

ABSTRACT

The concept of full service is a flight that prioritizes full service to passengers both in terms of comfort to safety, quality consumption services, inflight entertainment, luggage capacity, and other services. GA airlines implement full service that prioritizes its customers in full. Pt. Aero Indonesia is required and required to always be optimally effective and efficient in carrying out maintenance to GA airlines that have entrusted the maintenance of its aircraft fleet to PT. Aero Indonesia is special in inflight entertainment maintenance. In the process of inflight entertainment maintenance at the time of aircraft before departure there is still a first departure delay caused by inflight entertainment devices that require repair time that causes losses for the airline that must provide compensation. In this study, Define-Mesure-Analyze-Improve-Control (DMAIC) and Failure Mode and Effects Analysis (FMEA) methods will be used to improve the process before departure check on cabin maintenance services work units in PT. Aero Indonesia. THE average result of DPMO in the inflight entertainment before departure check process was 635,526 of the number of flights with a yield or probability value without problems of 99.75%. With average level sigma inflight entertainment before departure check at PT. Aero Indonesia based on data before departure and delay inflight entertainment period March 2019 - February 2020 is 4.72. After analysis using DMAIC and FMEA methods, the proposed improvements can be given to cabin maintenance services unit pt. Aero Indonesia to solve the problem of system controller failure that occurs is by creating Standard Operational Procedure (SOP) in the implementation of inflight entertainment before departure check and apply preventive maintenance on inflight entertainment devices to reduce the occurrence of software corrupt so that delay inflight entertainment before departure check due to system controller failure.

Keyword : Lean Manufacturing, Six Sigma, DMAIC, FMEA