An Optimization model for Aircraft Maintenance Problem

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Résumé

Aircraft maintenance takes place in a series of checks of increasing diligence with the exception of unscheduled fixes. The frequency of these checks depend on the combination of flight hours and number of take-off and landing cycles, and may be performed at any site appropriately equipped. Because each aircraft type has different inventory requirement, little saving can be achieved by combing facilities for different fleets. Operation research has been a vital tool for tacking the many logistical industry. The aircraft maintenance scheduling is one among the major decision an airline has to make during its operation. This study presents a model to optimize the aircraft maintenance-scheduling based on the objective function of minimization cost. Meta-heuristic Algorithm is used to solve the problem.

Mots-Clés: Aircraft, Maintenance, Optimization, Crew, Scheduling

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