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SYSTEM FOR CONTACTLESS REMOVAL OF SPACE DEBRIS FROM NEAR-EARTH ORBITS USING AERODYNAMIC COMPENSATOR

The purpose of the work is to validate the proposed system for contactless removal of space debris from near-earth orbits using an aerodynamic compensator. The technical solution associated with the space ion-beam shepherd is best suited to the proposed system. The authors' system differs in that instead of an additional jet engine the satellite includes the aerodynamic compensator of the engine thrust force, which is a source of an ion flow. The aerodynamic compensator parameters are assessed, and a preliminary conclusion about its applicability is made.

Keywords: *removal of space debris, system of space ion-beam shepherd, aerodynamic compensator, space debris collector.*

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