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On stationary solutions of a satellite case of the restricted three-body problem. (Russian. English summary) [Zbl 0576.70006](#)

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Summary: Here is considered a generalization of a satellite case of the restricted three-body problem when the primary is a triaxial ellipsoid. The existence of the stationary solutions corresponding to periodic solutions of Poincaré's third kind is proved. Calculations of the stationary solutions are carried out for parameters similar to those of the system Earth-Moon-Earth's satellite.

MSC:

[70F07](#) Three-body problems

[70M20](#) Orbital mechanics

Keywords:

restricted three-body problem; triaxial ellipsoid; periodic solutions of Poincaré's third kind; Earth-Moon-Earth's satellite