Institute for Aviation Research Reports

**Box 1**

- **87-101** Estimating Practical Maximum Flight Hours for General Aviation Turboprop and Jet Aircraft
- **87-102** General Aviation Aircraft Utilization Forecasts: 1986-1987
- **87-103** Explaining General Aviation Aircraft Utilization
- **87-104** Demand Estimates for New General Aviation Aircraft
- **87-105** On Estimating Aircraft Nonlinear Rotary Derivatives from Static Wind Tunnel Data
- **87-106** Solid Particle Erosion in Composite Materials
- **88-101** Wind Tunnel Model Loads Analysis Fairchild Metro V Empennage
- **88-108** Description of the Auxiliary Blowing-Air System for the WSU 7x10-Foot Low-Speed Wind Tunnel
- **88-109** X-Ray Characterization of Undoped Semi-Insulating GaAs and Effect of Oxide Films on Fatigue Behavior of Al-Li
- **88-110** Compilation of Characteristics of Airfoils at High Angles of Attack
- **88-111** Predicting Optimal Drooped Leading-Edge Extension Length for an NACA 0015 Wing Through Flow Visualization
- **88-114** Separated Flow Fields Measurements on a Wing with a Discontinuous Leading Edge
- **88-115** Implementing Distributed ADA Tasking by Emulating the Rendevous
- **88-117** Testimony of Dr. Wentz to Senator Kassebaum
- **88-118** User’s Guide to the WSU Engineering Shop Cam System
- **88-121** New Perceptions Concerning the Calculation of Boundary Layers by Means of Simple Quadrature Formulate, Part I
- **88-122** Autoclave Tooling for Thermoplastic/Graphite Composites
- **88-123** Final Report on Heat Capacity and Postiron Lifetime Measurements and Analysis on Rapidly Quenched Iron-Base Alloys Containing Noble Gases
- **88-124B** Utilization of General Aviation Turbine Aircraft and New Turbine Sales
- **89-1** Final Report IAR Research Project
- **89-2** “Economics 101" for General Aviation Manufacturers
- **89-3** Toward the Optimization of a Non-Diffusing, Two-Dimensional S-Shaped Duct
- **89-4 Part I** Erosion Mechanisms in Composite Materials and Ripple Formation
Mechanism in Erosion

89-4 Part II Erosion Mechanisms in Composite Materials and Ripple Formation
Mechanism in Erosion

89-7 Applying Formal Models and Proofs to the Verification of Distributed Systems

89-8 Fracture of Graphite/Polymer Composite Panels with Large Center Cracks

89-10 A Parametric Study of Counterflow Heat Exchanger Transients

89-11 A Comparison of the post-Buckling Behavior of Metallic and Composite Plates with Centrally Located Cutouts

89-13 Crack Growth Resistance and Fracture Analysis of Graphite/Peak and Graphite/Epoxy Laminate Containing Large Center Cracks

89-14 The Effects of Special Orientations on the Fracture Behavior of Graphite/Epoxy Laminate

89-15 Annual Report FY89 and Business Plan for FY90-FY95

Box 2

89-16 Elevator Tab Assembly Producibility Study

89-18 A NASA/University/Industry Consortium for Research on Aircraft Ice Protection

89-19 Computational Crash Dynamics Final Report FAA Contract DTFA 03-86-C-00041

89-21 Choosing a Pilot Subjective Workload Scale to Fit Flight Operational Requirements

89-22 Final Report on Suitability of Electrodeposition Process for High Temperature Superconductors

89-23 Mechanical Paint Removal Techniques for Aircraft Structures (Masters Thesis)

89-24 A Study of the Fatigue Behavior in Scratched Samples of Al-Li Alloy (2090-T3) (Masters Thesis)

89-25 Analysis of Strain Relaxation in Au/Ni Multilayers by X-Ray Diffraction

89-26 A Simulation Code for Turbocompound Diesel Engines

90-2 Numerical Analysis of Three-Dimensional Particle-Laden Flow Equations

90-3 A Trend Analysis of Women Who Hold Federal Aviation Administration Certificates: Relationship to the Representation of Women in Collegiate Aviation Faculty Ranks

90-4 Neural Networks for Detecting Defects in Aircraft Structures