Magsud A. NAJAFOV

AEROELASTIC VIBRATIONS AND STABILITY OF A CONICAL SHELL STREAMLINED BY GAS FLOW WITH HIGH SUPERSONIC SPEED

Abstract

Many papers have been devoted to the panel flutter of shells [1-4], it is used the piston theory formula for pressure of the aerodynamical interactions between the flow and a shell. Inadequacy of such an approach is discussed in papers [5-7]; results of these studies were used in [8-9] for new statements of problems on the flutter of conical shells. In the proposed work, in elaborations of results of [6], it is considered a problem on the truncated conical shell flutter, it is adduced data on evaluative computations and comparison them with analogous ones, obtained by the piston theory.