

## Aerodynamic characteristics of thin conical shells at supersonic speeds of the ram airflow

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*The article considers aerodynamic characteristics of thin conical shells separable from carrier rockets. Mathematical modeling of flow at the supersonic velocities of the ram airflow is performed; aerodynamic characteristics for various conical shells are obtained. The graphs of aerodynamic coefficients vs. angles of attack are plotted. They display the influence of the geometric parameters of the models under study on their aerodynamic characteristics. It is shown that the results of the calculations are in good agreement with the available experimental data.*

**Keywords:** aerodynamic characteristics, launch vehicle, separable elements, nose fairing, conical shells, flow simulation, SolidWorks Flow Simulation

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