COMMAND CONTROL OF HYPERSONIC AIRCRAFT ANGLE OF ATTACK DURING ACCELERATION AND CLIMB

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The paper deals with the tasks of forming command control of hypersonic aircraft: the main aircraft and the accelerator aircraft during acceleration and climb. The motion is analysed in conditions of atmospheric density perturbations and deviations of aircraft aerodynamic characteristics. An algorithm of single-channel (by the angle of attack) direction is proposed and its ability to compensate the impact of perturbations on satisfying the final conditions of motion is investigated.

Hypersonic aircraft, angle of attack, perturbed motion, command control.

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