Код: 10569

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Meta-Data Mining for Optimized Aircraft Repair and Overhaul

The aim of this project is the development of advanced software modeling tools for data mining, maintenance support, and structural health monitoring prognostics. The project will develop new modeling, optimization tools and algorithm concepts that provide database search and correlations facilitating intelligent decision making processes for maintenance, repair and overhaul work practices and schedules. Ultimately, such a support tool will act upon current databases, meta-data and repair practices to arrive at considerable personnel, parts and other resource savings as well as shorter repair time horizons within the Maintenance, Repair, and Overhaul (MRO) environment. An aircraft maintenance and repair work scope optimizer, as a decision support tool, will utilize dynamic data, meta-data information and knowledge to provide the repair work force with a daily work package that accommodates contingencies via dynamic re-planning. The decision support tool will be orderly, repeatable and controlled using advanced AI techniques to identify associations within a dynamic information repository, the Information Cube.

Ключевые слова:

Содержание.
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