ABSTRACT

PT Dirgantara Indonesia is a company that produces domestic needs. PT DI is the first aircraft industry and the only one in Indonesia and in Southeast Asia which is owned by the Government of Indonesia. To produce in accordance with a production target, company needs to be supported by machinery and equipment in each stage of the process and must be operated effectively and efficiently. To operate the machinery and equipment better, the process is need to operated to effectively and efficiently care system a good machine. The method that used is the Reliability Centered Maintenance by combining qualitative analysis covering Failure Mode and Effect Analysis and RCM Decision Worksheet. Another method used is by using the Risk Matrix is used to determine the critical systems before continuing to the stage of RCM.

From the result of determination critical systems based on the Risk Matrix and frequency of data damage, Axis System was selected as a critical system that will be discussed further in this study. Then determined the maintenance task and maintenance intervals in accordance with the characteristics of failure by using the method of Reliability-Centered Maintenance. Preventive Maintenance cost calculation is based on the RCM proposal which will be compared with existing Preventive Maintenance costs at PT DI.

Based on the results of data processing using RCM performed on equipment Axis System, there are tweenty nine scheduled on-condition, and seventeen scheduled restoration . While maintenance intervals of each equipment is vary according to the task that performed. Margin of maintenance costs if the company uses the task of preventive maintenance is 16% smaller than the existing corrective maintenance task.

Keywords : RCM , Risk Matrix, Decision Worksheet, Scheduled On-Condition, Scheduled Restoration