ABSTRACT

The Aircraft industry consists of several players those are the sellers as the original equipment manufacturers (OEMs), which include the aircraft and part manufacturers for Boeing, Airbus, etc. PT Dirgantara Indonesia or Indonesian Aerospace is an Indonesian aerospace company that engages in the field of aircraft design and development and manufacture. Currently PT Indonesian Aerospace is conducting an elevator project for an aircraft to meet a demand from customers. An Elevator is a pitch altitude controller of an aircraft, and therefore the angle of attack and the lift of the wing. Based on observations, there are still delays in the process of assembling the elevator. This happened because there are still mismatches between the planning process and actual process due to the lack of information of each worker, especially on an assembly line area, and also there is lateness in parts coming to the assembly line area. So, this research is focused on the parts that caused of delay of the assembling process because there are incomplete work package. To obtain these components and parts that are needed and to control the production system in the right item, right amount, and right time, the appropriate control system that can be used is Kanban. This research proposed to design the Electronic Kanban system to tackle the problem. Electronic Kanban also is known as e-Kanban includes all the features of the traditional Kanban system, using a mixture of technology to replace traditional elements such as Kanban cards in a way to reduce the delay and to achieving production time according to the schedule agreed with the customers.

Keywords: Aircraft, Elevator, Electronic Kanban, Kanban, Delay.