

## ABSTRACT

PT Aerospace Indonesia is one of the airlines in Asia, involved in design, development, and manufacturing of aircraft. The production of Airbus Helicopters EC-725 is one of the establishments that is done under a cooperation agreement with one of its international partners, namely Airbus Helicopters. The material procurement needed for the production process is very closely associated with the effectiveness of the production process.

The condition of being inefficient often occurs in the planning system for raw material supplies (RMN) with deterioration over time, where there are footprints in terms of materials expired at the high end, which are an indication that inventory material policy was not right. Therefore, it will investigate the end goal to determine an optimal inventory policy on a material system that undergoes a deterioration process during its lifetime based on computerized information systems management as the tool that advocates decision.

The model used for research is the EOQ Weiss model from 1982. This model is used because of the assumption that applies to the model, there are many similarities to real systems, especially the characteristics of the research material object as perishable items that undergo a deterioration process over time. To improve the conformity of the model, further research was conducted on the EOQ model. Some of the development of the model is the calculation of the footprint in terms of materials expired, the same time between reservations, an algorithm for calculating the reorder point. Recommendations for inventory with a model proposal capable of producing the total cost of inventory of the total cost of actual inventory is 46% from € 356,376.39 to € 193,672.09.

**Keyword:** Expired, Perishable item, EOQ Weiss, Non linear holding cost