



C H I N A   A E R O S P A C E  
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## **PLA Air Force: Bomber Force Organization**



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## Preface

This report provides an overview of the organization of the People's Republic of China's (PRC) People's Liberation Army (PLA) Air Force (PLAAF) Bomber force.

According to the Office of the Secretary of Defense's *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021*:<sup>1</sup>

“The PRC's bomber force is currently composed of H-6 Badger variants, which are domestically produced versions of the Soviet Tupolev Tu-16 (Badger) bomber. Despite the relative age of its bomber force, the PLAAF has worked to maintain and enhance the operational effectiveness of these aircraft. In recent years, the PRC has fielded greater numbers of the H-6K, a modernized H-6 variant that integrates standoff weapons and features more-efficient turbofan engines for extended-range. The H-6K can carry six land-attack cruise missiles (LACMs), giving the PLA a long-range standoff precision strike capability that can range targets in the Second Island Chain from home airfields in mainland China.

“During the PRC's 70th anniversary parade in 2019, the PLAAF publicly revealed the H-6N, a derivative of the H-6K optimized for long-range strikes. The H-6N features a modified fuselage that allows it to carry externally an air-launched ballistic missile (ALBM) that may be nuclear capable. In October 2020, an H-6N was observed carrying an air-launched ballistic missile. The H-6N's air-to-air refueling capability also provides it greater reach over other H6 variants that are not refuelable in air. As of 2020, the PLAAF has operationally fielded the H-6N bomber, providing a platform for the air component of the PRC's nascent nuclear triad. In 2021, the H-6N-equipped unit very likely will be developing tactics and procedures to conduct the PLAAF nuclear mission. In addition, the PLAAF is seeking to extend its power projection capability with the development of a new stealth strategic bomber, with official PRC state media stating that this new stealth bomber will have a nuclear mission in addition to filling conventional roles. The PLAAF is also developing new medium- and long-range stealth bombers to strike regional and global targets. PLAAF leaders publicly announced the program in 2016, however it may take more than a decade to develop this type of advanced bomber.

“The PLA can conduct air-to-air refueling operations to extend the ranges of its fighter and bomber aircraft equipped with refueling probes using the H-6U, a modified tanker variant of the H-6 bomber, as well as a small number of larger IL-78 Midas purchased from Ukraine. China has also developed the long range supersonic YJ-12 anti-ship cruise missile (ASCM) for the H-6 bomber.

“Following former PLAAF Commander General Ma Xiaotian's 2016 public statement that China was developing a new generation of long-range bombers, a number of reports suggest the new bomber, likely named the H-20, could debut sometime in the next decade with the following features: a stealthy design, employing many fifth- generation technologies; a likely range of at least 8,500 km; a payload of at least 10 metric tons; and a capability to employ both conventional and nuclear weaponry.”

Dr. Brendan S. Mulvaney  
Director, China Aerospace Studies Institute

## Key Terms and Concepts

### Aviation-related Academic Terms

The PLAAF has the following key terms for aviation-related academic institutions:

- *Daxue* (大学) is translated as “university” as for the Air Force Aviation University (AUAF / 空军航空大学).
- *Xueyuan* (学院) can be translated as “college” or “academy.” Concerning the PLAAF’s aviation-related institutions, the PLAAF used the term “flight college” until around 2011 and then began changing the official translation to “flight academy” for the three academic institutions, including the Harbin Flight Academy. The term in Mandarin has not changed.
- *Xueyuan* (学员) is translated as “cadet” for personnel receiving their undergraduate studies at AUAF; however, the same term is translated as “student” for personnel who have graduated from AUAF and are receiving their flight training in the next level flight academy.
- *Xuexiao* (学校) is translated as “school” and refers to the early versions of the flight academies.

### Aircrew Terms

According to China Armed Forces magazine, each aircrew (机组) consists of four personnel (空勤人员), including the pilot in command (PIC / 驾驶 / 机长),<sup>2</sup> who sits in the left seat, the co-pilot (副驾驶), who sits in the right seat, the electronic warfare (电战) /communications officer (通信官), and the navigator (领航) / bombardier (轰炸官), who has also been identified as a weapons control technician (武控师), who sit directly behind them.<sup>3</sup> Each of them has his own ejection seat. However, other articles state each bomber has only three personnel, including the two pilots (飞行员) and a weapons controller (武器控制员 / 武控员).<sup>4</sup> As a result, it is not exactly clear how many crew members there are today.

The following bullets also provide key personnel terms associated with bombers, as well as other combat aircraft:

- *Zhangji* (长机) is normally translated as “lead pilot” or “leader aircraft” for two or more aircraft in a group (机群长机) or formation (编队长机).<sup>5</sup> Examples include the lead pilot for a 2- (双机长机), 3- (三机长机), and 4-ship (四机长机) group or formation, which are based on an air unit’s company-level fight squadrons (飞行中队) that, depending on the type of airframe, have from four to five airframes, of which one is usually in the backshop receiving maintenance.
- *Liaoji* (僚机) is translated as “wingman.”
- *Kongzhong zhihuiyuan* (空中指挥员) is best translated as “airborne commander”. Based on its usage in multiple PLAAF articles since the early 2000s, the term appears to refer to the lead pilot for two 3-ship or 4-ship formations of the same type of aircraft from the same unit flying together as shown in the photo below. Each formation has its own lead pilot so that they can lead their formation in case the larger formation breaks up with different missions/targets. The U.S. Air Force (USAF) uses the term “mission commander”. In the 2000s, the PLAAF also began putting “airborne commanders” in PLAAF KJ airborne early warning and command (AEW&C / 空中预警指挥) aircraft. Normally, an “airborne commander” in an AEW&C aircraft comes from the unit that is being commanded in the air and the “airborne commander” usually only talks with personnel from his own unit, PLAAF Commander Ding Laihang served as the “airborne commander” in the

KJ-2000 airborne early warning and command (AEW&C) aircraft that led all of the PLAAF aircraft, including fighters, bombers, special mission aircraft, and transport aircraft over Beijing to celebrate the 70th anniversary of the People's Republic of China (PRC) in October 2019.<sup>6</sup>

### Aviation Unit Terms

- The PLAAF's aircraft are organized into the following types of units. Note that the PLAAF does not have Wings, and its Flight Groups and Flight Squadrons are completely different than the USAF's Groups and Squadrons.
- A Base (基地) is a corps deputy-level headquarters that is subordinate to a Theater Command Air Force Headquarters and are roughly equivalent to a USAF Numbered Air Force.
- An Air Division (航空兵师), which is roughly equivalent to a USAF Wing, normally has two to three subordinate Air Regiments (航空兵团), which are roughly equivalent to a USAF Squadron. Air Divisions are either directly subordinate to PLAAF Headquarters or a Theater Command Air Force Headquarters.
- An Air Brigade (航空兵旅) is also roughly equivalent to a USAF Wing. In the PLAAF, no Air Divisions have subordinate Air Brigades and no Air Brigades have subordinate Air Regiments. Air Brigades are either directly subordinate to a Base/Command Post or to a Theater Command Air Force Headquarters.
- A Flight Group (飞行大队) is a battalion-level organization that is subordinate to either an Air Regiment or an Air Brigade. Each Air Regiment and Air Brigade has approximately three operational Flight Groups and one transition Flight Group for new pilots. Each Flight Group has approximately 10 airframes and two subordinate Flight Squadrons. A Flight Group is roughly equivalent to a USAF Flight.
- A Flight Squadron (飞行中队) is a company-level organization that has four to five airframes.

**Figure 1: Formation Flying**



## **H-6 Operational Units**

### Bomber Missions and Types

The PLAAF has described its bombers in the following terms.<sup>7</sup> “Bombers are a type of military aircraft used for attacking enemy surface targets with air-to-surface weapons. Besides dropping bombs, bombers can also drop various torpedoes and nuclear bombs or launch air-to-ground missiles. They have strong penetration capabilities with a large payload for a long-range mission. Bombers are the main type of aircraft for air strikes. They can be divided into strategic bombers and tactical bombers, depending on their mission; heavy bombers (10 tons and over), medium bombers (5-10 tons), and light bombers (3-5 tons) based on their payload; or short-range bombers (less than 3,000 km), medium-range bombers (3,000-8,000 km), and long-range bombers (8,000 km over) based on their range.”

### Three Bomber Divisions and Possibly Two Brigades

The PLAAF originally had eight bomber divisions as part of its 50 air divisions; however, only three bomber air divisions still exist today – the 8th (Southern TCAF), 10th (Eastern TCAF), and 36th (Central TCAF). However, it appears that at least one regiment (36th AD’s 106th Regiment) has converted to a brigade starting around 2018.

Authoritative PLA reporting through 2020 continues to verify that, with the possible exception of a 23rd Air Brigade, the PLA has kept its non-nuclear bombers under a division-regiment structure; however, the 106th Air Brigade appears to have a nuclear role.<sup>8</sup> It appears that the 23rd Air Brigade, which is equipped with about 30 H-6U tankers, may have replaced the former 23rd Air Regiment in 2016. Although the PLAAF has converted a regiment to a brigade, it has left the rest of its bomber force as a division-regiment structure, and there is no evidence that the PLAAF sees the overall structure of its bomber force as being antiquated.<sup>9</sup> The key information for each of the three divisions and single brigade is discussed below.<sup>10</sup>

Figure 2 is a depiction of PLAAF bomber units.<sup>11</sup>

**Figure 2: PLAAF Bomber Units**



**Education & Training**

- 1. Air Force Aviation University, Changchun, Jilin (Basic education)
- 2. Harbin Flight Academy, Harbin, Heilongjiang (Flight training)

**8th Air Division, Leiyang, Hunan**

- 4. 22nd Air Regiment, Shaodong, Hunan (H-6K)
- 5. 24th Air Regiment, Leiyang, Hunan (H-6K)

**10th Air Division, Anqing, Anhui**

- 7. 28th Air Regiment, Anqing, Anhui (H-6K)
- 8. 29th Air Regiment, Luhe, Jiangsu (H-6H)
- 9. 30th Air Regiment, Luhe, Jiangsu (H-6M)

**10. 36th Air Division, Wugong, Shaanxi**

- 11. 107th Air Regiment Lintong, Shaanxi (H-6H, K, M)
- 12. 108th Air Regiment Wugong, Shaanxi (H-6K, M)

**PLA Air Force HQ**

- 13. 106th Air Brigade\*, Neixiang, Henan (H-6N)

\*Status unclear, possibly directly subordinate to CMC

Figure 3 below is a map from the Department of Defense showing the PLAAF and Naval Aviation Air Units in China in 2021.<sup>12</sup>

**Figure 3: PLA Aviation Units in 2021**



### 8th Air Division<sup>13</sup>

The 8th AD (空军航空兵第八师) was created on 27 November 1950 at Siping, Jilin Province and consisted of the 22nd and 24th ARs, whose pilots came from the PLAAF's 4th Composite Air Brigade's 12th Regiment (空军第4混成旅轰炸第12团) and ground support personnel came from Army infantry regiments and from graduates of the 1st and 2nd Air Force Aviation Schools.<sup>14</sup> Each air regiment had three subordinate battalion-level flight groups (飞行大队). The division was subordinate to the Northeast Military Region Air Force (东北军区空军) and was later resubordinated to the 3rd Air Corps (空三军) in Liaoning Province. The original aircraft consisted of 64 Tu-2s and trainer aircraft. During the Korean War, the unit moved to Shenyang, Liaoning Province. The division also acquired IL-28 bombers from the Soviet Union and Chinese versions known as the H-5 that were produced at the Harbin Aircraft Factory. In August 1958, the division's regiments moved to Wuhu, Anhui Province and Nanjing, Jiangsu Province. After the 2nd Taiwan

Strait Crisis in 1958, the regiments were moved to Wugong, Shaanxi Province, and later moved to Datong and Wenshui, Shanxi Province.

In October 1999, the 8th AD merged with the 48th (Bomber) AD and its headquarters was established in 2003 in Leiyang city under the Hengyang prefecture, Hunan Province, and was subordinated to the Guangzhou Military Region Air Force (MRAF). As part of the 2016 PLA reorganization, the division was subordinated under the Southern Theater Command Air Force (TCAF). The division's MUCD is 95291. The MUCDs for the subordinate regiments are shown below:

- 22nd AR: 95183<sup>15</sup>
- 23rd AR: 95320<sup>16</sup>
- 24th AR: 95148<sup>17</sup>

When the 8th AD received its first H-6 is unclear, and it is also unclear when the first H-6As were replaced by H-6Es and then by H-6H models. In mid-2012, the 24th AR started receiving the first operational H-6Ks. In 2015, the 22nd AR followed suit, replacing the H-6H. It appears that the 23rd AR became the 23rd Air Brigade in 2016 and is the first and only PLAAF bomber unit operating all H-6U (aka HU-6) refueling tankers. Since then, the division has operated two regiments, two flying the latest H-6K.

Today, the 22nd AR is located in Shaodong, which is a county-level city under the administration of Shaoyang City, Hunan Province. The 23rd AB and 24th AR are both located in Leiyang.. The aircraft tail numbers<sup>18</sup> and H-6 variants are shown in the bullets below: <sup>19</sup> [Note: The x and x represent 10-49, 51-99, and 00-50 as in 18091, 10599, 11105, etc.]

- 22nd AR: 18x9x (01-49);<sup>20</sup> H-6K
- 23rd AR: 10x9x (51-99); H-6U aerial refueling tanker
- 24th AR: 11x9x (00-50); H-6K

**Figure 4: 8th Air Division Bombers<sup>21</sup>**





### 10th Air Division<sup>22</sup>

The 10th AD (空军航空兵第十师) was created on 17 January 1951 in Nanjing, Jiangsu Province, but was relocated to Liaoyang, Liaoning Province, during the Korean War. It also drew personnel from the PLAAF's 4th Composite Air Brigade's 12th AR and consisted of the 28th, 29th, and 30th ARs equipped with the Tu-2. At some point, it was relocated to Qiqihar, Heilongjiang Province. In September 1956, the division was again relocated, to Tangshan, Hebei Province, and placed under the command of the Beijing MRAF. In 1957, the 28th AR received its first IL-28 bombers as part of a dedicated electronic reconnaissance and electronic jamming unit. At some point, the division was relocated to Huaining County, Anqing City, Anhui Province and placed under the Nanjing MRAF. The division has been involved in bombing ice floes on the Yellow River and several nuclear tests using H-5 bombers. In 1980, the indigenous HD-5 electronic warfare variant became operational. The division received the first H-6s in the 1970s and 1980s to equip two of the regiments, while the third regiment was used to establish the 48th AD and later became an independent electronic warfare regiment before being equipped with a mix of specialized Y-8 transport aircraft variants and reassigned to the division in 2003. In 2012, the 30th AR was abolished; however, by 2017, the 30th AR had been re-established and assigned H-6Ms. Meanwhile, the 28th AR received the first H-6K and transferred its older H-6Hs to replace the H-6As in the 36th Bomber Division's 108th AR. As such, today, all of the variants in the 10th AD are H-6 variants. In 2016, the division was subordinated to the Eastern TCAF.

Today, the 28th AR is located in Anqing, Anhui Province. The 29th and 30th ARs are both located in Luhe/Ma'an, next to Nanjing, Jiangsu Province. The aircraft tail numbers and H-6 variants are shown in the bullets below:<sup>23</sup>

- 28th AR: 20x1x (01-49); H-6K
- 29th AR: 20x1x (51-99); H-6H
- 30th AR: 21x1x (01-49); H-6M.

**Figure 5: 10th Air Division Bombers<sup>24</sup>**



The 10th AD also has what is identified as the “Model Bomber Group”. It was created as the 1st Flight Group under the 10th AD’s 28th AR in 1951 and received the honorary title of “Model Bomber Group” in 2009 and, in 2018, it competed for the first time in the Aviadarts competition.<sup>25</sup> This flight group’s regiment transitioned to the H-6K in 2013.<sup>26</sup>

### 36th Air Division<sup>27,28</sup>

The 36th AD (空军航空兵第三十六师), which did not receive this unit number until 13 April 1965, originated on 15 March 1953 when the PLAAF’s 4th Independent Regiment reorganized from the 10th Bomber Division’s 28th AR in Shijiazhuang, Hebei Province, but it still retained the 4th AR name. It was equipped with the Tu-4 bomber, which served in the Soviet Air Force from the late 1940s until it was replaced with the Tu-16 and Tu-95 in the mid-1950s,<sup>29</sup> and became the first heavy bomber unit. In March 1954, it was transferred to Nanyuan Airbase next to Beijing, and, in March 1955, it was moved to Wugong, Shaanxi Province, and placed under the command of the Northwest MRAF, which was renamed the Lanzhou MRAF in late 1955. In April 1960, the division received its first Tu-2s from the Soviet Union. The division was not renamed from the 4th Independent Regiment to the 36th Bomber Division until 13 April 1965 with its headquarters at Wugong. It had three subordinate brigades – 106th, 107th, and 108th – which were renamed air regiments in May 1969. By then, the 106th AR was re-organized into a dedicated Tu-4 electronic warfare and reconnaissance regiment and transferred under the Wuhan MRAF. The division’s aircraft dropped the first atomic bomb in May 1965, the first hydrogen bomb in June 1967, and another atomic bomb in October 1980. It received its first H-6s in February 1969. In 2004, the

106th AR was abolished to form an independent aerial survey regiment. In 2016, the division was subordinated to the Central TCAF. One flight group under the 108th AR, was originally created in 1953 and in 1996 was bestowed the name “Shenwei Flight Group” (神威大队), which means invincible, divine, or possessing martial prowess.<sup>30</sup> Since it was created, it has transitioned through six different bomber variants. It currently has 12 aircraft, which are organized into three flight squadrons (飞行中队).

Today, the 107th AR is located in Lintong, Shaanxi Province, near Xi’an, and the 108th AR is located in Wugong. The aircraft tail numbers and H-6 variants are shown in the bullets below:<sup>31</sup>

- 107th AR: 40x7x (01-29; 81-99; 51-99); H-6H, H-6K, and H-6M
- 108th AR: 41x7x (01-29); H-6K, H-6M, which includes the “Shenwei Flight Group” with tail numbers 4107x.<sup>32</sup>

**Figure 6: 36th Air Division Bombers<sup>33</sup>**



**Figure 7: 108th Air Regiment Imagery<sup>34</sup>**



The former 106th AR, whose H-6K bombers had tail numbers 41071-41271), has been reorganized and renamed as the 106th Air Brigade, which will be discussed separately below.

### 106th Air Brigade

The exact origin of the 106th Air Brigade (106旅) is not clear, since, as noted above, there was a 106th AR (106团) under the 36th AD, but it was removed and given a different mission. It appears that at some point around 2018, the PLAAF created an independent 106th [Bomber] Air Brigade with the MUCD 93671 and H-6Ns with tail numbers 5503x.<sup>35</sup> The 55x3x tail number series is a new one assigned only to this brigade. It does not fit into the division-regiment tail number system noted above for the three air divisions.

**Figure 8: 106th Air Brigade Bombers<sup>36</sup>**



## Bomber Unit Organizational Structure

Each bomber division is basically organized the same way with administrative and functional departments including the Staff Department (参谋部), Political Work Department (政治工作部), and Support Department (保障部), each of which has subordinate “second-level departments” and possibly some “third-level departments”.<sup>37</sup> The division’s Party Standing Committee (党委常委) is made up of its key leaders, including the commander (师长), the political commissar (政委), at least two deputy commanders (副师长), at least one deputy political commissar (副政委), the secretary of the Discipline Inspection Committee (纪律检查委员会书记), the chief of staff (参谋长), who directs the Staff Department, the director of the Political Work Department, the director of the Support Department, and the political commissar of the Support Department.

Historically, each air division had a commander (师长), political commissar (政委), at least two deputy commanders (副师长), at least one deputy political commissar (副政委), a chief of staff, who is the director of the Headquarters Department (司令部), director of the Political Department (政治部), and a director and political commissar of the Logistics Department (后勤部) and Equipment Department (装备部), as well as “second-level departments” and possibly some “third-level departments.” This structure remained fairly constant until the 2016 reorganization, when the Headquarters Department became the Staff Department (参谋部) and the Political Department became the Political Work Department (政治工作部). Although no information was found, the Logistics Department and Equipment Department were most likely merged into a Support Department (保障部) as they were in other branches, such as the radar branch. In addition, a Discipline Inspection Commission/Committee (纪律检查委员会) was added with a secretary (书记) in charge. Each air division can have two to three subordinate air regiments.

An air brigade, which is a division deputy leader-grade (副师职) organization, is organized the same way as an air division. As a general rule, brigades are not subordinate to a division and brigades do not have subordinate regiments; however, there may always be exceptions.

A typical air regiment leadership structure includes a commander, political commissar, two deputy commanders, and one deputy political commissar. Air regiments, which are regiment leader-grade (正团职) organizations, have only two administrative and functional departments: a Headquarters Department (now Staff Department) headed by a chief of staff and a Political Division (政治处) (now Political Work Division / 政治工作处) headed by a director. Air regiments do not have logistics, equipment, or support departments. These functions are managed by the airfield station (logistics) and the regiment’s maintenance group.

Each air brigade and regiment typically has two to three subordinate battalion leader-grade (正营职) flight groups (飞行大队). Some of the flight groups are operational, while one is normally a training aircraft flight group for new pilots. Depending on the type of airframe, each flight group has an average of eight to ten aircraft. Each flight group has a commander (大队长), a political director (教导员), one to two deputy commanders, and a deputy political director. As a general rule, PLA organizations at the battalion and company levels do not have any administrative and functional departments.

Each flight group has two to three company leader-grade (征连职) flight squadrons (飞行中队) with two to five aircraft per squadron. The PLAAF considers flight squadrons to be the basic

organizational structure for air units. Each flight squadron has a commander (中队长), a political instructor (指导员), and one to two deputy commanders. Some flight squadrons also have a deputy political instructor.

## Harbin Flight Academy (哈尔滨飞行学院)

The Harbin Flight Academy, which is located in Harbin, Heilongjiang Province, is the only one of the PLAAF's three flight academies that trains H-6 bomber pilots for the PLAAF.<sup>38,39</sup> It is unclear through authoritative sources as to whether or not it was transferred to the Northern Theater Command Air Force, or remains directly subordinate to the PLAAF headquarters.<sup>40</sup> In 2011, it was upgraded from a division leader-grade (正师职) organization to a corps deputy leader-grade (副军职) organization. Its Ministry of Education code is 91027.

Harbin Flight Academy was established in 1949 as the Air Force 1st Bomber School (空军第一轰炸学校), which was renamed in 1986 as the 1st Aviation School (第一航空学校), and was renamed in 1996 as the Air Force 1st Flight College (空军第一航空学院). In August 2011, it was named the Harbin Flight College when it merged with the Air Force 3rd Flight College (空军第三飞行学院), which was created in 1949 in Jinzhou, Liaoning Province, as the PLA's 1st "drive out" aircraft school (驱遂机学校).<sup>41,42</sup> In 1986, it was renamed as the Air Force 3rd Flight College. In 2017, the PLAAF changed the official English name of the Harbin Flight College to Flight Academy.<sup>43</sup>

Since their beginning in 1949, the academy's predecessors were division leader-grade organizations subordinate to the Shenyang Military Region Air Force (沈阳军区空军/沈空) and were organized like an operational air division with a Headquarters Department, Political Department, Logistics Department, and a Maintenance Division.<sup>44</sup> It appears that the current structure is still the same as operational air units, which includes a Staff Department, Political Work Department, and a Support Department.<sup>45</sup> Since it is organized and treated like an operational unit, it also has its own Military Unit Cover Designator (MUCD), which is 93163. The academy also has a commandant, political commissar, at least two deputy commanders, and at least one deputy political commissar.

The Harbin Flight Academy previously had a basic trainer regiment(s) (初级教练团) and an advanced trainer regiment(s) (高级教练团); however, they have been upgraded to numbered (1st to 5th) training brigades (训练旅). Each brigade has three subordinate flight groups (飞行大队), each of which is considered a "class" (班).

The Academy's 2nd [Training] Brigade (二旅) is responsible for training bomber pilot students (学员).<sup>46</sup> The former 1st Flight College had some H-5 bombers that it used for training students until 2007, but they were removed and the students trained only in Y-7 transport aircraft until they graduated and were assigned to their operational unit.<sup>47,48</sup> However, the PLAAF assigned H-6K bombers to the Harbin Flight Academy in April 2015 for the first time since bombers were removed in 2007.<sup>49</sup> This also resulted in an increase in the Academy's overall fuel consumption and a complete change in the type of refueling vehicles.<sup>50</sup> As a result, the airfield station's vehicle company's fuel truck squad had to increase the number of fuel trucks and created a "fuel consumption menu" in order to prepare for the amount of fuel for each sortie.

H-5 Bomber<sup>51</sup>



Although the aircraft were assigned to the Academy in early 2015, the first student flights in them did not occur until February 2016.<sup>52</sup> Overall, the transition period, which included training instructors and maintenance personnel, took less than one year. The ultimate goal was to tailor the cultivation programs to the operational units' needs. Starting with the 2016 class, an extra 6-month-long tactics basic subject (战术基础课目) was added to its curriculum, which extended the total time for bomber pilot training in Harbin to 1.5 years.<sup>53</sup> Although the Academy received its H-6s and assigned them to the 2nd [Training] Brigade, new bomber pilots most likely begin their training in a Y-7 and then transition to the H-6.

The instruction process took a couple of years to fully implement but it is still undergoing some adjustments. Pilot training in the H-6 included instrument flights, timely arrival, changing course without prior notice, short route zoom climb bombing, and radio silence.<sup>54</sup> The Academy built a new Air Force Bomber and Transport Aircraft Simulation Training Center (空军轰运机模拟训练中心)<sup>55</sup> which has allowed it to gradually increase its training such that in November 2017, the training brigade organized its flight cadets to conduct long-distance cross-theater command/province mobility relocation training for the first time. Multiple bombers were dispatched, and each sortie included a return flight of thousands of kilometers crossing seven provinces while all of the students were assigned the left seat (pilot in command/PIC).<sup>56</sup> This is significant because it indicates that pilots already receive some training in these operations before they get to their operational base. As they move up their aeronautical ratings from 3<sup>rd</sup> grade to special grade (discussed in the "Pilot Career Paths" section below), being in the left seat counts in filling the requirements at each grade. During training, the instructor sits in the right seat (co-pilot) and the student sits in the left (PIC) seat. The purpose of this training was for these students to improve their long-range mobility and strike capabilities and to implement self-directed takeoff and landing skills at unfamiliar airfields.

In mid-August 2018, the new 2018 class of students held the first group of flights in their transport and bomber trainer aircraft.<sup>57</sup> Besides the past instrument flying (仪表飞行), an entirely new item of training-subject training (课目训练) was also carried out: extreme limits flight (极限性能飞行). This was defined as carrying out maneuver flight with the greatest amount of movement, which is to occur on a student's first flight under the regulations and new Outline of Military Training and Evaluation (OMTE / 新法规新大纲).<sup>58</sup>

According to one article in *China Air Force* magazine in 2017, prior to the introduction of active bombers to training, a flight student would need 5-6 years of transition training at an operational unit upon graduating from the academy to become a qualified combat pilot.<sup>59</sup> Now, it

only takes one year for the graduates to be ready for combat. For example, once the first and second group of students who began training in the H-6 at the Academy arrived at their operational unit, they were qualified to fly within six months rather than a year.<sup>60</sup> In 2017, at least four pilots from the first group had been selected to sit in the left seat as the pilot in command (PIC / 驾驶 / 机长) in an unidentified operational bomber brigade.<sup>61,62</sup> For example, Xie Cheng (谢铖) became the youngest PIC of a bomber aircraft at the age of 27, and he was considered a best example of the new transition training method. According to this operational brigade's leaders, this was inconceivable in the past. It usually took graduates 5-6 years of transition training in units to become qualified combat personnel (战斗员), and now the combat force's growth cycle had been significantly shortened.

According to Yang Ronghuan (杨荣桓), who was transferred back to the Training Brigade from an operational unit to become the Commander of the Flight Academy Training Brigade's 1st Flight Group, assigning H-6s to the Academy also posed huge challenges to the instructors. Although the article did not provide any specific information, he was most likely referring to the fact that almost all flight instructors in the PLAAF's Flight Academies graduated in the top of their class and then remained at the Flight Academy as an instructor for the rest of their career. As a general rule, very few pilots with operational experience return to a Flight Academy as an instructor.<sup>63</sup> Therefore, when the Flight Academy received its first H-6s, none of the flight instructors had any experience in the aircraft.

A November 2019 Air Force News article described the career progression of pilot Chen Jie (陈劫), who graduated from the Harbin Flight Academy in 2016 and was assigned to the 10th AD's "Model Bomber Group" (模范轰炸机大队) along with three other newly graduated pilots.<sup>64</sup> Within four months of assuming his billet, Chen was taking on a far-seas training mission. Sometime in 2017, Chen became one of the group's Flight Squadron Commanders. In July 2018, this flight group represented China in the "Aviadarts-2018" (航空飞镖-2018) International Army Games with Russia, placing second. Chen was the youngest pilot to take part in this event.

## Appendix A: Abolished Bomber Units

Besides the 8<sup>th</sup>, 10<sup>th</sup>, and 36<sup>th</sup> air divisions that still exist today, the PLAAF has had five other bomber air divisions (20<sup>th</sup>, 23<sup>rd</sup>, 25<sup>th</sup>, 48<sup>th</sup>, and 50<sup>th</sup>), all of which have been abolished. The following subsections provide a brief overview of each division. Only the key organizational information has been included.

### 20<sup>th</sup> Air Division<sup>65</sup>

The 20<sup>th</sup> AD (空军航空兵第二十师) and its two regiments (58<sup>th</sup> and 60<sup>th</sup>) were established on 15 September 1952 in Bengbu, Anhui Province. It received over 40 Tu-2 bombers from the Soviet Union. In 1958, the regiments were reorganized and moved to Nanjing University for training purposes. In March 1956, the division was transferred to Qiqihar, Heilongjiang Province and the Tu-2s were replaced with IL-28s. The division added the 59<sup>th</sup> AR 1964 and the three regiments were renamed as brigades; however, in 1970, they were renamed again as regiments. In September 1992, the division was abolished.

### 23<sup>rd</sup> Air Division<sup>66</sup>

The 23<sup>rd</sup> AD (空军航空兵第二十三师) was created in January 1952 in Hengyang, Hunan Province. Its three regiments (67<sup>th</sup>, 68<sup>th</sup>, and 69<sup>th</sup>) were all equipped with Tu-2 bombers. It received the official name of the 23<sup>rd</sup> AD in September 1953 and was based at Changsha, Hunan Province and moved to Zhengzhou, Henan Province in October 1954. In 1959, it was transferred to a new location. In August 1985, the division was abolished.

### 25<sup>th</sup> Air Division<sup>67</sup>

The 25<sup>th</sup> AD (空军航空兵第二十五师) was established in May 1952 at Xi'an, Shaanxi Province. It was equipped with Tu-2s. In 1952, it was transferred to Linyi, Shandong Province. In 1970, it began converting to the domestic H-5, but the division was abolished in August 1985.

### 48<sup>th</sup> Air Division<sup>68</sup>

The 48<sup>th</sup> AD (空军航空兵第四十八师) was officially established in August 1970 at Fuyang, Hunan Province, with two subordinate regiments (142<sup>nd</sup> and 143<sup>rd</sup>). The 142<sup>nd</sup> AR was based on the original 10<sup>th</sup> AD's 30<sup>th</sup> AR, and the 143<sup>rd</sup> AR was formerly the 20<sup>th</sup> AD's 59<sup>th</sup> AR. Both were equipped with the H-5. In January 1976, it was placed under direct leadership of the Guangzhou MRAF. In April 1976, the 144<sup>th</sup> AR was formed. In 1982, the 143<sup>rd</sup> AR converted to the H-6. In 1985, the 142<sup>nd</sup> AR was abolished. In September 1992, the air division was abolished.

### 50<sup>th</sup> Air Division<sup>69</sup>

Officially established on 1 August 1971 in Leizhuang, Guiyang City, Guizhou Province, the 50<sup>th</sup> AD had two subordinated regiments, including the 148<sup>th</sup> AR, which was the former 23<sup>rd</sup> AD's 69<sup>th</sup> AR, and the 149<sup>th</sup> AR, which was formed from the 25<sup>th</sup> AD's 74<sup>th</sup> AR. It was equipped with Tu-2 aircraft and placed under the Kunming MRAF. In early 1976, the 50<sup>th</sup> AD was transferred to Guiyang City, Guizhou Province, and was converted from a bomber to ground-attack / fighter-bomber aircraft division. From that time on, it was reorganized several times. In 2017, the air division was abolished and the subordinate air regiments were converted to air brigades.<sup>70</sup>

## ENDNOTES

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<sup>1</sup> Since 1999, the US Department of Defense has produced an annual report for Congress on selected Chinese military capabilities. The information in these two paragraphs comes from Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021*, accessed at <https://www.defense.gov/News/Releases/Release/Article/2831819/dod-releases-2021-report-on-military-and-security-developments-involving-the-pe/>.

<sup>2</sup> The PLAAF also translates the term *jizhang* (机长) as “captain”.

<sup>3</sup> Zhang Lijun and Li Wei, [“H-6K Bomber”] [轰-6K轰炸机], *China Armed Forces*, 1 April 2016, 94-97. Xu Tongxuan, Jia Erbing, Gao Di, and Li Yinghui, [“Notes on the ‘Model Bomber Group’”], *Air Force News*, 15 November 2019, 1.

<sup>4</sup> Mou Xingguang, [“Eastern TCAF Air Regiment Innovates to Allow Bomber to Fire Two Missiles Simultaneously”], *Air Force News*, 19 September 2016, 1. Zhu Xiaojing and Zhang Haitao, [“Oral Report of Maritime Live-Munition Targeting Mission by Bombardier Participant”], *China Air Force*, May 2018, 30-31.

<sup>5</sup> Zhang Qiliang, ed., *A Chinese-English Dictionary of Military Terms* [汉英军事词典], (Beijing: Naval Press, December 2001), 988.

<sup>6</sup> Niu Ruili, ed., [“The Most Beautiful ‘Same Frame’: I Love the Motherland’s Blue Sky”] [最美“同框”:我爱祖国的蓝天], [kj.81.cn](http://kj.81.cn), 6 November 2019, accessed at [http://kj.81.cn/content/2019-11/06/content\\_9669708.htm](http://kj.81.cn/content/2019-11/06/content_9669708.htm).

<sup>7</sup> Lu Xiaoping, ed., *The PLA Air Force*, (Beijing: China Intercontinental Press, 2012), 86-87.

<sup>8</sup> Huang Panyue, ed., “Bomber Takes Off for Round-the-clock Flight Mission,” *China Military Online* (English), 27 March 2020, accessed at [http://english.chinamil.com.cn/view/2020-03/27/content\\_9778779.htm](http://english.chinamil.com.cn/view/2020-03/27/content_9778779.htm).

<sup>9</sup> Zhao Danpeng, Xu Peng, Xia Qi, et al., [“Development of the First Generation Companion Particle Target Tube”] [第一代伴随粒子靶管的研制], *CNKI*, November 2018, accessed at <https://kns.cnki.net/kcms/detail/detail.aspx?filename=QJGY201811032&dbcode=CJFD&dbname=CJFD2018&v=>.

<sup>10</sup> The historical information for each of the three air divisions comes from Andreas Rupprecht, *Chinese Air Power in the 20<sup>th</sup> Century: Rise of the Red Dragon*, (Houston, TX: Harpia Publishing, 2019), and [“History of the Air Force Air Divisions of the Chinese People’s Liberation Army”] [中国人民解放军空军航空兵师历史沿革], 13 May 2014, accessed at <http://www.plaaf.net/special/hkbs.html> and [http://blog.sina.com.cn/s/blog\\_a3f74a990101fi67.html](http://blog.sina.com.cn/s/blog_a3f74a990101fi67.html).

<sup>11</sup> This map comes from Peter Wood, who used the following sources: Roderick Lee, “China’s Air Force Might Be Back in the Nuclear Business,” *The Diplomat*, 9 September 2020. <https://thediplomat.com/2020/09/chinas-air-force-might-be-back-in-the-nuclear-business/>; United States Department of Defense. Defense Intelligence Agency. *Directory of PRC Military Personalities*. Washington DC, 2019; Andreas Rupprecht, *Modern Chinese Warplanes*, Houston: Harpia, 2019.

<sup>12</sup> Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021*, accessed at <https://www.defense.gov/News/Releases/Release/Article/2831819/dod-releases-2021-report-on-military-and-security-developments-involving-the-pe/>.

<sup>13</sup> Andreas Rupprecht, *Rise of the Red Dragon*, 189-191.

<sup>14</sup> [“History of the Air Force Air Divisions of the Chinese People’s Liberation Army”] [中国人民解放军空军航空兵师历史沿革], 13 May 2014, accessed at <http://www.plaaf.net/special/hkbs.html> and [http://blog.sina.com.cn/s/blog\\_a3f74a990101fi67.html](http://blog.sina.com.cn/s/blog_a3f74a990101fi67.html). “Air Force 8<sup>th</sup> Division” [空八师], [baike.baidu](http://baike.baidu.com/item/空八师), accessed at <https://baike.baidu.com/item/空八师>. “PLAAF is the tactical bomber of the IL-28 / Harbin H-5,” eastern order of battle, accessed at [http://www.easternorbat.com/html/harbin\\_h-5\\_eng.html](http://www.easternorbat.com/html/harbin_h-5_eng.html). Andreas Rupprecht, *Chinese Air Power in the 20<sup>th</sup> Century: Rise of the Red Dragon*, (Houston, TX: Harpia Publishing, 2019), 189-191.

<sup>15</sup> <http://www.shdcx.net/bencandy.php?fid=57&id=1958>.

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<http://big5.oversea.cnki.net/KCMS/detail/detail.aspx?filename=DNZS200823088&dbcode=CJFD&dbname=CJFD2008>.

<sup>17</sup> [http://www.mod.gov.cn/photos/2016-12/28/content\\_4768350.htm](http://www.mod.gov.cn/photos/2016-12/28/content_4768350.htm),

[http://www.xinhuanet.com/politics/19cpcnc/2017-10/22/c\\_129724764.htm](http://www.xinhuanet.com/politics/19cpcnc/2017-10/22/c_129724764.htm), and [http://81rc.81.cn/news/2018-01/02/content\\_7892394.htm](http://81rc.81.cn/news/2018-01/02/content_7892394.htm).

<sup>18</sup> For more on PLAAF aircraft serial numbers, see Allen and Garafola, 70 Years of the PLA Air Force.

<sup>19</sup> Information from correspondence with Andreas Rupprecht.

<sup>20</sup> Note that this is merely a block for the numbers. It does not mean there are 49 aircraft in the regiment.

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- <sup>21</sup> <https://news.qq.com/a/20170724/015928.htm>. [https://www.sohu.com/a/343368574\\_750886](https://www.sohu.com/a/343368574_750886). 11192 and 11198 are H-6K aircraft 112 and 118 of the 24<sup>th</sup> Air Regiment .
- <sup>22</sup> Andreas Rupprecht, *Chinese Air Power in the 20<sup>th</sup> Century: Rise of the Red Dragon*, (Houston, TX: Harpia Publishing, 2019), 193-195.
- <sup>23</sup> Information from correspondence with Andreas Rupprecht.
- <sup>24</sup> <https://web.shobserver.com/news/detail?id=293038>. [https://m.baike.com/wiki/%E8%BD%B0-6K/2357884?baike\\_source=innerlink\\_20014](https://m.baike.com/wiki/%E8%BD%B0-6K/2357884?baike_source=innerlink_20014) and 20019 are H-6Ks 004 and 009 of the 28<sup>th</sup> Air Regiment.
- <sup>25</sup> <http://news.haiwainet.cn/n/2019/1118/c3541093-31665869.html?nojump=1>. No Chinese sources were found to provide an official English name for the bomber group so this is the best translation available.
- <sup>26</sup> Chen Liang, [“Notes from bomber regiment commander Chen Liang”], *Air Force News*, 21 November 2019, 1.
- <sup>27</sup> Andreas Rupprecht, *Chinese Air Power in the 20<sup>th</sup> Century: Rise of the Red Dragon*, (Houston, TX: Harpia Publishing, 2019), 228-230.
- <sup>28</sup> In April 1989, the author of this report visited the 36<sup>th</sup> Bomber Division while escorting the US Air Force Chief of Staff, General Larry Welch, during his visit to China.
- <sup>29</sup> [https://en.wikipedia.org/wiki/Tupolev\\_Tu-4#Operational\\_history](https://en.wikipedia.org/wiki/Tupolev_Tu-4#Operational_history).
- <sup>30</sup> Zhang Xuefeng, Zhang Lei, Wang Litao, Wang Li, and Yang Kaidian, [“In-depth: Record of Central TCAF Aviation Unit’s ‘Shenwei Flight Group’ Putting into Practice the ‘Three Solids’”], *China Air Force*, April 2018, 16-30.
- <sup>31</sup> Information from correspondence with Andreas Rupprecht.
- <sup>32</sup> [“The Chinese Air Force Bomber Shenwei Flight Group Has a Background: It Has Experienced the ‘96 Taiwan Strait Crisis’”], [中国空军轰炸机神威大队有来头:曾经经历“96台海危机”], *sohu.com*, 28 March 2013, accessed at [https://www.sohu.com/a/226625842\\_403246](https://www.sohu.com/a/226625842_403246). [“The ‘God of War’ Spreads Its Wings and Writes a New Answer Sheet for a Powerful Country ‘and a Strong Army in Three Years – The Air Force ‘Shenwei Flight Group’ Inspires New Momentum to Fly in a New Era] [“战神”展翅，三年航迹书写强国强军新答卷——空军“神威大队”激发新动力奋飞新时代], *Xinhuanet*, 29 March 2018, accessed at [http://www.xinhuanet.com/2018-03/29/c\\_1122611893.htm](http://www.xinhuanet.com/2018-03/29/c_1122611893.htm).
- <sup>33</sup> [https://www.sohu.com/a/403040436\\_448414](https://www.sohu.com/a/403040436_448414). [http://m.justoper.com/news/5d6bab5cc8e4be064423e273\\_81B4997405640EC1E67E95652F077AAC](http://m.justoper.com/news/5d6bab5cc8e4be064423e273_81B4997405640EC1E67E95652F077AAC). Tail number 40078 is aircraft 008 either from the 106<sup>th</sup> Air Regiment (before conversion) or the 107<sup>th</sup> (depending on when the photo was taken). 41073 is H-6K aircraft 103 from the 108<sup>th</sup> Air Regiment.
- <sup>34</sup> Imagery of the 108<sup>th</sup> Air Regiment with H-6K and H-6M bombers at Wugong on 12 February 2020, accessed at [https://twitter.com/5472\\_nde/status/1257015921295659008/photo/4](https://twitter.com/5472_nde/status/1257015921295659008/photo/4).
- <sup>35</sup> Timothy Wright, “Chinese PLAAF H-6N Pictured Carrying Large Missile” IISS, October 2020, accessed at <https://www.iiss.org/blogs/analysis/2020/10/mdi-chinese-plaaf-h-6n-missile>.
- <sup>36</sup> <https://daydaynews.cc/zh-my/military/857502.html>. <http://baijiahao.baidu.com/s?id=1666641565685252879>.
- <sup>37</sup> Prior to the 2016 reorganization, each division had a Logistics Department (后勤部) and an Equipment Department (装备部), each of which had a director (部长) and a political commissar (政委), but they were merged into a single Support Department with a director and political commissar. The “second-level departments” and “third-level departments” include divisions (处), offices (科), and branches (股).
- <sup>38</sup> The other two flight academies are the Xi’an Flight Academy and the Shijiazhuang Flight Academy. See Kenneth W. Allen and Mingzhi Chen, *The People’s Liberation Army’s 37 Academic Institutions*, (Montgomery, AL: China Aerospace Studies Institute, 2020) for more details.
- <sup>39</sup> “Harbin Flight College of the Air Force” [空军哈尔滨飞行学院] in Dong Huiyu and Mou Xianming, eds. *Dictionary of Modern Military Education (sic)* [现代军校教育辞典], Second Edition, (Beijing: National Defense University Press, 2011), 481.
- <sup>40</sup> “Harbin Flight College of the Air Force” [空军哈尔滨飞行学院], *Dictionary of Modern Military Education (sic)* [代军校教育辞典], (Beijing: National Defense University Press, August 2011, Second Edition), 481. <https://baike.baidu.com/item/中国人民解放军空军哈尔滨飞行学院>.
- <sup>41</sup> According to the PLA’s dictionary, the term *quju* (驱逐) is translated as “drive out” and is defined as operations to drive the enemy out of a particular location.
- <sup>42</sup> “Drive out” [驱逐] in AMS All-Army Military Terminology Management Committee, [*People’s Liberation Army Military Terminology*] [中国人民解放军军语] Second Edition, (Beijing: Academy of Military Science Press, December 2011), 91.

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- <sup>43</sup> “PLA Air Force Spreads Stall/Spin Recovery Training on JL-8 Aircraft in Flight Academies,” *China Military Online* (English), 27 March 2018, accessed at [http://eng.chinamil.com.cn/view/2018-03/27/content\\_7985275.htm](http://eng.chinamil.com.cn/view/2018-03/27/content_7985275.htm);
- <sup>44</sup> “5 Military Colleges and Academies Conduct Joint Drill,” *China Military Online* (English), 8 May 2014, accessed at [http://eng.chinamil.com.cn/news-channels/photo-reports/2014-05/08/content\\_5895921.htm](http://eng.chinamil.com.cn/news-channels/photo-reports/2014-05/08/content_5895921.htm).
- <sup>45</sup> Yao Wei et al., eds., “Air Force Flight College” [空军飞行学院], in *China Air Force Encyclopedia* [中国空军百科全书], (Beijing: Aviation Industry Press, November 2005), 1248.
- <sup>46</sup> This information comes from various *Air Force News* articles in 2017 and 2018.
- <sup>47</sup> Although the PLAAF uses the same term *xueyuan* (学员) at AUAF and the Harbin Flight Academy, the term is best translated as “cadets” at AUAF and “students” at the flight academy.
- <sup>48</sup> “43 Years of Flying Life of a Meritorious Pilot” [“功勋飞行员”的43年飞行人生], *sina.com*, 17 October 2020, accessed at <http://gz.sina.com.cn/news/sh/2020-10-17/detail-iiznctkc6022934.shtml>.
- <sup>49</sup> The H-5 is based on the Russian IL-28 bomber and was license produced in Harbin starting in 1967. All of these aircraft were retired as of 2011.
- <sup>50</sup> Zhang Tao, ed., “Active Jet Bombers Become Training Aircraft Again for Cadet Pilots,” *China Military Online* (English), 21 April 2015, accessed at [http://eng.mod.gov.cn/DefenseNews/2015-04/21/content\\_4581110.htm](http://eng.mod.gov.cn/DefenseNews/2015-04/21/content_4581110.htm). Li Kaiqiang and Li Tianxia, [“Active Jet Bombers Become Training Aircraft Again for Cadet Pilots”] [喷气式轰炸机重返空军飞行院校], *PLA Daily*, 19 April 2015, accessed at [http://news.mod.gov.cn/headlines/2015-04/19/content\\_4580771.htm](http://news.mod.gov.cn/headlines/2015-04/19/content_4580771.htm).
- <sup>51</sup> Fang Leilei and Wang Tianwei, [“Harbin Flight Academy Vehicle Unit Tailors Fuel Specifications”] *Air Force News*, 23 January 2018, 2.
- <sup>52</sup> [“China Air Force H-5 Bomber”] [中国空军之轰5轰炸机], accessed at <https://mil.news.sina.com.cn/2003-07-24/139194.html>.
- <sup>53</sup> Zhang Yuanzhi, Zhang Yechi, and Wang Zhijia, [“Harbin Flight Academy 2<sup>nd</sup> Brigade Transitions to a New Bomber”], *Air Force News*, 2 March 2016, 3.
- <sup>54</sup> Fang Leilei and Wang Zhijia, [“The 2nd brigade of Harbin Flight Academy’s [哈飞院二旅] Basic Training [基础课目] Activities”], *Air Force News*, 6 December 2017, 3.
- <sup>55</sup> Jiang Feng, Shao Wenjie, and Wang Zhijia, [“Air Force Harbin Flight Academy’s 2nd Brigade Trains Second Group of Student in H-6”], *Air Force News*, 17 May 2017, 1.
- <sup>56</sup> Xu Jianjun and Wang Zhijia, [“Air Force Harbin Flight Academy Air Force Bomber and Transport Aircraft Simulation Training Center overview”], *Air Force News*, 21 June 2017, 3.
- <sup>57</sup> Fang Leilei and Wang Zhijia, [“The 2nd Brigade of Harbin Flight Academy’s Basic Training Activities [哈飞院二旅基础课目”], *Air Force News*, 6 December 2017, 3. Wang Junfeng and Wang Zhijia, [“Harbin Flight Academy Training”], *Air Force News*, 23 November 2017, 1.
- <sup>58</sup> Ma Yaowu and Wang Zhijia, [“Harbin Flight Academy Brigade’s 2018 Class Of Flight Students Holds First Group of Flights for a Type of Bomber and Transport Trainer Aircraft], *Air Force News*, 6 September 2018, 2.
- <sup>59</sup> According to PLA writings, the former General Staff Department (GSD), which served as the Army HQ, first published an *Outline of Military Training* (军事训练大纲) in 1955 that was applicable to all PLA forces. The outline is described as the general plan for military training. Since 1955, revised documents were approved and issued in 1957, 1978, 1980, 1989, 1995, 2001, 2009, and 2018. From 1955 to 1989, the GSD remained the overall manager for the outline. However, when the 1989 version was published, the overall responsibility was divided accordingly, whereby the GSD issued the outline for the Army, while the Navy, Air Force, and former Second Artillery Force issued their own documents for the first time. In 2001, the word “evaluation” was added, such that the new name became the *Outline of Military Training and Evaluation* (军事训练与考核大纲) or OMTE. Once the draft of a new outline is provided to each PLA component, it normally takes at least two years to rewrite the regulations and approve the final version. Although the overall OMTE is not available to the public, a review of multiple articles over the years helps provide a general understanding of its content.
- <sup>60</sup> Fang Leilei, Mu Biao, and Li Donggeng, [“Active-duty Bombers Enter Academic Institution”] [现役轰炸机进院校], *China Air Force*, June 2017, #233, 39-42.
- <sup>61</sup> Jiang Feng, Shao Wenjie, and Wang Zhijia, [“Air Force Harbin Flight Academy’s 2nd Brigade Trains Second Group of Student in H-6”], *Air Force News*, 17 May 2017, 1.
- <sup>62</sup> The PLAAF translates *jizhang* (机长) as “captain,” but it is best translated as “pilot in command”.
- <sup>63</sup> “Captain” [机长] in Zhu Rongchang, ed., *Air Force Dictionary* [空军大辞典], (Shanghai: Shanghai Dictionary Press, September 1996) 170, and Yao Wei, ed., *China Air Force Encyclopedia* [中国空军百科全书], (Beijing: Aviation Industry Press, November 2005, Volume 1) 250.

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<sup>63</sup> Kenneth W. Allen, *PLA Air Force, Naval Aviation, and Army Aviation Aviator Recruitment, Education, and Training*, (Washington, D.C.: Jamestown Foundation), 8 April 2016. Li Yue, “A Regiment in the Air Force Flight Instructor Training Base Speeds up Cultivation of a New Type of Officer Instructors” (空军飞行教官训练基地某团加速培养新型教官队伍), Chinanews.com, September 25, 2013, accessed at [www.chinanews.com/mil/2013/09-25/5321140.shtml](http://www.chinanews.com/mil/2013/09-25/5321140.shtml).

<sup>64</sup> Xu Tongxuan, Jia Erbing, Gao Di, and Chi Yuguang, [“A History of the ‘Model Bomber Group’”], Air Force News, 14 November 2019, 1.

<sup>65</sup> Andreas Rupprecht, *Rise of the Red Dragon*, 209-210. “History of the Air Force Air Divisions of the Chinese People’s Liberation Army” [中国人民解放军空军航空兵师历史沿革], 13 May 2014.

<http://www.plaaf.net/special/hkbs.html> and [http://blog.sina.com.cn/s/blog\\_a3f74a990101fi67.html](http://blog.sina.com.cn/s/blog_a3f74a990101fi67.html).

<sup>66</sup> Andreas Rupprecht, *Rise of the Red Dragon*, 213. “History of the Air Force Air Divisions of the Chinese People’s Liberation Army” [中国人民解放军空军航空兵师历史沿革], 13 May 2014.

<http://www.plaaf.net/special/hkbs.html> and [http://blog.sina.com.cn/s/blog\\_a3f74a990101fi67.html](http://blog.sina.com.cn/s/blog_a3f74a990101fi67.html).

<sup>67</sup> Andreas Rupprecht, *Rise of the Red Dragon*, 215-216. “History of the Air Force Air Divisions of the Chinese People’s Liberation Army” [中国人民解放军空军航空兵师历史沿革], 13 May 2014.

<http://www.plaaf.net/special/hkbs.html> and [http://blog.sina.com.cn/s/blog\\_a3f74a990101fi67.html](http://blog.sina.com.cn/s/blog_a3f74a990101fi67.html).

<sup>68</sup> Andreas Rupprecht, *Rise of the Red Dragon*, 237. “History of the Air Force Air Divisions of the Chinese People’s Liberation Army” [中国人民解放军空军航空兵师历史沿革], 13 May 2014.

<http://www.plaaf.net/special/hkbs.html> and [http://blog.sina.com.cn/s/blog\\_a3f74a990101fi67.html](http://blog.sina.com.cn/s/blog_a3f74a990101fi67.html).

<sup>69</sup> Andreas Rupprecht, *Rise of the Red Dragon*, 238-239. “History of the Air Force Air Divisions of the Chinese People’s Liberation Army” [中国人民解放军空军航空兵师历史沿革], 13 May 2014.

<http://www.plaaf.net/special/hkbs.html> and [http://blog.sina.com.cn/s/blog\\_a3f74a990101fi67.html](http://blog.sina.com.cn/s/blog_a3f74a990101fi67.html).

<sup>70</sup> <https://www.scramble.nl/planning/orbats/china/china-air-force#ZSWF109>.