

# Abandoning Gansu to Sichuan: Study on the Relocation of 062 Base in the Early Stage of the Third-Front Movement Construction

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## Abstract

At the initial stage of the Third-Front construction, due to the rapid and urgent requirements for the progress of the project, the project site was hastily determined without strict demonstration, causing serious economic losses. 062 base is the only research and production project of long-range launch vehicle in the Third-Front construction of China. It took less than a year from its construction site in Tianshui, Gansu Province, to its relocation to Daxian County, Sichuan Province, resulting in a huge waste of human, material and financial resources. This paper examines the process of site selection and relocation of 062 base in detail, and summarizes historical lessons to deepen the understanding of the history of this period.

## Keywords

062 Base; Site Selection; Relocation.

## 1. Preliminary Site Selection Tianshui, Gansu

In the early 1960s, China was under the military threat and war provocation of the two superpowers, the United States and the Soviet Union. In the face of the imminent war situation, national defense and security had become a top priority at that time. In May 1964, at the working conference of the Central Committee of the Communist Party of China, Mao Zedong, starting from the estimation of the serious danger of the New World War, proposed to divide the country into "the first front", "the second front" and "the third front", plan for "the third front" construction, and gradually change the industrial layout[1].As a result, the central government officially launched the third front construction. In August of the same year, the State Construction Commission held a conference on the relocation of the first and second fronts, which proposed that we should decentralize and concentrate in a small way. In particular, the cutting-edge national defense projects that are related to the country's security should be "backed up, scattered and hidden", and some of them should go into holes[2].

In accordance with the deployment of the Central Committee, in early September 1964, the Office of the National Defense Industry held a meeting of heads of various departments of the national defense industry to convey the instructions of Mao Zedong and the Central Committee, It was also decided to organize the survey team (10 regional groups and 1 central group) to conduct site selection and plant construction survey in the third front areas[3]. On September 9, the Fifth Academy of the Ministry of National Defense held a meeting to propose that the first, second, third and fourth branches should build a new base on the principle of "model as the key, regional supporting, and counterpart contracting" and "small but divided, large cooperation"[4].The Fifth Academy of the Ministry of National Defense dispatched Zhou Jiyi, Vice President of the First Branch, Geng Rui, Vice President of the Second Branch, Zhang Naichuan, Vice President of the Third Branch, and Qi Ziyi, Vice President of the Fourth Branch, to lead teams to select sites in various regions. Among them, Zhou Ji, Vice President of the First Branch, led a team to Lanzhou, Tianshui, Gansu and the southern area of Shanxi[5].Through

field investigation, four point distribution schemes are proposed, namely Tianshui District Scheme, Longxi Zhangxian District Scheme, Fengxian County and Huixian County Scheme and Tianlan Road Line Scheme. On November 24, the Office of National Defense Industry held a meeting in Changsha to determine the layout of various departments of the national defense industry, and decided to build the ground to ground missile third line construction base in Tianshui region of Gansu Province and Baoji region of Shanxi Province[6]. In December of the same year, the First Branch of the Seventh Mechanical Engineering Department[7] established the third front base project headquarters, code 062. Zhou Jiyi, Vice President, presided over the construction of the third front. The office is located in Wangjiamo, Tianshui. According to the guiding principles of the Central Spirit and the Office of National Defense Industry, the First Branch decided to arrange 34 projects in the third front areas, 25 of which were concentrated in Tianshui, in accordance with the principle of "one in front of and behind, and two in production"[8]. In fact, Tianshui is not suitable for the layout of the aerospace industry. Tianshui is located in the southeast of Gansu Province, at the intersection of the north-south seismic belt of China and the east-west seismic belt from Kunlun to Qinling. This seismic region is the largest seismic region in China, and also the region with the strongest seismic activity and frequent occurrence of large earthquakes. In history, there were 9 earthquakes with magnitude above 8 and 78 earthquakes with magnitude ranging from 7 to 7.9, ranking first in China[9]. The frequent occurrence of earthquakes in Tianshui has attracted the attention of the site selection team as early as the early stage of site selection. According to Xu Lanru, who was then the head of the Technology Department of the First Branch of the Fifth Academy of the Ministry of National Defense, who participated in the site selection, the site selection team at that time learned from the local chronicles that Tianshui was a high earthquake prone area, and earthquakes were very frequent in history. The site selection team reported this situation to the main leaders of the National Defense Industry Office who were inspecting in Tianshui at that time, but the earthquake problem did not attract special attention, and they thought that "what does the earthquake matter", "that is, there is a crack on the ground, it does not matter"[10]. The earthquake problem in Tianshui area has not attracted enough attention.

In March 1965, the Central Committee approved Luo Ruiqing's Report on the Layout Plan of New Projects of the National Defense Industry in the Second and Third Front Areas. For the construction projects of the Seventh Engine Department, it was determined to build new research, design and production bases for missiles and rockets in the third front areas according to the principle of "model as the key and regional supporting" [11]. In August, the Seventh Machinery Department submitted the Report on Rear Area Construction Plan to the Central Special Committee for approval. According to this plan, the construction scale, construction area, production capacity of equipment and progressiveness of the third front base of the Ministry of seven aircraft have exceeded the level of the existing first front research and development bases [12]. In late August, Xie Beiyi, Deputy Director of the National Construction Commission, Wang Lin, Secretary of the Northwest Bureau, and Song Ping, Director of the Planning Commission of the Northwest Bureau went to Tianshui to visit. On August 31, the headquarters of 062 Base was officially established in Wangjiamo, Tianshui, Gansu[13]. By the end of 1965, the 062 base had invested 7.5 million yuan in Tianshui area, and 8570 square meters of new civil projects had been started, including 7643 square meters of delivery; 241.78 kilometers of new roads outside the plant have been opened, and 32.78 kilometers of roads outside the plant have been completed[14].

## **2. Internal Adjustment - Liziyuan Area**

According to the previous layout, the General Design Department and General Assembly Plant of 062 Base are located in Ganquan Temple and Jiezikou. However, in the second round of site

selection and layout survey conducted in January 1965, it was found that this area is open and belongs to a magnitude 9 earthquake area. The Liziyuan area was located in the mountain forest area, which was in line with the preparation requirements of "relying on the mountain, scattering and concealing" at that time. Therefore, the headquarters had to change its previous idea, move the General Design Department and the General Assembly Plant from Ganquan Temple and Jiezikou to Liziyuan, and require all ground equipment stations (plants) and control system stations (plants) to move closer to Liziyuan. In June 1965, the Seventh Engineering Department approved the First Branch to move the Overall Design Department and the General Assembly Plant from Ganquan Temple and Jiezikou to Liziyuan[15].

In order to ensure the absolute safety of the construction of the 062 base, in September 1965, the Ministry of Machinery, through the National Science Commission and the Chinese Academy of Sciences, requested an investigation and study on the basic seismic intensity of the Tianshui 062 base area, namely, Liziyuan area. Due to the urgent task, the Northwest Earthquake Investigation Team carried out the investigation work in late September with Liziyuan Mayanhe, Luojiabao and Tianshui area as the center. In just one month, about 80 residential areas were investigated in terms of earthquake and about 1800 square kilometers in terms of geology. The investigation was completed in late October, and the indoor analysis was carried out in Lanzhou in November. After more in-depth discussion, the Tianshui Seismic Geological Investigation Team Work Report was written. The "Opinions on Basic Seismic Intensity in Tianshui Mission Area" was reported to the Chinese Academy of Sciences, the Ministry of Geosciences and the Seventh Bureau of the State Science Commission in the (65) Kelanqiu Zi No. 280 document of Lanzhou Institute of Geophysics, Chinese Academy of Sciences. The report puts forward the opinion that the basic earthquake intensity in Tianshui Mission Area is: "It is reasonable to initially consider the basic earthquake intensity in Tianshui Mission Area as 8-9 degrees, and it is suggested that when building a plant, the important plant should be considered as 9 degrees, while the general plant should be considered as 8 degrees. In view of the thin overburden in this area, the more important plant should be placed on the basis of good bedrock or foundation conditions.[16]".

In February 1966, the central government officially approved the 062 base as a national key construction project. To be cautious, from April 16 to June 21, 1966, the Northwest Seismic Investigation Team went to the above areas again for a comprehensive and detailed investigation. On the basis of the previous work, the investigation team not only made a detailed investigation and study on whether there would be a big earthquake in Liziyuan area itself, but also made an investigation and study on the five big earthquakes that had occurred in the history of Tianshui area and its surrounding areas. Based on the comprehensive investigation, the Northwest Seismic Investigation Team submitted the Opinion on Seismic Intensity in Lishui Liziyuan Area in December that year, and believed that there were no major earthquakes in the history of Liziyuan area, and there are few weak earthquakes now. At the same time, many geological data also show that the area is relatively stable, so "the possibility of a major earthquake in Liziyuan area itself is very small". Although the main threat in terms of four cycle coverage comes from the future replay of the 10 degree earthquake in 1654 in the west, the possibility of such a replay is small, and the possibility of nearby migration is also small. The investigation team believed that "the earthquake intensity in Liziyuan area can be increased to 7 degrees in the last one to two hundred years". However, the investigation team also cautiously pointed out that there is still a possibility of large earthquakes in Liziyuan area in the future. "After all, there are still weak earthquakes in Liziyuan area, and we are not completely sure that the large faults there are not earthquakes. In addition, considering that the 10 degree earthquake will not repeat and there is no migration condition nearby, it is not absolutely sure, so we think that the possibility of 8 degree earthquake should also be considered.[17]".

### 3. Relocation - Daxian County, Sichuan

On March 8, 1966, an earthquake of magnitude 6.8 occurred in Xingtai, Hebei Province. On March 9, Zhou Enlai went to Xingtai by train to direct the earthquake relief work. While directing the earthquake relief work in Xingtai, Zhou Enlai was very concerned about the safety of the third front construction project. Yu Qiuli, deputy director of the State Planning Commission, and Li Renjun, minister of the Ministry of Construction Engineering, were ordered by Zhou Enlai to travel from Beijing to Xi'an to learn about the historical earthquakes in Tianshui, Gansu Province, and to study whether the third front construction project of the First Institute could be arranged in this area. On the same day, Zhou Enlai phoned Wang Bingzhang, Minister of the Seventh Machinery Department from Xingtai, and thought that Tianshui was an earthquake prone area. Is it appropriate to place the Third Front Project of the First Institute? At that time, Deng Xiaoping, Li Fuchun, Bo Yibo and others were holding a third front construction conference in Xi'an. Zhou Enlai asked Wang Bingzhang to report to Deng Xiaoping in Xi'an as soon as possible, which was decided by Deng Xiaoping. On March 10, Wang Bingzhang and his department arrived in Xi'an by plane and reported Zhou Enlai's instructions to Deng Xiaoping in time[18]. On March 11, Zhou Enlai presided over the 15th meeting of the Central Special Committee and proposed that whether to choose a new site for the third front construction base of the First Academy should be decided by the Ministry of Machinery, the Chinese Academy of Sciences and the National Construction Commission after field investigation in Tianshui[19]. On March 13, Wang Bingzhang arrived in Tianshui with Deng Xiaoping's special train from Xi'an, and immediately went to the construction site of the First Institute, Liziyuan, for investigation. Through the inquiry of Tianshui Geography, we visited the local farmers, and convened scientific, geological, construction design, engineering construction and other personnel to have a discussion. Finally, it is concluded that Tianshui area is an earthquake prone area, while Liziyuan is located in the island of the fault zone. From the perspective of the whole area, the future project is unsafe[20]. In fact, relocation will be a matter of time.

In order to ensure the absolute safety of 062 base, on March 15, Deng Xiaoping convened Li Fuchun, Bo Yibo, Yu Qiuli, Zhao Erlu and others on the official train of Tianshui Railway Station (historically known as the "Train Meeting", also known as the "Carriage Meeting"), initially determined that 062 base would move out of Tianshui and to Daxian District, Sichuan, and reported the discussion results to the Central Committee. Zhou Enlai immediately organized a meeting of the Central Special Committee and approved the reform plan proposed by Deng Xiaoping and others[21]. On March 30, surveyors gathered in Daxian County to study the selection of spots and visited Daxian County, Xuanhan County, Wanyuan County and other places accompanied by Liu Chongshan, Deputy Secretary of Daxian Prefecture Party Committee. With a water bottle, a straw hat, a wooden stick and a Huang Jun bag, the survey and selection personnel went deep into the hinterland of Daba Mountain for survey. After three months of trekking through mountains and rivers, nearly 400 mountains and ditches have been passed through 11 counties and cities, and detailed topographic and geomorphic maps have been successfully drawn, recording the local geological structure information, cultural and environmental information[22].

On June 14, Zhou Enlai presided over the meeting of the Central Special Committee, and adjusted the fixed point of the third front layout of the First Academy. The third front ground to ground missile construction base was located in Daxian District, North Sichuan. 062 The headquarters of the base shall review the layout of each fixed point according to the principle of "relying on mountains, scattering and concealment". The First Design & Research Institute of the Seventh Mechanical Engineering Department abandoned the previous construction project in the Li Ziyuan area of Tianshui, and the engineers were evacuated in batches to move to Sichuan. At the same time, the First Machinery Department took over the 062 project in

Tianshui[23]. In 1967, some people put forward different views on various points in northern Sichuan, demanding another change, which attracted the attention of the Central Committee. On June 28, Su Yu held a symposium on the three front construction of the seven ministries, one institute and one hospital at the Office of National Defense Industry. Su Yu instructed that the first hospital should be located in northern Sichuan[24].

#### 4. Conclusion

It took less than a year for the 062 base to be relocated from Tianshui, Gansu Province to Daxian County, Sichuan Province, resulting in a huge waste of human, material and financial resources. The root cause was that it violated the capital construction procedure. The so-called capital construction procedure refers to the sequence that construction projects must follow in the whole construction process. It is a correct reflection of the objective laws of project construction and an important guarantee for scientific decision-making and smooth project construction. As early as the recovery of the national economy, the state made strict regulations on the capital construction procedures. Before the formal commencement of construction, any construction project must have a feasibility study demonstration, an engineering geological survey report on the selected plant site, and a design document prepared on the basis of it. Then, the formal construction can be carried out through the arrangement of the national plan. This working procedure must not be reversed.

The most critical factor leading to the relocation of 062 base is the earthquake. Tianshui has always had frequent earthquakes. During the early site selection process, scientists have paid close attention to the historical earthquake history and disasters in Tianshui, but policymakers have not paid enough attention to this. Without knowing the geological conditions, the decision-maker decided the site of the project hastily. Later, although a professional seismic investigation team intervened to carry out engineering geological survey, the survey work was not yet completed, and the design unit started to prepare design documents before a detailed survey report was submitted. When the design work was in progress, the construction unit entered the site and started construction in a hurry. This principle of "location, survey and construction at the same time" clearly violates the national capital construction procedures, which is not only risky, but will inevitably lead to serious consequences.

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#### References

- [1] Mao Zedong's Military Manuscripts since the founding of the People's Republic of China (Volume II), compiled by the Central Literature Research Office of the Communist Party of China and the Academy of Military Sciences of the People's Liberation Army, Military Science Press and Central Literature Press, 2010, pp. 225-226.
- [2] Luo Ruiqing: Selected Military Works of Luo Ruiqing, Contemporary China Press, 2006, page 726.
- [3] Chief Editor Chen Xi; Wang Chuncai, consultant of this volume; Chen Donglin, Executive Editor of this volume; Xu Youwei, Song Yijun, executive deputy editor: the CPC and the third front construction, CPC History press, 2014, page 144.

- [4] Edited by Wang Liheng; China Aerospace Industry Corporation, Cultural and Historical Information Committee of the CPPCC National Committee, China Aerospace Industry Corporation, China Aerospace Soaring Road, China Culture and History Press, 1999, page 683.
- [5] Shen Shaode: Train Conference - The Beginning and End of 062 Base's Decision to "Abandon Gansu and Enter Sichuan", China Aerospace News, China Aerospace Press, 2016, page 177.
- [6] Liu Jiyuan, Chief Editor: Philosophy of China's Aerospace Development, Peking University Press, 2013, page 53.
- [7] The Fifth Academy of the Ministry of National Defense was transformed into the Seventh Ministry of Machinery Industry. 1964.
- [8] Party History Research Office of Dazhou Municipal Committee of the Communist Party of China: Third Front Construction in Sichuan: Dazhou Volume, internal printing, 2017, page 6.
- [9] Tianshui Archives Bureau; Compilation of Earthquake Disaster Data in Tianshui History, compiled by Tianshui Local Records Office, internal printing, 2008, page 1.
- [10] Xu Lanru: Military · Missile · Oral Autobiography of Xu Lanru in the Third Front, Hunan Education Press, 2016, pages 193-194.
- [11] Li Chengzhi: Historical Manuscript of China's Aerospace Technology Development, Shandong Education Press, 2006, page 83. Chief Editor Chen Xi; Wang Chuncai, consultant of this volume; Chen Donglin, Executive Editor of this volume; Xu Youwei, song Yijun, executive deputy editor: the CPC and the third front construction, CPC History press, 2014, pages 144-145.
- [12] Li Chengzhi: Historical Manuscript of China's Aerospace Technology Development, Shandong Education Press, 2006, page 83.
- [13] Party History Research Office of Wanyuan Municipal Committee of the Communist Party of China: Third Front Construction - Wanyuan Chapter, internal printing, 2015, page 2.
- [14] Shen Shaode: Train Conference - The Beginning and End of the 062 Base's Decision to "Abandon Gansu and Enter Sichuan", China Aerospace News, China Aerospace Press, 2016, page 177.
- [15] Party History Research Office of Dazhou Municipal Committee of the Communist Party of China: Third Front Construction in Sichuan: Dazhou Volume, internal printing, 2017, page 7.
- [16] Gansu Local History Compilation Committee and Gansu Seismography Compilation Committee: Gansu Chronicle Volume 12 Seismography, Gansu People's Publishing House, 1991, page 285.
- [17] Local History Compilation Committee of Gansu Province and Seismography Compilation Committee of Gansu Province: Seismography of Gansu Province, Volume 12, Gansu People's Publishing House, 1991, page 285.
- [18] Shen Shaode: Train Conference - The Beginning and End of 062 Base's Decision on "Entering Sichuan from Gansu", China Aerospace News: China Aerospace Publishing House, 2016, page 176.
- [19] Liu Jiyuan, Chief Editor: Philosophy of China's Aerospace Development, Peking University Press, 2013, page 54.
- [20] Shen Shaode: Train Conference - The Beginning and End of the 062 Base's Decision to "Abandon Gansu and Enter Sichuan", China Aerospace News, China Aerospace Press, 2016, page 177.
- [21] Zeng Xun Edited: Building the Rear and the Third Front of the Country Raised a High Tide, Jilin Publishing Group Co., Ltd., 2011, page 81.
- [22] Party History Research Office of Wanyuan Municipal Committee of the Communist Party of China: Third Front Construction - Wanyuan Chapter, internal printing, 2015, page 4.
- [23] Tianshui Municipal Political Consultative Conference Cultural and Historical Materials Committee: Tianshui Cultural and Historical Materials Series 13 Third Front Construction Historical Materials, Tianshui s Xinhua Printing Factory, 2007, page 2.
- [24] Party History Research Office of Wanyuan Municipal Committee of the Communist Party of China: Third Front Construction - Wanyuan Chapter, internal printing, 2015, pages 4-5.
- [25] Chen Jun, Yang Guang, Qu Yuanyuan, Chief Editor: Building Construction Organization and Data Management, Beijing University of Technology Press, 2018, page 2.
- [26] Gao Jiren: History of China's Industrial Economy, Henan University Press, 1992, page 231.