

## **ABSTRACT**

Airplanes manufacturing are growing along with the increasing demand from consumers. PT XYZ is a manufacturing company of aircraft included the design and development, manufacture, assembly, and services of aircraft. The helicopter's tail called Tailboom is a product of the helicopter division, where the Tailboom assembly line is a pull system. Based on observations of existing conditions that occur at PT XYZ, production is still unable to meet demands of consumers, Lead Time occurs greater than the plan agreed upon by the consumers. In the assembly process, each work station experiences a lack of parts and component needed to assemble. This happens because of the delay in getting the required part information and there is no warning about the availability of parts needed, it makes some parts unavailable in assembly warehouse. The lack of parts and components from the previous work station causes the assembly process to stop and the assembly line also stops at the next station. In its completion, the production time was late and not on schedule. In resolving these problems, controlling process is needed, which is controlling the assembly line to get all components and sub-assembly in the right amount and at the right time. This study applies one of Just In Time tools, namely Kanban and automation should be added as efficiently and effectively communication line becomes Electronic Kanban. The problem can be solved by reducing buffer such as waiting time and idle time. The proposed results of controlling the assembly line of Tailboom result in a smooth assembly line without waiting, reduced lead time and achieving production time according to the schedule agreement with the consumers.

Keywords: Kanban, E-Kanban, Lead Time, Pull System.