Combined modeling of aircraft flying and combustion processes in engines with anisotropic solid propellants

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The model of combined calculation of aero-ballistic characteristics of unguided aircrafts and combustion characteristics in combustion chambers of engines with anisotropic solid fuels has been suggested. This model allows us to investigate the interaction of anisotropic combustion of fuels and aero-ballistic characteristics of aircrafts. The numerical example of the complex simulation has been given, that demonstrates the model possibilities for investigating the influence of fuel's anisotropy on aircraft's characteristics.

Keywords: *combustion, gasodynamics, anisotropic solid propellants, computational modeling, combined modeling.*

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