APPLICATION OF QUALITY FUNCTIONAL DEPLOYMENT TO THE ASSESSMENT OF AIRCRAFT MAINTENANCE EDUCATION

Jen-Chieh Cheng*, Cheng-Ying Lo, Yeong-Ley Tay

Department of Aeronautical Engineering, National Huwei University of Science and Technology,

64 Wun - Hua Road, Huwei, Yuenlin 63208, Taiwan R.O.C.

Application of Quality Functional Deployment to the Cultivation of Aircraft Repair and Maintenance Workers

Due to government opening up airways, domestic companies grow rapidly and numerous small airlines companies with insufficient maintenance power are founded. Nevertheless, our domestic maintenance education system could not provide enough well trained technical people for the market. This causes the speed of establishing maintenance power to lag the growth in the number of airplanes. And it directly causes high turnover rate among maintenance workers, which negatively affects airline safety.

To meet the demand for educating airline professionals, our school established the aeronautical engineering department in 1995. The major focus of the department is the airplane maintenance program. To sufficiently and effectively handle the various demands in airline maintenance worker structures. The article proposes to apply current popular "quality functional deployment" in "total quality management enhancement" to cultivation of the aircraft repair and maintenance workers.

We intend to treat airline companies as customers and our formal products are our students. Also, we assume our main competitors are other aeronautic schools like ours. We intend to utilize the analysis method of quality functional deployment system as a tool to improve "curriculum design and teaching quality". We will also focus on curriculum, facilities and teaching areas to provide our department a reference benchmark for future curriculum design and teaching guideline plan.

Based on discussions, we conclude that what the airline industry wants the most is that novice aircraft repair and maintenance workers improve their reading capability of English technical orders and manuals; to posses relevant technical skill in aircraft repair and maintenance field; and to be able to work hard. All these demands can be fulfilled by school system through (1) universalizing English education program (2) requiring and encouraging students to study manuals (3) enhancing the varieties of practical training classes and practicality (4) cultivating

rigorous work attitude and concept.

In addition, by using practical training requirement and creating relevant classes in general knowledge education program, we can make our department students treasure the value of human life, team spirit, mutual respect, discipline and motivation, and spirit of service and devotions, life time learning, and keeping up with aircraft knowledge and technical skills. We hope that this will prepare our student well to meet the industry demands after they graduate. And they will become popular maintenance force in the airplane maintenance industry.