

عنوان مقاله:

Moment-Inertial Factor as a Criterion for Assessing the Dimension of an Aircraft

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خلاصه مقاله:

The study aims to compare the characteristics of the moment-inertial schemes of two aircrafts – a mainline aircraft of a normal aerodynamic scheme and an aircraft made according to the flying wing scheme, to improve their flight performance. The study uses the method of successive approximations using relative masses (when determining m_0), the formula of A. Mozhaisky, an artificial method consisting of the layout of the aircraft oriented to the virtual center of mass. Design studies at the modern level of scientific and technical development have confirmed the relevance of using the proposed methods of forming a moment-inertial appearance for promising long-haul aircraft of large passenger capacity.

کلمات کلیدی:

linear dimension, airplane volume, square-cube law, load-range diagram, fifth-degree

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