ABSTRACT

PT. Indonesian Aerospace is a state-owned company engaged in the aircraft industry. Nowadays PT. Indonesian Aerospace is experiencing problems at Single Aisle Project which can not meet the demand in a timely manner. This problem occurs because of the frequent occurrence of line stop in the assembly line. The line stop in the assembly line occurs because of lack of parts needed during the assembly of components process. The main cause of the lack of parts that are needed is because the amount of buffer stock not specified as required and schedule for the replenishment the buffer stock is not on time. Therefore, we need a system that can meet the schedule for buffer stock replenishment.

This research will be designed a proposed Kanban system that consists of designing the card Kanban, Kanban Post, the mechanism of using Kanban System and calculation number of Kanban card that are useful in fulfilling the schedule of buffer stock replenishment.

The results of this research is a Kanban system that has a number of buffer stock is greater than the number of units required for replenishment time and schedule for buffer stock replenishment which appropriate when the buffer stock will be depleted, so there will be no shortage or excess amount of buffer stock that is owned.

Keywords **:** *Kanban*, *Buffer Stock Replenishment*, *Constant – Quantity Withdrawal System*, *Pull System*