

ABSTRACT

In Indonesia, the government established PT Dirgantara Indonesia to meet the needs of the best in the country. The development of air transport services requires PT Dirgantara Indonesia to fulfill orders in a timely project. One way to minimize the losses that are likely to be responsibly by the company is to improve the Reliability, Availability and Maintainability from the production system itself and Cost of Unreliability to know how big the charge generated by the Reliability, Availability and Maintainability problem. By using the data such as Mean Time To Failure, Mean Time To Repair and Mean Downtime useful to assess the performance of a system that works.

From the results of data processing using the Reliability, Availability and Maintainability Analysis using Reliability Block Diagram based on analytical approach, at the time of 336 hours, the system has a value of Reliability (31%). Average value of Maintainability system at $t = 12$ hours was 99.60%. Values of Inherent Availability is 99,998% and the value of Operational Availability is 99,997%. Based on the evaluations that have been done using the world class maintenance Key Performance Indicator, the leading and lagging indicators of availability has reached the target of a given indicator. As well as by using calculations Cost of Unreliability, obtained the expenses caused by the unreliability of the system is \$ 11,526.92 by active repair time, and \$ 19,301.95 based on downtime.

Keywords : Availability, Cost of Unreliability, Key Performance Indicator, Maintainability, Reliability, Reliability Block Diagram