

2007 *Journal of Aircraft* Index

How to Use the Index

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C07-023 Design and Numerical Optimization of Thick Airfoils Including Blunt Trailing Edges

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C07-085 Cueing System for Near-Term Implementation of Aircraft Noise Abatement Approach Procedures

C07-108 Motion-Visual Phase-Error Detection in a Flight Simulator

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C07-025 Design Guidelines of Rotary Wings in Hover for Insect-Scale Micro Air Vehicle Applications

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C07-165 Prediction of Hovering Rotor Noise Based on Reynolds-Averaged Navier-Stokes Simulation

C07-161 Influence of Vortex Core on Wake Vortex Sound Emission

C07-226 New Computational Procedure for Incorporating Computational Fluid Dynamics into Sonic Boom Prediction

Boundary Layers and Heat Transfer-Laminar

C07-070 Numerical Simulation of Airfoil Thermal Anti-Ice Operation, Part 1: Mathematical Modeling

C07-071 Numerical Simulation of Airfoil Thermal Anti-Ice Operation, Part 2: Implementation and Results

Boundary Layers and Heat Transfer-Turbulent

C07-071 Numerical Simulation of Airfoil Thermal Anti-Ice Operation, Part 2: Implementation and Results

C07-070 Numerical Simulation of Airfoil Thermal Anti-Ice Operation, Part 1: Mathematical Modeling

Boundary-Layer Stability and Transition

C07-170 Lift and Drag Characteristics of a Blended-Wing Body Aircraft

C07-098 Drag Prediction in Transitional Flow Over Airfoils

C07-011 Automatic Transition Prediction and Application to Three-Dimensional Wing Configurations

C07-245 Aerodynamic Hysteresis of a Low-Reynolds-Number Airfoil

C07-191 Early Flight-Test and Other Boundary-Layer Research at Mississippi State 1949-1960

C07-107 Automatic Transition Prediction and Application to Three-Dimensional High-Lift Configurations

C07-103 Effect of Oscillation on Boundary-Layer Development with Adverse Pressure Gradients

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C07-177 Navier-Stokes Analysis of Airfoils with Gurney Flap

C07-185 Computational Study of Submerged Air Inlet Performance Improvement Using Vortex Generators

C07-149 Effect of Acoustic Slat Modifications on Aerodynamic Properties of High-Lift Systems

C07-113 Multipoint Aerodynamic Design of Wing-Body Configurations for Minimum Drag

C07-015 Robust Design of an Aerodynamic Compensation Pitot-Static Tube for Supersonic Aircraft

C07-107 Automatic Transition Prediction and Application to Three-Dimensional High-Lift Configurations

C07-179 Application of CFD-Based Unsteady Forces for Efficient Aeroelastic Stability Analyses

C07-195 Analysis of Wind Tunnel Wall Interference Effects on Subsonic Unsteady Airfoil Flows

C07-226 New Computational Procedure for Incorporating Computational Fluid Dynamics into Sonic Boom Prediction

C07-239 Improving the Stability and Efficiency of the Pseudocompressibility Method

C07-141 Evaluation of a Simplified Grid Treatment for Oscillating Trailing-Edge Control Surfaces

C07-158 Optimization of Airfoil Flow Control Using a Genetic Algorithm with Diversity Control

C07-180 Optimum Shape Design for Unsteady Three-Dimensional Viscous Flows Using a Nonlinear Frequency-Domain Method

C07-208 High Resolution Turbulence Treatment of F/A-18 Tail Buffet

C07-217 Effect of Streamwise Slots on the Drag of a Transonic Projectile

C07-213 Aerodynamic Characteristics of Bodies of Revolution at Near-Sonic Speeds

C07-011 Automatic Transition Prediction and Application to Three-Dimensional Wing Configurations

C07-018 Computational Analysis on Flow Through Transition s-Diffusers: Effect of Inlet Shape

C07-017 Comparison of Reynolds-Averaged Navier-Stokes Simulations of Multi-Element High-Lift Configurations

C07-220 Drag Decomposition-Based Adaptive Mesh Refinement
C07-092 Extension of Projectile Range Using Oblique-Wing Concept
C07-212 Investigation of Relative Humidity and Induced-Vortex Effects on Aircraft Icing
C07-225 Error Quantification for Computational Aerodynamics Using an Error Transport Equation
C07-134 Unsteady Thermodynamic Computational Fluid Dynamics Simulations of Aircraft Wing Anti-Icing Operation
C07-098 Drag Prediction in Transitional Flow Over Airfoils
C07-138 Analysis Method for Inertial Particle Separator
C07-047 Transonic Computational Fluid Dynamics Calculations on Preproduction F/A-18E for Stability and Control
C07-187 Cartesian-Like Grids Using a Novel Grid-Stitching Algorithm for Viscous Flow Computations
C07-118 Comparison of Computational Fluid Dynamics Approaches for Simulating Weapons Bay Flow
C07-170 Lift and Drag Characteristics of a Blended-Wing Body Aircraft
C07-076 Enhancements of the Cut-Paste Algorithm in Overlapping Grid Generation
C07-001 Aerodynamic Modeling of Morphing Wings Using an Extended Lifting-Line Analysis
C07-055 Computational Analysis of Wake Vortices Generated by Notched Wings
C07-030 Effect of a Porosity Strength on Drag Reduction of a Transonic Projectile
C07-133 Multidisciplinary Design Optimization and Data Mining for Transonic Regional-Jet Wing
C07-106 Predicting Maximum Lift Coefficient for Twisted Wings Using Computational Fluid Dynamics
C07-005 Computational Aeroelastic Analysis of Store-Induced Limit-Cycle Oscillation

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C07-076 Enhancements of the Cut-Paste Algorithm in Overlapping Grid Generation

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C07-084 Tradeoffs in Jet Inlet Design: A Historical Perspective
C07-185 Computational Study of Submerged Air Inlet Performance Improvement Using Vortex Generators

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C07-100 Development of a Trailing Vortex Formed with Spanwise Tip Jets
C07-009 Dynamics of Corotating Vortex Filaments Part 2: Experimental Results
C07-069 Adaptive Compensation Control of Synthetic Jet Actuator Arrays for Airfoil Virtual Shaping

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C07-058 Autonomous Sensing and Control of Wing Stall Using a Smart Plasma Slat

Separated Flows

C07-035 Flow Control by Spanwise Blowing on a NACA 0012

C07-106 Predicting Maximum Lift Coefficient for Twisted Wings Using Computational Fluid Dynamics
C07-050 Reynolds-Averaged Navier-Stokes Analysis of Zero Efflux Flow Control over a Hump Model
C07-105 Predicting Maximum Lift Coefficient for Twisted Wings Using Lifting-Line Theory
C07-020 Robust Multivariable Closed-Loop Control of a Turbulent Backward-Facing Step Flow
C07-224 Upstream Blowing Jet on Transonic Convex-Corner Flow
C07-221 Forebody Geometry Effects on the Flow of a Blunt-Nose Projectile at High Alpha
C07-102 Active Separation Control on the Flap of a Two-Dimensional Generic High-Lift Configuration
C07-152 Experimental Investigation of Unsteady Flow Separation on a Maneuvering Axisymmetric Body
C07-204 Passive Control of Bluff Body Using Stepped-Nose Obstacle

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C07-103 Effect of Oscillation on Boundary-Layer Development with Adverse Pressure Gradients
C07-083 Generalized Empirical Airfoil Stagnation Point Location Prediction
C07-149 Effect of Acoustic Slat Modifications on Aerodynamic Properties of High-Lift Systems
C07-195 Analysis of Wind Tunnel Wall Interference Effects on Subsonic Unsteady Airfoil Flows
C07-244 Experimental Studies on Unsteady Lateral Blowing on NACA 0012
C07-017 Comparison of Reynolds-Averaged Navier-Stokes Simulations of Multi-Element High-Lift Configurations
C07-202 Two Aspects of Use of Full- and Partial-Span Gurney Flaps
C07-225 Error Quantification for Computational Aerodynamics Using an Error Transport Equation
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C07-030 Effect of a Porosity Strength on Drag Reduction of a Transonic Projectile
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C07-016 Effect of Microvortex Generators On Separated Normal Shock/ Boundary Layer Interactions
C07-224 Upstream Blowing Jet on Transonic Convex-Corner Flow
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C07-220 Drag Decomposition-Based Adaptive Mesh Refinement
C07-213 Aerodynamic Characteristics of Bodies of Revolution at Near-Sonic Speeds

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C07-186 Streamwise Vorticity in Simple Mechanical Flapping Wings

C07-152 Experimental Investigation of Unsteady Flow Separation on a Maneuvering Axisymmetric Body
C07-180 Optimum Shape Design for Unsteady Three-Dimensional Viscous Flows Using a Nonlinear Frequency-Domain Method
C07-161 Influence of Vortex Core on Wake Vortex Sound Emission
C07-103 Effect of Oscillation on Boundary-Layer Development with Adverse Pressure Gradients
C07-135 Computational Fluid Dynamics Study of Three-Dimensional Dynamic Stall of Various Planform Shapes
C07-235 Optimum Aeroelastic Design of a Flapping Wing
C07-215 Unsteady Numerical Simulation of Wings with Flaperon Flying Over Nonplanar Ground Surface
C07-178 Compressible Unsteady Vortex Lattice Method for Arbitrary Two-Dimensional Motion of Thin Profiles
C07-050 Reynolds-Averaged Navier-Stokes Analysis of Zero Efflux Flow Control over a Hump Model
C07-118 Comparison of Computational Fluid Dynamics Approaches for Simulating Weapons Bay Flow
C07-111 Dynamic Wing Airloads with Higher Harmonic Flap Motion
C07-034 Effect of Flap Motion on Unsteady Aerodynamic Loads
C07-031 Drag and Flutter Characteristics of Loop Membranes

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C07-055 Computational Analysis of Wake Vortices Generated by Notched Wings
C07-026 Effect of a Winglet on Normal Blade-Vortex Interaction
C07-054 Effect of Swirl Flows in Aeronautical Mix Manifolds
C07-100 Development of a Trailing Vortex Formed with Spanwise Tip Jets
C07-202 Two Aspects of Use of Full- and Partial-Span Gurney Flaps
C07-212 Investigation of Relative Humidity and Induced-Vortex Effects on Aircraft Icing
C07-218 Effect of Thrust-Vectoring Jets on Delta Wing Aerodynamics
C07-009 Dynamics of Corotating Vortex Filaments Part 2: Experimental Results
C07-135 Computational Fluid Dynamics Study of Three-Dimensional Dynamic Stall of Various Planform Shapes
C07-062 Wake of Transport Flying Wings
C07-079 Trailing Vortex Filament: A Novel Similarity Analysis
C07-086 Ultrasonic Method for Aircraft Wake Vortex Detection
C07-024 Wake Vorticity Measurements for Low Aspect Ratio Wings at Low Reynolds Number
C07-053 Wake Vortex Model for Real-Time Flight Simulation Based on Large Eddy Simulation
C07-161 Influence of Vortex Core on Wake Vortex Sound Emission
C07-036 Planform Variations and Aerodynamic Efficiency of Movable Tip Strakes

- C07-186** Streamwise Vorticity in Simple Mechanical Flapping Wings
C07-214 Effects of Strake Planform Change on Vortex Flow of a Double-Delta Wing
C07-203 Effect of Leading-Edge Form on Performance of Wing-Movable Tip Strake Configurations
C07-246 Reduced-Order-Model-Based Flutter Analysis at High Angle of Attack

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- C07-123** Dynamic Coupling of the KC-135 Tanker and Boom for Modeling and Simulation
C07-181 Nonlinear Flight Dynamics of Very Flexible Aircraft
C07-131 Modeling and Flight Control of Large-Scale Morphing Aircraft
C07-110 Neuro-Fuzzy Techniques for the Air-Data Sensor Calibration

Aircraft Guidance

- C07-010** Implementing Time-Based Spacing for Decelerating Approaches
C07-193 Assessment of Ionosphere Spatial Decorrelation for Global Positioning System-Based Aircraft Landing Systems

Aircraft Stability and Control

- C07-047** Transonic Computational Fluid Dynamics Calculations on Preproduction F/A-18E for Stability and Control
C07-131 Modeling and Flight Control of Large-Scale Morphing Aircraft
C07-033 Method Based on Chebyshev Polynomials for Aerservoelastic Interactions on an F/A-18 Aircraft
C07-099 Post-Stall Motions Evolving Toward Chaos
C07-207 Experimental Study of a Micro Air Vehicle with a Rotatable Tail

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- C07-110** Neuro-Fuzzy Techniques for the Air-Data Sensor Calibration

Autonomous Vehicles

- C07-194** Autonomous Airborne Refueling of Unmanned Air Vehicles Using the Global Positioning System

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- C07-134** Unsteady Thermodynamic Computational Fluid Dynamics Simulations of Aircraft Wing Anti-Icing Operation

Control System Sensors

- C07-110** Neuro-Fuzzy Techniques for the Air-Data Sensor Calibration

Control Theory

- C07-020** Robust Multivariable Closed-Loop Control of a Turbulent Backward-Facing Step Flow
C07-234 Assessment of Critical Fuel Configurations Using Robust Flutter Analysis

Dynamics

- C07-123** Dynamic Coupling of the KC-135 Tanker and Boom for Modeling and Simulation

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- C07-182** Adaptive Stochastic Filtering for Online Aircraft Flight Path Reconstruction
C07-099 Post-Stall Motions Evolving Toward Chaos

Handling Qualities

- C07-221** Forebody Geometry Effects on the Flow of a Blunt-Nose Projectile at High Alpha

Intelligent Control

- C07-057** Piezoelectric Transducer Actuated Leading Edge De-Icing with Simultaneous Shear and Impulse Forces

Navigation

- C07-205** In-Flight GPS-Signal-Reception Anomalies of Helicopters
C07-160 Magnetometer Autocalibration Leveraging Measurement Locus Constraints
C07-194 Autonomous Airborne Refueling of Unmanned Air Vehicles Using the Global Positioning System
C07-193 Assessment of Ionosphere Spatial Decorrelation for Global Positioning System-Based Aircraft Landing Systems

Optimization Techniques

- C07-101** Multi-Objective Aerodynamic Exploration of Elements' Setting for High-Lift Airfoil Using Kriging Model
C07-022 Modelization and Kinematics Optimization for a Flapping-Wing Microair Vehicle

Signal Processing

- C07-143** Experimental Training and Validation of a System for Aircraft Acoustic Signature Identification

State Estimation

- C07-182** Adaptive Stochastic Filtering for Online Aircraft Flight Path Reconstruction

Structural Control

- C07-087** Experimental Evaluation of an Advanced Buffet Suppression System on Full Scale F/A-18 Fin
C07-129 Morphing Wing Flight Control Via Postbuckled Precompressed Piezoelectric Actuators

System Identification

- C07-014** Volterra Kernel Extrapolation for Modeling Nonlinear Aeroelastic Systems at Novel Flight Conditions
C07-182 Adaptive Stochastic Filtering for Online Aircraft Flight Path Reconstruction

Trajectory Optimization

- C07-044** Study of Near-Optimal Endurance-Maximizing Periodic Cruise Trajectories
C07-010 Implementing Time-Based Spacing for Decelerating Approaches

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- C07-160** Magnetometer Autocalibration Leveraging Measurement Locus Constraints
C07-194 Autonomous Airborne Refueling of Unmanned Air Vehicles Using the Global Positioning System

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- C07-115** Failure Forecasting of Aircraft Air Conditioning/Cooling Pack with Field Data

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- C07-184** Application of Probability Methods to Assess Airframe Crash Modeling Uncertainty
C07-125 Method for Multivariate Analysis with Small Sample in Aircraft Cost Estimation
C07-231 Analysis of Visual Cues During Landing Phase by Using Neural Network Modeling
C07-064 Analytical Two-Dimensional Model of a Hybrid (Bolted/Bonded) Single-Lap Joint
C07-003 Analysis of the Airframe Noise of an A320/A321 with a Parametric Method
C07-178 Compressible Unsteady Vortex Lattice Method for Arbitrary Two-Dimensional Motion of Thin Profiles

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- C07-093** Local and Total Density Measurements in Ice Shapes
C07-027 Current Experimental Basis for Modeling Ice Accretions on Swept Wings
C07-183 Measured Statistics of Multicomponent Gust Patterns in Atmospheric Turbulence

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- C07-136** Automated Aircraft Sheet Metal Component Production Technologies

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- C07-140** Methodology for Optimizing Parameters of Noise-Abatement Approach Procedures
C07-241 Specific Weight: A Challenge for a Fuel-Cell-Powered Electric Helicopter
C07-199 Overview on Contrail and Cirrus Cloud Avoidance Technology

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- C07-108** Motion-Visual Phase-Error Detection in a Flight Simulator
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C07-122 Semi-Active Control of Vertical Stroking Helicopter Crew Seat for Enhanced Crashworthiness
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- C07-198** Flight Test Evaluation of a Helicopter Airborne Lidar
C07-042 Geometric Properties of Parachutes Using 3-D Laser Scanning
C07-095 Characterization of Aircraft Wake Vortices by Airborne Coherent Doppler Lidar

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- C07-046** Ranking Based Uncertainty Quantification for a Multifidelity Design Approach
C07-133 Multidisciplinary Design Optimization and Data Mining for Transonic Regional-Jet Wing
C07-146 System-of-Systems Inspired Aircraft Sizing and Airline Resource Allocation via Decomposition

C07-176 Coupled Vehicle Design and Network Flow Optimization for Air Transportation Systems

C07-209 Design "Feasibilization" Using Knowledge-Based Engineering and Optimization Techniques

C07-235 Optimum Aeroelastic Design of a Flapping Wing

C07-126 Interval Analysis-Based Optimum Design of Wing Structures Under Taxiing Loads

C07-113 Multipoint Aerodynamic Design of Wing-Body Configurations for Minimum Drag

C07-171 Preliminary Aerostructural Optimization of a Large Business Jet

C07-158 Optimization of Aifoil Flow Control Using a Genetic Algorithm with Diversity Control Reliability,

Maintainability, and Logistics Support

C07-115 Failure Forecasting of Aircraft Air Conditioning/Cooling Pack with Field Data

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C07-206 Sensitivity of Aircraft Performance to Icing Parameter Variations

C07-029 Calibration and Use of Goodrich Model 0871FA Ice Detectors in Icing Wind Tunnels

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C07-057 Piezoelectric Transducer Actuated Leading Edge De-Icing with Simultaneous Shear and Impulse Forces

C07-196 Hybrid III Numerical Model for Aircraft Seat Crash Performance Assessment

C07-231 Analysis of Visual Cues During Landing Phase by Using Neural Network Modeling

C07-097 Reliability-Based Aircraft Structural Design Pays, Even with Limited Statistical Data

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C07-015 Robust Design of an Aerodynamic Compensation Pitot-Static Tube for Supersonic Aircraft

C07-143 Experimental Training and Validation of a System for Aircraft Acoustic Signature Identification

C07-029 Calibration and Use of Goodrich Model 0871FA Ice Detectors in Icing Wind Tunnels

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C07-046 Ranking Based Uncertainty Quantification for a Multifidelity Design Approach

C07-013 Design of Waverider Configuration with High Lift-Drag Ratio

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C07-046 Ranking Based Uncertainty Quantification for a Multifidelity Design Approach

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C07-044 Study of Near-Optimal Endurance-Maximizing Periodic Cruise Trajectories

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C07-241 Specific Weight: A Challenge for a Fuel-Cell-Powered Electric Helicopter

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C07-053 Wake Vortex Model for Real-Time Flight Simulation Based on Large Eddy Simulation

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C07-209 Design "Feasibilization" Using Knowledge-Based Engineering and Optimization Techniques

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C07-205 In-Flight GPS-Signal-Reception Anomalies of Helicopters

C07-193 Assessment of Ionosphere Spatial Decorrelation for Global Positioning System-Based Aircraft Landing Systems

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C07-019 A Tensile Stress Concentration Equation for Countersunk Holes

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C07-049 Advancements in Aircraft Model Force and Attitude Instrumentation by Integrating Statistical Methods

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C07-087 Experimental Evaluation of an Advanced Buffet Suppression System on Full Scale F/A-18 Fin

C07-006 Transient and Limit Cycle Simulation of a Nonlinear Aeroelastic System

C07-094 Two-Dimensional Unsteady Aerodynamic Application to Higher Harmonic Control Test Data

C07-119 Surface Splines Generalization and Large Deflection Interpolation

C07-137 Supersonic Nonlinear Panel Flutter Suppression Using Shape Memory Alloys

C07-005 Computational Aeroelastic Analysis of Store-Induced Limit-Cycle Oscillation

C07-002 Gust Loads Alleviation Using Special Control Surfaces

C07-067 Case of Explosive Wing-Flap Flap Flutter

C07-007 Active Control of Wing Flutter Using Piezoactuated Surface

C07-240 Bending-Torsion Divergence of a Clamped-Clamped Composite Wing

C07-236 Parametric Studies on Ground Vibration Test Modeling for Highly Flexible Aircraft

C07-181 Nonlinear Flight Dynamics of Very Flexible Aircraft

C07-117 Reduced Order Aerodynamic Model for Aeroelastic Analysis of Complex Configurations in Incompressible Flow

C07-246 Reduced-Order-Model-Based Flutter Analysis at High Angle of Attack

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C07-065 Finite Element Modeling of a Bird Striking an Engine Fan Blade

C07-006 Transient and Limit Cycle Simulation of a Nonlinear Aeroelastic System

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C07-130 Investigation of Self-Resetting Active Multistable Laminates

C07-144 Topology Synthesis of Distributed Actuation Systems for Morphing Wing Structures

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C07-069 Adaptive Compensation Control of Synthetic Jet Actuator Arrays for Airfoil Virtual Shaping

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C07-051 Effect of Hydrogen and Hold Time on the Lifetime of AF1410 Steel

C07-232 Bending of Bonded Composite Repairs for Aluminum Aircraft Structures: A Design Study

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C07-155 Probabilistic Approach to Damage Tolerance Design of Aircraft Composite Structures

C07-130 Investigation of Self-Resetting Active Multistable Laminates

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C07-114 Fuzzy-Logic-Based Health Monitoring and Residual-Life Prediction for Composite Helicopter Rotor

C07-157 Doubly Curved Anisotropic Sandwich Panels: Modeling and Free Vibration

C07-240 Bending-Torsion Divergence of a Clamped-Clamped Composite Wing

C07-188 Thermal Buckling and Nonlinear Flutter Behavior of Functionally Graded Material Panels

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C07-209 Design "Feasibilization" Using Knowledge-Based Engineering and Optimization Techniques

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C07-040 Analysis of the Effects of Interference and Sealant on Riveted Lap Joints
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C07-155 Probabilistic Approach to Damage Tolerance Design of Aircraft Composite Structures
C07-153 Residual Strength of Panels with Cracks Based on a Plastic Hinge
C07-232 Bending of Bonded Composite Repairs for Aluminum Aircraft Structures: A Design Study

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C07-153 Residual Strength of Panels with Cracks Based on a Plastic Hinge
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C07-051 Effect of Hydrogen and Hold Time on the Lifetime of AF1410 Steel
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C07-230 Lateral Response of Nose-Wheel Landing Gear System to Ground-Induced Excitation
C07-057 Piezoelectric Transducer Actuated Leading Edge De-Icing with Simultaneous Shear and Impulse Forces
C07-073 Cantilevered Plate Rayleigh–Ritz Trial Function Selection for von Kármán’s Plate Equations
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C07-091 Unstable, Cyclically Symmetric and Stable, Asymmetric Pumpkin-Balloon Configurations
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C07-196 Hybrid III Numerical Model for Aircraft Seat Crash Performance Assessment
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C07-138 Analysis Method for Inertial Particle Separator
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