

## **ABSTRACT**

*PT Dirgantara Indonesia is a company engaged in aerospace with core competencies in aircraft design and development, aircraft structure construction, aircraft production, and aircraft services for civilian and military. To guarantee that the product runs well, PTDI provides warranty policies for aircraft sold. During the period of 2017 to 2018 the company received 34 damage claims from the CN-235-220 MPA aircraft so it was necessary to issue a warranty fee of Rp. 18,963,780,000. The costs incurred are quite large and exceed the target of the company which targets warranty costs of 2% of the product selling price. The survival analysis is needed to determine how long the aircraft can survive until it is damaged, and the estimated warranty costs are carried out using the Free Replacement Warranty (FRW) policy, so the warranty duration and the estimated warranty cost of the CN-235-220 MPA aircraft is obtained. From the calculation of MTTF value, it was found that the duration of warranty is 0.5 years (6 months), which with a warranty period of 6 months the company only need to pay a warranty fee as much as IDR 6,582,333,741.22. Warranty costs spent by the company can approach the target, which is 2% of the selling price of the product.*

**Keywords:** *Warranty, Free Replacement Warranty (FRW), MTTF, Warranty Costs*