

## **Ergonomic analysis of aircraft passenger seat: a Malaysian case study**

### **ABSTRACT**

Today, aircraft has become common transport mode for many people, especially with the high market success of low cost airlines that makes air transportation more affordable. In an effort to gain more profits by accommodating more people onboard per flight, many airlines have resorted to modify their passenger cabin arrangement and also the seat design in a way that potentially reduces the level of travel comfort experienced by the passengers. Therefore, the primary aim of this study is to ergonomically analyze the typical passenger cabin seat on an aircraft in order to highlight whether it is comfortable for the passengers. It is focused only on Malaysian aircraft passengers. From the results of conducted Rapid Upper Limb Assessment (RULA) analysis using JACK software package based on the anthropometric data of Malaysians, it is shown that there are some improvements that can be made to the current aircraft seat design and cabin arrangement to increase the passengers' comfort level.

**Keyword:** Aircraft cabin; Ergonomic; RULA analysis; Cabincomfort; JACK; DELMIA