ABSTRACT

Merpati Nusantara Facility (MMF) is the center of airlines' repairmen that owned by PT. Merpati Nusantara Airlines. In performing repairment, the operator uses ladder work facility. The rising problem is the use of ladder facility that more than 10 ladders for an airline and also the condition of the ladder, in which many accidents occurs, pain on the certain body of employees because the less ergonomic.

In this research, we would like to look for a solution that problem, by spreading a questionnaire to operator, measure old ladder dimension, measure the height of airline, etc., and then we would like to analyze it by using AHP (Analytical Hierarchy Process) software to determine the significance level between criteria and software SAP 2000 (Structure Analysis Program) to determine the accepted power by structure because of outside power.

The end result from this research is to make a redesign of ergonomic ladder work facility so that it could decrease work accident and work fatigue.

Key words: safety, ergonomic, redesign