

The invention relates to rocket-space transportation means, which place payloads on required orbits. Invention provides for increase of the accuracy of separation and decrease of action of this component on total accuracy of placing of this payload. During separation of payload at its starting by rocket-space carrier in orbit with required parameters, which includes placing into orbit, turnings of carrier for guaranteeing the required direction of separation of payload and its separation in this direction, during placing are conducted the measurements of navigation parameters of carrier and on their basis is forecast the moment of separation of payload. A device for conducting the process includes series-connected unit of navigation, unit of trajectory shaping, and unit of orientation and stabilization system. According to the invention it additionally contains a storage unit, a unit of forecast of final parameters of trajectory, a unit of forecast of errors of placing, a unit of determining the derivatives, a unit of calculating the criterial function, a unit of optimization and a unit of determining the direction of separation of payload; moreover the storage unit is connected with unit for forecasting of final parameters of trajectory, with unit for forecasting of errors of placing, with unit of calculating the criterial function and with optimization unit. The unit of navigation is connected to unit for forecasting of errors of placing, the unit of trajectory shaping is connected to unit for forecasting of final parameters of trajectory and with unit of determining the direction of separation of payload. The unit for forecasting of final parameters of trajectory is connected to unit of determining the derivatives, with unit for forecasting of errors of placing and with optimization unit. The unit of determining the derivatives is connected to unit of calculating the criterial function, the unit of forecast of errors of placing is connected to unit of calculating the criterial function and to unit of determining the direction of separation of payload. The unit of orientation and stabilization system is connected to unit for forecasting of errors of placing.