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# Constructing a multipurpose system of cruise missiles within the conditions of multifactorial uncertainty

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*The article considers the problem of constructing a system of cruise missiles resistant to the change of the external target environment. We have formulated a criterion of stability that allows selecting such design decisions which increase the feasibility of accomplishing the target by the system. Our work defines the statistical functional interconnection between the optimality criterion and the design decision, which provides an opportunity for finding a reasonable stable design decision. We introduce a criterion of the design decision immunity to the multifactorial uncertainty that is dependent on the impact of the uncontrolled factors related to the target. A large variety of such factors, different nature of their origin and the incompleteness of knowledge of their laws dictate the need for considering the multifactorial uncertainty from more common positions connected with the notion of the design decision immunity to the perturbing factors. As the criterion of immunity we examine a regularity criterion written in relation to the Lipschitz constant characterizing the degree of the criterion scores immunity to the variations of the multifactorial uncertainty.*

**Keywords:** *cruise missile, optimal target allocation, multifactorial uncertainty, functional stability*

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