

AIAA JOURNAL

VOLUME 49, NUMBER 3

MARCH 2011

AIRCRAFT TECHNOLOGY, CONVENTIONAL, STOL/VTOL

System Identification for Coupled Fluid-Structures: Aerodynamics is Aeroelasticity Minus Structure	T. Kim	503
Flutter Failure Risk Assessment for Damage-Tolerant Composite Aircraft Structures	A. V. Styuart, E. Livne, L. Demasi, M. Mor	655

FLUID DYNAMICS

Analysis of Interference Drag for Strut-Strut Interaction in Transonic Flow	R. K. Duggirala, C. J. Roy, J. A. Schez	449
Numerics: Simulation and Theoretical Analysis of Perturbations in Hypersonic Boundary Layers	A. Turin, X. Wang, X. Zhong	463
Flow Control Techniques for Transport Aircraft	A. Stenilovich and Y. Yadin	469
Excitation of a Zero Mass Flow Liner for Acoustic Damping	C. Lahiri, B. Pardowitz, F. Bake, J. Röhe, L. Enghart	513
Computations: Modeling of Roughness-Based Laminar Flow Control on a Subsonic Swept Wing	F. L. M. Choudhari, C.-L. Chiang, C. Street, M. Carpenter	520
Flow Characteristics of Synthetic Jet Induced by Plasma Actuator	A. B. Liu, P. F. Zhang, B. Yan, C. F. Dai, J. J. Wang	544
Experiments and Numerical Study of Jets from Elliptic Nozzles with Conic Plug	D. Munday, M. Mihăescu, E. Gutmark	554
Improving Low-Frequency Characteristics of Recycling/Rescaling Inflow Turbulence Generation	B. Morgan, J. Larsson, S. Kawai, S. K. Lele	582
Seedless Velocimetry Measurements by Schlieren Image Velocimetry	M. J. Hargather, M. J. Lawson, G. S. Settles, L. M. Weinstein	611
Low-Speed Static Stall Suppression Using Steady and Pulsed Air-Jet Vortex Generators	S. A. Prince and V. Khooagolien	642

INTERDISCIPLINARY TOPICS

Novel Uncertainty Propagation Method for Robust Aerodynamic Design	M. Padulo, M. S. Camobasso, M. D. Gueno	530
Formulation of Analytical Design Derivatives for Nonlinear Unsteady Aeroelasticity	B. Stanford and P. Beran	598

Table of Contents continued on back cover



CONTENTS—continued

STRUCTURAL MECHANICS AND MATERIALS

Adaptive Control of Nonlinear Free Vibration of Shallow Shell Using Piezoelectric Actuators	M. Park, A. Przekop, T. Pharon, J.-K. Huang, C. Mei	472
Structural Health Monitoring of Composite Structures with Piezoelectro-Water Active Sensors	V. Gargulski and G. Santoni-Bodi	565
Piezoelectric Transducer Diagnostics via Linear Reciprocity for Guided Wave Structural Health Monitoring	S. J. Lee, J. E. Michaels, H. Sohn, T. E. Michaels	621
Nonlinear Reduced-Order Models for Thermoelastodynamic Response of Isotropic and Functionally Graded Panels	R. Perez, X. Q. Wang, M. P. Mignolet	630
Buckling and Postbuckling of a Delaminated Composite Beam in Bending (TN)	M. Kinawy, R. Butler, G. W. Hunt	670

026476	AIAA JOURNAL - AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS
01106013746044	2011 VOLUME 49 ISSUE 3
4	SISAC
	0001-1452(2011)49:3;1-U
	4795688