Total Quality Management Effecting Result of Air-Force Base Runway Rebuild in C.C.K. Air-Force Base

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ABSTRACT

Since people paying more attention to aviation security day by day now, and the fabrication cost of the jet plane is extra expensive, and its speed is extremely rapid, we need the stable structure and high quality runway for airplane to take off and land. It, however, occurs the crack and damage frequently now, that cause the airport to close field and a great deal of flying case incidents. Therefore, it is very important for the quality control during the entire construction of the runway. MND has already rebuilt for six domestic serious damaged runways in air base during the period from the 1990 to 1993. However, it does not meet the demand of Air Force airport use because the poor planning and design, Mostly, it had made the project quality worse than before and causes a lot of problems due to the poor construction quality control, the poor construction technology and machines provided by the subcontractors, the poor schedule control of the construction, and the poor quality control. At first, this paper presents the professionalism characteristics and the quality degree of the runway reconstruction based on the quality management researches and successful experience of the manufacturing industries. We then discuss how to apply TQM (Total Quality Management) into the runway reconstructing with the domestic and international cases. In addition, this research has a detailed discussion on the relationship between the project members (owners, architects and contractors) and the procedure of the runway constructing. Finally, we proposed three factors (artificial background, standardize systems, influencing keys, etc.). We also develop the system model and prediction equations to achieve the high quality and to improve the customer satisfaction as the goal. Furthermore, one can offer the improved way of quality and suggestion for the runway reconstruction.

Keywords : Quality Management、TQM(Total Quality Management)、 Construction Management、Air Force Runway Reconstruction.

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