

Aerospace parachute systems – as an effective braking means of the launch vehicles return stages and reusable spacecraft

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The work is devoted to the problem of preserving the launch vehicle stages descending at high speed in the atmosphere for their subsequent use and estimating the unit costs of launching the payload into low Earth orbit. The conceptual assessment was carried out on the example of the return of the first stage of the Falcon-9 launch vehicle and a reusable spacecraft using an aerospace parachute system. The methods of landing, including using helicopter pick-up, are considered. The prospects of using such rescue systems are shown.