
Resource control of multiobject systems of ground and air based aircraft in multistage conflict situation

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Resource control and decision-making problems in tasks of conflict interaction of complex multiple-object systems of ground and air based flying vehicles are analyzed. The combined structure of resource control of the systems is considered, including their configurations, elements of target distribution and ranging of systems of objects, and also the dynamics forecast of average numbers of object groups of systems. The scheme and mathematical model of a multistage conflict situation taking into account a set of configuration parameters of systems is created. The method of conflict optimum control of systems' resources is implemented, and on its basis multiple factor analysis of efficiency of conflict parameters' influence on optimum control of systems' resources with possibility of obtaining the positional forecast of control is carried out.

Keywords: *resource control, multiobject systems of ground and air based flying vehicles, target distribution, ranging of objects, multistage conflict situation, conflict-optimal forecast, positional forecast, stable-effective compromise, efficiency of conflict interaction.*

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