

METHOD OF IMPROVING CONTROL USING A SIMULATION OBJECT MODEL AND ITS APPLICATION TO THE PROBLEM OF HELICOPTER EMERGENCY LANDING MANOEUVRE OPTIMIZATION

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The paper presents an iterative algorithm of improving control for dynamic systems based on object approximation on average at each iteration in the vicinity of the path being improved by linear-quadratic structures. The algorithm can be applied directly to simulation models of dynamic systems that have no complete analytical description, and it forms a part of the method of optimizing control using such models. The efficiency of the method is illustrated by the example of helicopter emergency landing.

Dynamic controllable system, improvement of control, simulation object model, emergency helicopter landing manoeuvres, parallel algorithm.

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