

Project: AEROSERVOELASTIC TESTBED WITH ACTIVE CONTROL. Acronym: AVDAC

Coordinator: Straero, Partner: Polytechnic University of Bucharest

Objectives:

- developing an aero-servo-elastic two degrees of freedom testbed in order to carry out aeroelastic tests and to develop solutions for avoiding the flutter phenomena,
- limit cycle oscillation and internal resonances experimenting,
- developing robust control algorithms.

Analysis Method:

Flutter analysis and predictive nonlinear models are developed using coupling algorithms between non-stationary flow and elastic structure dynamics. The Finite Volumes Method is used to solve Euler equations.



Fig. 1 3D model for simulation of the AVDAC assy