

The asteroid laser rocket engine

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Recently the scientific community has come to comprehension of gravity of a problem of threat to the Earth from action of asteroids and comets. There is a real and probable threat of the future collisions of the Earth with a celestial body. Therefore the person to guarantee the future in long-term prospect should be prepared for to reflect such danger. Time come of not passive, but active action on comets, the asteroids which are bringing the threat for the Earth. The NASA carried out recently experiment on collision with comet Tempel-1 which is representing the most direct interest for the solution of to take away dangerous bodies for the Earth into other harmless orbits. The purpose of the report is a statement of idea of use of space-rocket conveyances for transfer of dangerous celestial bodies for the Earth into other orbit through a creation in their body of a laser rocket engine. The similar experience is present already, when orbit of station "Mir" was corrected previously, that the station has fallen in lonely ocean. Certainly, it was an insignificant body by astronomical measures. But it does not mean, that these problems should not be developed. The first results on studying a structure of comet Tempel-1 have shown, that an ice nucleus is under firm crust. In the future it allows to create in a body of a comet well-known laser rocket engine of the enormous sizes by means of laser beams (when their power and long-range action begins comprehensible for realization of this idea) and, by melting ice and evaporating water to receive jet force which will enable to change orbit of a celestial body. It will be possible to send the robots to a celestial body. These robots can "cut out" the "nozzle" of the cometary laser engine by the laser in its body. The same robots will give the removed briquettes from a body of a planet, ensuring a water as a propulsive mass a rocket engine. Certainly, it is idea, fancy, but 75 years ago the thrust of the first rocket engines was measured by shares of kilograms, and now the thrust has grown in millions times. It is possible, to build such engine sideways from the centre of gravity of an asteroid, to twirl a celestial body by a force eccentricity, having created gyroscopic effect and by withdraw a body from its orbit. In the report the sizes of such water rocket engine, the force of action created on a space body are estimated. Necessary power of solar batteries in orbit of a body for a capability to evaporate a ice in a space body by means of laser beams and to create thrust force is determined.

- 1 This problem has plus that person has time to think of disposal of threat of falling of celestial object to the Earth.**