

# *Thoughts on the Integration of Civil Aviation Freight Talent Training and 1+X Certificate System in Higher Vocational Colleges*

**Fang Wang, Xudong Li, Jiajian Huang**

*School of Transportation & Economic Management, Guangdong Communication Polytechnic,  
Guangdong Guangzhou, 510650, China*

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**Abstract:** In the post-pandemic era, the transformation and upgrading of civil aviation freight industry is speeding up. It urgently requires higher vocational colleges to deepen the reform of civil aviation freight talent training, and the 1+X certificate system can provide an important guarantee for this. This paper first analyzes the new business areas under the transformation and upgrading of the civil aviation freight industry in the post-pandemic era and the new requirements for the talent training of higher vocational colleges, and then determines the basic idea of the integration of the talent training of civil aviation freight and the 1+X certificate system in higher vocational colleges under the post-pandemic era.

## **1. Introduction**

Since the outbreak of COVID-19, China's civil aviation freight industry has provided an important logistics support for the supply of anti pandemic materials, but at the same time, the ability of short board has been highlighted, and the industry has undergone severe tests. With the normalization of pandemic prevention and control and the advent of the post-pandemic era, the structure of air freightation has changed significantly. Civil aviation freight is no longer only regarded as a mode of transport, but integrated into the modern logistics service system<sup>[1]</sup>. The civil aviation freight industry is accelerating the transformation and upgrading, constantly improving the service system, and continuously generating new business areas. In this situation, it is urgent to cultivate new-type civil aviation freight talents. It is urgent for the related majors of civil aviation freight in higher vocational colleges to adapt to the talent demand of industry transformation and upgrading, and strive to cultivate students' comprehensive skills for new business jobs. The 1+X certificate system can provide a solid guarantee for the quality of civil aviation freight talents training in higher vocational colleges in the post-pandemic era.

In 2019, "the National Vocational Education Reform Implementation Plan"<sup>[2]</sup> proposed to implement the system of "Academic Certificate + Several Vocational Skill Level Certificates" (1+X certificate system); In 2020, the China Air Transport Association complies with the trend of the transformation and development of the civil aviation freight industry and its new demand for skilled personnel under the influence of COVID-19. It has formulated "the Vocational Skill Level the

Standard of Civil Aviation Freight”<sup>[3]</sup>, providing important criteria and reference for the training of civil aviation freight personnel in higher vocational colleges in the post-pandemic era. This paper organically integrates the training of higher vocational civil aviation freight talents in the post-pandemic era with the 1+X certificate system, and puts forward a series of vocational education reform measures aiming at the key link of course certificate integration, aiming at improving the training quality of higher vocational civil aviation freight talents and providing stronger talent support for the transformation and upgrading of civil aviation freight industry in the post-pandemic era.

## **2. New Business Areas under the Transformation and Upgrading of Civil Aviation Freight Industry in the Post-Pandemic Era**

Since the outbreak of COVID-19, China's civil aviation freight industry has provided important logistics support for the supply of anti pandemic materials, but it also exposed problems such as short service board and sustainable development capability. With the advent of the post-pandemic era, the transformation and upgrading of civil aviation freight industry is imperative, and new business areas are gradually emerging. First, the pandemic has significantly promoted the consumption of “residential economy”, made the penetration rate of online shopping continue to rise, further promoted the growth of cross-border e-commerce, provided momentum for the development of the civil aviation freight industry, but also put forward new requirements, and the new cross-border e-commerce logistics mode came into being. Second, the pandemic has led to a significant decline in the passenger volume of civil aviation. A large number of passenger planes have been grounded and sealed up, resulting in a serious shortage of abdominal cargo capacity. With the advent of the post-pandemic era, many airlines have modified the passenger cabin to carry cargo in order to improve the utilization rate of aircraft and turn losses into profits. The business volume of the mode of Passenger Aircraft-Changed to-Cargo Aircraft is growing day by day. Third, in the post-pandemic era, there are strict requirements on temperature control and delivery timeliness, and the demand for medical materials represented by vaccines has increased significantly. Professional cold chain air transport services are in the ascendant and in short supply. Fourth, although the domestic pandemic prevention and control has achieved remarkable results, the pandemic situation in many countries and regions around the world is still grim, and the pandemic prevention and control has a long way to go. Emergency air logistics is still a strong support for the rapid supply of pandemic prevention materials.

## **3. New Requirements for Training Civil Aviation Freight Talents in Higher Vocational Colleges in Post-Pandemic Era**

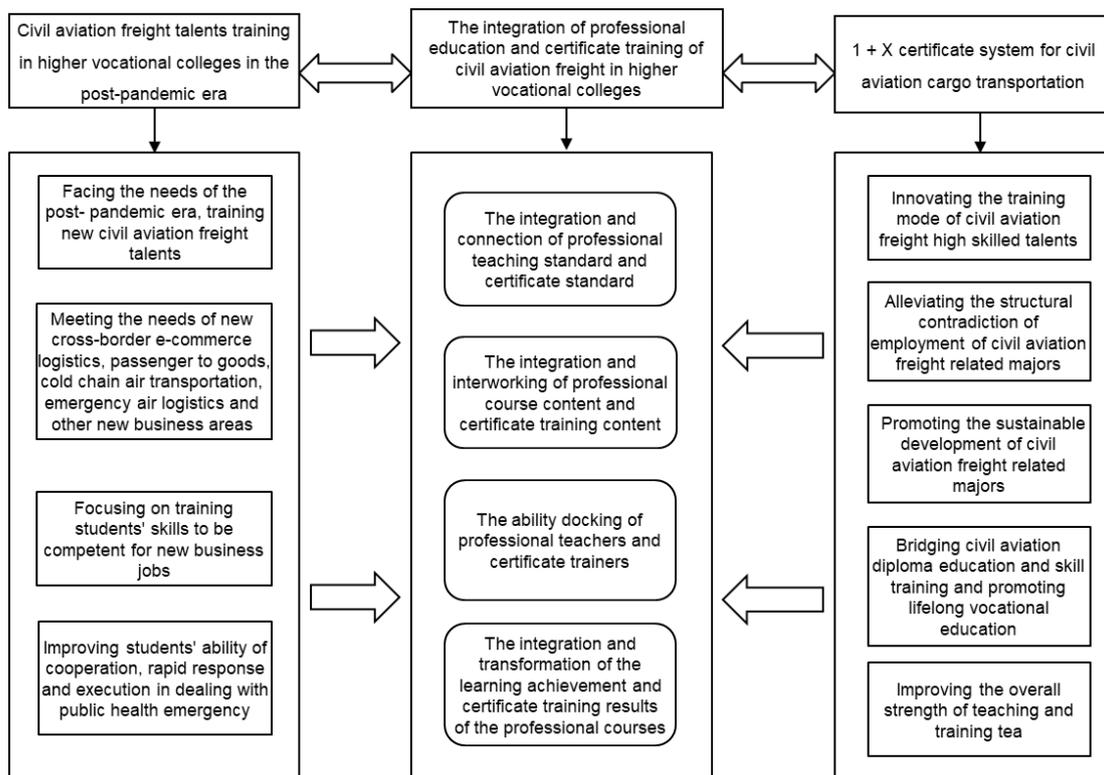
The purpose of this paper is to explore the integration of Civil Aviation Freight talent training course certificate under the post-pandemic era 1+X certificate system, aiming to improve the quality of Civil Aviation Freight talent training in higher vocational colleges, and provide stronger personnel support for the transformation and upgrading of civil aviation freight industry in the post-pandemic era. Therefore, vocational colleges should analyze the adjustment of service system and changes in business fields under the transformation and upgrading of civil aviation freight industry in the post-pandemic era, namely, focusing on new cross-border e-commerce logistics, vaccine and other medical materials cold chain air freight, the mode of Passenger Aircraft-Changed to-Cargo Aircraft, emergency air logistics and other new business areas, analyzing the adjustment of the working group, sorting out the changes of post tasks to the new civil aviation freight. The professional skills of talents require that students should be trained with new cross-border e-commerce logistics comprehensive skills, air freight operation skills of the mode of Passenger

Aircraft-Changed to-Cargo Aircraft,, cold chain air freight operation skills and emergency aviation logistics operation skills, and strive to improve the students' ability of cooperation, quick response and task execution in response to public health emergencies.

#### **4. THE THOUGHTS ON THE INTEGRATION OF CIVIL AVIATION FREIGHT TALENT TRAINING AND 1+X CERTIFICATE SYSTEM IN HIGHER VOCATIONAL COLLEGES UNDER POST-PANDEMIC ERA**

In 2020, the China Air Transport Association complies with the trend of transformation and development of the civil aviation freight industry and its new demand for skilled personnel under the influence of COVID-19. It has formulated the “civil aviation freight occupation skill level standard”, which has provided the standard and basis for the implementation of the 1+X certification system for civil aviation freight, and also provided a heavy weight for the training of civil aviation freight personnel in vocational colleges in the post-pandemic era. We need to ensure the safety of our country. Therefore, the training of civil aviation freight talents in the post-pandemic era of higher vocational colleges should be organically integrated with the implementation of 1+X certificate system, and the basic idea of the integration should be determined.

First of all, on the basis of in-depth study and interpretation of “civil aviation freight vocational skill level standard”, we should clarify the vocational post group and its vocational skill requirements, and then determine the basic idea of the integration of civil aviation freight talent training and 1+X certificate system in higher vocational colleges in the post-pandemic era. On the one hand, higher vocational colleges should face the pandemic era, cultivate new civil aviation freight talents, adapt to the needs of new business areas, enhance students' comprehensive skills for new business areas, and improve the air freight team cooperation ability, rapid response ability and task execution ability to deal with public health emergencies; on the other hand, the significance and purpose of the implementation of civil aviation freight 1+X certificate system It mainly lies in innovating the training mode of high skilled talents of civil aviation freight, alleviating the structural contradiction of employment of civil aviation freight related majors, promoting the sustainable development of civil aviation freight related majors, bridging civil aviation diploma education and skill training, promoting lifelong vocational education, and improving the strength of teaching and training team, etc. And the path of organic integration of the above two aspects mainly includes the following four aspects It includes the integration of professional teaching standards and certificate standards, the integration and intercommunication of professional curriculum contents and certificate training contents, the ability docking of professional teachers and certificate trainers, and the integration and transformation of professional curriculum learning achievements and certificate training learning achievements. The basic idea of the integration of higher vocational civil aviation freight talents training and 1+X certificate system in the post-pandemic era is shown in figure 1.



*Fig.1 The Basic Idea of the Integration of Higher Vocational Civil Aviation Freight Talents Training and 1+X Certificate System in the Post-Pandemic Era*

Under the existing vocational education environment and conditions, the implementation of the 1+X certificate system is also facing many difficulties<sup>[4]</sup>. The above four paths are still some practical problems to be solved. The first is the integration and connection of professional teaching standards and certificate standards. The first problem to be solved in the implementation of the system is how to ensure the convergence between the teaching standards and professional skill level standards of the relevant specialties of civil aviation freight (civil aviation transport service, air logistics management, customs declaration and international freight freight, modern logistics management, etc.), and how to grasp the wide integration of the two standards. The second is the integration and interworking of professional curriculum content and certificate training content<sup>[5]</sup>. Another problem to be solved in the process of promoting 1+X certificate system is that the higher vocational colleges are limited to do well in the reform pilot work within the unit, and it is difficult to cooperate with secondary vocational schools and undergraduate colleges to improve the existing school running mode and teaching management mode, and can only ensure the X certificate of civil aviation in horizontal dimension certificate training content can choose the curriculum content of relevant majors in our school, which is difficult to refine the existing curriculum content in the vertical dimension, so it will limit the selection and combination space of civil aviation freight talent training course in content module to a large extent. Third, the ability of professional teachers and certificate trainers is connected. Only by following the changes of industry practice and improving the practical operation level in time, can teachers be competent for the training of X certificate for civil aviation freight, and effectively solve the practical problems encountered by students in learning and practice. Fourthly, there are some difficulties in the integration and transformation of the learning achievement and the certificate training results of the professional courses.<sup>[6]</sup>

## 4. Conclusion

In the post-pandemic era, the transformation and upgrading of civil aviation freight industry is speeding up, and it is urgent for higher vocational colleges to reform related majors and strengthen talent support. Meanwhile, the 1+X certificate system can provide an important guarantee for the quality of civil aviation freight talent training in higher vocational colleges. This paper analyzes the new business fields produced by the transformation and upgrading of civil aviation freight industry in the post-pandemic era and the new requirements for talent training in higher vocational colleges. On this basis, the talent training and 1+X certificate system are organically integrated, and the basic ideas for the implementation of the integration are put forward.

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## References

- [1] Liu Guomin. *Cross Border E-commerce Superimposes Pandemic Situation and Air Freight Turns in Response* [n]. *China Trade News*, 2020-12-22 (003)
- [2] Notice of the State Council on Printing and Distributing the National Vocational Education Reform Implementation Plan [EB/OL].(2019-02-13)[2021-03-31].[http://www.gov.cn/zhengce/content/2019-02/13/content\\_5365341.htm](http://www.gov.cn/zhengce/content/2019-02/13/content_5365341.htm).
- [3] *Vocational Skill Level Standard for Civil Aviation Freight (version 1.0, 2020)* [R]. Beijing: China Air Transport Association, 2020.
- [4] Yan Zhiyong, Jiang Dayuan, Wu Quanquan. *Governance Implication and Misunderstanding Avoidance of 1+X Certificate system* [J]. *Education and Vocation*, 2019 (15): 5-12.
- [5] Ding Tianming. *Thoughts on the Integration of Courses and Certificates in the Process of Promoting the 1+X Certificate System of Logistics Management in Higher Vocational Colleges* [J]. *Education and Vocation*, 2020 (16): 42-47.
- [6] Dai Yong. *Principles and methods of integration of 1+X Courses and Certificates and Optimization of Professional talent Training Scheme* [J]. *Vocational Education for Mechanical Industry*, 2020 (02): 1-5.