building up the Navy and Air Force services along with the Army's artillery, armored, engineering, chemical defense, communications (signals), and railway branches. The move was also intended to help support national economic development. By the end of 1950, the overall size of the force had been reduced by 17.1 percent; however, the move to reduce the size of the force halted when the Korean War broke out in 1950. As a result, the size of the force expanded, where it reached 6.27 million by October 1951.
2. January 1952: This included reducing the number of general departments, headquarters staff members, and infantry units, while expanding the number of people in the new services and schools. The PLA also turned over 950,000 troops to the Ministry of Public Security. This left the PLA with about three million troops.
3. August 1953: The PLA began downsizing by 23.3 percent, with the Army being reduced by the largest percentage.
4. January 1957: By the end of 1958 the PLA had merged the Air Defense Force in the Air Force) and adjusted 46 divisions and more than 30 institutes and schools. The Army's infantry still took the largest percentage. By the end of 1958, the size of the PLA had been reduced by 61 percent of its size when the PRC was established in 1949. The Second Artillery Force was created in 1966.
5. September 1975: This downsizing dealt with the confusion brought about by the Cultural Revolution. At that time, the number of officers in the various headquarters far exceeded what was needed. The largest percentage went to the engineering and railway troops. As such, when 1976 began, the PLA's size had been reduced by 13.6 percent.
6. March 1980: This reduction focused on headquarters staffs and non-combat personnel and support units. Still more troops were transferred to the public sector.
7. June 1982: The CCP Central Committee decided that all of the PLA's units responsible for providing service for internal security along with armed police, border defense, and all firemen and policemen would be organized as Chinese People's Armed Police (PAP) units. In September 1982, the PLA began implementing its seventh downsizing. A total of 510,000 troops composed of the capital construction engineering troops, which were created in January 1978, plus the railway troops were transferred primarily to the Ministry of Railways and its organizations in the various provinces. Some of these troops were transferred to the PAP. As a result, these two PLA branches were abolished. In addition, the PLA initiated its first NCO (军士支队) system by changing 76 types of officer billets to enlisted billets.

8. June 1985: This reduced the force by one million troops. This downsizing had four key points. First, several Army branches were merged into group armies (集团军). Meanwhile, the communications troop and chemical defense troop branches were expanded, while electronic countermeasures units (电子对抗部队) and camouflage units (伪装部队) were created. Second, the Army began its shift to motorization (摩托化) and mechanization (机械化). Third, the organizational structure was reformed. The Artillery Troop Headquarters Departments, Armored Troop Headquarters Departments, Engineering Troop Headquarters Departments, and Chemical Defense Troop Departments, which were subordinate to the CMC and military region headquarters, were all consolidated as functional departments under the General Staff Department and the Headquarters Department in the various military regions. In addition, the Army Aviation Branch, the PLA Navy's Marine Corps Branch, and Army Air Defense Missile Units were born. The number of military regions was also reduced from 11 to 7. Fourth, subordinate relationships were reformed. Specifically, county and city PAP departments were returned to the leadership of local governments.
9. September 1997: This reduction included a reduction of 500,000 troops in three years that focused on combined arms (合成) and high efficiency and was aimed at transforming the PLA from one of quantity to one of quality and from one that is manpower intensive to one that is based on science and technology.
10. September 2003: 200,000 personnel (85 percent officers, including 200 1-star flag officers) that reduced the PLA from 2.5 to 2.3 million personnel. The goals were as follows: to reduce the size of unit headquarters in order to increase their efficiency and quality; and to improve the balance between leadership and management compared with the support structure. More than 70 junior officer specialty billets in aviation, communications, missile, vessel, and radar units were turned over to NCOs.<sup>1110</sup>
11. January 2016: This reduced the size of the PLA from 2.3 to 2.0 million personnel. Of the 300,000, one-half were officers and one-half were enlisted personnel, all of whom were demobilized.



## APPENDIX G:

# I6 CONFERENCES OF PLA MILITARY EDUCATIONAL INSTITUTIONS

Since 1950, the PLA has held 16 Conferences of PLA Military Educational Institutions (全军院校会议) which implemented major reforms to the entire PLA academic structure.<sup>1111</sup> As can be seen, there is no set pattern for the conferences. Most recently, the 16<sup>th</sup> Conference was held in July 2011, during Hu Jintao's tenure as CMC Chairman. Table 52 below shows the conferences and the number of academic institutions represented (Note: for the 4<sup>th</sup> Conference, only 15 institutions that were directly subordinate to the CMC were represented) and the number of representatives. The number of academic institutions includes both PLA and People's Armed Police (PAP) institutions as well as both officer and NCO institutions. Of note, there has yet to be a conference held under Xi Jinping, even though major changes to the military academic structure occurred in 2017.

**Table 52: Conferences of PLA Military Educational Institutions: 1950-2011**

Number	Date	Academic Institutions Represented	Representatives
1 <sup>st</sup>	Nov 1950	33	70
2 <sup>nd</sup>	Sep 1951	34	150
3 <sup>rd</sup>	Jan 1953	93	123
4 <sup>th</sup>	Mar 1954	15 (CMC)	115
5 <sup>th</sup>	Feb 1955	(Unknown)	131
6 <sup>th</sup>	Apr 1956	126	248
7 <sup>th</sup>	Dec 1957	109	284
8 <sup>th</sup>	Aug 1960	139	313
9 <sup>th</sup>	Oct 1961	134	211
10 <sup>th</sup>	Oct 1964	(Unknown)	558
11 <sup>th</sup>	Oct 1980	118	451
12 <sup>th</sup>	Feb 1983	117	353
13 <sup>th</sup>	Feb 1986	(Unknown)	460
14 <sup>th</sup>	Jun 1999	(Unknown)	322
15 <sup>th</sup>	Nov 2003	71	(Unknown)
16 <sup>th</sup>	Jul 2011	68	300

# APPENDIX H:

## CHINESE COMMUNIST PARTY 7TH TO 19TH PARTY CONGRESSES: 1945-2017

This appendix provides information about when the Chinese Communist Party held its Party Congresses since 1945 and when the PLA held its 16 Conferences of PLA Military Educational Institutions. As can be seen, there are no clear links between when each one was held. However, the various Party Congress Plenums did provide guidance to the PLA concerning its academic institutions. For example, based on a decision made at the 12<sup>th</sup> CCP Party Congress in 1982, the PLA began placing greater emphasis on education for its officer corps,<sup>1112</sup> and during the 14<sup>th</sup> CCP Party Congress in 1992, the program of recruiting civilian college graduates as officers was revived, but the emphasis was on graduates with technical skills.<sup>1113</sup>

**Table 53: CCP Party Congresses and Conferences of PLA Military Educational Institutions: 1945-2017**

CCP Party Congress	Month/Year	Conferences	Month/Year
7 <sup>th</sup>	Jun 1945	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> 6 <sup>th</sup>	Nov 1950 Sep 1951 Jan 1953 Mar 1954 Feb 1955 Apr 1956
8 <sup>th</sup>	Sep 1956	7 <sup>th</sup> 8 <sup>th</sup> 9 <sup>th</sup> 10 <sup>th</sup>	Dec 1957 Aug 1960 Oct 1961 Oct 1964
9 <sup>th</sup>	Apr 1969	None	
10 <sup>th</sup>	Aug 1973		
11 <sup>th</sup>	Aug 1977	11 <sup>th</sup>	Oct 1980
12 <sup>th</sup>	Sep 1982	12 <sup>th</sup> 13 <sup>th</sup>	Feb 1983 Feb 1986
13 <sup>th</sup>	Nov 1987	None	
14 <sup>th</sup>	Oct 1992		
15 <sup>th</sup>	Sep 1997	14 <sup>th</sup>	Jun 1999
16 <sup>th</sup>	Oct 2002	15 <sup>th</sup>	Nov 2003
17 <sup>th</sup>	Oct 2007	16 <sup>th</sup>	Jul 2011
18 <sup>th</sup>	Oct 2012		
19 <sup>th</sup>	Oct 2017		

# APPENDIX I: NEW UNDERGRADUATE CADETS IN 2017

Table 54 below shows the number of new cadets found for some of the 37 academic institutions in 2017. The lowest was 40 and the highest was 1,064.

**Table 54: New Undergraduate Cadets in 2017**

Institution	Cadets
National Defense University	
National University of Defense Technology	1,064
Army Command Academy	
Army Engineering University	813
Army Infantry Academy	
Army Armored Force Academy	
Army Artillery & Air Defense Academy	426
Army Aviation College	
Army Special Operations Academy	
Army Border and Coastal Defense Academy	
Army Institute of NBC Defence	121
Army Third Military Medical University	316
Army Service Academy	
Army Military Transportation Academy	
Naval Command College	
Naval Engineering University	420
Dalian Naval Academy	364
Navy Submarine Academy	121
Naval Aviation University	312
Naval Second Military Medical University	313
Naval Service Academy	
Naval NCO School	
Air Force Command College	
Air Force Engineering University	2,072
Air Force Aviation University	1,100
Air Force Early Warning College	340
Air Force Fourth Military Medical University	313
Air Force Logistics College	
Air Force Communication NCO Academy	
Rocket Force Command College	
Rocket Force Engineering University	526
Rocket Force NCO School	
Strategic Support Force Space Engineering University	232
Strategic Support Force Information Engineering University	894

# ENDNOTES

- 1 On 1 August 1927, the Chinese Communist Party (CCP) created the Red Army (红军) and continues to celebrate August 1<sup>st</sup> (*bayi* / 八一) as its Armed Forces Day. The CCP's Chinese People's Revolutionary Military Commission (中国人民革命军事委员会), later known as the Central Military Commission (CMC), did not begin using the term People's Liberation Army (PLA / 人民解放军) until early 1945 to identify the concept of a single armed forces. The term, however, was not formally used until the Chinese People's Revolutionary Military Commission raised a flag with the PLA name and symbol on it on 15 June 1948 and it then issued a general order (关于统一全军组织及部队番号的规定) to this effect on 1 November 1948. "Chinese People's Liberation Army, CPLA" [中国人民解放军], in *Chinese Military Encyclopedia* [中国军事百科全书], vol. 3 (Beijing: Encyclopedia of China Publishing House, 2007), 45; *People's Liberation Army Chronicle 1927-1982* [中国人民解放军大事记1927-1982], (Beijing: Academy of Military Science, November 1983), 127-185. "Chinese People's Liberation Army" [中国人民解放军], *Baidu*, accessed 4 November 2019, <https://baike.baidu.com/item/中国人民解放军>; "Chinese People's Liberation Army Formation Sequence" [中国人民解放军陆军编制序列], *Wikipedia*, accessed 4 November 2019, <https://zh.wikipedia.org/wiki/中国人民解放军陆军编制序列>.
- 2 Dong Huiyu and Mou Xianming, eds., "All-Army Academic Institution Conferences" [全军院校会议], in *Dictionary of Modern Military Education* [现代军校教育辞典], Second Edition (Beijing: National Defense University Press, 2011), 445-459.
- 3 Jiang Yanyu, *60 Years of New China National Defense and Military Building* [新中国国防和军队建设60年], (Beijing: Dangjian Duwu Press, September 2009), 17-64; Cheng Ronggui, "The NCOs are not only the Technical Backbone," *PLA Daily*, 15 February 2008; Jiang Heping and Su Ruozhou, "Training and Recruitment for Officer Billets to be Converted to NCO Duties Next Year," *PLA Daily*, 23 December 2004; Interviews with PLA officials, *Renmin Haijun*, 13 September 2003, 3.
- 4 Li Chunzhao, ed., *The Introduction on Air Force Academies Education* [空军院校教育概论] (Beijing: Academy of Military Science Press, September 2017), 122.
- 5 "Half of All New Air Force Cadres to Come from National Defense Student Program" [空军一半新干部来自国防生] *Beijing Examination Paper*, 1 September 2006, <http://edu.sina.com.cn/exam/2006-09-01/111652631.html>.
- 6 Li, *Air Force Academics Education*, 122.
- 7 Ibid.
- 8 Bi Yongjun, "Master's and Doctoral degrees – Development Trend in Military Officers Contingent," *China Military Online*, 11 December 2000, 1.
- 9 Jin Peng and Dong Ming, eds., *An Overview of Chinese Military Academic Institutions* [中国军事院校通览] (Beijing: Academy of Military Science Press, 2003); Li Cheng'an, *Education Reform in Military Academies in the New Situation* [新形势下军队院校教育改革] (Beijing: National Defense University Press, 2015); Sun Yougui, ed., *A Brief History of the Development of Chinese PLA Academic Institutions* [中国人民解放军院校发展简史] (Beijing: Lantian Press, March 1996).
- 10 Yuan Wei and Zhang Zhuo, eds., *History of the Development of China's Military Academic Institutions* [中国军校发展史] (Beijing: National Defense University Press, July 2001).
- 11 Hu Guangzheng, ed., *Contemporary Military Organizational Reform Research* [当代军事体制变革研究] (Beijing: Academy of Military Sciences Press, October 2007); Jin and Dong, *An Overview*; Yuan and Zhang, *History*; Li, *Education Reform*.
- 12 Hu, *Contemporary Military Organizational Reform Research*, 307-312; Yuan and Zhang, *History*.
- 13 "Chinese Army Officers to Be Better Educated" *Xinhua*, 11 December 2000.
- 14 "Chinese Armed Forces Modernization Marked in National Day Article," *Xinhua News Agency*, reprinted in BBC, 1 October 2001.
- 15 Sun, *A Brief History*, 492, 499, 550-551.
- 16 Hu, *Contemporary Military Organizational Reform Research*, 307-312; Yuan and Zhang, *History*, 718-723.
- 17 Hu, *Contemporary Military Organizational Reform Research*, 307-312; Yuan and Zhang, *History*, 757.
- 18 Yuan and Zhang, *History*, 757.
- 19 Tsang Hsing, "Zhang Tingfa Interviewed on Air Force Reforms," *Kuang Chiao Ching*, 16 June 1985, reprinted in BBC, 21 June 1985.
- 20 "Chinese Army Officers to Be Better Educated" *Xinhua*, 11 December 2000.
- 21 "More Importance Placed on Study in PLA," *Xinhua*, 31 May 1983. For example, the *Xinhua* report states, "The PLA General Political Department recently made a decision demanding that all cadres below 40 years of age reach an educational level of junior middle school or above before 1985 and reach an educational level of senior middle school or secondary technical school before 1990. Some are even required to reach a college and university educational level."
- 22 "PRC Military Official on Cadre Recruitment," *Xinhua*, 23 June 2000.
- 23 "Training New Missile Troops," *Jiefangjun Bao*, 26 December 1999. *Xinhua*, 17 August 1999.
- 24 "Starting in 2017, the PLA will no longer recruit national defense students from ordinary high school graduates," *China Military Online*, 26 May 2017, [http://www.81.cn/zggfs/2017-05/26/content\\_7620030.htm](http://www.81.cn/zggfs/2017-05/26/content_7620030.htm). "National Defense Student Program History," *Renmin Haijun*, 8 July 2003, 3.

- 25 One report said 40,000 while another report said 46,000.
- 26 “Chinese Army Officers to Be Better Educated” *Xinhua*, 11 December 2000.
- 27 The *Xinhua* article did not make a distinction between graduates from civilian and military colleges, nor did the article make the distinction between combat unit commanders and division/regiment-level equivalent positions in the headquarters, which is most likely the case.
- 28 Yuan and Zhang, *History*.
- 29 Sun, *A Brief History*, 472, 504.
- 30 Sun, *A Brief History*, 377.
- 31 Dong Huiyu and Mou Xianming, eds., “Naval Bengbu Sergeant School” [海军蚌埠士官学校], in *Dictionary of Modern Military Education* [现代军校教育辞典], Second Edition (Beijing: National Defense University Press, August 2011), 478; Zhao Yiping, et al., “Bengbu Naval Petty Officer Academy of the CPLA” [中国人民解放军蚌埠士官学校], in *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 746-747.
- 32 *Military Science* [军事学术], vol. II (Beijing: Academy of Military Sciences Publishing House, 1997). 563.
- 33 “Non-commissioned officer” [士官], in *PLA Terminology* [中国人民解放军军语] (Beijing: Academy of Military Sciences Press, December 2011), 341.
- 34 *Military Science*, 401-405. Although the *Air Force Dictionary* translates “*zhuanye junshi*” (专业军士) as a “technical sergeant,” we have elected to render this term as “specialist sergeant” given its application to the entire PLA.
- 35 Tsang Hsing, “Air Force Reforms”; Xu Yaoyuan, Lin Xianghai, and Mu Song, eds., “System of Promoting Cadres through College Training” [院校培训提拔干部制度], in *Military Cadre Work* [军队干部工作], Second Edition, vol. 39 (Beijing: China Military Encyclopedia Press, 2006), 118.
- 36 The 8<sup>th</sup> and 9<sup>th</sup> Flying Schools were abolished, and the 11<sup>th</sup> Flying School was changed to the Test Flight and Training Center. The SAM, Weather, Political, Radar, and Communications Engineering academies, as well as the Engineering and Air Force Command colleges, have begun awarding master’s degrees.
- 37 “2014 Air Force Aviator Recruitment Brochure” [2014年空军招飞简章], 30 October 2013, <http://www.kjzfw.net/Item/88.aspx>.
- 38 Chen Daojin and Liu Yuan, “Flight Academic Institutions Leap Ahead in Developing the Strategic Position and High Quality of Educating and Training Aviation Cadets” [飞行学院跨越式发展的战略定位与高素质飞行学员培养], in *Research on New Century New Period Air Force Academic Institution Transformation Building and Personnel Education and Culture* [新世纪阶段空军院校转型建设与人才培养研究], First Edition, vol. 1 (Beijing: Lantian Press, 2009), 55-66. As a benchmark, USAF undergraduate pilot training is accomplished in 12 months with approximately 85 hours in the T-6 primary trainer and 95 hours in the advanced T-38 trainer. Fighter pilots subsequently receive 20 T-38 hours in fighter fundamentals prior to attending a fighter transition course that runs four to seven months with 40-60 flight hours.
- 39 “Air Force College pilots graduate ‘with flying colors,’” *Xinhua*, 24 November 1987.
- 40 *Air Force News*, 15 August 2002, 3; Wang Dinglie and Lin Hu, eds., *Chinese Air Force Today* [当代中国空军] (Beijing: China Social Sciences Press, 1989); Lin Hu, ed., PLAAF Headquarters Education and Research Office, *History of the Air Force* [空军史], (Beijing: PLA Press, November 1989), 195-202.
- 41 Jin and Dong, *An Overview*, 77-78; *Renmin Haijun*, 20 September 2003, 1.
- 42 Jin and Dong, *An Overview*, 161-162.
- 43 For example, the PLAAF’s Engineering University did not create its first post-doctoral research station until 1995, see “Guidelines Regarding Air Force Engineering University Admitting Local College Graduates” [空军工程大学接收地方高校毕业生简介], *Air Force Talent*, accessed 13 November 2019, <http://kzrc.hy.ccgw.net>; Office of the Selection & Training of Reserved Duty Officers of Air Force, “Management Regulations for Air Force Graduating National Defense Program Students Who Are Continuing Graduate Studies” [空军应届毕业国防生攻读研究生管理规定], accessed 13 November 2019, [http://www.csust.edu.cn/pub/kjxpb/zc/t20080108\\_63438.htm](http://www.csust.edu.cn/pub/kjxpb/zc/t20080108_63438.htm). For more information, see China Post-Doctoral Science Foundation, “China Post-Doctoral Science Foundation” [中国博士后科学基金会], accessed 13 November 13 2019, <http://jj.chinapostdoctor.org.cn/V1/Program3/Default.aspx>.
- 44 “Five top comprehensive universities in the military, known as the pride of the military, and graduates are immediately the officers of the Republic!” [全軍最強五所綜合性大學，被譽為軍中驕子，畢業即為共和國軍官!], *KKNews*, 15 January 2018, <https://kknews.cc/military/y2lxzak.html>.
- 45 Dong and Mou, *Dictionary of Modern Military Education*, Second Edition.
- 46 Zhao et al., *PLA Military History*.
- 47 Dong and Mou, *Dictionary of Modern Military Education*, Second Edition; *PLA Terminology*.
- 48 Wang Peinan et al., “Although I Do Not Know If My Alma Mater Still Exists, the School Motto Is Always in Our Hearts” [虽然不知道母校还在不在，但是校训永远在我们心中], *China Youth Daily*, 2 March 2017, [http://news.cyol.com/content/2017-03/02/content\\_15687657.htm](http://news.cyol.com/content/2017-03/02/content_15687657.htm).
- 49 Zhao et al., “Institute of International Relations of the CPLA” [中国人民解放军国际关系学院], in *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 678.
- 50 Zhao et al., “University Foreign Languages of the CPLA” [中国人民解放军外国语学院], in *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 678-679; Zhenqiang Li, Yan Mei, and Ke Lu, “Development of Bivouac Base System of PLA” [我军“基地化宿营保障系统”建设初探], *CNKI*, 2019, <http://gb.oversea.cnki.net/kcms/detail/detail.aspx?filename=JSCX201905021&DBName=cjfqto-tal&dbcode=cjfq>. For example, the Chinese name of the academic institution 陆军勤务学院 was translated as “Army Logistic University.”
- 51 Zhao et al., “Shenyang Artillery Academy of the CPLA” [中国人民解放军沈阳炮兵学院], in *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 689-690; Dong Huiyu and Mou Xianming, eds., “Shenyang Artillery College” [沈阳炮兵学院], in *Dictionary of Modern Military Education* [现代军校教育辞典], Second Edition (Beijing: National Defense University Press, August 2011), 467.
- 52 Dong and Mou, *Dictionary of Modern Military Education*, Second Edition, 152; Yao Wei, et al., eds., *China Air Force Encyclopedia* [中国空军百科全书] (Beijing: Aviation Industry Press, November 2005), 1249; “Free Air Combat Training Course Included in Air Force Flight Academy Syllabus,” *China Military Online*, 6 February 2018, [http://english.chinamil.com.cn/view/2018-02/06/content\\_7934591.htm](http://english.chinamil.com.cn/view/2018-02/06/content_7934591.htm).

- 53 Sun, *A Brief History*, 540; Zhao et al., “Xi’an Political College of the CPLA” [西安政治学院], in *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 704-705.
- 54 Dong Huiyu and Mou Xianming, eds., “National Defense University” [国防大学], in *Dictionary of Modern Military Education* [现代军校教育辞典], Second Edition (Beijing: National Defense University Press, August 2011), 460; Zhao et al., “National Defence University” [国防大学], in *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 665-667.
- 55 Zhao et al., “Military and Political College of the CPLA” [中国人民解放军军政大学], in *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 660-661.
- 56 Sun, *A Brief History*, 547.
- 57 Pride of the Military! PLA’s Five Comprehensive Universities” [军之骄子! 解放军全军五所综合大学], *Xilu*, 8 September 2010, <http://club.xilu.com/emas/msgview-821955-4656460.html>; Dong Huiyu and Mou Xianming, eds., “University” [综合大学], in *Dictionary of Modern Military Education* [现代军校教育辞典], First Edition (Beijing: National Defense University, 2009), 115.
- 58 *Military Academic Institutions and Higher Education Defense Students Applicants Guide*, (Beijing: PLA Press, January 2005), 27. No author or editor is identified, but the book was sponsored by the GPD Cadre Department and Shijiazhuang Army Command Academy. For information on the four areas see “Location of the NUDT” [国防科大位置], *Baidu*, 11 November 2018, <https://zhidao.baidu.com/question/108398775.html>.
- 59 Interview with a PLA officer in May 2011.
- 60 “Five top comprehensive universities in the military, known as the pride of the military, and graduates are immediately the officers of the Republic!” [全軍最強五所綜合性大學，被譽為軍中驕子，畢業即為共和國軍官!], *KKNews*, 15 January 2018, <https://kknews.cc/military/y2lxzak.html>.
- 61 Dong and Mou, *Dictionary of Modern Military Education*, Second Edition, 445-459; Zhao et al., *PLA Military History*.
- 62 Dong Huiyu and Mou Xianming, eds., “The 16th Conference of PLA Military Educational Institutions” [第十六次全军院校会议], in *Dictionary of Modern Military Education* [现代军校教育辞典], Second Edition (Beijing: National Defense University Press, 2011), 457-459.
- 63 Hengzhang Tu, *Discussion of Military Professional Education* [军事任职教育论] (Beijing: Academy of Military Science Press, 2007), 92.
- 64 Dong Huiyu and Mou Xianming, eds., *Dictionary of Modern Military Education*, First Edition, 116-117. Of note, this dictionary translates *renzhi jiaoyu* (任职教育) as vocational educational institutions, but it also translates *zhiye jiaoyu* (职业教育) as vocational education.
- 65 For Information on these career tracks and terminology, see “PLA Special Technical and Wenzhi Ganbu Grades and Ranks,” accessed 5 March 2012, *Netease blog*, <http://qiming0130.blog.163.com/blog/static/7975228120119279109428/>. See also Xu, Lin, and Mu, *Military Cadre Work*, 48-50, 85; Shu Shubo et al., eds., *Military Cadre Work Handbook* [军队干部工作手册] (Beijing: National Defense University Press, 2011), 36.
- 66 Ken Allen, Interview with PLA officer in 2011.
- 67 Although several websites refer to [www.pbgc.net](http://www.pbgc.net) as the Second Artillery Engineering Academy’s official website, it does not work.
- 68 Dong Huiyu and Mou Xianming, eds., “Establishment of rank of military college” [军校编制等级], in *Dictionary of Modern Military Education* [现代军校教育辞典], First Edition (Beijing: National Defense University Press, July 2009), 111.
- 69 “Cui Shifang: It is real that National Defense University is Downgraded” [崔士方: 国防大学被降级成真], *Epoch Times*, 12 March 2018, <http://www.epochtimes.com/gb/18/3/12/n10211708.htm>.
- 70 Although the majority of the *fendui* (分队) are assigned two-digit identifiers, there are some *fendui* with one- and three-digit identifiers.
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- 72 Ken Allen, Multiple PLA media sources; Li, *Air Force Academies Education*, 149.
- 73 Interview with PLA NDU delegation on 4 December 2018.
- 74 Interview with PLAAF Command College delegation on 23 April 2018. Li, *Air Force Academies Education*, 149.
- 75 Ibid.
- 76 Li, *Air Force Academies Education*, 149.
- 77 Air Force Medical University, “Air Force Medical University,” accessed 7 November 2019, <https://www.fmmu.edu.cn/en/>; Air Force Medical University, “Academic Departments,” accessed 7 November 2019, <https://www.fmmu.edu.cn/jgsz/yx1.htm>.
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- 79 State Council Academic Degrees Committee Office, “Annual Reporting Data on Degrees Granted, Structure and Code Manual (2018 Edition)” [学位授予信息年报数据 结构及代码手册 (2018 版)], March 2018, [http://graschool.ahu.edu.cn/\\_upload/article/files/e6/db/9191fe2440238a3f-17892f024594/1dc87887-e9e5-41a4-9cb9-6564a720dea2.pdf](http://graschool.ahu.edu.cn/_upload/article/files/e6/db/9191fe2440238a3f-17892f024594/1dc87887-e9e5-41a4-9cb9-6564a720dea2.pdf).
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- 82 Zhao et al., *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 665-666; Dong Huiyu and Mou Xianming, eds., *Dictionary of Modern Military Education* [现代军校教育辞典], Second Edition (Beijing: National Defense University Press, 2011), 460; “PLA National Defence University,” *Wikipedia*, accessed 6 September 2019, [https://en.wikipedia.org/w/index.php?title=PLA\\_National\\_Defence\\_University&oldid=887695720](https://en.wikipedia.org/w/index.php?title=PLA_National_Defence_University&oldid=887695720); Zang Jiansheng and Luo Jinmu, “China’s National Defense University Builds Ties with Military Academies in above 100 Countries,” *China Military Online*, reprinted in Ministry of Defense, 2 August 2018, [http://eng.mod.gov.cn/news/2018-08/02/content\\_4821607.htm](http://eng.mod.gov.cn/news/2018-08/02/content_4821607.htm); “Defense Ministry’s Regular Press Conference on Jun. 27,” *China Military Online*, 27 June 2019, [http://eng.mod.gov.cn/news/2019-06/27/content\\_4844628.htm](http://eng.mod.gov.cn/news/2019-06/27/content_4844628.htm).
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- 87 “Chinese People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Wikipedia*, accessed 10 September 2019, <https://zh.wikipedia.org/wiki/中国人民解放军国防大学>; “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>.
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- 89 “Chinese People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Wikipedia*, accessed 10 September, 2019, <https://zh.wikipedia.org/wiki/中国人民解放军国防大学>; “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>.
- 90 “Chinese People’s Liberation Army National Defense University International College of Defense Studies” [中国人民解放军国防大学国际防务学院], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学国际防务学院/>.
- 91 “Contact Information” [联系办法], *Yanzhao Net*, accessed 6 September 2019, <https://yz.chsi.com.cn/sch/schoolInfo--schId-367819,categoryId-478771.dhtml>.
- 92 Ibid.
- 93 “Chinese Liberation Army National Defense University Joint Services College” [中国人民解放军国防大学联合勤务学院], *Wikipedia*, accessed 11 September 2019, <https://zh.wikipedia.org/w/index.php?title=中国人民解放军国防大学联合勤务学院>; “Contact Information” [联系办法], *Yanzhao Net*, accessed 6 September 2019, <https://yz.chsi.com.cn/sch/schoolInfo--schId-367819,categoryId-478771.dhtml>. The two sources provided two different address for the college. The two locations are very close to each other, and google map shows that the college is located on Wanshou Road (万寿路).
- 94 “Contact Information” [联系办法], *Yanzhao Net*, accessed 6 September 2019, <https://yz.chsi.com.cn/sch/schoolInfo--schId-367819,categoryId-478771.dhtml>.
- 95 Ibid.
- 96 Ibid.
- 97 “Chinese Liberation Army National Defense University Graduate School” [中国人民解放军国防大学研究生院], *Baidu*, 10 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学研究生院>. The exact location of the graduate school cannot be determined based on open source materials. But some sources indicate that it is located in Beijing.
- 98 “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>.
- 99 Ibid.
- 100 Ibid.
- 101 Ibid.
- 102 “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>; Ken Allen, Interview with PLA NDU Delegation, 4 December 18. The information presented here merges information from Ken Allen’s interview with PLA NDU delegation on 4 December 2018 and *Baidu*. This summary reflects an estimate of the current administrative and functional departments after the 2017 merger and reorganization. Some names of the departments have been changed as result of the reorganization.
- 103 In Ken Allen’s interview with PLA NDU delegation, an administrative department named “Management/Administration Support Department (管理保障部)” was provided, which appears to coincide with the “School Affairs Department (校务部)” provided by *Baidu*. It is possible these are the same department.
- 104 “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>.
- 105 Ibid.
- 106 Ibid.
- 107 “Chinese People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Wikipedia*, accessed 10 September 2019, <https://zh.wikipedia.org/wiki/中国人民解放军国防大学>; “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>; “Directory of PRC Military Personalities 2019” (Washington, DC: United States Department of Defense, Defense Intelligence Agency, March 2019).
- 108 “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>.
- 109 Wang, “Official Channel Discloses Information Regarding National Defense University’s Military Management College and Its Operations.”
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- 111 Wang, “Official Channel Discloses Information Regarding National Defense University’s Military Management College and Its Operations.”

- 112 “National Defense University 2019 Master’s level graduate student recruitment guide” [国防大学2019年硕士研究生招生简章], *Sohu*, 2 October 2018, [www.sohu.com/a/257423027\\_672309](http://www.sohu.com/a/257423027_672309).
- 113 “National Defense University conducts extensive international military exchanges and cooperation” [国防大学 广泛开展国际军事交流合作], *People’s Liberation Army Daily*, reprinted in *Xinhua*, 2 August, 2018, [http://www.xinhuanet.com/mil/2018-08/02/c\\_129924959.htm](http://www.xinhuanet.com/mil/2018-08/02/c_129924959.htm); “People’s Liberation Army National Defense University” [中国人民解放军国防大学], *Baidu*, accessed 6 September 2019, <https://baike.baidu.com/item/中国人民解放军国防大学>; “The second National Defense University International Defense Forum Held in Beijing” [第二届国防大学国际防务论坛在京开幕]. *Xinhua*, 20 June 2019, [http://www.xinhuanet.com/mil/2019-06/20/c\\_1210165266.htm](http://www.xinhuanet.com/mil/2019-06/20/c_1210165266.htm).
- 114 National University of Defense Technology, “National University of Defense Technology” [国防科技大学], accessed 7 November 2019, <https://www.nudt.edu.cn/>.
- 115 Ibid.
- 116 Ibid.
- 117 “Chinese People’s Liberation Army National University of Defense Technology” [中国人民解放军国防科技大学], *Wikipedia*, accessed 7 November 2019, <https://zh.wikipedia.org/wiki/中国人民解放军国防科技大学>.
- 118 “The First Stop of the 2017 Military School Tour: National University of Defense Technology” [2017年军校巡礼第一站: 国防科技大学], *China Military Online*, 3 June 2017, [http://www.81.cn/jwgz/2017-06/03/content\\_7627180.htm](http://www.81.cn/jwgz/2017-06/03/content_7627180.htm); Ministry of Education, “Circular on Adjusting Data Structure of Annual Reporting of Degree Award Information” [关于调整学位授予信息年报数据结构的通告], 10 October 2008, [http://www.moe.gov.cn/s78/A22/s7065/tnull\\_40234.html](http://www.moe.gov.cn/s78/A22/s7065/tnull_40234.html); “2017 Military Academy Tour 15<sup>th</sup> Stop: Air Force Early Warning Academy [2017军校巡礼第十五站: 空军预警学院]”, *China Military Online*, 9 June 2017, [http://www.81.cn/jwgz/2017-06/09/content\\_7634167.htm](http://www.81.cn/jwgz/2017-06/09/content_7634167.htm). This code is from 2008. MOE is apparently trying to change the codes, but the new ones may not yet be official. State Council Academic Degrees Committee Office, “Annual Reporting Data on Degrees Granted, Structure and Code Manual (2018 Edition)” [学位授予信息年报数据结构及代码手册(2018 版)], March 2018, [http://graschool.ahu.edu.cn/\\_upload/article/files/e6/db/9191fe2440238a3f17892f024594/1dc87887-c9e5-41a4-9cb9-6564a720dea2.pdf](http://graschool.ahu.edu.cn/_upload/article/files/e6/db/9191fe2440238a3f17892f024594/1dc87887-c9e5-41a4-9cb9-6564a720dea2.pdf).
- 119 “The First Stop of the 2017 Military School Tour.”
- 120 National University of Defense Technology, “About,” accessed 13 November 2019, <https://english.nudt.edu.cn/About/index.htm>; National University of Defense Technology, “Brief Introduction” [学校概况], accessed 13 November 2019, <https://www.nudt.edu.cn/xxgk/index.htm>.
- 121 National University of Defense Technology, “About”; National University of Defense Technology, “Brief Introduction”; “Chinese People’s Liberation Army National University of Defense Technology,” *Wikipedia*.
- 122 “Chinese People’s Liberation Army National University of Defense Technology,” *Wikipedia*. For English name of the 2<sup>nd</sup> to 4<sup>th</sup> campuses see Zhao et al., *PLA Military History* [中国人民解放军军史], Volume 3 (Beijing: Encyclopedia of China Publishing House, December 2007), 690, 698, 705.
- 123 Note that the PLA uses the characters *ji* (级) and *zhi* (职) to identify its grades as in 正军级 and 正军职 for corps leader grade.
- 124 “Pride of the Military! PLA’s Five Comprehensive Universities” [军之骄子! 解放军全军五所综合大学], *Xilu*, 8 September 2010, <http://club.xilu.com/emas/msgview-821955-4656460.html>; Dong Huiyu and Mou Xianming, eds., *Dictionary of Modern Military Education* [现代军校教育辞典], First Edition (Beijing: National Defense University Press, 2009), 115. The other four comprehensive universities were the National University of Defense Technology (NUDT/国防科学技术大学), Naval Engineering University (NAE/海军工程大学), PLA Information Engineering University (PLAIEU/解放军信息工程大学), and PLA Science and Engineering University (PLAUST/解放军理工大学).
- 125 “Are National Defense University and National University of Defense Technology the Same? Students Should be Cautious When Making Selections” [国防大学和国防科技大学一样吗? 填报志愿的同学要慎重了], *Tencent*, 23 July 2018, <https://new.qq.com/omn/20180723/20180723A0LFMW.html>; “Cui Shifang: It is real that National Defense University is Downgraded” [崔士方: 国防大学被降级成真], *Epoch Times*, March 12, 2018, <http://www.epochtimes.com/gb/18/3/12/n10211708.htm>.
- 126 National University of Defense Technology, “about”; National University of Defense Technology, “Brief Introduction.”
- 127 National University of Defense Technology, “About,” accessed 13 November 2019, <https://www.deyankang.com/en/About/index.htm>; National University of Defense Technology, “Brief Introduction.”
- 128 National University of Defense Technology, “About,” accessed 13 November 2019, <https://www.deyankang.com/en/About/index.htm>.
- 129 National University of Defense Technology, “Colleges,” accessed 13 November 2019, <https://english.nudt.edu.cn/Colleges/index.htm>; National University of Defense Technology, “Colleges” [院所设置], accessed 13 November 2019, <https://www.nudt.edu.cn/xysz/index.htm>. Note that the institutions identified in this bullet came from the official NUDT website; however, other websites include other institutions from 2017 as well, so it is not clear if they also exist.
- 130 “Chinese People’s Liberation Army National University of Defense Technology,” *Wikipedia*.
- 131 This is merely a rough translation of this department.
- 132 National University of Defense Technology, “About,” accessed 13 November 2019, <https://www.deyankang.com/en/About/index.htm>. National University of Defense Technology, “Brief Introduction.”
- 133 Ibid.
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- 1094 Dong and Mou, "Discipline" [学科], in *Dictionary of Modern Military Education*, 174. Note: The dictionary does not have an entry for "major." However, the PLA has translated "major" as *zhuanke* [专业]. See Air Force Medical University, "Teaching & Learning"; Air Force Medical University, "Academic Departments."
- 1095 Air Force Medical University, "Air Force Medical University." Note that this source uses "supervisor" instead of advisor. This report uses advisor. Air Force Medical University, "Introduction on the University."
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