

Application of subsystems change ranking methodology in aircraft redesign process

ABSTRACT

Redesigning an aircraft is hardly a straightforward task. Due to its high susceptibility to change effects propagation, it becomes very important to select the right initiating change components to minimize redesign development risks. With realization that there are often several different ways to redesign an existing aircraft for satisfying similar requirements, designers might require assistance in selecting suitable initiating change components in their redesign plan. A methodology that systematically ranks the subsystems of the chosen baseline design according to their estimated redesign risk is proposed here. It is strongly believed that making this information available to designers during the early redesign stages will help them to make a better redesign plan.

Keyword: Subsystems ranking; Aircraft redesign; Redesign plan