

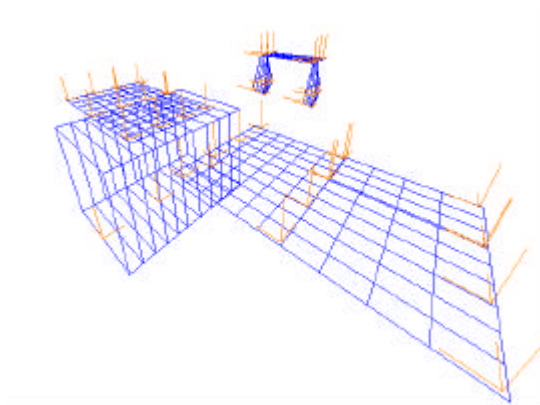
# P-FLIGHT-MODAL<sup>®</sup>

## FLUTTER PREDICTION SOFTWARE

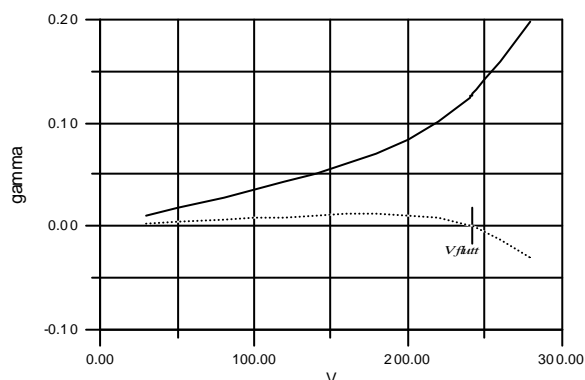
### AIM OF THE SOFTWARE

From the Ground Vibration Test (GVT) or imported vibration modes, **P-Flight-Modal**<sup>®</sup> performs a flutter analysis by predicting the evolution of the modal parameters for different flight conditions.

**P-Flight-Modal**<sup>®</sup> analysis software covers the sub-sonic, super-sonic and trans-sonic ranges.



### MAIN FEATURES



The solution of the typical flutter equation is performed in the sub-sonic and super-sonic ranges by the **p-k** method for constant altitude (different max number) or constant Mach number (different altitudes). The only computational difference between these two cases is the way of computing the aerodynamic influence coefficients, using the **Doublet Lattice Method** in the sub-sonic range and the **Constant Pressure Panel Method** in the super-sonic range.

In the trans-sonic range, **P-Flight-Modal**<sup>®</sup> computes the pressure distributions around the structure by an integration of the Euler equations.

### INTERFACES

**P-Flight-Modal**<sup>®</sup> includes interfaces with **P-Win-Modal**<sup>®</sup> modal analysis software and **P-Flutter-Monitoring**<sup>®</sup> real time flight test software. Interfaces with the most common engineering codes are available using the **DYNAWORKS**<sup>®</sup> database or via the universal files.

### SYSTEM REQUIREMENTS

Operating system	Linux 7 or greater
Computer system	PC-PENTIUM III Computer 500 MHz min
Memory requirements	64 Mbytes RAM memory (128 Mbytes recommended)

