

عنوان مقاله:

Flutter Analysis of a Low Aspect Ratio Swept- Back Trapezoidal Wing at Low Subsonic Flow

محل انتشار:

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خلاصه مقاله:

A linear, aeroelastic analysis of a low aspect ratio swept back trapezoidal wing modeled as a cantilever plate is presented. An analytical and numerical formulation for both the aerodynamic forcing and structural response of the wing was developed. The analytical model uses a three dimensional time domain vortex lattice aerodynamic method. A Rayleigh-Ritz approach has been used to transfer equations into a modal domain in order to solve equations of motion. The theoretical results are consistent with numerical results for low aspect ratio rectangular wings and experimental data reported by other investigators for delta wings.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1792785>

