

## Coordination of operation of autonomous information and control system and the executive device excluding systematic errors

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*The article considers the options for constructing autonomous information and control systems ensuring the coordinated operation of these systems and the executive device having the form of a fragmentation warhead enhancing the efficiency of such systems in a wide range of speeds. The variants of the autonomous information and control system structure with swinging the radiation pattern or with a delay in generating control command to the executive device make it possible to eliminate systematic errors generally determining the width of the cone of actuator element spread. In the design of autonomous information and control systems with a single antenna system swinging the radiation pattern and the implementation of the delay law are carried out within a wide range of speeds. For variants of design of autonomous information and control systems with two antenna systems, the range of conditions for meeting the munition with the target where swinging radiation patterns or delaying the generation of a control command occurs is halved comparing with variants having a single antenna system. The analysis of the coordinated operation of these devices is performed by the method of efficiency express-evaluation at the initial stage of design using the hodograph of relative velocities describing a wide range of speeds.*

**Keywords:** antenna system, swinging radiation pattern, angle of radiation pattern inclination, cone of element spread, hodograph of relative velocities, systematic errors, random errors, delay in generating a command, control command

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