



CHINA AEROSPACE  
STUDIES INSTITUTE



# PLA ROCKET FORCE ORGANIZATION

MA XIU

Prepared for the China Aerospace Studies Institute

By Blue Path Labs

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## Acronyms and Abbreviation Index

ASBM – Anti-ship Ballistic Missile [反舰弹道导弹]
BDE – Brigade [旅]
BN – Battalion [营]
CNTR – Center [中心]
CO – Company [连]
COMMS – Communications [通信]
COMP – Comprehensive [综合]
COS – Chief of Staff [参谋长]
DEP – Deputy [副]
DEPT – Department [部]
DIV – Division [师]
ECM – Electronic Countermeasures [电抗]
ENG – Engineering [工程]
EQUIP – Equipment [装备]
GRP – Group [大队]
HGV – Hypersonic Glide Vehicle [超高音速滑翔飞行器]
ICBM – Intercontinental Ballistic Missile [洲际弹道导弹]
INSP – Inspection [检]
INST – Institute [所]
IRBM – Intermediate Range Ballistic Missile [中远程弹道导弹]
ISR – Intelligence, Surveillance, Reconnaissance [情报监视侦察]
LACM – Land Attack Cruise Missile [对地巡航导弹]
MEAS – Measurements [量]
MOB – Mobile [机动]
MRBM – Medium Range Ballistic Missile [中程弹道导弹]
MUCD – Military Unit Cover Designator (5-digit ID number given to all PLA units at the Regiment Leader grade and above) [代号]
NBC – Nuclear, Biological, Chemical [核生化]
OPFOR – Opposition Force
OPS – Operations [作战]
PC – Political Commissar [政治委员/政委]
POL – Political [政治]

PWDD – Political Work Department/Division Director (政治工作部/处主任)

RECON – Reconnaissance [侦察]

REG – Regiment [团]

SPEC – Special [特种]

SNR – Senior [高级]

SRBM – Short Range Ballistic Missile [短程弹道导弹]

SSM – surface-to-surface missile [地地导弹]

SERV – Service [勤务]

SUPP – Support [保障]

TECH – Technical [技术]

TUD – True Unit Designator (“true” unit name (e.g. 801 Brigade), which is typically masked in public sources) [潘浩]

UAV – Unmanned Aerial Vehicle [无人机]



## Notes on the Data in this Report

### Geolocation

While unit geolocation was not a primary goal of this project, the author has attempted, wherever possible, to provide geocoordinates for the units described in this report. All geocoordinates given are based on the unit's location in Google. Chinese law, which Google continues to comply with, mandates that all geolocation services be offset by random distances usually amounting to several hundred meters. This means that all coordinates given in this report are actually off by several hundred meters from the unit's *actual* location and are thus for informational purposes only.

All units for which a location has not been verified by conclusive ground imagery correlation (even in cases where the author is otherwise quite confident of accuracy) are listed as “unconfirmed.”

### Dates

All personnel named in this report have dates next to their names. These represent the latest date for which that individual has been confirmed to be in that position. For example, if the personnel's name is followed by (1/18), we can say for a fact that this individual was in that position as late as January 2018. All information is current as of the beginning of 2022.

### Sources

All information was sourced from publicly available information and documents.

## Introduction

The PLA Rocket Force (PLARF), formerly known as the PLA 2<sup>nd</sup> Artillery Force (PLASAF) until 2016, is responsible for the PLA's land-based nuclear and conventional ballistic missiles. The Second Artillery Force was officially established in 1966 and given command of China's small inventory of land-based, regional nuclear missiles. These first-generation missiles were largely categorized as unsophisticated and of limited range and capability. The story of the PLARF/PLASAF, however, has been one of steady and progressive growth in both size and capability, beginning with the development of increasingly longer-range systems through the 1960s and 1970s and, with the introduction of the DF-5 in the early 1980s, the first intercontinental ballistic missile capable of striking the United States. The 1980s were a seminal decade for the PLASAF in two other ways: first, through its development of the DF-21, the PLA's first road-mobile ballistic missile system, and second, through its decision to field conventional as well as nuclear missiles, leading to the introduction of the DF-11 and DF-15 short range ballistic missiles in the early 1990s. The steady diversification of platforms and improvement in capabilities assigned to the PLASAF was matched by its equally steady growth in size. Four new brigades were stood up between 1980 and 2000, three of which were equipped with these latest weapons systems. This expansion accelerated in the 2000s: between 2000 and 2010, the PLASAF stood up as many as eleven new brigades equipped with its growing array of weapons, including its first ground-launched cruise missile, the CJ-10, and its first road-mobile ICBM, the DF-31. The pace of growth continued to intensify between 2010 and 2020, as the PLASAF (and, following its name change in 2016, the PLA Rocket Force) added 13 new brigades, as well as more important weapons systems such as the DF-21D anti-ship ballistic missile, the longer range and more capable DF-41 road-mobile ICBM, the dual nuclear-conventional DF-26 IRBM, and the DF-17 hypersonic glide vehicle (HGV). Incredibly, between 2017 and late 2019 the PLARF added at least ten new missile brigades. This unprecedented expansion from 29 to 39 brigades represented a more than 33% increase in size in only three years.<sup>1</sup> This was followed by an apparent massive expansion of the PLARF's silo-based ICBM force in 2021. Thus, the PLARF has evolved from a small, unsophisticated force of short-ranged and vulnerable ballistic missiles to an increasingly large and modern force with a wide array of both nuclear and conventional weapons platforms.

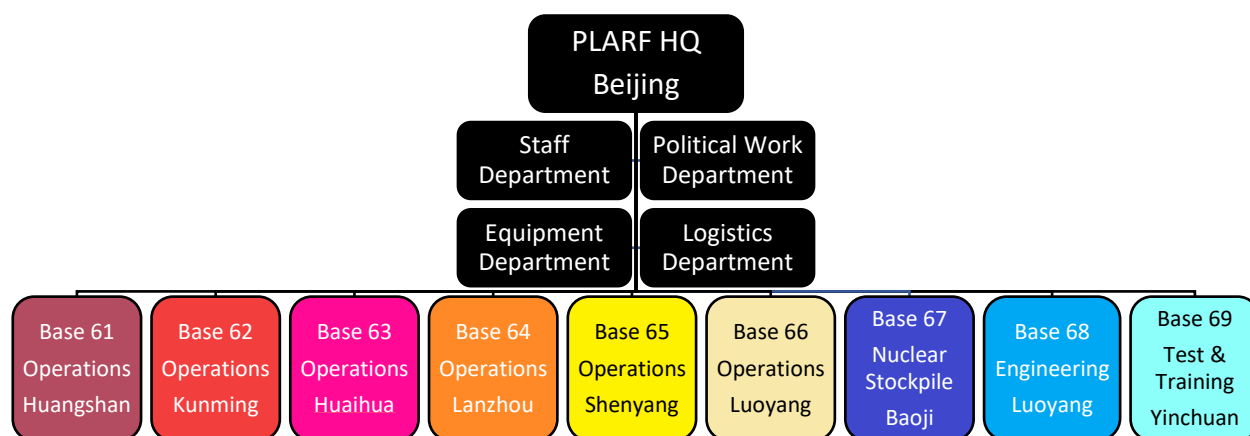
While recent scholarship has gone a long way toward demystifying China's ballistic missile force, it remains in many ways a poorly understood phenomenon, with an unusually high degree of censorship even by the strict standards of the PLA. With this in mind, the purpose of this report is to improve the level of detail available to researchers by providing the most thorough encyclopedia of PLA Rocket Force units available in open sources. The author has attempted to compile dossiers on as many PLARF units and institutions as possible, including information, where available, on each unit's history, mission, location, leadership, equipment, and force structure, utilizing a wide range of mostly Chinese language sources. The author hopes that the information contained in this report will fill a critical gap in scholarship, serve as a valuable resource to the PLA research community, and help facilitate further research and greater understanding of the PLARF.

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<sup>1</sup>For further information, see the author's piece in Popular Science: Ma Xiu, PW Singer, "China's missile force is growing at an unprecedented rate," Popular Science, 25 February 2020. <https://www.popsci.com/story/blog-eastern-arsenal/china-missile-force-growing/>

## PLARF Force Structure

The PLARF is directly subordinate to the Central Military Commission (CMC), the PRC's supreme national defense authority. Command authority of the PLARF's nuclear launch forces is somewhat byzantine: administratively, nuclear forces are subordinate to their individual bases, but in wartime are placed under direct operational control of the CMC. Operational control of conventional missile forces, in particular the extent to which they are subordinate to the local joint theater command versus their individual PLARF bases, is less well understood. Initial evidence suggests that integration of conventional missile forces into the local theater command is ongoing, and that the local theater command may exercise a degree of operational control over these forces, facilitating joint operations between missile forces and their air, land, and sea counterparts.<sup>ii</sup>



The PLARF controls nine bases, all of which are either Corps or Corps Deputy Leader grade. Six of these bases, Bases 61-66, are responsible for ballistic missile operations, while the other three, Bases 67-69, conduct support missions (Base 67 is responsible for overseeing the central nuclear stockpile, Base 68 is responsible for engineering and physical infrastructure, and Base 69, the newest base, is poorly understood but appears to be responsible for both personnel training and missile tests).

Each of the six operations bases cover discrete geographical areas. As seen in the map below, the missile brigades of Base 61 cover eastern and some of southeastern China, Base 62 covers the rest of southeastern China, Base 63 covers inland southern China, Base 64 covers northwest and north-central China, Base 65 covers eastern and northeastern China, and Base 66 covers central China. Each base also features a unique makeup of nuclear and conventional forces depending on individual mission and strategic need: Base 61, for instance, is made up of mostly short-range conventional missile brigades primarily aimed at Taiwan, while more inland bases, such as Bases 64 and 66, are made up primarily of longer-range nuclear forces.

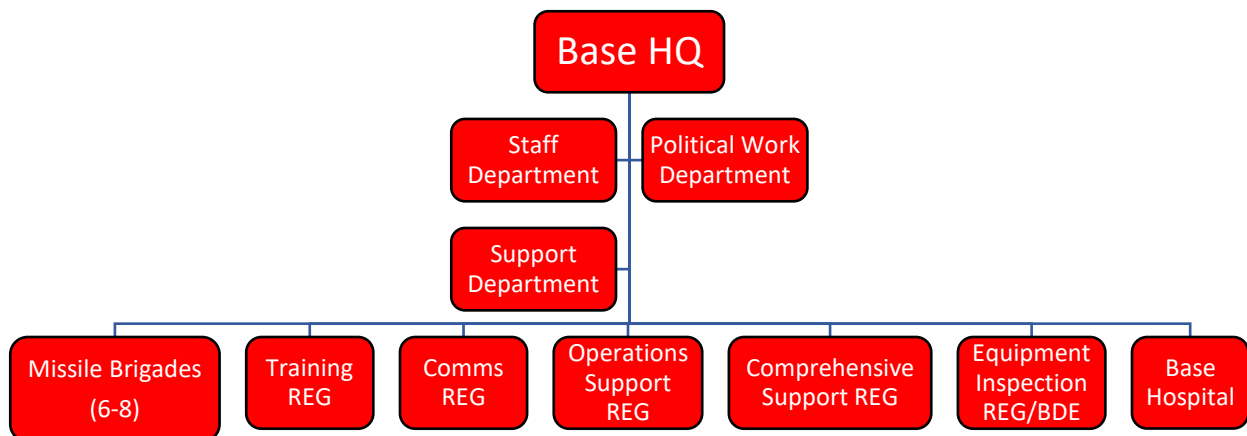
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<sup>ii</sup>For further information, see Roderick Lee, "Integrating the PLA Rocket Force into Conventional Theater Operations," Jamestown Foundation, 14 August 2020. <https://jamestown.org/program/integrating-the-pla-rocket-force-into-conventional-theater-operations/>



### *PLARF Operations Base Structure*

The six PLARF operations bases largely conform to a standardized structure, with six to seven subordinate missile brigades and five to seven support regiments, depending on the base. The standard base structure is as follows:



*Missile Brigades* [导弹旅]: Responsible for launching of ballistic missiles. Each Base oversees between six to eight of these brigades.

*Training Regiment* [训练团]: Responsible for basic training of new recruits assigned to this base, as well as certain advanced specialist training as needed.

*Communications Regiment* [通信团]: Responsible for ensuring communications between Base Headquarters and subordinate elements. These regiments manage the variety of communications methods employed by the PLARF, including fiberoptic, satellite, microwave, and troposcatter communications.

*Operations Support Regiment* [作战保障团]: This regiment type was established around 2012 by taking several disparate support functions and consolidating them under a single regiment. Base support functions handled by this unit include security, engineering, meteorology, survey and mapping, and NBC defense.

*Comprehensive Support Regiment* [综合保障团]: This regiment type was recently established in 2017 by combining the base Repair Factory [修配厂] with the Technical Service Regiment [技术勤务团] and taking on the responsibilities of both. Thus, this regiment is responsible for repair and maintenance of base vehicles and equipment, as well as storage of missiles, fuel, munitions, and other supplies, and transport of these assets via road and rail to base units. It may also be in charge of other miscellaneous support missions, such as vehicle driving, food preparation, cultural/media work, and training of certain support personnel. Integrating vehicle, transport, repair, and logistical support missions into a single unit is designed to improve logistical efficiency and coordination.

*Equipment Inspection Regiment* [装检团]: This regiment is responsible for storage, management, and distribution of nuclear warheads assigned to each base. While most of the PLARF's nuclear stockpile is stored in a central location at Taibai, it is believed that a limited number of warheads are forward-deployed to each base and managed by these regiments. These regiments transport warheads to missile brigades via their own road and rail transport capabilities.<sup>iii</sup> Base 64 is the only base which has an Equipment Inspection Brigade rather than regiment.

*Base Hospital* [医院]: Each base has at least one associated hospital. Hospital staff frequently deploy for training with base units. In wartime these hospitals would deploy field medical teams to provide comprehensive medical care to base units at the front line. Base hospitals are typically Division Leader or Division Deputy Leader grade organizations.

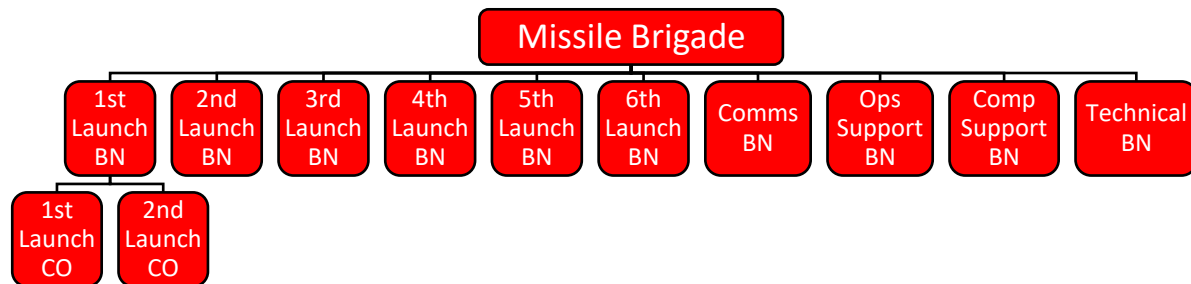
Of the six operations bases, four conform to this exact structure, while two, Bases 61 and 63, differ slightly. Base 61 also hosts one additional regiment responsible for UAV operations, while Base 63 hosts one additional regiment responsible primarily for fueling of its liquid-fueled ICBMs.

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<sup>iii</sup> For further information, see: Mark Stokes, "China's Nuclear Warhead Storage and Handling System," *Project 2049 Institute*, 12 March 2010

## Missile Brigade Structure

The PLARF oversees 40 missile brigades which constitute the entirety of its missile force. As stated above, each operations base controls six to eight of these brigades, which largely conform to a standardized structure of six launch battalions (each typically made up of two launch companies) and four to six support battalions. A standard missile brigade is structured as follows:



In some ways, missile brigades are like miniaturized bases, with their own communications, operations support, and comprehensive support battalions. The number of launchers assigned to each brigade varies widely depending on missile type. Official and comprehensive estimates of missiles and launchers per brigade are lacking, but knowledgeable observers have given estimates ranging from 6-12 launchers per brigade for certain ICBMs, 12-24 for MRBMs, 18-36 for IRBMs, and up to 36-48 launchers per brigade for SRBMs and GLCMs.<sup>iv</sup>

Each brigade also appears to have at least one, and in at least some cases two, Technical Battalions. Technical Battalions are responsible for an array of launch support missions, including missile loading and hoisting, propellant injection, and pre-launch testing and diagnostics. They may also play a role in missile assembly and warhead mating. It is unclear whether a 2<sup>nd</sup> Technical Battalion is an exception limited to a handful of brigades, or the norm. Besides this, additional battalions are quite rare, but do exist. For example, the 633 Brigade has a Telemetry Battalion [遥测营], and the 635 Brigade has an ECM Battalion [电抗营].

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<sup>iv</sup> See Decker Eveleth, "Mapping the People's Liberation Army Rocket Force," 29 March 2020, <https://www.abovandhis.blog/post/mapping-the-people-s-liberation-army-rocket-force>. The International Institute for Strategic Studies (IISS) has given estimates of 12 launchers per MRBM brigade, 18 per IRBM brigade, and 27 per cruise missile brigade. See Henry Boyd, "2019 Pentagon report: China's Rocket Force trajectory," IISS, 15 May 2019, <https://www.iiiss.org/blogs/military-balance/2019/05/pla-rocket-force-trajectory>



## How to Read PLARF MUCDs

Every PLA unit at the Regiment Leader grade and above is given a unique Military Unit Cover Designator (MUCD), a five-digit number which is used to publicly identify that unit. The PLARF began using a new MUCD system in April 2017 which is highly ordered and intuitive, and a researcher can actually glean significant information about a unit's size, mission, and subordination just from knowing that unit's MUCD, if he or she knows what to look for. With that in mind, the following is a guide to intelligently reading PLARF MUCDs, digit by digit.

### *If the first two digits are...*

- **96xxx** – This is a PLARF unit.
- Not **96xxx** – This is not a PLARF unit.

### *If the third digit is...*

- **961xx** to **965xx** – This is an outdated PLARF MUCD from the pre-2017 system. No longer in use.
- **966xx** – This is either a PLARF base or a headquarters direct-reporting unit, depending on the fourth digit.
  - *If the fourth digit is 9661x to 9666x* – This is a headquarters direct-reporting unit. Beginning in 2019, these MUCDs are being slowly phased out and replaced with the **969xx** series, but many are still used as of 2020.
    - Note: **9664x** units have since been resubordinated to Base 68.
  - *If the fourth digit is 9660x* – This is a PLARF base.
    - The fifth digit represents the base number. E.g. **96602** is Base **62**.
- **967xx** – This is a brigade or brigade-sized unit under a PLARF base.
  - *If the fourth digit is 9671x to 9676x* – This is a missile brigade, with the digit representing the specific base this brigade is subordinate to. E.g. a **9672x** brigade is subordinate to Base **62**.
    - The fifth digit represents the brigade sequence under that base. E.g. **96711** is the first brigade under Base 61 (the 611 Brigade), **96722** is the second brigade under Base 62 (the 622 Brigade), etc.
  - *If the fourth digit is 9677x to 9679x* – This is a support brigade or brigade-sized unit, with the digit representing the support base this unit is subordinate to. E.g. a **9678x** unit is a support brigade under Base 68
- **968xx** – This is a regiment or regiment-sized unit under a PLARF base.
  - *If the fourth digit is 9681x to 9688x* – This is a support regiment under Bases 61-68, with the digit representing the base number. E.g. **9682x** is a support regiment under Base **62**.
    - *If the fifth digit is 968x1* – This is the base Training Regiment.
    - *If the fifth digit is 968x2* – This is the base Communications Regiment.
    - *If the fifth digit is 968x3* – This is the base Operations Support Regiment.

- *If the fifth digit is 968x4* – This is the base Comprehensive Support Regiment.
  - *If the fifth digit is 968x5* – This is the base Technical Service Regiment.
  - *Note:* There are two known exceptions to this. Base 61 has a sixth support regiment which uses 96816. There was also a Unit 96819, an outdated MUCD for the Research Academy.
  - *If the fourth digit is 9689x* – This is a Base 69 support regiment. Very little is known about these regiments as of 2020.
- 969xx – This is a headquarters direct-reporting unit. These MUCDs began replacing the previous 966xx series of MUCDs for headquarters units beginning in 2019, and the process is still ongoing.
  - *If the fourth digit is 9690x* – This is the PLARF Research Academy (96901), or the as-yet unidentified Unit 96902.
  - *If the fourth digit is 9691x* – This unit is subordinate to the PLARF Research Academy.
  - *If the fourth digit is 9692x* – This unit is subordinate to Unit 96902.
  - *If the fourth digit is 9693x* – Unknown.
  - *If the fourth digit is 9694x* – This unit is subordinate to the PLARF Staff Department
  - *If the fourth digit is 9695x* – This unit is subordinate to the PLARF Logistics Department
  - *If the fourth digit is 9696x* – This unit is subordinate to the PLARF Equipment Department
- 960xx – This is a base Equipment Inspection unit, responsible for nuclear warhead management and transport.
  - The fourth digit is always 9603x.
    - The fifth digit represents the base number. E.g. 96032 is the Base 62 Equipment Inspection Regiment.
    - Units 96037 and 96038 are both responsible for warhead management and transport of the central stockpile at Taibai.

While this system might seem complex at first, it is actually quite helpful knowing that a given MUCD will always represent a specific type of unit. For example, if we find a unit with MUCD 96753, we immediately know that this is a missile brigade subordinate to Base 65, specifically the 653 Brigade. If we see MUCD 96832, we immediately know that this is the Base 63 communications regiment. If we see MUCD 96941, we know that this unit is directly subordinate to the PLARF Staff Department. Hopefully this de-mystification of PLARF MUCDs will make unit identification easier in the future.



# PLA Rocket Force Command

**Grade:** Theater Leader<sup>1</sup>

**Parent Unit:** Central Military Commission

**Location:** 31 Xiaoying W. Rd., Qinghe Subdistrict, Haidian District, Beijing [北京市海淀区清河街道小营西路 31 号]<sup>2</sup>

**Geocoordinates:** 40.036740, 116.319472

## Leadership

**PLARF Commander:** Li Yuchao [李玉超] (1/22)<sup>3</sup>

**PLARF PC:** Xu Zhongbo [徐忠波] (7/20)<sup>4</sup>

**Deputy Commanders:** Li Jun [李军] (5/20)<sup>5</sup>; Zhang Zhenzhong [张振中] (6/19)<sup>6</sup>; Li Chuanguang [李传广] (6/19)<sup>6</sup>

**Deputy PC:** Yu Guang [禹光] (9/20)<sup>7</sup>

**Chief of Staff:** Unknown, previously held by Li Yuchao before promotion to Commander

**Discipline Inspection Commission Secretary:** possibly Zhu Guobiao [朱国标]

**Political Work Department Director:** Cheng Jian [程坚] (5/20)

**Logistics Department Director:** Wang Qifan [王启繁] (5/20)

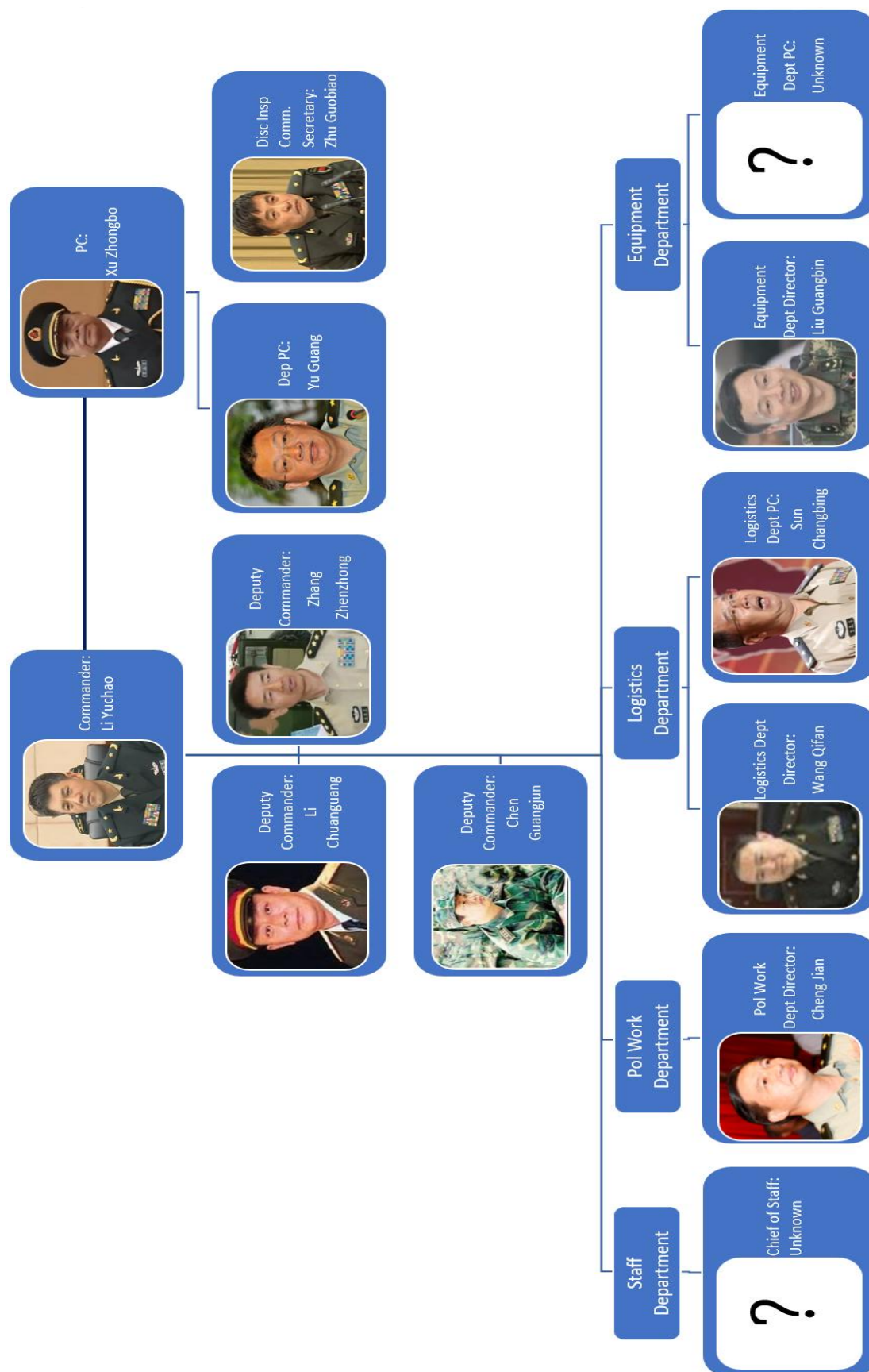
**Logistics Department PC:** Sun Changbing [孙昌兵] (5/21)

**Equipment Department Director:** Liu Guangbin [李光斌] (6/19)

**Equipment Department PC:** Unknown, previously held by Sun Danping [孙旦平]

## Recent Developments

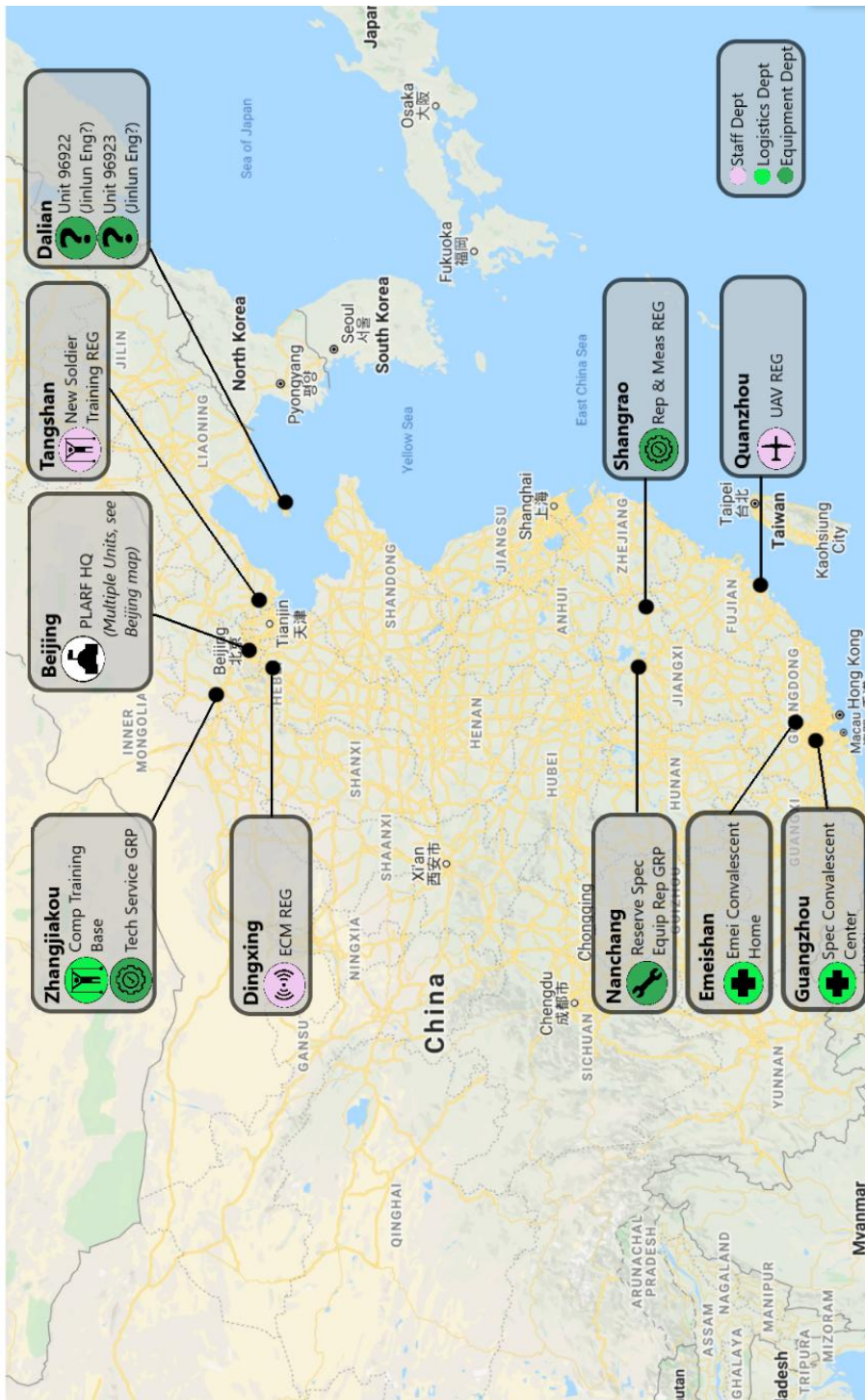
- Xu Zhongbo became PC in July 2020. Xu is not a career PLARF officer, and previously held positions as the PC of the Joint Logistics Support Force (JLSF) and the PLA Army Western Theater Command.<sup>8</sup>
- Li Jun, previously PLARF Chief of Staff, became Deputy Commander in May 2020.<sup>5</sup> He likely replaced former Deputy Commander Wu Guohua, who was the longest-serving Deputy Commander to that point.
- There are as-yet unconfirmed reports that Chen Guangjun [陈光军] was promoted to Deputy Commander in 2021. It is unclear who, if anyone, he has replaced.



## Direct-Reporting Units

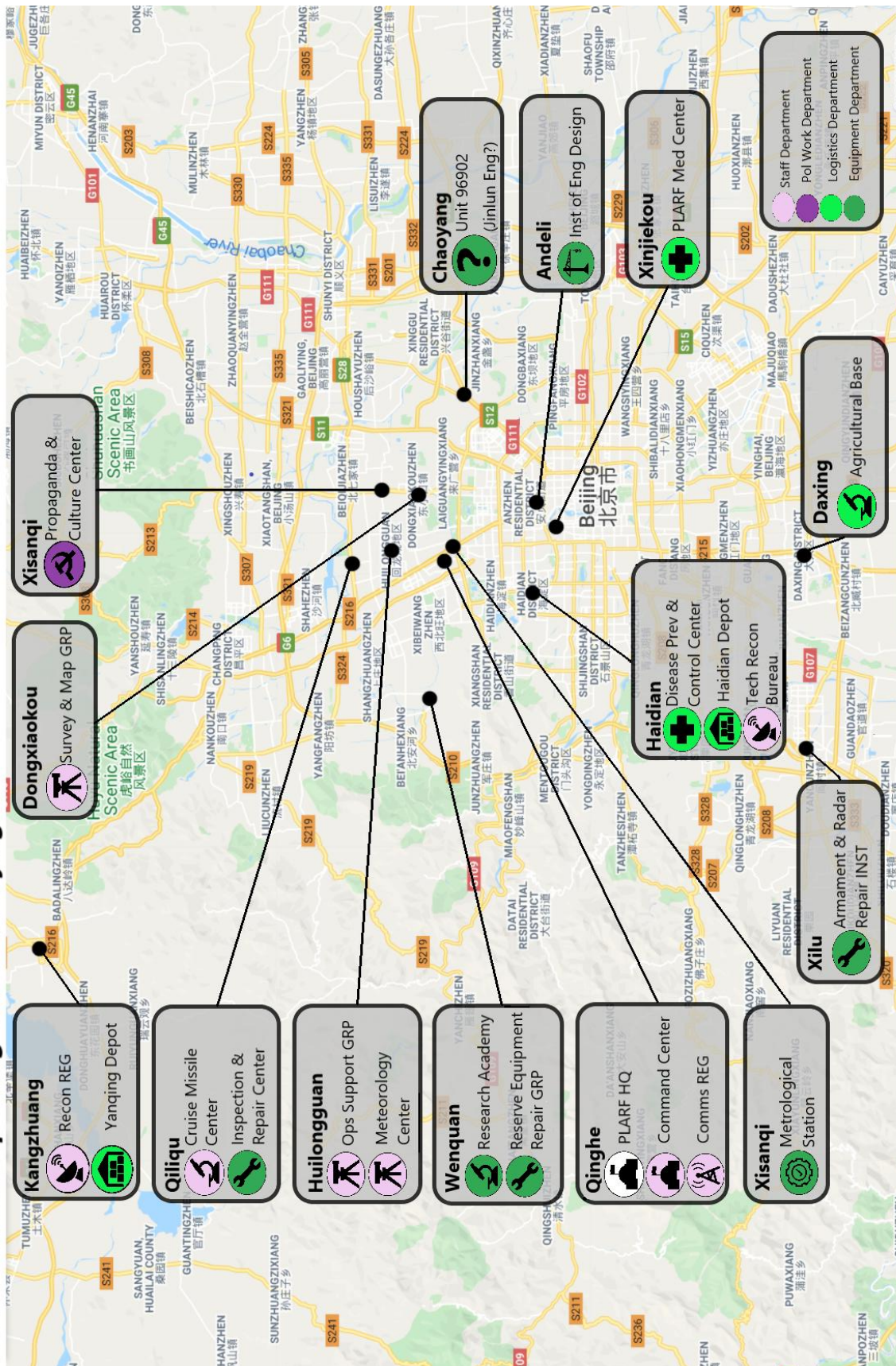
The PLARF, like the other PLA services, commands a number of direct-reporting units. These are units which are not subordinate to any of the bases, but are directly subordinate to, and report directly to, one of PLARF Headquarters' four administrative departments. These are the PLARF Staff Department, Political Work Department, Equipment Department, and Logistics Department.

**PLARF Direct Reporting Units**

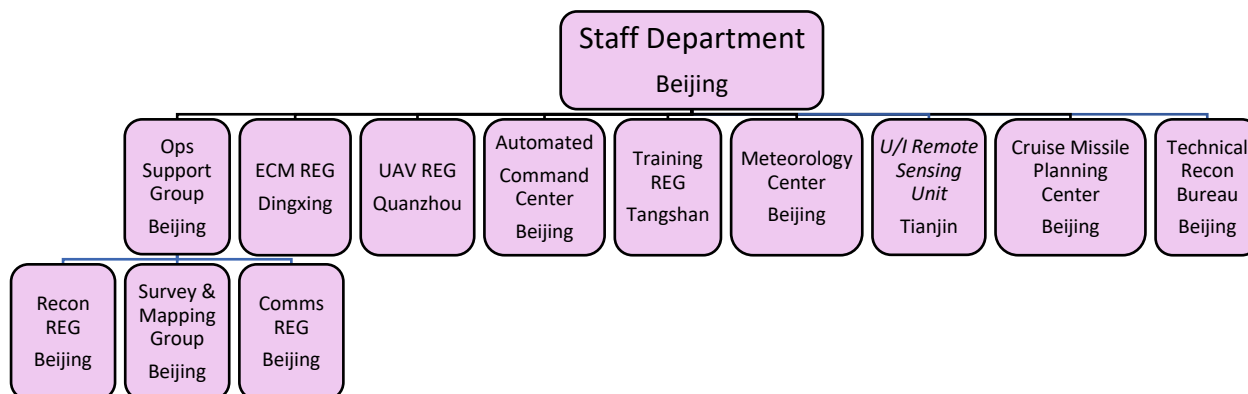




# PLARF Direct Reporting Units in Beijing



## PLARF Staff Department [参谋部]



### Leadership

**Chief of Staff:** Unknown, previously Li Yuchao [李玉超] (6/20)<sup>9</sup>

**Deputy Chiefs of Staff:** Li Xiaohong [李晓宏] (12/19),<sup>10</sup> Wu Zuobao [吴祚宝] (8/18)<sup>11</sup>, Deputy #3 may be either Wang Liyan [王立岩] (1/18)<sup>12</sup> or Xu Kunxia [徐坤侠] (11/17)<sup>13v</sup>

**Assistant to the Chief of Staff:** Wang Hongyan [王宏宇] (7/18)<sup>14</sup>

### Known Subordinate Bureaus

- Operations Bureau [作战局]
  - Director: Zhang He [张赫] (12/20)<sup>15</sup>
  - Former Director Wang Chengyue [王成跃] (2018) may also direct a Central Committee agency having to do with information security, and may have a particular interest in quantum encryption.<sup>16</sup>
- Intelligence Bureau [情报局]<sup>17</sup>
- Training Bureau [训练局]
  - Director: Shi Hongyan [石鸿雁] (12/20)<sup>18</sup>
  - Deputy Director: Wei Zhigang [卫志刚] (12/19)<sup>19</sup>
- Unit Management Bureau [部队管理局]
  - Deputy Director: Lei Hongbing [雷红兵] (12/16)<sup>20</sup>
- Planning and Staffing Structure Bureau [规划和编制局]<sup>21</sup>
- Information and Communications Bureau [信息通信局]<sup>22</sup>

<sup>v</sup> Per unofficial sources, a recent shakeup at this position may have left Wu Zuobao as DCOS alongside newcomers Wu Xihua [吴喜铎] and Zhang Mingguo [张明国]. This remains unconfirmed.

- Informatization Bureau [信息化局]<sup>23</sup>
- Directly Subordinate Work Bureau [直属工作局]<sup>24</sup>

## Recent Developments

- Previous Chief of Staff Li Jun [李军] became Deputy Commander in 2020, leaving this position open. There has yet to be an official announcement of Li's replacement, but unofficial media reports put Base 63 Commander Li Yuchao in the position. This has not been confirmed by official sources.
- There are conflicting reports about the third Deputy Chief of Staff, who could be either Wang Liyan or Xu Kunxia.

## Staff Department Operations Support Group [参谋部作战保障大队]

Beginning in November 2018,<sup>25</sup> the PLARF Staff Department reorganized at least three of its regiment leader grade organizations in the Beijing area into a single large, overarching Operations Support Group.<sup>26 27</sup> Likely units re-subordinated to this Group include the Staff Department Reconnaissance Regiment,<sup>28</sup> the Staff Department Communications Regiment,<sup>29</sup> and the Survey and Mapping Group.<sup>30</sup> This unit is described as a new type of integrated operations support force,<sup>25</sup> and is the latest step in the PLARF's recent trend toward consolidating disparate operations support functions into single units.

**MUCD:** 96942<sup>31</sup>

**Former MUCD/TUD:** N/A

**Grade:** Division Leader<sup>26</sup>

**Parent Unit:** Staff Department

**Location:** Near the Zhuxinzhuang Bridge, Beiqing Rd., Changping District, Beijing [北京昌平区北清路朱辛庄桥附近]<sup>32</sup>

**Geo:** Unconfirmed, possibly 40.094598, 116.320614

## Leadership

**Commander:** Lu Bin [陆斌] (12/19)<sup>26</sup>

**PC:** Chen Yonghua [陈永华] (12/19)<sup>26</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD**<sup>vi</sup>: Tang Shengxuan<sup>vii</sup> [唐盛选] (12/19)<sup>26</sup>

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<sup>vi</sup>Political Work Department Director

<sup>vii</sup>Alternative possible spelling of name: Tang Chengxuan

**Support Dept Director:** Unknown

**Other Senior Leadership:** Cao Jinguo [曹金国], Snr Survey & Mapping Engineer (12/19)<sup>26</sup>;  
Wang Xianzhong [王献忠] Snr Communications Engineer (12/19)<sup>26</sup>

### Known Composition

- Communications Station [通信站]<sup>26</sup>
  - Battalion Leader Grade<sup>26</sup>
  - Likely associated with Staff Department Communications Regiment
- Reconnaissance Team [侦察队]<sup>33</sup>
  - Likely associated with Staff Department Reconnaissance Regiment
- Targeting Team [目标队]<sup>33</sup>
  - Likely associated with Staff Department Reconnaissance Regiment
- Survey and Mapping Team [测绘队]<sup>33</sup>
  - Likely associated with Survey and Mapping Group
- Engineering Defense Team [工程维护队]<sup>33</sup>

### Background

- Much remains unknown about this new unit, including which units have been resubordinated and the current grades of the re-subordinated units. All three known units appear to still have MUCDs, meaning they must still be at least Regiment Leader Grade, but may now be referred to as “Teams” [队] rather than regiments.

### Reconnaissance Regiment [侦察团]

The PLARF Reconnaissance Regiment, formerly organized as a group [大队], was likely resubordinated to the Staff Department Operations Support Group (96942) in November 2018.<sup>25</sup> It may have been given the new MUCD 96943. It is responsible for battlefield reconnaissance and intelligence support,<sup>34</sup> and possesses a wide range of capabilities toward that end. These capabilities include a Special Operations Reconnaissance Team [特种侦察队] likely responsible for target reconnaissance and damage assessment,<sup>34</sup> a specialized unmanned aerial vehicle (UAV) battalion responsible for mission planning and intelligence, surveillance, and reconnaissance (ISR) targeting support,<sup>viii</sup> a radar squadron in the Gobi Desert responsible for radar tracking,<sup>35</sup> and other assets responsible for electronic reconnaissance, translation, and damage assessment in support of

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<sup>viii</sup>See: Ian M. Easton, L.C. Russell Hsiao, “The Chinese People’s Liberation Army’s Unmanned Aerial Vehicle Project: Organizational Capacities and Operational Capabilities,” *Project 2049 Institute*, 11 March 2013. 41



operations.<sup>viii</sup> It also hosts a training center, possibly for training personnel in ISR.<sup>34</sup> This unit moved from Qinghe to its current location in Kangzhuang in 2002.<sup>36</sup>

**MUCD:** 96943

**Former MUCD:** 96637; 80809 Imagery Group<sup>viii</sup>

**Grade:** Regiment Leader

**Parent Unit:** Staff Department; Operations Support Group

**Location:** Kangzhang Rd., Kangzhuang Town, Yanqing District, Beijing 102101 [北京市延庆区康庄镇康张路]<sup>37 38 39</sup>

**Geo:** Unconfirmed, possibly 40.354024, 115.905500

### Secondary Garrisons:

- Meishan Village, Hui'an County, Quanzhou, Fujian [福建省泉州市惠安县梅山村] (possibly 25.062908, 118.783575)<sup>ix</sup>
  - 1<sup>st</sup> Subunit [1 分队]<sup>40</sup>
- Da Qaidam, Haixi Prefecture, Qinghai [青海省海西州大柴旦]<sup>41</sup>

### Leadership

**Commander:** Lü Feng [吕烽] (12/18)<sup>42</sup>

**PC:** Zhang Guoqing [张国清] (3/17)<sup>43</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Duan Xiaogang [段小刚] (8/16)<sup>44</sup>

**Support Div Director:** Unknown

### Known Composition

- Special Operations Reconnaissance Team [特种侦察队]
  - Described as having "an important special operations mission" (likely target and damage assessment reconnaissance) and capable of operating in a range of different environments.<sup>45</sup>
- UAV Battalion [无人机营]
- Radar Squadron [雷达中队]
- Military Training Center [军事训练中心]

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<sup>ix</sup>Credit to Twitter user Pir3 (@pir34) for first pointing out this location



## Survey and Mapping Group [测绘大队]

The PLARF Survey and Mapping Group was established in 1977,<sup>46</sup> and resubordinated to the Staff Department Operations Support Group in November 2018.<sup>25</sup> It may have been given the new MUCD of 96944.<sup>47</sup> This unit dispatches personnel to conduct on-site surveying and measurement missions.<sup>48</sup> It may also have a UAV or other airborne capability to conduct aerial photography.<sup>48</sup>

**MUCD:** 96944

**Former MUCD:** 96633

**Grade:** Regiment Leader

**Parent Unit:** Staff Department; Operations Support Group

**Location:** 188 Yifengyuan, He Village, Dongxiaokou Town, Changping District, Beijing 100096 [北京市昌平区东小口镇贺村 188 号颐丰园]<sup>49 50 51</sup>

**Geo:** Unconfirmed, possibly 40.050212, 116.391962

### Leadership

**Commander:** Li Jianwei [李建伟] (8/15)<sup>52</sup>

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### Composition

Unknown

### Background

- This unit previously hosted a satellite navigation and positioning station which was transferred to the Base 61 Operations Support Regiment in 2017.<sup>53</sup>

## Staff Department Communications Regiment [参谋部通信团]

The PLARF Staff Department Communications Regiment (also referred to as the Communications Command [总站]) was established in April 1968 as a communications hub for strategic missile units, and is referred to as the PLARF's communications “nerve center.”<sup>54</sup> It is responsible for communications between PLARF Headquarters and subordinate operations elements.<sup>55</sup> It was resubordinated to the Staff Department Operations Support Group (96942) in November 2018 and may now have the new MUCD of 96946.<sup>56</sup>

**MUCD:** 96946

**Former MUCD:** 96618

**Grade:** Regiment Leader<sup>57</sup>

**Parent Unit:** Staff Department; Operations Support Group

**Location:** 31 Xiaoying W. Rd., Qinghe Subdistrict, Haidian District, Beijing [北京市海淀区清河街道小营西路 31 号] (co-located with PLARF HQ)<sup>58</sup>

**Geo:** 40.036839, 116.319492

**Secondary Garrison:** Yamenkou, Shijingshan District, Beijing [北京市石景山区衙门口]<sup>59</sup>

## Leadership

**Commander:** Zhou Chuangang<sup>x</sup> [周传刚] (3/17)<sup>60</sup>

**PC:** Unknown

**Dep Commanders:** Wang Qisheng [王启胜] (1/20)<sup>56</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Wan Jin [万晋], PC (2018)<sup>61</sup>

## Composition (presumed)

- 1<sup>st</sup> Battalion [一营]
- 2<sup>nd</sup> Battalion [二营]
- 3<sup>rd</sup> Battalion? [三营]
  - *Presumed to exist based on typical size of PLARF communications regiments*
- 5<sup>th</sup> Company [五连]
  - Presumed to be under 2<sup>nd</sup> or 3<sup>rd</sup> Battalion
  - Tasked with transmitting communications from PLARF headquarters to subordinate brigades and regiments<sup>55</sup>

## Background

- This regiment also possesses mobile capabilities and the ability to set up communications nodes in the field.<sup>62</sup>
- In recent years, this regiment has focused on upgrading its equipment to create a modern communications network via fiberoptic cables and satellite communications.<sup>54</sup>

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<sup>x</sup>Alternative possible spelling of name: Zhou Zhuangang

## Staff Department ECM Regiment [参谋部电子对抗团]

This regiment is one of the PLARF's two dedicated electronic countermeasures (ECM) regiments (the other being subordinate to Base 67). Beginning in 2019, this unit may have taken the new MUCD of 96945.<sup>63</sup>

**MUCD:** 96945

**Former MUCD:** 96620

**Grade:** Regiment Leader

**Parent Unit:** Staff Department

**Location:** Dingxing County, Baoding, Hebei 072653 [河北省保定市定兴县]<sup>64 65</sup>

**Geo:** 39.206468, 115.700330<sup>66</sup>

### Secondary Garrison:

- Fangshan District, Beijing 102488 [北京市房山区]<sup>67</sup>
  - Training Unit [教导队]

### Leadership

**Commander:** Huang Haitao [黄海涛] (5/17)<sup>68</sup>

**PC:** Zhang Li [张立] (11/17)<sup>69</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### Composition

Unknown

### Background

- A 2008 report shows this unit allegedly employing the DZ 9001C ground mobile electronic intelligence (ELINT) system, designed to intercept and record enemy radar signals.<sup>70</sup>
- The PLARF's other ECM Regiment, subordinate to Base 67, may be known as the 2nd Comprehensive Defense Regiment [综合防护二团]. It is thus logical, if unconfirmed, that this regiment may be known as the 1st Comprehensive Defense Regiment [综合防护一团].

## Staff Department UAV Unit [无人机部队]

Former Unit 96605 has been reported as a PLARF directly subordinate UAV unit.<sup>xi</sup> There is very little public information about this unit. Its location near the Taiwan Strait suggests it would play a role in target acquisition, including for ASBMs, in the event of conflict with Taiwan.

**MUCD:** Unknown

**Former MUCD:** 96605

**Grade:** Regiment Leader?

**Parent Unit:** Staff Department

**Location:** Meishan Village, Hui'an County, Quanzhou, Fujian [福建省泉州市惠安县梅山村]<sup>71</sup>

**Geo:** Unconfirmed, possibly 25.060739, 118.788050

### Leadership

**Commander:** Huang Fei [黄飞] (6/18)<sup>72</sup>

**PC:** Unknown – surname Xu [徐] (1/17)<sup>73</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### Composition

Unknown

### Background

- This unit may be located at a military complex in the village of Meishan, in Fujian's Hui'an County. Since the PLARF Reconnaissance Regiment also has a garrison in this village, it is possible that the two units are co-located and work closely together. There is a small military airfield to the southeast of Meishan known to house PLAAF J-6 drones, although it is unknown if it is also associated with this unit.
- As of 2018 there is evidence this unit still exists and may still be using the 96605 MUCD, despite the overlap with Base 65, which now also has this MUCD. There is also some evidence this unit may now be subordinate to, or at least associated in some way with, the PLA Strategic Support Force. A document from June 2018 lists this unit as being under the "SSF PLARF Bureau, 2nd Office" [战略支援部队火箭军局二处].<sup>72</sup>

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<sup>xi</sup> See: Ian M Easton, L.C. Russell Hsiao, "The Chinese People's Liberation Army's Unmanned Aerial Vehicle Project: Organizational Capacities and Operational Capabilities", Project 2049 Institute, 11 March 2013. 12.

## **PLARF Automated Command Center [自动化指挥中心]**

The Automated Command Center<sup>74</sup> is likely located at PLARF HQ in Qinghe.<sup>75</sup> Little public information exists for this unit, but one article has an image of a situation room dominated by a large LED screen. A vague description states that this Command Center needs to be able to take in a large amount of data from the multiple sources that it monitors, while also having to be able to quickly transmit plans and orders and ensure the command system remains intact.<sup>76</sup>

**MUCD:** Unknown

**Former MUCD:** 96616

**Grade:** Unknown

**Parent Unit:** Staff Department

**Location:** Qinghe Subdistrict, Haidian District, Beijing 100085 [北京市海淀区清河街道]<sup>75</sup>

**Geo:** 40.036157, 116.318766 (assuming co-location with PLARF HQ)

### **Leadership**

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### **Composition**

Unknown

### **Background**

- This unit is a member of the Internet Society of China Data Center and Basic Infrastructure Working Group [中国互联网协会数据中心基础设施工作组].<sup>74</sup> As of 2016 it appears to be the only non-civilian member.

## **New Soldier Training Regiment [新兵团]**

Unit 96619 appears to be a basic training base for new enlisted recruits.<sup>77</sup> It is co-located with the 4th Student Group of the Rocket Force NCO School at a large training facility in Fengrun.

**MUCD:** Unknown

**Former MUCD:** 96619

**Grade:** Regiment Leader

**Parent Unit:** Staff Department

**Location:** Fengrun District, Tangshan, Hebei [河北省唐山市丰润区]<sup>78</sup>

**Geo:** 39.857413, 118.090267<sup>79</sup>

### Leadership

**Commander:** Wang Deji [王德继] (2/15<sup>xii</sup>)<sup>80</sup>

**PC:** Meng Guoliang [孟国良] (2/18)<sup>79</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### Known Composition

- 1<sup>st</sup> Battalion [一营]
- 2<sup>nd</sup> Battalion [二营]
- 3<sup>rd</sup> Battalion [三营]<sup>77</sup>

### Background

- In the 2012-2013 timeframe, each training batch of new soldiers consisted of 60-85 personnel.<sup>81 82</sup>

### PLARF Meteorology Center [气象中心]

The PLARF Meteorology Center is responsible for both meteorological and hydrological support.<sup>83</sup> Launch brigades receive daily weather reports from this unit, which they use in combination with their own meteorological capabilities to plan optimal launch windows.<sup>84</sup>

**MUCD:** Unknown

**Former MUCD:** 96631

**Grade:** Regiment Leader

**Parent Unit:** Staff Department

**Location:** Huilongguan, Changping District, Beijing [北京市昌平区回龙观]<sup>85</sup>

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<sup>xii</sup>Likely Dated

**Geo:** Unconfirmed, possibly 40.081714, 116.270518<sup>xiii</sup>

### **Leadership**

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### **Composition**

Unknown

### **Unit 96635 [96635 部队]**

This unit's mission may be related to satellites and remote sensing,<sup>86</sup> and it may be connected to both the PLARF Technical Reconnaissance Bureau (TRB) (see below) and the Staff Department Intelligence Bureau.<sup>17</sup>

**MUCD:** Unknown

**Former MUCD:** 96635

**Grade:** Regiment Leader<sup>87</sup>

**Parent Unit:** Unknown, possibly Staff Department

**Location:** Balitai Town, Jinnan District, Tianjin 300356 [天津市津南区八里台镇]<sup>88</sup>

**Geo:** Unknown

### **Leadership**

**Commander:** Unknown

**PC:** Unknown

**Former Leadership:** Jiang Yanchuan [姜艳川], Commander (2016)<sup>89</sup>

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<sup>xiii</sup>Credit to Twitter user @nudelsinpita for first publicly identifying this site

## Background

- Two researchers with this unit, Wang Zhenguo [王振国] and Li Shaomin [李少敏], have also published articles for the PLARF TRB, suggesting that this unit may be associated with the TRB.<sup>90</sup>
- Some further clues about this unit's function may be found in the relatively high-profile post-military career of its former commander, Jiang Yanchuan. Jiang has worked for GalaxySpace [银河航天], a micro-satellite and 5G company, and is described as an expert in satellite remote sensing.<sup>91</sup> A short profile from the South China Sea Probing Initiative states that he has devoted himself to remote sensing for "many years."<sup>92</sup> He currently holds a position with a company called All In Eyes [北京瞰天科技有限公司] which specializes in applying AI and big data to satellite imagery and remote sensing.<sup>93</sup>

## Cruise Missile Mission Planning Center [巡航导弹任务规划中心]

The Cruise Missile Mission Planning Center,<sup>xiv</sup> established around 2004,<sup>94</sup> is responsible for conducting a wide range of research related to physics, mathematics, and computer science. Research topics include UAVs, scene matching, navigation and mapping, ballistics, signals, missile guidance, and remote sensing.<sup>95</sup> This unit may be primarily responsible for research into LACM navigation and guidance, with a specific focus on DSMAC (digital scene matching area and correlation) guidance.<sup>xv</sup>

**MUCD:** Unknown, possibly 96941

**Former MUCD:** 96656

**Grade:** Regiment Leader

**Parent Unit:** Staff Department

**Location:** Qiliqu South Village, Changping District, Beijing 102208 [北京市昌平区七里渠南村]<sup>96</sup>

**Geo:** Unconfirmed, possibly 40.100221, 116.321723 (if MUCD is 96941)

## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Chen Kang [陈康] (12/16)<sup>97</sup>

**Support Div Director:** Unknown

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<sup>xiv</sup>Thank you to Mark Stokes for providing the official name of this unit.

<sup>xv</sup>See: Mark A Stokes, Ian Easton, "Evolving Aerospace Trends in the Asia-Pacific Region", Project 2049 Institute, 2010. 46.



## Composition

Unknown

## Background

- Former PC Tao Xianfeng [陶贤锋] went on to have a successful acting career playing the role of Zhu De in several propaganda films.<sup>98</sup>

## PLARF Technical Reconnaissance Bureau [火箭军技术侦察局]

The PLARF Technical Reconnaissance Bureau is responsible for the PLARF's signals intelligence (SIGINT) activities. It remains unclear as to whether it has been resubordinated to the Strategic Support Force, or remains under the PLARF.

**MUCD:** Unknown

**Former MUCD:** 96669

**Grade:** Division Leader<sup>99</sup>

**Parent Unit:** Staff Department

**Location:** 500 Beiyuhe Village, Haidian District, Beijing [北京市海淀区上庄镇北玉河村 500 号]<sup>99</sup>

**Geo:** Unconfirmed, possibly 40.116412, 116.223839

## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Former Leadership:** Liang Xiaojing [梁晓婧], PC (2017)<sup>100</sup>

## Composition

Unknown

## Background

- It is unclear if this unit remains in the PLARF, or if it was transferred to the SSF along with the other TRBs, although significant circumstantial evidence suggests the latter. A contract from December 2018 to provide computer equipment to this unit lists the SSF, rather than the PLARF, as the issuing work unit.<sup>101</sup> Further, an article from early 2017 states that this

unit had recently undergone a transfer as part of a larger CMC optimization scheme, with some work units being transferred and others remaining. It seems to imply that these elements have been transferred out of the PLARF, with a senior official telling unit personnel, "no matter where you go, the PLARF will always be your home."<sup>102</sup>

- Former Political Commissar Liang Xiaojing has served as a military NPC representative since at least 2008,<sup>103</sup> and was considered an authority on political issues within the PLARF.<sup>104</sup> She now serves as Political Work Department Director for another TRB under the SSF (Unit 32081).<sup>103</sup>
- The 610<sup>th</sup> Subunit [610 分队] seems to be a research-oriented subunit of 96669, publishing frequently in 2018 on GNSS satellite navigation and signal interference.<sup>95</sup>

# PLARF Political Work Department [政治工作部]

## Leadership

**Director:** Cheng Jian [程坚] (5/20)<sup>105</sup>

**Deputy Director:** Li Jiaqin [李家勤] (5/20)<sup>106</sup>

## Known Subordinate Bureaus

- Organization Bureau [组织部]
  - Dep Director: Huang Jinxin [黄金新] (10/17)<sup>107</sup>
- Cadre Bureau [干部局]
  - Director: Li Jiaquan [李加权] (12/20)<sup>108</sup>
  - Dep Director: Leng Xinggao [冷兴高] (8/17)<sup>109</sup>
- Propaganda Bureau [宣传局]
  - Director: Wang Yongxiao [王永孝] (10/20)<sup>110</sup>
  - Dep Directors: Wang Hongjian [王宏建] (7/20)<sup>111</sup>; Zhang Wenxue [张文学] (12/20)<sup>112</sup>
- Military and Civilian Personnel Bureau [兵员和文职人员局]
  - Director: Liu Xuming [刘旭明] (6/18)<sup>113</sup>
  - Dep Directors: Cao Wei [曹伟] (1/19)<sup>114</sup>; Ye Le [叶乐] (11/18)<sup>115</sup>
- Mass Work Liaison Bureau [群工联络局]
  - Director: Ji Jianchun [姬建春] (11/20)<sup>116</sup>
  - Dep Director: Zhen Yide [郑谊德] (5/20)<sup>106</sup>

## Recent Developments

- As of late 2020, there is only one known Deputy Director, Li Jiaqin, however the existence of more Deputy Directors cannot be ruled out. Deputy Director Jiang Jiage [蒋家革] was last noted in the position in 2018,<sup>117</sup> and Wang Dingfang [王定放] in mid-2017.<sup>118</sup> Yu Chunfu [于春福] was last noted in late 2017<sup>119</sup> and was confirmed to no longer be in this position in 2020.<sup>120</sup>

## Propaganda and Cultural Center [宣传文化中心]

The former PLARF Cultural Troupe, formed in 1966,<sup>121</sup> was responsible for cultural events promoting the PLARF and CCP propaganda, including musical and theatric productions. It was disbanded along with the other service cultural troupes in September 2018,<sup>121</sup> and replaced by the PLARF Political Work Department Propaganda and Cultural Center. It is unclear how this new Center's role will differ from the former Cultural Troupe's. Both the Center and the former Cultural Troupe were also tasked with dispatching "light cavalry" troupes [轻骑队] of performers who embed with grassroots units to conduct propaganda work and morale-boosting cultural activities.<sup>122 123</sup>

**MUCD:** N/A

**Former TUD:** PLARF Cultural Troup [文工团]

**Grade:** Division Leader<sup>124</sup>

**Parent Unit:** Political Work Department

**Location:** Tianqin Theater, A-1 Dongsanqi Village, Changping District, Beijing [北京市昌平区东三旗甲一号天泰剧院]<sup>125 126</sup>

**Geo:** 40.077817, 116.395946

### Leadership

**Director:** Nie Jianzhong [聂建忠] (12-18)<sup>124</sup>**PC:** Yan Jian [闫建] (8/16)<sup>127</sup>

**Dep Directors:** Chen Sisi [陈思思] (8/18)<sup>128</sup>; Lu Haitian [逯海田] (10/17)<sup>129</sup>; Cai Weiman [蔡薇蔓] (1/16)<sup>130</sup>

**Former Leadership:** Zhou Wei [周炜], Director (2018)<sup>131</sup>

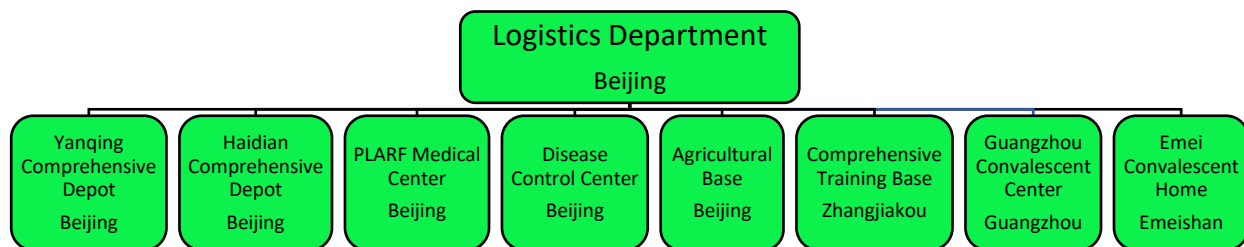
### Composition

Unknown

### Background

- The former PLARF Cultural Troupe was a Division Deputy Leader Grade organization.<sup>132</sup> However a recent photo of Nie Jianzhong with a visible grade ribbon indicates that the new Propaganda and Culture Center may have been upgraded to Division Leader Grade.<sup>124</sup>

## PLARF Logistics Department [后勤部]



### Leadership

**Director:** Wang Qifan [王启繁] (5/20)<sup>133</sup>    **PC:** Sun Changbing [孙昌兵] (5/21)<sup>134</sup>

**Deputy Directors:** Wang Zhaojun [王兆军] (8/18)<sup>135</sup>; possibly Tian Qinglong [田庆龙] (5/18)<sup>136</sup> and/or Yao Dangnai [姚党鼐] (6/16)<sup>137</sup>

### Known Subordinate Bureaus

- Finance Bureau [财务局]<sup>138</sup>
- Medical Bureau [卫生局]
  - Director: Xu Daojiang [许道江] (11/20)<sup>139</sup>
- Transport and Delivery Bureau [运输投送局]<sup>140</sup>
- Military Infrastructure and Construction Bureau [军事设施建设局]<sup>141</sup>
- Purchase and Supply Bureau [采购供应局]<sup>142</sup>
- Functional Bureau [业务局]<sup>143</sup>
- Combat Service and Planning Bureau [战勤计划局]
  - Director: Zhang Hong [张鸿] (5/19)<sup>144</sup>
- Directly Subordinate Work Bureau [直属工作局]
  - Director: Zhang Shaojun [张少军] (8/18)<sup>145</sup>

### *Other known subordinate elements*

- Fuel Technology Supervision Office [油料技术监督室]<sup>146</sup>
- Special Clothing and Equipment Verification and Repair Depot [特种被装检定修理所]<sup>146</sup>
- Military Vehicle Inspection and Control Office [军车监理所]<sup>146</sup>

## Recent Developments

- Previous Logistics Department PC Sun Shaohua [孙少华] appears to have been replaced by late 2019<sup>147</sup> by Sun Changbing, who came from the PLA AF and was previously Deputy Director of the Eastern TCAF Political Work Department.<sup>148</sup>
- Wang Zhaojun is the most recent Deputy Director for which there is confirmation. If the Department has multiple Deputy Directors, Tian Qinglong and Yao Dangnai are also possibilities for these positions.

## Yanqing Comprehensive Depot [延庆综合仓库]

The Yanqing Comprehensive Depot is one of two such material depots in the Beijing area. It is responsible for storing and transporting PLARF equipment,<sup>34 149</sup> including heavy equipment such as vehicles, and has its own rail transport and armed escort capabilities.<sup>149</sup>

**MUCD:** Unknown

**Former MUCD:** 96603

**Grade:** Regiment Leader?

**Parent Unit:** Logistics Department

**Location:** Kangzhuang Town, Yanqing District, Beijing [北京市延庆区康庄镇]<sup>150</sup>

**Geo:** Unknown

## Leadership

**Commander:** Zhang Hongwu [张洪武] (2/15<sup>xvi</sup>)<sup>151</sup> **PC:** Leng Fuchun [冷富春] (11/16)<sup>152</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

## Composition

Unknown

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<sup>xvi</sup>Possibly dated

## PLARF Medical Center [火箭军特色医学中心]

The PLARF Medical Center is the PLARF's primary general hospital. In addition to its peacetime function as a service hospital, it trains to conduct field medical support in wartime, with a 160-man Field Medical Clinic [野战医疗所] capable of rapidly deploying and setting up a field hospital.<sup>153</sup> It was formerly known as the PLA Rocket Force General Hospital [火箭军总医院] before moving from Haidian District to Xicheng District and changing to its current name in November 2018.<sup>154</sup> The hospital was established in 1954 as the Beijing Military Region 262nd Hospital in May 1954, and was transferred to the 2nd Artillery in May 1997.<sup>154</sup>

**MUCD:** N/A

**Former TUD:** PLARF General Hospital [火箭军总医院]

**Grade:** Division Leader<sup>155</sup>

**Parent Unit:** Logistics Department

**Location:** 16 Xijiekou Outer Street, Xicheng District, Beijing [北京市西城区新街口外大街16号]<sup>156</sup>

**Geo:** 39.95578, 116.3723

### Leadership

**Director:** Zhao Jun [赵军] (11/19)<sup>157</sup>

**PC:** Zhan Guangda [展广大] (6/18)<sup>158</sup>

**Dep Directors:** Zhou Dinghua [周丁华] (12/16)<sup>159</sup>; Jiang Weijian [姜卫剑] (2/18)<sup>160</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Zhang Xiuyi [张秀义] (12/18)<sup>161</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Wang Kaiping [王开平], Director (2016)<sup>162</sup>; Luo Shancheng [罗山城], PWDD (2018)<sup>158</sup>

### Known Composition

- Field Medical Clinic [野战医疗所]
  - Director: Zhang Rongdong [张蓉动] (12/16)<sup>153</sup>
  - Divided into 8 teams: Command Team, Classification & Evaluation Team, Serious Injury Treatment Team, Patient Receiving & Management Team, Surgical Team, Disease Control & Decontamination Team, Medical Support Team, Logistical Support Team<sup>153</sup>
- Nuclear Emergency Medicine Rescue Group [核应急医学救援大队]
  - Director: Liu Quanbin [刘全斌] (11/19)<sup>157</sup>



- Capable of establishing a field response and treating victims in the aftermath of a nuclear strike or nuclear disaster. Hospital staff receive training in NBC response.<sup>163 164</sup>

## **Disease Prevention and Control Center [火箭军疾病预防控制中心]**

This Center is a national public sanitation emergency support backbone force<sup>165</sup> providing medical and sanitation support to both the PLARF and civilian communities as needed. It was formed in December 1980 and received its current name in March 2014.<sup>166</sup> Its primary peacetime missions include safeguarding PLARF personnel against occupational hazards such as radiation exposure, exposure to toxic propellants, hazards related to tunneling,<sup>166</sup> and training injuries,<sup>167</sup> as well as being responsible for hygiene and disease prevention and monitoring,<sup>166</sup> food and water sanitation,<sup>167</sup> air pollutants,<sup>167</sup> health education,<sup>166</sup> nutrition,<sup>167</sup> and mental health support.<sup>166</sup> It can deploy to provide sanitation and epidemic prevention support during natural disasters.<sup>165</sup> In wartime, it can deploy with PLARF units to provide medical and disease control support.<sup>165</sup>

**MUCD:** Unknown

**Former MUCD:** 96615

**Grade:** Regiment Leader?

**Parent Unit:** Logistics Department

**Location:** Haidian District, Beijing 100094 [北京市海淀区]<sup>168</sup>

**Geo:** Unknown

### **Leadership**

**Director:** Liao Yuanxiang [廖远祥] (8/16)<sup>165</sup>

**PC:** Unknown

**Dep Directors:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Officers:** Liu Quanbin [刘全斌], Dep Director (2016)<sup>169</sup>

### **Known Composition**

- Health Supervision Office [卫生监督科]<sup>170</sup>
- Environmental Monitoring Office [环境监测科]<sup>171</sup>
- Mental Health Office [心理卫生科]<sup>172</sup>
- Health Education Office [健康教育科]<sup>173</sup>

## Background

- This unit deployed to provide sanitation and epidemic prevention support following the 2008 Wenchuan Earthquake,<sup>169</sup> and also provided hygiene support and education to Chinese medical staff returning from Africa during the 2014 Ebola crisis.<sup>174</sup> This unit is fully integrated into the National Public Health System [国家公共卫生体系].<sup>175</sup>
- This unit moved from Fangshan District to Haidian District in Beijing in 2015.<sup>169 176</sup>

## Comprehensive Training Base [综合训练基地]

The Logistics Department's Comprehensive Training Base, established in February 1979,<sup>177</sup> serves several purposes for the PLARF. First, it serves as the PLARF's only base for training personnel in various support specialties,<sup>178</sup> including meteorology, communications,<sup>179</sup> camouflage<sup>180</sup>, chemical/NBC defense,<sup>181</sup> reconnaissance,<sup>182</sup> and survey and mapping.<sup>183</sup> Further, this base plays an important role in NCO training. It provides training to new NCOs and other enlisted personnel<sup>177</sup> in over 20<sup>180</sup> operations, equipment, and logistics specialties, including finance, armaments, materiel, fuel, barracks, transportation,<sup>178</sup> vehicle testing and repair,<sup>184</sup> and special equipment repair.<sup>180</sup> It is a major training base for the PLARF's direct-recruit NCO program (see below).<sup>180</sup> Further, midlevel and senior NCOs receive mid-career skills training at this base,<sup>180</sup> and NCO School cadets are often sent to this base for field training.<sup>185</sup>

**MUCD:** Unknown

**Former MUCD:** 96625

**Grade:** Unknown

**Parent Unit:** Logistics Department

**Location:** Xuanhua District, Zhangjiakou, Hebei 075100 [河北省张家口市宣化区]<sup>186</sup>

**Geo:** 40.616376, 115.064037

### Secondary Garrison:

- Kangzhuang Town, Yanqing District, Beijing 102101 [北京市延庆区康庄镇]<sup>187</sup>
  - Special Vehicle Driver Training Group [特种车司机训练大队]

## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Mao Zhengjun [毛征军] (10/16)<sup>188</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Chu Xinwei [褚新伟] (10/16)<sup>188</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Li Jianlin [李建林], PC (2017)<sup>189</sup>

### Known Composition

- 1<sup>st</sup> Student Group [学兵一大队]
- 2<sup>nd</sup> Student Group [学兵二大队]
- 3<sup>rd</sup> Student Group [学兵三大队]
- Special Vehicle Driver Training Group [特种车司机训练大队]
  - PLARF's only training institution for special vehicle drivers

### Background

- A 2013 article states that the base accepted 79 chemical defense specialists that year.<sup>181</sup> A 2016 article states that in the past two years it has cultivated over 4,000 personnel.<sup>182</sup>
- In 2015, it received its first batch of 118 direct recruit NCOs, who conduct three months of basic and specialist training here<sup>179</sup> following three years of study at civilian academic institutions. By 2017, the number of direct recruit NCOs had risen to over 200.<sup>190</sup>
- The base also has a Logistics Equipment Repair Center [后勤装备维修中心], established in 2005, which is responsible for repairs of specialized Logistics Department equipment, dispatching personnel to conduct repairs, and providing emergency support and repairs in wartime.<sup>191</sup>

### Haidian Comprehensive Depot [海淀综合仓库]

This is one of two comprehensive depots in the Beijing area. It is described as the PLARF's only strategic campaign Comprehensive Depot [战略战役综合仓库].<sup>192</sup> It stores, manages, transports, and distributes special equipment, vehicle spare parts, medication, and many other items.<sup>192 193</sup> One source describes it as the Logistics Department's primary depot for non-mission essential materials and components.<sup>xvii</sup>

**MUCD:** Unknown

**Former MUCD:** 96628

**Grade:** Regiment Leader?

**Parent Unit:** Logistics Department

**Location:** Haidian District, Beijing 100194 [北京市海淀区]<sup>194</sup>

**Geo:** Unknown

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<sup>xvii</sup> See: *Evolving Aerospace Trends in the Asia-Pacific Region*, Mark A. Stokes, Ian Easton, Project 2049 Institute, 2010, p. 41

## Leadership

**Commander:** Wang Shijing [王世靖] (2/17)<sup>192</sup>      **PC:** Xiang Xueyong [向学勇] (9/16)<sup>195</sup>

**Dep Commanders:** Unknown      **Dep PC:** Unknown

**Chief of Staff:** Unknown      **PWDD:** Unknown

**Support Div Director:** Unknown

## Known Composition

- Special Equipment Branch Depot [特装分库]<sup>196</sup>
- Armed Escort Subunit [押运分队]<sup>197</sup>

## Background

- There is a dearth of sources on this unit after 2017, indicating it may have changed names or been folded into another unit.

## Logistics Department Testing, Cultivation, and Training Base for New Agricultural Techniques [火箭军后勤部农业新技术试验培训基地]

The PLARF Logistics Department maintains a base for testing, cultivation, and training in new agricultural techniques in the Daxing suburb of Beijing.<sup>198</sup> The PLA Navy, PLA Air Force, and former military regions maintain their own similar such agricultural bases.<sup>199</sup> Among the priorities for these bases is innovating agricultural techniques to allow work units based in difficult environments to grow their own food, improving personnel diet and nutritional intake.<sup>200</sup>

**MUCD:** Unconfirmed, possibly 96951

**Former MUCD:** Unknown

**Grade:** Unknown

**Parent Unit:** Logistics Department

**Location:** Daxing District, Beijing [北京市大兴区]<sup>198</sup>

**Geo:** Unknown

## Leadership

**Commander:** Unknown

**PC:** Unknown

## Composition

Unknown

## Background

- This base utilizes military-civil fusion [军民融合] with the Ministry of Agriculture, and is considered a model base for green food production and education.<sup>201</sup> It produces approximately 12 million kilograms of food products annually, providing nutritious food for and supplementing the food production of individual PLARF units.<sup>201</sup> (Note: assuming an average of 2kg daily food intake for 100,000 personnel, this would mean this base is supplying roughly one-sixth of the PLARF's food).
- There is some initial evidence this unit may have taken on the MUCD of 96951, although this is not confirmed. Unit 96951 is subordinate to the Logistics Department Directly Subordinate Work Bureau's Management Support Division [直属工作局管理保障处],<sup>202</sup> is located in the Beijing area, and is heavily involved in agriculture and green food production.<sup>202 203</sup>

## Guangzhou Special Convalescent Center [火箭军广州特勤疗养中心]

This convalescent center for military personnel opened in December 1987 under the Guangzhou MR.<sup>204 205</sup> It was resubordinated to the JLSF, presumably around the time of its creation in 2016, then transferred from the JLSF to the PLARF around 2018.<sup>206</sup> Formerly known as the Guangzhou Convalescent Hospital, it seems to have taken on its current name around 2019. It appears to serve dual functions of providing convalescent care to personnel,<sup>207</sup> including those with drug addiction issues,<sup>208</sup> as well as serving as a rest/vacation destination awarded to top cadres.

**MUCD:** N/A

**Former MUCD:** N/A

**Grade:** Division Deputy Leader?

**Parent Unit:** Logistics Department

**Location:** 1849 Guangzhou North Ave., Baiyun District, Guangzhou, Guangdong [广东省广州市白云区广州北大道 1849 号]<sup>209</sup>

**Geo:** 23.192229, 113.321186

### Secondary Garrisons:

- Zhuhai, Guangdong [广东省珠海市]<sup>210</sup>
  - Zhuhai Branch
- Zhongshan, Guangdong [广东省中山市]
  - Zhongshan Branch

- Formerly known as PLARF Zhongshan Rest Home [火箭军中山休养院] and now known as either the Zhongshan Convalescent Center [中山疗养中心]<sup>211</sup> or the Guangzhou Special Service Convalescent Center Zhongshan Barracks [广州特勤疗养中心中山营]<sup>212</sup>

## Leadership

**Commander:** Unknown

**PC:** Zou Yuan [邹渊] (12/19)<sup>212</sup>

## Composition

Unknown

## Background

- This Center has been translated as both a "Convalescent Hospital"<sup>212</sup> and a "Sanatorium."<sup>208</sup>

## Emei Convalescent Home [峨眉疗养院]

Previously subordinate to the Chengdu MR, this convalescent home was re-subordinated to PLARF Logistics Department in 2016.<sup>213</sup> It serves as a spot for recuperating personnel, as well as a vacation spot awarded to model personnel and their families for exemplary service.

**MUCD:** N/A

**Former MUCD:** N/A

**Grade:** Unknown

**Parent Unit:** Logistics Department

**Location:** 3 Jingqu Road, Emeishan, Sichuan [四川省峨眉山景区路 3 号]<sup>214</sup>

**Geo:** 29.556799, 103.448980

## Leadership

**Director:** Li Lixin [李立新] (9/17)<sup>215</sup>

**PC:** Chen Tigao [陈提高] (9/17)<sup>215</sup>

## Composition

Unknown

## **PLARF Beidaihe Rest Home [火箭军北戴河休养院]**

The Beidaihe Rest Home appears to be primarily tasked with providing a leisure spot for select model personnel and their families. It may also go by the name of Beidaihe Rest Center [北戴河休养中心]<sup>216</sup>

**MUCD:** N/A

**Former MUCD:** N/A

**Grade:** Unknown

**Parent Unit:** Logistics Department

**Location:** Beidaihe District, Hebei [河北省北戴河区]

**Geo:** Unknown

### **Leadership**

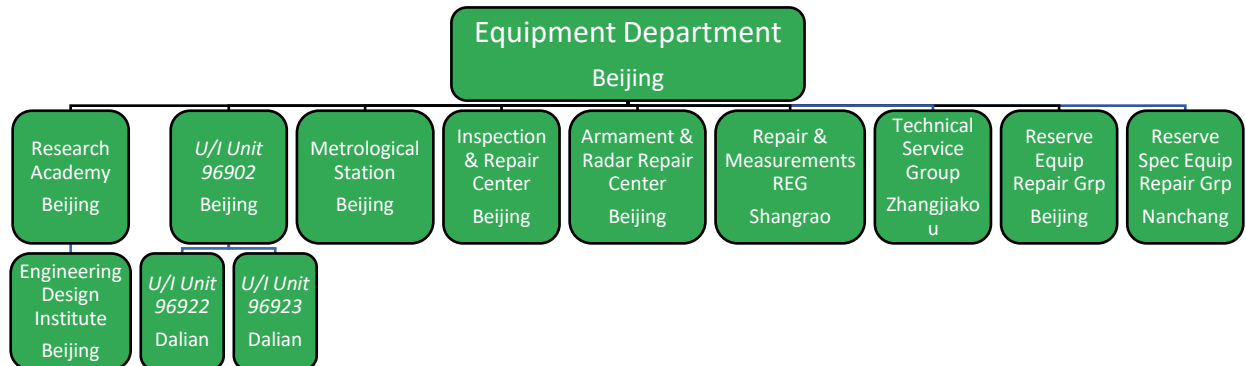
**Commander:** Liu Hairu [刘海儒] (11/16)<sup>217</sup> **PC:** Wei Zehui [魏泽辉] (11/16)<sup>217</sup>

### **Composition**

Unknown



## PLARF Equipment Department [装备部]



### Leadership

**PLARF Equipment Department Director:** Liu Guangbin [刘光斌] (6/19)<sup>218</sup>

**PLARF Equipment Department PC:** Unknown<sup>xviii</sup>

**Equipment Department Deputy Directors:** Zhou Rong [周荣] (4/19)<sup>219</sup>; He Yubin [何玉彬] (8/18)<sup>220</sup>

### Known Subordinate Bureaus

- Comprehensive Planning Bureau [综合计划局]
  - Director: Chen Qingyuan [陈庆元] (4/18)<sup>221</sup>
- Scientific Research and Purchasing Bureau [科研订购局]
  - Dep Director: Liu Shigang [刘士刚] (6/20)<sup>222</sup>
- Experimentation Supervision Bureau [试验监管局]
  - Director: Guo Hongyu [郭红宇] (2/19)<sup>223</sup>
- Directly Subordinate Work Bureau [直属工作局]
  - Director: Pei Changqing [裴长青] (12/18)<sup>224</sup>
  - Dep Director: Zhong Tao [钟涛] (1/18)<sup>225</sup>
- Nuclear Technology and Equipment Bureau [核技术装备局]
  - Director: Ren Jiawei [任家伟] (8/18)<sup>226</sup>

### Recent Developments

- Former PC Sun Danping may have been named Base 61 PC in 2020.

<sup>xviii</sup> Per unofficial sources, the new PC may be Li Dexi [李德喜]. This remains unconfirmed.

## PLARF Research Academy [火箭军研究院]

The PLARF Research Academy, formerly known as the Equipment Research Academy [装备研究院],<sup>227</sup> was established in December 2003 by combining several independent research institutes and key labs involved in missile R&D.<sup>227</sup> This is the PLARF's principal institution for weapons and equipment research,<sup>228</sup> overseeing at least six<sup>229</sup> Corps Deputy Leader grade<sup>230</sup> research institutes and seven key labs.<sup>227</sup> The Academy also plays a key role in developing PLARF theory, strategy, strategic development and planning, and equipment procurement planning via a subordinate think tank, the PLARF Strategic Research Center [火箭军战略研究中心], established in 2012.<sup>231</sup>

**MUCD:** 96901

**Former MUCD/TUD:** 96658/Equipment Research Academy

**Grade:** likely Corps Leader<sup>230</sup>

**Parent Unit:** Equipment Department

**Location:** 109 Beiqing Rd., Haidian District, Beijing [北京市海淀区北清路 109 号]<sup>232</sup>

**Geo:** 40.069126, 116.221423<sup>228</sup>

### Leadership

**Director:** Zhang Mingguo [张明国] (8/17)<sup>233</sup>

**PC:** Zhuo Ling [卓凌] (2/16)<sup>234</sup>

**Dep Directors:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

### Known Composition

- 1<sup>st</sup> Institute [一所]
- 2<sup>nd</sup> Institute [二所]
- 3<sup>rd</sup> Institute [三所]
- 4<sup>th</sup> Institute [四所]
  - Director: Li Xianyu [李贤玉] (3/20)<sup>230 235</sup>
  - Expert on ballistic missile guidance
- 5<sup>th</sup> Institute [五所]
- 6<sup>th</sup> Institute [六所]
- Institute of Engineering Design [工程设计研究所]
  - Responsible for design and engineering of PLARF facilities (see entry)
- PLARF Strategic Research Center [火箭军战略研究中心]

- This think tank works directly with the CMC and includes academics from the PLA Academy of Military Science, National Defense University, top defense contractors CASC and CASIC, the China Academy of Engineering Physics, and Tsinghua University.<sup>231</sup>

## Background

- As of 2018 the Academy had over 1,000 research projects and several hundred personnel dispatched to first line units and test ranges. It has civil-military fusion agreements with over 10 academic institutions and over 50 industrial institutions, including Tsinghua University, Peking University, National University of Defense Technology (NUDT), CASC, and CASIC.<sup>236</sup>
- One advisor [顾问] at the Strategic Research Center, Wan Fayang [万发扬], graduated from Harvard Kennedy School and specializes in military foreign relations.<sup>237</sup>
- Researcher Wang Xuening [王学宁] is an expert on missile command and control systems.<sup>238</sup>
- The 5th Office [五室] under Su Wuyun [苏武运] seems to be involved in R&D of missile reconnaissance and damage assessment equipment.<sup>239</sup>
- Zhou Hongchao [周宏潮] is director of a key state lab with a focus on weapons testing and assessment research.<sup>240</sup>
- Yang Weizhong [杨维忠] is the chief engineer in charge of a certain type of missile.<sup>241</sup> Around the years 2000-2005, he was engaged in developing an informatized command system for a new type of missile, and became chief engineer for a missile type in 2005 (unclear if this was the same missile that he had been working on for the past five years, but seems likely). Around 2010, Yang took part in a test launch for a new missile type.<sup>242</sup>

## PLARF Research Academy Institute of Engineering Design [火箭军研究院工程设计研究所]

The Institute of Engineering Design, established in 1958,<sup>243</sup> is primarily responsible for surveying, design, and engineering of PLARF facilities,<sup>244</sup> <sup>245</sup> including tunneling for underground facilities,<sup>245</sup> launch sites,<sup>246</sup> roads and bridges,<sup>243</sup> and camouflage.<sup>243</sup> <sup>247</sup> By 2018 it had been resubordinated to the PLARF Research Academy [研究院], and is now called the PLARF Research Academy Institute of Engineering Design.<sup>248</sup> <sup>249</sup>

**MUCD:** 96911<sup>250</sup>

**Former MUCD:** 96657

**Grade:** Division Leader or Corps Deputy Leader<sup>251</sup>

**Parent Units:** Equipment Department; Research Academy

**Location:** 18 Andeli Rd, Dongcheng District, Beijing 100011 [北京市东城区安德里北街 18 号]<sup>252</sup>

**Geo:** Unconfirmed, possibly 39.956624, 116.387859

## Leadership

**Director:** Unknown

**PC:** Xu Fengzhong [许凤忠] (11/16)<sup>244</sup>

**Dep Directors:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Tian Siping [田四平] (8/18)<sup>253</sup>

**Support Div Director:** Unknown

**Former Leadership:** Tian Qinglong [田庆龙], Director (2017)<sup>254</sup>; Liu Minghua [刘明华], Political Dept Director (2015)<sup>247</sup>

## Known Composition

- 1<sup>st</sup> Office [一室]
- 2<sup>nd</sup> Office [二室]
- 3<sup>rd</sup> Office [三室]
- 4<sup>th</sup> Office [四室]
- 5<sup>th</sup> Office [五室]
- 6<sup>th</sup> Office [六室]
- 7<sup>th</sup> Office [七室]
- 8<sup>th</sup> Office [八室]
- 9<sup>th</sup> Office [九室]
- Surveying Team [勘测队]<sup>255 256</sup>
  - Battalion Leader Grade<sup>256</sup>
  - Re-subordinated to this Institute in 2012<sup>257</sup>

## Background

- This Institute has a working agreement with the China Astronaut Scientific Research and Training Center [中国航天员科研训练中心], which appears to be part of the Strategic Support Force.<sup>258</sup>

## **Unit 96902 [96902 部队]: possible Jinlun Engineering Command Department [金轮工程指挥部]**

Unit 96902 is a large but rather mysterious unit about which little has been publicly stated. It is involved in a wide range of research, including medical (disease control, mental health, pharmacology, etc.), equipment support, communications, navigation, basic research in physics, and social sciences.<sup>259</sup> It remains unclear exactly what role this institution plays in the greater PLARF research environment, given the high degree of overlap in its research with other institutions. This unit is also closely associated with the Jinlun Engineering Command Department [金轮工程指挥部] (and may in fact *be* the Jinlun Engineering Command Department), which is responsible for overseeing missile exports to Saudi Arabia, although the exact nature of this relationship remains unclear.

**MUCD:** 96902

**Former MUCD/TUD:** 96819

**Grade:** Corps Deputy Leader<sup>260</sup>

**Parent Unit:** Equipment Department

**Location:** 2 Heping Road, Chaoyang District, Beijing 100015 [北京市朝阳区和平路 2 号]<sup>261 262</sup>

**Geo:** 40.019176, 116.520438<sup>263</sup>

### **Secondary Garrisons:**

- Changxing Island Economic Zone, Dalian, Liaoning [辽宁省大连市长兴岛经济区]<sup>264</sup>
- Qianshao Village, Jiaoliu Island, Lingang Industrial Zone, Wafangdian District, Dalian, Liaoning [辽宁省大连市瓦房店区临港工业交流岛办事处前哨村]<sup>265</sup>
  - Described as an “External” or “Foreign” Training Base [外训基地]

### **Leadership**

**Director:** Unknown

**PC:** Jiang Jinglian [姜京连] (2/18)<sup>266</sup>

**Dep Directors:** Guo Jinhu [郭金虎] (1/19)<sup>267</sup>; Li Yuping [李玉平] (4/19)<sup>260</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Liu Runran [刘润然] (9/17)<sup>268</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Gan Min [干敏], Jinlun Engineering Command Dept Director (4/16)<sup>269</sup>

## Known Composition

- Unit 96829
- Unit 96839
- “External Training Base” [外训基地]
  - According to a single reference in an online directory of PLA guesthouses, this unit has a guesthouse for its “External Training Base” (which can also be translated as “Outside” or “Foreign” Training Base) in Dalian’s Qianshao Village.<sup>265</sup> No further information about the purpose of this base could be found. Given Jinlun Engineering’s history of exporting ballistic missiles to Saudi Arabia, the concept of it running a “Foreign Training Base” would be intriguing, but so far lacking in further evidence.
- Comprehensive Planning Department [综合计划部]<sup>270</sup>
- Translation Group [翻译大队]<sup>271</sup>
- Advisory Experts Center [顾问专家中心]<sup>272</sup>
- Medical Clinic Department [门诊部]<sup>273</sup>

## Background

- The Jinlun Engineering Company [金轮工程公司] was allegedly established in the 1980s as a front for exporting DF-3 MRBMs to Saudi Arabia and facilitating their deployment in-country, including engineering support and training of Saudi personnel. PLA personnel deployed to two Saudi bases at Al Sulaiyil and Al Joffer, where they have allegedly maintained a permanent presence. In 2007, the PLA again exported DF-21 MRBMs to Saudi Arabia. In 2016 the “Jinlun Engineering Command Department” was publicly acknowledged for the first time, with Gan Min as commander.<sup>269 274 275</sup>
- While definitive proof connecting this unit to Jinlun Engineering remains tantalizingly out of reach, there are several interesting pieces of evidence. First, an unofficial source names the subordinate Unit 96829 as the “Jinlun Engineering Training Brigade” [金轮工程训练旅].<sup>276</sup> Second, a 2016 article names Gan Min as the new Jinlun Engineering commander. A photo of Gan shows that he is a Corps Deputy Leader grade officer.<sup>269</sup> Since Unit 96902 is likely a Corps Deputy Leader grade organization itself, it stands to reason that Jinlun Engineering and Unit 96902 are one and the same. Third, a 2015 court case shows this unit’s Logistics Department Director serving as an official representative for Jinlun Engineering in negotiations.<sup>277</sup> Finally, searching for Jinlun Engineering alongside the unit’s MUCD in Google brings up a number of old articles which appear to have been meticulously scrubbed from the internet.

## Unit 96922 [96922 部队]: possible Jinlun Engineering Command Department Training Brigade [金轮工程指挥部训练旅]

According to a single unofficial source, Unit 96922 is called the Jinlun Engineering Command Department Training Brigade.<sup>276</sup> Jinlun Engineering is allegedly responsible for missile exports to Saudi Arabia, so it remains unclear what this unit's exact role is.

**MUCD:** 96922

**Former MUCD/TUD:** 96829

**Grade:** Division Deputy Leader?<sup>278</sup> <sup>xix</sup>

**Parent Unit:** Equipment Department; Unit 96902

**Location:** Pulandian District, Dalian, Liaoning [辽宁省大连市普兰店区]<sup>279</sup>

**Geo:** Unknown

**Secondary Garrison:** Ji'an, Jilin [吉林省集安市]<sup>280</sup>

### Leadership

**Commander:** possibly Chu Xiangdong [初向东] (3/16)<sup>281</sup>

**PC:** possibly Liu Gangyong [刘刚勇] (2/16)<sup>282</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Du Chao [杜超] (8/19)<sup>279</sup>

**Support Dept Director:** Unknown

### Known Composition

- 1<sup>st</sup> Battalion [一营]
- 2<sup>nd</sup> Battalion [二营]<sup>283</sup>
- Site Management Battalion [阵管营]<sup>284</sup>

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<sup>xix</sup>Has a Political Work *Department*, indicating at least a Division Deputy Leader grade, instead of a *Division*, indicating a Regiment Leader grade.



## Background

- Two videos from this unit's Ji'an location show the unit's delegation being led by a lieutenant colonel in one video,<sup>280</sup> and a Senior Colonel, Sun Qingjing [孙庆景], in another.<sup>285</sup>
- The MUCD sequence and overlapping locations suggest that it is subordinate to Unit 96902.

## Unit 96923 [96923 部队]

No further information available. The MUCD sequence and location, in the same village where Unit 96902's "External/Foreign Training Base Guesthouse"<sup>265</sup> is located, suggests that it is subordinate to Unit 96902. Unit 96902 is connected to Jinlun Engineering, which is responsible for missile exports to Saudi Arabia. Given the possible translation of an External or Foreign Training Base, this could be a clue as to this unit's purpose.

**MUCD:** 96923

**Former MUCD/TUD:** 96839

**Grade:** Unknown  
96902

**Parent Unit:** Equipment Department; Unit

**Location:** Qianshao Village, Jiaoliu Island Subdistrict, Lingang Industrial Zone, Changxing Island, Dalian, Liaoning [辽宁省大连市长兴岛临港工业区交流岛街道前哨村]<sup>286</sup>

**Geo:** Unconfirmed, possibly 39.379799, 121.357420

## Leadership

**Commander:** Unknown

**PC:** Unknown

## Composition

Unknown

## Equipment Department Metrological Station [计量站]

The PLARF Metrological Station, established around 1988,<sup>287</sup> is the PLARF's highest organization<sup>288</sup> responsible for verification and precision calibration of weapons and equipment, ensuring equipment and facility standards, and conducting relevant repairs and scientific research. Its repair mission may focus on certain types of complex precision equipment like missile laser targeters,<sup>289</sup> as well as certain missile parts, launch vehicles, and support equipment.<sup>288</sup>

**MUCD:** possibly 96961

**Former MUCD:** 96604

**Grade:** Regiment Leader

**Parent Unit:** Equipment Department

**Location:** Xisanqi Subdistrict, Haidian, Beijing 100192 [北京市海淀区西三旗街道]<sup>290 291</sup>

**Geo:** 40.035056, 116.359358<sup>292</sup>

**Secondary Garrison:** Lishui District, Nanjing, Jiangxi [江西省南京市溧水区]<sup>293</sup>

## Leadership

**Director:** Zhao Hemin [赵和民] (6/18)<sup>294</sup>

**PC:** Zhuang Keting [庄可亭] (8/17)<sup>295</sup>

**Dep Directors:** Wang Haicheng [王海成] (7/18)<sup>296</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Zhao Man [赵曼] (4/18)<sup>287</sup>

**Support Div Director:** Unknown

## Known Composition

- 1<sup>st</sup> Measurements Verification Subunit [第一计量检定分队]
  - These subunits provide inspections and mobile maintenance support to missiles and other support equipment<sup>288</sup>
  - Mobile measurements support vehicles [计量保障车] are able to provide on-site missile verification, calibration, and repair support in the field<sup>297</sup>
- 2<sup>nd</sup> Measurements Verification Subunit [第二计量检定分队]
- 3<sup>rd</sup> Measurements Verification Subunit [第三计量检定分队]
- 4<sup>th</sup> Measurements Verification Subunit [第四计量检定分队]
- 5<sup>th</sup> Measurements Verification Subunit [第五计量检定分队]
- 6<sup>th</sup> Measurements Verification Subunit [第六计量检定分队]<sup>288</sup>

## Background

- This station has military-civil fusion [军民融合] agreements with the CASC China Aerospace Academy of Systems Science and Engineering [航天系统], the National Metrological Science Research Academy [国家计量科学研究院], China Jiliang University [中国计量大学], and the Rocket Force Engineering University [工程大学].<sup>298</sup>
- This Station repaired 140 precision targeters between 2008-2010.<sup>289</sup>

## Equipment Department Inspection and Repair Center [检测维修中心]

This unit is responsible for missile inspection and repair, with a focus on solid rocket engines.<sup>299</sup> The Center's Quality Inspection Office [质量检测室]<sup>300</sup> uses road mobile X-Ray,<sup>301</sup> ultrasound,<sup>302</sup> and rapid scanning CT equipment<sup>303</sup> to scan and diagnose issues with multiple missile types. It is also responsible for missile command and control system repair, rapid emergency missile repairs,<sup>304</sup> missile lifespan monitoring and warning, and missile renovation<sup>305</sup> and life extension.

**MUCD:** 96962

**Former MUCD:** 96630

**Grade:** Division Deputy Leader?<sup>xx</sup>

**Parent Unit:** Equipment Department

**Location:** Three Stars Courtyard, Qiliqu North Village, Changping District, Beijing 102206 [北京市昌平区沙河镇七里渠北村三颗星大院]<sup>305</sup>

**Geo:** 40.108877, 116.325942<sup>306</sup>

**Secondary Garrison:** Langfang, Hebei [河北省廊坊市]<sup>307</sup>

### Leadership

**Commander:** Lu Tingzhen [路廷镇] (3/18)<sup>308</sup>

**PC:** Lu Xiaoping [卢小平] (3/18)<sup>308</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Liu Ming [刘明] (12/16)<sup>309</sup>

**PWDD:** Xu Tianji [徐天骥] (1/18)<sup>300</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Zhang Jin [张晋], Dep COS (4/16)<sup>310</sup>

### Composition

- 1<sup>st</sup> Station [一站]
- 2<sup>nd</sup> Station [二站]
- 3<sup>rd</sup> Station [三站]<sup>311</sup>
- Quality Inspection Office [质量检验室]
  - Director: Li Wei [李伟] (1/18)<sup>300</sup>
- Inspection and Repair Technical Office [检测维修技术室]
  - Director: Jia Qinglong [贾庆龙] (1/18)<sup>300</sup>

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<sup>xx</sup>Has a Political Work *Department* [部], indicating at least a Division Deputy Leader grade, instead of a *Division* [处], indicating a Regiment Leader grade.

- Support Office [保障室]
  - Director: Niu Yupeng [牛余朋] (1/18)<sup>300</sup>

## Background

- It is described by one source as the PLARF's only repair unit for a certain type of equipment.<sup>102</sup>
- This unit was responsible for refitting of a missile type with new engines around summer 2016.<sup>312</sup>
- Missiles are both inspected at the Center as well as on-site, using mobile inspection vehicles with the above mentioned equipment. The Center's Inspection Office has 20 engineers, including five PhDs and seven master's graduates.<sup>313</sup>
- This unit may have previously been known as the 2nd Artillery Solid Missile Engine Inspection and Repair Station [固体导弹发动机检测维修站].<sup>314</sup>

## Armaments and Radar Repair Depot [军械雷达修理所]

The Armaments and Radar Repair Depot is responsible for conducting mobile repairs<sup>315</sup> and regular testing and maintenance of at least 13 types of radar, including warning, meteorology, reconnaissance, ballistic measurement,<sup>316</sup> and hypsography<sup>317</sup> radars.

**MUCD:** 96963

**Former MUCD:** 96602

**Grade:** Regiment Leader

**Parent Unit:** Equipment Leader

**Location:** Xilu Subdistrict, Fangshan District, Beijing 102488 [北京市房山区西潞街道]<sup>318</sup>

**Geo:** Unconfirmed, possibly 39.754387, 116.167743

## Leadership

**Commander:** Zhao Jinhu [赵金虎] (6/18)<sup>319</sup> **PC:** Zhong Shuping [钟树平] (11/17)<sup>320</sup>

**Dep Commanders:** Gao Ping'an [高平安] (11/17)<sup>320</sup>, Tang Zehua [唐泽华] (9/19)<sup>318</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

## Composition

Unknown

## Background

- Li Xiaojun [李效军] is a model personnel<sup>xxi</sup> from this unit.<sup>321</sup>
- As of 2019, this unit has a presence in Shangrao, Jiangxi, indicating a possible merger with Unit 96623.<sup>322</sup> This has not yet been confirmed.

## Repair and Measurements Regiment [维修计量团]

The Equipment Department's Repair and Measurements Regiment, likely established around 2007,<sup>323</sup> is responsible for inspection, testing, measurement,<sup>324</sup> and repair of "special" equipment [特种设备].<sup>325</sup> This includes tunneling equipment,<sup>325</sup> missile components, vehicles (including missile loading vehicles),<sup>323</sup> and missile launch sites.<sup>324</sup> This unit may have merged with the Armaments and Radar Repair Depot (former 96602) to become Unit 96963,<sup>326</sup> but this has not been confirmed.

**MUCD:** 96963?

**Former MUCD:** 96623

**Grade:** Regiment Leader

**Parent Unit:** Equipment Department

**Location:** Luoqiao Subdistrict, Guangxin District, Shangrao, Jiangxi 334109 [江西省上饶市广信区罗桥街道]<sup>327</sup>

**Geo:** Unconfirmed, possibly 28.470223, 117.884540

### Secondary Garrisons:

- Zhanggong District, Ganzhou, Jiangxi 341002 [江西省赣州市章贡区]<sup>328</sup>
  - 2<sup>nd</sup> Repair Station [维修二站]
- Laiwu District, Jinan, Shandong [山东省济南市莱芜区]<sup>329</sup>

## Leadership

**Commander:** Liu Bo [刘波] (6/18)<sup>330</sup>

**PC:** Zhang Guo [张国] (6/15)<sup>324</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

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<sup>xxi</sup>That is, a personnel who is held up as an ideal in PLA media, and who frequently stars in PLA propaganda

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Liu Shigang [刘士刚], Commander (2017)<sup>331</sup>

### **Known Composition**

- 1<sup>st</sup> Measurement and Inspection Station [计量检测一站]
- 2<sup>nd</sup> Measurement and Inspection Station [计量检测二站]
- 3<sup>rd</sup> Measurement and Inspection Station [计量检测三站]<sup>330</sup>
- 1<sup>st</sup> Repair Station [维修一站]
- 2<sup>nd</sup> Repair Station [维修二站]<sup>328</sup>

### **Background**

- This regiment underwent a major structural reorganization in 2013 which saw it lose much of its experienced backbone talent.<sup>324</sup>
- This unit is apparently located nearby (and may even be co-located with) the Base 61 Missile Component Depot. This would of course be logical, to place the unit responsible for missile testing near the large stockpile of missiles. Units 96623 and 96815 also apparently both have corresponding subordinate garrisons at Ganzhou and Fenggangxiang which are either closeby or co-located with one another.

### **Technical Service Group [技术勤务大队]**

The Equipment Department Technical Service Group is responsible for missile testing,<sup>332</sup> storage,<sup>333</sup> site management, transport, and armed escort.<sup>334</sup> The unit conducts annual inspections and verifications of multiple missile types, transporting missiles to and from operations sites to unit factories for inspection.<sup>335</sup>

**MUCD:** 96964

**Former MUCD:** 96612

**Grade:** Regiment Leader

**Parent Unit:** Equipment Department

**Location:** Xuanhua District, Zhangjiakou, Hebei [河北省张家口市宣化区]<sup>336</sup>

**Geo:** Unknown

### **Leadership**

**Commander:** Liu Guoliang [刘国良] (8/17)<sup>337</sup>

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Officers:** Zhai Weixiang<sup>xxii</sup> [翟唯翔], PC (2018)<sup>338</sup>

### Known Composition

- Experimental Test Squadron [试验测试中队]<sup>334</sup>
- Rail Transport Squadron [铁运中队]<sup>339</sup>
  - Commander: Liu Zhongyan [刘忠言] (1/18)<sup>340</sup>
  - Has its own dedicated rail line, which underwent major renovations in 2010<sup>341</sup>
  - Conducts over 30 escort missions each year, covering 200,000km<sup>340</sup>
- Vehicle Service Squadron [汽车勤务中队]
  - Commander: Fan Hongzhang [范鸿章] (8/18)<sup>342</sup>
- Management Squadron [管理中队]<sup>343</sup>

### Background

- By the end of 2016, a typical test and verification mission took as little as 8-12 days<sup>335</sup> (contextually, a major reduction in time needed to transport the missile back to the factory, inspect it, and transport it back). It seems that some missiles undergo annual inspections [年检], while others undergo inspections every ten years.<sup>344</sup>

### Reserve Equipment Repair Group [预备役装备维修大队]

This reserve unit was likely established around 2005.<sup>345</sup> It is described as a "new type" of reserve unit, with a greater scope, longer mobilization range, and a large number of experts, along with more complex maintenance demands.<sup>346</sup> It provides maintenance support for missile launch equipment to several launch brigades,<sup>346</sup> deploying several (up to 10) times per year along with these brigades for joint training lasting from 1-2 weeks to several months.<sup>346</sup>

**MUCD:** N/A

**Former MUCD:** N/A

**Grade:** Regiment Leader

**Parent Unit:** Equipment Department

**Location:** Wenquan Town, Haidian District, Beijing [北京市海淀区温泉镇]<sup>347</sup>

**Geo:** Unconfirmed, possibly 40.029716, 116.237352

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<sup>xxii</sup> Alternative possible spelling of name: Di Weixiang



## Leadership

**Commander:** Jia Huaiwei [贾怀玮] (6/20)<sup>345</sup>      **PC:** Xu Zhongjun [徐中军] (8/18)<sup>348</sup>

**Dep Commanders:** Xu Yongquan [徐永全] (7/15)<sup>349</sup>      **Dep PC:** Unknown

**Chief of Staff:** Jiang Zeyao [姜泽耀] (3/17)<sup>350</sup>      **PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Liu Guoqing [刘国庆], Dep COS (6/18)<sup>351</sup>

## Composition

Unknown

## Background

- This unit made efforts to recruit the very engineers who had helped design the equipment, selecting several hundred personnel from 89 work units across 23 provinces/cities. "Several tens" of the personnel are senior engineers (formerly?) holding the rank of specialist technical senior colonel,<sup>346</sup> some of whom are over 50 years old.<sup>352</sup> The unit recruited by first going to the launch brigades and figuring out which equipment they would need to maintain, then going out and recruiting personnel capable of repairing that specific equipment.<sup>346</sup>
- This unit's duties also include local emergency and disaster response. It has an emergency subunit [应急分队]<sup>350</sup> made up of both reserve and active duty personnel and responsible for emergency response. It is also a part of the Beijing Emergency Group [北京市应急大队], as well as the Beijing-PLARF Reserve Earthquake and Emergency Rescue Team [北京火箭军预备役地震应急救援队], which it formed along with the Beijing and Haidian governments and the private Baofu Group [保福集团].<sup>353</sup>
- This unit has a close relationship with the Haidian District government. At least two of its senior personnel are also senior officials in the Haidian government.<sup>346 349</sup>
- This unit has also practiced joint operations by integrating into the Central Theater Command and has provided support for the Central Theater Command Air Force and SSF.<sup>354</sup>
- There was initially some concern about whether a reserve unit with personnel scattered across China would be able to quickly mobilize, so in May 2014 it held a drill in which 240 personnel were rapidly called up and had to muster at a location in northern China. Upon being called up, personnel quickly boarded trains and planes and all had arrived by evening the next day. The unit holds several such rapid mobilization drills every year.<sup>346</sup>

- Another drill around July 2018 saw nearly 100 reserve personnel from 44 factories being integrated into an active duty unit and working seamlessly with that unit during a drill, with no distinction between reserve and active duty personnel.<sup>355</sup>

## **Reserve Special Equipment Repair Group [预备役特种装备维修大队]**

This group was established in December 2005<sup>356 357</sup> as a new type of reserve force<sup>358</sup> focused on integrating with active units to provide repair of missiles,<sup>357</sup> vehicles,<sup>359</sup> and other high-tech equipment.<sup>360</sup> It was the 2nd Artillery's first such reserve unit.<sup>361</sup> Personnel from across China can be assembled within 24 hours<sup>362</sup> and can be attached as needed to grassroots work units, including launch elements, command posts, and repair factories to augment and improve independent repair and maintenance support capabilities.<sup>362 363</sup> The unit regularly deploys for joint training with active duty launch and support units.<sup>364</sup>

**MUCD:** N/A

**Former MUCD:** N/A

**Grade:** Regiment Leader?

**Parent Unit:** Equipment Department

**Location:** Ganjiang New District, Nanchang, Jiangxi [江西省南昌市赣江新区]<sup>365 366</sup>

**Geo:** Unknown

### **Leadership**

**Commander:** Lai Chuncui [赖春材] (7/18)<sup>367</sup>

**PC:** Wang Maobai<sup>xxiii</sup> [王茂柏] (1/18)<sup>368</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Gan Weimin [甘伟民]<sup>xxiv</sup> (3/15), Dep COS<sup>361</sup>

**Former Leadership:** Ding Zhaolong [丁兆龙], Dep Commander (2015)<sup>369</sup>

### **Composition**

Unknown

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<sup>xxiii</sup>Alternative possible spelling of name: Wang Maobo

<sup>xxiv</sup>Also Deputy Director of Nanchang Traffic Bureau

## Background

- This unit includes nearly 1,000 technical experts from 11 provinces and 58 factories and research institutions.<sup>364</sup> Another source states that it includes 700 experts just from CASC and CASIC.<sup>367</sup> 27% of its personnel are senior engineers, 35% are engineers, and 38% are assistant engineers.<sup>364</sup> This cooperation is described as an excellent example of military-civil fusion [军民融合].<sup>358</sup>
- From 2006-2016 it took part in over 30 major missions, supporting 170 conventional and nuclear missile launches.<sup>356</sup> In one drill, 81 reserve personnel integrated into six conventional launch brigades.<sup>357</sup>

## Equipment Department Representative Bureaus [装备部军事代表局]

The PLARF Equipment Department maintains several Military Representative Bureaus (MRB) [火箭军军事代表局] in cities across China, responsible for working with local industries to ensure quality control and smooth delivery of military equipment to the PLARF. There are also smaller Military Representative Offices [军代室] in multiple cities, factories, and research institutes.

### Identified PLARF Military Representative Bureaus (8):

- Beijing
  - Deputy Director: Wei Jinxian [魏锦先] (9/17)<sup>370</sup>
  - May be the largest and most important MRB, with 21 subordinate offices<sup>371</sup>
  - Responsible for inspecting over half of the PLARF's weaponry and over 100 local factories and research institutions<sup>371</sup>
- Chengdu, Sichuan
  - Director: Liao Ping [廖平] (1/19)<sup>372</sup>
  - Division Deputy Leader grade<sup>372</sup>
- Chongqing<sup>373</sup>
- Liuzhou, Guangxi
  - Director: Song Wenzhong [宋文忠] (12/17)<sup>374</sup>
- Nanjing, Jiangsu
  - PC: Zhai Weixiang<sup>xxv</sup> [翟唯翔] (2/19)<sup>223</sup>
- Shanghai<sup>375</sup>
- Shenyang, Liaoning<sup>376</sup>
- Xi'an, Shaanxi
  - Director: Su Baoying [苏保营] (8/18)<sup>377</sup>
  - PC: Li Wencong [李文聪] (1/18)<sup>378</sup>

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<sup>xxv</sup> Alternative possible spelling of name: Di Weixiang

- Division Deputy Leader grade<sup>377</sup>

#### **Identified PLARF Military Representative Offices (14):**

- Changsha, Hunan
  - Director: Chen Minghui [陈明辉] (12/17)<sup>379</sup>
  - Consists of over ten cadres responsible for over 30 factories and research institutions<sup>379</sup>
- Changzhi, Shanxi
  - Director: Zhang Zaijin [张在进] (10/18)<sup>380</sup>
  - Division Deputy Leader grade<sup>380</sup>
- Guiyang, Guizhou
  - Director: Kang Bin [康斌] (4/18)<sup>381</sup>
- Harbin, Heilongjiang<sup>382</sup>
- Hohhot, Inner Mongolia
  - Director: Cheng Guokui [成国奎] (6/17)<sup>383</sup>
  - Division Deputy Leader grade<sup>384</sup>
  - Six-man team (as of 2016) responsible for overseeing three factories producing over ten pieces of equipment<sup>384</sup>
- Jinan, Shandong<sup>385</sup>
- Jinzhou, Liaoning<sup>386</sup>
- Lanzhou, Gansu<sup>387</sup>
- Qingdao, Shandong<sup>388</sup>
- Shenzhen, Guangdong<sup>389</sup>
- Shijiazhuang, Hebei<sup>390</sup>
- Tianjin<sup>391</sup>
- Xiaogan, Hunan<sup>392</sup>
- Zhengzhou, Henan
  - Director: Shang Jiyao [尚计尧] (5/19)<sup>393</sup>

#### **PLA Rocket Force Equipment Department Retirement Home [火箭军装备部清河干休所]**

The PLARF Equipment Department runs a home for retired cadres in Qinghe, Beijing. It may now be known as the Beijing Garrison District Haidian 27th Home for Retired Cadres [北京卫戍区海淀第二十七离职干部休养所].<sup>394</sup> There is also a PLA Rocket Force Beijing Qinghe Home for Retired Cadres [火箭军北京清河离职干部休养所] which may be referring to the same work unit.<sup>395</sup>

**MUCD:** N/A

**Former MUCD:** N/A

**Grade:** Unknown

**Parent Unit:** Equipment Department

**Location:** Beijing Garrison, Haidian District, Beijing [北京市海淀区卫戍区]<sup>394</sup>

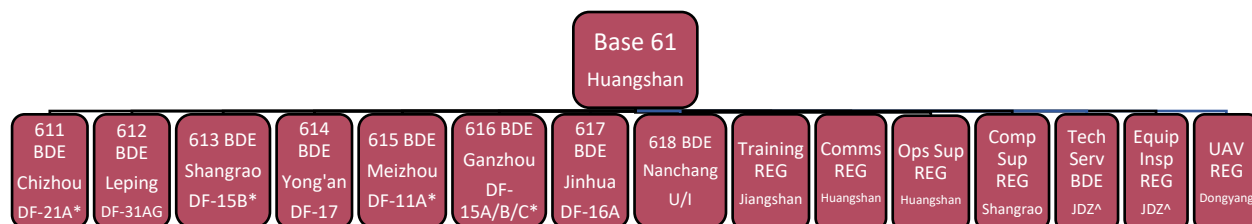
**Geo:** Unknown

### **Leadership**

**Director:** Li Ming [李明] (1/15)<sup>396</sup>

**PC:** Jiang Dongjun [姜东军] (5/16)<sup>397</sup>

## Base 61 [61 基地]



\*Likely conversion to new system  
^Jingdezhen City

Base 61, first established in 1965<sup>398</sup> and currently headquartered in the eastern Chinese city of Huangshan, is an operations base covering eastern and part of southeastern China. The Base's operating area adjacent to the Taiwan Strait, and its large number of SRBM brigades, indicates that it would be the primary base tasked with ballistic missile operations in a conflict against Taiwan. Until recently, this Base commanded two nuclear MRBM brigades and five SRBM brigades. However, most of the Base's brigades have since likely upgraded to new systems. 612 Brigade is likely now equipped with the DF-31AG, and 611 Brigade may soon follow suit (possibly with some variant of the DF-31) as the DF-21A is retired. 614 Brigade is now believed to be equipped with the DF-17 hypersonic MRBM. 613, 615, and 616 Brigades may also soon be equipped with new systems. Further, as of this writing there is initial evidence that an eighth brigade is currently being stood up around Nanchang, Jiangxi Province, although little information is available. The Base also has a unique support system, with a brigade responsible for testing and transport of its high number of short-range conventional missiles, and its own UAV regiment for ISR over the Taiwan Strait.

**MUCD:** 96601

**Former MUCD/TUD:** 96151 (Base 56)

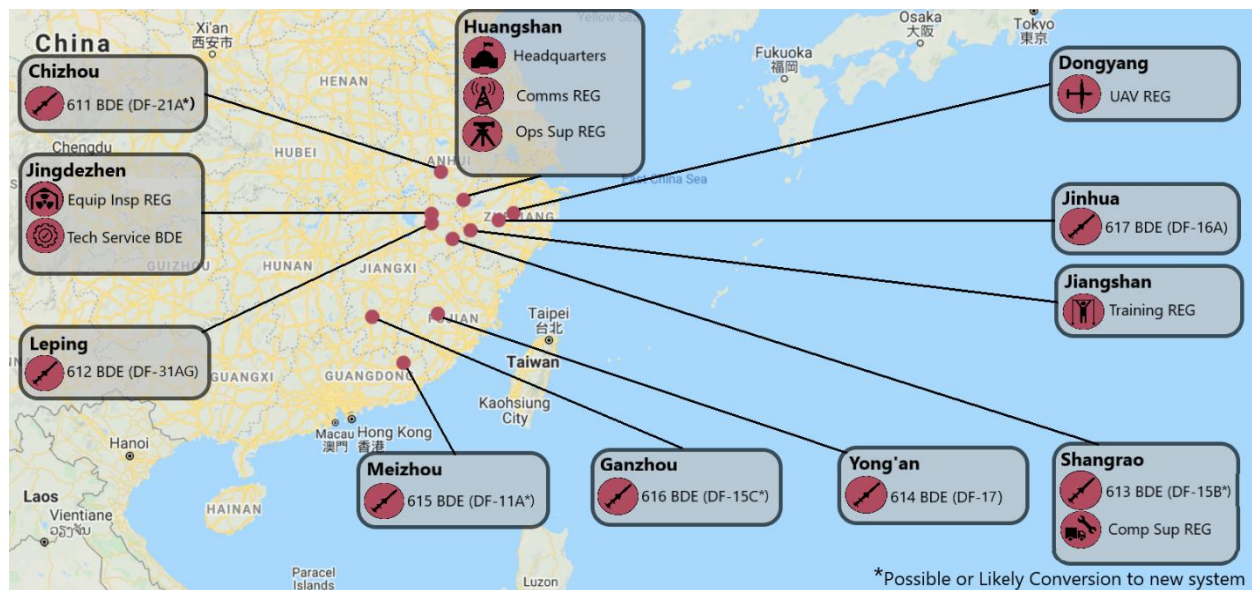
**Grade:** Corps Leader<sup>399</sup>

**Location:** 40 Hongxing Rd, Yanghu Town, Tunxi District, Huangshan, Anhui [安徽省黄山市屯溪区阳湖镇红星路 40 号]<sup>400 401</sup>

**Geo:** 29.695635, 118.300243<sup>402</sup>

**Secondary Garrison:**

- Shangrao, Jiangxi [江西省上饶市] (possibly 28.464326, 117.879419, near 613 Bde)
  - Base 61 Driver Training Battalion [司训营]<sup>403</sup>



## Leadership

**Commander:** Zhao Qiuling [赵秋领]<sup>xxvi</sup> (1/20)<sup>404</sup> **PC:** Sun Danping [孙旦评] (1/20)<sup>405</sup>

**Dep Commanders:** Zhang Jianqiang [张建强] (1/20)<sup>404</sup>; Yang Guang [杨光] (1/20)<sup>404</sup>

**Dep PC:** Li Yang [李阳] (8/19)<sup>406</sup>

**Chief of Staff:** Li Youcheng [李友成] (8/18)<sup>407</sup> **PWDD:** Liu Weiyun [刘惟云] (10/18)<sup>408</sup>

**Support Dept Director:** Shi Xiangyang [施湘阳] (1/20)<sup>404</sup>

**Other Senior Leadership:** Wang Baocai [王保才], Dep COS (1/20); Sun Nianfa [孙念发] (11/19), Support Dept Dep Director<sup>409</sup>; Chen Feng [陈峰] (12/19), Support Dept Dep Director<sup>410</sup>; Liu Wuchun [刘午春] (11/19), Support Dept Dep Director<sup>411</sup> xxvii

**Former Leadership:** Li Hongjun [李洪军], Commander (2017)<sup>412</sup>; Zhao Ruibao [赵瑞宝], PC (2017)<sup>412</sup>; Sun Jinming [孙金明], Dep Commander (2017)<sup>412</sup>; Zhu Chuanfa<sup>xxviii</sup> [朱传法], Dep PC (2018)<sup>413</sup>; Yang Chunguang [杨春光], Dep PC (2017)<sup>412</sup>; Hong Bing [洪兵], PWDD (2017)<sup>412</sup>; Ai Chuan [艾川], Logistics Dept Director (2017)<sup>414</sup>; Xu Deli [徐德立], PWD Dep Director (2020)<sup>415</sup>

<sup>xxvi</sup> Zhao was until recently commanding Base 65. Recent evidence suggests he has been promoted to the Corps Leader Grade Base 61.

<sup>xxvii</sup> It seems unusual that this Base's Support Department would have three Deputy Directors. Perhaps this is related to the Base's uniquely large support structure and relatively high numbers of missiles?

<sup>xxviii</sup> Alternative possible spelling of name: Zhu Zhuanfa



## Known Composition

- 611 Brigade [611 旅]
- 612 Brigade [612 旅]
- 613 Brigade [613 旅]
- 614 Brigade [614 旅]
- 615 Brigade [615 旅]
- 616 Brigade [616 旅]
- 617 Brigade [617 旅]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Operations Support Regiment [作战保障团]
- Comprehensive Support Regiment [综合保障团]
- Missile Technical Service Brigade [导弹技术勤务旅]
- Equipment Inspection Regiment [装检团]
- UAV Regiment [无人机团]
- Driver Training Battalion [司训营]
  - See location info above
- Special Operations Security Training Team [特种警卫集训队]
  - This Team has cultivated over 200 security backbone personnel in anti-reconnaissance, anti-infiltration, and anti-raiding.<sup>416</sup>
- Unit 96601 Hospital

## Background

- This base was first established as Unit 121 in August 1965 in Guangyang Township, Shitai County, Anhui. It was developed by the 303 Engineering Command in June 1966.<sup>398</sup>
- This base's makeup of mostly SRBM brigades has led to a unique support structure vis a vis the other five operations bases. Unlike most other bases, it has not only retained its Technical Service Regiment, but upgraded it to a Missile Technical Service Brigade, likely due to the large number of SRBMs this base would need to test and transport. It is also unique for having its own subordinate UAV regiment, likely responsible for ISR, targeting, and missile damage assessment over Taiwan.

## 611 Brigade [611 旅]

The 611 Brigade, garrisoned in the eastern Chinese city of Chizhou, was established around 1968. As of recently, it was equipped with the nuclear DF-21A MRBM, but it may soon be equipped with a new system, possibly some variant of the DF-31.

**MUCD:** 96711

**Former MUCD/TUD:** 96161 (807<sup>th</sup> Launch Brigade<sup>417 xxix</sup>)

**Grade:** Division Deputy Leader<sup>418</sup> **Parent Unit:** Base 61

**Location:** Xinhe Town, Qingyang County, Chizhou, Anhui 242803 [安徽省池州市青阳县新河镇]<sup>419 420 421</sup>

**Geo:** 30.689928, 117.901269<sup>418</sup>

**Secondary Garrisons:**

- Shitai County, Chizhou, Anhui 245108 [安徽省池州市石台县]<sup>422</sup>
- Guichi District, Chizhou, Anhui [安徽省池州市贵池区]<sup>423</sup>

**Capabilities**

**Missile:** DF-21A MRBM<sup>424</sup>; likely imminent conversion to new system

**Missile Type:** Nuclear; Road-mobile

**Leadership**

**Commander:** Lu Wenlong [鹿文龙] (12/19)<sup>425</sup> **PC:** Wei Xingjie [卫星杰] (5/19)<sup>426</sup>

**Dep Commanders:** Cao Jinxu [曹金绪] (9/18)<sup>427</sup>; Meng Fengyu [孟峰玉] (7/17)<sup>428</sup>; Yan Qiye [闫其叶] (4/17)<sup>429</sup>

**Dep PC:** Wang Xiaoke [汪晓课] (12/18)<sup>430</sup>

**Chief of Staff:** Unknown

**PWDD:** Chen Kai [陈凯] (8/18)<sup>431</sup>

**Support Dept Director:** Gong Xuming [巩绪明] (2/18)<sup>432</sup>

**Other Senior Leadership:** Du Jianbao [杜建宝], Dep COS (4/17)<sup>433</sup>; Wang Hao [王皓], Pol Work Dept Dep Director (2017)<sup>433</sup>

**Former Leadership:** Chen Zaiwang [陈在望], Commander (2016)<sup>434</sup>; Huang Changping [黄长平], PC (2018)<sup>435</sup>; Liu Lei [刘磊], COS (2017)<sup>436</sup>

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<sup>xxix</sup>All brigade former TUDs come from: David C. Logan, “Making Sense of China's Missile Forces, Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms”, NDU Press, 2019. 404-405. <https://ndupress.ndu.edu/Media/News/News-Article-View/Article/1748530/making-sense-of-chinas-missile-forces/>

### Composition (presumed)<sup>xxx</sup>

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Wan Xinliang [万新亮] (6/18)<sup>437</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
  - Political Instructor: Xu Yajian [许亚健] (1/18)<sup>438</sup>
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
  - Political Instructor: Geng Tianhua [耿天华] (1/18)<sup>439</sup>
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]
  - Comprehensive Defense Company [综合防护连]<sup>427</sup>
    - Commander: Wu Huibin [吴慧斌] (9/18)<sup>427</sup>
- New Soldier Battalion [新兵营]
  - Responsible for replacement training [代训] for multiple subordinate work units, training 600 new personnel in one year<sup>440 441</sup>

### 612 Brigade [612 旅]

The 612 Brigade moved to the eastern Chinese city of Leping in the 2008-2012 timeframe. As of recently, it was equipped with the nuclear DF-21A MRBM, but it may already be equipped with a new system, likely the DF-31AG ICBM.

**MUCD:** 96712                      **Former MUCD/TUD:** 96163 (811<sup>th</sup> Launch Brigade)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 61

**Location:** Bayi Road, Jiyang Subdistrict, Leping, Jingdezhen, Jiangxi [江西省景德镇市乐平市洎阳街道八一路]<sup>442 443</sup>

**Geo:** 28.979319, 117.120551<sup>444</sup>

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<sup>xxx</sup>In the case of Missile Brigades and some other unit types, sufficient examples exist to create an accurate composite example of that unit type. *Presumed* compositions in this report represent the estimated structure based on multiple examples.

## Secondary Garrisons:

- Anling Town, Qimen County, Anhui [安徽省祁门县安凌镇]<sup>444</sup>
- Qingyang County, Chizhou, Anhui [安徽省池州市青阳县]<sup>445</sup>

## Capabilities

**Missile:** Previously DF-21A MRBM<sup>446 447</sup>; likely converting to DF-31AG ICBM<sup>xxxxi</sup>

**Missile Type:** Nuclear; Road-mobile

## Leadership

**Commander:** Liu Lei [刘磊] (3/20)<sup>448</sup>

**PC:** Xu Lin [徐琳] (6/19)<sup>449</sup>

**Dep Commanders:** Pan Yong [潘勇] (12/17)<sup>450</sup>

**Dep PC:** Chen Hao [陈浩] (10/17)<sup>451</sup>

**Chief of Staff:** Zhang Guobing [张国兵] (9/17)<sup>452</sup>

**PWDD:** Zhu Jiaguang [祝家光] (1/19)<sup>453</sup>

**Support Dept Director:** Li Yuqiang [李玉强] (7/16)<sup>454</sup>

**Other Senior Leadership:** Ma Chao [马超], Dep COS (12/17)<sup>450</sup>; Jiang Zhicheng [姜志成], Pol Work Dept Dep Director (12/19)<sup>455</sup>

**Former Leadership:** Wang Xingli [王性利], Commander (2018)<sup>456</sup>; Yue Jijun [岳继军], PC (2018)<sup>457</sup>; Wang Yunyong [王云勇], PWDD (2018)<sup>458</sup>; Ji Hongxin [纪红心], Logistics Dept Director (2016)<sup>459</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Wu Longjiang [吴龙江] (7/18)<sup>444</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
  - Political Instructor: Ren Kefeng [任可峰] (6/18)<sup>458</sup>
- 6<sup>th</sup> Launch Battalion [发射六营]

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<sup>xxxxi</sup> Rod Lee (@roderick\_s\_lee), Twitter, 9 September 2021 1:57 PM. [https://twitter.com/roderick\\_s\\_lee/status/1436026035842211843](https://twitter.com/roderick_s_lee/status/1436026035842211843)

- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
  - Commander: Wang Diao [汪钧] (3/18)<sup>460</sup>
- Technical Battalion [技术营]

## 613 Brigade [613 旅]

The 613 Brigade, located in the eastern Chinese city of Shangrao, was established in 1993 as the 2<sup>nd</sup> Artillery's first conventional missile unit, earning itself the honorific title of "1<sup>st</sup> Conventional Missile Brigade" [常规导弹第一旅]. It is likely equipped with the B variant of the DF-15 SRBM, but may have converted to an unidentified new system around 2021.

**MUCD:** 96713                      **Former MUCD/TUD:** 96165 (815<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>461</sup>    **Parent Unit:** Base 61

**Location:** Luoqiao Subdistrict, Guangxin District, Shangrao, Jiangxi [江西省上饶市广信区罗桥街道]<sup>462</sup>

**Geo:** 28.474249, 117.895578<sup>463</sup>

### Secondary Garrisons:

- Xinzhou District, Shangrao, Jiangxi [江西省上饶市新洲区]<sup>464</sup>
- Shangrao County, Shangrao, Jiangxi [江西省上饶市上饶县]<sup>465</sup>
- Shaowu Economic Development Zone, Shaowu, Fujian [福建省邵武经济开发区]<sup>466 467</sup>
- Jianyang District, Nanping, Fujian [福建省南平市建阳区]<sup>468</sup>
- Zhengfang Town, Guangxin District, Shangrao, Jiangxi 334102 [江西省上饶市广信区郑坊镇]<sup>469</sup>
- Changxi Village(?), Xiapu County, Ningde, Fujian [福建省宁德市霞浦县长溪村]<sup>470</sup>
  - Located just northwest of the northern tip of Taiwan, roughly 150 miles from Taipei

### Capabilities

**Missile:** DF-15B SRBM<sup>471</sup>; possible conversion to unidentified new system in 2021<sup>472</sup>

**Missile Type:** Conventional

## Leadership

**Commander:** Liu Xiyang [刘西洋] (2/19)<sup>473</sup>

**PC:** Zhou Lusheng [周吕胜] (12/20)<sup>474</sup>

**Dep Commanders:** Wang Xun [王勋] (6/18)<sup>475</sup>

**Dep PC:** Wang Yuyang [汪于阳] (12/20)<sup>476</sup>

**Chief of Staff:** Gao Xuedong (高学东) [1/19]<sup>477</sup>

**PWDD:** Li Zhengji [李正基] (3/19)<sup>478</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Ma Fusheng [马福升] (2019)<sup>477</sup>; Yang Heli [杨鹤立], PWDD (2018)<sup>463</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - 3<sup>rd</sup> Launch Company [发射三连]
    - Company Commander: Wang Xu [王旭] (6/19)<sup>479</sup>
    - Known as the "Missile Launch Vanguard Company" [导弹发射先锋连]<sup>479</sup>
    - Conducts frequent joint drills with the local Eastern Theater Command<sup>479</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- 1<sup>st</sup> Technical Battalion [技术一营]
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>480</sup>

## Background

- In 1995, this brigade conducted the PLA's first missile launch training in the East China Sea.<sup>481</sup> This brigade was the first to launch 100 missiles in 2010, 17 years after its founding, and became known as the first "100 Launches, 100 Hits" Brigade [百发百中旅].<sup>482</sup> It launched its second hundred missile in 2017, only seven years later.<sup>483</sup>
- One contract request puts fiberoptic cables going from the towns of Huanggu [煌固] to Linhu [临湖] to Huatanshan [华坛山] outside Shangrao. Another fiberoptic cable goes from Shangrao's Erdou [二都] to Shaowu [邵武] in Fujian.<sup>467</sup>

- In recent years, this brigade has worked to integrate itself into the Theater Command joint operations and command structure, conducting integration training and improving its joint command, strike, and support chains.<sup>484</sup>
- This brigade may have provided some of personnel for the DF-17 column at the 2019 National Day Parade. An article describes the column as coming in part from the PLARF's 1st Conventional Missile Brigade.<sup>485</sup> The fact that it is equipped with the relatively old DF-15 makes it a good candidate for conversion to the DF-17, but this remains to be confirmed.
- The "Heroic Martyr" Chen Degui [陈大桂], who died in the 2008 Sichuan earthquake and is now held up as a kind of PLARF Lei Feng figure, came from this unit, and his sister is currently in this unit.<sup>486</sup>

## 614 Brigade [614 旅]

The 614 Brigade, garrisoned in the southeast Chinese city of Yong'an, was officially established in 1997<sup>495</sup> as the first brigade equipped with the DF-11 SRBM. It has since upgraded to the improved DF-11A variant. In August 2018, this brigade likely began conversion to the DF-17 hypersonic MRBM.<sup>487</sup>

**MUCD:** 96714                      **Former MUCD/TUD:** 96167 (817<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 61

**Location:** 400 Kangyuan Village, Dahu Town, Yong'an, Fujian [福建省永安市大湖镇坑源村 400 号]<sup>488</sup>

**Geo:** 26.060300, 117.315026<sup>489</sup>

## Capabilities

**Missile:** DF-17 MRBM<sup>490</sup>                      **Missile Type:** Conventional

## Leadership

**Commander:** Unknown                      **PC:** Zhang Lixin [章礼信] (3/20)<sup>491</sup>

**Dep Commanders:** Lü Ercan [吕尔参] (12/19)<sup>492</sup>; Wang Zhiqiang [王志强] (4/17)<sup>493</sup>

**Dep PC:** Huang Jinbin [黄金斌] (2/19)<sup>494</sup>

**Chief of Staff:** Yu Yangyang [于洋洋] (4/20)<sup>495</sup>

**PWDD:** Gao Xiangguo [高相国] (12/19)<sup>496</sup>

**Support Dept Director:** Wu Haicheng [吴海诚] (12/17)<sup>497</sup>

**Former Leadership:** Zhang He [张赫], Commander (2018)<sup>498</sup> Lu Yanxian [陆艳先], PC (2017)<sup>492</sup>; Yang Xiaoming [杨小明], COS (2018)<sup>499</sup>

### **Composition (presumed)**

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Known as the “Missile Launch Vanguard Battalion” [导弹发射先锋营] since 2005<sup>500</sup> and is a showpiece battalion, appearing frequently in propaganda and the media
  - This battalion fired the brigade's 100th missile<sup>496</sup>
  - Commander: Pan Shaoming [潘少明] (12/19)<sup>496</sup>
  - Political Instructor: Yan Shouxiang [颜寿祥] (12/20)<sup>112</sup> replacing Le Yanhui [乐焰辉] (12/19)<sup>492</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]<sup>495</sup>
- Technical Battalion [技术营]

### **615 Brigade [615 旅]**

The 615 Brigade, located in the southeast Chinese city of Meizhou, was likely established in the early 2000s as the second brigade equipped with the DF-11 SRBM. It has since upgraded to an improved DF-11 variant.

**MUCD:** 96715

**Former MUCD/TUD:** 96169 (818<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 61

**Location:** Nankou Town, Meixian District, Meizhou, Guangdong 514783 [广东省梅州市梅县区南口镇]<sup>501 502 503</sup>

**Geo:** 24.281964, 115.970875<sup>504</sup>



## Secondary Garrisons:

This brigade is spread out across 10 locations in southeast China.<sup>505</sup> Known garrisons include:

- Fu'an, Fujian [福建省福安市]<sup>506</sup>
- Huliao Town, Meizhou, Guangdong [广东省梅州是湖寮镇]<sup>507</sup>
- Fenglang Town, Meizhou, Guangdong [广东省梅州市枫朗镇]<sup>507</sup>
- Chayang, Meizhou, Guangdong [广东省梅州市茶阳]<sup>507</sup>
  - Communications Station
- Pingyuan County, Meizhou, Guangdong [广东省梅州市平远县]<sup>508 509</sup>
  - Hosts at least two subunits [分队], the 78<sup>th</sup> and 90<sup>th</sup>

## Capabilities

**Missile:** DF-11A<sup>510</sup>, and/or DF-11AZT SRBM

**Missile Type:** Conventional

## Leadership

**Commander:** Zhou Liming [周黎明] (12/18)<sup>511</sup>    **PC:** Liu Renxi [刘仁喜] (7/18)<sup>512</sup>

**Dep Commanders:** Wu Zhiyun [吴志云] (4/19)<sup>513</sup>    **Dep PC:** Long Keyu [龙柯宇] (2/19)<sup>514</sup>

**Chief of Staff:** Zhang Fengwen [张奉文] (4/20)<sup>510</sup>    **PWDD:** Kang Changyi<sup>xxxii</sup> [康长意] (4/18)<sup>515</sup>

**Support Dept Director:** Li Yu [李禹] (3/18)<sup>516</sup>

**Other Senior Leadership:** He Songbiao [何松彪], Pol Work Dept Dep Director (4/17)<sup>517</sup>

**Former Leadership:** Shi Hongyan [石鸿雁], Commander (2016)<sup>518</sup>; Li Yanhai [李延海], COS (2018)<sup>519</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]

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<sup>xxxii</sup>Alternative possible spelling of name: Kang Zhangyi

- Commander: Chen Xiaojian [陈晓剑] (7/18)<sup>520</sup>
- 5<sup>th</sup> Launch Battalion [发射五营]
  - Commander: Guo Haitao [郭海涛] (5/18)<sup>521</sup>
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]<sup>522</sup>
- Operations Support Battalion [作战保障营]<sup>505</sup>
  - Surveying Team [测地队]
- Comprehensive Support Battalion [综合保障营]
  - Service Company [勤务连]<sup>523</sup>
- 1<sup>st</sup> Technical Battalion [技术一营]
  - Testing Company [测试连]<sup>523</sup>
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>524</sup>

## Background

- In 2015, this brigade joined the 614 Brigade as a "100 Launches, 100 Hits" brigade [百发百中旅]<sup>505</sup>

## 616 Brigade [616 旅]

The 616 Brigade, garrisoned in the southeast Chinese city of Ganzhou, is believed to be equipped with the A, B, and/or C variants of the DF-15 SRBM. It may soon upgrade to an new system.

**MUCD:** 96716                      **Former MUCD/TUD:** 96162 (819<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>525</sup>    **Parent Unit:** Base 61

**Location:** 171 Kejia Rd., Zhanggong District, Ganzhou, Jiangxi [江西省赣州市章贡区客家大道 171 号]<sup>526</sup>

**Geo:** 25.833469, 114.909842<sup>527</sup>

## Secondary Garrisons:

- Zhanggong District, Ganzhou, Jiangxi [江西省赣州市章贡区]
  - This appears to be the primary site of the brigade's garages, hosting most of its vehicles and missiles (25.781788, 114.880652)<sup>xxxiii</sup>
- Ruijin City, Jiangxi [江西省瑞金市]<sup>528</sup>

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<sup>xxxiii</sup>Credit to Hans Kristensen of FAS for first pointing out this location.

- Jiangkou Town, Nankang, Ganzhou, Jiangxi [江西省赣州市南康市江口镇]<sup>529</sup>
  - 91<sup>st</sup> Subunit [91 分队]

## Capabilities

**Missile:** DF-15 A/B/C SRBM<sup>530 531 532 533</sup>; likely imminent upgrade to new system

**Missile Type:** Conventional

## Leadership

**Commander:** Chen Zaiwang [陈在望] (6/18)<sup>534</sup>      **PC:** Wei Zhongtao [魏忠涛] (9/18)<sup>535</sup>

**Dep Commanders:** Ding Guanghan [丁光寒] (10/18)<sup>536</sup>; Lei Kangsheng<sup>xxxiv</sup> [雷康盛] (3/18)<sup>537</sup>

**Dep PC:** Wang Yuyang [汪于阳] (12/20)<sup>538</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Zhang Hongjun [张红军] (2/19)<sup>539</sup>

**Other Senior Leadership:** Dai Xiaoyun [戴小云], Dep COS (1/20)<sup>540</sup>; Pei Weiliang [裴维良], Pol Work Dept Dep Director (9/18)<sup>541</sup>

**Former Leadership:** Fang Jian [方健], PC (2017)<sup>542</sup>; Yu Junshan [于军善], Pol Dept Director (2017)<sup>543</sup>; Wei Chunhai [魏纯海], Dep COS (2018)<sup>544</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Political Instructor: Wang Fei [王飞] (9/18)<sup>535</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - Political Instructor: Wu Gang [吴岗] (10/18)<sup>536</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
  - Commander: Pan Weizheng [潘威正] (4/18)<sup>545</sup>
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]

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<sup>xxxiv</sup> Alternative possible spelling of name: Lei Kangcheng

- Communications Battalion [通信营]<sup>543</sup>
- Operations Support Battalion [作战保障营]<sup>546</sup>
- Comprehensive Support Battalion [综合保障营]<sup>547</sup>
- 1<sup>st</sup> Technical Battalion [技术营]
  - Commander: Ma Junming [马军明] (7/18)<sup>548</sup>
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>549</sup>

## Background

- This brigade likely took part in the August 2022 military exercises aimed at Taiwan following US House Speaker Nancy Pelosi's visit. This is based upon proximity to the launch area combined with images of DF-15s participating in the exercises.<sup>550</sup>

## 617 Brigade [617 旅]

The 617 Brigade, garrisoned in the eastern Chinese city of Jinhua, was the second brigade equipped with the DF-16 SRBM.

**MUCD:** 96717                      **Former MUCD/TUD:** 96164 (820<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 61

**Location:** 142 Beishan Rd., Jinhua, Zhejiang [浙江省金华市北山路 142 号]<sup>551</sup>

**Geo:** 29.150413, 119.615473<sup>552</sup>

### Secondary Garrison:

- Jinhua, Zhejiang 321021 [浙江省金华市]<sup>553</sup>
  - The 58<sup>th</sup> Subunit [58 分队] is garrisoned at this location

## Capabilities

**Missile:** DF-16A SRBM<sup>554 555</sup>

**Missile Type:** Conventional

## Leadership

**Commander:** Xia Zhengxin [夏正新] (4/20)<sup>555</sup>      **PC:** Cao Yaosheng [曹耀生] (1/20)<sup>556</sup>

**Dep Commanders:** Liu Peng [刘鹏] (1/20)<sup>556</sup>; Li Wencan [李文灿] (1/20)<sup>557</sup>; Huang Chuangao [黄传高] (9/17)<sup>558</sup>

**Dep PC:** Zhou Zhengchun [周政春] (1/20)<sup>559</sup>

**Chief of Staff:** Jiang Haitao [江海涛] (1/20)<sup>556</sup>      **PWDD:** Zhang Zhibin [张志彬] (1/20)<sup>556</sup>

**Support Dept Director:** Wang Junhui [王俊辉] (1/20)<sup>556</sup>

**Other Senior Leadership:** Hu Guihe [胡桂和], Pol Work Dept Dep Director (1/20)<sup>560</sup>; Chen Feng [陈峰], Support Dept Dep Director (12/19)<sup>561</sup>

**Former Leadership:** Xu Dongfeng [徐东峰], Commander (2018)<sup>562</sup>; Chen Tao [陈韬], Dep Commander (2017)<sup>563</sup>; Dai Haijun [代海军], Pol Work Dept Dep Director (2018)<sup>564</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
  - 3<sup>rd</sup> Communications Company [通信三连]<sup>565</sup>
- Operations Support Battalion [作战保障营]<sup>415</sup>
  - Security and Camouflage Company [警卫伪装连]<sup>566</sup>
  - Fire Computation Station [火力计算站]<sup>415</sup>
    - In recent years was reduced from a battalion leader to a company leader grade organization
    - Commander: Hong Rongjun [洪溶骏] (1/20)<sup>415</sup>
    - Political Instructor: Zhang Jian [张建] (1/20)<sup>415</sup>
- Comprehensive Support Battalion [综合保障营]<sup>567</sup>
- Technical Battalion [技术营]

### Background

- This brigade fired 45 missiles from 2010 to 2019.<sup>415</sup>

## 618 Brigade [618 旅]

The earliest public evidence of an eighth Base 61 brigade came in early 2020.<sup>568</sup> Additional evidence appeared in August 2022.<sup>569</sup> Little is known about this brigade as of writing.

**MUCD:** 96718

**Former MUCD:** N/A

**Grade:** Division Deputy Leader

**Parent Unit:** Base 61

**Location:** Nanchang County, Jiangxi Province [江西省南昌县]<sup>569</sup>

**Geo:** Unconfirmed, possibly 28.500373, 115.925359<sup>xxxv</sup>

### Leadership

**Commander:** Sun Guojian [孙国建] (8/22)<sup>570</sup>

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Han Fengyun [韩丰云] (8/22)<sup>570</sup>

**Support Dept Director:** Unknown

**Other Leadership:** Pan Yuechun [潘月春] (8/22), Huang Xiaorong [黄小荣] (8/22), Liu Bin [刘斌] (8/22) – all in unidentified senior leadership positions<sup>570</sup>

## Base 61 Training Regiment [61 基地训练团]

The Base 61 Training Regiment was established in March 1968, when the base combined personnel from a Special Service Battalion [特务营] and a former Training Squadron [训练中队], which was upgraded to a Training Group [训练大队] the next year.<sup>571</sup> It is responsible for 3-month basic training of base personnel,<sup>572</sup> as well as more advanced specialist training<sup>573</sup> of midlevel and above NCOs and missile and site management personnel.<sup>574</sup>

**MUCD:** 96811

**Former MUCD:** 96171

**Grade:** Regiment Leader

**Parent Unit:** Base 61

**Location:** Jiangshan, Quzhou, Zhejiang [浙江省衢州市江山市]<sup>575</sup>

**Geo:** 28.670492, 118.512447<sup>576</sup>

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<sup>xxxv</sup> The lefthand facility is or was a PLARF ECM Regiment under Base 67.

## Leadership

**Commander:** Li Weiran [李魏然] (12/19)<sup>577</sup>      **PC:** Zhao Wei [赵伟] (4/20)<sup>578</sup>

**Dep Commanders:** Huang Jin [黄晋] (8/18)<sup>571</sup>      **Dep PC:** Unknown

**Chief of Staff:** Dai Chong [戴冲] (5/18)<sup>579</sup>      **PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Yang Luansui [杨峦虽], Pol Work Dept Dep Director (8/18)<sup>571</sup>; Zhang Weilin [张伟林], Snr Engineer (8/18)<sup>571</sup>

**Former Leadership:** Xia Zhengxin [夏正新], Commander (2018)<sup>580</sup>; Yin Jinbao [殷进保], Commander (2015)<sup>581</sup>; Zhu Zhangping [朱章平], PC (2019)<sup>582</sup>; Zhang Lixin [章礼信], PC (2017)<sup>583</sup>; Chu Yijiang [储一江], PWDD (2018)<sup>571</sup>; Wang Yuyang [汪于阳], PWDD (2017)<sup>584</sup>

## Composition (presumed)

- Unknown number of subordinate training battalions
- Blue Team OPFOR<sup>xxxvi</sup> [蓝军分队]
  - Commander: Luo Tingrong [骆庭荣] (8/17)<sup>585</sup>

## Background

- New personnel arrive in September and graduate at the end of December. In December 2019, over 3,000 new personnel completed their basic training before being assigned to base units.<sup>572 586</sup>
- In May 2017, over 400 students [学兵] finished 4 months of specialist training.<sup>573</sup>
- In 2016, the regiment changed its method of basic training from only teaching basic military skills and physical training to incorporating more advanced missile operator skills from the start. Previously, personnel would only begin to learn these skills after being assigned to their operational units, but this was burdensome for the units, who had to both train up these personnel while simultaneously maintaining the skills of their veteran personnel. The base thus began incorporating operations skills into basic training.<sup>587</sup>

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<sup>xxxvi</sup>Unlike most countries, in which the Red Team plays the role of aggressor, as good Marxist-Leninists the PLA designates the Blue Team for this role, while the Red Team is the home force.

## Base 61 Communications Regiment [61 基地通信团]

This regiment is responsible for Base 61 communications.

**MUCD:** 96812

**Former MUCD:** 96175

**Grade:** Regiment Leader

**Parent Unit:** Base 61

**Location:** Shangqiayang Village, Tunxi District, Huangshan, Anhui 245041 [安徽省黄山市屯溪区上洽阳村]<sup>588 589</sup>

**Geo:** 29.690840, 118.313738<sup>590 591</sup>

### Secondary Garrisons:

This regiment has elements garrisoned in the following locations:

- Qimen County, Huangshan, Anhui 245611 [安徽省祁门县]<sup>592</sup>
- Xinjie Village, Yangxi Town, Meilie District, Sanming, Fujian [福建省三明市梅列区洋溪镇新街村]<sup>593</sup>
  - The 66<sup>th</sup> Subunit [66 分队] is garrisoned in this village
- Sanyuan Jingdong, Sanming, Fujian [福建省三明市三元荆东]<sup>594</sup>
  - Elements of the 64<sup>th</sup> Subunit [64 分队] garrisoned here
- Chaohu, Anhui [安徽省巢湖市]<sup>595</sup>
- Huizhou District, Huangshan, Anhui [安徽省黄山市徽州区]<sup>596</sup>
  - The 56<sup>th</sup> Subunit [56 分队] is garrisoned in this district

### Leadership

**Commander:** Gu Xingguo [顾兴国] (7/19)<sup>597</sup>

**PC:** Yu Junshan [于军善] (7/19)<sup>598</sup>

**Dep Commanders:** Unknown

**Dep PC:** Feng Liang (凤亮) (5/20)<sup>599</sup>

**Chief of Staff:** Unknown

**PWDD:** Chen Shaotian [陈少田] (4/18)<sup>600</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Chen Qiang [陈强], PWD Dep Director (10/19)<sup>601</sup>

**Former Leadership:** Long Wenjiang [龙文江], PC (2016)<sup>602</sup>; Liu Bin [刘斌], COS (2019)<sup>603</sup>; Yin Chong [尹冲], COS (2018)<sup>604</sup>; Gu Dunyong<sup>xxxvii</sup> [顾敦勇], COS (2017)<sup>605</sup>

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<sup>xxxvii</sup> Alternative possible spelling of name: Gu Duiyong



### Composition (presumed)

- 1<sup>st</sup> Communications Battalion [通信一营]
- 2<sup>nd</sup> Communications Battalion [通信二营]
- 3<sup>rd</sup> Communications Battalion [通信三营]

### Base 61 Operations Support Regiment [61 基地作战保障团]

The Base 61 Operations Support Regiment, established in 2012,<sup>606</sup> is responsible for engineering, meteorology, survey and mapping, NBC defense, and security. Uniquely among base Operations Support Regiments, it also controls a satellite navigation and positioning station [卫星导航定位站] responsible for missile launch support,<sup>607</sup> providing precision guidance, navigation, surveying, and geodesic support.<sup>606</sup>

**MUCD:** 96813

**Former MUCD:** 96177

**Grade:** Regiment Leader

**Parent Unit:** Base 61

**Location:** Xiuning County, Huangshan, Anhui [安徽省黄山市休宁县]<sup>608 609</sup>

**Geo:** Unknown

### Leadership

**Commander:** Bao Xueqing [鲍学庆] (4/20)<sup>610</sup>      **PC:** Tong Feng [童锋] (8/19)<sup>611</sup>

**Dep Commanders:** Dai Yi [戴毅] (12/19)<sup>612</sup>; Li Gang [李刚] (4/18)<sup>613</sup>

**Dep PC:** Wu Yongsheng [吴永生] (1/17)<sup>614</sup>

**Chief of Staff:** Liao Zengwei [廖增为] (4/18)<sup>613</sup>      **PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Cheng Jun [程俊], Pol Work Div Dep Director (4/18)<sup>613</sup>; Wang Cunjun [王存军], Snr Engineer (8/19)<sup>615</sup>; Li Shengyu [李胜玉], Snr Engineer (meteorology specialist) (6/18)<sup>616</sup>

**Former Leadership:** Xu Lin [徐琳], PC (2018)<sup>617</sup>

### Composition (presumed)

- Security and Chemical Defense Battalion [警卫防化营]
  - Security Company [警卫连]<sup>618</sup>
  - 1st Chemical Defense Company [防化一连]
  - 2nd Chemical Defense Company [防化二连]
- Meteorology Station (Battalion Leader Grade) [气象台]
- Surveying Team (Battalion Leader Grade) [测地队]
  - 1st Squadron [一中队]
  - 2nd Squadron [二中队]
- Engineering Company [工兵连]
  - Founded prior to 1949 as an Engineering and Construction Battalion [工程建筑营]
  - Responsible for base engineering projects, including missile launch sites.<sup>619</sup>
- Satellite Navigation and Positioning Station [卫星导航定位站]
  - Commander: Sun Jinhai [孙锦海] (8/17)<sup>607</sup>
  - Political Instructor: He Jianghai [何江海] (2/17)<sup>606</sup>
  - In 2012, this unit took over a battalion leader grade missile ground navigation subunit [导弹地面导航分队], which was transferred from the Survey and Mapping Group (96633) in Beijing to its current location in Anhui,<sup>606</sup> and was redesignated as a satellite navigation and positioning station [卫星导航定位站]<sup>607</sup> The station is described as the PLARF's only strategic missile ground precision guidance pioneer [战略导弹地面精导先锋],<sup>606</sup> and it specializes in satellite networks, communications,<sup>620</sup> navigation, surveying, geodesy, precision guidance support,<sup>606</sup> and missile launch support.<sup>607</sup>
  - Between 2012 and 2017, the station supported the launch of over 100 missiles of multiple types.<sup>606</sup>
  - The station has agreements with both CASIC and the PLARF Research Academy.<sup>606</sup>

### Base 61 Comprehensive Support Regiment [61 基地综合保障团]

The Base 61 Comprehensive Support Regiment was formed around mid-2017<sup>621</sup> by combining the Base 61 Repair Factory (96174) with its former Missile Component Depot [导弹器材仓库] (96176).<sup>622</sup> It is thus likely responsible for repair and maintenance of Base 61 equipment, as well as storage and delivery<sup>623</sup> of the Base's conventional missiles. This makes this unit unique among the PLARF's comprehensive support regiments by not incorporating the base Technical Service Regiment, which remains a distinct unit.

MUCD: 96814

Former MUCD: 96174, 96176

**Grade:** Regiment Leader

**Parent Unit:** Base 61

**Location:** Banbantou Village, Luoqiao Subdistrict, Shangrao, Jiangxi [江西省上饶市罗桥街道办坂头村]<sup>624 625 626</sup>

**Geo:** 28.464143, 117.884617<sup>627</sup>

### **Secondary Garrisons:**

The regiment has elements garrisoned in the following locations:

- Haiyang Town, Xiuning County, Huangshan, Anhui [安徽省黄山市休宁县海阳镇]<sup>628 629</sup>
- Tunxi District, Huangshan, Anhui 245041 [安徽省黄山市屯溪区]<sup>630</sup>
- Xinling Village, Qimen County, Huangshan, Anhui [安徽省祁门县新岭村]<sup>631</sup>
- Dahu Township, Yong'an, Fujian [福建省永安市大湖镇]<sup>632</sup>
  - May provide support to nearby 614 Brigade
- Jinhua, Zhejiang [浙江省金华市]<sup>633</sup>
  - May provide support to nearby 617 Brigade

### **Leadership**

**Commander:** Li Sheng [李胜] (6/19)<sup>634</sup>

**PC:** Zheng Jinghua [郑经华] (6/19)<sup>634</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Ma Lei [马雷] (5/18)<sup>627</sup>

**Support Div Director:** Liu Jiceng [刘纪层] (1/20)<sup>635</sup>

**Former Leadership:** Chao Yanming [晁彦明], Commander (2016)<sup>636</sup>; Wei Xingjie [卫星杰], PC (2018)<sup>627</sup>

### **Composition**

Unclear – insufficient data to conceptualize an accurate Order of Battle for this regiment. Based upon its component parts, it would presumably include repair assets and missile depots spread across multiple locations.

## Base 61 Technical Service Brigade [61 基地技术勤务旅]

The Base 61 Technical Service Brigade began as a rail transport station [铁运站], before being upgraded to a regiment, and around 2018, to a brigade. It is primarily responsible for missile testing and transport, via both road and rail, to base missile brigades.<sup>637</sup>

**MUCD:** 96815

**Former MUCD:** 96172

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 61

**Location:** Lalishan Rd., Huangnitou Village, Zhushan District, Jingdezhen, Jiangxi [江西省景德镇市珠山区黄泥头村腊丽山路]<sup>xxxviii 638 639</sup>

**Geo:** 29.314819, 117.271923<sup>640</sup>

### Secondary Garrison:

- Tafang Township, Qimen County, Anhui [安徽省祁门县塔坊乡]<sup>641</sup>
- Yushan County, Shangrao, Jiangxi [江西省上饶市玉山县]<sup>642 643</sup> (28.657294, 118.288776)
  - Rail yard used for missile and equipment transport
  - Rail Escort Battalion garrisoned at this location

### Leadership

**Commander:** Wu Xudong [吴旭东] (5/19)<sup>644</sup>

**PC:** Hu Huaiyu [胡怀宇] (5/19)<sup>645</sup>

**Dep Commanders:** Lin Wei [林伟] (4/19)<sup>646</sup>

**Dep PC:** Rao Lei [饶磊] (4/19)<sup>646</sup>

**Chief of Staff:** Wei Shijie [魏世杰] (4/19)<sup>646</sup>

**PWDD:** Unknown

**Support Dept Director:** Unknown

### Known Composition

- Road Transport Battalion [公路运输营]
  - Commander: Zhuo Mei [卓敏] (6/19)<sup>644</sup>
  - Political Instructor: Ai Jie [艾杰] (6/19)<sup>644</sup>
  - Established around 2005<sup>644</sup>

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<sup>xxxviii</sup> Located next door to Base 61 Equipment Inspection Regiment

- Capable of transporting missiles under battlefield conditions, dealing with enemy attacks, utilizing camouflage, and navigating degraded or destroyed infrastructure to ensure missiles are delivered to operations units<sup>644</sup>
- The success of this battalion is described as the key to being able to complete missile launches in a future war<sup>644</sup>
- Integrated into the Eastern Theater Command joint combat and joint training systems, and is able to cooperatively deliver missiles over a long range and to multiple locations<sup>644</sup>
- In addition to this mission, this battalion is also responsible for training Base 61 special vehicle drivers, and from 2005 through 2015 it has trained over 200 Red Flag drivers [红旗驾驶员]<sup>647</sup>
- Rail Escort Battalion [铁路押运营]<sup>648</sup>
  - Formed as early as 1966<sup>649</sup> and based in Yushan County, Shangrao
  - Missile escort soldiers [导弹押运兵] can spend three or more weeks continuously aboard a train transporting missiles and other equipment<sup>650</sup>
- 1<sup>st</sup> Technical Battalion [技术一营]<sup>637 651</sup>
  - 1<sup>st</sup> Testing Company [第一测试连]<sup>637</sup>
    - Responsible for missile testing
  - 2<sup>nd</sup> Testing Company? [第二测试连]
    - Implied due to existence of “First” Testing Company
  - Beginning in March 2018, these battalions began sending testing specialists to first-line units to learn launch operations. This was somewhat controversial, as some believed that limited launch opportunities should be reserved for training launch specialists, but was deemed necessary to allow testing specialists to better understand the missiles.<sup>637</sup>
- 2<sup>nd</sup> Technical Battalion? [技术二营]
  - Implied based on existence of “First” Battalion

## **Base 61 Equipment Inspection Regiment [61 基地装检团]**

The Base 61 Equipment Inspection Regiment is responsible for storage, management, and transport of the Base’s nuclear warheads.

**MUCD:** 96031

**Former MUCD/TUD:** 96173 (906 Regiment<sup>652</sup>)

**Grade:** Regiment Leader

**Parent Unit:** Base 61

**Location:** 398 Lalishan Road, Zhushan District, Jingdezhen, Jiangxi [江西省景德镇市珠山区腊里山路 398 号]<sup>653 654 655</sup>

**Geo:** 29.316406, 117.268020<sup>656 657</sup>

**Secondary Garrison:** Xinshi District, Urumqi, Xinjiang 830031 [新疆维吾尔自治区乌鲁木齐市新市区]<sup>658</sup>

## Leadership

**Commander:** Unknown

**PC:** Zhang Wusong [张武松] (9/18)<sup>657 659</sup>

**Dep Commanders:** Ji Kehua [季克华] (9/16)<sup>660</sup>

**Dep PC:** Wang Huishi [汪会师] (6/19)<sup>661</sup>

**Chief of Staff:** Wang Wei [汪伟] (3/19)<sup>662</sup>

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Ren Yang [任洋], Commander (2020)<sup>663</sup>; Liu Xiyang [刘西洋], Commander (2018); Zhang Yincheng [张银昌], PC (2017)<sup>664</sup>; Han Fengyun [韩丰云], PWDD Director (2019)<sup>666</sup>

## Composition (presumed)

- 1st Equipment Inspection Station [装检一站]
- 2nd Equipment Inspection Station [装检二站]<sup>662</sup>
- 3rd Equipment Inspection Station [装检三站]
- Technical Service Battalion [技术勤务营]
- Comprehensive Support Battalion [综合保障营]
- Transport Company [转运连]
- Security and Communications Company [警卫通信连]

## Base 61 UAV Regiment [61 基地无人机团]

Base 61 appears to command a UAV regiment garrisoned in the eastern Chinese city of Dongyang. Relatively little information exists about this unit in open sources, but its location means it is likely to be responsible for tactical reconnaissance, targeting, and damage assessment for Base 61's missile brigades, primarily over Taiwan.<sup>xi xxxix</sup>

**MUCD:** 96816

**Former MUCD:** 96626

**Grade:** Regiment Leader

**Parent Unit:** Base 61

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<sup>xxxix</sup> See: Elsa Kania, "The PLA's Unmanned Aerial Systems: New Capabilities for a 'New Era' of Chinese Military Power", *China Aerospace Studies Institute*, 2018, 22

**Location:** 70 Dongsheng Road, Chengdong Subdistrict, Dongyang, Jinhua, Zhejiang 32210 [浙江省金华市东阳市城东街道东嵎路 70 号]<sup>665 666</sup>

**Geo:** Unconfirmed, possibly 29.270912, 120.351142

**Secondary Garrison:**

- Chongming District, Shanghai [上海市崇明区] (31.547075, 121.934821)
  - 60<sup>th</sup> Subunit [60 分队]<sup>xl</sup>

**Leadership**

**Commander:** Liu Guoxiang [刘国祥] (1/19)<sup>667</sup>      **PC:** Xu Fenglong [许凤龙] (1/20)<sup>668</sup>

**Dep Commanders:** Liu Qi<sup>xli</sup> [刘奇] (11/16)<sup>669</sup>      **Dep PC:** Unknown

**Chief of Staff:** Unknown      **PWDD:** Chen Fugang [陈付刚] (1/17)<sup>670</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Han Yong [韩勇], Support Div Dep Director (1/17)<sup>670</sup>

**Known Composition**

- 1<sup>st</sup> Battalion [一营]
  - Commander: Lü Linglei [吕令磊] (11/16)<sup>669</sup>
- 2<sup>nd</sup> Battalion [二营]
  - Commander: Wang Xin [王鑫] (9/16)<sup>671</sup>

**Background**

- This regiment was formerly located in Hui'an, Fujian,<sup>670</sup> near the Taiwan Strait. It is unclear if this regiment is still active at that location, but the PLARF's other UAV unit is currently garrisoned at that location.
- The 46<sup>th</sup>, 49<sup>th</sup>, and 52<sup>nd</sup> Subunits [分队] under this regiment are said to have an unidentified "special" position within the PLARF.<sup>668</sup>
- Google satellite imagery appears to show unidentified ASN-series UAVs at this location.

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<sup>xl</sup> See: CASI (@CASI\_Research), *Twitter*, 7 August 2020 5:05PM. [https://twitter.com/CASI\\_Research/status/1291843044434739207](https://twitter.com/CASI_Research/status/1291843044434739207).

<sup>xli</sup> Alternative possible spelling of name: Liu Ji

## Unit 96601 Hospital [96601 部队医院]

The Unit 96601 Hospital is the official hospital attached to Base 61. Like the other base hospitals, it commands field medical teams tasked with providing medical support to Base 61 units in wartime.<sup>672</sup>

**MUCD:** N/A

**Former TUD:** 532 Hospital [532 医院]

**Grade:** Division Leader<sup>673</sup>

**Parent Unit:** Base 61

**Location:** 63 Xin'an South Rd., Tunxi District, Huangshan, Anhui [安徽省黄山市屯溪区新安南路 63 号]<sup>674</sup>

**Geo:** 29.693002, 118.297152

### Leadership

**Director:** Wang Guiyao [王桂尧] (3/18)<sup>675</sup> **PC:** Liu Xiaozheng [刘小正] (7/19)<sup>676</sup>

**Dep Director:** Hong Qiang [洪强] (7/18)<sup>677</sup>

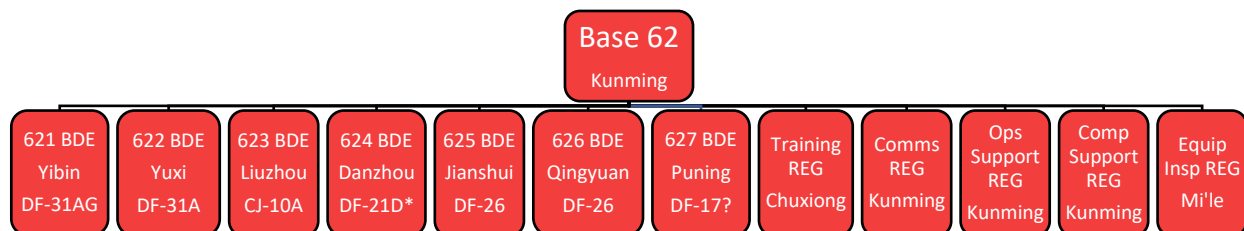
**Former Leadership:** Zhan Guoqing [詹国清], Director (2015)<sup>673</sup>; Liu Chuanyuan [刘传远], Director (2013)<sup>678</sup>; Liao Yongjun [廖永军], PC (2017)<sup>679</sup>; Hua Guosheng [华国生], PC (2014)<sup>680</sup>

### Background

- In September 2013, this hospital held a large-scale mobile medical support drill lasting around 15 days. Hospital field medical teams worked in complex and mobile conditions in support of combat operations. Training subjects included NBC defense and battlefield medicine.<sup>672</sup>



## Base 62 [62 基地]



Base 62, established in 1966<sup>681</sup> and headquartered in the southern Chinese city of Kunming, is an operations base covering much of southern and lower southeastern China and bordering both Southeast Asia and the South China Sea. It commands two road-mobile ICBM brigades, two dual nuclear-conventional IRBM brigades, one LACM brigade, one ASBM brigade, and likely the PLARF's first hypersonic MRBM brigade.

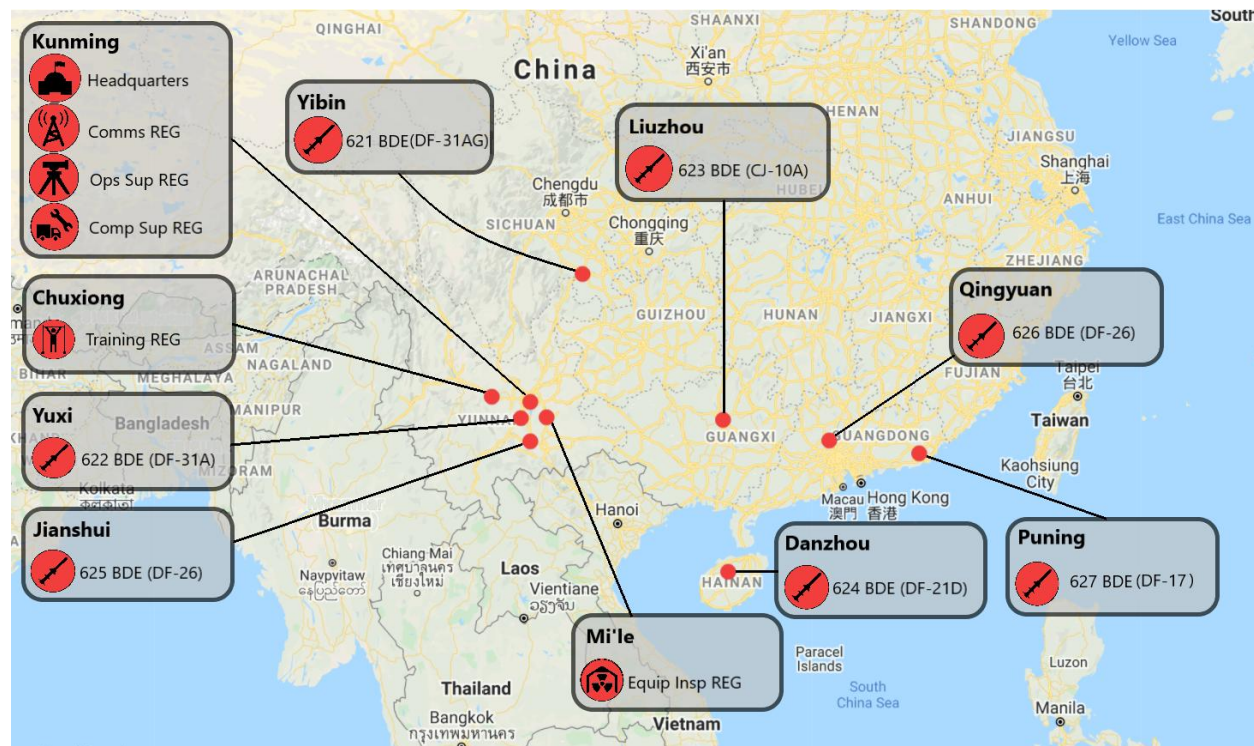
**MUCD:** 96602

**Former MUCD/TUD:** 96201 (Base 53)

**Grade:** Corps Deputy Leader<sup>682</sup>

**Location:** Gongjia Village, Guandu District Economic Development Zone, Kunming, Yunnan [云南省昆明市官渡经开区公家村]<sup>683</sup>

**Geo:** 24.991652, 102.834622<sup>684</sup>



## Leadership

**Commander:** Unknown

**PC:** Zhang Youxiang [张有祥] (2/19)<sup>685</sup>

**Dep Commanders:** Li Zhi [李志] (8/16)<sup>686</sup>

**Dep PC:** Guan Houqing [管厚清] (8/16)<sup>686</sup>

**Chief of Staff:** Unknown

**PWDD:** Wang Maorui [王懋瑞] (2/19)<sup>687</sup>

**Support Dept Director:** Lü Kangwen [吕康文] (12/19)<sup>688</sup>

**Other Senior Leadership:** Xia Xiaoping [夏小平] (2/19)<sup>689</sup>; Li Zhaokun [李兆坤], Dep COS (5/17)<sup>687</sup>; He Liangping [何良平], Pol Work Dept Dep Director (9/17)<sup>690</sup>; Wang Zhiji [王治基], Support Dept Dep Director (6/18)<sup>691</sup>

**Former Leadership:** Qiu Nianping [仇念平], Pol Work Dept Dep Director (2018)<sup>692</sup>

## Known Composition

- 621 Brigade [621 旅]
- 622 Brigade [622 旅]
- 623 Brigade [623 旅]
- 624 Brigade [624 旅]
- 625 Brigade [625 旅]
- 626 Brigade [626 旅]
- 627 Brigade [627 旅]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Operations Support Regiment [作战保障团]
- Comprehensive Support Regiment [综合保障团]
- Equipment Inspection Regiment [装检团]
- Unit 96602 Hospital [96602 部队医院]

## Recent Developments

- Former Base Commander Xia Xiaoping [夏小平] was promoted to Base 63 Commander.

## 621 Brigade [621 旅]

The 621 Brigade is one of the PLA's most longstanding strategic missile units,<sup>693</sup> likely dating to the 1960s. It transferred from its previous headquarters in Jianshui, Yunnan<sup>694</sup> to its current location in Yibin, Sichuan between late 2016<sup>695</sup> and early 2017.<sup>696</sup> This move was accompanied by a unit reorganization into a new force structure for a new opponent,<sup>697</sup> and, it is implied, a new missile system.

**MUCD:** 96721                      **Former MUCD/TUD:** 96211 (802<sup>nd</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 62

**Location:** Shuangqiao Village, Lizhuanggu Town, Cuiping District, Yibin, Sichuan [四川省宜宾市翠屏区李庄古镇 31 号/双桥村]<sup>698 699</sup>

**Geo:** 28.760477, 104.791346<sup>700</sup>

**Secondary Garrison:** Shuangliu District, Chengdu, Sichuan 610225 [四川省成都双流区]<sup>701</sup>

### Capabilities

**Missile:** Possibly DF-31AG ICBM<sup>700</sup>

**Missile Type:** Nuclear, Road-mobile

### Leadership

**Commander:** Yi Guangguo [弋光国] (9/18)<sup>702</sup>      **PC:** Xie Fei (谢菲) (9/20)<sup>700</sup>

**Dep Commanders:** Unknown                      **Dep PC:** Unknown

**Chief of Staff:** Liu Junle [刘君乐] (8/19)<sup>703</sup>      **PWDD:** Wang Guanjun [王冠军] (12/19)<sup>704</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Yang Zhiwei [杨智炜], Commander (2017)<sup>705</sup>; Li Shujing [李书静], PC (2018)<sup>693</sup>; Deng Changcheng<sup>xlii</sup> [邓长城], COS (2017)<sup>706</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]

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<sup>xlii</sup> Alternative possible spelling of name: Deng Zhangcheng

- Commander: Wang Peng [王鹏] (6/18)<sup>697</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
  - Commander: Fang Lexin [方乐铎] (7/18)<sup>696</sup>
- Comprehensive Support Battalion [综合保障营]
- 1<sup>st</sup> Technical Battalion [技术营]<sup>707</sup>
- 2<sup>nd</sup> Technical Battalion? (技术二营)
  - Implied by existence of “First” Technical Battalion

## Background

- This brigade was previously equipped with the DF-21A MRBM.<sup>417</sup> Its recent move inland suggests conversion to a longer range system.

## 622 Brigade [622 旅]

The 622 Brigade, established around 1968<sup>708</sup> and currently stationed in the southern Chinese city of Yuxi, is now equipped with the DF-31A road-mobile ICBM.

**MUCD:** 96722                      **Former MUCD/TUD:** 96213 (808<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>709</sup>    **Parent Unit:** Base 62

**Location:** Chima Village, Daying Subdistrict, Hongta District, Yuxi, Yunnan [云南省玉溪市红塔区大营街道赤马村]<sup>710 711 712</sup>

**Geo:** 24.359784, 102.494552<sup>709</sup>

## Capabilities

**Missile:** DF-31A ICBM<sup>709 713</sup>

**Missile Type:** Nuclear; Road-mobile

## Leadership

**Commander:** Shen Yong [沈勇] (5/20)<sup>714</sup>      **PC:** Deng Zhiliang [邓志良] (5/20)<sup>709</sup>

**Dep Commander:** Yang Guangying [杨光盈] (8/19)<sup>715</sup>

**Dep PC:** Rao Liuyuan [饶留源] (9/18)<sup>716</sup>

**Chief of Staff:** Lü Qingkun [吕庆坤] (7/18)<sup>717718</sup>      **PWDD:** Cheng Xianran [程先冉] (2/18)<sup>719</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Hao Jian [郝剑], Dep COS (8/18)<sup>720</sup>

**Former Leadership:** He Feng [何锋], Commander (2018)<sup>721</sup>; Xu Baokun [许保坤], PC (2016)<sup>722</sup>; Peng Xingdou [彭星斗], Dep PC (2018)<sup>715</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - Commander: Chen Gao [陈高] (8/18)<sup>720</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]
  - 1<sup>st</sup> Testing Company [测试一连]<sup>723</sup>
  - 2<sup>nd</sup> Testing Company [测试二连]

## Background

- This brigade was previously garrisoned in Chuxiong, and moved to Yuxi at some point between 2006 and 2011.<sup>724</sup>
- NCO Wang Zhongxin [王忠心], a squad commander in the 1<sup>st</sup> Testing Company and often held up as a model NCO, was in this unit<sup>723</sup> prior to his retirement in May 2020.<sup>715</sup>

## 623 Brigade [623 旅]

The 623 Brigade, located in the southern Chinese city of Liuzhou, was established in spring 2000 as the 2nd Artillery's first cruise missile test unit,<sup>725</sup> earning it the honorific title of "1<sup>st</sup> Cruise Missile Brigade" [巡航导弹第一旅].<sup>726</sup> It received its first CJ-10 cruise missiles in September 2006,<sup>725</sup> and in 2009 the brigade took part in the CJ-10's first public exhibition at that year's National Day parade.<sup>727</sup> It began conversion to a new missile, presumably the CJ-10A, in April 2016,<sup>725</sup> and by 2017 it had completed its upgrade to the new variant.<sup>728</sup>

**MUCD:** 96723                      **Former MUCD/TUD:** 96215 (821<sup>st</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>729</sup>    **Parent Unit:** Base 62

**Location:** 27 Xinliuda Rd., Liudong New District, Yufeng District, Liuzhou, Guangxi 545616 [广西省柳州市鱼峰区柳东新区新柳大道 27 号]<sup>730 731 732</sup>

**Geo:** 24.385898, 109.572331<sup>733</sup>

### Capabilities

**Missile:** CJ-10A LACM<sup>728 733</sup>

**Missile Type:** Conventional; Cruise Missile

### Leadership

**Commander:** Wang Tao [汪涛] (10/20)<sup>734</sup>

**PC:** Tian Tao [田涛] (2/19)<sup>726</sup>

**Dep Commanders:** Jia Zilong [贾子龙] (1/19)<sup>735</sup>; Zhong Xinming [钟歆明] (2/21)<sup>736</sup>

**Dep PC:** Chen Zhiqian [陈志前] (5/19)<sup>737</sup>

**Chief of Staff:** Lou Jun [娄军] (6/18)<sup>725</sup>

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Former Leadership:** Zhang Zhenghong [张正红], Commander (2019)<sup>738</sup>; Cheng Congcai [程丛才], Commander (2014)<sup>739</sup>; Liu Changguo [柳长国], PC (2014)<sup>725</sup>; Tan Zhihua [谭智华], COS (2017)<sup>740</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Li Yue [李跃] (10/20)<sup>734</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]

- Commander: Xu Wei [许伟] (6/18)<sup>741</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
  - Commander: Luo Yinsheng [罗寅生] (PLARF model personnel)<sup>735</sup>
  - Also known as 56<sup>th</sup> Subunit [56 分队]<sup>732</sup>
  - New battalion formed in March 2017 following a reorganization that saw the previous 6th Launch Battalion and another company transferred to a new brigade<sup>725</sup> (possibly the 627 Brigade). Luo Yinsheng was awarded a citation for bringing the inexperienced battalion up to standard and successfully firing four missiles only four months after the battalion's establishment.<sup>742</sup>
  - Luo Yinsheng may have been promoted to Brigade COS by 2022.<sup>743</sup>
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## 624 Brigade [624 旅]

The 624 Brigade, stationed on the island of Hainan in the South China Sea, was established around 2006-2007.<sup>744</sup> By 2012 it was conducting testing of a new “assassin’s mace”<sup>xliii</sup> DF-21 variant<sup>739</sup><sup>745</sup>, likely a reference to the DF-21D ASBM. It transferred from its previous location in Qingyuan to its current location in Danzhou, Hainan in 2018.<sup>746</sup> Its location on Hainan suggests it would be a key anti-ship anti-access/area denial (A2/AD) unit in the event of a conflict in the South China Sea. Beginning in 2020, this brigade may have begun conversion to an unidentified new missile type, although there are as yet no indications as to what it might be.

**MUCD:** 96724                      **Former MUCD/TUD:** 96219 (828<sup>th</sup> Launch Brigade?)

**Grade:** Division Deputy Leader<sup>747</sup>    **Parent Unit:** Base 62

**Location:** Danzhou, Hainan [海南省儋州市]<sup>747</sup>

**Geo:** 19.470828, 109.457023<sup>748</sup>

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<sup>xliii</sup> “Assassin’s mace” is a general term from Chinese folklore often utilized by the PLA to loosely describe asymmetric weapons and strategies used to defeat a stronger opponent.



## Secondary Garrisons:

- The brigade has three garrisons in these three small nearby villages. The last village, Xiajiao, does not appear to exist in either Google or Baidu Maps.<sup>749</sup>
  - Shiye Village, Lingshui County, Hainan [海南省陵水县什也村]
  - Shinandan Village, Lingshui County, Hainan [海南省陵水县什南单村]
  - Xiajiao Village, Lingshui County, Hainan [海南省陵水县下脚村]
- Changjiang County, Hainan [海南省昌江县]<sup>750</sup>

## Capabilities

**Missile:** DF-21D ASBM<sup>748 751</sup>; possible conversion to new missile type by 2020<sup>752</sup>

**Missile Type:** Conventional; Anti-ship

## Leadership

**Commander:** Zhou Yongkun [周勇坤] (6/20)<sup>748</sup>      **PC:** Ma Xiaojiang [马小江] (5/20)<sup>751</sup>

**Dep Commanders:** Li Qiang [李强] (11/17)      **Dep PC:** Shan Tao [山涛] (7/18)<sup>750</sup>

**Chief of Staff:** Guo Yang [郭洋] (9/18)<sup>753</sup>

**PWDD:** Zhao Changxiong<sup>xliv</sup> [赵长雄] (8/18)<sup>754</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Wang Jianli [王建立], Dep COS (5/18)<sup>755</sup>

**Former Leadership:** Yang Zhiwei [杨智炜], Commander (2018)<sup>747</sup>; Xu Zheng [绪政], Commander (2017)<sup>756</sup>; Chen Zhihao [陈志豪], PC (2019)<sup>757</sup>; Li Shaogang [李少刚], Dep Commander (2017)<sup>758</sup>; Chen Kun [陈昆], COS (2018)<sup>759</sup>; Song Guangjun [宋光军], Logistics Dept Director (2017)<sup>756</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]

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<sup>xliv</sup> Alternative possible spelling of name: Zhao Zhangxiong



- 4<sup>th</sup> Launch Battalion [发射四营]
  - Commander: Jiang Yi [姜意] (6/18)<sup>760</sup>
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]<sup>761</sup>
- Technical Site Testing Hall [技术阵地测试大厅]<sup>760</sup>
- Three Companies under an unknown Battalion<sup>762</sup>:
  - “Rifle” Company [钢枪连]
  - “Iron Will” Company [铁血连]
  - “Fierce Eagle” Company [狼鹰连]

## Background

- This brigade is one of two known to have been equipped with the DF-21D ASBM. However beginning in 2019, both DF-21D brigades have given some indications they have since replaced the DF-21D with an unidentified new missile type. There is currently no firm evidence as to what this new missile type may be, but speculatively it could be the DF-26, perhaps an anti-ship variant, or the newest DF-21E, of which little is known. In the case of this brigade, it would make sense that any new missile would have an anti-ship capability, given this brigade’s recent move to Hainan in the South China Sea.
- This unit is integrated into the local Theater Command and JLSF joint command networks, meaning it is able to share information and data and is plugged into the Theater Command and JLSF logistics and support networks.<sup>758</sup>

## 625 Brigade [625 旅]

The 625 Brigade, located in Yunnan’s Jianshui County near the Vietnamese border, was likely established around 2015<sup>763</sup> as the first unit equipped with the DF-26 IRBM. It is described by one source as a new type of operations force centered around its new missile, with a new command system and force structure.<sup>764</sup>

**MUCD:** 96725

**Former MUCD/TUD:** 96216 (Unknown TUD)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 62

**Location:** Yang Street, Nanzhuang Town, Jianshui County, Yunnan [云南省建水县南庄镇羊街]<sup>765</sup>

**Geo:** 23.735139, 102.874978<sup>766</sup>

## Capabilities

**Missile:** DF-26 IRBM<sup>767</sup>

**Missile Type:** Dual Nuclear-Conventional; Road-mobile

## Leadership

**Commander:** Unknown

**PC:** Huang Ping [黄平] (10/17)<sup>768</sup>

**Dep Commanders:** Unknown

**Dep PC:** Dong Yuanbo [董院波] (7/16)<sup>769</sup>

**Chief of Staff:** Unknown

**PWDD:** Zhang Guangzhen [张广振] (3/17)<sup>770</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Wang Xueshan [王雪山], Dep COS (10/17)<sup>771</sup>

**Former Leadership:** Lü Kangwen [吕康文], Commander (2017)<sup>771</sup>; Feng Xiaoyong [冯晓永], PC (2016)<sup>772</sup>; Zhang Yanchang [张彦昌], Pol Work Dept Dep Director (2017)<sup>773</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - Political Instructor: Su Jie [苏杰] (1/19)<sup>768</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## 626 Brigade [626 旅]

The 626 Brigade, garrisoned in the southeast Chinese city of Qingyuan, was likely established in the early to mid-2000s<sup>774</sup> as a PLAA missile brigade<sup>775</sup> (possibly the PLAA 2<sup>nd</sup> SSM Brigade<sup>776</sup>). It was moved and reorganized three times between 2010 and 2017, beginning with its transfer from the PLAA to the 2<sup>nd</sup> Artillery's Base 55 in 2010.<sup>777</sup> In 2017 it was transferred to the new Base 62

and its current location in Qingyuan,<sup>777</sup> where it occupies the former headquarters of the 624 Brigade. This move came with a transition to a new missile type,<sup>778</sup> believed to be the DF-26 IRBM.

**MUCD:** 96726

**Former MUCD/TUD:** 96319 (825<sup>th</sup>?<sup>417</sup> or 836<sup>th</sup>?<sup>776</sup> Brigade)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 62

**Location:** Yuantan Town, Qingyuan, Guangdong [广东省清远市源潭镇]<sup>779 780</sup>

**Geo:** Unconfirmed, possibly 23.683975, 113.177136

### Capabilities

**Missile:** DF-26 IRBM<sup>781</sup>

**Missile Type:** Dual Nuclear-Conventional

### Leadership

**Commander:** Li Shaogang [李少刚] (1/20)<sup>782</sup>      **PC:** Cai Hai [蔡海] (12/20)<sup>783 xlv</sup>

**Dep Commanders:** Hu Zuzhi (胡祖治) [3/18]<sup>784</sup>; Li Xianjian [李先建] (2/17)<sup>785</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Wang Xinbao [汪新堡] (7/18)<sup>786</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Cha Xianfa [查显发], Commander (2018)<sup>787</sup>; Ma Rubing [马如兵], PC (2020)<sup>779</sup>; Chen Yonghua [陈永华], PC (2018)<sup>788</sup>; Shen Yong [沈勇], COS (2017)<sup>789</sup>; Zhong Xinming [钟歆明], Support Dept Director (2018)<sup>790</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Jia Feihu [贾飞虎] (2/18)<sup>778</sup>
  - Known as “Wild Wolf” Battalion [野狼营]<sup>777</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - Political Instructor: Zhang Loulou [张楼楼] (2/18)<sup>778</sup>

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<sup>xlvi</sup>Unconfirmed but probable

- 3<sup>rd</sup> Launch Battalion [发射三营]
  - Commander: Xiao Xuerong [肖雪荣] (2/18)<sup>778</sup>
  - Known as "Fierce Tiger" Battalion [猛虎营]<sup>777</sup>
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## Background

- Commander Li Shaogang may have been replaced by Zhou Yongkun [周勇坤] in 2022.<sup>791</sup>

## 627 Brigade [627 旅]

The 627 Brigade, located in the southeast Chinese city of Puning, was established in March 2017 as a “new type of operations force.”<sup>792</sup> It is likely the first brigade equipped with the DF-17 hypersonic glide vehicle, and appears to have achieved full combat capability.

**MUCD:** 96727

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 62

**Location:** Yinggeshan Industrial Zone, Puning, Jieyang, Guangdong [广东省揭阳市普宁市英歌山工业园区]<sup>793</sup>

**Geo:** Unconfirmed, possibly 23.411697, 116.181700

**Secondary Garrison:** Zhangzhou, Fujian [福建省漳州市]<sup>794</sup>

## Capabilities

**Missile:** DF-17 MRBM<sup>783</sup>

**Missile Type:** Conventional

## Leadership

**Commander:** Qi Kui (起奎) [12/20]<sup>795</sup>

**PC:** Xu Baokun [许保坤] (3/18)<sup>796</sup>

**Dep Commanders:** Unknown

**Dep PC:** Chen Xinjian [陈新建] (5/18)<sup>797</sup>

**Chief of Staff:** Unknown

**PWDD:** Zhao Bo [赵波] (5/18)<sup>797</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Zhou Yongkun [周勇坤], Commander (2018)<sup>798</sup>

### **Composition (presumed)**

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

### **Background**

- This brigade may have converted to the DF-17 MRBM around May 2019.<sup>799</sup>

### **Base 62 Training Regiment [62 基地训练团]**

The Base 62 Training Regiment is responsible for basic training of Base 62 enlisted personnel.<sup>800</sup>

**MUCD:** 96821

**Former MUCD/TUD:** 96221

**Grade:** Regiment Leader

**Parent Unit:** Base 62

**Location:** 399 Huancheng West Rd., Chuxiong, Yunnan [云南省楚雄市环城西路 399 号]<sup>801</sup>

- This appears to be the location of a small administrative facility. The regiment's primary training facilities have not yet been found.

**Geo:** Unconfirmed, possibly 25.038070, 101.533517

## Leadership

**Commander:** Unknown

**PC:** Wang Liang [王亮] (5/19)<sup>802</sup>

**Dep Commanders:** Unknown

**Dep PC:** Xu Xin [徐鑫] (12/19)<sup>803</sup>

**Chief of Staff:** Zhao Guoyin [赵国银] (6/18)<sup>804</sup>

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Wang Tao [汪涛], Commander (2020)<sup>805</sup>; Zhou Yongkun [周勇坤], Commander (2016)<sup>806</sup>; Ma Xiaojiang [马小江], PC (2018)<sup>800</sup>

## Composition (presumed)

- Unknown number of subordinate training battalions

## Background

- This unit annually provides training to almost 1,000 new soldiers. Training lasts around three months. One batch graduating in late March 2018 consisted of 389 personnel.<sup>800</sup> Based on this and another reports from 2020,<sup>806</sup> it appears that at least one batch begins in early January and ends in late March.<sup>806</sup> Graduated personnel are expected to possess basic operator capabilities prior to joining their first billets. They must be skilled in one billet, while having some working knowledge of 1-2 other billets.<sup>805</sup>
- Video imagery of this unit training shows personnel learning to operate the CJ-10 LACM and the DF-21C/D.<sup>805</sup> The CJ-10 and DF-21D are both deployed with Base 62 brigades.

## Base 62 Communications Regiment [62 基地通信团]

This unit is responsible for Base 62 communications. It is also responsible for the training of at least some of the base's female personnel.<sup>807</sup>

**MUCD:** 96822

**Former MUCD:** 96225

**Grade:** Regiment Leader

**Parent Unit:** Base 62

**Location:** Guandu District, Kunming, Yunnan [云南省昆明市官渡区]<sup>808</sup> (possibly co-located with Base HQ)

**Geo:** Unconfirmed, possibly 24.994327, 102.834561 (if co-located with Base HQ)

## Secondary Garrisons:

- Guilin, Guangxi [广西省桂林市]<sup>809</sup>
- Chenggong District, Kunming, Yunnan [云南省昆明市呈贡区]<sup>810</sup> (possibly 24.926633, 102.796431)
  - Elements may include the 53<sup>rd</sup> Subunit [53 分队]

## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Liu Qin [刘勤] (8/17)<sup>811</sup>

**PWDD:** Wang Yi [王毅] (9/18)<sup>812813</sup>

**Support Div Director:** Unknown

**Former Leadership:** Yang Tangzhen [杨堂珍], Acting PC (2018)<sup>814</sup>; Feng Xiaoyong [冯晓永], PC (2018)<sup>815</sup>

## Composition (presumed)

- 1<sup>st</sup> Communications Battalion [通信一营]
- 2<sup>nd</sup> Communications Battalion [通信二营]
- 3<sup>rd</sup> Communications Battalion [通信三营]

## Base 62 Operations Support Regiment [62 基地作战保障团]

As with other Operations Support Regiments, the Base 62 Operations Support Regiment was likely formed around 2012 by bringing several support specialties, including survey and mapping, meteorology, NBC defense, security, and engineering, under one roof.

**MUCD:** 96823

**Former MUCD:** 96226

**Grade:** Regiment Leader

**Parent Unit:** Base 62

**Location:** Guandu District, Kunming, Yunnan 650219 [云南省昆明市官渡区]<sup>816</sup> (co-located with Base HQ)

**Geo:** 24.995520, 102.836565<sup>817 818</sup>

## Secondary Garrison:

- Chenggong District, Kunming, Yunnan [云南省昆明市呈贡区]
  - Elements include 65<sup>th</sup> Subunit [65 分队]<sup>819</sup>
  - May be located with other Base 62 units in an as-yet unidentified facility in Chenggong District

## Leadership

**Commander:** Liu Bo [刘波] (7/18)<sup>820</sup>      **PC:** Unknown

**Dep Commanders:** Unknown      **Dep PC:** Unknown

**Chief of Staff:** Li Gang [李刚] (1/17)<sup>821</sup>      **PWDD:** Huang Zhen [黄镇] (4/18)<sup>822</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Hu Yan [胡龔], Pol Work Dept Dep Director (8/19)<sup>823</sup>

**Former Leadership:** Xiao Quan [肖权], Commander (2017)<sup>824</sup>; Ma Rubing [马如兵], PC (2018)<sup>825</sup>

## Composition (presumed)

- Security and Chemical Defense Battalion [警卫防化营]
  - Security Company [警卫连]<sup>824</sup>
  - 1st Chemical Defense Company [防化一连]<sup>826</sup>
  - 2nd Chemical Defense Company [防化二连]
- Meteorology Station (Battalion Leader Grade) [气象台]
- Surveying Team (Battalion Leader Grade) [测地队]
  - 1st Squadron [一中队]
  - 2nd Squadron [二中队]
- Engineering Company [工兵连]<sup>827</sup>

## Base 62 Comprehensive Support Regiment [62 基地综合保障团]

The Base 62 Comprehensive Support Regiment, as with the other base Comprehensive Support Regiments, was formed around 2017 by merging the former base Repair Factory, Service Regiment, and other directly subordinate support elements.<sup>828</sup> Unit responsibilities include repair of base equipment, as well as storage and transport of missiles, fuel, munitions, and other supplies.<sup>829</sup> It is also in charge of several other base logistical missions, such as food preparation



and cultural/media work.<sup>829</sup> Integrating vehicle, transport, repair, and logistical support missions into a single unit is designed to improve logistical efficiency and coordination as compared to the previous system, in which repairs, transport, and fuel all fell under separate authorities.<sup>829</sup>

**MUCD:** 96824

**Former MUCD:** 96224, 96222

**Grade:** Regiment Leader

**Parent Unit:** Base 62

**Location:** Guandu District, Kunming, Yunnan 650219 [云南省昆明市官渡区]<sup>830</sup> (co-located with base HQ)

**Geo:** 24.991981, 102.833218<sup>831 832</sup>

### **Secondary Garrison:**

- Wujiaying Village, Luoyang Subdistrict, Chenggong District, Kunming, Yunnan [云南省昆明市呈贡区洛羊街道吴家营村]<sup>833</sup>
  - Site of the former Base Service Regiment<sup>834</sup>

### **Leadership**

**Commander:** Unknown

**PC:** Hu Haibin [胡海斌] (12/19)<sup>829</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Zhou Ming [周铭] (9/18)<sup>835</sup>

**Support Div Director:** Unknown

**Former Leadership:** Qi Kui [起奎], Commander (2019)<sup>829</sup>; Cai Hai [蔡海], PC (2018)<sup>836</sup>; Wang Liang [王亮], PC (2016)<sup>837</sup>

### **Composition (presumed)**

- Vehicle Battalion [汽车营]
- Repair and Measurements Station (Battalion Leader Grade) [维修计量站]
  - Director: Xu Dapeng [许大鹏] (12/19)<sup>829</sup>
  - Political Instructor: Xu Xin [徐鑫] (12/19)<sup>829</sup>
  - This is the former Base 62 Repair Factory [修配厂 – 96224]. It was downgraded from a regiment to a battalion grade as part of the reforms that created this regiment.<sup>829</sup>
- Munitions Depot [军械仓库]
- Fuel Storage Depot [油料仓库]
- Comprehensive Depot [综合仓库]

- Rail Transport Company [铁路运输连]<sup>838</sup>
- Service Company [勤务连]
  - Responsible for all Base 62 food preparation, public services, water and electricity, and online presence, and cooperates with the base Political Work Department for base media and photography.<sup>829</sup>
- Vehicle Repair Subunit [汽车维修分队]

## Base 62 Equipment Inspection Regiment [62 基地装检团]

The Base 62 Equipment Inspection Regiment is in charge of storage, management, and transport of the base's nuclear warheads.

**MUCD:** 96032

**Former MUCD:** 96223 (903 Regiment<sup>652</sup>)

**Grade:** Regiment Leader

**Parent Unit:** Base 62

**Location:** Jishan South Rd., Miyang Town, Mi'le, Yunnan [云南省弥勒市弥阳镇吉山南路]<sup>839 840 841</sup>

**Geo:** Unconfirmed, possibly 24.399054, 103.432068

**Secondary Garrison:** Dali Village, Dongshan Town, Mi'le, Yunnan [云南省弥勒市东山镇大栗村]<sup>842</sup> (possibly 24.236944, 103.589800)

### Leadership

**Commander:** Zhang Shuxue [张树学] (10/18)<sup>839</sup> **PC:** Unknown

**Dep Commanders:** Unknown **Dep PC:** Huang Tao [黄涛] (9/18)<sup>839</sup>

**Chief of Staff:** Su Xiaobo [苏小波] (9/18)<sup>843</sup> **PWDD:** Unknown

**Support Div Director:** Chang Yuquan [常余犬] (7/18)<sup>844</sup>

**Other Senior Leadership:** Xie Fei [谢菲], PC (2018)<sup>845</sup>; Chen Meng [陈梦], U/I Dep Div Director (9/18)<sup>838</sup>

### Composition (presumed)

- 1st Equipment Inspection Station [装检一站]
- 2nd Equipment Inspection Station [装检二站]
- 3rd Equipment Inspection Station [装检三站]
- Technical Service Battalion [技术勤务营]

- Comprehensive Support Battalion [综合保障营]
- Transport Company [转运连]
- Security and Communications Company [警卫通信连]

## Background

- Around 2017 this unit underwent a restructuring and change of mission, expanding from "assembly and inspection" [装配检验] to "equipment inspection operations" [装检作战].<sup>846</sup> The unit's mission is also described as "guarding the national treasure" [守护国宝], a euphemism for China's nuclear weapons stockpile.<sup>847</sup>

## Unit 96602 Hospital [96602 部队医院]

The Unit 96602 Hospital, established in 1968 as the Unit 122 Hospital<sup>848</sup>, is the official hospital attached to Base 62. Like the other PLARF base hospitals, the Unit 96602 Hospital controls several field medical teams which are tasked with providing field medical support to and conducting joint training with Base 62 units. These medical teams are capable of conducting a wide range of medical services in the field, including battlefield surgery.<sup>848 849</sup>

**MUCD:** N/A

**Former TUD:** 533 Hospital [533 医院]

**Grade:** Division Leader or Division Deputy Leader<sup>xlvi</sup> **Parent Unit:** Base 62

**Location:** 462 Chuanjin Rd., Kunming, Yunnan [云南省昆明市穿金路 462 号]<sup>850</sup>

**Geo:** 25.074229, 102.742809

## Leadership

**Director:** Qi Yijie [漆宜华] (4/19)<sup>849</sup>

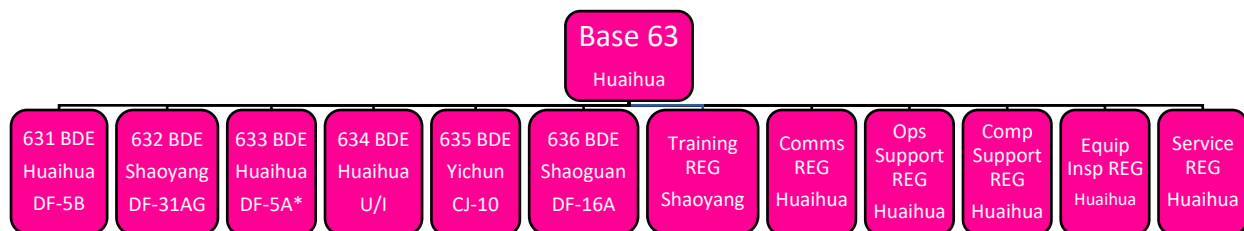
**PC:** Wang Liang [王亮] (8/18)<sup>851</sup>

**Dep PC:** Zhou Zhifu [周智夫] (8/18)<sup>851</sup>

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<sup>xlvi</sup>Presumed based on other base hospitals

## Base 63 [63 基地]



\*May be equipped with other DF-5 variants

Base 63, headquartered in the inland southern Chinese city of Huaihua, is an operations base covering southeast China. It commands at least three ICBM brigades (two silo-based and one road-mobile), one conventional SRBM brigade, and one LACM brigade, as well as one brigade with an unknown missile type. Since 2017 it has expanded from five to six missile brigades.

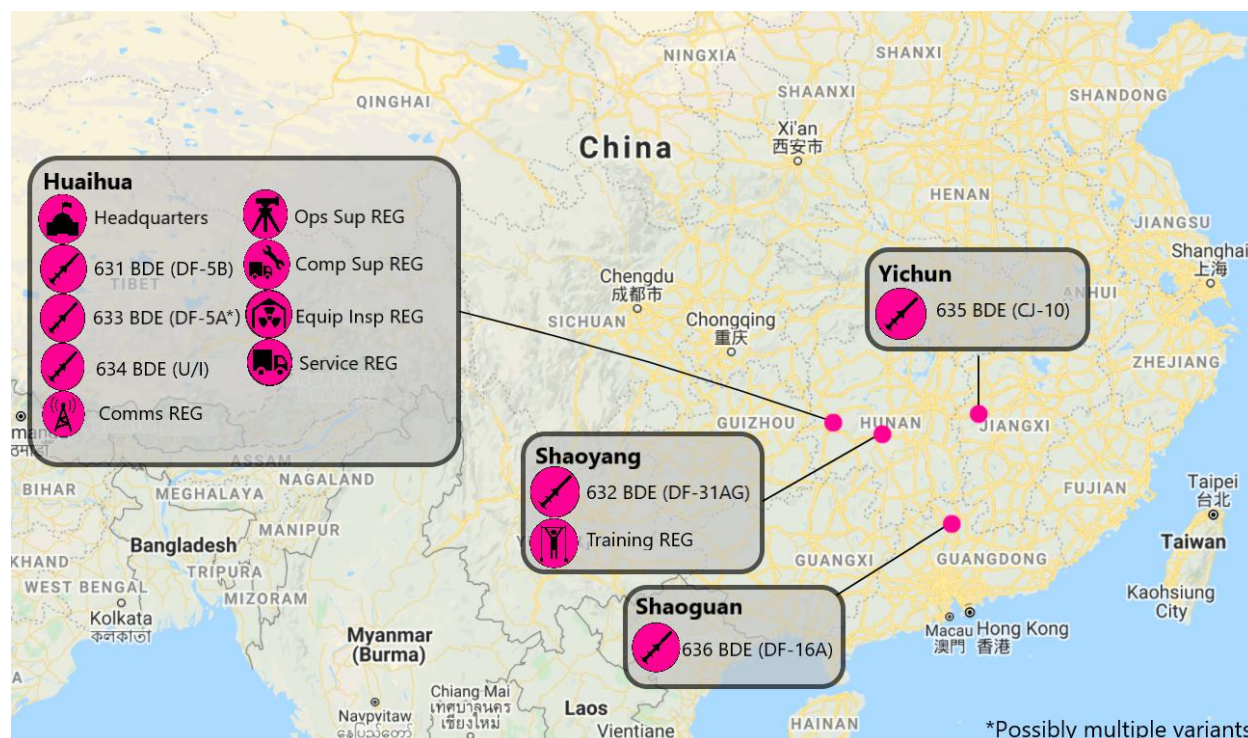
**MUCD:** 96603

**Former MUCD/TUD:** 96301 (Base 55)

**Grade:** Corps Leader<sup>852</sup>

**Location:** 786 Yingfeng East Rd., Hecheng District, Huaihua, Hunan [湖南省怀化市鹤城区迎丰东路 786 号]<sup>853 854</sup>

**Geo:** Unconfirmed, possibly 27.574686, 110.024999



\*Possibly multiple variants

## Leadership

**Commander:** Xia Xiaoping [夏小平] (3/21)<sup>855</sup>      **PC:** Zhao Quanhong [赵全红] (7/20)<sup>856</sup>

**Dep Commanders:** Wang Xiaochu [汪晓初] (1/19)<sup>857</sup>

**Dep PC:** Deng Rongzhen [邓荣珍] (1/20)<sup>858</sup>

**Chief of Staff:** Li Shunhua [李顺华] (5/19)<sup>859</sup>      **PWDD:** Gao Tingxin [高廷欣] (8/18)<sup>860</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Li Yuchao [李玉超] (4/19)<sup>861</sup>; Zheng Xiaodong [郑晓东], Pol Work Dept Dep Director (5/20)<sup>862</sup>; Zhang Qingyong [张青勇], Support Dept Dep Director (1/18)<sup>863</sup>

**Former Leadership:** Li Chuanguang [李传广], Commander (2016)<sup>864</sup>; Wang Liping, [汪利平], PC (9/17)<sup>865</sup>

## Composition

- 631 Brigade [631 旅]
- 632 Brigade [632 旅]
- 633 Brigade [633 旅]
- 634 Brigade [634 旅]
- 635 Brigade [635 旅]
- 636 Brigade [636 旅]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Operations Support Regiment [作战保障团]
- Comprehensive Support Regiment [综合保障团]
- Technical Service Regiment [技术勤务团]
- Equipment Inspection Regiment [装检团]
- Unit 96603 Hospital [96603 部队医院]

## 631 Brigade [631 旅]

The 631 dates back to 1961,<sup>866</sup> when it was established as a battalion.<sup>867</sup> It is located in the inland southern Chinese city of Huaihua and believed to be equipped with the newest B variant of the DF-5 silo-based ICBM.

**MUCD:** 96731

**Former MUCD/TUD:** 96311 (803<sup>rd</sup> Launch Brigade<sup>417</sup>); 80403<sup>868</sup>

**Grade:** Division Deputy Leader<sup>869</sup>

**Parent Unit:** Base 63

**Location:** Erliangting Village, Jingzhou County, Huaihua, Hunan [湖南省怀化市靖州县二凉亭村]<sup>870 871</sup>

**Geo:** 26.557693, 109.664996<sup>872</sup>

### **Secondary Garrison:**

- Tongdao County, Huaihua, Hunan [湖南省怀化市通道县]<sup>873</sup>
  - This brigade hosts a Training Unit [教导队] in this county.<sup>874</sup>

### **Capabilities**

**Missile:** DF-5B ICBM<sup>866</sup>

**Missile Type:** Nuclear, Silo-based

### **Leadership**

**Commander:** Yin Jinbao [殷进保] (3/20)<sup>875</sup>

**PC:** Peng Ke [彭柯] (6/20)<sup>876</sup>

**Dep Commanders:** Unknown

**Dep PC:** Feng Xiangbing [冯向兵] (9/20)<sup>877</sup>

**Chief of Staff:** Unknown

**PWDD:** Shi Yunhui [史云辉] (1/19)<sup>878</sup>

**Support Dept Director:** Ding Binbin [丁彬彬] (11/18)<sup>879</sup>

**Other Senior Leadership:** Liu Zhiyong [刘志勇], Dep COS (7/20)<sup>880</sup>

**Former Leadership:** Zeng Aijun [曾爱军], Commander (2017)<sup>869</sup>

### **Composition (presumed)**

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
  - Political Instructor: Fang Bin [方斌] (3/18)<sup>881</sup>
  - Former Commander Liu Zhiyong (2018)<sup>881</sup> is now Brigade Deputy COS.
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]<sup>882</sup>

- Comprehensive Support Battalion [综合保障营]<sup>880</sup>
- Technical Battalion [技术营]

## Background

- Since its establishment in the 1960s, this unit has been structurally reorganized eight times, relocated three times, and received a new missile three times.<sup>866</sup> In late 2017, the unit faced restructuring, with some companies being merged, while others were disbanded. According to one source, this led to the retirement of a high number of veteran personnel and problems with a lack of leadership.<sup>883</sup>
- This brigade took part in the 2019 National Day Parade as part of the DF-5B parade formation.<sup>866</sup>

## 632 Brigade [632 旅]

The 632 Brigade is located in the inland southern Chinese city of Shaoyang and equipped with the latest DF-31AG variant of the DF-31 road-mobile ICBM.

**MUCD:** 96732                      **Former MUCD/TUD:** 96313 (805<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 63

**Location:** Guangyu Village, Chenjiaqiao Township, Beita District, Shaoyang, Hunan [湖南省邵阳市北塔区陈家桥乡光裕村]<sup>884</sup>

**Geo:** 27.252885, 111.385919<sup>885</sup>

### Secondary Garrisons:

- Kuanxi Dam, Chengbu County, Shaoyang, Hunan [湖南省邵阳市城步苗族自治县款溪拦河坝]<sup>884</sup>
- Huagu Subdistrict, Dongkou County, Shaoyang, Hunan [湖南省邵阳市洞口县花古街道]<sup>886</sup>
- Dong'an County, Yongzhou, Hunan [湖南省永州市东安县]<sup>887</sup>

## Capabilities

**Missile:** DF-31AG ICBM<sup>888</sup>

**Missile Type:** Nuclear; Road-mobile

## Leadership

**Commander:** Wang Jinjian [王金剑] (12/19)<sup>888</sup>      **PC:** Unknown



**Dep Commanders:** Cai Zhengyu [蔡征宇] (2/18)<sup>889</sup> **Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Liu Mingliang [刘明亮] (5/19)<sup>890</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Tian Xiwen [田细文], Deputy COS (8/17)<sup>891</sup>

**Former Leadership:** Zhang Hong [张鸿], Commander (2017)<sup>892</sup>; Dai Weide [戴伟德], PC (2018)<sup>893</sup>; Wang Zhibin [王志彬], COS (2017)<sup>892</sup>; Hu Haoran [胡浩然], PWDD (2017)<sup>889</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]<sup>894</sup>
- 1<sup>st</sup> Technical Battalion [技术一营]
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>895</sup>

### Background

- Model personnel Rong Kexin [容科新] is part of this unit.<sup>896</sup>

### 633 Brigade [633 旅]

The 633 Brigade, located in the inland southern Chinese city of Huaihua, was established in 1993 and fired its first missile around 1997. It is equipped with a variant of the DF-5 silo-based ICBM.

**MUCD:** 96733

**Former MUCD/TUD:** 96315 (814<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 63

**Location:** 005 Jianshe Rd., Lincheng Town, Huitong County, Huaihua, Hunan [湖南省怀化市会同县林城镇建设路 005 号]<sup>897</sup>



**Geo:** 26.892974, 109.738805<sup>898</sup>

## Capabilities

**Missile:** DF-5A ICBM<sup>417</sup>; possibly other variants    **Missile Type:** Nuclear; Silo-based

## Leadership

**Commander:** Ao Bao (敖宝) [2/19]<sup>899</sup> <sup>xlvi</sup>    **PC:** Zhang Junhui (张俊晖) [4/18]<sup>900</sup>

**Dep Commanders:** Wang Liangfeng [王良锋] (4/18)<sup>901</sup>

**Dep PC:** Unknown

**Chief of Staff:** Zhang Ou [张欧] (6/17)<sup>902</sup>    **PWDD:** Liu Wenbo [刘文波] (5/18)<sup>903</sup>

**Support Dept Director:** Liang Zhiping [梁治平] (12/19)<sup>904</sup>

**Other Senior Leadership:** Xiang Fange [向帆格], Pol Work Dept Dep Director (1/20)<sup>905</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Jie Jing [揭晶] (12/19)<sup>906</sup>
  - Also known as the 40<sup>th</sup> Subunit [40 分队]<sup>906</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]
- Telemetry Battalion [遥测营]<sup>907</sup>

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<sup>xlvi</sup> One source from early 2020 refers to Ao as “then-commander” when referring to an earlier date, implying he may no longer be commander

## 634 Brigade [634 旅]

The 634 Brigade first appeared publicly in late 2018 and is equipped with an unidentified new type of missile. This is the third missile brigade to be garrisoned in the inland southern Chinese city of Huaihua.

**MUCD:** 96734

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 63

**Location:** Tongdao County, Huaihua, Hunan [湖南省怀化市通道县] possibly Qingwuzhou Town [菁芜洲镇]<sup>908</sup>

**Geo:** Unknown

### Capabilities

**Missile:** Unknown “new missile type”<sup>911</sup>

**Missile Type:** Unknown

### Leadership

**Commander:** possibly Zhang Gensheng<sup>xlviii</sup> [张艮胜]<sup>911</sup> **PC:** Wu Jun [吴君] (10/19)<sup>909</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Wu Zhisheng [胡智胜] (12/19)<sup>910</sup>

**Support Dept Director:** Unknown

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - Commander: Yang Xinglong [杨兴龙] (3/20)<sup>911</sup>
  - Political Instructor: Wang Feng [王锋] (4/20)<sup>912</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
  - Commander: Jiang Wanfa [江万发] (4/20)<sup>912</sup>
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]

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<sup>xlviii</sup> The commander of this brigade is not yet known, however Zhang Gensheng, the former COS of the 636 Brigade, wrote an opinion piece attached to an article about this brigade in March 2020 (see citation), suggesting a possible promotion

- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]<sup>911</sup>

## 635 Brigade [635 旅]

The 635 Brigade, located in the inland southern Chinese city of Yichun, was established around 2005 as the second CJ-10 cruise missile brigade, and fired its first missile in 2007.<sup>913</sup>

**MUCD:** 96735                      **Former MUCD/TUD:** 96317 (824<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 63

**Location:** Yuanzhou District Industrial Park, Yichun, Jiangxi [江西省宜春市袁州区工业园]<sup>914 915</sup>

**Geo:** 27.888289, 114.386869<sup>916</sup>

**Secondary Garrison:** High-tech District, Yushui District, Xinyu, Jiangxi [江西省新余市渝水区高新区]<sup>917 918</sup>

## Capabilities

**Missile:** CJ-10 LACM<sup>919</sup>                      **Missile Type:** Conventional; Cruise Missile

## Leadership

**Commander:** Li Lihong [李立弘] (8/20)<sup>919</sup> **PC:** Liu Hongwei [刘宏伟] (6/20)<sup>920</sup>

**Dep Commanders:** Mao Guanghong [毛光宏] (10/18)<sup>921</sup>; Yang Zhibai [杨治白] (2/18)<sup>922</sup>; Deng Boliao [邓波聊] (1/18)<sup>923</sup>

**Dep PC:** Unknown

**COS:** Mao Wenchang [毛文昌] (9/18)<sup>924</sup>

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Other Senior Leadership:** Xie Pingwu [谢平武], Pol Work Dept Dep Director (10/18)<sup>925</sup>

**Former Leadership:** Zheng Xiaodong [郑晓东], PC (2018)<sup>926</sup>; Li Chengyong [李承勇], Dep Commander (2019)<sup>927</sup>; Han Xiao [韩萧], PWDD (2020)<sup>928</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]<sup>913</sup>
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
  - Political Instructor: Tang Langbo [唐浪波] (1/18)<sup>923</sup>
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]<sup>929</sup>
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- 1<sup>st</sup> Technical Battalion [技术一营]
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>930</sup>
- ECM Battalion [电抗营]<sup>931</sup>
  - This brigade is notable, and possibly unique, for having a subordinate ECM battalion.

### Background

- Han Xiao [韩萧], until recently the Political Work Department Director for this brigade, served as the PC of the CJ-100 formation at its 2019 debut.<sup>932</sup>

### 636 Brigade [636 旅]

The 636 Brigade, garrisoned in the southern Chinese city of Shaoguan, was officially established in 2010<sup>933</sup> by combining the test unit established around 2005 to bring the new DF-16 SRBM into service with a PLAA unit which was transferred to the 2nd Artillery at this time.<sup>934</sup> It was the first unit equipped with the DF-16, and may now be equipped with both the DF-16 and DF-16A.

**MUCD:** 96736                      **Former MUCD/TUD:** 96318 (826<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>935</sup>    **Parent Unit:** Base 63

**Location:** Qujiang District, Shaoguan, Guangdong 512158 [广东省韶关市曲江区]<sup>936 937</sup>

**Geo:** 24.755160, 113.679761<sup>306 938</sup>

**Secondary Garrison:** Donglian Village, Xinshao Town, Zhenjiang District, Shaoguan, Guangdong [广东省韶关市浚江区新韶镇东联村]<sup>939</sup> (possibly 24.782042, 113.627729 or 24.788218, 113.615410)

## Capabilities

**Missile:** DF-16<sup>306</sup>/DF-16A<sup>940 941</sup> SRBM

**Missile Type:** Conventional

## Leadership

**Commander:** Li Yongzhou [李永周] (7/19)<sup>942</sup>      **PC:** Yin Hongwen [阴红文] (8/20)<sup>943</sup>

**Dep Commanders:** Chen Gang [陈刚] (9/18)<sup>935</sup>      **Dep PC:** Unknown

**Chief of Staff:** Zhang Gensheng [张良胜]<sup>xlix</sup> (7/17)<sup>933</sup>      **PWDD:** Unknown

**Support Dept Director:** Unknown

**Other Senior Leadership:** Zhao Yougang [赵优刚], Dep COS (12/18)<sup>944</sup>; Jiang Wuzhi [姜武致], Pol Work Dept Dep Director (4/19)<sup>945</sup>

**Former Leadership:** Liu Chuanguo<sup>l</sup> [刘传国], Commander (2017)<sup>946</sup>; Shi Daqing [石大庆], PC (2015)<sup>947</sup>; Tao Xiaofeng [陶晓峰], Pol Dept Director (2015)<sup>947</sup>; Zhu Zhongliang [朱忠亮], Dep COS (2015)<sup>947</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Made up of two companies. The 1<sup>st</sup> Company came from the 2nd Artillery and was highly technical, while the 2<sup>nd</sup> Company came from the PLAA and lacked technical skills, but had superior physical fitness. This mismatch of skillsets initially presented a problem that had to be overcome, but the Battalion was able to successfully carry out a major launch mission only three months after formation.<sup>934</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]

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<sup>xlix</sup> Possibly dated – there is circumstantial evidence that Zhang may now command the 635 BDE as of March 2020, but this is unconfirmed

<sup>l</sup> Alternative possible spelling of name: Liu Zhuanguo

- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## Background

- The PLAA unit which was transferred to the PLARF in 2010 to form this brigade has a long and storied history. It was established in May 1938 as the 4th Zhidui of the New 4<sup>th</sup> Army,<sup>934</sup> with elements coming from the 1<sup>st</sup> and 3<sup>rd</sup> Army Artillery Companies.<sup>306</sup>
- This brigade successfully launched its first missile in the first year of its creation. In its second year it had established operational capabilities. In its third year it carried out its first on-duty mission.<sup>934</sup>

## Base 63 Training Regiment [63 基地训练团]

This regiment is responsible for training of Base 63 enlisted personnel.

**MUCD:** 96831

**Former MUCD:** 96321

**Grade:** Regiment Leader

**Parent Unit:** Base 63

**Location:** Dongkou County, Shaoyang, Hunan [湖南省邵阳市洞口县]<sup>948</sup>

**Geo:** Unconfirmed, possibly 27.033222, 110.536653

## Leadership

**Commander:** Liu Hongzhang [刘红章] (1/18)<sup>949</sup> **PC:** Han Kai [韩凯] (3/18)<sup>950</sup>

**Dep Commanders:** Unknown

**Dep PC:** Yang Ping [杨平] (1/18)<sup>951</sup>

**Chief of Staff:** Unknown

**PWDD:** Li Youquan [李友权] (4/18)<sup>952</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Xu Hanpei [徐寒裴], Pol Work Div Dep Director (3/18)<sup>953</sup>

**Former Leadership:** Zhang Ruijiang [张瑞江], Commander (2016)<sup>954</sup>; Wan Chongwei [万崇伟], PC (2015)<sup>955</sup>

## Composition

- Unknown number of subordinate training battalions

## Base 63 Communications Regiment [63 基地通信团]

This regiment is responsible for base-level communications.

**MUCD:** 96832

**Former MUCD:** 96325

**Grade:** Regiment Leader

**Parent Unit:** Base 63

**Location:** Hecheng District, Huaihua, Hunan 418008 [湖南省怀化市鹤城区]<sup>956 957</sup> (possibly co-located with base HQ)

**Geo:** Unconfirmed, possibly 27.574100, 110.022901

## Leadership

**Commander:** Lü Haiming [吕海明] (6/17)<sup>958</sup>

**PC:** Li Zhongui [李中辉] (11/16)<sup>959</sup>

**Dep Commanders:** Unknown

**Dep PC:** Zhang Xiaobo [张小波] (9/17)<sup>960</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

## Composition (presumed)

- 1<sup>st</sup> Communications Battalion [通信一营]
- 2<sup>nd</sup> Communications Battalion [通信二营]
- 3<sup>rd</sup> Communications Battalion [通信三营]
  - Established in 2005<sup>961</sup>
- Communications Network Technical Management Center [通信网络技术管理中心]<sup>956</sup>

## Base 63 Operations Support Regiment [63 基地作战保障团]

The Base 63 Operations Support Regiment is responsible for survey and mapping,<sup>962</sup> meteorology,<sup>963</sup> security, NBC defense,<sup>964</sup> and engineering.<sup>965</sup> The unit also has a precision guidance support team [精导保障队].<sup>966</sup>

**MUCD:** 96833

**Former MUCD:** 96326

**Grade:** Regiment Leader

**Parent Unit:** Base 63

**Location:** 786 Yingfeng East Rd., Hecheng District, Huaihua, Hunan 418099 [湖南省怀化市鹤城区迎丰东路 786 号]<sup>967 968</sup> (co-located with Base HQ)

**Geo:** 27.577500, 110.023033<sup>969</sup>

## Leadership

**Commander:** Shen Qiguo<sup>li</sup> [沈奇国] (5/20)<sup>970</sup>      **PC:** Jiang Cuizheng [姜翠正] (1/20)<sup>971</sup>

**Dep Commanders:** Chen Jianqiang [陈建强] (6/18)<sup>972</sup>

**Dep PC:** Zhao Fangdong [赵方栋] (12/20)<sup>973</sup>

**Chief of Staff:** Dong Dong [董栋] (9/18)<sup>974</sup>

**PWDD:** Zou Zhengjun [邹政军] (4/18)<sup>975</sup>

**Support Div Director:** Wang Liang [王亮] (8/18)<sup>976</sup>

**Former Leadership:** Li Yongzhou [李永周], Commander (2018)<sup>977</sup>; Zhang Youwu [张有武], Commander (2016)<sup>978</sup>; Cheng Xiaofei [程晓飞], PC (2018)<sup>979</sup>; Ding Yangsheng [丁洋声], PC (2016)<sup>980</sup>

## Composition (presumed)

- Security and Chemical Defense Battalion [警卫防化营]<sup>964</sup>
  - Security Company [警卫连]<sup>981</sup>
  - 1<sup>st</sup> Chemical Defense Company [防化一连]<sup>982</sup>
  - 2<sup>nd</sup> Chemical Defense Company [防化二连]
    - Commander: Li Congyuan [李聪元] (5/20)<sup>970</sup>
- Meteorology Station (Battalion Leader Grade) [气象台]
- Surveying Team (Battalion Leader Grade) [测地队]<sup>961</sup>
  - 1<sup>st</sup> Squadron [一中队]
  - 2<sup>nd</sup> Squadron [二中队]
- Engineering Company [工兵连]<sup>965</sup>
- Precision Guidance Support Team [精导保障队]<sup>966</sup>

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<sup>li</sup>Alternative possible spelling of name: Shen Jiguo



## Base 63 Comprehensive Support Regiment [63 基地综合保障团]

The Base 63 Comprehensive Support Regiment is a recently established unit<sup>983</sup> (likely established in 2017 as with other such regiments) formed by combining the former base repair factory and other support units.<sup>983</sup> However unlike most other bases, Base 63 still has its Technical Service Regiment, and it is thus unclear whether this regiment took on the responsibilities of the Service Regiment as with other bases.<sup>lii</sup> If so, it is responsible for weapons and equipment storage, management, and transportation, in addition to equipment repair and maintenance.

**MUCD:** 96834

**Former MUCD:** 96324

**Grade:** Regiment Leader

**Parent Unit:** Base 63

**Location:** Hecheng District, Huaihua, Hunan [湖南省怀化市鹤城区]<sup>984</sup> (possibly co-located with Base HQ)

**Geo:** Unconfirmed, possibly 27.575885, 110.024839

**Secondary Garrison:** Dong'an County, Yongzhou, Hunan [湖南省永州市东安县]<sup>985</sup>

### Leadership

**Commander:** Cheng Xueping [程学平] (6/20)<sup>986</sup> **PC:** Yin He [殷赫] (8/20)<sup>987</sup>

**Dep Commanders:** Unknown

**Dep PC:** Shi Jincai [石进才] (9/19)<sup>988</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Ye Xiaoyang [叶孝阳], Dep COS (10/18)<sup>989</sup>

**Former Leadership:** Ni Rang [倪让], Commander (2018)<sup>990</sup>; Wan Jun [万军], PC (2018)<sup>991</sup>; Li Mingyue [李明跃], Repair Factory PC (2017)<sup>992</sup>; Cheng Xueping [程学平], Dep Commander (2018)<sup>993</sup>

### Composition (presumed)

- Vehicle Battalion [汽车营]<sup>994</sup>

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<sup>lii</sup> There is mixed evidence in this regard. On the one hand, the Service Regiment has retained its rail transport capabilities, suggesting it is still responsible for transport of base equipment. On the other, the Service Regiment today seems to be exclusively concerned with management of missile propellants, and the author can find no evidence of it transporting other equipment post-2017. This remains an open question

- Repair and Measurements Station (Battalion Leader Grade) [维修计量站]<sup>995</sup>
- Munitions Depot [军械仓库]
- Fuel Storage Depot [油料仓库]
- Comprehensive Depot [综合仓库]<sup>996</sup>
- Service Company [勤务连]
- Vehicle Repair Subunit [汽车维修分队]

## Background

- Zhou Fenglin [周丰林], a PLARF model NCO, belongs to this unit.<sup>997</sup>
- This unit offers training to base personnel in medical rescue, equipment repair, and vehicle driving.<sup>998</sup>

## Base 63 Service Regiment [63 基地勤务团]

The Base 63 Service Regiment was established in 1999 by upgrading a distribution station [转运站] to a regiment.<sup>999</sup> It is notable for being one of only two base Service Regiments to still exist following the 2017 round of reforms, albeit with a possibly narrower mission. Today, the regiment's primary responsibility is the testing,<sup>1000</sup> transport,<sup>1001</sup> and loading of missile propellants, including nitrogen, prior to missile launch. Base 63 is the only base with such a regiment, likely due to its two silo-based, liquid propellant ICBM brigades in Huaihua. It is unclear if this regiment has retained its previous mission of storage and transport of missiles and other base equipment, or if, as with other bases, this mission has been transferred to the Comprehensive Support Regiment. One source states that it retains its rail transport capability, suggesting it may still transport other base equipment.<sup>1002</sup>

**MUCD:** 96835

**Former MUCD:** 96322

**Grade:** Regiment Leader

**Parent Unit:** Base 63

**Location:** Genshankou, Jingzhou County, Hunan [湖南省靖州县良山口]<sup>1003 1004</sup>

**Geo:** Unconfirmed, possibly 26.646131, 109.690937

## Leadership

**Commander:** Wang Zhibin [王志彬] (9/18)<sup>1005</sup>

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Wang Liming [王黎明] (8/18)<sup>1006</sup>

**PWDD:** Feng Shengyong [冯圣勇] (5/18)<sup>1007</sup>

**Support Div Director:** Tu Yuanpeng [涂远朋] (8/18)<sup>1008</sup>

**Former Leadership:** Wang Jinjian [王金剑], Commander (2017)<sup>1009</sup>; Jiang Cuizheng [姜翠正], PC (2019)<sup>1010</sup>; Wang Liangfeng [王良锋], Dep Commander (2017)<sup>1011</sup>

### Known Composition

- 1<sup>st</sup> Fueling Battalion [转注一营]<sup>1012</sup>
  - Commander: Wang Lishuai [王立帅] (12/18)<sup>1001</sup>
- 2<sup>nd</sup> Fueling Battalion? [转注二营]
  - Existence of a “First” Battalion implies possible existence of a second
- Rail Transport Company [铁路运输连]<sup>1013</sup>

### Background

- The regiment's primary mission is to fuel [介质转注] the base's missiles. This mission includes transport and armed escort of propellants via both road and rail<sup>1013</sup> to missiles sites,<sup>1014</sup> and regular quality control testing of propellants.<sup>1000</sup> It is often described as providing the "lifeblood" [血液] for Base 63 launch units.<sup>1000</sup> This is considered a particularly dangerous job. Nitrogen is stored under high pressure, making it dangerous during the manufacture, storage, and transport stages.<sup>1015</sup> Further, propellant testing is dangerous work due to the proximity of noxious, explosive, and/or corrosive substances, and lurid stories about workplace injuries appear frequently in PLA media as part of the unit's lore.<sup>1000</sup>
- Wang Yanchuan [王言传], a model NCO in this unit, has supported 14 live missile launches [实弹发射] in his 24 years of service.<sup>1016</sup>

### Base 63 Equipment Inspection Regiment [63 基地装检团]

The Base 63 Equipment Inspection Regiment, established around 2006,<sup>1017</sup> is responsible for storage, management, and transport of the Base's nuclear warheads.

**MUCD:** 96033

**Former MUCD:** 96323 (905 Regiment<sup>652</sup>)

**Grade:** Regiment Leader

**Parent Unit:** Base 63

**Location:** Tianxing East Road, across from Tianxing Square, Hecheng District, Huaihua, Hunan [湖南省怀化市鹤城区天星东路天星广场对面]<sup>1018 1019</sup>

**Geo:** Unconfirmed, possibly 27.537574, 109.986285

## Leadership

**Commander:** Gui Zhijie [桂志杰] (1/18)<sup>1017</sup>

**PC:** Yang Junyu [杨骏宇] (5/19)<sup>1020</sup>

**Dep Commanders:** Unknown

**Dep PC:** Li Fanghua [李方华] (11/16)<sup>1021</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Hu Zhongze [湖中泽], Dep COS (12/19)<sup>1022</sup>

**Former Leadership:** Deng Zhiliang [邓志良], PC (2017)<sup>1023</sup>; Zhu Jingli [朱敬礼], PC (2015)<sup>1024</sup>

## Composition (presumed)

- 1<sup>st</sup> Equipment Inspection Station [装检一站]
- 2<sup>nd</sup> Equipment Inspection Station [装检二站]
- 3<sup>rd</sup> Equipment Inspection Station [装检三站]
- 1<sup>st</sup> Technical Service Battalion [技术勤务一营]
- 2<sup>nd</sup> Technical Service Battalion [技术勤务二营]<sup>1025</sup>
  - This is the only Equipment Inspection Regiment confirmed to have a second Technical Service Battalion.
- Comprehensive Support Battalion [综合保障营]
- Transport Company [转运连]
- Security and Communications Company [警卫通信连]
- Fueling Company [转注连]<sup>1026</sup>
  - This fueling company suggests that this regiment may share the liquid propellant fueling mission with the Base Service Regiment. However the source is from 2016, and it is thus possible this company has since been transferred to the Service Regiment.

## Unit 96603 Hospital [96603 部队医院]

The Unit 96603 Hospital is the official hospital attached to Base 63.

**MUCD:** N/A

**Former TUD:** 535 Hospital [535 医院]

**Grade:** Division Deputy Leader<sup>1027</sup>

**Parent Unit:** Base 63

**Location:** 535 Yingfeng East Rd., Huaihua, Hunan [湖南省怀化市迎丰东路 535 号]<sup>1028</sup>

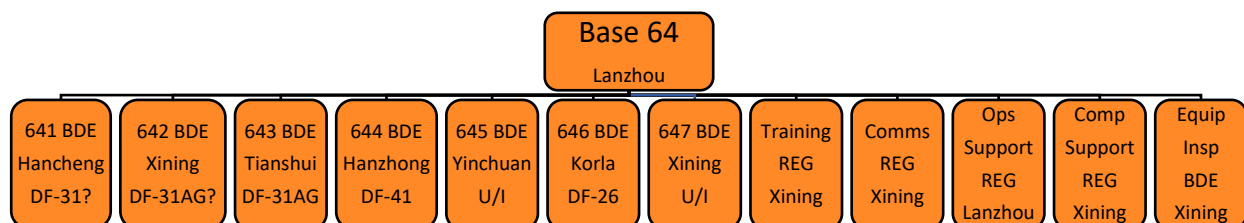
**Geo:** 27.577168, 110.012803

**Leadership**

**Director:** Zhu Daosheng [朱道生] (9/19)<sup>1029</sup> **PC:** Hu Haoran [胡浩然] (9/19)<sup>1029</sup>

**PWDD:** Huang Ying [黄应] (8/19)<sup>1030</sup>

## Base 64 [64 基地]



Base 64, headquartered in the western Chinese city of Lanzhou, is an operations base covering northwest and northern central China. It commands at least four road-mobile nuclear ICBM brigades, one dual nuclear-conventional IRBM brigade, and two more brigades of unknown missile type. Since 2017 it has nearly doubled in size, expanding from four to seven missile brigades.

**MUCD:** 96604

**Former MUCD/TUD:** 96351 (Base 56)

**Grade:** Corps Leader<sup>1031</sup>

**Location:** 156 Jinke Rd., Eastern S&T New City, Dingyuan Town, Yuzhong County, Lanzhou, Gansu [甘肃省兰州市榆中县定远镇东部科技新城金科路 156 号]<sup>1032 1033</sup>

**Geo:** 35.938567, 104.015405<sup>1034</sup>

### Secondary Garrison:

- Golmud, Qinghai [青海省格尔木]<sup>1035</sup>
- Delhi (Delingha), Haixi, Qinghai [青海省海西德令哈]<sup>1036</sup>
  - Base 64 Delhi (Delingha) Command Department [德令哈指挥部]
  - May be co-located with other PLARF assets in the area.
- Biandangou Township, Litong District, Wuzhong, Ningxia [宁夏回族自治区吴忠市利通区扁担沟镇]<sup>1037</sup>
  - Base 64 Logistics Department Agricultural Product Base [后勤部农副产品基地], presumably for growing food for the base.



## Leadership

**Commander:** Sun Jinming [孙金明] (1/20)<sup>1038</sup>      **PC:** He Jun [何俊 or 何骏] (1/20)<sup>1038</sup>

**Dep Commanders:** Liu Yuesheng [刘岳生] (3/19)<sup>1039</sup>; Deng Lizhong [邓立中] (1/20)<sup>1040</sup>

**Dep PC:** Pan Jihui [潘吉慧] (1/20)<sup>1038</sup>

**Chief of Staff:** You Shaoping [由绍平] (1/20)<sup>1038</sup>      **PWDD:** Xu Deli [徐德立] (5/20)<sup>1041</sup>

**Support Dept Director:** Zhang Weimin [张卫民] (6/18)<sup>1042</sup>

**Other Senior Leadership:** Zhang Kebao [张可宝], Dep COS (7/17)<sup>1043</sup>; Ma Jiaxing [马家兴], Pol Work Dept Dep Director<sup>106</sup>; Ren Yongji [任永吉]<sup>liii 1044</sup>; Xiang Songbo [向松波], unknown senior position<sup>1044</sup>

**Former Leadership:** Li Jun [李军], Commander (2017)<sup>1045</sup>; Wang Dingfang [王定放], PC (2017)<sup>1046</sup>; Li Yang [李阳], PWDD (2018)<sup>1047</sup>; Zhou Jingjiong [周晶炯], Pol Work Dept Dep Director (8/17)<sup>1048</sup>; Liu Yongmin [刘拥民], Support Dept Dep Director (2017)<sup>1049</sup>

<sup>liii</sup>Ren Yongji was a base Deputy COS, transferred to PLAN South Sea Fleet, and is now apparently back with this base



## Known Composition

- 641 Brigade [641 旅]
- 642 Brigade [642 旅]
- 643 Brigade [643 旅]
- 644 Brigade [644 旅]
- 645 Brigade [645 旅]
- 646 Brigade [646 旅]
- 647 Brigade [647 旅]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Operations Support Regiment [作战保障团]
- Comprehensive Support Regiment [综合保障团]
- Equipment Inspection Brigade [装检旅]
  - Notably, this base possesses a brigade-sized unit for this purpose, whereas most bases only have a regiment.
- Unit 96604 Hospital [96604 部队医院]
- Sharp Knife Special Operations Team [利刃特战队]<sup>1050</sup>
  - This base is known to possess a special operations team, possibly dedicated to counter-SOF and missile/infrastructure defense (personnel are referred to as “missile guardians” [导弹卫士]. It is unclear whether this capability is something all bases possess or if it is specific to this base.

## 641 Brigade [641 旅]

The 641 Brigade dates back to at least 1968, when it was established as a regiment.<sup>1051</sup> Formerly subordinate to Base 51 (now Base 65), it was apparently transferred to Base 64 as part of the 2017 reforms. It is located in the central Chinese city of Hancheng and possibly equipped with the DF-31 road-mobile ICBM.

**MUCD:** 96741                      **Former MUCD/TUD:** 96111 (806<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>1052</sup>    **Parent Unit:** Base 64

**Location:** Xincheng Subdistrict, Hancheng, Weinan, Shaanxi [陕西省渭南市韩城市新城街道]<sup>1053</sup>

**Geo:** 35.474451, 110.446555<sup>1053 1054</sup>



## Secondary Garrisons:

- Huanglong County, Yan'an, Shaanxi [陕西省延安黄龙县]<sup>1055</sup>
- Linyi County, Yuncheng, Shanxi [山西省运城市临猗县]<sup>1056</sup>

## Capabilities

**Missile:** possibly DF-31 ICBM (see below)

**Missile Type:** Nuclear, Road-mobile

## Leadership

**Commander:** Duan Juxing [段聚兴] (5/20)<sup>1052</sup>      **PC:** Wei Liqiang [卫礼强] (7/18)<sup>1057</sup>

**Dep Commanders:** Li Maoxue [李茂学] (1/20)<sup>1058</sup>; Dong Longju [董龙聚] (7/19)<sup>1053</sup>

**Dep PC:** Dong Mingri [董明日] (1/17)<sup>1059</sup>

**Chief of Staff:** Xu Dongxin [许东新] (7/19)<sup>1053</sup>      **PWDD:** Ma Chunyu [马春雨] (9/17)<sup>1060</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Guo Yongzhen [郭永臻], Pol Work Dept Dep Director (7/19)<sup>1053</sup>

**Former Leadership:** Xiao Junling [肖俊岭], COS (2015)<sup>1061</sup>; Zhu Liandeng [朱连登], Pol Dept Director (2015)<sup>1062</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]
  - Loading Company [装填连]<sup>1051</sup>
  - Missile Test Company [导弹测试连]<sup>1063</sup>

- The all-female nature of this company is often emphasized in PLA media.

## Background

- This unit is noted as having been involved in a significant number of test and experimental missile launches over the years.<sup>1064</sup>
- As of 2015, this brigade was equipped with the DF-21A MRBM.<sup>1065 1066</sup> By 2018 it had converted to an unidentified new missile type,<sup>1067</sup> and satellite imagery suggests a buildout of infrastructure associated with the DF-31,<sup>liv</sup> although there is no definitive proof as of this writing.

## 642 Brigade [642 旅]

The 642 Brigade, dating back to around 1969<sup>1068</sup> and located in the western Chinese city of Xining, is equipped with some variant of the DF-31 road-mobile ICBM, possibly the latest AG variant.

**MUCD:** 96742

**Former MUCD/TUD:** 96361 (809<sup>th</sup> Launch Bde<sup>417</sup>)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 64

**Location:** Qiaotou Town, Datong Hui and Tu Autonomous County, Xining, Qinghai [青海省西宁市大通回族土族自治县桥头镇]<sup>1069 1070</sup>

**Geo:** 36.949294, 101.667324<sup>1071</sup>

## Capabilities

**Missile:** DF-31 ICBM, possible upgrade to DF-31AG<sup>1072 1073</sup>

**Missile Type:** Nuclear, Road-mobile

## Leadership

**Commander:** Li Jinlong [李进龙] (3/21)<sup>1074</sup>

**PC:** Xie Jianxun [解建勋] (10/19)<sup>1075</sup>

**Dep Commanders:** Unknown

**Dep PC:** Yao Fei [姚菲] (10/19)<sup>1075</sup>

**Chief of Staff:** Wang Haizheng [王海争] (3/21)<sup>1074</sup> **PWDD:** Luo Kanghong [罗康洪] (2/18)<sup>1076</sup>

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<sup>liv</sup>Credit to private analyst Decker Eveleth for this analysis.

**Support Dept Director:** Unknown

**Former Leadership:** Chen Shoude [陈守德], Commander (2019)<sup>1077</sup>; Du Hai [杜海], COS (2017)<sup>1072</sup>; Wang Haizheng [王海争], Support Dept Director (2019)<sup>1077</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

### Background

- In 2017 this brigade began conversion to a new missile type,<sup>1068</sup> and photos from around August 2017 show brigade personnel with DF-31AG TELs,<sup>1072 1073</sup> indicating possible conversion. However analysis of base infrastructure does not yet provide supporting evidence for this.<sup>lv</sup>
- This brigade is located in a high-elevation plateau environment.<sup>1078</sup>

### 643 Brigade [643 旅]

The 643 Brigade is located in the western/central Chinese city of Tianshui and equipped with the DF-31 road-mobile ICBM. Sources from 2017 suggest it has recently converted to a new variant, possibly the DF-31AG.

**MUCD:** 96743

**Former MUCD/TUD:** 96363 (812<sup>th</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 64

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<sup>lv</sup> See: Decker Eveleth, "China's Mobile ICBM Brigades: The DF-31 and DF-41," *A Boy and His Blog*, 2 July 2020, <https://www.aboyandhis.blog/post/china-s-mobile-icbm-brigades-the-df-31-and-df-41>

**Location:** Shiziping Village, Maiji District, Tianshui, Gansu 741020 [甘肃省天水市麦积区什字坪村]<sup>1079 1080</sup>

**Geo:** 34.531837, 105.909832<sup>1081</sup>

**Secondary Garrisons:**

- Qinzhou District, Tianshui, Gansu [甘肃省天水市秦州区]<sup>1082</sup>
- Qingshui County, Tianshui, Gansu [甘肃省天水市清水县]<sup>1083</sup>

**Capabilities**

**Missile:** DF-31AG ICBM<sup>1084 1085</sup>

**Missile Type:** Nuclear, Road-mobile

**Leadership**

**Commander:** Li Dongxu [李东旭] (7/20)<sup>1086</sup> **PC:** Si Jianping [司建平] (1/20)<sup>1087</sup>

**Dep Commanders:** Guo Yu [郭瑜] (1/19)<sup>1088</sup>; Lin Yuan [林园] (1/20)<sup>1089</sup>

**Dep PC:** Wang Feng [王峰] (1/19)<sup>1090</sup>

**Chief of Staff:** Zhang Pengpeng [张朋朋] (9/18)<sup>1091</sup>

**PWDD:** Liu Xiaobo [刘小波] (8/18)<sup>1092</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Ma Jiaying [马家兴], PC (2019)<sup>1093</sup>

**Composition (presumed)**

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
  - Commander: Zhang Zhichun [张志纯] (8/18)<sup>1084</sup>
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]<sup>1094</sup>
- Comprehensive Support Battalion [综合保障营]<sup>1095</sup>

- Technical Battalion [技术营]

## 644 Brigade [644 旅]

The 644 Brigade, established in 2017 in the central Chinese city of Hanzhong, is likely the first equipped with the newest DF-41 road-mobile ICBM.

**MUCD:** 96744

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader<sup>1096</sup>

**Parent Unit:** Base 64

**Location:** Longjiang Town, Hantai District, Hanzhong, Shaanxi [陕西省汉中市汉台区龙江镇]<sup>1097</sup>

**Geo:** Unconfirmed, possibly 33.132711, 106.933997

**Secondary Garrison:** Mian County, Shaanxi (possibly around Lianshui Village, Wuhou Town) [陕西省勉县武侯镇莲水村]<sup>1098 1099</sup>

## Capabilities

**Missile:** likely DF-41 ICBM

**Missile Type:** Nuclear, Road-mobile

## Leadership

**Commander:** Xing Jianjun [邢建军] (1/20)<sup>1100</sup>      **PC:** Unknown

**Dep Commanders:** Jin Chaohua [晋朝华] (5/19)<sup>1101</sup>      **Dep PC:** Wan Jingang [万金刚] (9/18)<sup>1098</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Former Leadership:** Ji Jianchun [姬建春] PC (2020)<sup>1100</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - Commander: Bai Lingyun [白凌云] (10/18)<sup>1102</sup>; often touted as model officer

- This battalion was responsible for test launches of a new missile type beginning in 2015. It conducted test launches in April 2016,<sup>1103</sup> in line with a known launch of the DF-41,<sup>lvi</sup> and another in late 2017.<sup>1104</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## Background

- Following the 2<sup>nd</sup> Battalion's test launches of the DF-41, one article referred to this unit as the "New Generation 1<sup>st</sup> Dongfeng Brigade" [新时代东风第一旅],<sup>1104</sup> though it is not yet clear if this is an official brigade honorific. The missile is also repeatedly described as "image-enhancing" [形象弹],<sup>1104</sup> a phrase unique to this unit.

## 645 Brigade [645 旅]

The 645 Brigade, garrisoned in the central Chinese city of Yinchuan, was first publicly cited in November 2019.<sup>1105</sup> Very little information has emerged on this brigade as of late 2020.

**MUCD:** 96745

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 64

**Location:** 52 Wenchang North Rd., Xixia District, Yinchuan, Ningxia [宁夏回族自治区银川市西夏区文昌北街 52 号]<sup>1105 1106</sup>

**Geo:** Unknown

## Capabilities

**Missile:** Unknown

**Missile Type:** Unknown

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<sup>lvi</sup>See: Franz-Stefan Gady, "China Flight Tests Multiple Warhead Missile Capable of Hitting All of US," *The Diplomat*, April 20, 2016, <https://thediplomat.com/2016/04/china-flight-tests-multiple-warhead-missile-capable-of-hitting-all-of-us/>

## Leadership

**Commander:** Unknown

**PC:** Yang Yong [杨勇] (7/21)<sup>1107</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Other Senior Leadership:** Qiu Dongqin [邱东勤] (2/21)<sup>1108</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## 646 Brigade [646 旅]

The 646 Brigade, located in the far-western city of Korla, is equipped with the DF-26 IRBM, which is capable of swapping both nuclear and conventional warheads. This brigade is notable for being tasked with both nuclear and conventional strike missions,<sup>1109</sup> the first time this type of dual mission had been confirmed within a single brigade.

**MUCD:** 96746

**Former MUCD/TUD:** 96365 (823<sup>rd</sup> Launch Brigade<sup>417</sup>)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 64

**Location:** Waihuan Rd., Korla, Bayingol Prefecture, Xinjiang [新疆巴音郭楞州库尔勒市外环路]<sup>1110 1111 1112</sup>

**Geo:** 41.695033, 86.173623<sup>1113</sup>

## Secondary Garrison:

- 199 Youpeng Street, Yingbin East St., Xinshi District, Urumqi, Xinjiang [新疆乌鲁木齐市新市区迎宾东路友朋街 199 号]<sup>1114</sup> (possibly 43.901002, 87.544443)
  - This brigade reportedly commands a transit depot [中转站] at this location.

## Capabilities

**Missile:** DF-26 IRBM<sup>1109</sup>

**Missile Type:** Dual Nuclear-Conventional, Road Mobile

## Leadership

**Commander:** Kong Qiang [孔强] (8/18)<sup>1109 1115</sup> **PC:** Unknown

**Dep Commanders:** Unknown **Dep PC:** Unknown

**Chief of Staff:** Zhang Wenbin [张文斌] (12/17)<sup>1116</sup> **PWDD:** Li Jianlong [李建龙] (6/18)<sup>1117</sup>

**Comprehensive Support Dept Director**<sup>lvii</sup>: Jia Yunhong [贾云鸿] (9/18)<sup>1118</sup>

**Other Senior Leadership:** Feng Qingcai [冯庆彩], Dep COS (7/17)<sup>1119</sup>

**Former Leadership:** Li Zhenglian [李正连], Commander (2016)<sup>1120</sup>; Zhou Lüsheng [周吕胜], PC (2018)<sup>1109 1115</sup>; Yang Hongquan [杨洪全], PC (2016)<sup>1120</sup>; Li Hui [李辉], Dep Commander (2017)<sup>1109</sup>; Guo Yu [郭瑜], COS (2017)<sup>1121</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Mo Bin [莫斌] (5/18)<sup>1122</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]

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<sup>lvii</sup>According to one source, this brigade has a *Comprehensive* Support Department, while most brigades simply have a Support Department. The significance of this difference is not immediately clear.



- Comprehensive Support Battalion [综合保障营]
- 1<sup>st</sup> Technical Battalion [技术一营]
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>1122</sup>

## Background

- According to one drill held in 2017, this brigade is capable of firing a conventional missile and then immediately preparing for a nuclear counterstrike.<sup>1109</sup> This brigade’s dual nuclear-conventional mission has major implications for deterrence, increasing ambiguity and making differentiation between nuclear and conventional missiles much more difficult. This in turn raises the risk of nuclear miscalculation.<sup>lviii</sup> This is so far the only brigade confirmed to possess this capability, but it raises the possibility that some or all PLARF DF-26 brigades could be tasked in the same way.

## 647 Brigade [647 旅]

The 647 Brigade, located in the western Chinese city of Xining, was first publicly cited around mid-2018.<sup>1123 1124</sup> It is equipped with an unidentified “new missile type.”

**MUCD:** 96747

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader<sup>1125</sup>

**Parent Unit:** Base 64

**Location:** Chengdong District, Xining, Qinghai [青海省西宁市城东区]<sup>1126</sup>

**Geo:** Unconfirmed, possibly 36.593398, 101.877074

## Capabilities

**Missile:** Unknown “new missile type”<sup>1127</sup>

**Missile Type:** Unknown

## Leadership

**Commander:** Zhang Jun [张军] (7/18)<sup>1124</sup>

**PC:** Wang Qin [王庆] (9/18)<sup>1124</sup>

**Dep Commanders:** Lü Wei [吕伟] (7/18)<sup>1124</sup>

**Dep PC:** Unknown

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<sup>lviii</sup> For more on this brigade’s nuclear-conventional mission, see the author’s article in Popular Science: Ma Xiu and Peter Singer, “China’s ambiguous missile strategy is risky,” Eastern Arsenal, Popular Science, 11 May 2020, <https://www.popsci.com/story/blog-network/eastern-arsenal/china-nuclear-conventional-missiles/>. For a more in-depth treatment of this phenomenon and its implications, see James Acton, “Is It a Nuke?: Pre-Launch Ambiguity and Inadvertent Escalation,” Carnegie Endowment for International Peace, 9 April 2020, <https://carnegieendowment.org/2020/04/09/is-it-uke-pre-launch-ambiguity-and-inadvertent-escalation-pub-81446>

**Chief of Staff:** Zhang Jiaqing [张驾卿] (7/18)<sup>1124</sup> **PWDD:** Zhu Xiaogang [朱晓刚] (11/19)<sup>1125</sup>

**Support Dept Director:** Bai Shusheng<sup>lix</sup> [白树盛] (6/20)<sup>1128</sup>

**Former Leadership:** Liu Nian [刘念], Support Dept Director (2018)<sup>1124</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

### Base 64 Training Regiment [64 基地训练团]

This regiment is responsible for training of new enlisted personnel assigned to this base.

**MUCD:** 96841

**Former MUCD:** 96371

**Grade:** Regiment Leader

**Parent Unit:** Base 64

**Location:** Shangwuzhuang Town, Huangzhong County, Xining, Qinghai 810011 [青海省西宁市湟中县上五庄镇]<sup>1129</sup>

**Geo:** Unconfirmed, possibly 36.853165, 101.377012 or 36.841023, 101.385977

### Leadership

**Commander:** Zhang Chunfeng [张纯峰] (3/20)<sup>1130</sup> **PC:** Hou Zhiyu [侯志宇] (9/19)<sup>1131</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

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<sup>lix</sup>Alternative possible spelling of name: Bai Shucheng

**Chief of Staff:** Unknown

**PWDD:** Ding Feng [丁峰] (9/19)<sup>1132</sup>

**Support Div Director:** Unknown

**Former Leadership:** Zhang Wei [张伟], PC (2017)<sup>1133</sup>

### Composition

- Unknown number of subordinate training battalions

### Base 64 Communications Regiment [64 基地通信团]

This regiment is responsible for base-level communications.

**MUCD:** 96842

**Former MUCD:** 96375

**Grade:** Regiment Leader

**Parent Unit:** Base 64

**Location:** Chengdong District, Xining, Qinghai 810007 [青海省西宁市城东区]<sup>1134 1135</sup>

**Geo:** 36.596801, 101.810449<sup>1136</sup>

### Secondary Garrisons:

- Ledu District, Qinghai [青海省乐都区]<sup>1137</sup>
- Dingyuan Town, Lanzhou, Gansu [甘肃省兰州市定远镇]<sup>1138</sup> (35.938764, 104.015911)
  - Element co-located with Base HQ.

### Leadership

**Commander:** Li Hui [李辉] (8/18)<sup>1139</sup>

**PC:** Zhang Hongwei [张红伟] (9/18)<sup>1140</sup>

**Dep Commanders:** Unknown

**Dep PC:** He Zhiqiang [何志强] (8/18)<sup>1141</sup>

**Chief of Staff:** Unknown

**PWDD:** Song Yanfang [宋颜芳] (2/18)<sup>1142</sup>

**Support Div Director:** Zhang Yanbin [张彦彬] (6/18)<sup>1143</sup>

**Other Senior Leadership:** Qian Yegang [钱叶刚], Dep COS (9/17)<sup>1144</sup>

**Former Leadership:** Zhang Han [张翰], Commander (2017)<sup>1145</sup>; Wang Qing [王庆], PC (2017)<sup>1146</sup>; Guo Xueliang [郭学亮], Dep PC (2018)<sup>1147</sup>; Zhou Lichun [周利纯] (2016)<sup>1148</sup>

### Composition (presumed)

- 1<sup>st</sup> Communications Battalion [通信一营]
- 2<sup>nd</sup> Communications Battalion [通信二营]
- 3<sup>rd</sup> Communications Battalion [通信三营]

### Base 64 Operations Support Regiment [64 基地作战保障团]

The Base 64 Operations Support Regiment was established in August 2012,<sup>1149</sup> bringing together base support missions such as security, NBC defense, meteorology, survey and mapping, and engineering.

**MUCD:** 96843

**Former MUCD:** 96376

**Grade:** Regiment Leader

**Parent Unit:** Base 64

**Location:** 156 Jinke Rd., Eastern S&T New City, Dingyuan Town, Yuzhong County, Lanzhou, Gansu [甘肃省兰州市榆中县定远镇东部科技新城金科路 156 号]<sup>1150 1151</sup> (co-located with Base HQ)

**Geo:** 35.937267, 104.011855<sup>1149</sup>

**Secondary Garrison:** Yongzhou, Hunan [湖南省永州市]<sup>1152</sup>

### Leadership

**Commander:** Li Jinlong [李进龙] (7/18)<sup>1153</sup>

**PC:** Chen Bingjue [陈秉爵] (7/18)<sup>1154 1155</sup>

**Dep Commander:** Wang Xingang [王新刚] (8/18)<sup>1156</sup>

**Dep PC:** Wu Gaoling [吴高岭] (8/18)<sup>1157 1158</sup>

**Chief of Staff:** Unknown

**PWDD:** Cheng Gang [程刚] (9/18)<sup>1159</sup>

**Support Div Director:** Unknown

**Former Leadership:** Xing Jianjun [邢建军], Commander (2016)<sup>1160</sup>; Wu Wenzhong [吴文忠], Commander (2015)<sup>1161</sup>

### Composition (presumed)

- Security and Chemical Defense Battalion [警卫防化营]
  - Security Company [警卫连]
  - 1<sup>st</sup> Chemical Defense Company [防化一连]

- 2<sup>nd</sup> Chemical Defense Company [防化二连]
  - Commander: Deng Xiaoshi [邓晓世] (7/18)<sup>1162</sup>
  - Responsible for security, NBC defense, and camouflage<sup>1162</sup>
  - Includes a horse cavalry detachment likely responsible for base security<sup>1149</sup>
- Meteorology Station (Battalion Leader Grade) [气象台]<sup>1163</sup>
- Surveying Team (Battalion Leader Grade) [测地队]
  - 1st Squadron [一中队]
  - 2nd Squadron [二中队]
- Engineering Company [工兵连]
  - Previously a battalion, downgraded to a company as part of 2017 reforms<sup>1164</sup>

### **Base 64 Comprehensive Support Regiment [64 基地综合保障团]**

The Base 64 Comprehensive Support Regiment was formed around early 2017 by combining the former Technical Service Regiment, Repair Factory, and possibly other work units into a single regiment.<sup>1165</sup> The regiment is thus responsible for storage of missiles, fuel, munitions, and other supplies, as well as transport of these assets via road and rail to Base 64 units. It is also responsible for repair and maintenance of these assets as well as other Base 64 facilities and equipment.

**MUCD:** 96844

**Former MUCD:** 96374, 96372

**Grade:** Regiment Leader

**Parent Unit:** Base 64

**Location:** Xixingyuan Village, Dabaozi Town, Chengbei District, Xining, Qinghai 810005 [青海省西宁市城北区大堡子镇西杏园村]<sup>1166 1167 1168 1169</sup>

**Geo:** 36.661144, 101.684021<sup>1170</sup>

#### **Secondary Garrisons:**

- Huangzhong County, Xining, Qinghai [青海省西宁市湟中县]<sup>1171</sup> (possibly 36.852838, 101.377703)
  - Possibly co-located with the base Equipment Inspection Regiment
- Zhamalong Village, Duoba Town, Huangzhong County, Xining, Qinghai 811601 [青海省西宁市湟中县多巴镇扎麻隆村]<sup>1172 1173</sup> (possibly 36.666833, 101.473806)
  - Likely former site of the former Base 64 Service Regiment, which has since been folded into this regiment.

#### **Leadership**

**Commander:** Unknown

**PC:** Zou Gang [邹刚] (9/18)<sup>1169</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Pang Yuxiang [庞昱祥] (3/20)<sup>1131</sup>

**Support Div Director:** Unknown

**Former Leadership:** Zhu Xiaogang [朱晓刚], PWDD (2018)<sup>1174</sup>

### **Composition (presumed)**

- Vehicle Battalion [汽车营]
- Repair and Measurements Station (Battalion Leader Grade) [维修计量站]
- Munitions Depot [军械仓库]
- Fuel Storage Depot [油料仓库]
- Comprehensive Depot [综合仓库]
  - Director: Fu Chunming [付春明] (2/18)<sup>1175</sup>
  - Responsible for storage, management, and dispatch of munitions, fuel, and other supplies<sup>1176</sup>
  - Six locations in two provinces<sup>1175</sup>
- Rail Transport Company [铁路运输连]<sup>1177</sup>
- Service Company [勤务连]
- Vehicle Repair Subunit [汽车维修分队]

### **Background**

- This regiment has at least three major facilities, including that of the former Service Regiment.<sup>1165</sup> The Chengbei District HQ is located next to a railway station, which it may make use of for its transport mission.

### **Base 64 Equipment Inspection Brigade [64 基地装检旅]**

The Base 64 Equipment Inspection Brigade is responsible for inspection, storage, and management of the Base's nuclear warheads.<sup>1178</sup> As one of the 2nd Artillery's first units, elements of this unit, then known as Unit 8122, date back as far as August 1958,<sup>1180</sup> when the unit's first personnel were dispatched to the Gobi Desert as part of the PRC's early nuclear weapons program.<sup>1178</sup> It served as the PLA's first storage facility for nuclear weapons prior to the construction of the current facility at Taibai.<sup>1180</sup> Notably, Base 64 is the only base to command a brigade-sized Equipment Inspection unit.

**MUCD:** 96034

**Former MUCD/TUD:** 96373 (906 Regiment<sup>652</sup>); 80431<sup>1179</sup>; Unit 8122<sup>1180</sup>

**Grade:** Division Deputy Leader<sup>1181</sup>

**Parent Unit:** Base 64

**Location:** Nabuzang Village, Duoba Town, Huangzhong County, Xining, Qinghai [青海省西宁市湟中县多巴镇纳卜藏村]<sup>1182</sup>

**Geo:** Unconfirmed, possibly 36.841029, 101.386005 or 36.853089, 101.377534

**Secondary Garrisons:**

- Qaidam (Haixi) Prefecture, Delhi (Delingha), Qinghai [青海省德令哈海西州]<sup>1183</sup>
  - Possibly associated with the PLARF Test and Training District in this area
- Huangzhong County, Xining, Qinghai [青海省西宁市湟中县] (36.88938, 101.3399)<sup>lx</sup>
  - Possible site of the Brigade's 2<sup>nd</sup> Security Company

**Leadership**

**Commander:** Zhang Zenghui [张增辉] (7/20)<sup>1184</sup>    **PC:** Zhang Jianming [张建明] (7/20)<sup>1184</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Zou Bo [邹波] (6/18)<sup>1185</sup>

**PWDD:** Sun Erpeng [孙二朋] (7/20)<sup>1184</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Lou Yong [娄勇], Pol Work Dept Dep Director (7/17)<sup>1186</sup>; Wang Haizhou [王海洲], Snr Engineer (9/17)<sup>1180</sup>

**Former Leadership:** Zhang Bin [张彬], Commander (2018)<sup>1187</sup>; Yang Yong [杨勇], PC (2018)<sup>1188</sup>; Li Jindang [李进党], PWDD (2018)<sup>1188</sup>

**Composition (presumed)**

- 1st Equipment Inspection Station [检一站]
- 2nd Equipment Inspection Station [装检二站]
- 3rd Equipment Inspection Station [装检三站]
  - Director: Zhao Zhenghong [赵正宏] (6/17)<sup>1189</sup>
- Technical Service Battalion [技术勤务营]<sup>1190 lxi</sup>
  - Director: Wang Jianwei [王建伟] (8/18)<sup>1191</sup>

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<sup>lx</sup>Based on a private conversation with CASI Research Director Rod Lee

<sup>lxi</sup> Also referred to as a *Station* (站) in one source.<sup>1191</sup>

- Comprehensive Support Battalion [综合保障营]<sup>1192</sup>
- Security Battalion [警卫营]<sup>1193</sup>
  - The Battalion's 2<sup>nd</sup> Company is a horse cavalry company [骑兵连] armed with sabers (with which they appear to be operationally proficient) as well as guns and responsible for patrolling remote areas unsuitable for vehicles.<sup>1193</sup>
- 2<sup>nd</sup> Outpost
  - Established in 1960<sup>1194</sup>
- 9<sup>th</sup> Outpost
  - Established in 1960<sup>1195</sup>
  - Manned by six personnel and commanded by a corporal<sup>1196</sup>
  - Utilizes horses for transport<sup>1195</sup>
- Transport Company [转运连]
- Electrical Power Company [电力连]<sup>1187</sup>

## Background

- This unit is notable for its remote and harsh plateau geography. Average elevation for brigade subunits is 3,300m (10,862 feet) above sea level, with some garrisons located as high as 3,600m (11,811 feet) above sea level.<sup>1178</sup>

## Unit 96604 Hospital [96604 部队医院]

The Unit 96604 Hospital was established in 1939<sup>1197</sup> as the PLA 1<sup>st</sup> Hospital and was previously subordinate to the Lanzhou Military Region<sup>1198</sup> before being transferred to the PLARF around 2018.<sup>1199</sup>

**MUCD:** N/A

**Former TUD:**

PLA 1<sup>st</sup> Hospital [解放军第一医院];

Lanzhou San'aitang Hospital [兰州三爱堂医院]<sup>1200</sup>

**Grade:** Division Leader or Division Deputy Leader<sup>lxii</sup>

**Parent Unit:** Base 64

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<sup>lxii</sup> Presumed based on other base hospitals



**Location:** 72 Jingning Rd., Chengguan District, Lanzhou, Gansu [甘肃省兰州市城关区静宁路 72 号]<sup>1201</sup>

**Geo:** 36.048373, 103.828965

## Leadership

**Director:** Unknown

**PC:** Unknown

## Background

- It is unclear what this hospital's relationship is with the 536 Hospital, which is also attached to Base 64.
- Beginning in July 2018, this hospital began 6 months of training for 64 base medical personnel, suggesting it also has a training function.<sup>1199</sup>

## 536 Hospital [536 医院]

The PLA 536 Hospital, established in 1971,<sup>1202</sup> is (or was, prior to the establishment of the new Unit 96604 Hospital in 2018) the Base 64 hospital. It is unclear what its relationship is with the separate Unit 96604 Hospital in Lanzhou.

**MUCD:** N/A

**Former TUD:** N/A

**Grade:** Division Deputy Leader<sup>1203</sup>

**Location:** 29 Xiadu Street, Xining, Qinghai [青海省西宁市夏都大街 29 号]<sup>1204</sup>

**Geo:** 36.603688, 101.800136

## Leadership

**Director:** Li Tao (利涛) (1/18)<sup>1203</sup>

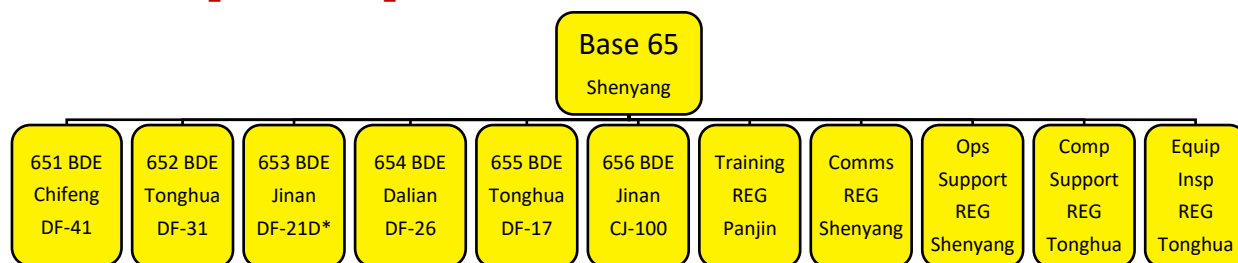
**PC:** Mao Hongkui [毛红魁] (1/15)<sup>1202</sup>

**Dep Director:** Xing Zhenglü [邢征率] (10/16)<sup>1205</sup>

## Background

- Base 64 has created an integrated support system in which missile brigades deploy for training missions with logistics and emergency support teams. Prior to this, the Base's brigades and regiments had their own support capabilities, but these were ineffective at SAR and medical support, leading to the creation of medical subunits from this hospital which are able to integrate into the joint command system of units in the field.<sup>1206</sup>

## Base 65 [65 基地]



*\*Possible conversion to new system*

Base 65, headquartered in the northeastern city of Shenyang, is an operations base covering northeast China and the Shandong Peninsula. It commands at least two road-mobile nuclear brigades, one dual nuclear-conventional IRBM brigade, one ASBM brigade, one hypersonic MRBM brigade, and one cruise missile brigade. Since the beginning of 2017 it has doubled in size, expanding from three to six missile brigades.

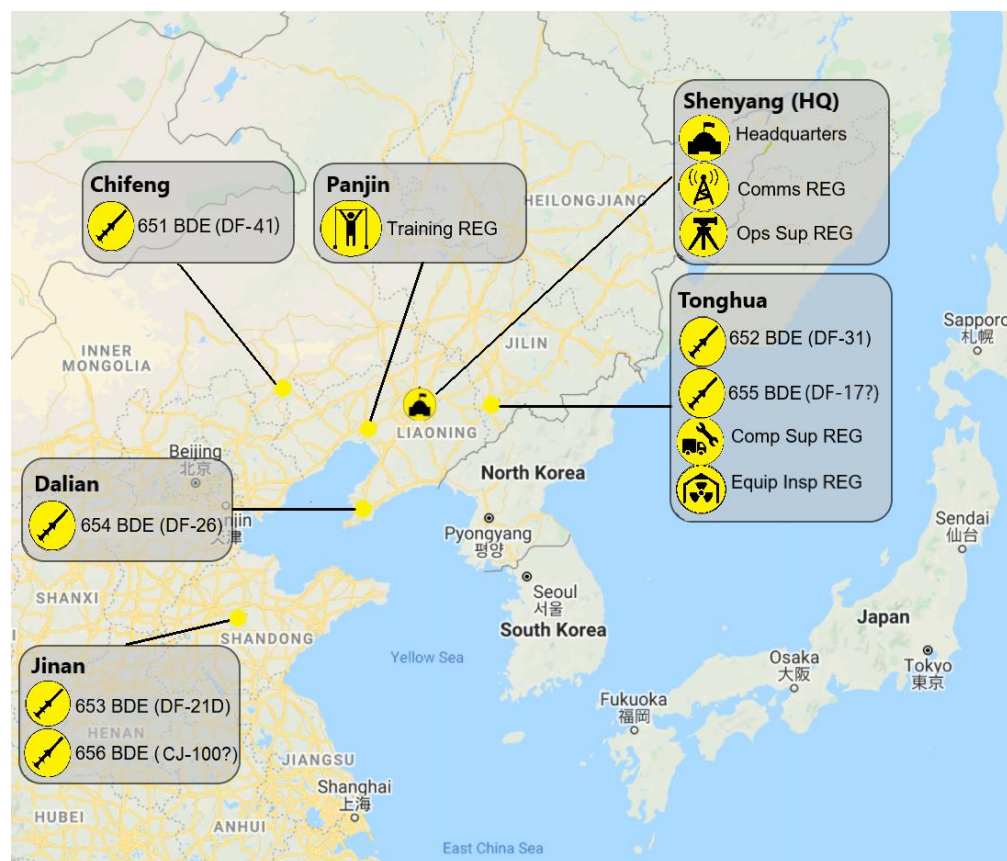
**MUCD:** 96605

**Former MUCD/TUD:** 96101 (Base 51)

**Grade:** Corps Deputy Leader<sup>1207</sup>

**Location:** 53 Yalujiang North St., Huanggu District, Shenyang, Liaoning 110033 [辽宁省沈阳市皇姑区鸭绿江北街 53 号]<sup>1208</sup>

**Geo:** 41.859448, 123.450765



## Leadership

**Commander:** Unknown

**PC:** Wang Dejun [王德君] (5/19)<sup>1207</sup>

**Dep Commanders:** Unknown

**Dep PC:** Fang Jian [方健] (5/20)<sup>1209</sup>

**Chief of Staff:** Chen Qian [陈前] (2/18)<sup>1210</sup>

**PWDD:** Wang Haijun [汪海军] (5/20)<sup>1209</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Dong Chunbo [董春波], Dep COS (8/16)<sup>1211</sup>; Wang Liuyu [王刘玉], Pol Work Dept Dep Director (7/18)<sup>1212</sup>; Wang Zhenyu [王震宇], Support Dept Dep Director (9/18)<sup>1213</sup>; Zhang Shuwei [张书伟], Propaganda Div Director (1/20)<sup>1214</sup>

**Former Leadership:** Zhao Qiuling [赵秋领], Commander (2019)<sup>1215</sup>; Zhang Fengzhong [张凤中], PC (2018)<sup>1216</sup>; Ma Wenyuan [马温元] (2018)<sup>1217</sup>

## Composition

- 651 Brigade [651 旅]
- 652 Brigade [652 旅]
- 653 Brigade [653 旅]
- 654 Brigade [654 旅]
- 655 Brigade [655 旅]
- 656 Brigade [656 旅]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Operations Support Regiment [作战保障团]
- Comprehensive Support Regiment [综合保障团]
- Equipment Inspection Regiment [装检团]
- Unit 96605 Hospital [96605 部队医院]

## Background

- Elements of what would become Base 51 were established in Tonghua in 1964 before moving to its current location in Shenyang.<sup>1218</sup>
- The Base Communications Regiment and Operations Support Regiment are also garrisoned at this location.

## 651 Brigade [651 旅]

The 651 Brigade was established in 1970.<sup>1219</sup> It was the last brigade equipped with the DF-3 until 2013, when it upgraded to the DF-21A, likely as a temporary bridge until the new DF-41 became operational.<sup>1220 1221</sup> It likely began conversion to the DF-41 in 2019, when unit elements were observed taking part in the 2019 National Day Parade as part of the DF-41 formation.<sup>1222</sup> It was finally equipped with the DF-41 in August 2020, following a two-month delay due to COVID.<sup>1223</sup> This conversion also came with a move from Dalian to a more inland location in Chifeng, Inner Mongolia.<sup>1224</sup>

**MUCD:** 96751                      **Former MUCD/TUD:** 96113 (810<sup>th</sup> Launch Bde<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 65

**Location:** Songshan District, Chifeng, Inner Mongolia [内蒙古赤峰市松山区]; Former location at 2 Zhengyang Rd., Dengshahe Town, Jinzhou District, Dalian, Liaoning 116105 [辽宁省大连市金州区登沙河镇正阳街 2 号]<sup>1225</sup>

**Geo:** Possibly 42.257, 118.825<sup>lxiii</sup>

### Capabilities

**Missile:** DF-41 ICBM                      **Missile Type:** Nuclear, Road Mobile

### Leadership

**Commander:** Zhao Jian (赵建) [11/19]<sup>1219</sup>                      **PC:** Yin Keming [尹可明] (5/20)<sup>1220</sup>

**Dep Commanders:** Wen Zhengjie [文郑杰] (8/20)<sup>1226</sup>

**Dep PC:** Unknown

**Chief of Staff:** Bao Feng [暴风] (11/19)<sup>1226</sup>                      **PWDD:** Zhu Hua [朱华] (11/19)<sup>1219</sup>

**Support Dept Director:** Yao Shengwei [姚胜伟] (6/20)<sup>1227</sup>

**Former Leadership:** Qiao Chunlei [乔春雷]<sup>1228</sup>, Commander (2018); Du Libin [杜立斌], COS (2018); Yin Xianyin [伊宪银], PWDD (2017)<sup>1229</sup>; Bai Chongqing<sup>lxiv</sup> [白重庆], Support Dept Director (2018)<sup>1230</sup>

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<sup>lxiii</sup> Credit to Twitter user “Mavana’s Pizza” for the possible new location. Mavana’s Pizza (@ljsxank), Twitter, 11 March 2021 6:28 PM, <https://twitter.com/ljsxank/status/1370154813653090307/photo/1>

<sup>lxiv</sup> Alternative possible spelling of name: Bai Zhongqing

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]<sup>1231</sup>

### 652 Brigade [652 旅]

The 652 Brigade, one of two Base 65 brigades garrisoned in the northeast city of Tonghua, may have been the last brigade equipped with the DF-21C MRBM. More recent evidence suggests it has converted to an unknown variant of the DF-31 ICBM.

**MUCD:** 96752                      **Former MUCD/TUD:** 96115 (816<sup>th</sup> Launch Bde<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>1232</sup>    **Parent Unit:** Base 65

**Location:** Dongchang District, Tonghua, Jilin 134008 [吉林省通化市东昌区]<sup>1233</sup>

**Geo:** Unconfirmed, possibly 41.760872, 125.987438

**Secondary Garrison:** Liupan Village, Sanyuanpu Township, Tonghua, Jilin [吉林省通化市三源浦镇六盘村]<sup>1239</sup>

### Capabilities

**Missile:** DF-31 or 31A ICBM<sup>1234 1235 1237</sup>

**Missile Type:** Nuclear, Road Mobile

### Leadership

**Commander:** Wang Mingcai [王明才] (2/20)<sup>1236</sup>    **PC:** Fu Chunquan [傅春权] (2/20)<sup>1237</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Wang Zhipeng [王志鹏] (6/18)<sup>1238</sup> **PWDD:** Zhang Zhen [张臻] (7/19)<sup>1239</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Wang Limin [王利民], PC (2018)<sup>1240</sup>; Pang Xiuhai [庞秀海], PC (2016)<sup>lxv</sup>; Wu Wei [吴伟], COS (2017); Duo Zhiliang [多志亮], Pol Dept Director (2017)<sup>1241</sup>; He Taichao [何太朝], Logistics Dept Director (2017)<sup>1242</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

### Background

- Reporting indicates that this brigade may have moved to a new location in a remote mountain environment around June 2018,<sup>1243</sup> and its former location was taken over by the new 655 Brigade.<sup>lxvi</sup> The new HQ seems to still be in Tonghua's Dongchang District.<sup>1233</sup> One analyst has located a recently constructed base which seems like a good candidate,<sup>lxvii</sup> and this is the location given here pending further confirmation. Around the same time, an increasing number of articles indicated a brigade presence in Liupan Village, Sanyuanpu Town, Tonghua,<sup>1239</sup> indicating this may be another possible candidate for the new HQ.

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<sup>lxv</sup>Spring Festival Launch Festivities, Catherine Dill, Arms Control Wonk, February 5, 2016, <https://www.armscontrolwonk.com/archive/1200957/spring-festival-launch-festivities/>

<sup>lxvi</sup>See entry for 655 Brigade.

<sup>lxvii</sup>Decker Eveleth (@dex\_eve), *Twitter.com*, June 16, 2020 1:19 PM. [https://twitter.com/dex\\_eve/status/1272941765188677639](https://twitter.com/dex_eve/status/1272941765188677639)

## 653 Brigade [653 旅]

The 653 Brigade, garrisoned in Jinan<sup>lxviii</sup> near the Shandong Peninsula, was likely established in 2001.<sup>1255</sup> In 2004, it conducted the first launch of a new type of missile,<sup>1255</sup> likely the DF-21C. More recently, this brigade has been re-equipped with a new missile,<sup>1244</sup> believed to be the DF-21D ASBM. This brigade's anti-ship missiles and position near the Shandong Peninsula make it likely that it would play a key A2/AD role during a conflict in the East China Sea. Beginning in 2019, this brigade may have begun converting to another unknown new missile.

**MUCD:** 96753                      **Former MUCD/TUD:** 96117 (822<sup>nd</sup> Launch Bde<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>1250</sup>   **Parent Unit:** Base 65

**Location:** 31 Wenshui Rd., High-tech District, Laiwu District, Jinan, Shandong [山东省济南市莱芜区高新区汶水大街 31 号]<sup>1245 1246</sup>

**Geo:** Unconfirmed, possibly 36.233844, 117.715662

### Capabilities

**Missile:** DF-21D ASBM<sup>1247</sup>; possible conversion to new system in 2020<sup>1248</sup>

**Missile Type:** Conventional, Anti-Ship

### Leadership

**Commander:** Zhang Jie [张杰] (7/19)<sup>1249</sup>                      **PC:** Zuo Yaming [左亚明] (9/18)<sup>1250</sup>

**Dep Commanders:** Wang Bo [王波] (9/18)<sup>1251</sup>                      **Dep PC:** Hu Wenming [胡文明] (8/18)<sup>1252</sup>

**Chief of Staff:** Unknown                      **PWDD:** Jiang Shusheng [姜蜀生] (9/19)<sup>1253</sup>

**Support Dept Director:** Wu Zhichun [吴志纯] (5/18)<sup>1254</sup>

**Other Senior Leadership:** Xia Chuntian [夏春田], Pol Work Dept Dep Director (10/18)<sup>1255</sup>

**Former Leadership:** Wang Maorui [王懋瑞], PC (2017)<sup>1256</sup>; Zhang Dawei [张大伟], COS (2018)<sup>1257</sup>; Wang Zhiwei [王志伟], PWDD (2017)<sup>1258</sup>

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<sup>lxviii</sup>This brigade is located in Laiwu District, which until 2019 was an independent city before being swallowed up by its larger neighbor. Thus, sources prior to 2019 will list this brigade as being located in Laiwu.

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Yin Dong [尹东]<sup>1247</sup>; often held up as a model PLARF officer
  - 1<sup>st</sup> Company [一连]
    - Described as PLARF's first mixed nuclear-conventional missile [核常兼备导弹] company.<sup>1255</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- 1<sup>st</sup> Technical Battalion [技术一营]
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>1259</sup>

## Background

- This brigade is one of two known to have been equipped with the DF-21D ASBM. However beginning in 2019, both DF-21D brigades have given vague indications that they have since replaced the DF-21D with an unidentified new missile type. There is currently no firm evidence as to what this new missile type may be, but speculatively it could be the DF-26, perhaps an anti-ship variant, or the newest DF-21E, of which little is currently known.

## 654 Brigade [654 旅]

The 654 Brigade, the second stationed in the northeast city of Dalian, was first publicly cited in June 2017.<sup>1260</sup> It appears to be among the first units equipped with the DF-26 IRBM, and it completed its first successful launch around summer 2018.<sup>1261</sup>

**MUCD:** 96754

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 65

**Location:** Chejiatun, 34 Huajia Subdistrict, Jinzhou District, Dalian, Liaoning [辽宁省大连市金州区华家街道 34 号车家屯]<sup>1262</sup>



**Geo:** Unconfirmed, possibly 39.302672, 122.065102

**Secondary Garrison:** Jinpu New District, Pulandian District, Dalian, Liaoning [辽宁省大连市普兰店区金普新区]<sup>1263</sup>

## Capabilities

**Missile:** DF-26 IRBM<sup>1264 1265 1266</sup>      **Missile Type:** Dual Nuclear-Conventional, Road-mobile

## Leadership

**Commander:** Xie Weipeng [解维鹏] (1/20)<sup>1267</sup>      **PC:** Zheng Jianyong [郑建勇] (1/19)<sup>1268</sup>

**Dep Commanders:** Yuan Jiyun [袁纪云] (9/19)<sup>1269</sup> **Dep PC:** Zhang Guanghui [张光辉] (5/18)<sup>1270</sup>

**Chief of Staff:** Unknown      **PWDD:** Xu Zhi [徐治] (1/20)<sup>1271</sup>

**Support Dept Director:** Zhang Xiaoguang [张孝光] (1/19)<sup>1268</sup>

**Former Leadership:** Yao Chi [姚驰], Pol Work Dept Dep Director (2018)<sup>1272</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## Background

- Dong Xianglin [董祥林], who served as PC of the DF-26 formation at the 2019 National Day parade, is part of this unit.<sup>1264 1265</sup>

- As of January 2019, this unit was still not completely formed, and had not yet received all of its equipment. The 5th Launch Battalion [发射五营] was a little over 6 months old at this point.<sup>1273</sup>

## 655 Brigade [655 旅]

First reports of this launch brigade, the second stationed in the northeast city of Tonghua, appeared around July 2018. Recent ground imagery indicates this brigade is now stationed in the 652 Brigade's former headquarters.<sup>1277</sup> There is some initial evidence this unit may be equipped with the DF-17 hypersonic missile.<sup>1274</sup>

**MUCD:** 96755

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 65

**Location:** Jinchang Town, Toupeng, Dongchang District, Tonghua, Jilin [吉林省通化市东昌区金厂镇]<sup>1275 1276</sup>

**Geo:** 41.669045, 125.955439<sup>1277</sup>

### Secondary Garrison:

- Dongchang District, Tonghua, Jilin [吉林省通化市东昌区] (41.634058, 125.995811)<sup>lxix</sup>
  - Satellite facility possibly used for equipment storage and/or training.
- Toupeng, Tonghua County, Tonghua, Jilin [吉林省通化市通化县头棚]<sup>1278</sup>

## Capabilities

**Missile:** Possible DF-17 MRBM

**Missile Type:** Conventional

## Leadership

**Commander:** possibly Zhang Weilian [张伟连]<sup>1279</sup> **PC:** Wang Limin [王利民] (9/19)<sup>1280</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Feng Bo [冯博] (8/19)<sup>1281</sup>

**Support Dept Director:** Unknown

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<sup>lxix</sup>Credit to private analysts Decker Eveleth and Tajo Takoya (@TajoTakoya) for initial ID of this site.

**Other Senior Leadership:** Qiang Wei [强伟], Dep COS (4/20)<sup>1282</sup>; Zhang Xinyu [张新宇], Unknown Position (8/19)<sup>1281</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

### 656 Brigade [656 旅]

First reports of this new brigade, the second to be stationed in Jinan, first appeared publicly in December 2019.<sup>1283</sup> While not yet definitively confirmed, initial evidence suggest this may be the first brigade equipped with the newest CJ-100 LACM.

**MUCD:** 96756

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 65

**Location:** Laiwu District, Jinan, Shandong [山东省济南市莱芜区]<sup>1284</sup>

**Geo:** 36.246, 117.65326<sup>1284</sup> lxx

### Capabilities

**Missile:** Possible CJ-100 LACM<sup>lxxi</sup>

**Missile Type:** Conventional

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<sup>lxx</sup>First ID'ed by Rod Lee of China Aerospace Studies Institute.

<sup>lxxi</sup>“First PLA Rocket Force CJ-100 Unit Likely Identified,” *China Aerospace Studies Institute*, 4 November 2020, [https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/CASI%20Articles/2020-11-04%20656%20Brigade%20CJ-100s.pdf?ver=vG4fQA5fYa8Y5\\_4yNpfOVg%3d%3d](https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/CASI%20Articles/2020-11-04%20656%20Brigade%20CJ-100s.pdf?ver=vG4fQA5fYa8Y5_4yNpfOVg%3d%3d)

## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Song Yugang [宋玉刚] (12/19)<sup>1285</sup>

**Support Dept Director:** Unknown

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## Base 65 Training Regiment [65 基地训练团]

The Base 65 Training Regiment is responsible for training of new Base 65 enlisted personnel.<sup>1286</sup> Since 2015 it has also been responsible for pre-billet training of newly graduated PLARF academic institution cadets bound for Base 65 billets.<sup>1287</sup>

**MUCD:** 96851

**Former MUCD:** 96121

**Grade:** Regiment Leader

**Parent Unit:** Base 65

**Location:** Tangjia Town, Dawa District, Panjin, Liaoning 124203 [辽宁省盘锦市大洼区唐家镇]<sup>1288 1289</sup>

**Geo:** 41.063075, 122.151516<sup>1290</sup>

## Leadership

**Commander:** Yu Chunbo [于春波] (11/19)<sup>1291</sup>

**PC:** Zhu Liandeng [朱连登] (10/17)<sup>1292</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Liang Dong [梁栋] (10/17)<sup>1294</sup>

**PWDD:** Liu Yang [刘杨] (12/19)<sup>1293</sup>

**Support Div Director:** Unknown

**Former Leadership:** Tao Dexi [陶德喜], Commander (2016)<sup>1294</sup>

## Composition

- Unknown number of subordinate training battalions

## Background

- In 2016 this regiment is noted as having invested 700,000 RMB in nine new training rooms/offices ( 室 ), including for training personnel in control, targeting, and hydraulics.<sup>1295</sup>

## Base 65 Communications Regiment [65 基地通信团]

This regiment is responsible for base-level communications.

**MUCD:** 96852

**Former MUCD:** 96125

**Grade:** Regiment Leader

**Parent Unit:** Base 65

**Location:** 53 Yalujiang North Rd., Huanggu District, Shenyang, Liaoning 110033/110032 [辽宁省沈阳市皇姑区鸭绿江北街 53 号]<sup>1296 1297</sup> (co-located with Base HQ)

**Geo:** 41.860502, 123.451290<sup>1296</sup>

## Secondary Garrisons:

- Haoxintai Village, Daoyi Town, Shenbei New District, Shenyang, Liaoning [辽宁省沈阳市沈北新区道义镇郝心台村]<sup>1298</sup> (possibly 41.961457, 123.387292)
  - This second Shenyang location is located near an unidentified vehicle battalion [汽车营], and it is unclear if the military facility coordinates given here are for this unit or the vehicle battalion.
- Huanggou Village, Jinchang Town, Tonghua, Jilin [吉林省通化市金厂镇荒沟村]<sup>1299</sup> (possibly 41.627620, 125.980450)
  - Likely co-located with Base 65 Equipment Inspection Regiment

## Leadership

**Commander:** Wang Shuangbin [王双滨] (12/19)<sup>1300</sup> **PC:** Xin Guozhou [辛国洲] (5/19)<sup>1301</sup>

**Dep Commanders:** Cao Chengyong [曹成永] (8/18)<sup>1302</sup>

**Dep PC:** An Gang [安刚] (5/19)<sup>1301</sup>

**Chief of Staff:** Chen Hu [陈虎] (9/19)<sup>1303</sup> **PWDD:** Wang Pu [王璞] (12/19)<sup>1300</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Liu Nan [刘男], Dep COS (2/18)<sup>1304</sup>

**Former Leadership:** Fu Chunquan [傅春权], PC (2018)<sup>1305</sup>; Liu Zhong [刘忠], COS (2017)<sup>1306</sup>

## Composition (presumed)

- 1<sup>st</sup> Communications Battalion [通信一营]
- 2<sup>nd</sup> Communications Battalion [通信二营]
- 3<sup>rd</sup> Communications Battalion [通信三营]
  - 7<sup>th</sup> Company [七连]<sup>1307</sup>
- Vanguard Mobile Company [先锋机动连]
  - Commander: Huang Nianlong [黄念龙] (1/18)<sup>1308</sup>
  - Presumably subordinate to one of the three above battalions, but unknown which one.

## Background

- This unit is also responsible for conducting 3 month pre-billet group training for new comms specialists coming out of basic training.<sup>1309</sup>
- The 210th Subunit [210 分队] was established in August 2005. It is located at Base 65 HQ. It is responsible for comms support, including via telephone and telegram. It is described as a nerve center for base operations and the command chain. It is an all or mostly all female subunit.<sup>1296</sup>
- The 211th Subunit [211 分队] was established in September 1965. It is responsible for providing a fixed comms platform for communication with both lower and higher level units, as well as with neighboring units. It has drilled with the Northern TC and CMC. It is a primarily female subunit.<sup>1310</sup>

## Base 65 Operations Support Regiment [65 基地作战保障团]

The Base 65 Operations Support Regiment was likely established around 2012 and is responsible for several support specialties including security, NBC defense, engineering, meteorology, survey and mapping, and emergency response.

**MUCD:** 96853

**Former MUCD/TUD:** 96126

**Grade:** Regiment Leader

**Parent Unit:** Base 65

**Location:** 53 Yalujiang North Street, Huanggu District, Shenyang, Liaoning 110033 [辽宁省沈阳市皇姑区鸭绿江北街 53 号]<sup>1311</sup> (co-located with Base HQ)

**Geo:** 41.857875, 123.450077<sup>1312 1313</sup>

**Secondary Garrison:** Harbin, Heilongjiang [黑龙江省哈尔滨]<sup>1314</sup>

### Leadership

**Commander:** Chen Wei [陈伟] (9/19)<sup>1315</sup>

**PC:** Han Xiaofeng [韩晓峰] (9/19)<sup>1315</sup>

**Dep Commanders:** Unknown

**Dep PC:** Jin Hongyi [靳弘毅] (3/17)<sup>1316</sup>

**Chief of Staff:** Chai Zhenghe [柴正和] (2/20)<sup>1317</sup> **PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Peng Chunliang [彭春良], Snr Engineer (3/17)<sup>1313</sup>

### Composition (presumed)

- Security and Chemical Defense Battalion [警卫防化营]
  - Security Company [警卫连]
  - 1<sup>st</sup> Chemical Defense Company [防化一连]<sup>1318</sup>
  - 2<sup>nd</sup> Chemical Defense Company [防化二连]
- Meteorology Station (Battalion Leader Grade) [气象台]<sup>1313</sup>
- Surveying Team (Battalion Leader Grade) [测地队]<sup>1318</sup>
  - 1<sup>st</sup> Squadron [一中队]
  - 2<sup>nd</sup> Squadron [二中队]
- Engineering Company [工兵连]

## Base 65 Comprehensive Support Regiment [65 基地综合保障团]

The Base 65 Comprehensive Support Regiment was formed around June 2017 by combining the former Technical Service Regiment, Repair Factory, and possibly other base elements into a single regiment.<sup>1319</sup> The regiment is thus responsible for maintenance and repair of base equipment, storage of missiles, fuel, munitions, vehicles and other supplies, and transport of these assets via road and rail to Base 65 units.<sup>1320</sup>

**MUCD:** 96854

**Former MUCD:** 96124, 96122

**Grade:** Regiment Leader

**Parent Unit:** Base 65

**Location:** 9 Xinguang Rd., Tonghua, Jilin [吉林省通化市新光路 9 号]<sup>1321</sup>

**Geo:** 41.738550, 125.952809<sup>1322</sup>

### Secondary Garrisons:

- This regiment has over ten small work units which are dispersed across eight locations in three cities and two provinces.<sup>1323</sup> Three of these locations have likely been identified, all in Tonghua:
- 1281 Xinling Rd., Dongchang District, Tonghua, Jilin [吉林省通化市东昌区新岭路 1281 号]<sup>1324</sup> (41.731048, 125.965555)<sup>1325</sup>
  - A small satellite facility near the HQ which hosts the Repair and Measurements Station<sup>1324</sup> as well as other support elements. Its position near rail tracks suggests possible involvement with rail transport.
- Huanggou Village Tonghua, Jilin [吉林省通化市荒沟村]<sup>1326</sup> (possibly located at 41.628115, 125.980312)
  - This facility was the likely site of the former base Technical Service Regiment. It was presumably absorbed into this regiment following the 2017 merger.
- Jinchang Town, Tonghua, Jilin [吉林省通化市金厂镇] (possibly located at 41.670816, 125.952941)

### Leadership

**Commander:** Unknown

**PC:** Ma Donghao [马东浩] (9/18)<sup>1328 1327</sup>

**Dep Commanders:** Wang Bin [王斌] (9/18)<sup>1328</sup>; Xiang Haifeng [项海峰] (7/16)<sup>1329</sup>

**Dep PC:** Unknown

**Chief of Staff:** Geng Xianfeng [耿献峰] (8/17)<sup>1330</sup> **PWDD:** Unknown

**Support Div Director:** Unknown



**Other Senior Leadership:** Gao Yang [高洋], Pol Work Div Dep Director (9/18)<sup>1331</sup>; Wang Xu [王旭], Factory Management Div Director (1/17)<sup>1332</sup>

**Former Leadership:** Zhao Jian [赵建], Commander (2018)<sup>1333</sup>

### Composition (presumed)

- Vehicle Battalion [汽车营]
- Repair and Measurements Station [维修计量站]
  - Director: Tang Sheng [唐圣] (8/18)<sup>1334</sup>
  - Battalion Leader Grade
- Munitions Depot ([械仓库])
- Fuel Storage Depot [油料仓库]
  - Director: Guo Bingyuan [郭兵源] (5/17)<sup>1335</sup>
- Comprehensive Depot [综合仓库]
  - Director: Yin Jie [殷杰] (5/17)<sup>1335</sup>
- Rail Transport Company [铁路运输连]
- Service Company [勤务连]
- Vehicle Repair Subunit [汽车维修分队]

### Background

- This unit is informally known as the “Dongfang Escorts”<sup>1336</sup>

### Base 65 Equipment Inspection Regiment [65 基地装检团]

The Base 65 Equipment Inspection Regiment is responsible for storage, management, and transport<sup>1337</sup> of Base 65 nuclear warheads.

**MUCD:** 96035

**Former MUCD/TUD:** 96123 (901 Regiment<sup>652</sup>)

**Grade:** Regiment Leader

**Parent Unit:** Base 65

**Location:** Guosong Township, Tonghua County, Tonghua, Jilin 134103 [吉林省通化市通化县果松镇]<sup>1338 1339 1340</sup>

**Geo:** unconfirmed, possibly 41.599921, 126.248813

## Secondary Garrison:

- Guosongchuan, Guosong Town, Tonghua County, Tonghua, Jilin [吉林省通化市通化县果松镇果松镇果松川]<sup>1341</sup> (possibly located at 41.546945, 126.241531)
  - Likely site of the regiment's Technical Service Battalion. The facility is located in close proximity to railway tracks, as is the likely regiment headquarters, indicating a possible rail transport capability.

## Leadership

**Commander:** Zhang Dawei [张大伟] (12/19)<sup>1342</sup> **PC:** Zhao Hongyan [赵洪岩] (9/18)<sup>1343 1344</sup>

**Dep Commanders:** Unknown **Dep PC:** Gao Yang [高洋] (3/19)<sup>1345</sup>

**Chief of Staff:** Sun Chengda [孙承达] (8/18)<sup>1346</sup> **PWDD:** Han Jianfeng [韩建峰] (3/20)<sup>1347</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Zhang Qiangqiang [张强强], Dep PWDD (9/17)<sup>1348</sup>

**Former Leadership:** Wang Hongguo [王洪国], Commander (2018)<sup>1344</sup>; Zuo Yaming [左亚明], PC (2017)<sup>1349</sup>; Hou Jianqiu [侯建秋], Dep PC (2017)<sup>1350</sup>; Zhang Xinyu [张新宇], COS (2017)<sup>1351</sup>; Lu Jun [卢俊], PWDD (2017)<sup>1352</sup>; Zheng Tao [郑涛], Chief Engineer (2017)<sup>1353</sup>

## Composition (presumed)

- 1<sup>st</sup> Equipment Inspection Station [装检一站]
- 2<sup>nd</sup> Equipment Inspection Station [装检二站]
- 3<sup>rd</sup> Equipment Inspection Station [装检三站]
- Technical Service Battalion [技术勤务营]<sup>1341</sup>
- Comprehensive Support Battalion [综合保障营]<sup>1354</sup>
- Transport Company [转运连]<sup>1355</sup>
- Security and Communications Company [警卫通信连]<sup>1356</sup>

## Unit 96605 Hospital [96605 部队医院]

The Unit 96605 Hospital was established in October 2018 by combining the former 531 Hospital and 206 Hospital.<sup>1357</sup> A ribbon cutting ceremony was held in January 2019.<sup>1362</sup> The primary facility is the site of the former 206 Hospital.<sup>1358</sup>

**MUCD:** N/A

**Former TUD:** 531 Hospital [531 医院]; 206 Hospital [206 医院]

**Grade:** Division Leader or Division Deputy Leader<sup>lxxii</sup>

**Parent Unit:** Base 65

**Location:** 500 Xinhua Rd., Dongchang District, Tonghua, Jilin [林省通化市东昌区新华大街 500 号]<sup>1359</sup>

**Geo:** 41.700644, 125.906440

**Secondary Garrison:**

- 1888 Jianshe Rd., Changdong District, Tonhua, Jilin [吉林省通化市东昌区建设大街 1888 号]<sup>1360</sup>
  - Former site of 531 Hospital, presumed still active.

**Leadership**

**Director:** Zhu Mengjun [朱孟军] (3/20)<sup>1361</sup>

**PC:** Zhang Mingyong [张明勇] (1/19)<sup>1362</sup>

**Former Leadership:** Ma Minhua [马民华], 531 Hospital Director (2017)<sup>1363</sup>; Ge Shuangbo; [葛双波] 206 Hospital PC (2018)<sup>1364</sup>

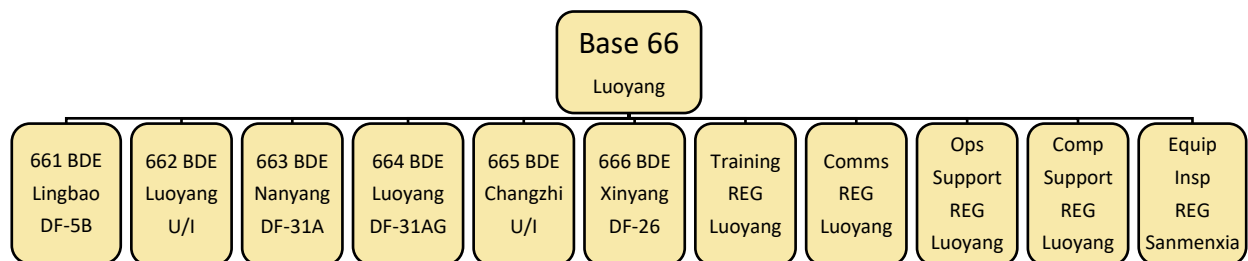
**Background**

- The 531 Hospital was, until recently, the primary hospital attached to Base 65. Like the other base hospitals, it commands field medical teams which provide mobile battlefield medical support, including field surgery and NBC response.<sup>1365</sup> It also provides free medical services to local elderly and underserved civilians.<sup>1366 1367</sup> Its staff is primarily military, though it does employ a small number of civilian personnel, including four head nurses.<sup>1368</sup>
- The 206 Hospital was established in 1950. Previously under the Shenyang MR, it was transferred to the PLARF in 2016 and merged with the 531 Hospital in October 2018. It is subordinate to PLARF Base 65.<sup>1357</sup> It dispatches medical teams to serve communities and PLA veterans in the vicinity of Tonghua, as well as providing medical care to first line units.<sup>1369</sup>

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<sup>lxxii</sup> Presumed based on other base hospitals

## Base 66 [66 基地]



Base 66, established in 1966<sup>1373</sup> and headquartered in Luoyang, is an operations base located in inland central China. It commands at least four nuclear ICBM brigades (at least two of which are road-mobile), one dual nuclear-conventional IRBM brigade, and one additional brigade of unknown type. Since 2017 it has expanded from four to six missile brigades.

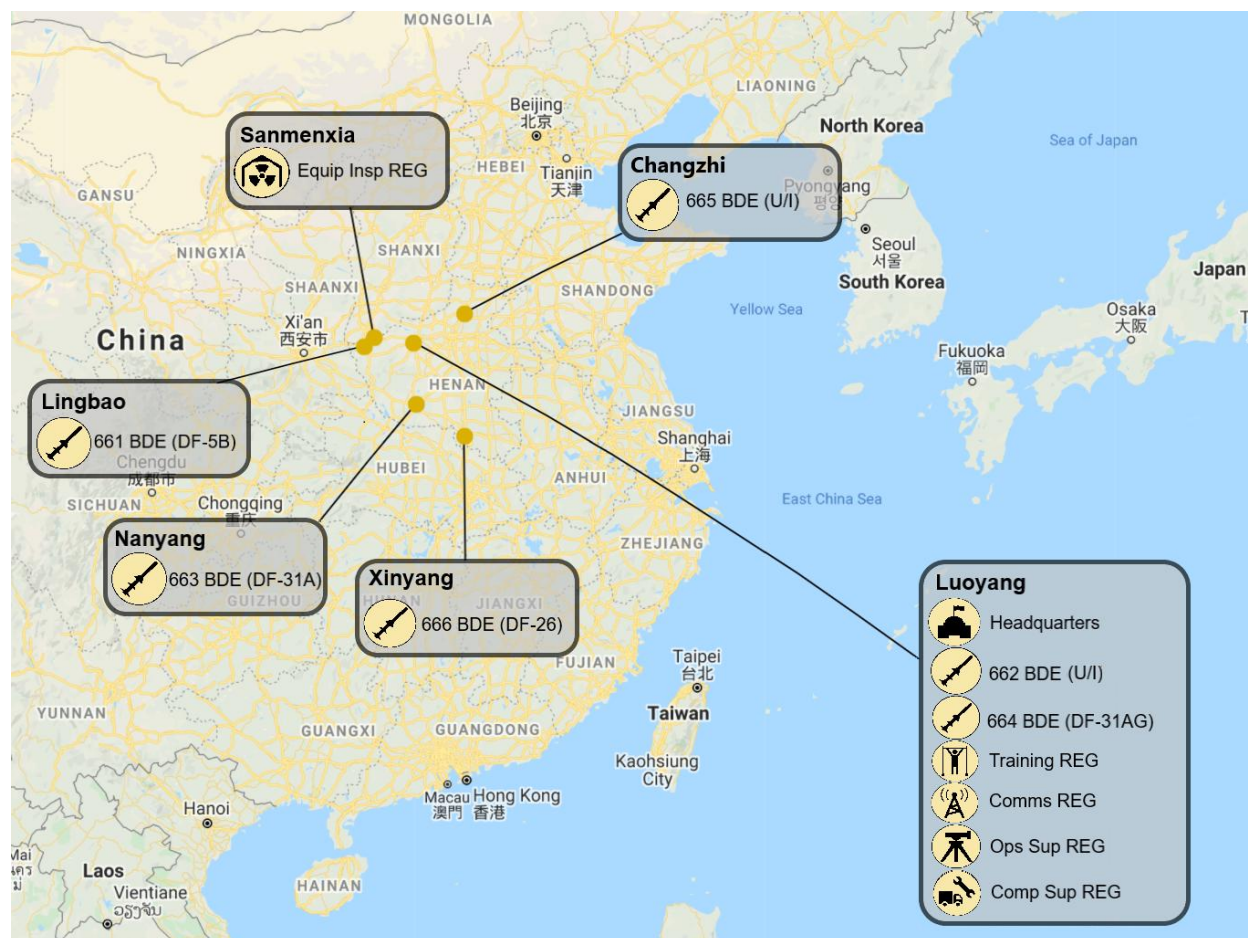
**MUCD:** 96606

**Former MUCD/TUD:** 96251 (Base 54)

**Grade:** Corps Leader Grade<sup>1370</sup>

**Location:** Lichun West Rd., Jianxi District, Luoyang, Henan [河南省洛阳市涧西区丽春西路]<sup>1371</sup>

**Geo:** 34.640446, 112.382525<sup>1372</sup>



## Leadership

**Commander:** Xue Jinfeng [薛今峰] (10/19)<sup>1373</sup>      **PC:** Zhang Fengzhong [张凤中] (1/20)<sup>1374</sup>

**Dep Commanders:** Hu Mingquan [胡明全] (8/19)<sup>1375</sup>

**Dep PC:** Wang Xinguo [王新国] (7/18)<sup>1376</sup>

**Chief of Staff:** Li Tian (李天) (5/18)<sup>1377</sup>      **PWDD:** Feng Zhiwen [冯智文] (9/18)<sup>1378</sup>

**Support Dept Director:** Jia Ziguang [加子国] (6/18)<sup>1379</sup>

**Other Senior Leadership:** Wang Ximin [王锡民], Dep COS (7/20)<sup>1380</sup>; Lü Zhougen [吕舟根], Dep COS (10/18)<sup>1381</sup>; Gan Yeyuan [甘业元] (7/19)<sup>1382</sup>; Gou Xiaoping [勾小平] (11/19)<sup>1383</sup>

**Former Leadership:** Liu Qide [刘启德], Commander (2016)<sup>1384</sup>; Li Yongsheng [李永生], PC (2018)<sup>1385</sup>; He Junmin [何钧民], Dep PC (2015)<sup>1386</sup>

## Composition

- 661 Brigade [661 旅]
- 662 Brigade [662 旅]
- 663 Brigade [663 旅]
- 664 Brigade [664 旅]
- 665 Brigade [665 旅]
- 666 Brigade [666 旅]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Operations Support Regiment [作战保障团]
- Comprehensive Support Regiment [综合保障团]
- Equipment Inspection Regiment [装检团]
- Unit 96606 Hospital [96606 部队医院]
- PLA Rocket Force Military Canine Training Team [火箭军军犬训练队]

## 661 Brigade [661 旅]

The 661 Brigade, established in July 1959<sup>1398</sup> as the 1<sup>st</sup> SSM Battalion<sup>1387</sup> and often referred to today as the “1<sup>st</sup> Dongfeng Brigade” [东风第一旅],<sup>1388</sup> was the 2<sup>nd</sup> Artillery’s first strategic missile unit. It fired its first missile on 25 October 1963, and was first publicly revealed in 1984.<sup>1388</sup> Today,

it is garrisoned in the central Chinese city of Lingbao and equipped with the latest B variant of the DF-5 silo-based ICBM.

**MUCD:** 96761 **Former MUCD/TUD:** 96261 (801<sup>st</sup> Launch Bde<sup>417</sup>)

**Grade:** Division Deputy Leader<sup>1388</sup> **Parent Unit:** Base 66

**Location:** Compound 80, #6 Neighborhood, Huanghe Rd., Lingbao, Sanmenxia, Henan [河南省三门峡市灵宝市黄河路六街坊 80 号院]<sup>1389</sup>

**Geo:** 34.516597, 110.862079<sup>1390</sup>

**Secondary Garrison:** Nanchao Village, Lingbao, Sanmenxia, Henan [河南省三门峡市灵宝市南朝村] (34.472805, 111.001041)<sup>1391</sup>

### Capabilities

**Missile:** DF-5B<sup>417 1390</sup>

**Missile Type:** Nuclear, Silo-based

### Leadership

**Commander:** Luo Degang [罗德刚] (12/20)<sup>1392</sup> **PC:** Zhang Wei [张伟] (12/20)<sup>1393</sup>

**Dep Commanders:** Yang Yizhi [杨溢治] (7/18)<sup>1376</sup>; Fan Jintao [范金涛] (11/19)<sup>1383</sup>

**Dep PC:** Mao Xinfeng [毛新丰] (12/19)<sup>1394</sup>

**Chief of Staff:** Li Lei [李磊] (4/20)<sup>1395</sup> **PWDD:** He Haiwei [何海卫] (5/22)<sup>1396</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Wei Xiaoguang [魏晓光], Dep COS (12/20)<sup>484</sup>; Shao Huanping [邵焕平], Dep COS (3/18)<sup>1397</sup>; Yan Hai [闫海], Snr Engineer (7/17)<sup>1399</sup>

**Former Leadership:** Wang Ximin [王锡民], Commander (2020)<sup>1398</sup>; Wen Qing [文青], PC (2017)<sup>1399</sup>; Wang Lihua [王立华], COS (2019)<sup>1400</sup>; Wang Yanlei [王艳磊], COS (2017)<sup>1399</sup>; Zhou Tao [周涛], Dep COS (2017)<sup>1399</sup>; Zhang Jiguo [张继国], PWDD (2022)<sup>1401</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]

- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## 662 Brigade [662 旅]

The 662 Brigade, garrisoned in the central Chinese city of Luoyang, was established in March 1961, and fired its first missile in June 1966. This brigade is or was the last still equipped with the DF-4 ICBM. It has likely transitioned to a new system, but it remains unclear what that system is. Recent construction suggests this may be a new silo-based DF-41,<sup>lxxiii</sup> but this remains speculative.

**MUCD:** 96762                      **Former MUCD/TUD:** 96263 (804<sup>th</sup> Launch Bde<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 66

**Location:** 448 Xinghua West Rd., Chengguan Town, Luanchuan County, Luoyang, Henan [河南省洛阳市栾川县城关镇兴华西路 448 号]<sup>1402</sup>

**Geo:** 33.789768, 111.591369<sup>1403</sup>

## Capabilities

**Missile:** Previously DF-4 ICBM<sup>1404 1405</sup>; imminent conversion to unidentified new system

**Missile Type:** Nuclear, Roll-out-to-launch

## Leadership

**Commander:** Zeng Manjun [曾满军] (4/19)<sup>1406</sup> **PC:** Chen Yang [陈阳] (10/17)<sup>1407</sup>

**Dep Commanders:** Sun Jianjun [孙建军] (5/20)<sup>1408</sup> **Dep PC:** Unknown

**Chief of Staff:** Luo Degang [罗德刚] (2/18)<sup>1409</sup>      **PWDD:** Wang Weiqiang [王伟强] (9/18)<sup>1410</sup>

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<sup>lxxiii</sup>Scott Lafoy, Decker Eveleth, "Possible ICBM Modernization Underway at Sundian," Arms Control Wonk, 5 February 2020, <https://www.armscontrolwonk.com/archive/1208828/possible-icbm-modernization-underway-at-sundian/>



**Support Dept Director:** Unknown

**Former Leadership:** Wang Jianxun [王建勋], COS (2017)<sup>1411</sup>

### Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Political Instructor: He Chunhui [何春晖] (7/20).<sup>1412</sup>
  - May be the 40<sup>th</sup> Subunit [40 分队]<sup>1403</sup>
  - This battalion has been recognized as a first-class military training battalion for the last 28 years, and has been conferred multiple honors.<sup>1403</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
  - Commander: Zhou Zhili [周志立] (9/18)<sup>1413</sup>
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
  - Comprehensive Defense Company [综合防护连]<sup>1414</sup>
- Comprehensive Support Battalion [综合保障营]<sup>1415</sup>
- Technical Battalion [技术营]
  - 4<sup>th</sup> Site Management Company [阵管四连]<sup>1416</sup>

### 663 Brigade [663 旅]

The 663 Brigade, located in the central Chinese city of Nanyang, is equipped with the DF-31A road-mobile ICBM.

**MUCD:** 96763                      **Former MUCD/TUD:** 96265 (813<sup>th</sup> Launch Bde<sup>417</sup>)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 66

**Location:** Wangcun Township, Nanyang, Henan [河南省南阳市王村乡]<sup>1417 1418</sup>

**Geo:** 33.012898, 112.416819<sup>1419</sup>

### Capabilities

**Missile:** DF-31A ICBM<sup>1420</sup>

**Missile Type:** Nuclear, road-mobile



## Leadership

**Commander:** Zheng Yan [郑焱/郑炎] (6/20)<sup>1420</sup>      **PC:** Tan Donghua [谭东华] (6/20)<sup>1421</sup>

**Dep Commanders:** Unknown      **Dep PC:** Li Dongdong [李冬冬] (9/17)<sup>1422</sup>

**Chief of Staff:** Bao Xianglong [包相龙] (2/21)<sup>1423</sup>      **PWDD:** Liu Jiyang [刘激扬] (6/20)<sup>1420</sup>

**Support Dept Director:** Wang Meng [王猛] (1/18)<sup>1424</sup>

**Other Senior Leadership:** Zhang Longling [张龙领], Dep COS (9/19)<sup>1425</sup>; Zhang Shumin [张书民], Pol Work Dept Dep Director (9/17)<sup>1422</sup>; Li Quan [李全], Snr Engineer (7/17)<sup>1426</sup>

**Former Leadership:** Mu Shouqin [沐守勤], Commander (2018); Lin Shusen [林树森], PC (2019); Liu Shougong [刘守功], Dep Commander (2018)<sup>1427</sup>; Zhang Jinzhong [张金忠], COS (2018)<sup>1428</sup>; Zhong Aizhong [仲爱忠], Pol Dept Director (2017)<sup>1429</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Commander: Niu Zhendong [牛振东] (4/20)<sup>1430</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- 1<sup>st</sup> Technical Battalion [技术一营]
- 2<sup>nd</sup> Technical Battalion [技术二营]<sup>1431</sup>

## 664 Brigade [664 旅]

The 664 Brigade, likely established around early 2017, is garrisoned in the central Chinese city of Luoyang. It is likely now equipped with the latest DF-31AG variant of the DF-31 road-mobile ICBM.

**MUCD:** 96764

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader<sup>1432</sup>

**Parent Unit:** Base 66

**Location:** 100m south of the intersection of Yinluo Rd. and Tongji Street, Luolong District, Luoyang, Henan [河南省洛阳市洛龙区伊洛路与通济街交叉口南 100 米]<sup>1433</sup>

**Geo:** 34.596658, 112.438668<sup>1434 1435</sup>

**Secondary Garrisons:**

- Yiyang County, Luoyang, Henan [河南省洛阳市宜阳县] (34.546973, 112.146394)<sup>1436</sup>
  - The Brigade may store at least some of its equipment and vehicles at this location, which also serves as the base Training Regiment.<sup>lxxiv</sup>
- Xiangyang City and Nanzhang County, Hubei [湖北省襄阳市/南漳县]
  - The Brigade may have one or more special 10kv power or communications lines [专线] that route through these two locations in Hubei Province.<sup>1437</sup>

**Capabilities**

**Missile:** DF-31AG ICBM<sup>1436</sup>

**Missile Type:** Nuclear, Road-mobile

**Leadership**

**Commander:** Ma Ze [马赧] (7/19)<sup>1438</sup>

**PC:** Li Baoguo [李保国] (10/19)<sup>1439</sup> (possibly dated, see below)

**Dep Commander:** Wang Zhongyan [王忠燕] (10/18)<sup>1440</sup>

**Dep PC:** Tang Zhibin [唐志斌] (11/18)<sup>1441</sup>

**Chief of Staff:** Wei Wei [魏炜] (7/19)<sup>1435</sup>

**PWDD:** Unknown

**Support Dept Director:** Xi Changyu [席长煜] (7/19)<sup>1435</sup>

**Other Senior Leadership:** Zhang Yingbin [张迎彬], Dep COS (7/19)<sup>1435</sup>; Shen Meng [沈猛], Support Dept Dep Director (10/19)<sup>1439</sup>

**Former Leadership:** Dong Shimin [董世民], COS (2018)<sup>1442</sup>; Cao Jun [曹军] (2018), Dep PC (2017)<sup>1443</sup>

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<sup>lxxiv</sup>Credit to Private Analyst Decker Eveleth for first suggesting this location, which the author later independently confirmed.

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
  - Commander: Ding Daguo [丁大国] (10/19)<sup>1439</sup>
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## Background

- The brigade has a dedicated rail line leading into/out of its HQ.<sup>1444</sup>
- PC Li Baoguo has been celebrated in several articles, indicating he could be headed for more senior leadership. In December 2019, an article emerged indicating this brigade may have a new PC with the surname Zhang [张].<sup>1445</sup>

## 665 Brigade [665 旅]

The 665 Brigade, located in the central Chinese city of Weihui, was first publicly acknowledged in December 2019. Early sources had the brigade stationed in Weihui, but later sources place it in Changzhi, indicating Weihui may have been an early temporary garrison.

**MUCD:** 96765

**Former MUCD/TUD:** N/A (new brigade)

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 66

**Location:** Likely Lucheng District, Changzhi, Shanxi [山西省长治市潞城区]<sup>1446</sup>

**Secondary Garrison:** Weihui, Xinxiang, Henan [河南省新乡市卫辉市]<sup>1447</sup>

**Geo:** Unknown

## Capabilities

**Missile:** Unknown

**Missile Type:** Unknown

## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Other Senior Leadership:** Zhang Zhongchao [张中超], Pol Work Dept Dep Director (3/20)<sup>1448</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- Technical Battalion [技术营]

## 666 Brigade [666 旅]

The 666 Brigade, located in the central Chinese city of Xinyang, was likely established in 2011 to introduce the DF-26 IRBM into service, and was the first brigade to conduct an independent launch of the DF-26.<sup>1449</sup>

**MUCD:** 96766  
Bde<sup>417</sup>)

**Former MUCD/TUD:** 96267 (827<sup>th</sup> Launch

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 66

**Location:** Heping Community, Yangshan New District, Xinyang, Henan [河南省信阳市羊山新区和平社区]<sup>1450</sup>

**Geo:** Unconfirmed, likely 32.167003, 114.125679

## Secondary Garrisons:

- Xishili Village, Tongbai County, Nanyang, Henan [河南省南阳市桐柏县西十里村]<sup>1451</sup>

- Xin County, Xinyang, Henan [河南省信阳市新县]<sup>1452</sup>

## Capabilities

**Missile:** DF-26 IRBM<sup>1453</sup>

**Missile Type:** Dual Nuc.-Conv., Road Mobile

## Leadership

**Commander:** Unknown

**PC:** Zhang Jianyang [张建阳] (7/20)<sup>1454</sup>

**Dep Commanders:** Jing Xiaopeng [景晓鹏] (1/19)<sup>1453</sup>

**Dep PC:** Yang Anyong [杨安勇] (9/19)<sup>1455</sup>

**Chief of Staff:** Li Xiubin [李秀斌] (9/19)<sup>1456</sup> **PWDD:** Feng Zhongyi [丰忠义] (1/18)<sup>1457</sup>

**Support Dept Director:** Zhang Jin [张进] (7/20)<sup>1458</sup>

**Other Senior Leadership:** Jia Xiaobing [贾小兵], Dep COS (4/17)<sup>1459</sup>

**Former Leadership:** Yao Wenshan [姚文山], Commander (2019)<sup>1453</sup>

## Composition (presumed)

- 1<sup>st</sup> Launch Battalion [发射一营]
  - Political Instructor: Cui Bingxiang [崔丙祥] (4/20)<sup>1460</sup>
  - Established around 2011, and fired its first missile in 2013, less than two years later<sup>1460</sup>
- 2<sup>nd</sup> Launch Battalion [发射二营]
- 3<sup>rd</sup> Launch Battalion [发射三营]
- 4<sup>th</sup> Launch Battalion [发射四营]
- 5<sup>th</sup> Launch Battalion [发射五营]
- 6<sup>th</sup> Launch Battalion [发射六营]
  - Commander: Zhao Dong [赵东] (7/20)<sup>1458 1460</sup>
- Communications Battalion [通信营]
- Operations Support Battalion [作战保障营]
- Comprehensive Support Battalion [综合保障营]
- 1<sup>st</sup> Technical Battalion [技术一营]<sup>1461</sup>
- 2<sup>nd</sup> Technical Battalion? [技术二营]
  - Implied from existence of a “First” Technical Battalion

## Base 66 Training Regiment [66 基地训练团]

The Base 66 Training Regiment is responsible for basic training of new enlisted base personnel, as well as pre-billet specialist training.<sup>1462</sup>

**MUCD:** 96861

**Former MUCD:** 96271

**Grade:** Regiment Leader

**Parent Unit:** Base 66

**Location:** 5 Yongjun Rd., Longwang Village, Xianglushan Town, Yiyang County, Luoyang, Henan [河南省洛阳市宜阳县香鹿山镇龙王村拥军路 5 号]<sup>1463 1464 1465</sup>

**Geo:** Unconfirmed, possibly 34.543067, 112.147037

### Leadership

**Commander:** Unknown

**PC:** Wang Dajiang [王大江] (6/19)

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Sun Yaojun [孙耀军] (7/18)

**Support Div Director:** Unknown

**Other Senior Leadership:** Liu Gaojie [刘高杰] (2/17)

**Former Leadership:** Zheng Yan [郑焱/郑炎], Commander (2019); Yang Xiaodong [杨晓东], Commander (2017); Li Zun'an [李遵安], PC (2017); Ma Benrui [马本瑞], COS (2017)

### Composition (presumed)

- Unknown number of subordinate training battalions

## Base 66 Communications Regiment [66 基地通信团]

This regiment is responsible for base-level communications.

**MUCD:** 96862

**Former MUCD:** 96275

**Grade:** Regiment Leader

**Parent Unit:** Base 66

**Location:** 113 Tianjin Rd., Jianxi District, Luoyang, Henan [河南省洛阳市涧西区天津路 113 号] (co-located with Base HQ)<sup>1466</sup>

**Geo:** 34.638695, 112.378866

## **Leadership**

**Commander:** Unknown

**PC:** Fu Zhengnian [符正年] (2/17)<sup>1467</sup>

**Dep Commanders:** Unknown

**Dep PC:** Zhou Le [周乐] (8/19)<sup>1468</sup>

**Chief of Staff:** Wu Zhibin [吴志刚] (8/19)<sup>1469</sup>

**PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Zhou Hongyu [周宏育], Dep COS (5/18)<sup>1470</sup>; Yang Keng [杨铿], Pol Work Dept Dep Director (6/20)<sup>1471</sup>

## **Composition (presumed)**

- 1<sup>st</sup> Communications Battalion [通信一营]
- 2<sup>nd</sup> Communications Battalion [通信二营]
- 3<sup>rd</sup> Communications Battalion [通信三营]

## **Background**

- The regiment controls a wide range of communications assets, including a microwave station at base HQ<sup>1472</sup> and a satellite ground station associated with the Beidou navigation system.<sup>1473</sup>
- Known fiber optic cable lines around Luoyang run from Yingzhou Road [瀛洲路] to Yiluo Road [伊洛路],<sup>1474</sup> from Xiyuan Bridge [西苑桥] 8 km to the Luoyang Bridge [洛阳桥], then 1.5 km to Anle [安乐],<sup>1475</sup> and from Yingzhou Road [瀛洲路] to Zhoushan Road [周山路] to Nanyang Road [南阳路] to Anle [安乐].<sup>1476</sup> There is also a fiberoptic station in Ruyang County [汝阳县].<sup>1477</sup>

## **Base 66 Operations Support Regiment [66 基地作战保障团]**

The Base 66 Operations Support Regiment was established around 2012 when several of the base's direct reporting subunits were organized into a single regiment.<sup>1478</sup> Subunits include security, NBC defense, survey and mapping, meteorology, and engineering.<sup>1478</sup>

**MUCD:** 96863

**Former MUCD:** 96276

**Grade:** Regiment Leader

**Parent Unit:** Base 66

**Location:** Tianjin Rd., Jianxi District, Luoyang, Henan 471003 [河南省洛阳市涧西区天津路]<sup>1479 1480</sup> (co-located with Base HQ)

**Geo:** 34.637837, 112.381366<sup>1481</sup>

## Leadership

**Commander:** Zhang Haibing [张海冰] (7/18)<sup>1482</sup>    **PC:** Ma Libao [马立宝] (5/18)<sup>1483</sup>

**Dep Commanders:** Unknown

**Dep PC:** Shen Yongkui [沈永奎] (11/17)<sup>1484 1485</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Yuan Ruhao [袁如豪], Commander (2017)<sup>1486</sup>; Yang Yong [杨勇], PC (2017)<sup>1487</sup>; Jing Xiaopeng [景晓鹏], COS (2017)<sup>1485</sup>

## Composition (presumed)

- Security and Chemical Defense Battalion [警卫防化营]
  - Security Company [警卫连]
  - 1<sup>st</sup> Chemical Defense Company [防化一连]
  - 2<sup>nd</sup> Chemical Defense Company [防化二连]
- Meteorology Station (Battalion Leader Grade) [气象台]<sup>1488</sup>
- Surveying Team (Battalion Leader Grade) [测地队]
  - 1<sup>st</sup> Squadron [一中队]
  - 2<sup>nd</sup> Squadron [二中队]<sup>1478</sup>
    - The surveying team may have been transferred to another unit around March 2017, along with several other such teams<sup>1489</sup>
- Engineering Company [工兵连]

## Base 66 Comprehensive Support Regiment [66 基地综合保障团]

The Base 66 Comprehensive Support Regiment was formed around May 2017<sup>1490</sup> by combining the former Technical Service Regiment, Repair Factory, and Vehicle Battalion into a single regiment.<sup>1491</sup> The regiment is thus presumably responsible for storage of missiles, fuel,<sup>1492</sup> munitions,<sup>1493</sup> and other supplies, as well as transport of these assets via road and rail to Base 66 units.<sup>1490</sup> It is also responsible for repair and maintenance of these assets<sup>1492</sup> as well as other Base



66 equipment and facilities.<sup>1490</sup> It may also have a role in other support functions, such as food preparation, vehicle driving, and training of certain support personnel.<sup>1490</sup>

**MUCD:** 96864

**Former MUCD:** 96276, 96272

**Grade:** Regiment Leader

**Parent Unit:** Base 66

**Location:** 666 Qiming East Rd., Chanhe District, Luoyang, Henan [河南省洛阳市瀍河区启明东路 666 号]<sup>1494 1495</sup>

**Geo:** Unconfirmed, possibly 34.700255, 112.527611

### **Secondary Garrisons:**

- Luoyang, Henan [河南省洛阳市] (34.541207, 112.139507)<sup>1496 1501</sup>
  - This location, next door to the base Training Regiment, hosts extensive vehicle and training facilities for this regiment. Known subunits at this location include the regiment Vehicle Battalion [汽车营] and Driver Training Subunit [司机训练分队], and possibly others.
  - The unit Vehicle Battalion [汽车营] took delivery of 3 new model 50-ton trucks, and 24 new 6 ton trucks, in April 2020.<sup>1497</sup>
- Luolong District, Luoyang, Henan 471023 [河南省洛阳市洛龙区] (possibly 34.592795, 112.415948)<sup>1498 1499</sup>
  - This may have been the headquarters of the former base Technical Service Regiment before its 2017 merger. This regiment was responsible for storage and transport of nuclear warheads, missiles, munitions, fuel, and other components to Base 66 units.
- Litun Station, Luolong District, Luoyang, Henan [河南省洛阳市洛龙区李屯站] (34.578184, 112.408631)<sup>1500</sup>
  - This regiment reportedly possesses a rail line at Litun Station which is exclusively for official military use. As this regiment is responsible for transport of key equipment via both road and rail, this is likely an important rail transfer point. The likely headquarters of the former Technical Service Regiment is only a few blocks away.

### **Leadership**

**Commander:** Ma Benrui [马本瑞] (8/19)<sup>1494</sup>

**PC:** Tang Renjiang [汤仁江] (4/20)<sup>1501</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Wang Haitao [王海涛] (8/18)<sup>1502</sup>

**Support Div Director:** Unknown

**Former Leadership:** Wang Jianxun [王建勋], Commander (2018)<sup>1503</sup>

### Composition (presumed)

- Vehicle Battalion [汽车营]<sup>1501</sup>
- Repair and Measurements Station (Battalion Leader Grade) [维修计量站]<sup>1490</sup>
- Munitions Center [军械中心]<sup>1504</sup>
  - This subunit differs slightly from those of other regiments, being referred to as a “center” rather than a “warehouse.” It is not clear whether this name difference is significant.
- Fuel Depot [油料仓库]<sup>1505</sup>
- Comprehensive Depot [综合仓库]
- Rail Transport Company [铁路运输连]
- Service Company [勤务连]
- Vehicle Repair Subunit [汽车维修分队]
- 1<sup>st</sup> Fueling Company [转注一连]<sup>1506</sup>
  - This important company is responsible for the manufacture and transport of nitrogen prior to launch of the base’s silo-based liquid propellant rockets.
- 2<sup>nd</sup> Fueling Company? [转注二连]
  - *Existence of “First” Battalion implies existence of more than one*
- Driver Training Subunit [司机训练分队]<sup>1507</sup>
- Unidentified Depot<sup>1508</sup>
  - This regiment received a depot from the Jinan MR in 2016 consisting of eleven 3,600 sqm warehouses

### Background

- In addition to the “standard” tasks of equipment repair, facility maintenance, and equipment transport, this unit is also responsible for training of drivers, cooks, and other support specialists, as well as being responsible for base culinary support.<sup>1490</sup>

### Base 66 Equipment Inspection Regiment [66 基地装检团]

The Base 66 Equipment Inspection Regiment is responsible for storage, management, and transport of Base 66 nuclear warheads.

**MUCD:** 96036

**Former MUCD/TUD:** 96273 (904 Regiment<sup>652</sup>)

**Grade:** Regiment Leader<sup>1509</sup>

**Parent Unit:** Base 66

**Location:** Xiheimaqu, Lushi County, Sanmenxia, Henan [河南省三门峡市卢氏县西黑马渠]<sup>1510 1511</sup>

**Geo:** 34.030839, 111.023038<sup>1512</sup>

**Secondary Garrison:** Wulichuan Town, Lushi County, Henan [河南省卢氏县五里川镇]<sup>1513</sup>

## Leadership

**Commander:** Unknown

**PC:** Zhao Peng [赵鹏] (acting PC) (9/18)<sup>1514</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Liu Huasheng [刘华胜] (2/18)<sup>1515</sup>

**Support Div Director:** Unknown

**Former Leadership:** Zhang Zenghui [张增辉], Commander (2017)<sup>1509</sup>; Li Baoguo [李保国], PC (2017)<sup>1516</sup>; Shen Yijun [沈义军], COS (2018)<sup>1517</sup>

## Composition (presumed)

- 1<sup>st</sup> Equipment Inspection Station [装检一站]
- 2<sup>nd</sup> Equipment Inspection Station [装检二站]
- 3<sup>rd</sup> Equipment Inspection Station [装检三站]
  - Commander: Song Jipeng [宋基鹏] (2/18)<sup>1517</sup>
- Technical Service Battalion [技术勤务营]<sup>1341</sup>
- Comprehensive Support Battalion [综合保障营]<sup>1518</sup>
- Transport Company [转运连]
- Site Security Company [阵地警卫连]<sup>1519</sup>
- Some references refer to this regiment having at least three "Missile Battalions" [导弹营] – it is likely that these are just another name for the Equipment Inspection Stations.
  - Prior to 2016, each battalion was responsible for handling a different missile type, but this led to vulnerabilities if one battalion was unavailable and the others were not able to step in as replacements. Thus, the battalions have since begun cross-training and are now able to handle multiple missile types.<sup>1520</sup>

## Unit 96606 Hospital [96606 部队医院]

The Unit 96606 Hospital, formerly the 534 Hospital, was established in the 1960s<sup>1521</sup> and is the official hospital attached to Base 66. It is subordinate to the Base 66 Support Department.<sup>1376</sup> As

with the other PLARF base hospitals, hospital personnel can deploy with Base 66 units to provide medical support in wartime.<sup>1526 1527</sup>

**MUCD:** N/A

**Former TUD:** 534 Hospital [534 医院]

**Grade:** Division Deputy Leader<sup>1522</sup>

**Parent Unit:** Base 66

**Location:** Intersection of Tianjin Street and Yingzhou North Street, Jianxi District, Luoyang, Henan [河南省洛阳市涧西区天津路南端与瀛洲北路交汇处]<sup>1523</sup>

**Geo:** 34.638052, 112.378659

### Leadership

**Director:** Xiao Jianhua [肖建华] (7/19)<sup>1524</sup>

**PC:** Jin Zhibin [靳志彬] (7/18)<sup>1376</sup>

**Other Senior Leadership:** Lü Genfa [吕根法], Field Medical Team Commander (12/18)<sup>1525</sup>

**Former Leadership:** Wu Tianshun [吴天顺], Director (2018)<sup>1526</sup>

### Background

- A 2018 video about one of these drills shows that the hospital field medical team is able to erect an operating room and perform surgery in the field, and is commanded by a senior colonel.<sup>1527</sup>

### PLA Rocket Force Military Canine Training Team [火箭军军犬训练队]

The PLARF Military Canine Training Team was established in August 1993 with only three personnel.<sup>1528</sup> By 1997, when it was formally incorporated into the PLARF, it had 30 personnel and 188 dogs.<sup>1529</sup> Commander Li Baohua has led this team since 1993.<sup>1530</sup> The unit appears to be subordinate to Base 66 and located at a satellite facility of the 661 Brigade, although it is unclear if it is subordinate to this brigade, or directly subordinate to Base 66.

**MUCD:** Unknown

**Former MUCD/TUD:** Unknown

**Grade:** Unknown

**Parent Unit:** Base 66

**Location:** Nanchao Village, Lingbao, Sanmenxia, Henan 472522 [河南省三门峡市灵宝市南朝村]<sup>1531 1532</sup>

**Geo:** 34.476465, 111.000254<sup>1533</sup>

## Leadership

**Commander:** Li Baohua [李保华] (1/20)<sup>1534</sup>      **PC:** Unknown

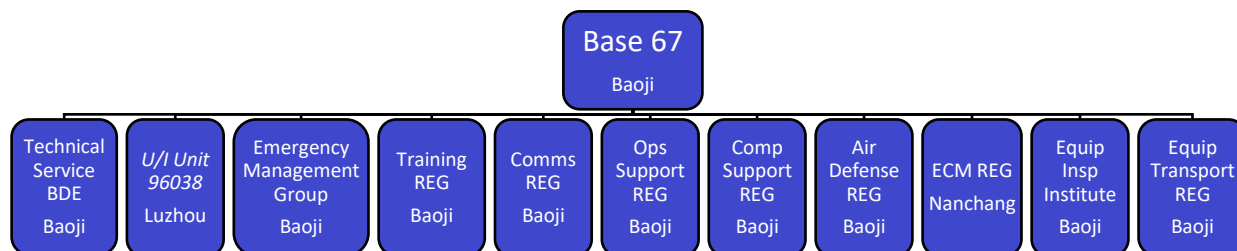
## Composition

Unknown

## Background

- By 2016 this team had completed 18 rounds of training. Over 800 instructors and 1,236 dogs had successfully completed the course.<sup>1529</sup>
- In 2005, Li Baohua travelled to several European nations, including Germany,<sup>1530</sup> France, the Netherlands, and Belgium<sup>1529</sup> to learn best training practices from these countries, and incorporated his findings into the team's training. These included improvements to canine explosive detection techniques he learned in Germany.<sup>1530</sup>
- Li Baohua has over 30 years of experience in military canine training and is considered the most experienced canine trainer in the entire PLA.<sup>1530</sup>

## Base 67 [67 基地]



Base 67, established as early as 1958,<sup>1535</sup> is a support base responsible for oversight of the PRC's nuclear weapons storage complex at Taibai, as well as distribution of nuclear warheads to operations bases as needed. This base was established in Qinghai's Haiyan County in 1958 as Unit 0674.<sup>1536</sup> At the time it was directly subordinate to the CMC. In 1965 it was transferred to the Commission of Science, Technology and Industry for National Defense [国防科工委], and in 1969 it was moved to Shaanxi.<sup>1536</sup> It was transferred to the 2nd Artillery and took on the new MUCD 80310 in 1980.<sup>1536</sup> Previously known as Base 22, it took on its current name in 2017.

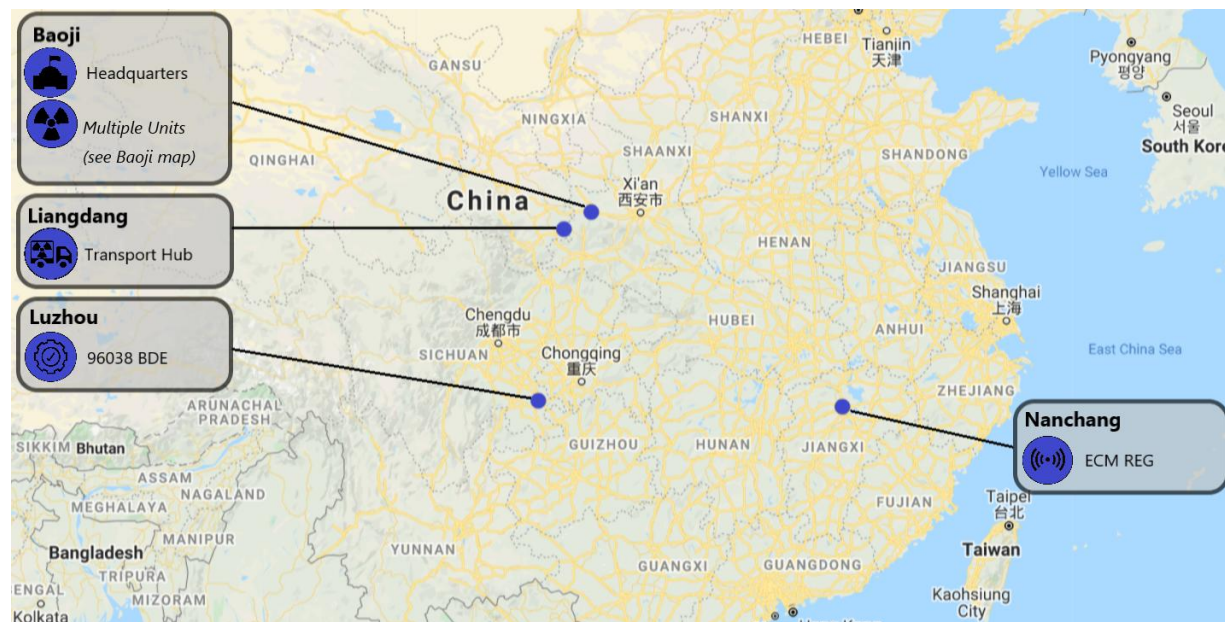
**MUCD:** 96607

**Former MUCD/TUD:** 96401 (Base 22); 80310

**Grade:** Corps Deputy Leader<sup>1537</sup>

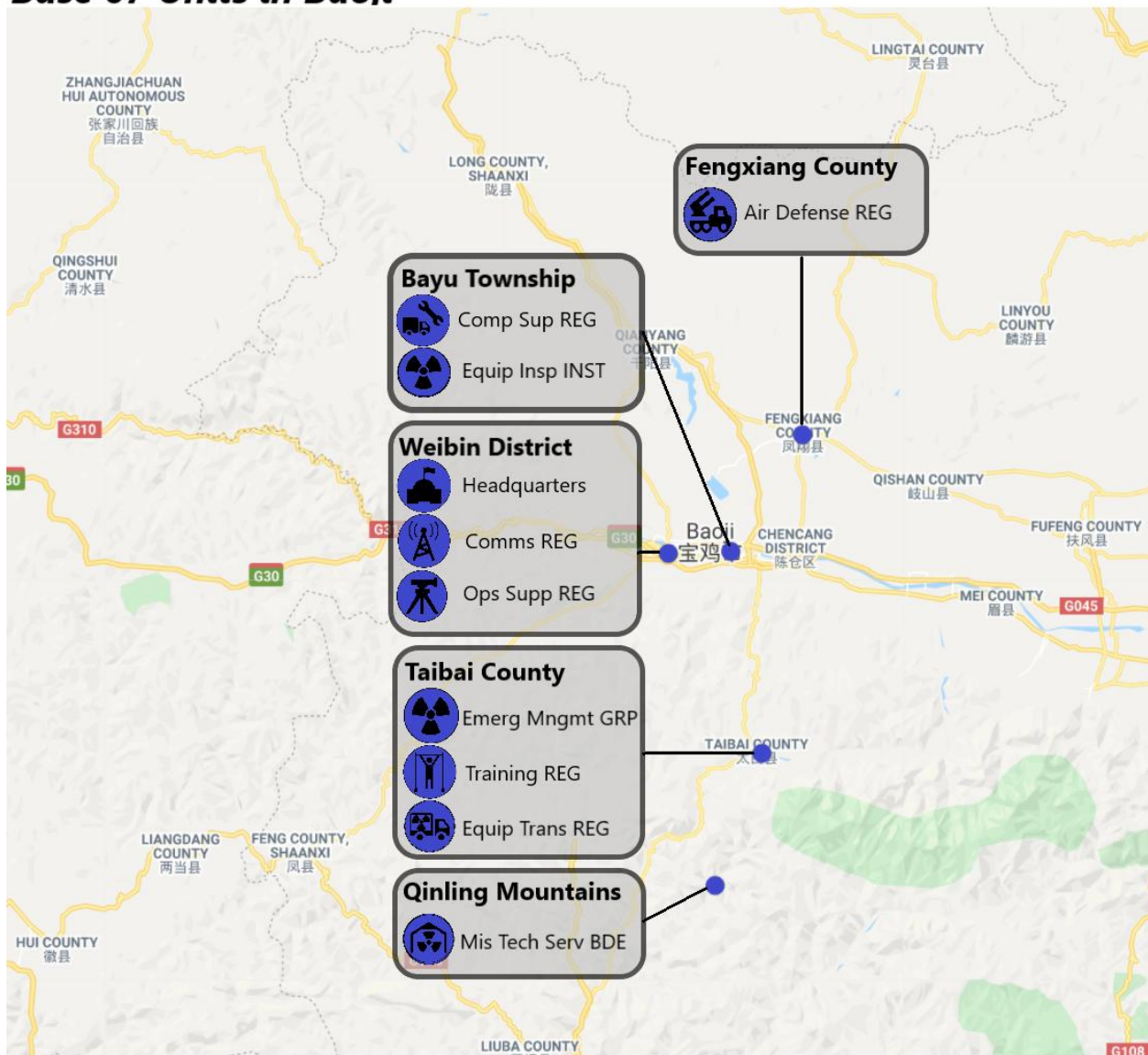
**Location:** Bayi Building, 49 Baoguang Rd., Baoji, Shaanxi 721006 [陕西省宝鸡市宝光路 49 号八一大楼]<sup>1538 1539</sup>

**Geo:** 34.348958, 107.160065<sup>1540</sup>





## Base 67 Units in Baoji



### Leadership

**Commander:** Unknown

**PC:** Zhang Jichun [张继春] (8/18)<sup>1541</sup>

**Dep Commanders:** Unknown

**Dep PC:** Guo Zhenjian [郭振建] (1/20)<sup>1542</sup>

**Chief of Staff:** Unknown

**PWDD:** Shi Daqing [石大庆] (8/19)<sup>1543</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Niu Yumin [牛玉民], Dep COS (7/19)<sup>1544</sup>; Chen Xiuhai [陈修海], Support Dept Dep Director (1/19)<sup>1545</sup>

**Former Leadership:** Li Xiaohong [李晓宏], Commander (2018)<sup>1541</sup>; Sun Danping [孙旦平], PC (2017)<sup>1546</sup>; Zhou Rong [周荣], Dep Commander (2015)<sup>1537</sup>

### Known Composition

- Missile Technical Service Brigade [导弹技术勤务旅]
- Unit 96038 [96038 部队]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Operations Support Regiment [作战保障团]
- Comprehensive Support Regiment [综合保障团]
- Air Defense Regiment (no characters given)
- 2<sup>nd</sup> Comprehensive Defense (ECM) Regiment [综合防护二团]
- Equipment Inspection Institute [装检研究所]
- Special Equipment Transport Regiment [特装运输团]
- PLARF Emergency Management Group [应急处置大队]
- Unit 96607 Hospital [96607 部队医院]

### Background

- Base personnel are referred to as "Guardians of the National Treasure" [国宝卫士] (i.e. China's nuclear arsenal).<sup>1547</sup> Units associated with this base frequently invoke the term "National Treasure" as an oblique reference to the nuclear stockpile.

### Missile Technical Service Brigade [导弹技术勤务旅]

The Missile Technical Service Brigade (or just *Technical Service Brigade*), established in 1968,<sup>1548</sup> is the primary unit charged with overseeing the PLARF's nuclear stockpile facilities at Taibai. Its duties include management, testing, secure handling, and transport of nuclear material.<sup>1549</sup> It was upgraded from a regiment to a brigade in April 2017.<sup>1548</sup>

**MUCD:** 96037

**Former MUCD:** 96421

**Grade:** Division Deputy Leader

**Parent Unit:** Base 67

**Location:** Taibai County, Baoji, Shaanxi [陕西省宝鸡市太白县]<sup>1550</sup>

**Geo:** 33.863638, 107.246776<sup>1550</sup>



## Secondary Garrisons:

- Zuitou Town, Taibai County, Baoji, Shaanxi 721012 [陕西省宝鸡市太白县嘴头镇]<sup>1551</sup> (34.05527, 107.32508)
  - This large facility hosts several Base 67 units, including elements of this brigade. More centrally located in the city, this may be a base administrative center.
- Bayu Town, Taibai County, Baoji, Shaanxi 721013<sup>1552</sup> [陕西省宝鸡市太白县八鱼镇] (possibly 34.350873, 107.272220)
- Liangdang County, Longnan, Gansu [甘肃省陇南市两当县]<sup>1553</sup> (possibly 33.824696, 106.420187)
  - This county also hosts rail transport assets of the Special Equipment Transport Regiment, responsible for transporting the nuclear warheads managed by this brigade
- Taibai County, Baoji, Shaanxi [陕西省宝鸡市太白县] (33.886220, 107.279583)
  - Multiple satellite facilities located deep in the mountains are visible in satellite imagery, including at 33.883351, 107.270683; 33.881224, 107.258896; 33.904459, 107.276922; 33.906906, 107.281320; 33.911509, 107.294329; 33.902080, 107.317223; 33.914758, 107.300700; 33.927280, 107.308473; 33.882927, 107.322139

## Leadership

**Commander:** Ye Shoujiang [叶铸江] (3/19)<sup>1554</sup>      **PC:** Zhang Fanghui [张芳辉] (1/20)<sup>1555</sup>

**Dep Commanders:** Unknown      **Dep PC:** Unknown

**Chief of Staff:** Yang Jichuan [杨继川] (1/17)<sup>1556</sup>      **PWDD:** Li Gang [李刚] (8/17)<sup>1548</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Xiang Jian [向健], Commander (2017)<sup>1556</sup>; Wu Xiaojun [乌晓军], Dep Commander (2018)<sup>1557</sup>

## Known Composition

- Stockpile Management Battalion [贮管营]<sup>1558</sup>
  - Responsible for handling, transport, and testing of the nuclear stockpile
  - One source shows this battalion conducting precision temperature testing of the surrounding environment<sup>1549</sup> to ensure optimal storage conditions
- Site Management Battalion [阵管营]<sup>1559</sup>
- Special Equipment Transport Subunit [特装运输分队]<sup>1555</sup>
- Security Battalion

- May have a dedicated horse cavalry company<sup>lxxv</sup>
- Communications Battalion [通信营]<sup>1549</sup>
- Operations Support Battalion [作战保障营]
  - Commander: Wang Renta [王认塔] (1/18)<sup>1560</sup>
- Comprehensive Support Battalion [综合保障营]<sup>1561</sup>

## Background

- This unit's location deep in the mountains where it guards the nuclear stockpile is frequently referred to as "Hongchuan" [红川], and personnel are urged to exhibit "Hongchuan spirit" [红川精神]. This facility has no cell coverage and no internet.<sup>1550</sup>
- A second location is known as Hongling [红岭]. This may to be some kind of command post. There is a reference to a Hongling Command Organization [红岭指挥组] in a 2018 Taibai government document.<sup>1562</sup>
- This unit did not allow female personnel until late 2014, when it allowed a small cadre of women, who appear to be mostly involved in comms work. These women are referred to in propaganda as the "Mulans of Hongchuan."<sup>1554</sup>

## Unit 96038 [96038 部队]

Unit 96038, a brigade, was probably established around 2007.<sup>1563</sup> Its exact purpose is not yet known, but its duties include management,<sup>1564</sup> transport,<sup>1563</sup> and inspection<sup>1565</sup> of nuclear warheads. Security and site defense also seem to be an important function of this unit.<sup>1566</sup> Like other Base 67 units associated with warhead security, its personnel have been referred to as the "Guardians of the National Treasure" [国宝卫士].<sup>1564</sup> Speculatively, this brigade's mission may be complimentary to the mission Unit 96037, with 96037 more focused on warhead storage and management and this brigade more focused on testing and inspection of certain warhead components.

**MUCD:** 96038

**Former MUCD:** 96617

**Grade:** Division Deputy Leader<sup>1567</sup>

**Parent Unit:** Base 67

**Location:** Hongyan Village, Lantian Subdistrict Jiangyang District, Luzhou, Sichuan [四川省泸州市江阳区蓝田街道红岩村]<sup>1568</sup>

**Geo:** Unconfirmed, possibly 28.838747, 105.418284

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<sup>lxxv</sup>See Mark Stokes, "China's Nuclear Warhead Storage and Handling System," *Project 2049 Institute*, 12 March 2010.

## Leadership

**Commander:** Li Jun [李俊] (3/18)<sup>1569</sup>

**PC:** Yuan Fei [袁非] PC (3/18)<sup>1570</sup>

**Dep Commanders:** Li Jian [李建] (12/16)<sup>1571</sup>

**Dep PC:** Guo Yusheng [郭煜生] (12/19)<sup>1572</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Li Yunfeng [李云峰] (3/18)<sup>1569</sup>

**Other Senior Leadership:** Ren Weidong [任卫东], Dep COS (9/17)<sup>1573</sup>

**Former Leadership:** Zhang Xingdong [张兴东], Commander (2017)<sup>1574</sup>; Zhang Ji [张鹤], possible COS (2017)<sup>1575</sup>; Liang Jiantao [梁剑涛], Snr Engineer (2018)<sup>1576</sup>

## Known Composition

- Transport Battalion [运输营]<sup>1577</sup>
  - Responsible for escort of the “National Treasure,” i.e. nuclear material<sup>1563</sup>
  - May include a rail transport capability<sup>1565</sup>
- Security Battalion [警卫营]
  - “Sharp Blade” Special Operations Team [利刃特战队]<sup>1574</sup>
    - 38-man team responsible for site defense<sup>1566</sup>
  - “Guardian Spirits of the Restricted Zone” Security Company [禁区守护神警卫连]<sup>1578</sup>
- Repair Battalion [修理营]<sup>1579</sup>
  - May have since converted to a Comprehensive Support Battalion
- Technical Subunit [技术分队]<sup>1580</sup>
- ECM Subunit [电子对抗分队]<sup>1577</sup>
- Special Inspection Station [特检站]<sup>1581</sup>

## Background

- The unit utilizes a Missile Simulation Training Center [导弹武器模拟训练中心]<sup>1576</sup> which is capable of simulating different missile types and components.<sup>1569</sup> Beginning in 2015, it took on a new component inspection mission. These facts seem to imply the unit includes inspection and possibly repair of missile and/or warhead components as a part of its mission.
- The unit may also be responsible for certain aspects of training. In 2017, it took on a new experimental training reform mission.<sup>1582</sup>

- In 2019 this brigade built a dedicated fiber optic cable from Maliuwan [麻柳湾] to Xinmiao Village [新庙村] in Sichuan.<sup>1583</sup>

## PLARF Emergency Management Group [应急处置大队]

The PLARF Emergency Management Group, established in 2008 from a security and chemical defense battalion,<sup>1584</sup> is responsible for NBC emergency response and disaster assistance.<sup>1585</sup> It was named as a National NBC Emergency Assistance Team [核生化应急救援国家队] in 2015.<sup>1585 1586</sup> Beginning in late 2018, there is evidence it may have been upgraded to a brigade and taken the new MUCD 96771.<sup>lxxvi</sup>

**MUCD:** 96771

**Former MUCD:** 96879; 96426

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 67

**Location:** Taibai County, Baoji, Shaanxi 721012 [陕西省宝鸡市太白县]<sup>1587 1588</sup>

**Geo:** 34.056190, 107.326841<sup>1589</sup>

### Leadership

**Commander:** Ding Lihu [丁立虎] (8/19)<sup>1590</sup>

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Wang Yongmao [王永茂] (12/16)<sup>1591</sup> **PWDD:** Wan Zhihua [万志华] (1/17)<sup>1592</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Jin Guofeng [金国锋], Chief Engineer (3/17)<sup>1593</sup>

**Former Leadership:** Ning Bin [宁斌], PC (2017)<sup>1586</sup>; Zhang Jianming [张建明], PC (2016)<sup>1594</sup>; Zhang Ji [张鹤], COS (2015)<sup>1584</sup>

### Known Composition

- Chemical Defense Subunit [防化分队]<sup>1595</sup>
- Detection Subunit [侦测分队]<sup>1596</sup>

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<sup>lxxvi</sup>Multiple personnel associated with Unit 96879, including but not limited to Commander Ding Lihu and Engineer Jin Guofeng, are now associated with 96771. Further, Ding Lihu is now described as a Brigade Commander in July 2019. 96771 must be above a regiment grade, as it has administrative Departments [部], whereas 96879 had Regiment Grade administrative Divisions [处].

## Background

- Soon after being formed, this unit conducted disaster relief and pandemic prevention work following the 2008 Wenchuan Earthquake.<sup>1584</sup>

## Base 67 Training Regiment [67 基地训练团]

The Base 67 Training Regiment is co-located with several other units at Base 67's likely administrative HQ in the town of Zuitou. It is responsible for basic training of new enlisted personnel as well as three-month basic training of direct-cultivation NCOs.<sup>1597</sup> It may also provide training for operations base personnel tasked with nuclear warhead handling and management.<sup>1598</sup>

**MUCD:** 96871

**Former MUCD:** 96423

**Grade:** Regiment Leader

**Parent Unit:** Base 67

**Location:** Zuitou Town, Taibai County, Baoji, Shaanxi 721012 [陕西省宝鸡市太白县嘴头镇]<sup>1599 1600</sup>

**Geo:** 34.053425, 107.327487<sup>1601 1602</sup>

## Leadership

**Commander:** Lu Zhanjun [逯战军] (9/19)<sup>1603</sup>

**PC:** Feng Yabin [冯亚斌] (12/19)<sup>1601</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Yin Yeli<sup>lxxvii</sup> [殷烨砾] (9/19)<sup>1603</sup>

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Yuan Fang [袁方], COS (2016)<sup>1604</sup>

## Known Composition

- Unknown number of subordinate training battalions
- Site Management Battalion [阵管营]<sup>1605</sup>
  - Site Management and Defense Company [阵管防卫连]<sup>1606</sup>

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<sup>lxxvii</sup> Alternative possible spelling of name: Yi Yeyue

## Base 67 Communications Regiment [67 基地通信团]

This regiment is responsible for base communications.

**MUCD:** 96872

**Former MUCD:** 96425

**Grade:** Regiment Leader

**Parent Unit:** Base 67

**Location:** Shibahe Village, Baoji, Shaanxi 721006 [陕西省宝鸡市石坝河村] (co-located with Base HQ)<sup>1607 1608</sup>

**Geo:** 34.349052, 107.162293<sup>1609 1610</sup>

### Secondary Garrisons:

- 11th Road, Gaoxin Ave., Bayu Town, Baoji, Shaanxi [陕西省宝鸡市八鱼镇高新大道11路]<sup>1611</sup> (34.351066, 107.271155)<sup>1612</sup>
- Panjiawan Village, Baoji, Shaanxi [陕西省宝鸡市潘家湾村]<sup>1608</sup>
- Mei County, Baoji, Shaanxi [陕西省宝鸡市眉县]<sup>1613</sup>

### Leadership

**Commander:** Wu Keyong [吴可勇] (8/18)<sup>1614</sup> **PC:** Dang Xuefeng<sup>lxxviii</sup> [党学锋] (2/17)<sup>1615</sup>

**Dep Commanders:** Li Haiqing [李海庆] (9/19)<sup>1616</sup> **Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Liu Chunyuan [刘春元], Commander (2017)<sup>1617</sup>; Yin Yeli<sup>lxxix</sup> [殷烨栋], COS (2018)<sup>1618</sup>

### Composition (presumed)

- 1<sup>st</sup> Communications Battalion [通信一营]
- 2<sup>nd</sup> Communications Battalion [通信二营]
- 3<sup>rd</sup> Communications Battalion [通信三营]
  - 6<sup>th</sup> Company [六连]<sup>1618</sup>

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<sup>lxxviii</sup>Alternative possible spelling of name: Zhang Xuefeng

<sup>lxxix</sup>Alternative possible spelling of name: Yin Yeyue

- Suggests each battalion consists of two subordinate companies
- Mobile Communications Battalion [机动通信营]<sup>1619</sup>
  - Unclear if this constitutes a fourth battalion, or is one of the three battalions above

## Background

- The regiment's motto is "All-hours communications, information efficiency, guaranteed reliability" [随时能通, 信息高校, 保底可靠]<sup>1620</sup>

## Base 67 Operations Support Regiment [67 基地作战保障团]

The Base 67 Operational Support Regiment is responsible for engineering,<sup>1621</sup> security,<sup>1622</sup> NBC defense, meteorology, and possibly other forms of operational support.

**MUCD:** 96873

**Former MUCD:** 96427

**Grade:** Regiment Leader

**Location:** Liujia Village, Weinan District, Baoji, Shaanxi 721006 [陕西省宝鸡市渭滨区刘家村]<sup>1623 1624</sup>

**Geo:** 34.350450, 107.160357<sup>1625</sup>

## Leadership

**Commander:** Unknown

**PC:** Wang Baoping [王保平<sup>lxxx</sup>] (5/20)<sup>1626</sup>

**Dep Commanders:** Unknown

**Dep PC:** Zhang Yu [张宇] (4/19)<sup>1627</sup>

**Chief of Staff:** Tian Yanping [田彦平] (3/18)<sup>1628</sup>

**PWDD:** Yang Tao [杨涛] (4/19)<sup>1627</sup>

**Support Div Director:** Unknown

**Former Leadership:** Zhang Ji [张鹤], Commander (2018)<sup>1584</sup>

## Known Composition

- Security and Service Battalion [警卫勤务营]<sup>1622</sup>
  - "Knife Edge" Special Operations Team [刀锋特战队]<sup>1629</sup>

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<sup>lxxx</sup>Also sometimes spelled as 王宝平

- Engineering Battalion [工兵营]<sup>1621</sup>
  - May have been downgraded to a company, based on what is known about other regiments

## **Base 67 Comprehensive Support Regiment [67 基地综合保障团]**

The Base 67 Comprehensive Support Regiment was formed around April 2017 by combining six base subunits<sup>1630</sup> with the base Repair Factory [修配厂].<sup>1640</sup> The new unit went from having a simple equipment and vehicle repair mission<sup>1640</sup> to being responsible for comprehensive equipment and logistics support,<sup>1631</sup> including vehicle and equipment repair, storage, and transport, as well as possibly other logistical specialties like medical and culinary support.<sup>1636</sup>

**MUCD:** 96874

**Former MUCD:** 96424

**Grade:** Regiment Leader

**Parent Unit:** Base 67

**Location:** Wolongsi Subdistrict, Jintai District, Baoji, Shaanxi 721004 [陕西省宝鸡市金台区卧龙寺街道]<sup>1632 1633</sup>

**Geo:** 34.349880, 107.272280<sup>1634</sup>

### **Secondary Garrisons:**

- Wolongsi Subdistrict, Jintai District, Baoji, Shaanxi 721004 [陕西省宝鸡市金台区卧龙寺街道] (34.364958, 107.276050)
  - Fuel Storage Depot<sup>1635</sup>
- Wolongsi Subdistrict, Jintai District, Baoji, Shaanxi 721004 [陕西省宝鸡市金台区卧龙寺街道] (34.365727, 107.267321)
  - Possible rail transport facilities

### **Leadership**

**Commander:** Xu Jun [徐君] (5/20)<sup>1634</sup>

**PC:** Liu Zhe [刘哲] (10/19)<sup>1636</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Wang Gaosheng [汪高升] (4/19)<sup>1637</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Yuan Bo [袁博], Dep COS (9/18)<sup>1638</sup>

**Former Leadership:** Hu Yunhui [胡云辉], Commander (2017)<sup>1639</sup>; Liu Wangsheng [刘旺升], Commander (2014)<sup>1640</sup>



## Composition (presumed)

- Repair and Measurements Station (Battalion Leader Grade) [维修计量站]<sup>1641</sup>
- Comprehensive Depot [综合仓库]<sup>1634</sup>
- Fuel Storage Depot [油料仓库]<sup>1635</sup>
- Service Team [勤务队]<sup>1634</sup>
- Rail Transport Company [铁路运输连]
- Vehicle Battalion [汽车营]
- Vehicle Repair Team [汽车维修队]<sup>1642</sup>

## Air Defense Regiment

Unit 96875 appears to be an experimental air defense regiment. It was established in 2012<sup>1643</sup> and described variously as a "test and training team" [试训队],<sup>1644</sup> a "new type of operations force" [新型作战力量], or simply as a "unit" [部] before being officially reorganized into a regiment in early 2017.<sup>1645</sup> Its mission is described as providing a "security shield"<sup>1644</sup> in defense of the "National Treasure," i.e. China's nuclear arsenal.

**MUCD:** 96875

**Former MUCD:** 96428

**Grade:** Regiment Leader

**Parent Unit:** Base 67

**Location:** Fengxiang County, Baoji, Shaanxi 721400 [陕西省宝鸡市凤翔县]<sup>1646</sup>

**Geo:** Unknown

## Capabilities

Known to be equipped with the LD-2000 30mm close-in weapon system (CIWS),<sup>1643</sup> as well as unidentified surface-to-air missiles.

## Leadership

**Commander:** Luo Jin [罗进] (9/18)<sup>1647</sup>

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Wang Jianhui [王建辉] (1/20)<sup>1648</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Yang Pengxing [杨朋星], Pol Work Div Dep Director (2/18)<sup>1649</sup>

**Former Leadership:** Xu Jun [徐君], Commander (2015)<sup>1650</sup>; Zhang Jianming [张建明], PC (2018)<sup>1647</sup>; Ning Bin [宁斌], PC (2017)<sup>1645</sup>; Dou Rongbin [窦荣斌], COS (2015)<sup>1651</sup>

## Composition

- Mobile Launch Battalion [机动发射营]
  - Established in 2012<sup>1647</sup>
  - Equipped with a new weapon system<sup>1647</sup>
  - Between 2012 and 2018, took part in five major missions, firing 32 missiles and destroying the target 15 times. This is described as a "historic breakthrough" for the PLARF.<sup>1647</sup>
  - A 2015 Red-Blue OPFOR drill ended in missile launch from concealed position.<sup>1652</sup>
  - A 2016 source describes an "intercept mission" in which an enemy aircraft was able to use the local geography to sneak through, resulting in mission failure<sup>1644</sup>
  - A 2018 source describes the battalion tracking a suddenly appearing target and destroying it with a missile, as well as engaging in jamming<sup>1647</sup>
- Fire Defense Battalion [火力防护营]<sup>1653</sup>
  - Comes from a single source in 2015, so may just be an earlier iteration of the Launch Battalion
- ECM Battalion [电抗营]<sup>1651</sup>
  - Capable of conducting jamming and "comprehensive defense"<sup>lxxxi</sup> [综合防护]<sup>1654</sup>
- Security Battalion [警卫营]<sup>1655</sup>
  - Transferred from an unidentified brigade to this regiment following its reorganization in 2017.<sup>1656</sup>
  - Commander: Zhang Fenghao [张峰毫] (9/18)<sup>1656</sup>
- 1<sup>st</sup> Technical Office [技术一室]
  - Responsible for research and training<sup>1656</sup>
  - Technical cadres frequently visit factories and academic institutions<sup>1656</sup>
- 2<sup>nd</sup> Technical Office [技术二室]

## Background

- This unit appears to have a connection to the PLARF training area in Alxa, Inner Mongolia, although it is unclear if this is a permanent garrison. In 2016, it held a drill in the towns of

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<sup>lxxxi</sup>Usually a euphemism for ECM

Alatengchaoge [阿拉腾朝格苏木] and Badanjilin [巴丹吉林镇]<sup>lxxxii</sup> in Alxa's Right Banner.<sup>1657 1658</sup>

- The regiment's first major exercise took place soon after it was reorganized, in September 2017. Its tracking and jamming success rates for this mission were 40% and 33%, respectively, which was considered unacceptable. Through training it managed to raise these rates to 80% and 100%, respectively.<sup>1656</sup>

## 2<sup>nd</sup> Comprehensive Defense Regiment [综合防护二团]

The 2nd Comprehensive Defense Regiment is one of two PLARF ECM regiments. It is noted for conducting jamming and suppression, electronic reconnaissance,<sup>1659</sup> and being responsible for the protection of the "National Treasure," i.e., China's nuclear arsenal.<sup>1660</sup> The regiment was reorganized in 2017, with some personnel being transferred to a remote mountain location.<sup>1661</sup> This may be a reference to Hongchuan [红川], where the PRC's nuclear arsenal is stored, as the source describes this mission as protection of the nuclear stockpile.<sup>1660</sup>

**MUCD:** 96876

**Former MUCD:** 96634

**Grade:** Regiment Leader

**Parent Unit:** Base 67

**Location:** Nanchang County, Nanchang, Jiangxi [江西省南昌市南昌县]<sup>1662 1663</sup>

**Geo:** Unconfirmed, possibly 28.50000, 115.92139

**Secondary Garrison:** Xi'an, Shaanxi 710068 [陕西省西安市]<sup>1664</sup>

### Leadership

**Commander:** Wang Wenqing [王文清] (5/18)<sup>1665</sup> **PC:** Shi Zuming [石祖明] (8/18)<sup>1666</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Xi Zidan [西子丹] (9/18)<sup>1667</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Sun Haibin [孙海滨], Dep COS (6/17)<sup>1661</sup>

### Known Composition

- 1<sup>st</sup> Battalion

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<sup>lxxxii</sup>Both town names are Sinicizations of the original Mongolian

- 2<sup>nd</sup> Battalion
  - Commander: Liu Shiliang [刘石亮] (6/18)<sup>1668</sup>
  - Political Instructor: Wen Yonggang [温拥纲] (4/18)<sup>1669</sup>

## Background

- Key terms used to describe this unit's mission and equipment include "jamming control" [干扰控制], "servo-antennas" [伺服天线], "radar" [雷达],<sup>1670</sup> "fire intercept equipment" [火力拦截装备], and "network testing" [组网测试].<sup>1660</sup>

## Equipment Inspection Institute [装检研究所]

The Equipment Inspection Institute is primarily responsible for ensuring nuclear warhead safety, reliability, and quality control.<sup>1671</sup> Among its duties are testing of weapons systems and components,<sup>1672</sup> regular quality control and environmental inspections of missiles and warheads in long-term storage,<sup>1673</sup> routine monitoring and repairs, and ensuring the integrity of storage facilities.<sup>1674</sup> Other missions include research on missile usage and applications,<sup>1671</sup> <sup>1675</sup> and missile telemetry and tracking support.<sup>1676</sup>

**MUCD:** 96877

**Former MUCD:** 96411

**Grade:** Unknown

**Parent Unit:** Base 67

**Location:** Gaoxin Ave., Bayu Town, High-tech District, Weibin District, Baoji, Shaanxi 721013 [陕西省宝鸡市渭滨区高新区八鱼镇高新大道]<sup>1677</sup> <sup>1678</sup> <sup>1679</sup> <sup>1680</sup>

**Geo:** Unconfirmed, possibly 34.348850, 107.270698

## Secondary Garrison:

- Taibai County, Baoji, Shaanxi [陕西省宝鸡市太白县] (33.884842, 107.278483)
  - This Institute moved a large number of its personnel from its HQ in Baoji to the remote Hongchuan [红川] garrison in March 2017<sup>1681</sup>

## Leadership

**Director:** Wang Guoqing [王国庆] (11/16)<sup>1672</sup>      **PC:** Unknown

**Former Leadership:** Gan Yeyuan [甘业元], PC (2016)<sup>1682</sup>

## Known Composition

- Telemetry Subunit [遥测分队]
  - Travels long distances providing data for missile test launches.<sup>1676</sup>
- Unknown number of Technical Offices [技术室]<sup>1682</sup>

## Background

- The Institute's relationship with Unit 96037 after March 2017, when a large number of Institute personnel were probably transferred to Hongchuan, is still unclear. Contextually, it appears Unit 96037 may have some degree of administrative control over this Institute,<sup>1681 1683</sup> although the Institute continues to exist as a distinct unit with its own MUCD.
- Sources for this unit repeatedly use the term "core" components [核心部件]<sup>1684 1685</sup> when discussing this Institute's inspection focus. This could be an oblique reference to the warhead itself.
- In addition to its inspection mission, this Institute conducts research on weapons usage and applications, including on best practices for newly introduced weapons platforms. In 2009, a new missile had recently entered service (could be the DF-16 or DF-31A) and was experiencing problems in both quality control and in operational applications, limiting its effectiveness. A team from this Institute spent five years tackling these problems, improving quality control and optimizing the missile's operations course.<sup>1671</sup> One source describes the Institute conducting research on core weapons control technology.<sup>1675</sup> Another source mentions the Institute is engaged in lifespan extension and renovations.<sup>1685</sup>
- The Institute has a high number of senior engineers [高级工程师] who make up 1/6 of its cadres.<sup>1682</sup>

## Special Equipment Transport Regiment [特种装备运输团]

The Special Equipment Transport Regiment, established in 1981,<sup>1686</sup> is responsible for transporting nuclear warheads and related equipment from the central repository at Taibai to operations bases.<sup>1687</sup> It is capable of transporting warheads via both road<sup>1688</sup> and rail,<sup>1687</sup> and even possesses an air transport capability.<sup>1686 1689 1690</sup>

**MUCD:** 96878

**Former MUCD:** 96422

**Grade:** Regiment Leader

**Parent Unit:** Base 67

**Location:** Taibai County, Baoji, Shaanxi 721012 [陕西省宝鸡市太白县]<sup>1691</sup>

**Geo:** 34.053503, 107.324458<sup>1692 1693</sup>

## Secondary Garrisons:

- Wolongsi Subdistrict, Jintai District, Baoji, Shaanxi [陕西省宝鸡市金台区卧龙寺街道]<sup>1633</sup> (possibly 34.350619, 107.272166)
- Sandushui Village, Xipo Town, Liangdang County, Longnan, Gansu [甘肃省陇南市两当县西坡镇三渡水村]<sup>lxxxiii 1694 1695</sup> (possibly 33.826494, 106.419984)
  - Former regiment HQ prior to mid-1990s<sup>lxxxiii</sup>
- Hongqing Station, Xipo Town, Liangdang County, Longnan, Gansu [甘肃省陇南市两当县西坡镇宏庆站] (possibly 33.844983, 106.423496)
  - Key rail transport point used in transshipment of nuclear warheads<sup>lxxxiii</sup>

## Leadership

**Commander:** Zhang Ji [张鹤] (5/21)<sup>1696</sup>

**PC:** Ning Bin [宁斌] (2/19)<sup>1695</sup>

**Dep Commander:** Li Bo [李博] (5/17)<sup>1697</sup>

**Dep PC:** Bai Jinliang [白金良] (9/19)<sup>1698</sup>

**Chief of Staff:** Wang Xinfei [王新飞] (5/17)<sup>1700</sup>

**PWDD:** Unknown

**Support Div Director:** Tang Xiaowen [唐孝文] (8/18)<sup>1699</sup>

**Former Leadership:** Shang Fei [尚飞], Commander (2018)<sup>1700</sup>; Li Zhijin [李志金], Commander (2016)<sup>1701</sup>; Zheng Chaowei [郑朝伟], PC (2017)<sup>1702</sup>

## Known Composition

- 1<sup>st</sup> Rail Transport Battalion [铁运一营]<sup>1687</sup>
- 2<sup>nd</sup> Rail Transport Battalion [铁运二营]
  - Commander: Wang Yang [王洋] (6/18)<sup>1703</sup>
- Road Transport Battalion [公路运输营]<sup>1688</sup>
  - Practices transporting equipment in a degraded wartime environment, dealing with damaged roads and infrastructure and being able to quickly make repairs to roads and vehicles<sup>1701</sup>

## Background

- The unit executed its first airborne support mission in 1986, carrying a nuclear payload 2,600 km.<sup>1686</sup>

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<sup>lxxxiii</sup>See Mark Stokes, “China’s Nuclear Warhead Storage and Handling System,” *Project 2049 Institute*, 12 March 2010

## Unit 96607 Hospital [96607 部队医院]

The Unit 96607 Hospital, formerly known as the PLA 537 Hospital, was established in 1950<sup>1704</sup> and is the official hospital attached to Base 67.

**MUCD:** N/A

**Former TUD:** 537 Hospital [537 医院]

**Grade:** Division Leader<sup>1705</sup>

**Parent Unit:** Base 67

**Location:** 49 Baoguang Rd., Baoji, Shaanxi [陕西省宝鸡市宝光路 49 号]<sup>1706 1707</sup>

**Geo:** 34.347978, 107.161165

### Leadership

**Director:** Wang Jin [王进] (1/19)<sup>1708</sup>

**PC:** Yang Haibo [杨海波] (10/16)<sup>1709</sup>

**PWDD:** Zhao Gang [赵刚] (5/18)<sup>1710</sup>

**Former Leadership:** Li Changlin<sup>lxxxiv</sup> [李长林], Director (2017)<sup>1711</sup>

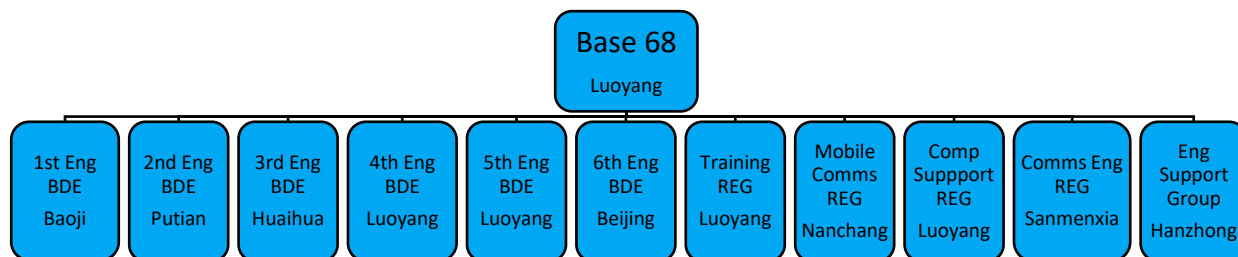
### Background

- This location also hosts numerous civilian support facilities associated with Base 67, including a reception area, guesthouse, daycare, dry cleaning, and a supermarket.<sup>265</sup>

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<sup>lxxxiv</sup> Alternative possible spelling of name: Li Zhanglin

## Base 68 [68 基地]



Base 68, the PLARF's engineering support base, is responsible for construction of physical infrastructure.<sup>1712</sup> The PLARF Engineering Base was first established in 2012 from the former Engineering Technical Zongdui (ETZ) [工程技术总队].<sup>1713</sup> As part of the 2017 reorganization, this base was combined with the 308th Engineering Command [308 工程指挥部] and renamed Base 68. It likely consists of 6 Engineering Brigades, at least two of which specialize in installation, a Communications Engineering Regiment responsible for constructing the PLARF's communications infrastructure, a Communications Repair and Maintenance Regiment, and at least four other support regiments.

**MUCD:** 96608

**Former MUCD/TUD:**

96501 (308 Engineering Command)<sup>1714</sup>; 96531<sup>1715</sup>; 80590<sup>1716</sup>;

Unit 352<sup>1716</sup> (Engineering Technical Zongdui)

**Grade:** Corps Deputy Leader<sup>1717</sup>

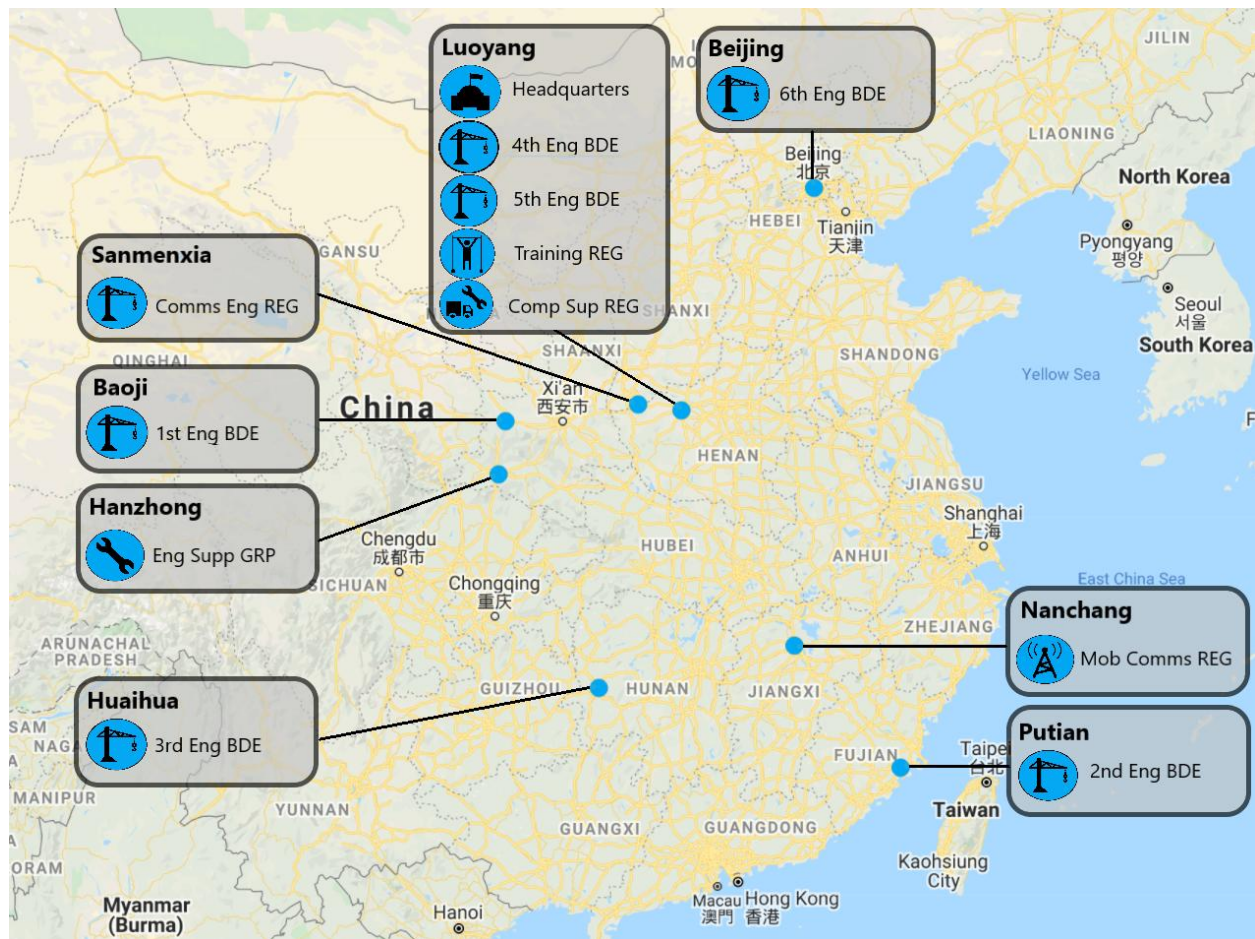
**Location:** 378 Heluo Rd., Xujiaying, High-tech District, Luoyang, Henan 471031 [河南省洛阳市高新区徐家营河洛路 378 号]<sup>1718 1719 1720</sup>

**Geo:** 34.601976, 112.357479<sup>1721</sup>

**Secondary Garrison:**

- Hantai District, Hanzhong, Shaanxi [陕西省汉中市汉台区]<sup>1722</sup> (possibly at 33.068987, 107.009818)
  - Former HQ of 308<sup>th</sup> Engineering Command





## Leadership

**Commander:** Kang Jianguo [康建国] (8/19)<sup>1723</sup>    **PC:** Sun Le [孙乐] (12/18)<sup>1724</sup>

**Dep Commanders:** Liu Jianming [刘建明] (12/19)<sup>1725</sup>; Guo Zhongding [郭中定] (8/19)<sup>1723</sup>

**Dep PC:** Unknown

**Chief of Staff:** Chang Jianwei [常建伟] (4/18)<sup>1726</sup>    **PWDD:** Zhang Wei [张炜] (11/19)<sup>1717</sup>

**Support Dept Director:** Shen Zhanmin [申占民] (10/18)<sup>1727</sup>

**Other Senior Leadership:** Li Deping [李德平], Dep Chief Engineer (7/18)<sup>1728</sup>; Liu Weijie [刘维杰], Snr Engineer (7/18)<sup>1728</sup>

**Former Leadership:** Zhao Quanhong [赵全红], PC (2018)<sup>1729</sup>; Hu Mingquan [胡明全], Dep Commander (2019)<sup>1723</sup>; Chen Xiuhe [陈修河], Dep Commander (2015)<sup>1729</sup>; Liu Changguo<sup>lxxxv</sup> [柳长国], PWDD (2018)<sup>1730</sup>; Wang Xuanping [王选平], Pol Dept Director (2015)<sup>1723</sup>

## Composition

- 1<sup>st</sup> Engineering Brigade [工程一旅]
- 2<sup>nd</sup> Engineering Brigade [工程二旅]
- 3<sup>rd</sup> Engineering Brigade [工程三旅]
- 4<sup>th</sup> Engineering Brigade [工程四旅]
- 5<sup>th</sup> Engineering Brigade [工程五旅]
- 6<sup>th</sup> Engineering Brigade [工程六旅]
- Training Regiment [训练团]
- Communications Regiment [通信团]
- Comprehensive Support Regiment [综合保障团]
- Communications Engineering Regiment [通信工程团]
- Engineering Maintenance Support Group [工程维护保障大队]
- Construction Project Technical Management Center [施工技术管理营]<sup>1731</sup>,
- Security and Communications Battalion [警卫通信营]<sup>1732</sup>

## Background

- In addition to its construction role, this base is also responsible for wartime engineering support and peacetime military operations other than war (MOOTW),<sup>1712</sup> including emergency response.
- The Engineering Technical Zongdui (ETZ) was established on 18 October 1962, when the Chief of the General Staff ordered its creation from the Engineering Special Command Department's [工程兵特种指挥部] Engineering Technical Group [工程技术大队] and Special Engineering Command Department's directly subordinate subunits [特种工程指挥部直属分队]. It would be responsible for installation of test platforms for nuclear weapon and satellite tests.<sup>1733</sup> It was responsible for the constructing the tower for the PRC's initial nuclear tests in 1963-64. From 1968 to 1972, it played a role in construction of the largest early warning radar in the world at that time.<sup>1733</sup> It has also played a role in construction of the Xichang Satellite Launch Center,<sup>1734</sup> as well as the PLA's first missile test base and initial missile sites.<sup>1735</sup> The ETZ moved from Luoyang's Luolongmen to the

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<sup>lxxxv</sup>Alternative possible spelling: Liu Zhangguo

location of the former Armored Tank School [装甲兵坦克学校] in Xuzhou, Jiangsu in 1970. It moved again back to Luoyang in 1975,<sup>1716</sup> and on 28 September 1975, it was resubordinated to the 2nd Artillery, where it would be responsible for missile site infrastructure installation.<sup>1733</sup> Originally consisting of six subordinate groups [大队],<sup>1716</sup> the ETZ was reorganized into three subordinate installation regiments in the early 1990s.<sup>1736</sup> Following its reorganization in 2012, these regiments were converted to brigades.<sup>1713</sup>

- The ETZ, until its recent reorganization in 2012, was the only PLARF unit responsible for installation of electricity, plumbing, ventilation, shock absorption, blast and radiation shielding, and other key components of PLARF missile sites and other infrastructure, ensuring missile lifespan and optimal functionality.<sup>1733</sup> It would also be responsible for emergency repairs of tunnels, roads, bridges, and missile sites in wartime.<sup>1734</sup>
- The Engineering Command Department has had a role in the construction of the Great Hall of the People in Beijing, Mao Zedong's Mausoleum, and the Beijing subway, as well as national defense projects like satellite launch centers and missile sites.<sup>1734</sup>
- Prior to the creation of this Base bringing tunneling and installation functions under one roof, the ETZ worked closely with the Engineering Design Institute and Engineering Command Department in construction of PLARF infrastructure. The Engineering Design Institute, recently resubordinated to the PLARF Research Academy, was responsible for the design stage, the Engineering Command Department was responsible for major construction of buildings and tunnels, and the ETZ was responsible for final installation work.<sup>1734</sup>

## 1<sup>st</sup> Engineering Brigade [工程一旅]

The 1st Engineering Brigade was established on 5 May 1951 and was converted to a brigade on 14 March 2012.<sup>1737</sup> It is likely primarily responsible for tunneling and concrete reinforcement of tunnels.<sup>1738</sup> It would also be responsible for emergency engineering support in wartime, including rapid repairs to roads, bridges, tunnels, and other infrastructure.<sup>1739</sup>

**MUCD:** 96781

**Former MUCD/TUD:** 96512

**Grade:** Division Deputy Leader<sup>1740</sup>

**Parent Unit:** Base 68

**Location:** Dangjiabao Village, Panxi Town, Chencang District, Baoji, Shaanxi [陕西省宝鸡市陈仓区磻溪镇党家堡村]<sup>1741 1742</sup>

**Geo:** Unconfirmed, possibly 34.317958, 107.415185

### Secondary Garrisons:

- Weibin District, Baoji, Shaanxi [陕西省宝鸡市渭滨区]<sup>1743</sup> (possibly at 34.323315, 107.100568)

- Ledu District, Haidong, Qinghai [青海省海东市乐都区]<sup>1744</sup> (possibly at 36.466578, 102.401716)
  - Forward Command Post [前指]
- Shilipu Subdistrict, Jintai District, Baoji, Shaanxi [陕西省宝鸡市金台区十里铺街道]<sup>1745</sup> (possibly at 34.371937, 107.204976)
- Luoyang, Henan 471421 [河南省洛阳市]<sup>1746 1747</sup>
- Hanzhong, Shaanxi [陕西省汉中市]<sup>1748</sup>
- Qakilik (Ruoqiang) County, Bayingolin Prefecture, Xinjiang [新疆巴音郭楞州若羌县]<sup>1749</sup>
- Nanyang, Henan 434370 [河南省南阳市]<sup>1750</sup>
- Golmud, Haixi Prefecture, Qinghai [青海省海西州格尔木市]<sup>1751</sup>

## Leadership

**Commander:** Zhang Jie [张杰] (8/20)<sup>1738</sup>

**PC:** Jiang Gangbiao [蒋刚彪] (8/20)<sup>1738</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Wang Zhaocheng [王兆成] (8/18)<sup>1752</sup>

**Support Dept Director:** Chen Denglong [陈登胧] (9/17)<sup>1753</sup>

**Other Senior Leadership:** Dang Xi<sup>lxxxvi</sup> [党西], Dep COS (1/18)<sup>1739</sup>

**Former Leadership:** Guo Zhongding [郭中定], Commander (2018)<sup>1737</sup>; Chen Lianmeng [陈联盟], Dep PC (2016)<sup>1743</sup>; Li Jindang [李进党], PWDD (2018)<sup>1754</sup>

## Composition (presumed)

- 1<sup>st</sup> Battalion [一营]
- 2<sup>nd</sup> Battalion [二营]
  - “Heroic” 3<sup>rd</sup> Company [英雄三连]<sup>1755</sup>
- 3<sup>rd</sup> Battalion [三营]
  - “Fierce Tigers” 5<sup>th</sup> Company [猛虎五连]<sup>1755</sup>
  - “National Defense Project Pioneers” 6<sup>th</sup> Company [国防施工先锋六连]<sup>1755</sup>
- 4<sup>th</sup> Battalion [四营]
  - “Iron” 8<sup>th</sup> Company [钢八连]<sup>1756</sup>

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<sup>lxxxvi</sup> Alternative possible spelling of name: Zhang Xi

- As of 2015, elements of this battalion have been stationed in the Gobi Desert for the past twelve years, working on a major engineering project<sup>1757</sup>
- 5<sup>th</sup> Battalion [五营]<sup>906</sup>
  - Also known as 60<sup>th</sup> Subunit [60 分队]<sup>906</sup>
  - Commander: Sha Ziga [沙子呷] (8/20)<sup>906</sup>
    - NPC Representative and model personnel who appears frequently in PLA propaganda
    - Member of Yi Ethnic Minority
- Vehicle Company [汽车连]<sup>1745</sup>
- Security and Communications Company [警通连]<sup>1758</sup>

## Background

- Early missions for this unit included participation in the Korean War and aiding the construction of the Jiuquan Satellite Launch Center. In 1997, this unit was responsible for emergency construction of a site on the southeast China coast. In 2008, it was an early responder to the earthquake in Wenchuan.<sup>1737</sup>
- In addition to the primary missions named above, it has also been noted installing defensive doors [防护门]<sup>1738</sup> and constructing a simulated "enemy" camp for missile target practice.<sup>1756</sup>

## 2<sup>nd</sup> Engineering Brigade [工程二旅]

This engineering brigade seems to mainly be concerned with tunneling<sup>1759</sup> and concrete reinforcement [被复].<sup>1760</sup>

**MUCD:** 96782

**Former MUCD/TUD:** 96514

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 68

**Location:** Basan Compound, Laidian Town, Xianyou County, Putian, Fujian [福建省莆田市仙游县赖店镇八三大院]<sup>1761 1762</sup>

**Geo:** Unconfirmed, possibly 25.317198, 118.712805

### Secondary Garrisons:

- Jiushang Village, Xiadao Town, Yan'an District, Nanping, Fujian [福建省南平市延平区夏道镇鸠上村]<sup>1763</sup>
  - Forward Command Post
- Xingcheng, Liaoning [辽宁省兴城市]<sup>1764</sup>

- MOOTW training ground and Heavy Machinery Training Center [非战争军事科目训练场和大型机械操作手培训中心]

## Leadership

**Commander:** Liu Jun [刘军] (8/19)<sup>1764</sup>

**PC:** Liu Yanchun [刘彦春] (8/20)<sup>1765</sup>

**Dep Commanders:** Unknown

**Dep PC:** Wu Jianye [吴建业] (3/18)<sup>1766</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Former Leadership:** Liu Yunsheng [刘允生], Commander (2018)<sup>1767</sup>; Shen Zhanmin [申占民], Commander (2016)<sup>1768</sup>; Guo Sanhu [郭三虎], Commander (2015)<sup>1769</sup>; Zhang Wei [张炜], PC (2018)<sup>1770</sup>

## Composition (presumed)

- 1<sup>st</sup> Battalion [一营]
  - Commander: Zheng Wanping [郑万平] (2/18)<sup>1771</sup>
- 2<sup>nd</sup> Battalion [二营]
- 3<sup>rd</sup> Battalion [三营]
- 4<sup>th</sup> Battalion [四营]
- 5<sup>th</sup> Battalion [五营]
- Security and Communications Company [警通连]<sup>1772</sup>

## Background

- Other noted missions include tunnel flooring/paving,<sup>1766</sup> installation of heavy blast doors,<sup>1773</sup> and special structure bricklaying.<sup>1774</sup> Concrete reinforcement is described as a “core” mission<sup>1760</sup> for the brigade.

## 3<sup>rd</sup> Engineering Brigade [工程三旅]

This brigade appears to be responsible for underground tunneling, as well as concrete pouring and reinforcement.<sup>1775 1776</sup> In wartime it would also be responsible for emergency repairs of tunnels, roads, and bridges.<sup>1777</sup>

**MUCD:** 96783

**Former MUCD:** 96518; 96516?



**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 68

**Location:** Zhengqing Rd., Yangcun Township, Hecheng District, Huaihua, Hunan [湖南省怀化市鹤城区杨村乡正清路]<sup>1778 1779 1780</sup>

**Geo:** Unconfirmed, possibly 27.543129, 110.007407<sup>lxxxvii</sup>

### Secondary Garrisons:

- Banshanping Township, Nanzhao County, Nanyang, 474667 [河南省南阳市南召县板山坪镇]<sup>1781 1782 1783</sup>
  - Forward Command Post [前指] and Brigade Repair Shop [修理所]
- 34 Jiefang Rd., Xigong District, Luoyang, Henan [河南省洛阳市西工区解放路 34 号院]<sup>1784</sup> (34.677150, 112.427621)
  - Possible administrative facility, plus a for-profit hotel run by PLARF
- Qingcheng District, Qingyuan, Guangdong 511533 [广东省清远市清城区]<sup>1785</sup>
  - Possible construction site for 626 Brigade
- Yingde, Qingyuan, Guangdong [广东省清远市英德市]<sup>1786</sup>
  - Possible construction site for 626 Brigade
- Yankou, Longhui County, Shaoyang, Hunan 42214 [湖南省邵阳市隆回县岩口]<sup>1787 1788</sup>
  - Possible construction site for 632 Brigade
- Yimen County, Yuxi, Yunnan [云南省玉溪市易门县]<sup>1789</sup>
  - Possible construction site for 622 Brigade
- Lingshui County, Hainan [海南省陵水县]<sup>1790</sup>
  - Possible construction site for 624 Brigade

### Leadership

**Commander:** Li Binli [李斌利] (9/19)<sup>1789</sup>

**PC:** Pi Zufeng [皮祖峰] (1/20)<sup>1791</sup>

**Dep Commanders:** Unknown

**Dep PC:** Duan Linxian [段林献] (6/18)<sup>1792</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Other Senior Leadership:** Xu Feng [徐峰], Dep COS (2/20)<sup>1775</sup>

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<sup>lxxxvii</sup> Brigade headquarters are said to be on Zhengqing Road, next to an elementary school. The most likely candidate is labelled as a Middle School in Baidu Maps, but Baidu has mislabeled military facilities in the past and there do appear to be military vehicles visible in satellite imagery, so it is possible this is the location.

**Former Leadership:** Yang Hongwei [杨宏伟], PC (2018)<sup>1793</sup>; Liu Jun [刘军], Dep Commander (2017)<sup>1776</sup>; Sun Liangshan [孙良善], PWDD (2018)<sup>1794</sup>; Zhang Zhenhua [张振华], PWDD (2016)<sup>1795</sup>

### Composition (presumed)

- 1<sup>st</sup> Battalion [一营]
- 2<sup>nd</sup> Battalion [二营]
- 3<sup>rd</sup> Battalion [三营]
- 4<sup>th</sup> Battalion [四营]
  - Commander: Sun Dongfeng [孙东风] (2/18)<sup>1796</sup>
  - Political Instructor: Lu Shuiqing [路水清] (7/20)<sup>1788</sup>
  - As of July 2020 this battalion was stationed in Yankou, Longhui County, Guangdong,<sup>1796</sup> likely conducting a long-term construction mission<sup>1796</sup>
- 8<sup>th</sup> Company [八连]<sup>1797</sup>
  - Established in 2003
  - Added a 4th Platoon to its three existing platoons in 2008
- 5<sup>th</sup> Battalion [五营]
- Operations Support Battalion [作战保障营]<sup>1798</sup>
  - Security and Communications Battalion [警通连]
- Comprehensive Support Battalion [综合保障营]<sup>1799</sup>
- Service Company [勤务连]<sup>1800</sup>
  - Subordinate to Brigade Staff Department [参谋部]
- Repair Shop [修理所]<sup>1801</sup>

### Background

- This unit transferred to a new location, possibly its current location in Huaihua, in 2011.<sup>1797</sup> It converted from a regiment to a brigade at some point after 2010,<sup>1786</sup> likely as part of the 2012 reorganization.
- While speculative, this brigade may have incorporated elements of the former Unit 96516, another engineering regiment formerly based in Huaihua which mostly disappeared after 2014.<sup>1802</sup>
- In recent years, the brigade has been noted in several locations, some associated with known PLARF launch brigades. In 2016 it was noted in Qingyuan, Guangdong, one year before the 626 Brigade moved to that location.<sup>1785</sup> In 2010 it was also noted in nearby Yingde, next to Qingyuan.<sup>1786</sup> In August 2016, the brigade took over the "321 Project" from Unit 96514 in Yimen County, Yuxi, Yunnan.<sup>1789</sup> Yuxi is home to the 622 Brigade. In



2014, it was noted in Lingshui County, Hainan,<sup>1790</sup> home of the 624 Brigade since 2018. The 4th Battalion has been noted in Shaoyang, home of the 632 Brigade (see above).

- From 2007-2009, Unit 96516 was involved in constructing a large air defense tunnel in Fengda Village, Qiaotou Township, Huaiji County, Guangdong [广东省怀集县桥头镇丰大村].<sup>1803</sup>

#### 4<sup>th</sup> Engineering Brigade [工程四旅]

The 4<sup>th</sup> Engineering Brigade was established in 2012 through the combination of two previous work units,<sup>1804</sup> possibly a reference to the 1st and 2nd Installation Regiments (see below). As one of Base 68's two installation specialist brigades, it is responsible for final installation of electrical,<sup>1805</sup> water,<sup>1804</sup> ventilation,<sup>1806</sup> HVAC,<sup>1807</sup> and other key components of PLARF facilities. It has also been noted installing steel support girders,<sup>1808</sup> security cameras, sensors, and control systems,<sup>1809</sup> and an 18 ton diesel generator,<sup>1809</sup> as well as being responsible for tunnel whitewashing.<sup>1810</sup>

**MUCD:** 96784

**Former MUCD/TUD:** 96542; 96544?

**Grade:** Division Deputy Leader

**Parent Unit:** Base 68

**Location:** Maying Village, 696 Chengguan Town, Yichuan County, Luoyang, Henan 471399 [河南省洛阳市伊川县城关镇 696 号马营村]<sup>1811 1812 1813</sup>

**Geo:** 34.533013, 112.455619<sup>1814 1815</sup>

#### Secondary Garrisons:

- Jingyuan Subdistrict, Xigong District, Luoyang, Henan [河南省洛阳市西工区金谷园街道]<sup>1816</sup> (possibly at 34.686596, 112.410134)
- Jianxi District, Luoyang, Henan 471003 [河南省洛阳市涧西区]<sup>1817</sup>
- Yimen County, Yuxi, Yunnan [云南省玉溪市易门县]<sup>1818</sup>
  - Possible construction for 622 Brigade
  - Possibly located in vicinity of Zhongtun Village [中屯村] and Hongtongqing<sup>lxxxviii</sup> Village [红铜箐村]
- Pingyuan County, Meizhou, Guangdong [广东省梅州市平远县]<sup>1819</sup>
  - Possible construction for 615 Brigade

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<sup>lxxxviii</sup> Alternative possible spellings of village name: Hongtongjing, Hongtongqiang

## Leadership

**Commander:** Li Qiang [李强] (3/20)<sup>1820</sup>

**PC:** Jin Zhibin [靳志斌] (10/20)<sup>1821</sup>

**Dep Commander:** Zhou Ming [周明] (2/17)<sup>1822</sup>

**Dep PC:** Unknown

**Chief of Staff:** Yu Shisong [余世松] (3/20)<sup>1820</sup>

**PWDD:** Fan Yong [范勇] (1/20)<sup>1823</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Liu Mingbo [刘明波], PC (2019)<sup>1824</sup>; Sun Liangshan [孙良善], Dep PC (2019)<sup>1825</sup>; Guo Xifeng [郭希峰], PWDD (2017)<sup>1826</sup>

## Composition (presumed)

- 1<sup>st</sup> Installation Battalion [安装一营]
  - Political Instructor: Li Lei [李磊] (3/20)<sup>1820</sup>
- 2<sup>nd</sup> Installation Battalion [安装二营]
- 3<sup>rd</sup> Installation Battalion [安装三营]
  - Political Instructor: Peng Zhiguo [彭志国] (2/18)<sup>1827</sup>
- 4<sup>th</sup> Installation Battalion [安装四营]
- 5<sup>th</sup> Installation Battalion [安装五营]
- Security and Communications Company [警通连]<sup>1828</sup>
- Vehicle Company [汽车连]<sup>1829</sup>
- Service Company [公勤连]<sup>1810</sup>
- Repair Shop [修理所]<sup>1810</sup>

## Background

- The 2nd Installation Regiment (96544) mostly disappeared from the public record around 2012, and it was unclear what had happened to it. Although not definitively confirmed, there are several pieces of evidence pointing to Unit 96544 being absorbed into this brigade. First, one source states that this brigade was formed by the combination of Unit 96542 with another unidentified work unit.<sup>1804</sup> Second, Zhang Yuliang, who commanded this brigade until 2017, previously commanded Unit 96544.<sup>1830</sup> Finally, this brigade has been noted having a presence in the 471003 postal code, where Unit 96544 was previously based.<sup>1831</sup>
- Between its establishment in 2012 and February 2015, this brigade completed 35 construction projects. This included a major project in Beijing that involved water, electrical, and ventilation installation.<sup>1804</sup>
- Another source describes a construction project which took place on a remote island at an unidentified date.<sup>1832</sup>

- This Brigade is a National-level Emergency Rescue Specialist Force [国家级应急救援专业力量], capable of restoring roads, communications, and electrical power following floods or other disasters.<sup>1833</sup> The former Unit 96544 was recognized for its excellent response to the 2008 Sichuan earthquake.<sup>1834</sup>

## 5<sup>th</sup> Engineering Brigade [工程五旅]

The 5th Engineering Brigade is one of two installation [工程安装] specialist brigades,<sup>1835</sup> meaning it is responsible for installation of power, water, ventilation,<sup>1836</sup> armor plating,<sup>1837</sup> and other key infrastructure for missile sites and other facilities. The predecessor to this unit dates back to the Korean War, when it was known as the PLA's "Installation Force" [安装劲旅] and took part in engineering missions related to the PRC's early nuclear tests.<sup>1838</sup> It was later resubordinated to the 2nd Artillery, where it took part in early missile silo construction.<sup>1838</sup> Previously subordinate to the Engineering Technical Zongdui<sup>1838</sup> and likely referred to as the 3rd Installation Regiment,<sup>1839</sup> it was reorganized and converted to a brigade in 2012.<sup>1838</sup>

**MUCD:** 96785

**Former MUCD/TUD:** 96546

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 68

**Location:** 559 Shangdu W. Rd., Shiyao Village, Chengguan Town, Yichuan County, Luoyang, Henan [河南省洛阳市伊川县城关镇石窑村商都西路 559 号]<sup>1840 1841 1842</sup>

**Geo:** Unconfirmed, possibly 34.437576, 112.415626

### Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Rong Baoning [容宝宁] (5/18)<sup>1843</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Sun Qingchao [孙庆超], Commander (2018)<sup>1844</sup>; Pi Zufeng [皮祖峰], PC (2019)<sup>1845</sup>

### Composition (presumed)

- 1<sup>st</sup> Installation Battalion [安装一营]
- 2<sup>nd</sup> Installation Battalion [安装二营]
- 3<sup>rd</sup> Installation Battalion [安装三营]

- Political Instructor: Tu Yanfeng [屠艳锋] (8/18)<sup>1846</sup>
- Established around 2001<sup>1847</sup>
- Responsible for missile nest construction<sup>1847</sup>
- 4<sup>th</sup> Installation Battalion [安装四营]
- 5<sup>th</sup> Installation Battalion [安装五营]
- Comprehensive Support Battalion [综合保障营]
- Exterior Line Company [外线连]<sup>1848</sup>

## Background

- In August 1964, this unit may have been known as the 2<sup>nd</sup> Group [二大队], and its 7<sup>th</sup> Squadron [七中队] took part in building the "nerve center" for the first atomic bomb site, including installing control and measurement cables.<sup>1838</sup>
- In addition to its primary installation mission, this brigade is responsible for wartime engineering support, including infrastructure repair, as well as peacetime emergency support and rescue.<sup>1835</sup>
- According to one source which gives insight into working conditions, this brigade was installing a ventilator room when one soldier was killed due to being tired and overworked. The source makes clear that this is not an uncommon occurrence.<sup>1849</sup>

## 6<sup>th</sup> Engineering Brigade [工程六旅]

The 6<sup>th</sup> Engineering Brigade traces its roots to 1948.<sup>1850</sup> It has been established in its current location in the Beijing suburbs since 1985, and was transferred to the 2nd Artillery in 2011.<sup>1850</sup> It seems to serve two major functions: the first is as a "typical" PLARF engineering unit engaged in underground drilling<sup>1851</sup> as well as construction and repair<sup>1852</sup> of key infrastructure like roads and bridges.<sup>1850</sup> Its second function seems to be as a kind of civil engineering unit, engaged in non-military projects such as environmental greenification,<sup>1853</sup> and serving as a national-level flood relief and disaster response unit.<sup>1850</sup> This brigade was also one of the first PLA units to go abroad for a UN peacekeeping mission.<sup>1850</sup>

**MUCD:** 96786

**Former MUCD/TUD:** 96528

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 68

**Location:** Wennan Rd., Nankou Town, Changping District, Beijing [北京市昌平区南口镇温南路]<sup>1854 1855 1856</sup>

**Geo:** 40.220199, 116.120130<sup>1857 1858</sup>

**Secondary Garrisons:**

- Xifengshan, Liucun Town, Changping District, Beijing [北京市昌平区流村镇西峰山]<sup>1859 1860</sup>
- Lengquan Village, Xibeiwang Town, Haidian District, Beijing [北京市海淀区西北旺镇冷泉村]<sup>1861</sup>
- Nanjiao Township, Fangshan District, Beijing [北京市房山区南窖乡]<sup>1862</sup>
  - 52<sup>nd</sup> Subunit [52 分队] and possibly other elements stationed here

## Leadership

**Commander:** Zheng Junlin [郑军林] (3/18)<sup>1863</sup>      **PC:** Unknown

**Dep Commanders:** Zhang Zhonghua [张中华] (3/16)<sup>1853</sup>

**Dep PC:** Sun Liangshan [孙良善] (1/20)<sup>1864</sup>

**Chief of Staff:** Wang Rui [王锐] (7/16)<sup>1865</sup>      **PWDD:** Unknown

**Support Dept Director:** Unknown

**Other Senior Leadership:** Liu Yang [刘洋], PC (2017)<sup>1866</sup>

## Composition (presumed)

- 1<sup>st</sup> Battalion [一营]
  - Commander: Qian Jiang [钱江] (7/20)<sup>1867</sup>
- 2<sup>nd</sup> Battalion [二营]
- 3<sup>rd</sup> Engineering and Construction Battalion [工程建设三营]<sup>1868</sup>
- 4<sup>th</sup> Battalion [四营]
- 5<sup>th</sup> Battalion [五营]

## Background

- This brigade has been involved in planting of trees as part of the "Green Great Wall."<sup>1853</sup>
- In 2003, 700 personnel of this brigade were dispatched to an unidentified African country in two batches. They were engaged in building and restoring roads, bridges, and airfields.<sup>1850</sup>
- Other observed missions include blasting,<sup>1869</sup> minesweeping,<sup>1870</sup> digging electrical cable ditches,<sup>1871</sup> and EOD.<sup>1872</sup>
- This brigade was involved in a tunneling project in the Beijing suburbs in 2015.<sup>1873</sup>
- This brigade is equipped with an amphibious reconnaissance vehicle<sup>1874</sup> capable of operating on both land and water.

- In 2002, this brigade was named by the PLA General Headquarters [总部] as one of 19 anti-flood emergency response units.<sup>1875</sup>

## **Base 68 Training Regiment [68 基地训练团]**

The Base 68 Training Regiment is responsible for training of new Base 68 personnel, as well as training of engineering specialists across the PLARF.<sup>1876</sup> It has also trained PLARF National Defense Students [国防生].<sup>1876</sup>

**MUCD:** 96881

**Former MUCD:** 96520

**Grade:** Regiment Leader

**Parent Unit:** Base 68

**Location:** 48 Binhe North Rd., Xujiaying Village, High-tech District, Luoyang, Henan 471031 [河南省洛阳市高新区徐家营滨河北路 48 号]<sup>1877 1878 1879</sup>

**Geo:** 34.599577, 112.364372<sup>1880</sup>

### **Secondary Garrisons:**

- Longwang Village North, Xianglushan Town, Yiyang County, Luoyang, Henan [河南省洛阳市宜阳县香鹿山镇龙王村北]<sup>1881</sup> (34.535643, 112.132265)<sup>1880</sup>
  - The bulk of the regiment's training facilities appear to be located here
- Luoyang, Henan 471003 [河南省洛阳市]<sup>1882</sup>
  - Machine Teaching and Research Office [机械教研室]

### **Leadership**

**Commander:** Lian Chunyi [廉春毅] (4/18)<sup>1876</sup>

**PC:** Kuang Kunlun [匡坤伦] (8/18)<sup>1876</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Fan Yong [范勇], PWDD (2017)<sup>1883</sup>

### **Composition (presumed)**

- Unknown number of subordinate training battalions

## Mobile Communications Regiment [机动通信团]

This regiment, previously directly subordinate to the PLARF Staff Department and more recently resubordinated to Base 68, is responsible for mobile communications support.<sup>1884</sup> It is capable of deploying and rapidly setting up field mobile communications hubs during wartime or emergencies.<sup>1885</sup>

**MUCD:** 96882

**Former MUCD:** 96647

**Grade:** Regiment Leader

**Parent Unit:** Base 68

**Location:** Liantang Town, Nanchang County, Nanchang, Jiangxi [江西省南昌市南昌县莲塘镇]<sup>1886 1887</sup>

**Geo:** 28.500367, 115.925356<sup>1888</sup>

**Secondary Garrison:** Dongxia Community, Sanyuan District, Sanming, Fujian [福建省三明市三元区东霞社区]<sup>1889 1890</sup>

### Leadership

**Commander:** Wen Guangjie [温广杰] (7/20)<sup>1891</sup>    **PC:** Zhao Zhongxiang [赵忠祥] (7/20)<sup>1891</sup>

**Dep Commanders:** Yang Yue [杨玥] (7/20)<sup>1892</sup>; Yu Hongchao [余红超] (11/17)<sup>1893</sup>

**Dep PC:** Wu Yan [吴砚] (1/20)<sup>1894</sup>

**Chief of Staff:** Unknown

**PWDD:** Wang Bo [王博] (11/20)<sup>1895</sup>

**Support Div Director:** Unknown

**Other Senior Leadership:** Li Shiyong [李世勇], Dep COS (7/20)<sup>1891</sup>

**Former Leadership:** Ding Qingyuan [丁晴远], PC (2017)<sup>1896</sup>; Pi Zufeng [皮祖峰], PC (2014)<sup>1897</sup>; Chen Dongliang [陈栋梁], COS (2019)<sup>1898</sup>; Zhao Xiaowei [赵晓伟], COS (2018)<sup>1899</sup>; Tuo Mingjun [拓明军], PWDD (2017)<sup>1900</sup>

### Known Composition

- 1<sup>st</sup> Battalion [一营]<sup>1901</sup>
  - Responsible for site repair and comms support
  - Located in a remote mountain area hundreds of km from the main HQ
- 2<sup>nd</sup> Battalion [二营]
- 3<sup>rd</sup> Battalion [三营]
  - Political Instructor: Yu Lei [于磊] (5/18)<sup>1902</sup>

- 50<sup>th</sup> Subunit [50 分队]<sup>1903</sup>

## Background

- This regiment has been referred to by multiple names, including the Base 68 Communications (Transmission) Regiment<sup>1904</sup> (通讯团, rather than the more common 通信团) and the PLARF 2nd Communications Regiment [火箭军第二通信团]<sup>1905</sup> (likely a throwback to when it was one of two comms regiments directly under the Staff Department).
- This regiment is located next door to Unit 96876, the 2<sup>nd</sup> ECM Regiment.
- This regiment seems to have a close relationship with Unit 96885, the Communications Engineering Regiment. Both were formerly under the Staff Department with sequential MUCDs, and senior personnel tend to transfer between the two. This would make sense, since both regiments are tasked with maintaining communications, particularly in a degraded environment. In wartime, Unit 96882 is tasked with setting up communications nodes where needed, and Unit 96885 is tasked with repairing and restoring damaged communications lines.
- Mobile comms personnel are considered the elite “special forces” of communications personnel.<sup>1885</sup>

## Base 68 Comprehensive Support Regiment [68 基地综合保障团]

This unit has not been definitively identified, but it may be Base 68's Comprehensive Support Regiment, and before this the base Repair Factory [修配厂]. If so, it is the PLARF's only unit dedicated to repair of engineering equipment, while also conducting engineering equipment repair for other PLA services.<sup>1906</sup>

**MUCD:** 96884

**Former MUCD:** 96552

**Grade:** Regiment Leader

**Parent Unit:** Base 68

**Location:** 30 Jingyuan West Rd, Xigong District, Luoyang, Henan [河南省洛阳市西工区金谷园西路 30 号院]<sup>1907</sup>

**Geo:** Unconfirmed, possibly 34.688044, 112.412321.<sup>1908</sup> Another possibility is 34.687504, 112.420790.

## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown



**Chief of Staff:** Unknown

**PWDD:** possibly Ye Song [叶松] (9/17)<sup>1909</sup>

**Support Div Director:** Unknown

**Former Leadership:** Ma Xinkui [马新魁], PC (2015)<sup>1910</sup>; Rong Baoning [荣宝宁], Pol Div Director (2015)<sup>1910</sup>

## Composition

*Unknown*

## Background

- Personnel in this unit are referred to as “military craftsmen” [军匠].<sup>1908</sup>

## Communications Engineering Regiment [通信工程团]

This regiment dates back to October 1965, and is the PLARF's only unit dedicated to communications engineering.<sup>1911</sup> Responsibilities include construction of the PLARF's communications infrastructure<sup>1912</sup> and construction of communication lines for PLARF missile sites and command.<sup>1913</sup> <sup>1914</sup> This includes both above ground lines as well as underground and underwater cables.<sup>1914</sup> This regiment is also tasked with conducting emergency repairs of communications infrastructure if damaged or destroyed.<sup>1915</sup>

**MUCD:** 96885

**Former MUCD:** 96548

**Grade:** Regiment Leader

**Parent Unit:** Base 68

**Location:** Sanmenxia, Henan [河南省三门峡市]<sup>1916</sup>

**Geo:** Unconfirmed, possibly 34.795668, 111.182388

## Leadership

**Commander:** You Hu [游虎] (11/19)<sup>1917</sup>

**PC:** Li Zhuozhuang [李茁壮] (8/20)<sup>1918</sup>

**Dep Commanders:** Li Yong [李勇] (7/17)<sup>1919</sup>

**Dep PC:** Unknown

**Chief of Staff:** Hu Xiaowei [胡晓巍] (9/20)<sup>1920</sup>

**PWDD:** Han Zhe [韩哲] (1/20)<sup>1921</sup>

**Support Div Director:** Gao Jiling [郜机灵] (7/17)<sup>1919</sup>

**Other Senior Leadership:** Chen Liang [陈亮], PWDD (8/20)<sup>1918</sup>

**Former Leadership:** Tian Changyan [田昌炎], Commander (2018)<sup>1912</sup>; Meng Baoping [孟宝平/孟保平], PC (2019)<sup>1922</sup>; Wang Xingping [王兴平], Dep PC (2015)<sup>1923</sup>; Hao Chaohui [郝朝辉], COS (2019)<sup>1924</sup>; You Hu [游虎], COS (2018)<sup>1912</sup>; Shen Xiangyang [申湘阳], PWDD (2018)<sup>1925</sup>; Fu Jianhua [付建华], Pol Division Director (2017)<sup>1926</sup>

## Known Composition

- Installation Battalion [安装营]<sup>1913</sup>
  - 1<sup>st</sup> Installation Company [安装一连]
  - 2<sup>nd</sup> Installation Company [安装二连]<sup>1927</sup>
    - Commander: Fu Wei [付威] (2/19).<sup>1913</sup>
- 1<sup>st</sup> Communications Line Battalion [线路一营]<sup>1928</sup>
  - 4<sup>th</sup> Communications Line Company [线路四连]<sup>1929</sup>
    - Responsible for laying down fiberoptic cables<sup>1930</sup> and construction of communications nodes/platforms<sup>1931</sup>
- *2<sup>nd</sup> Communications Line Battalion?* [线路二营]
  - Existence of “First” Battalion implies existence of more than one
- Comprehensive Support Battalion [综合保障营]<sup>1932</sup>
  - Vehicle Service Company [汽车勤务连]<sup>1925</sup>
    - Political Instructor: Li Zhenyang [李贞阳] (7/20)<sup>1933</sup>
- Drilling Company [钻探连]<sup>1934</sup>
- Security and Communications Company [警通连]<sup>1935</sup>

## Background

- Each year, personnel can expect to travel to 3-5 different locations to conduct engineering projects. The regiment laid down over 200km of fiberoptic cables in 2019.<sup>1911</sup>
- This regiment was working in Lingbao's Nanchao Village [川口乡南朝村] in Henan in August 2018.<sup>1936</sup> This is a known location for elements of the 661 Brigade.
- Another mission occurred around October 2016 in Long County [陇县], Baoji, Shaanxi, when the regiment buried 1 km of electric cables [电缆] alongside Longqian South Route [陇千南线].<sup>1937</sup>

## Engineering Maintenance Support Group [工程维护保障大队]

The exact role of this unit remains somewhat obscure, but it is related to providing support<sup>1938</sup> and repair<sup>1939</sup> for communications equipment. It was formerly referred to as a Communications Station,<sup>1940</sup> and its former MUCD suggests it may have previously been directly subordinate to the PLARF Staff Department before being transferred to Base 68.

**MUCD:** 96886

**Former MUCD:** 96646

**Grade:** Regiment Leader

**Parent Unit:** Base 68

**Location:** 33 Hanbai Rd. West Section, Erli Village, Chengbei Subdistrict, Xixiang County, Shaanxi [陕西省汉中市西乡县城北街道二里村汉白路西段 33 号]<sup>1941 1942</sup>

**Geo:** Unconfirmed, possibly 32.979704, 107.745221

### Leadership

**Commander:** Zhao Xiaowei [赵晓伟] (7/20)<sup>1943</sup> **PC:** Bian Fengquan [边峰泉] (7/17)<sup>1944</sup>

**Dep Commanders:** Gao Zhanjun [高战军] (7/16)<sup>1945</sup> **Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Other Senior Leadership:** Tian Tietao [田铁涛], Snr Engineer (10/18)<sup>1946</sup>

**Former Leadership:** Zhong Hengquan [钟恒权], Commander (2018)<sup>1946</sup>; Ding Qingyuan [丁晴远], PC (2015)<sup>1947</sup>; Li Shiyong [李世勇], Support Div Director (2017)<sup>1948</sup>

### Background

- This unit seems to have a particularly close relationship with unit 96882 (former 96646), the Mobile Communications Regiment. Beside the sequential MUCD numbers and communications roles, at least three senior personnel, Zhao Xiaowei, Ding Qingyuan, and Bian Fengquan<sup>1949</sup> all transferred between these two units in recent years.

## Unit 96608 Hospital [96608 部队医院]

The 538 Hospital is the official hospital attached to Base 68. It was established in 1977 and moved from Xixiang to its current location in Hanzhong in 2001.<sup>1950</sup> Among its duties is to dispatch small medical teams to support the base's many dispersed construction sites.<sup>1951</sup>

**MUCD:** N/A

**Former TUD:** 538 Hospital [538 医院]

**Grade:** Division Leader or Division Deputy Leader

**Location:** Dongchang Street Middle Section, Dakanhe, Hanzhong, Shaanxi [陕西省汉中市大河坎东昌街中段]<sup>1952</sup>

**Geo:** 33.048912, 107.028710

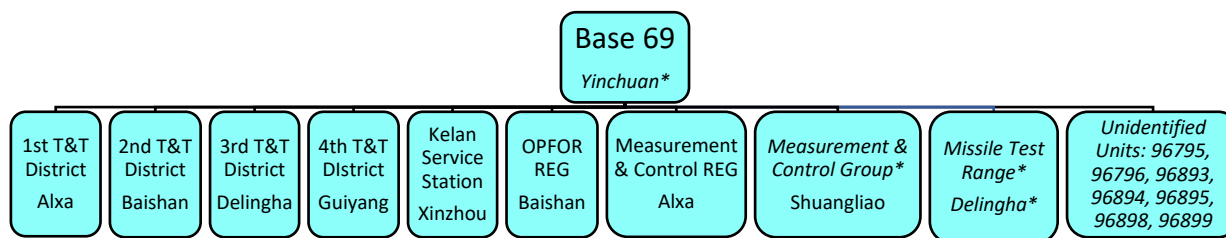
### **Leadership**

**Director:** Liu Chuanrui<sup>lxxxix</sup> [刘传瑞] (8/15)<sup>1953</sup> **PC:** Fang Xudong [方旭东] (7/15)<sup>1954</sup>

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<sup>lxxxix</sup> Alternative possible spelling of name: Liu Zhuanrui

## Base 69 [69 基地]



*\*Unconfirmed*

This new Test and Training Base [试验训练基地] was established in early 2017 as part of the PLA's latest round of structural reforms.<sup>1955</sup> Although much remains unknown about this base, it is comprised of four new Test and Training Districts<sup>1956</sup> (created from three former PLARF training bases), as well as several regiments supporting testing and training missions. Originally garrisoned in Jilin, there is growing evidence that it may have moved to Yinchuan in 2019.

**MUCD:** 96609

**Former MUCD/TUD:** N/A

**Grade:** Corps Leader<sup>1957</sup>

**Location:** 503 Huaiyuan West Rd., Xixia District, Yinchuan, Ningxia [宁夏省银川市西夏区怀远西路 503 号]<sup>1958</sup>

**Geo:** Unconfirmed, possibly 38.490665, 106.106937



## Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Hao Jianhui [郝建辉] (8/18)<sup>1959</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Ding Guolin [丁国林], Control and Assessment Div Director (1/19)<sup>1960</sup>

**Former Leadership:** Bi Yongjun [毕永军], PC (2017)<sup>1961</sup>

## Known Composition

- 1<sup>st</sup> Test and Training District [第一试验训练区]
- 2<sup>nd</sup> Test and Training District [第二试验训练区]
- 3<sup>rd</sup> Test and Training District [第三试验训练区]
- 4<sup>th</sup> Test and Training District [第四试验训练区]
- Kelan Launch Service Station [岢岚发射勤务站]
- Blue Team OPFOR Regiment [蓝军团]
- Measurement and Control Regiment [测控团]
- Measurement and Control Group [测控大队]
- U/I Training Unit 96795
- U/I Unit 96796
- U/I Unit 96893
- U/I Unit 96894
- U/I Unit 96895
- U/I Unit 96897 (possible missile test range)
- U/I Unit 96898
- U/I Unit 96899

## Background

- This unit's primary HQ still appeared to be in Jingyu, Jilin in late 2018.<sup>1962</sup> However beginning in 2019 sources began describing this unit's presence in Yinchuan's Xixia District and mentions of Jingyu abruptly disappeared. It is possible this unit was temporarily based in Jingyu until its Yinchuan HQ was operational.

- Colonel Ding Guolin [丁国林], Director of the base's Control and Assessment Division [导调考评处], is considered the mastermind and leading force behind the PLARF's OPFOR and realistic wargaming push.<sup>1960 1963</sup>
- Former PC Bi Yongjun transferred to the PLAN in 2018 and became Deputy PC of the North Sea Fleet.<sup>1964</sup>

## 1<sup>st</sup> Test and Training District [第一试验训练区]

This new Test and Training District [试训区] was established in November 2017.<sup>1149</sup> It is both responsible for unit training and drills in a desert environment,<sup>1965</sup> as well as conducting measurement and control [测控] support and analysis for missile test launches.<sup>1966 1967</sup> Large-scale drills involving multiple new missile models have been observed conducting maneuvers in the nearby Jilantai area,<sup>xc</sup> and this unit's proximity to Jilantai suggest it may be associated with those activities.

**MUCD:** 96791

**Former MUCD/TUD:** N/A

**Grade:** Division Deputy Leader<sup>1968</sup>

**Parent Unit:** Base 69

**Location:** Bayanhaote Township, Alxa Left Banner, Inner Mongolia [内蒙古阿拉善盟左旗巴彦浩特镇]<sup>1969</sup>

**Geo:** 38.849545, 105.714210<sup>1149 xci</sup>

### Secondary Garrisons:

- Yike'er Gacha (Village), Bayanhaote Town, Alxa Left Banner, Inner Mongolia [内蒙古阿拉善盟左旗巴彦浩特镇伊克尔嘎查]<sup>1970</sup>
- Shariburidu Gacha (Village), Jilantai Town, Alxa Left Banner, Inner Mongolia [内蒙古阿拉善盟左旗吉兰泰镇沙日布日都嘎查]<sup>1970</sup>

### Leadership

**Commander:** Yuan Denghong [袁登红] (1/20)<sup>1968</sup> **PC:** Zhang Chen [张晨] (1/20)<sup>1968</sup>

**Dep Commanders:** Lin Qingshan [林青山] (3/19)<sup>1971</sup> **Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Tuo Mingjun [拓明军] (11/18)<sup>1972</sup>

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<sup>xc</sup>See Hans M. Kristensen, "New Missile Silo And DF-41 Launchers Seen In Chinese Nuclear Missile Training Area," *Federation of American Scientists*, 3 September 2019, <https://fas.org/blogs/security/2019/09/china-silo-df41/>

<sup>xc</sup>Credit to private analyst Decker Eveleth for his help geolocating this unit.

**Support Dept Director:** Unknown

**Former Leadership:** Liu Mingzhu [刘明柱], PC (2018)<sup>1973</sup>

**Known Composition**

- Radio Company [无线电连]<sup>1974</sup>

**Background**

- This District is associated with a nearby measurement and control regiment [测控团] established in early 2018 and responsible for measurement and control support for the whole course of missile test launches, monitoring missile flights, and providing measurement and control analysis for missile units and research units.<sup>1966</sup>
- An article from August 2018 stated that around summer 2018 the unit's drill area (演练场) had just completed construction and was ready for use.<sup>1973</sup>

**2<sup>nd</sup> Test and Training District [第二试验训练区]**

This Test and Training District was established in 2017<sup>1975</sup> from the 2nd Artillery's Combined Arms Tactical Training Base [合同战术训练基地] in Jingyu. This District is notable for its specialized Blue Force Regiment, which provides comprehensive OPFOR training for PLARF units.<sup>xcii</sup>

**MUCD:** 96792

**Former MUCD/TUD:** 96451 (Combined Arms Tactical Training Base/Base 28)<sup>1976 1977</sup>

**Grade:** Division Deputy Leader (presumed)

**Parent Unit:** Base 69

**Location:** Xinnong Village, Sandaohu Town, Jingyu County, Baishan, Jilin 135203 [吉林省白山市靖宇县三道湖镇新农村]<sup>1978 1979 1980</sup>

**Geo:** Unconfirmed, possibly 42.312581, 126.909236

**Secondary Garrison:** Jingyue District, Changchun, Jilin [吉林省长春市净月区]<sup>1981</sup>

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<sup>xcii</sup>See OPFOR Regiment entry for more information



## Leadership

**Commander:** He Qinghui [何庆会] (7/18)<sup>1975</sup>

**PC:** Wen Qing [文青] (11/18)<sup>1982</sup>

**Dep Commanders:** Unknown

**Dep PC:** Wang Muzhou [王木周] (4/20)<sup>1983</sup>

**Chief of Staff:** Unknown

**PWDD:** Liu Hui [刘辉] (8/18)<sup>1984</sup>

**Support Dept Director:** Unknown

**Other Senior Leadership:** Zhou Tao [周涛], Dep COS (3/20)<sup>1985</sup>

**Former Leadership:** Cheng Congcai [程丛才], Commander (2017)<sup>1986</sup>; Hao Jianhui [郝建辉], PC (2017)<sup>1986</sup>

## Composition

Unknown

## Background

- During the 2017 reform period, a unit subordinate to this base moved from a city to a remote environment. The base's special operations team also moved to a remote mountain environment.<sup>1987</sup>
- This unit has a Control Office [导调科] responsible for wargame planning and execution. This office was previously led by Ding Guolin [丁国林], who is now in charge of wargaming for Base 69.<sup>1988</sup>
- This unit also conducts training in support of various specialized support functions, including communications, meteorology, and reconnaissance and monitoring [侦察监控].<sup>1989</sup>

## 3<sup>rd</sup> Test and Training District [第三试验训练区]

The 3rd Test and Training District was formed from the former Northwest Plateau Training Base [西北高原训练基地]. This unit hosts training for visiting PLARF units, including training in plateau operations. It hosts an OPFOR Blue Team with special operations capabilities to serve as aggressors,<sup>1990</sup> as well as the PLARF's only dedicated electronic warfare (EW) Blue Team, called the Blue Eagles [蓝鹰].<sup>1991</sup> This unit is also associated with a missile range in the Gobi Desert for test launches, with subordinate Missile Range Support Stations [靶场保障站] responsible for range maintenance, target setup, and EOD.<sup>1992</sup>

**MUCD:** 96793

**Former MUCD/TUD:** 96367 (NW Plateau Training Base)

**Grade:** Division Deputy Leader      **Parent Unit:** Base 69

**Location:** Tianjun West Rd., Delhi (Delingha), Haixi Prefecture, Qinghai 817099 [青海省海西州德令哈天峻西路]<sup>1993 1994 1995</sup>

**Geo:** Unconfirmed, possibly 37.362139, 97.361723

**Secondary Garrison:** Qakilik (Ruoqiang) County, Xinjiang UAR [新疆若羌县]<sup>1996</sup>

## Leadership

**Commander:** Wang Yanjun [王延军] (7/18)<sup>1997</sup>      **PC:** Zhang Yue [张悦] (5/18)<sup>1998</sup>

**Dep Commanders:** Unknown      **Dep PC:** Lü Qingye [吕庆叶] (5/18)<sup>1990</sup>

**Chief of Staff:** Feng Enhai [冯恩海] (8/18)<sup>1999</sup>      **PWDD:** Sun Haiming [孙海明] (7/18)<sup>2000</sup>

**Support Dept Director:** Unknown

**Former Leadership:** He Qinghui [何庆会], Commander (2017)<sup>2001</sup>; Cheng Congcai [程丛才], Commander (2016)<sup>2002</sup>; Xie Jianxun [解建勋], PC (2016)<sup>2003</sup>; Sheng Zhaoxuan [盛兆玄], PWDD (2016)<sup>2004</sup>

## Known Composition

- Blue Team OPFOR Subunit [蓝军分队]<sup>2005</sup>
- Blue Eagles EW OPFOR [蓝鹰]<sup>1991</sup>
- Security and Communications Company [警通连]<sup>2006</sup>
- Communications Station [通信站]<sup>2007</sup>

## Background

- This unit may have been subordinate to Base 64 (former base 56) prior to the 2017 reforms.<sup>2003</sup>
- The Blue Eagles are the PLARF's only professional Blue Team dedicated to electronic warfare and training in a complex electromagnetic environment. OPFOR drills with the Blue Eagles include jamming and electronic reconnaissance. In December 2017, He Qinghui [何庆会] was commander, and Guan Zhichang [关志昌] was PC.<sup>1991</sup>

## 4<sup>th</sup> Test and Training District [第四试验训练区]

Unit 96794 was established from the former Guiyang Training Base [贵阳训练基地]<sup>2008</sup> and resubordinated to the new Base 69 in early 2017.<sup>2009</sup> There is relatively little information about the role of this unit. According to one report from 2010, it may be involved in cruise missile training with the introduction of the CJ-10.<sup>xciii</sup> Today, it likely engages in other types of training as well - sources indicate it may be involved in training related to asset rail transport.<sup>2010</sup>

**MUCD:** 96794

**Former MUCD/TUD:** 96217 (Guiyang Training Base)

**Grade:** Division Deputy Leader

**Parent Unit:** Base 69

**Location:** 88 Shilin West Rd., Guanshanhu District, Guiyang, Guizhou 550081 [贵州省贵阳市观山湖区石林西路 88 号]<sup>2011 2012 2013</sup>

**Geo:** 26.617021, 106.592342<sup>2014</sup>

**Secondary Garrison:** Qingzhen, Guiyang, Guizhou [贵州省贵阳市清镇市]<sup>2015</sup> (possibly at 26.561521, 106.492711)<sup>2016</sup>

### Leadership

**Commander:** Chen Degui [陈德贵] (9/17)<sup>2017</sup>

**PC:** Li Meng [李猛] (2/19)<sup>1956</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Du Jun [杜军] (6/15)<sup>2018</sup>

**PWDD:** Jiang Weijun [姜卫军] (6/15)<sup>2018</sup>

**Support Dept Director:** Unknown

**Former Leadership:** Wei Zhongtao [魏忠涛], PC (2017)<sup>2017</sup>

### Known Composition

- Launch Company [发射连]<sup>2019</sup>
- Repair Shop [修理所]<sup>2020</sup>

### Background

- An early source from 2007 suggests this unit is responsible for operation of an unidentified new weapon type,<sup>2021</sup> and a 2017 source shows a Launch Company under this unit

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<sup>xciii</sup>See Mark A. Stokes, Ian Easton, "Evolving Aerospace Trends in the Asia-Pacific Region," *Project 2049 Institute*, 2010. p. 15

observing what appears to be a CJ-10 launch.<sup>2019</sup> This led to early speculation that this unit may eventually be spun off into a CJ-10 missile brigade, although this does not appear to be the case.<sup>xciii</sup>

- This unit has two locations in the Guiyang area. It is unclear which is the primary headquarters. This unit also previously had a third location in Jiyang District, Sanya, Hainan Province,<sup>2022</sup> which appears to have more recently been spun off into its own unit with the MUCD 96898.<sup>2023</sup>

## **Unit 96795 [96795 部队]**

First evidence of this unit appeared in December 2020, with a research paper on UAVs.<sup>2024</sup> While little is currently known about this unit, it is described as a “specialized training and evaluation unit” responsible for year-round tactical training.<sup>2025</sup>

**MUCD:** 96795

**Former MUCD:** N/A

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Xixia District, Yinchuan, Ningxia 750021 [宁夏省银川市西夏区]<sup>2024</sup>

**Geo:** Unknown, possibly co-located with Base HQ.

### **Leadership**

**Commander:** Unknown

**PC:** Unknown

## **Blue Team OPFOR Regiment [蓝军团]**

The 2nd Test and Training District hosts a dedicated Blue Team<sup>xciv</sup> OPFOR Regiment. The regiment began as a battalion strength<sup>2026</sup> Tactical OPFOR Team [战术对抗队] in 2004, was upgraded to a Blue Force Unit in 2012, and reorganized into a regiment in 2018.<sup>1982</sup> It utilizes a wide range of capabilities to train visiting PLARF units, including special operations attacks, UAVs, ECM,<sup>1982</sup> and precision strikes.<sup>2027</sup>

**MUCD:** Unknown

**Former MUCD:** N/A

**Grade:** Regiment Leader

**Parent Unit:** Base 69

**Location:** Jingyu County, Baishan, Jilin [吉林省白山市靖宇县]<sup>2028</sup>

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<sup>xciv</sup>Unlike most countries, in which the Red Team plays the role of aggressor, the PLA designates the Blue Team for this role and the Red Team as the home force.

**Geo:** 42.317335, 126.90838 (if co-located with 2<sup>nd</sup> Test and Training District)

## Leadership

**Commander:** Liu Xiaoguang [刘晓光] (2/20)<sup>2029</sup> **PC:** Yao Wenguo [姚文国] (6/18)<sup>2030</sup>

**Dep Commanders:** Unknown **Dep PC:** Unknown

**Chief of Staff:** Liu Zhanxiang [刘占祥] (6/18)<sup>2031</sup> **PWDD:** Unknown

**Support Div Director:** Unknown

## Known Composition

- Reconnaissance and Surveillance Battalion [侦察监视营]<sup>2028</sup>
- Comprehensive Strike Company [综合打击连]<sup>2032</sup>
- Special Operations Squadron [特战中队]<sup>2033</sup>
  - Commander: Zheng Yihang [郑亦航] (2/19)
- UAV Subunit [无人机分队]<sup>2031</sup>

## Background

- In a 2016 essay, Cheng Congcai, former Commander of the Jingyu Combined Arms Tactical Training Base, called for the creation of a Blue Force Unit with PLARF characteristics and geared toward the needs of PLARF operations.<sup>2034</sup> The current regiment was established in early 2018 as an experimental work unit.<sup>2032</sup>
- Col. Ding Guolin [丁国林] appears to be the mastermind behind PLARF OPFOR wargaming. One source states that he was influenced by the PLAA OPFOR unit at Zhurihe, as well as the United States' Fort Irwin in creation of this unit.<sup>2035</sup>
- In addition to conducting operations in Jingyu, this unit appears to also travel to other regions as needed.<sup>2028</sup> One notable example is the regiment's participation in the PLARF's 2018 Heavenly Sword [天剑] exercises, conducted in a desert environment. Operations in this exercise included SOF attacks, ECM, and technical reconnaissance against a PLARF missile brigade.<sup>2036</sup>
- A more comprehensive list of capabilities this unit possesses includes reconnaissance and surveillance [侦察监视], frequency jamming [频谱干扰], precision strike [精确打击], SOF raids [特战破袭],<sup>2027</sup> UAVs,<sup>1982</sup> electronic reconnaissance, and electromagnetic jamming.<sup>2037</sup>

## Unit 96796 [96796 部队]

Unit 96796 may be a research institution associated with Base 69, possibly focused on aerospace science and engineering.<sup>2038</sup> Like Base 69, it has locations in both Jingyu and Yinchuan's Xixia District.

**MUCD:** 96796

**Former MUCD/TUD:** Unknown

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Jingyu County, Baishan, Jilin 135200 [吉林省白山市靖宇县]<sup>2039</sup>

**Geo:** Unknown

**Secondary Garrison:** Xixia District, Yinchuan, Ningxia 750001 [宁夏省银川市西夏区]<sup>2040</sup>

### Leadership

**Commander:** Unknown

**PC:** Unknown

### Composition

Unknown

### Background

- All five researchers identified in the CNKI scientific database as being associated with this unit are listed as aerospace science and engineering experts.<sup>2038</sup> Article subjects include spacecraft flight, UAVs, and parafoils, as well as optimizing missile setup for launch. It also reveals significant research cooperation with the PLARF Engineering University and National University of Science and Technology.<sup>2041</sup> Speculatively, it may be involved with research on the test launches which this base conducts.

## Kelan Launch Service Station [岢岚发射勤务站]

This unit, referred to in some sources as a "Service Station" or "Launch Service Station," likely provides support and a local PLARF presence for ballistic missile test launches from the nearby Taiyuan Satellite Launch Center (TSLC) (subordinate to the SSF).

**MUCD:** 96891

**Former MUCD:** 96622; 80816<sup>2042</sup>

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Songjiazhai, Kelan County, Xinzhou, Shanxi 036304 [山西省忻州市岢岚县宋家寨]<sup>2042 2043 2044</sup>

**Geo:** Unconfirmed, possibly 38.798964, 111.623379

**Secondary Garrison:**

- Kelan County, Xinzhou, Shanxi [山西省忻州市岢岚县] (38.888740, 111.597570)
  - DF-41 Test Silo<sup>xcv</sup> at the TSLC

**Leadership**

**Commander:** Miao Baohua [苗宝华] (8/19)<sup>2045</sup>      **PC:** Unknown

**Dep Commanders:** Unknown      **Dep PC:**      Unknown

**Chief of Staff:** Unknown      **PWDD:** Unknown

**Support Div Director:** Unknown

**Composition**

Unknown

**Background**

- Associated with the Taiyuan Satellite Launch Center, also known as SSF Base 25, an important site for test launches of ballistic missiles.<sup>x cvi</sup> Both this unit and its SSF counterpart are located in the 036304 postal code,<sup>2046</sup> indicating close proximity, and the main location is less than a mile south of the Center.
- Recently, this site was host to several DF-41 test launches<sup>2047</sup> and appears to be an important testing ground for the DF-41.<sup>x cv</sup>

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<sup>x cv</sup> See Catherine Dill, "OPEN SILOS," *Arms Control Wonk*, 22 August 2018. <https://www.armscontrolwonk.com/archive/1205826/open-silos/>  
<sup>x cvi</sup> See Mark Stokes, Gabriel Alvarado, Emily Weinstein, Ian Easton, "China's Space and Counterspace Capabilities and Activities," The U.S.-China Economic and Security Review Commission, 2020. [https://www.uscc.gov/sites/default/files/2020-05/China\\_Space\\_and\\_Counterspace\\_Activities.pdf](https://www.uscc.gov/sites/default/files/2020-05/China_Space_and_Counterspace_Activities.pdf)

## Measurement and Control Regiment [测控团]

Unit 96892 is likely a new Measurement and Control Regiment [测控团] responsible for data measurement of missile test launches, monitoring of missile flights, and providing measurement and control analysis for missile and research units.<sup>1966</sup> This unit was formed by combining Measurement and Control subunits from across China and gathering them in a single training area.<sup>2048</sup> It is likely subordinate to<sup>1966</sup> and co-located with<sup>2049</sup> the 1<sup>st</sup> Test and Training District.

**MUCD:** 96892

**Former MUCD:** N/A

**Grade:** Regiment Leader

**Parent Unit:** Base 69

**Location:** Alxa Left Banner, Inner Mongolia [内蒙古阿拉善左旗]<sup>2050</sup>

**Geo:** Unconfirmed, possibly 38.852416, 105.713974

### Leadership

**Commander:** Shen Zhengwen? [沈正文] (9/18)<sup>2048</sup> **PC:** Gao Ge [高舸] (7/20)<sup>2051</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Tian Canchun? [田灿春] (9/18)<sup>2048</sup> **PWDD:** Unknown

**Support Div Director:** Unknown

### Known Composition

- Measurements Battalion [测量营]
  - Commander: Ma Wenzhe [马文哲] (2/18)<sup>2050</sup>
- Measurement and Control Center [测控中心]
  - Director: Tu Chongjun [涂崇俊] (9/18)<sup>2048</sup>
- Measurement and Control 1<sup>st</sup> Company [测控一连]
- Measurement and Control 2<sup>nd</sup> Company [测控二连]
- Measurement and Control 3<sup>rd</sup> Company [测控三连]<sup>2048</sup>

### Background

- There are contradictory reports about when this unit was established. One report states that this unit was established in early 2017 and supported over 50 missile launches of 9 different missile types in its first eight months.<sup>2050</sup> However another report seemingly about the same



unit states that this unit was quickly stood up in early 2018 and supported its first missile launch within 2 months.<sup>1966</sup>

- One source goes into some detail about how this unit provides launch support. The 3rd Measurement and Control Company [测控三连] has two stations, a primary station [主站] and secondary station [副站] which work together to gather missile trajectory data. The primary station has a high-speed camera which records the launch. The secondary station calculates missile trajectory in real time for the command post.<sup>2048</sup>

## **Unit 96893 [96893 部队]**

First public mention of this unit in August 2018.<sup>2052</sup> Speculatively, its location in Jilantai suggests that it may be a support unit for PLARF test and training activities in the area.

**MUCD:** 96893

**Former MUCD:** Unknown

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Jilantai Town, Left Banner, Alxa, Inner Mongolia [内蒙古阿拉善左旗吉兰泰镇]<sup>2053</sup>

**Geo:** Unconfirmed, possibly 39.794548, 105.750636

### **Leadership**

**Commander:** Unknown

**PC:** Sheng Zhaoxuan [盛兆玄] (8/18)<sup>2052</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### **Composition**

Unknown

### **Background**

- PC Sheng Zhaoxuan has a scientific PhD and was publicized as the 2nd Artillery's only PhD platoon commander in 2009.<sup>2054</sup>
- One source featuring this unit mentions a "PLARF unit and radar station,"<sup>2055</sup> suggesting a possible launch tracking function.

## Unit 96894 [96894 部队]

First public mention in April 2019.<sup>2056</sup> No further information available. Being located in Alxa's Right Banner, it is probably not co-located with the other Alxa units.

**MUCD:** 96894

**Former MUCD:** Unknown

**Grade:** Regiment Leader<sup>2056</sup>

**Parent Unit:** Base 69

**Location:** Badanjilin Town, Alxa Right Banner, Inner Mongolia [内蒙古阿拉善右旗巴丹吉林镇]<sup>2057</sup>

**Geo:** Unconfirmed, possibly 39.206861, 101.677212

### Secondary Garrison:

- Alatengchaoge Sum (Town), Alxa Right Banner, Inner Mongolia [内蒙古阿拉善右旗阿拉腾朝格苏木]<sup>2057</sup> (possibly at 39.220089, 100.845738)
  - Satellite imagery<sup>xcvii</sup> shows a possible base layout, as well as some nearby construction

### Leadership

**Commander:** Unknown

**PC:** Unknown

**Dep Commanders:** Sun Yuanyuan [孙元元/孙圆圆] (4/19)<sup>2056</sup>

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### Composition

Unknown

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<sup>xcvii</sup>This town does not appear in Google Maps, but does appear in Baidu Maps

## Background

- Sun Yuanyuan is referred to as both "Deputy Director"<sup>2056</sup> and "Regiment Deputy Commander"<sup>2058</sup> in different sources.

## Unit 96895 [96895 部队]

First (and so far only) public mention in December 2019.<sup>906</sup> No further information at this time.

**MUCD:** 96895

**Former MUCD:** Unknown

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Unknown

**Geo:** Unknown

## Leadership

**Commander:** Unknown

**PC:** Unknown

## Composition

Unknown

## Measurement and Control Group [测控大队]

This unit is involved with radar tracking, measurement, and control of missile launches, with its own indigenous radar capabilities.<sup>2059</sup> Authors and former MUCD suggest it is associated with the former Combined Arms Tactical Training Base (96451, now 96792) in Jingyu County,<sup>2059</sup> which is not far from this unit.<sup>2059</sup> It is organized as a group [大队].<sup>2060</sup>

**MUCD:** 96896

**Former MUCD:** 96469

**Grade:** Unknown

**Parent Unit:** Base 69; 2<sup>nd</sup> Test and Training District

**Location:** Namu Township, Shuangliao, Jilin 136400 [吉林省双辽市那木乡]<sup>2061 2062 2063</sup>

**Geo:** Unconfirmed, possibly 43.482469, 123.394524

## Leadership

**Commander:** Li Tiezheng [李铁铮] (5/17)<sup>2064</sup>

**PC:** Unknown

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

**Former Leadership:** Hu Chenjun [胡陈俊], Dep Commander (2015)<sup>2065</sup>

### Known Composition

- Measurements Battalion [测量营]
  - Responsible for travelling to missile launch sites across China, collecting launch measurements and data<sup>2066</sup>
- Security Company [警卫连]<sup>2067</sup>

### Background

- This unit appears to have taken on the post-reform MUCD of 96896.<sup>2062 2063</sup> According to one source, in early 2018 all of the PLARF's measurement and control units were combined under a single unit and gathered in a single location,<sup>2048</sup> likely under Unit 96892 in Alxa, but this does not seem to be the case for this unit. It does have connections to 96892 via 96892's likely commander, Shen Zhengwen, who was formerly associated with this unit.<sup>2061</sup>

### Unit 96897 [96897 部队]

This unit was first publicly mentioned in December 2019, when one of its subunits, a missile range support station [靶场保障站], was recognized as a model subunit.<sup>2068</sup> It appears to be responsible for missile target range management and support, including EOD.<sup>2069</sup> The PLARF does have a test launch range in the Gobi Desert<sup>2070</sup> associated with the 3<sup>rd</sup> Test and Training District,<sup>2069</sup> but it is not yet known whether this unit is associated with this test range.

**MUCD:** 96897

**Former MUCD:** Unknown

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Unknown

**Geo:** Unknown

### Leadership

**Commander:** Unknown

**PC:** possibly Zhao Hongjiang [赵洪江] (6/18)<sup>2069</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Div Director:** Unknown

### Known Composition

- Missile Range Support Station [靶场保障站]
  - Director: Wang Zhenghao [王正浩]<sup>1659</sup>

### Unit 96898 [96898 部队]

First Mention of this unit in June 2019.<sup>2071</sup> No further information at this time beyond an address in Hainan. This unit may have previously been subordinate to the former Guiyang Training Base, which had a presence in the same village, but now appears to have been spun off into its own unit.<sup>2022 2023</sup>

**MUCD:** 96898

**Former MUCD:** Unknown

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Group One #202, Wushi Village, Jiyang District, Sanya, Hainan [海南省三亚市吉阳区乌石村一组 202 号]<sup>2023</sup>

**Geo:** Unconfirmed, possibly 18.290270, 109.580044

### Leadership

**Commander:** Unknown

**PC:** Unknown

### Composition

Unknown

### Unit 96899 [96899 部队]

First mention of this unit in June 2019. Given its apparent location in Guiyang it likely supports the 4<sup>th</sup> Test and Training District nearby.

**MUCD:** 96898

**Former MUCD:** Unknown

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** Guiyang, Guizhou [贵州省贵阳市]<sup>2072</sup>

**Geo:** Unknown

### **Leadership**

**Commander:** Unknown

**PC:** Unknown

### **Unit 96609 Hospital [96609 部队医院]**

This is the official hospital attached to Base 69. It appears to be a brand new hospital built at the site of a former hotel.

**MUCD:** N/A

**Former TUD:** N/A

**Grade:** Unknown

**Parent Unit:** Base 69

**Location:** 690 W. Huaiyuan Rd., Yinchuan, Ningxia [宁夏回族自治区银川市西夏区怀远西路 690 号]<sup>2073</sup>

**Geo:** 38.489963, 106.102555

### **Leadership**

**Director:** Unknown

**PC:** Unknown

# Academic Institutions

## Rocket Force Command College [火箭军指挥学院]

The Rocket Force Command College<sup>xcviii</sup> was established in 1977 as the 2nd Artillery School, changing its name to 2nd Artillery College in 1979. In 1986 it became the 2nd Artillery Command College, and in 2016 it became the Rocket Force Command College.<sup>2074</sup> In its 40+ years it has graduated over 30,000 cadets, over 120 of whom have gone on to become generals.<sup>2075</sup>

**MUCD:** N/A

**Former MUCD/TUD:** N/A

**Grade:** Corps<sup>2076 2077</sup> or Corps Deputy Leader<sup>2078 xcix</sup>

**Parent Unit:** PLARF HQ

**Location:** 145 Two-seven Road, Jiang'an District, Wuhan, Hubei [湖北省武汉市江岸区二七路145号]<sup>2079</sup>

**Geo:** 30.629938, 114.301380

### Leadership

**Commandant:** Lan Jiying [兰吉银] (12/19)<sup>2080</sup>

**PC:** Liu Zhihui [刘志辉] (4/19)<sup>2081</sup>

**Dep Commandants:** Wang Wei [王玮] (9/19)<sup>2082</sup>; Zhao Guisheng [赵桂生] (7/17)<sup>2076</sup>

**Dep PC:** Xiong Zhaoyuan [熊照元] (4/18)<sup>2083</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

## Rocket Force University of Engineering [火箭军工程大学]

The PLARF University of Engineering was established in 1951 as the Northwest Military Region Artillery School, and the same year was renamed the PLA 1<sup>st</sup> Artillery School. It moved to Xi'an in 1955 and in 1956 was renamed the Xi'an Artillery School. In 1959, its mission was changed from teaching artillery personnel to specializing in strategic missile education, though its name remained the same to preserve secrecy. In 1963, its name changed to the PLA Artillery Technical

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<sup>xcviii</sup>For a more detailed treatment of this and other PLA Academic Institutions, the author recommends “The People’s Liberation Army’s 37 Academic Institutions” by Ken Allen and Mingzhi Chen of the China Aerospace Studies Institute. A copy can be found here: [https://www.airuniversity.af.edu/Portals/10/CASI/Books/CASI\\_Academic\\_Institutions\\_Encyclopedia\\_web\\_final.pdf?ver=2020-06-14-133016-747](https://www.airuniversity.af.edu/Portals/10/CASI/Books/CASI_Academic_Institutions_Encyclopedia_web_final.pdf?ver=2020-06-14-133016-747)

<sup>xcix</sup>Sources conflict as to whether this is a Corps Leader of Corps Deputy Leader grade organization. News sources refer to it as Corps Deputy grade, but investigations of the service ribbons of senior personnel at this institution are consistent with a Corps Leader grade org.

College [炮兵技术学院]. It was transferred to the 2<sup>nd</sup> Artillery in 1969, and changed its name to the 2<sup>nd</sup> Artillery Technical College. In 1975, it changed its name to the 2<sup>nd</sup> Artillery School. In 1978, it again changed its name to the 2<sup>nd</sup> Artillery Technical College. In 1986, it changed its name to the 2<sup>nd</sup> Artillery Engineering College. In 2011, it became the 2<sup>nd</sup> Artillery Engineering University. Since 1959, it has produced over 40,000 graduates, over 130 of whom went on to become generals. The majority of the PLARF's brigade commanders, chiefs of staff, and chief engineers, as well as lower-level battalion and company commanders, graduated from this university.<sup>2084</sup>

**MUCD:** N/A

**Former MUCD/TUD:** N/A

**Grade:** Corps Deputy Leader<sup>2085 2086</sup>

**Parent Unit:** PLARF HQ

**Location:** 2 Tongxin Rd., Baqiao District, Xi'an, Shaanxi [陕西省西安市灞桥区同心路 2 号]<sup>2087</sup>

**Geo:** 34.312973, 109.122501

## Leadership

**Commandant:** Li Hua [李华] (5/19)<sup>2088</sup>

**PC:** Guo Jianjun [郭建军] (1/20)<sup>2089</sup>

**Dep Commandants:** Hang Zhonghua [杭中华] (5/19)<sup>2090</sup>; Liu Guoqing [刘国庆] (9/17)<sup>2086</sup>

**Dep PC:** Cao Zhibin [操志斌] (9/18)<sup>2091</sup>

**Chief of Staff:** Unknown

**PWDD:** Unknown

**Support Dept Director:** Unknown

**Former Leadership:** Liu Guangbin [刘光斌], Commandant (2018)<sup>2092</sup>; Chen Hongke [陈洪珂], PC (2018)<sup>2093</sup>; Cui Li [崔力], Dep PC (2017)<sup>2094</sup>

## Known Composition

- Known subordinate colleges [学院]:
  - Engineering College [工程学院]<sup>2095</sup>
  - Natural Sciences College [理学院]<sup>2084</sup>
  - Basic Command College [初级指挥学院]<sup>2084</sup>
  - Missile Engineering College [导弹工程学院]<sup>2096</sup>
  - Nuclear Engineering College [核工程学院]<sup>2097</sup>



## Rocket Force NCO School [火箭军士官学校]

The Rocket Force NCO School was established in September 1970 as the Yunnan Shipin 2<sup>nd</sup> Artillery 814<sup>th</sup> Regiment [云南石屏的二炮第 814 团]. It was moved to Xi'an in November 1971, where it was responsible for a teaching support mission under the 2<sup>nd</sup> Artillery Engineering Academy. In April 1976 it was reorganized into a training regiment, and in August of the same year was transferred to the 2<sup>nd</sup> Artillery Command College in Wuhan. In January 1978 it again moved to Qingzhou, and in March 1993 it was reorganized into the 2<sup>nd</sup> Artillery Command College Qingzhou Branch [二炮兵指挥学院青州分院]. In July 1999 it became the PLA 2<sup>nd</sup> Artillery Qingzhou NCO School [中国人民解放军第二炮兵青州士官学校]. In June 2011 it changed its name to the PLA 2<sup>nd</sup> Artillery NCO Professional and Technical Education College [二炮兵工程大学士官职业技术教育学院] and was made subordinate to the Rocket Force Engineering University. In 2017 it became the Rocket Force NCO School [中国人民解放军火箭军士官学校], and was again made an independent institution.<sup>2098</sup>

**MUCD:** N/A

**Former MUCD/TUD:** N/A

**Grade:** Division Leader<sup>2098 2099</sup>

**Parent Unit:** PLARF HQ

**Location:** Qingzhou, Weifang, Shandong [山东省潍坊市青州市]<sup>2100</sup>

**Geo:** 36.673278, 118.454221

### Leadership

**Commandant:** Tang Yong [汤勇] (12/20)<sup>108</sup>

**PC:** Ning Luqiao [宁路桥] (12/19)<sup>2101</sup>

**Dep Commandants:** Chen Renyong [陈仁勇] (1/19)<sup>2102</sup>

**Dep PC:** Guan Zhichang [关志昌] (10/18)<sup>2099</sup>

**Former Leadership:** Li Hua [李华], Commandant (2018)<sup>2099</sup>; Xu Guoming [徐国明], PC (2017)<sup>2103</sup>; Zhang Yuli [张玉礼], Dep Commandant (2017)<sup>2104</sup>; Zhu Hongming [祝洪铭], Dep PC (2017)<sup>2104</sup>

### Background

- The School has a subordinate Teaching Service Battalion [教练勤务营] responsible for teaching operations skills, including missile launch skills, to prospective NCOs. This battalion handles drill deployments which include real missile launches.<sup>2105</sup>

- The NCO School appears to have at least partial control over the PLARF Comprehensive Training Base (96625),<sup>2106</sup> which is responsible for Logistics and NCO training. This unit was previously under the PLARF Logistics Department, and it is unclear if it has been completely transferred to the NCO School. NCO School personnel train in logistical specialties at this location.
- The NCO School is responsible for five types of NCO training, which it calls the "integrated five categories" [五类一体]. These are: NCO professional skills education [士官职业技术教育], new soldier training (新兵训练), training of direct-recruit and targeted-cultivation new NCOs [直招和定向培养士官入伍训练], cultivation and training of pre-selected NCOs [预选士官培训], and short-term/rotational training of some specialist NCOs and civilian personnel [部分专业士官, 文职人员短训轮训].<sup>2100 2107</sup>
- The NCO School annually trains over 20,000 personnel. As of 2019, the NCO school has 13 full professors and 61 assistant professors.<sup>2100</sup>

### Rocket Force NCO School 4<sup>th</sup> Student Group [学兵四大队]

The 4<sup>th</sup> Student Group dates back to 1954<sup>177</sup> and is responsible for basic training of direct recruit NCOs.<sup>177</sup> It may also conduct training for other NCOs and enlisted personnel.<sup>177</sup> It may have previously been subordinate to the Logistics Department's Comprehensive Training Base (96625), where it served as the PLARF's only Special Vehicle Driver Training Group [特种车司机训练大队].<sup>2108</sup> It was transferred, presumably to the NCO School, around 2017.<sup>177</sup> It is co-located with Unit 96619, a basic training base for new PLARF recruits.

**MUCD:** Unknown

**Former MUCD:** 96639

**Grade:** Regiment Leader?

**Parent Unit:** Rocket Force NCO School

**Location:** Fengrun District, Tangshan, Hebei [河北省唐山市丰润区]<sup>2109</sup>

**Geo:** 39.855631, 118.093376<sup>2110</sup>

#### Leadership

**Commander:** Yuan Qingkai [原庆凯] (7/19)<sup>2111</sup>

**PC:** Zhang Qingshan [张清山] (3/17)<sup>2112</sup>

**Dep Commanders:** Unknown

**Dep PC:** Unknown

**Chief of Staff:** Unknown

**PWDD:** Ni Tao [倪涛] (9/19)<sup>2113</sup>

**Support Div Director:** Possibly Sun Jie [孙杰] (5/18) (Logistics Div Director)<sup>2114</sup>

**Former Leadership:** Fang Kuixing [方奎兴], Commander (2015)<sup>2115</sup>; Zhou Qian [周前], PC (2016)<sup>2116</sup>

## Background

- This unit's MUCD appears to be 96639, although it is not in frequent use in public sources save for a handful of research articles related to driver training and vehicle technology.<sup>2117</sup>
- A 2018 article states that a batch of nearly 800 NCOs completed three months of training here.<sup>2118</sup>
- From 2017 to October 2019, this unit graduated over 8,000 personnel, both new enlisted personnel [新兵] and specialist students [学兵].<sup>177</sup>
- This unit may have previously been called the "NCO School Teaching Support Group" [教学保障大队].<sup>2119</sup> It may be associated in some way with the NCO School's "Instructor Service Battalion" [教练勤务营], which is responsible for joint training and assessment of NCO School graduates, weapons and equipment maintenance, and for dispatching cadets to northwest China to conduct real missile launch training.<sup>2105</sup>
- The exact relationship between this unit, the NCO School, and the Comprehensive Training Base remains unclear, although it does seem to have transferred from the Logistics Department to the NCO School at some point. Also unclear is the relationship between the various names thrown around when discussing this unit, including “NCO School Teaching Support Group,” “NCO School Fengrun Barracks” [士官学校丰润营区], and “Fengrun Training Group” [丰润训练大队].

## Miscellaneous and Unidentified Units

*The PLARF contains a number of direct-reporting units for which little to no public information exists. The following is a list of units that could not be properly identified or accurately placed within the PLARF hierarchy.*

### Unit 96610 [96610 部队]

This unit appears to be focused primarily on satellites and satellite communications, information security, and cryptography.<sup>2120</sup> Unlike many of the other unknown units, it appears to still be actively producing research as of 2018. It is likely located in or near PLARF HQ in Qinghe.

**MUCD:** Unknown

**Former MUCD:** 96610

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** Qinghe Subdistrict, Haidian District, Beijing, 100085 [北京市海淀区清河街道]<sup>2121</sup>

**Geo:** Unknown

### Unit 96611 [96611 部队]

No information on this unit, other than that it planned to erect a 7,7000 square meter facility in Fangshan County, Shanxi in late 2018.<sup>2122</sup>

**MUCD:** Unknown

**Former MUCD:** 96611

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** Fangshan County, Luliang, Shanxi [山西省吕梁市方山县]<sup>2122</sup>

**Geo:** Unknown

### Unit 96621 [96621 部队]

This MUCD appears to have fallen out of use around 2010. Prior to this, it conducted research into a wide array of topics, including electronic warfare, missile and UAV malfunctions, and cruise missile damage assessment.<sup>2120</sup>

**MUCD:** Unknown, may no longer exist

**Former MUCD:** 96621

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** Maliandian Village, Dongxiaokou Town, Changping District, Beijing 102208 [北京市昌平区东小口镇马连店村]<sup>2123</sup>

### Unit 96627 [96627 部队]

This may be some kind of research unit, based on the relatively high number of published research articles it has published, primarily having to do with computing, information systems, and equipment engineering issues.<sup>2120</sup> It appears to be co-located with PLARF HQ in Qinghe.

**MUCD:** Unknown

**Former MUCD:** 96627

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** Qinghe Subdistrict, Beijing 100085 [北京市海淀区清河街道]<sup>2124</sup>

**Geo:** Unknown

### Unit 96632 [96632 部队]

This unit is probably related to network security<sup>2120</sup> and possibly associated with the Equipment Department Research Academy. It is located in Qinghe Subdistrict, and is likely co-located with PLARF HQ.

**MUCD:** Unknown

**Former MUCD:** 96632

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** Qinghe Subdistrict, Haidian District, Beijing 100085 [北京市海淀区清河街道]<sup>2125</sup>

**Geo:** Unknown

### Unit 96638 [96638 部队]

No further information available, other than an address in Fengtai District, Beijing from a single source.

**MUCD:** Unknown

**Former MUCD:** 96638

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** 33 Nanding Village, Dahongmen Rd., Fengtai District, Beijing [北京市丰台区大红门路南顶村 33 号]<sup>2126</sup>

**Geo:** 39.843480, 116.400749

## Background

- No further information available, other than an address in Fengtai District, Beijing from a single source. The address is for the Beijing Bangkelou Hotel [北京邦克楼宾馆]<sup>2127</sup> which has no public connection to the PLA. This could just be a strange typo, but worth noting in case further evidence pops up.

## Unit 96650 [96650 部队]

No further information.

**MUCD:** Unknown

**Former MUCD:** 96650

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** 1 Xixin Rd., Xifengshan Village, Liucun Town, Changping District, Beijing [北京市昌平区流村镇西峰山村西新街 1 号]<sup>2128 2129</sup>

**Geo:** Unconfirmed, possibly 40.161299, 116.031454

## Composition

- 1<sup>st</sup> Vehicle Company [汽车一连]
- 2<sup>nd</sup> Vehicle Company [汽车二连]<sup>2130</sup>

*Note: this composition is incomplete.*

## Background

- This unit may have a presence in or around Dongxiaokou Township [东小口镇], where there are other known PLARF units.<sup>2131</sup>

## PLARF Unit Field Cultivation and Training Base [部队野战培训基地]

Unit 96651 appears to be a training unit possibly co-located with the PLARF Comprehensive Training Base (96625). It may be focused on field skills like erecting tents, cooking, and field communications.<sup>2132</sup>

**MUCD:** Unknown

**Former MUCD:** 96651

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** Taishizhuang Village, Donghuayuan Town, Huailai County, Zhangjiakou, Hebei [河北省张家口市怀来县东花园镇太师庄村]<sup>2133</sup>

**Geo:** Unconfirmed, possibly 40.359039, 115.875084

**Secondary Garrison:** Kangzhuang Town, Yanqing District, Beijing 102101 [北京市延庆区康庄镇]<sup>2134</sup>

## Background

- Research articles attributed to this unit indicate it may have a particular focus on field communications in the face of jamming.<sup>2120</sup>

## Unit 96591 [96591 部队]

No concrete evidence of this unit later than 2008, although it continues to pop up in a smattering of miscellaneous sources. Given its location in Pulandian, it is probably an older MUCD for one of the Jinlun Engineering units.

**MUCD:** Unknown

**Former MUCD:** 96591

**Grade:** Unknown

**Parent Unit:** Unknown

**Location:** Pulandian District, Dalian, Liaoning [辽宁省大连市普兰店区]<sup>2135</sup>

## Guazhou, Hami, and Hanggin Silo Fields

Location:

- Guazhou County, Gansu [甘肃省玉门市] (40.299000, 96.397000)<sup>c</sup>
- Hami, Xinjiang UAR [新疆维吾尔自治区哈密市] (43.35150, 92.50110)
- Hanggin Banner, Ordos City, Inner Mongolia [内蒙古鄂尔多斯市杭锦旗] (40.113, 108.104)

In June 2021, researchers from the James Martin Center for Nonproliferation Studies revealed the construction of approximately 120 new ICBM silos located in Guazhou County. This was followed four weeks later by the further discovery, by researchers at the Federation of American Scientists, of as many as 110 additional silos in the early stages of construction near Hami, Xinjiang. Finally,

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<sup>c</sup> This field has typically been referred to as the Yumen Silo Field in most sources due to its relative proximity to the city of Yumen, but is actually located in Guazhou County and not Yumen.

in August 2021, the China Aerospace Studies Institute revealed a third likely site, which may feature as many as 30-36 additional silos, in Hanggin Banner, Inner Mongolia.<sup>ci</sup>

These discoveries significantly expanded the number of known PLARF silos, which were previously believed to be around 20 in number, representing a more than twelve-fold increase. Little is currently known about these silos, including how many will be filled, what ICBM they will be filled with (initial evidence suggests a possible new silo-based DF-41), and whether this will be part of a nuclear "shell game" strategy.

It remains to be seen what these silo fields mean for the PLARF's order of battle. Assuming a size of 6-12 silos per brigade, it is possible that each site could lead to the addition of several new brigades, even if only a fraction of the silos are filled. These brigades would not fit into the PLARF force structure as it is currently composed, likely being too numerous and geographically distant to be subordinated to any of the six current operations Bases, which already oversee 6-7 brigades apiece. One strong possibility is that this will lead to the creation of additional Bases, the PLARF/PLASAF's first new operations Bases in over fifty years.

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<sup>ci</sup> Unless otherwise noted, all information comes from:

Joby Warrick, "China is building more than 100 new missile silos in its western desert, analysts say," Washington Post, 30 June 2021, [https://www.washingtonpost.com/national-security/china-nuclear-missile-silos/2021/06/30/0fa8debc-d9c2-11eb-bb9e-70fda8c37057\\_story.html](https://www.washingtonpost.com/national-security/china-nuclear-missile-silos/2021/06/30/0fa8debc-d9c2-11eb-bb9e-70fda8c37057_story.html) ; Matt Korda, Hans Kristensen, "China Is Building A Second Nuclear Missile Silo Field," Federation of American Scientists, 26 July 2021, <https://fas.org/blogs/security/2021/07/china-is-building-a-second-nuclear-missile-silo-field/> ; Rod Lee, "PLA Likely Begins Construction of an Intercontinental Ballistic Missile Silo Site near Hanggin Banner," China Aerospace Studies Institute, 12 August 2021, <https://www.airuniversity.af.edu/CASI/Display/Article/2729781/pla-likely-begins-construction-of-an-intercontinental-ballistic-missile-silo-si/>