

Countermeasures and Prevention of Railway Traffic Accidents in the Early Days of the Founding of the People's Republic of China

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Abstract: In the early days of the founding of the People's Republic of China, in order to restore the national economy as soon as possible, the Communist Party of China carried out maintenance and repairs on the railways that caused serious damage to transportation tasks through war-torn smoke, and carried out large-scale railway construction. However, in the course of operation, railway safety accidents occur frequently due to outdated equipment, low quality of staff, lack of rules and regulations, vandalism, and various natural disasters. In the face of severe conditions, the railway authorities summed up the accidents and learned the safety of the railways, so that the railway transportation industry, which started after the founding of the country, was gradually on the right track, and laid a solid foundation for the safe development of the railway industry.

Keywords: The early days of the founding of the People's Republic of China, Railway accident, Countermeasures, Prevention

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1 Introduction

During the period from the founding of New China to the completion of the socialist transformation, railway construction has gradually recovered and developed steadily, but railway traffic accidents still occur from time to time. Although the railway industry was still

in its infancy stage in the early days of the founding of the People's Republic of China, in the handling of the accidents after the accident, basically, it has achieved rapid dispatch, quick recovery, and quick opening. It is certainly desirable to respond quickly after a railway accident, but it is important to prevent railway accidents. Therefore, how to ensure railway traffic safety and reduce the occurrence of railway accidents has become an important issue for the Chinese Communists. To this end, the railway people represented by the then railway minister Teng Daiyuan on the one hand borrowed the experience of the Soviet railway management, and on the other hand, combined with China's national conditions they successively formulated a series of railway rules and regulations, which laid a solid foundation for the safe development of China's railway industry.

2 Strengthen the construction of railway transportation system

Catastrophic accidents are often the catalyst for system construction and innovation. In January 1950, the first passenger train accident in New China occurred at the Huaqiying Station of Jinpu Line. To this end, in the month of the accident, the Ministry of Railways formulated and promulgated the "Order on Safeguarding Traffic Safety for Accidents" and the "Interim Measures for Implementing Safety Responsibility System". Later, in May, the "Railway Rules", "Railway Signal Processing Rules" and "Traffic Accident Handling Rules" were promulgated and implemented, detailing the train operation, signal types and display methods, types of accidents, and notifications and statistics. In

June, on the basis of absorbing the experience of the Soviet railways, the unified “Technical Regulations for Railway Technology” was announced and implemented. It stipulates the basic organization principles, working methods and operating procedures of railway transportation, and stipulates the basic requirements for the design, construction, acceptance, maintenance and management of railway transportation equipment. By the time of the completion of the socialist transformation in 1956, the railway department also promulgated the “Interim Measures for the Construction of the Basic Construction of Business Railways” to prevent accidents caused by the construction of railways. Improve the locomotive personnel to prevent accidents and alertness, “Precautions for locomotive crews to prevent vicious accidents” and “Rules for locomotive drivers to prevent train breaks”, etc. The pioneering construction of the railway regulations system, such as series of rules and regulations, operational regulations, technical regulations, etc., has gradually brought the railway transportation industry, which has just started after the founding of the People’s Republic of China, to the right track, and effectively prevented and reduced the occurrence of railway accidents.

3 Establish a special railway safety supervision agency to build a safety monitoring network

In order to supervise the implementation of traffic safety regulations and systems, emergency repair command, accident investigation and handling during the accident, in May 1950, the Ministry of Railways set up a traffic safety director’s office, and each railway bureau set up a traffic monitoring room to monitor the division. At the request of the Ministry of Railways, the safety supervision offices of the railway bureaus were established one after another, and the supervision of traffic safety was intensified. At the same time, in order to make the safety supervision work routine and timely understand the security situation at the grassroots level, the railway sub-bureaus also select and hire the employees who are familiar with the regulations, have strong sense of responsibility, and can closely contact the masses, as the traffic safety supervision correspondent of the non-production. They are required to report directly to the supervisory office of the supervision office for the safety production, violation of regulations and concealment of accidents. The establishment of the railway safety supervision agency and the establishment of a safety correspondent network have established a solid defense line for railway traffic

safety.

4 Strengthen assessment and training to improve the quality of railway staff

In response to the uneven situation of railway staff in the early days of the founding of the People’s Republic of China, in October 1950, the Ministry of Railways issued the Interim Measures for the Study and Examination of Railway Technical Regulations, stipulating that all railway personnel should participate in the study and examination, with emphasis on driving safety personnel. The driver failed the two examinations and revoked his driving duties^{[1](P182)}. At the same time, in order to improve the business capability of railway managers, since the national railway meeting in June 1953, cadre training was also put on the agenda. From June 1954 to December 1955, the Ministry of Railways successively organized three leading cadres study groups to study the experience of the medium and long railways at the Harbin Railway Bureau^{[4](P375-376)}. Through assessment, study and training, the railway transportation sector’s safe transportation capacity and management level have gradually improved, which not only plays a key role in ensuring that the railway completes the “First Five-Year Plan” one year ahead of schedule, but also greatly reduces the surge in traffic volume of railway safety accidents caused by large-scale economic construction.

5 Strengthen railway safety education, establish railway safety awareness among railway workers and the general public

In order to avoid running trains colliding with road vehicles at railway crossings and crushing and rolling pedestrian accidents, the masses along the railways did not understand the common sense of railway safety during the early days of the founding of the People’s Republic of China, and there were pedestrians crossing the tracks and livestock on the road. In 1950, the railway branches established roads. The external propaganda group, or the printing of brochures or the integration of safety knowledge into the entertainment forms such as cross talk, allegro, etc., popularize the railway safety common sense along the countryside. At the same time, the village cadres and guardians are required to strictly manage the sputum, dumb, sly, stupid, and mentally ill patients, and sign the “contract” for responsibility^{[1](P183)}. At the same time as the safety promotion outside the road, the safety education for railway employees continued^{[1](P189)}. The two-pronged

off-road and on-road safety publicity and education not only improved the understanding of railway safety knowledge among residents and passengers along the route, but also strengthened the awareness of railway workers in obeying the rules and disciplines, and greatly reduced the railway traffic accidents caused by human factors.

6 Attach importance to the training of railway talents and improve the scientific and technological content of railways

Railway construction requires scientific and technological talents. Similarly, railway safety also needs the support of the continuous development of railway technology. Especially in the case of outdated railway equipment in the early days of the founding of the PRC, the improvement of technical content can effectively make up for this deficiency. After the founding of the People's Republic of China, in response to the shortage of railway talents, Northern Jiaotong University, which was merged by Beijing Railway Management College and Tangshan Institute of Technology, began to recruit high-end talents from multiple railways and step up the cultivation of railway technology. After hard work, a group of Chinese scholars were invited to apply and returned to China. Domestic experts were also invited^{[4](P379)}. The enhancement of teaching power, a large number of railway-related professional students entering the railway, not only gradually shortened the railway technology gap between New China and Western developed countries, but also greatly enhanced the scientific and technological content of railway construction. At the same time, various road bureaus have also set up scientific and technological institutions. For example, the Jinan Bureau established the Advanced Work Methodology Section in January 1952 and changed to the Railway Technology Pavilion in 1954^{[3](P481)}. In addition, in order to mobilize the enthusiasm of the vast number of employees in the entire railway system, the Chinese Railway Union has also made "new creations of the masses, promoting various advanced experiences in a planned and practical manner; actively leading and improving the rationalization proposals; The decision to help the administration to carry out transportation, design and construction"^{[1](P192)} should be strongly supported. The training of railway talents, the establishment of scientific research institutions, and the mobilization of employees' technological improvement have greatly eliminated the safety accidents caused by

the outdated railway equipment.

7 Conclusion

On the eve of the founding of the People's Republic of China, the first railway minister of the People's Republic of China, Teng Daiyuan, put forward the goal of "building a new type of people's railway that is accurate, rapid, safe, economical, efficient and low-cost"^{[4](P335)}. After the founding of the People's Republic of China, in the course of the intensive railway repair and remediation and the large-scale railway construction during the "First Five-Year Plan" period, railway accidents caused by various factors from time to time tortured the initial vows of the Chinese Communists. In order to achieve the goal of safety, the first generation of railway people after the founding of the People's Republic of China passed regulations and established safety supervision agencies. With the introduction of assessment and training mechanisms and the promotion of employee safety awareness, the railway industry has developed rapidly and the security situation has gradually improved. In 1957, at the end of the first five-year plan, there were 313 traffic accidents in Guangdong Province, including 6 major and massive accidents, which were 47% and 89% lower than those in 1950 respectively^{[5](P230)}. In the early days of the founding of the People's Republic of China, the history of the Communist Party of China on railway safety response showed us: Although railway safety accidents cannot be avoided, as long as we pay close attention to the construction and implementation of system regulations and strengthen our sense of responsibility and safety, the controllable situation of railway transportation safety will eventually take shape.

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