

Preface

Advanced Aerospace Applications represents one of six clusters of technical papers presented at the 29th IMAC, A Conference and Exposition on Structural Dynamics, 2011, organized by the Society for Experimental Mechanics, and held in Jacksonville, Florida, January 31 - February 3, 2011. The full proceedings also include volumes on Linking Models and Experiments, Modal Analysis; Civil Engineering; Rotating Machinery, Structural Health Monitoring, and Shock and Vibration; and Sensors, Instrumentation, and Special Topics.

Each collection presents early findings from experimental and computational investigations on an important area within structural dynamics. The current volume on *Advanced Aerospace Applications* includes studies on Aeroelasticity, Ground Testing, and Dynamic Testing of Aerospace Structures.

It could be said that many early developments in the field of structural dynamics were motivated by the needs of aviation, and later aerospace. By their very nature aerospace products are susceptible to vibration and they operate in high vibration environments. Structural dynamics plays a key role in aerospace design and testing, impacting flight safety, product durability, performance, and comfort. As in other industries, today's aerospace products are pushing the limits of performance, pose increased demands for structural dynamic analysis and testing, and will benefit greatly from the recent developments in this field that are the topics of technical sessions at IMAC.

The organizers would like to thank the authors, presenters, session organizers and session chairs for their participation in this track.

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