

On the Construction of Quality Cultivating System for Civil Aviation Flight Professionals

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ABSTRACT. Chinese cultivation of civil aviation flight professionals, grown out of nothing, has experienced over 60 years' hard work and exploration, through a change from the military to the civil, and is now developed into a complex personnel cultivating pattern from a simple one. Though brilliant achievements made and valuable experience accumulated, to meet the need of future development of civil aviation, the cultivation of civil aviation flight professionals is now facing new challenges. Strengthening the construction of quality cultivating system for creative civil aviation flight professionals is now badly needed.

KEYWORDS: Flight technology; Order-oriented cultivation

1. Introduction

With the development of science and technology, driverless cars are now commonplace. The intelligence of drones also gives people a surprise of artificial intelligence. At the same time there is a growing number of artificial factors that are affecting aviation safety. The artificial intelligence and unmanned driving has already entered the field of civil aviation. If intelligent autonomous piloting enters the civil aviation industry in 10 years, how should universities and colleges cultivating civil flight professionals respond?

2. Practical Problems the Cultivation of Civil Flight Professionals Faced

2.1 The Form of the Order-Oriented Cultivation Ought to Be Changed

With the purpose of cultivating talents and serving the society, a university is the main body of the students' management and education. It is the students that make a university exit and famous. An excellent graduate cultivated comprehensively in university can bring an immeasurable social value to the university.

For the major of flight technology, the airline company is the pilot student's entrusting party, commonly known as the "mother home". The entrusting companies would generally sign a 60-to-99-year service contract with the pilot students in the very beginning of their college life, which works like indentures of selling the students themselves. The airlines regard the pilot students as the labor force for future their development, focusing more on short-term and temporary economic benefits. The airlines rarely participate in the cultivating activities in the whole process of educating pilot students, let alone knowing the state of the students on campus. However, the airlines would often interfere in the teaching and training management of the university, which badly influences the normal teaching and training order. By doing so, these airlines have put the university under criticism, which confuses both teachers and students and will have a negative effect on students' developing.

2.2 The Authentication Method of License and Diploma is Imperfect

As an undergraduate major in advanced education recognized by the Chinese Ministry of Education, flight technology has made a great contribution to the cultivation of civil flight professionals. Undergraduate education is the main stage for college students to accept advanced education, which plays an irreplaceable role in the development of the students. Flight technology is a major with salient industrial characteristics, which aims to educate applied professionals. At the beginning of the founding of our country, because of the domestic reality, civil aviation, as an important part of national strategic development plan, took the glorious mission of going abroad. Civil aviation is a business card of the country, whose development directly influences the developing progress and image of our country. Civil flight professionals are the key factor of the development of civil

aviation. For the education of civil flight professionals, Civil Aviation Flight University of China has always maintained a flexible educational system with theoretical education and licensed education of '1.5 year + 2 year' and '2 year + 2 year', with a variety of educational modes for college graduates learning pilotage. Flight skills learning account for half of the pilot students' campus life. Due to the idea existing for a long time, the idea that theoretical learning is less important than flight skills learning has always existed, resulting in the lack of autonomous learning of the pilot students in the process of theoretical education. These students would not fully participate in the boring professional courses and would be just satisfied with passing the exams.

The importance of license seems to exceed the content of education, especially the cultivation of their comprehensive ability and guiding them fully release their potentials. Because of the limitation of educational system for flight technology, theoretical curriculum for pilot students mainly contains professional compulsory courses and courses of "Fundamental of Marxism" and "Culture of Mentality. And the number of general knowledge courses for college students is much less. Due to the lack of necessary ability of logical thinking, creative thinking and the cultivation of culture and art, the ideological belief of pilot students stays in the material and distortional vulgar world long after their graduation. That is the reason why they get the nickname of "pilot farmers".

The core quality of contemporary college graduates required by higher education is not that stressed in flight technology, just because people have lost in the pursuit of short-term economic benefits and abandoned something more important like the cultivation of the students' quality and the education of their values of life education. Simple, crude and low-level life pursuits will eventually be despised by the society.

2.3 The Quality and Structure of Professional Cultivation Should Be Improved

The order-oriented cultivation form was derived from the planned economic times, which was the result of the government's macroeconomic regulation and control so as to meet the social needs then. Because of the particularity of civil aviation, the enrollment pattern of flight technology is still in use nowadays. In the 21st century, an open, coordinated, green and shared information age, the information asymmetry is coming to an end. According to the industry estimates, more than 50 flight professional training institutes and enterprises have founded in recent years. It is no longer easy as before to maintain the advantageous position and hold the say in the intense competition for students. From dozens of students in the beginning to nearly ten thousand students present on campus, from the fine militarization management to the so called quasi militarization management, the quality of students and cultivation is not good as before.

The demand for civil flight professionals far exceeded the supply before, but now the airlines tend to raise their requirements for the quality of graduates and the number of pilot students on campus waiting for flight training keeps rising. All these changes urges us to make a discreet choice between quantity and quality. Since Civil Aviation Administration of China brought bachelor degree into the standard and requirement of civil flight professional cultivation, the flight technology has gone through a transition from the pure pursuit of flight skills to the pursuit of the combination of theoretical knowledge and flight skills. For the current development of the major, the cultivation of civil flight professionals is still restricted to the original undergraduate level. How to enhance the competitiveness of the graduates is a key point in the development of professional cultivation.

2.4 The Education Management System Should Be Reformed

The pilots have always left us a shining image, but people do not know how much bitterness and pain they hide under their gorgeous exterior. As for pilot students, they are under quasi-militarized management when they are in the theory-learning stage. While in this stage, pilot students have to pass several rounds of strict selection, experience several roll calls every day, face militarized dormitory order standard, wear uniform, obey strict attendance management, follow strict behavior norms and experience uninterrupted military training. All of these methods mentioned above aim to cultivate each pilot student into a well-disciplined, responsible civil aviation flight talents. In order to pass on the essence and tradition of talent cultivation, the counselors of pilot students were mainly veterans before 2008. The well-disciplined quality of soldiers helps develop pilot student behaviors and good habits. However, with the arrival of the post-90s, 95s, and even 00s, the strict quasi-militarized management model appears to be unable to manage them well. After a series of field research, the leaders of CAFUC decided to initiate public recruitment in order to recruit excellent master degree graduates as student counselors. Student counselors with master degree have a deeper knowledge of the development of the mental and physical health of the modern college students. CAFUC has continuously recruited more than hundred excellent student counselors with strong political quality and high academic qualification. The converging of the strict military style and the humanistic free spirit of university provides a new way for the development of the

quasi-militarization in the new era.

The education management atmosphere of flight technology is far from satisfactory. Irresponsibility is commonplace in theory-learning stage, practical skill teaching stage and student management. It is undeniable to treat flight skill education as the core, which concurs to the social demand for talents. However, if the aim of educating pilot students just focuses on cultivating professionals rather than cultivating a human, those professionals would probably be the black sheep of the society. With the enrollment increasing, CAFUC falls short both in the hardware and software facilities. Under such cultivating objective, the professionals produced are at most the production of the assembly line of advanced education. They are same to each other without personality and innovation. This way of education goes against to the content of quasi-militarized management in new era. Students graduated from such education would just the machine in the assembly line of the airlines. They fall short of thoughts, let alone emotion. In contemporary education management, the separation of teaching skills from educating a human, the isolation of morality from ability, the distance between being a talent and being a talent human become increasingly large. Instructors just instruct knowledge from the books. Counselors just care about the daily routine of the students. And students become the machine who can do nothing but doing exercises in order to pass license examination or know nothing but piloting skills.

In the implementation of the opinions and spirit of the Strengthening and Improving the Ideological and Political Work in Colleges and Universities under the New Situation, how to achieve a harmonious relationship among students, instructors, universities and society and how to effectively make use of the student managing staff are the problems pilot student management has to face and solve.

3. The Construction of the Quality Innovation System of Flight Technology Professionals

3.1 Reform the Enrollment System and Innovate the Mode of Cooperation between the University and the Airline

Change the present enrollment and entrusting education mode dominated by the airlines into the physical examination mode of pilot selection dominated by the university with the assistance from the airlines. Build up a full-time/ part-time autonomous pilot selection team, and have the pilot selection staff accept planned and purposeful personnel training and study. Demarcate the enrollment areas based on regional boundary to achieve the goal that enrollment can develop sustainably. The so-called "loose entrusting order mode" ought to be achieved gradually. When the university is enrolling pilot students independently or assisted by the airlines, airlines just need to reserve the number of pilots they need. The students will be sent to the airlines after they are qualified. By doing so, the communication and coordination in the transition and training of students can be saved, education management efficiency improves and virtuous circle of fair competition will be achieved to the most.

Introduce resource of good quality from the airlines and construct new communication platform between the university and airlines so as to make the university and airlines educate pilot students cooperatively. As an application-oriented university, it should do its utmost to practice the essence of the model of cooperation between the university and airlines, rather than meet the employers and hold career talk. Truly regard the growth of the students as the start-out, have the sustainable development of the students as the foundation and aim to cultivate talents who are welcomed by both the airlines and the society.

3.2 Attach Importance to the Degree Education and Explore Education Mode in Which Degree Weighs More Than the License

Attach much importance to bachelor education of flight technology and explore practical + theoretical bachelor education of flight technology. We will improve the theoretical education of flight technology and increase the number of the lessons of professional quality education, liberal education in order to improve the sustainable development capacity. Explore the cultivating mode separating degree education from license education training at the same time. In such mode, pilot students can complete all the license education training in the sub-flight-college after they have completed the theoretical education. They just need to return to the campus before their graduation to get the degree certificates and diplomas. The pilot students who are stopped flight training while they are in the sub-flight-college can be transferred to other majors. And they can continue the theoretical course learning of flight technology on campus to get degrees and diplomas if they pass all the exams. As for the pilot students whose training time exceeds the required one, they can be directly transferred to Adult Education College to finish the rest theory learning and flight skill training.

3.3 Stick to the Strategy of Success through High Quality, and Take the Initiative to Guarantee the Quality and Quantity

Develop the university based on quality and occupy the market by quantity. As the largest pilot training university, CAFUC should regard training the most qualified and high-level personnel as the only standard. We cannot rely too much on the market share. We should always focus on the forefront of the industry and the discipline, forecast the standard and quantity the market demand for professional personnel. By doing so, we can anticipate the market-developing trend in advance to adjust the quota of enrollment and realize the transformation of major as early as possible to realize the transition from undergraduate education to graduate education, leading the professional personnel training development.

3.4 Highlight Student-Centered Idea and Practice the Essence of Imparting Knowledge and Educating the People

As a group of special college students, pilot students are owned by the airlines, and it is common for the airlines to manage the students entrusted by them. The mission of higher education is to cultivate the advanced professionals with social responsibility, spirit of innovation and practical ability to develop technology and help build a modern socialism. As a university with more than 60 year history, CAFUC has to set up student-centered idea, emphasize student-based education management, fulfill the true requirement of imparting knowledge and educating people and prevent the commercial thought and economical interest from interfering the normal education management. Treat students as the most important employer of the university, put all heart in educating students and help them create more value in life.

4. Conclusion

Education is a kind of “slow art” which does not allow eager to seek quick success and instant benefits. A university is not a factory, which educates people rather than manufacturing products. Employment rate is not everything. As an old Chinese goes, “it takes ten years to grow a tree and a hundred years to bring up a generation of good men.” If the present system of the university does not change, teachers and students will no longer the center of the university or education. Teachers would become machines and students would become products. Assessing system guides the teachers to the pursuit of interest. All the work of the university would be connected with number and interest, which becomes an “achievement” to report, and then our education would be in the wrong path.

E-era offers us numerous opportunities to get information, but opportunities for us to think, to communicate with others and to express our opinions on this age and environment are limited. If universities need to make improvement in the aspect of imparting knowledge, they need have a new look at their roles in the rapid developing society. One university supports the development of an industry. One major supports a profession. In the transition from civil aviation world power to a true superpower, China needs more high-level talents with high quality. To have a solid status and strong voice in the industry among the fierce market competition, we need to change over time, dare to innovate and pursuit excellence. As one of the world's most famous application-oriented universities, CAFUC should regard cultivating integrated people who can develop sustainably as its fundamental aim.

References

- [1] Cai Zhengtao (2014). On the construction of quality assurance system for the training of civil aviation pilots in the new era. *China After School Education*, no.9, pp.59-60.
- [2] Chen Bin (2012). An Inquiry into the Reform of Flight Theory Courses Based on CDIO Mode: Taking Civil Aviation University of China for an Example. *The Science Education Article Cultures*, no.5, pp.37-38.