## **ABSTRACT**

Indonesian Aerospace is one of the indigenous aerospace companies in Asia with the main competent ini aircraft design, development, and manufacture of civil and regional military aircraft commuter. One of the products produced by this company is the components of the CN-235 aircraft, Emergency Door CN-235. In production activities, the company uses a bar chart as a reference for scheduling and control tool in the assembly of the CN-235 Emergency Door. In the bar chart contain information about operation activity, standart time, and number of labor. Problem came when the bar chart not contain curing time information which take a long time, and bar chart condition not updated yet, there are some operation change that are not accompanied by the time changing, but is still used as a reference to the assembly scheduling so assembly time delay happened. In addition, the program manager will request want the completion of the assembly is less than the time set in barchart become an obstacle for leader in taking a steps during the assembly. Therefore we need a new measurement of standard time on barchart by increasing the production rate of the Emergency Door CN-235 through controlling of labor.

The initial phase doing measurement of the cycle time measurements from each work element with attention to the adjustments and concessions workers that next will be processed into a new standard on the bar chart. The next step is identify work elements that can be expedited completion time process. The principle of shojinka in controlling labor when fluctuation completion time demand used for accelerate standart time from work element. There is three scenario controlling labor, first by increasing overtime for existing condition and increasing max three operator and four operator with distribution of working hours to normal working hours and overtime hours. Increasing number of work labor from each scenario can accelerate completion time process from normal time existing condition by 15 days/ unit became 12 days/ unit (20%) for overtime existing condition, 13 days/ unit (13,33%) for 3 operator normal time, 9 days/ unit (40%) for 3 operator overtime, 12 days/ unit (20%) for 4 operator normal time, and 8 days/ unit (46,67%) for 4 operator overtime.

Keywords: standard time, Shojinka, controlling of labor, bar charts

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