

Analisis Failure Nose Landing Gear ATR Menggunakan Metode Fault Tree Analysis (FTA)

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ABSTRACT

The risk of failure in the world of aviation, especially in aircraft, is very possible and will have a very fatal impact. This study took the case of the ATR72 plane which crashed at Lombok International Airport. The accident was caused by the failure of the nose landing gear on the plane which resulted in an accident. The failure of the nose landing gear can be fatal because the aircraft is unable to take off and land. To determine the cause of the failure of the nose landing gear of ATR aircraft, a fault tree analysis method was used.

Research using the fault tree analysis method is used because this method can analyze in more detail regarding a failure and then an evaluation will be carried out using a minimum cut set that can identify the causes of the top event.

The results obtained from this study are the failure of the nose landing gear of the ATR aircraft can occur due to several systems that do not work normally, namely the nose gear leg breakdown, the nozzle gear doesn't retract and extend and the nose wheel steering stiff.

Keywords: *Nose Landing Gear, ATR, failure, Fault tree Analysis, minimum cut set*