

The invention relates to aircrafts that perform lowering in atmosphere. Method for rescue of stage of aircraft at trajectory of lowering in atmosphere is in application of deceleration impulse by aerodynamical devices connected to aircraft with non-rigid elements. After aircraft falls to atmosphere non-rigid elements, for instance cables, are released with removal of intermediate links with its body. The body is separated to sections previously connected with those cables, for instance by means of elongated cumulative charges, with formation of system of sections connected with cables, stable with respect to vector of velocity of falling flow. Form and mass of sections are chosen in such way that ballistic coefficient of the end one of those in direction of flight is the largest, and lengths of the cables are determined under condition of sections being not in aerodynamical shade. Device for implementation of the method includes separated stage of rocket and non-rigid elements attached to it. On the body and the inner elements of construction by contours formed with intersection of those with distribution surfaces elongated cumulative charges are installed. On the side surface of the body of the stage at both sides from charges, near those, uniformly in perimeter of the stage along its generatrices units for fixation of opposite ends of each cable are installed, the cables themselves are laid along generatrices and are tightened through eyes by means of hooks to rings attached with pyro-bolts to the body. Between the fixation units of opposite ends of each cable with tension arc-like springs are installed, with convexity to outside of the body, at the outer surface of each of those troughs are provided for cables, on those it is laid with tension. Pyro-bolts and charges are electrically connected to programmed-time device. The invention provides high reliability and safety of use of the stage and its quick transformation to deceleration mode.