Pepper, W. B., C85-060 Plumer, J. A., C85-078 Pope, L. D., C85-143 Pototzky, A. S., C85-071 Powell, C. A., C85-143, C85-170 Powers, S. A., C85-144 Preisser, J. S., C85-008 Prydz, R. A., C85-098 Qiu, C., C85-177 Rand, O., C85-012 Rao, D. M., C85-093 Rasch, N. O., C85-078 Reddy, A. D., C85-045 Reding, J. P., C85-023, C85-058, C85-119 Rehfield, L. W., C85-045 Reid, L. D., C85-020 Reubush, D. E., C85-052 Revell, J. D., C85-098 Reynolds, C. N., C85-188 Riba, W. L., C85-196 Ringel, M., C85-175 Rizk, M. H., C85-096 Rizzi, A., C85-057 Rodden, W. P., C85-146 Roger, K. L., C85-046 Rosen, A., C85-012 Rosenberg, R. E., C85-161

Rosenthal, G., C85-144

Ross, E. W., Jr., C85-167 Ross, R., C85-194 Rudd, J. L., C85-147, C85-148 Ruhlin, C. L., C85-111 Rumsey, C. L., C85-030 Ruo, S. Y., C85-004 Rusak, Z., C85-137 Rust, W. D., C85-086 Schetz, J. A., C85-031 Schock, R. W., C85-149 Schuch, G., C85-161 Schweikhard, W. G., C85-075, C85-120 Seginer, A., C85-121, C85-137 Selberg, B. P., C85-074 Shang, J. S., C85-069 Shankar, V., C85-160, C85-196 Shaw, R. J., C85-132 Shmilovich, A., C85-089, C85-110 Shrout, B. L., C85-044 Silcox, R. J., C85-008 Simos, D., C85-125 Smith, H. W., C85-082 Soinne, E., C85-101 Soovere, J., C85-047 Sorenson, R. L., C85-007 Stanewsky, E., C85-005 Stark, V. J. E., C84-140 Staufenbiel, R. W., C85-183

Steinhoff, J. S., C85-036 Stewart, E. C., C85-051 Stirling, W. V., C85-144 Stough, H. P., C85-051 Strout, F. G., C85-194 Sugavanam, A., C85-182 Sullivan, P. A., C85-022 Szema, K., C85-196 Tai, T. C., C85-158 Takanashi, S., C85-123 Talcott, N. A., Jr., C85-160 Taverna, F. P., C85-145 Taylor, W. L., C85-086 Thiede, P., C85-005 Thompson, H. D., C85-049 Thrasher, D. F., C85-006 Tischler, M. B., C83-169 Torvik, P. J., C85-202 Treaster, A. L., C85-042 Trevino, G., C85-150 Trippi, A., C85-002 Tuell, L. P., C85-149 Vaicaitis, R., C85-054, C85-056 Valisetty, R. R., C85-045 van der Kolk, J. T., C85-189 Venkatesan, C., C85-029, C85-173 Venkayya, V. B., C85-202 Vinson, P. W., C85-053 Walsh, K. R., C85-195

Ward, D. T., C85-092 Wasserstrom, E., C85-137 Watson, L., C85-006 Weatherill, N. P., C85-156 Wedemeyer, E., C85-197 Wehrman, M. D., C85-181 Weisshaar, T. A., C85-028 Wentz, W. H., Jr., C85-011 White, S. N., C85-162 Wiler, C. D., C85-162 Wilkinson, R. L., C85-129 Williams, G. C., C85-109 Wingrove, R. C., C85-025, C85-105 Wood, R. M., C85-077, C85-090, C85-091 Woodson, S. H., C85-113 Xieyuan, Y., C85-014 Yan, Z., C85-177 Yang, H. T. Y., C85-139 Yang, J. K., C85-130 Yang, J. N., C85-076, C85-147 Yang, T. Y., C85-073 Yankulich, M., C85-135 Yaros, S. F., C85-052 Yechout, T. R., C85-075 Yetter, J. A., C85-052 Zhou, W., C85-177 Zhu, S., C85-112 Zwaan, R. J., C85-153.

Chronological Index

C82-028 Prediction of Subsonic Aerodynamic Characteristics: A Case for Low-Order Panel Methods. Brian Maskew, *Analytical Methods, Inc.* (19, 2, p. 157) Article based on AIAA Paper 81-0252

Technical Comment by Gabor Gy. Groh, *University of California* (22, 1, p. 92) Reply (22, 1, p. 93)

C83-020 Aerodynamic Estimation Techniques for Aerostats and Airships. S. P. Jones and J. D. DeLaurier, TCOM Corporation (20, 2, p. 120) Article based on AIAA Paper 81-1339 CP815 Technical Comment by B. Etkin and G. D'Eleuterio, Institute for Aerospace Studies, University of Toronto (22, 11, p. 1023)

Reply (22, 11, p. 1023)

C83-130 Apparent-Mass Coefficients for Isosceles Triangles and Cross Sections Formed by Two Circles. Ming-Ke Huang and Chuen-Yen Chow, University of Colorado (20, 9, p. 810) Article Technical Comment by Peter R. Payne, Ketron, Inc., Annapolis (22, 4, p. 349)
Reply (22, 4, p. 351)

C83-169 Effects of Atmospheric Turbulence on a Quadrotor Heavy Lift Airship. Mark B. Tischler, U. S. Army Research and Technology Laboratories; and Henry R. Jex, Systems Technology, Inc. (20, 12, p. 1050) Article based on AIAA Paper 82-1542 CP825

Technical Comment by B. Etkin, *University of Toronto* (22, 1, p. 93)

Reply (22, 1, p. 95)

C84-047 Aerodynamic Measurements About a Rotating Propeller with a Laser Velocimeter. J. Lepicovsky and W.A. Bell, Lockheed-Georgia Company (21, 4, p. 264) Article based on AIAA Paper 83-1354

Technical Comment by Sukeyuki Kobayashi, ORI, Inc., Maryland; and Stuart D. Jessup, David W. Taylor Naval Ship R&D Center (22, 5, p. 448)

Reply (22, 5, p. 448)

C84-062 Application of Computational Aerodynamics to Airplane Design. Luis R. Miranda, Lockheed-California Company (21, 6, p. 355) Survey Paper based on AIAA Paper 82-0018 Technical Comment by John L. Hess, McDonnell Douglas Corporation (22, 4, p. 351) Reply (22, 4, p. 352)

C84-068 Thrust Vector Control of a V/STOL Airship. B.L. Nagabhushan and G.D. Faiss, Goodyear Aerospace Corporation (21, 6, p. 408) Article

Technical Comment by James D. Lowe, *Institute for Aerospace Studies, University of Toronto* (22, 4, p. 348) Reply (22, 4, p. 348)

C84-128 High-Lift Airfoil Design from the Hodograph. M. J. Cohen, *Ben-Gurion University of the Negev* (21, 10, p. 760) Article

Errata (22, 5, p. 447)

C84-140 Induced Drag and Lift of Wing by the Piecewise Continuous Kernel Function Method. I. Lottati, Technion-Israel Institute of Technology (21, 11, p. 833) Synoptic Technical Comment by Valter J. E. Stark, Saab Scania AB (22, 6, p. 544)

Reply (22, 6, p. 544)

C85-001 Aerodynamic Characteristics of an Airfoil in a Nonuniform Wind Profile. Francis M. Payne and Robert C. Nelson, *University of Notre Dame* (22, 1, p. 5) Article based on AIAA Paper 82-0214

C85-002 Unsteady Response of an Axial Flow Compressor to Planar Temperature Transients. D.K. Das, SUNY College of Technology; A. Trippi, Cranfield Institute of Technology; and R.E. Peacock, Naval Postgraduate School (22, 1, p. 11) Article based on AIAA Paper 82-1266

C85-003 Compressible Lifting Surface Theory for Propeller Performance Calculation. Donald B. Hanson, *Hamilton Standard* (22, 1, p. 19) Article based on AIAA Paper 82-0020

- C85-004 Steady and Unsteady Transonic Airloads on a Supercritical Wing. S. Y. Ruo and J. B. Malone, Lockheed-Georgia Company; J. J. Horsten and R. Houwink, National Aerospace Laboratory (The Netherlands) (22, 1, p. 28) Article based on AIAA Paper 83-1686
- C85-005 Effects of Suction on Shock/Boundary-Layer Interaction and Shock-Induced Separation. P. Krogmann and E. Stanewsky, DFVLR, Institute for Experimental Fluid Mechanics; and P. Thiede, Messerschmitt Bolkow Blohm GmbH. (22, 1, p. 37) Article based on AIAA Paper 84-0098
- C85-006 A Vortex-Lattice Method for General, Unsteady Aerodynamics. P. Konstadinopoulos, Virginia Plytechnic Institute and State University; D. F. Thrasher, D. T. Mook, A. H. Nayfeh and L. Watson, Virginia Polytechnic Institute and State University (22, 1, p. 43) Article
- C85-007 Transonic Solutions for a Multielement Airfoil Using the Full-Potential Equations. J. Flores, T. L. Holst and R. L. Sorenson, *NASA Ames Research Center* (22, 1, p. 50) Article based on AIAA Paper 84-0300
- C85-008 Flight Study of Induced Turbofan Inlet Acoustic Radiation with Theoretical Comparisons. J. S. Preisser and R. J. Silcox, NASA Langley Research Center; W. Eversman and A. V. Parrett, University of Missouri-Rolla (22, 1, p. 57) Article based on AIAA Paper 84-0499
- C85-009 Propagation of Propeller Tone Noise Through a Fuselage Boundary Layer. D. B. Hanson and B. Magliozzi, *Hamilton Standard* (22, 1, p. 63) Article based on AIAA Paper 84-0248
- C85-010 The Influence of Leading-Edge Load Alleviation on Supersonic Wing Design. Christine M. Darden, NASA Langley Research Center (22, 1, p. 71) Article based on AIAA Paper 84-0138
- **C85-011 Flow over Double-Delta Wing and Wing Body at High** α. David Manor, *Parks College*; and William H. Wentz Jr., *Wichita State University* (22, 1, p. 78) Article
- C85-012 The Aerodynamic Behavior of Infinite Swept Wings: Another Point of View. A. Rosen and O. Rand, *Technion-Israel Institute of Technology* (22, 1, p. 83) Engineering Note
- C85-013 Economical Influence Function Calibrations Using the Distributed Loads Code. K. Scott Keen, Calspan Field Services Inc., Arnold Air Force Station (22, 1, p. 85) Engineering Note
- C85-014 Roll Up of Strake Leading/Trailing-Edge Vortex Sheets for Double-Delta Wings. Yin Xieyuan, *The University of Connecticut* (22, 1, p. 87) Engineering Note
- C85-015 Determination of Subcritical Damping in CF-5 Flight Flutter Tests. B. H. K. Lee, National Aeronautical Establishment, National Research Council (Canada) (22, 1, p. 89) Engineering Note
- C85-020 Nonlinear Simulation of Flight Along Wind Compensating Curved Glidepaths. A. B. Markov, Defence Research Establishment Suffield (Canada); and L. D. Reid, University of Toronto Institute for Aerospace Studies (22, 2, p. 97) Synoptic
- C85-021 Flowfield Analysis of Low Bypass Ratio Test Cells. S. L. Kromer and D. A. Dietrich, General Electric Company (22, 2, p. 99) Synoptic based on AIAA Paper 84-0285
- C85-022 Skirt Material Effects on Air Cushion Dynamic Heave Stability. T. A. Graham, P. A. Sullivan and M. J. Hinchey,

- University of Toronto (22, 2, p. 101) Article based on AIAA Paper 83-0369
- C85-023 Ground Interference Effects on Subsonic Dynamic Stall in Pitch and Plunge. L. E. Ericsson and J. P. Reding, Lockheed Missiles & Space Company, Inc. (22, 2, p. 109) Article based on AIAA Paper 83-0889 CP832
- C85-024 Field-Incidence Noise Transmission Loss of General Aviation Aircraft Double-Wall Configurations. Ferdinand W. Grosveld, *The Bionetics Corporation* (22, 2, p. 117) Article
- C85-025 Identification of Vortex-Induced Clear Air Turbulence Using Airline Flight Records. E. K. Parks, University of Arizona; R. C. Wingrove, R. E. Bach and R. S. Mehta, NASA Ames Research Center (22, 2, p. 124) Article based on AIAA Paper 84-0270
- C85-026 Experimental Aerodynamic Characteristics of an NACA 0012 Airfoil with Simulated Ice. K. D. Korkan, E. J. Cross Jr. and C. C. Cornell, *Texas A&M University* (22, 2, p. 130) Article based on AIAA Paper 84-0184
- C85-027 Analysis of a Split-Flow Inertial Particle Separator by Finite Elements. D. S. Breitman, E. G. Dueck and W. G. Habashi, *Pratt & Whitney Canada* (22, 2, p. 135) Article
- C85-028 Vibration Tailoring of Advanced Composite Lifting Surfaces. Terrence A. Weisshaar, *Purdue University*; and Brian L. Foist, *Northrop Corporation* (22, 2, p. 141) Article based on AIAA Paper 83-0961 CP831
- C85-029 Coupled Helicopter Rotor/Body Aeromechanical Stability Comparison of Theoretical and Experimental Results. P. P. Friedmann and C. Venkatesan, *University of California* (22, 2, p. 148) Article
- C85-030 Evaluation of a Stalled Airfoil Analysis Program. Christopher L. Rumsey, NASA Langley Research Center (22, 2, p. 156) Engineering Note
- C85-031 Experimental Results for Reynolds Number Effects on Trailing Vortices. H. Lee and J. A. Schetz, Virginia Polytechnic Institute and State University (22, 2, p. 158) Engineering Note based on AIAA Paper 83-1868 CP833
- C85-032 Tests of Wall Suction and Blowing in Highly Offset Diffusers. W. H. Ball, *Boeing Military Airplane Company* (22, 3, p. 161) Article based on AIAA Paper 83-1169
- C85-033 Experimental Definition of Nonaxisymmetric Exhaust Nozzle Plumes. Michael Compton and Douglas Bowers, *Air Force Wright Aeronautical Laboratories* (22, 3, p. 168) Article based on AIAA Paper 83-1290
- C85-034 Rotating Stall Cells in a Low-Speed Axial Flow Compressor. F. A. E. Breugelmans and K. Mathioudakis, von Karman Institute for Fluid Dynamics (Belgium); and F. Casalini, University of Bari (Italy) (22, 3, p. 175) Article
- C85-035 Impact of Computational Fluid Dynamics on Development Test Facilities. Robert H. Korkegi, *National Research Council, Washington, D. C.* (22, 3, p. 182) Article based on AIAA Paper 83-1764
- C85-036 Computation of Wind Tunnel Wall Effects in Ducted Rotor Experiments. A. L. Loeffler Jr., Grumman Aerospace Corporation; and J. S. Steinhoff, University of Tennessee Space Institute (22, 3, p. 188) Article based on AIAA Paper 82-0241
- C85-037 Efficient Algorithm for Unsteady Transonic Aerodynamics of Low-Aspect-Ratio Wings. Guru P. Guruswamy,

- Informatics General Corporation; and Peter M. Goorjian, NASA Ames Research Center (22, 3, p. 193) Article based on AIAA Paper 84-0872 CP844
- C85-038 A Method for Flight-Test Determination of Propulsive Efficiency and Drag. Gifford Bull and Philip D. Bridges, Mississippi State University (22, 3, p. 200) Article based on AIAA Paper 83-2750
- C85-039 A Comparison of Separated Flow Airfoil Analysis Methods. John D. Blascovich, *Grumman Aerospace Corporation* (22, 3, p. 208) Article based on AIAA Paper 84-0048
- C85-040 A Slotted Test Section Numerical Model for Interference Assessment. William B. Kemp Jr., *The College of William and Mary* (22, 3, p. 216) Article based on AIAA Paper 84-0627 CP841
- C85-041 Subsonic Wing Rock of Slender Delta Wings. P. Konstadinopoulos, D. T. Mook and A. H. Nayfeh, *Virginia Polytechnic Institute and State University* (22, 3, p. 223) Article based on AIAA Paper 85-0198
- C85-042 Sidewall Boundary-Layer Correction in Subsonic, Two-Dimensional Airfoil/Hydrofoil Testing. A. L. Treaster and G. B. Gurney, *The Pennsylvania State University*; and P. P. Jacobs Jr., *Edwards Air Force Base* (22, 3, p. 229) Article based on AIAA Paper 84-1366
- C85-043 The Effects of Gusts on the Fulctuating Airloads of Airfoils in Transonic Flow. W. J. McCroskey, NASA Ames Research Center (22, 3, p. 236) Article based on AIAA Paper 84-1580
- C85-044 Wing Design with Attainable Leading-Edge Thrust Considerations. Harry W. Carlson, Kentron International, Inc.; Barrett L. Shrout and Christine M. Darden, NASA Langley Research Center (22, 3, p. 244) Article based on AIAA Paper 84-2194
- C85-045 Continuous Filament Wound Composite Concepts for Aircraft Fuselage Structures. Ambur D. Reddy, R. Rao Valisetty and Lawrence W. Rehfield, *Georgia Institute of Technology* (22, 3, p. 249) Article based on AIAA Paper 84-0869 CP844
- C85-046 Nonplanar Doublet Lattices. Kenneth L. Roger, Boeing Military Airplane Company (22, 3, p. 256) Engineering Note
- C85-047 The Effect of Acoustic/Thermal Environments on Advanced Composite Fuselage Panels. J. Soovere, Lockheed-California Company (22, 4, p. 257) Article based on AIAA Paper 83-0955 CP831
- C85-048 Progress Toward Magnetic Suspension and Balance Systems for Large Wind Tunnels. C. P. Britcher, NASA Langley Research Center (22, 4, p. 264) Article based on AIAA Paper 84-0413
- C85-049 An Analytical and Experimental Investigation of Annular Propulsive Nozzles. Ralph R. Conley, McDonnell Douglas Astronautics Company; Joe D. Hoffman and H. Doyle Thompson, Purdue University (22, 4, p. 270) Article based on AIAA Paper 84-0282
- C85-050 Approach and Landing Technologies for STOL Fighter Configurations. Daniel W. Banks and John W. Paulson Jr., NASA Langley Research Center (22, 4, p. 277) Article based on AIAA Paper 84-0334

- C85-051 Discontinuous Wing Leading Edge to Enhance Spin Resistance. Daniel J. DiCarlo, Kenneth E. Glover, Eric C. Stewart and H. Paul Stough, *NASA Langley Research Center* (22, 4, p. 283) Article
- C85-052 Flowfield Investigation of a Supercruise Fighter Model. David E. Reubush, E. Ann Bare and Steven F. Yaros, NASA Langley Research Center; and Jeffrey A. Yetter, Boeing Military Airplane Company (22, 4, p. 289) Article based on AIAA Paper 84-1331
- C85-053 Studies of Convertible Turboshaft/Turbofan Engines for High-Speed Rotorcraft. R. E. Neitzel, R. Hirschkron and P. W. Vinson, *General Electric Company* (22, 4, p. 296) Article based on AIAA Paper 84-1268
- C85-054 Noise Transmission Through Aircraft Panels. R. Vaicaitis, Columbia University; F. W. Grosveld, Bionetics Corporation; and J. S. Mixson, NASA Langley Research Center (22, 4, p. 303) Article based on AIAA Paper 84-0911 CP844
- C85-055 Computation of Three-Dimensional Viscous Flows Using a Space-Marching Method. K. N. S. Murthy and B. Lakshminarayana, *The Pennsylvania State University* (22, 4, p. 311) Article based on AIAA Paper 84-1298
- C85-056 Theoretical Design of Acoustic Treatment for Noise Control in a Turboprop Aircraft. R. Vaicaitis, Columbia University; and J. S. Mixson, NASA Langley Research Center (22, 4, p. 318) Article based on AIAA Paper 84-2328
- C85-057 Euler Solutions of Transonic Vortex Flows Around the Dillner Wing. Arthur Rizzi, *The Aeronautical Research Institute of Sweden* (22, 4, p. 325) Article based on AIAA Paper 84-2142
- C85-058 Dynamics of Forebody Flow Separation and Associated Vortices. L. E. Ericsson and J. P. Reding, Lockheed Missiles & Space Company, Inc. (22, 4, p. 329) Article based on AIAA Paper 83-2118
- C85-059 Measured and Calculated Airloads on a Transport Wing Model. William E. McCain, NASA Langley Research Center (22, 4, p. 336) Article based on AIAA Paper 84-0301
- C85-060 A 73-ft Cross Parachute for Cargo Delivery. William B. Pepper, Horace Lucero, Paul C. Klimas and Raymond A. Klein, Sandia National Laboratories; and H. E. Antkowiak, U. S. Army Natick Research and Development Laboratories (22, 4, p. 343) Engineering Note based on AIAA Paper 84-0790 CP843
- C85-061 A Theorem on Swirl Loss in Propeller Wakes. C. W. McCutchen, *National Institutes of Health, Maryland* (22, 4, p. 344) Engineering Note
- C85-062 The Unsuitability of Ellipsoids as Test Cases for Line-Source Methods. John L. Hess, McDonnell Douglas Corporation (22, 4, p. 346) Engineering Note
- C85-069 An Assessment of Numerical Solutions of the Compressible Navier-Stokes Equations. J. S. Shang, *Air Force Wright Aeronautical Laboratories* (22, 5, p. 353) Survey Paper based on AIAA Paper 84-1549
- **C85-070 A Harmonic Gradient Method for Unsteady Supersonic Flow Calculations.** Ping-Chih Chen, *Northrop Corporation*; and D. D. Liu, *Arizona State University* (22, 5, p. 371) Article based on AIAA Paper 83-0887 CP831

- C85-071 Design of a Flutter Suppression System for an Experimental Drone Aircraft. Jerry R. Newsom, NASA Langley Research Center; Anthony S. Pototzky, Kentron International, Inc.; and Irving Abel, NASA Langley Research Center (22, 5, p. 380) Article based on AIAA Paper 83-0990 CP832
- C85-072 Aerodynamic Characteristics of Noncircular Bodies in Flat Spin and Coning Motions. L. E. Ericsson, Lockheed Missiles & Space Company (22, 5, p. 387) Article based on AIAA Paper 84-0508
- C85-073 Transonic Time Responses of the MBB A-3 Supercritical Airfoil Including Active Controls. J. T. Batina and T. Y. Yang, *Purdue University* (22, 5, p. 393) Article based on AIAA Paper 84-0873 CP844
- C85-074 Aerodynamic Canard/Wing Parametric Analysis for General-Aviation Applications. Michael W. Keith and Bruce P. Selberg, *University of Missouri* (22, 5, p. 401) Article based on AIAA Paper 00100
- C85-075 Flight-Test Evaluation of Engine Power Effects on Lift and Drag. T. R. Yechout, *United States Air Force Academy*; W. G. Schweikhard and K. B. Braman, *University of Kansas* (22, 5, p. 409) Article based on AIAA Paper 02400
- C85-076 Fatigue Reliability of Gas Turbine Engine Components under Scheduled Inspection Maintenance. J. N. Yang and Shiung Chen, *The George Washington University* (22, 5, p. 415) Article based on AIAA Paper 84-0850 CP844
- C85-077 Impact of Fuselage Incidence on the Supersonic Aerodynamics of Two Fighter Configurations. Richard M. Wood and David S. Miller, NASA Langley Research Center (22, 5, p. 423) Article based on AIAA Paper 84-2193
- C85-078 Recent Data from the Airlines Lightning Strike Reporting Project. J. Anderson Plumer, Lightning Technologies Inc.; Nickolus O. Rasch and Michael S. Glynn, Federal Aviation Administration Technical Center (22, 5, p. 429) Article based on AIAA Paper 84-2406
- C85-079 Noise Transmission Through an Acoustically Treated and Honeycomb-Stiffened Aircraft Sidewall. Ferdinand W. Grosveld, *The Bionetics Corporation*; and John S. Mixson, *NASA Lnagley Research Center* (22, 5, p. 434) Article based on AIAA Paper 84-2329
- C85-080 A Possible Causative Flow Mechanism for Body Rock.
 L. E. Ericsson, Lockheed Missiles & Space Company, Inc. (22, 5, p. 441) Engineering Note
 Errata (22, 11, p. 1022)
- C85-081 A Composite Model of Aircraft Noise. Robert G. Melton, *The Pennsylvania State University* (22, 5, p. 443) Engineering Note
- C85-082 Airplane Designer's Checklist for Occupant Injury Prevention. Howard Wesley Smith, *The University of Kansas* (22, 5, p. 444) Engineering Note based on AIAA Paper 84-2520
- C85-086 Lightning and Related Phenomena in Isolated Thunderstorms and Squall Line Systems. W. D. Rust, W. L. Taylor, D. R. MacGorman and E. Brandes, National Severe Storms Laboratory, NOAA; V. Mazur, University of Oklahoma; R. Arnold and T. Marshall, University of Mississippi; H. Christian and S. J. Goodman, NASA Marshall Space Center (22, 6, p. 449) Article based on AIAA Paper 84-0467

- **C85-087 Thrust Reverser Effects on Fighter Aircraft Aerodynamics.** A. Glezer, R. V. Hughes and B. L. Hunt, *Northrop Corporation* (22, 6, p. 455) Article
- C85-088 The Catastrophic Failure of Pressurized Graphite/Epoxy Cylinders Initiated by Slits at Various Angles. S. G. Chang and J. W. Mar, *Massachussets Institute of Technology* (22, 6, p. 462) Article based on AIAA Paper 84-0887 CP844
- **C85-089 Grid Generation for Wing-Tail-Fuselage Configurations.** Arvin Shmilovich and D. A. Caughey, *Cornell University* (22, 6, p. 467) Article
- C85-090 Assessment of Preliminary Prediction Techniques for Wing Leading-Edge Vortex Flows at Supersonic Speeds. Richard M. Wood and David S. Miller, NASA Langley Research Center (22, 6, p. 473) Article based on AIAA Paper 84-2208
- C85-091 Fundamental Aerodynamic Characteristics of Delta Wings with Leading-Edge Vortex Flows. Richard M. Wood and David S. Miller, NASA Langley Research Center (22, 6, p. 479) Article based on AIAA Paper 84-2208
- C85-092 Design Parameters for Flow Energizers. D. T. Ward and R. S. Binford, Texas A&M University (22, 6, p. 486) Article
- C85-093 An Investigation of the Tabbed Vortex Flap. Keith D. Hoffler and Dhanvada M. Rao, Vigyan Research Associates Inc. (22, 6, p. 490) Article based on AIAA Paper 84-2173
- C85-094 Transonic Shock Interaction with a Tangentially Injected Turbulent Boundary Layer. G. R. Inger, *Iowa State University* (22, 6, p. 498) Article based on AIAA Paper 84-0094
- C85-095 Droplet Sized Distribution Effects on Aircraft Ice Accretion. R. John Hansman Jr., Massachussetts Institute of Technology (22, 6, p. 503) Article based on AIAA Paper 84-0108
- C85-096 Application of the Single-Cycle Optimization Approach to Aerodynamic Design. Magdi H. Rizk, Flow Industries, Inc. (22, 6, p. 509) Article based on AIAA Paper 84-2165
- C85-097 Axisymmetric Bluff-Body Drag Reduction Through Geometrical Modification. Floyd G. Howard and Wesley L. Goodman, NASA Langley Research Center (22, 6, p. 516) Article
- **C85-098** Evaluation of Interior Noise Control Treatments for Advanced Turboprop Aircraft. R. A. Prydz, J. D. Revell, F. J. Balena and J. L. Hayward, *Lockheed-California Company* (22, 6, p. 523) Article based on AIAA Paper 83-0693
- C85-099 Measurement of Ice Accretion Using Ultrasonic Pulse-Echo Techniques. R. John Hansman Jr. and Mark S. Kirby, Massachusetts Institute of Technology (22, 6, p. 530) Article based on AIAA Paper 85-0471
- **C85-100** Scale-Model Tests of Airfoils in Simulated Heavy Rain. E. C. Hastings Jr. and G. S. Manuel, *NASA Langley Research Center* (22, 6, p. 536) Article based on AIAA Paper 85-0259
- C85-101 An Inverse Boundary Element Method for Single Component Airfoil Design. Erkki Soinne and Seppo Laine, Helsinki University of Technology (22, 6, p. 541) Engineering Note

- C85-104 Computational/Experimental Pressure Distributions on a Transonic, Low-Aspect-Ratio Wing. Earl R. Keener, NASA Ames Research Center (22, 7, p. 545) Synoptic based on AIAA Paper 84-2092
- C85-105 Applications of State Estimation in Aircraft Flight-Data Analysis. Ralph E. Bach Jr. and Rodney C. Wingrove, NASA Ames Research Center (22, 7, p. 547) Article based on AIAA Paper 83-2087
- C85-106 Classical and Neo-Classical Cruise-Dash Optimization. K. D. Bilimoria, E. M. Cliff and H. J. Kelley, Virginia Polytechnic Institute and State University (22, 7, p. 555) Article based on AIAA Paper 84-2125 CP849
- C85-107 Aircraft Performance in a JAWS Microburst. Walter Frost and Ho-Pen Chang, *The University of Tennessee Space Institute*; John McCarthy and Kimberly L. Elmore, *National Center for Atmospheric Research* (22, 7, p. 561) Article
- C85-108 Pilot Production of Superplastically Formed/Diffusion Bonded T-38 Main Landing Gear Doors. Walter Leodolter, Douglas Aircraft Company, McDonnell Douglas Corporation (22, 7, p. 568) Article based on AIAA Paper 84-0933 CP844
- C85-109 Interply Degradation Effects on Composite Structural Response. Christos C. Chamis, NASA Lewis Research Center; and George C. Williams, The University of Arizona (22, 7, p. 573) Article based on AIAA Paper 84-0849 CP844
- C85-110 Multigrid Calculation of Transonic Flow Past Wing-Tail-Fuselage Combinations. Arvin Shmilovich and D. A. Caughey, *Cornell University* (22, 7, p. 581) Article
- C85-111 Winglet Effects on the Flutter of a Twin-Engine Transport-Type Wing. Kumar G. Bhatia and K. S. Nagaraja, *Boeing Commercial Airplane Company*; and Charles L. Ruhlin, *NASA Langley Research Center* (22, 7, p. 587) Article based on AIAA Paper 84-0905 CP844
- C85-112 Model of the Wind Field in a Downburst. Shangxiang Zhu and Bernard Etkin, *University of Toronto* (22, 7, p. 595) Article
- C85-113 Numerical and Experimental Determination of Secondary Separation on Delta Wings in Subsonic Flow. Fred R. DeJarnette and Shawn H. Woodson, *North Carolina State University* (22, 7, p. 602) Article based on AIAA Paper 84-2175
- **C85-114 Noise of Counter-rotation Propellers.** Donald B. Hanson, *Hamilton Standard, United Technologies Corporation* (22, 7, p. 609) Article based on AIAA Paper 84-2305
- C85-115 Approach to Interior Noise Control Part I: Damped Trim Panels. Curtis I. Holmer, E-A-R Division, Cabot Corporation (22, 7, p. 618) Article based on AIAA Paper 84-2371
- C85-116 Comparison of NMC Analysis Model Winds and Temperatures with Aircraft Measurements. Gregory D. Nastrom, Air Weather Service, Scott Air Force Base; and William H. Jasperson, Control Data (22, 7, p. 624) Article based on AIAA Paper 85-0344
- C85-117 Aerodynamics of an Aspect Ratio 8 Wing at Low Reynolds Numbers. J. F. Marchman III and A. A. Abtahi, Virginia Polytechnic Institute and State University (22, 7, p. 628) Article based on AIAA Paper 85-0278
- C85-118 Theoretical Considerations in the Aerodynamic Effectiveness of Winglets. Keisuke Asai, National Aerospace

- Laboratory, Science and Technology Agency (Japan) (22, 7, p. 635) Engineering Note
- C85-119 Dynamic Overshoot of the Static Stall Angle. L. E. Ericsson and J. P. Reding, Lockheed Missiles & Space Company, Inc. (22, 7, p. 637) Engineering Note
- C85-120 Dynamic Ground Effects on a Two-Dimensional Flat Plate. Yen-Sen Chen, NASA Marshall Space Flight Center; and William G. Schweikhard, Kohlman System Research, Inc. (22, 7, p. 638) Engineering Note
- C85-121 Vortex Trajectories and Breakdown on Wing-Canard Configurations. J. Er-El and A. Seginer, *Technion-Israel Institute of Technology* (22, 8, p. 641) Article based on AIAA Paper 83-1817
- C85-122 Propeller Aerodynamic Performance by Vortex-Lattice Method. Makoto Kobayakawa, *Kyoto University*; and and Hiroyuki Onuma, *Kyoto University* (22, 8 p. 649) Article
- C85-123 Iterative Three-Dimensional Transonic Wing Design Using Integral Equations. S. Takanashi, *National Aerospace Laboratory (Japan)* (22, 8, p. 655) Article based on AIAA Paper 84-2155
- C85-124 Transient Aerodynamic Characteristics of a Two-Dimensional Airfoil During Stepwise Incidence Variation. Yasuhiko Aihara, Hisao Koyama and Atsushi Murashige, University of Tokyo (22, 8, p. 661) Article
- C85-125 The Determination of Optimum Flight Profiles for Short-Haul Routes. D. Simos and L. R. Jenkinson, Loughborough University of Technology (England) (22, 8, p. 669) Article based on AIAA Paper 84-2408
- C85-126 Transonic Aerodynamic Computations for a Canard Configuration. Nada Agrell, FFA, The Aeronautical Research Institute of Sweden; and Lorentz Elmeland, SAAB-SCANIA AB (22, 8, p. 675) Article based on AIAA Paper 84-2158
- C85-127 Experimental Aeroelastic Behavior of Unswept and Forward-Swept Cantilever Graphite/Epoxy Wings. Brian J. Landsberger, 6520 Test Group/Flight Simulator Branch, Edwards Air Force Base; and John Dugundji, Massachusetts Institute of Technology (22, 8, p. 679) Article based on AIAA Paper 84-0903 CP844
- C85-128 Risk Assessment of an Aging Military Aircraft. John W. Lincoln, Aeronautical Systems Division, Wright-Patterson Air Force Base (22, 8, p. 687) Article based on AIAA Paper 84-0851 CP844
- C85-129 Preliminary Investigation of the Strength and Durability of Superplastic Formed Aluminum. Rodney L. Wilkinson and Raymond K. Cannon, Air Force Wright Aeronautical Laboratories (22, 8, p. 692) Article based on AIAA Paper 84-0935 CP844
- C85-130 Generalized Math Model for Simulation of High-Altitude Balloon Systems. N. J. Nigro, J. K. Yang and A. F. Elkouh, Marquette University; and D. E. Hinton, NASA Langley Research Center (22, 8, p. 697) Article
- C85-131 Analysis of Low-Altitude Wind Speed and Direction Shears. Margaret B. Alexander and Dennis W. Camp, NASA Marshall Space Flight Center (22, 8, p. 705) Article
- C85-132 Performance Degradation of Helicopter Rotor in Forward Flight Due to Ice. K. D. Korkan, Texas A&M University; L. Dadone, Boeing Vertol Company; and R. J. Shaw, NASA Lewis Research Center (22, 8, p. 713) Article

- C85-133 Reconstruction of Pan Am New Orleans Accident. Mark A. Dietenberger, Patrick A. Haines and James K. Luers, University of Dayton Research Institute (22, 8, p. 719) Article
- C85-134 Approach to Interior Noise Control Part II: Self-Supporting Damped Interior Shell. Curtis I. Holmer, *E-A-R Divison, Cabot Corporation* (22, 8, p. 729) Article based on AIAA Paper 84-2372
- C85-135 The Determination of Load and Slope Transformation Matrices for Aeroelastic Analyses. Kari Appa, Michael Yankulich and David L. Cowan, *Northrop Corporation* (22, 8, p. 734) Engineering Note
- C85-136 Aerodynamic Characteristics of a Circulation Control Elliptical Airfoil with Two Blown Jets. J. K. Harvell and M. E. Franke, Air Force Institute of Technology, Wright-Patterson Air Force Base (22, 9, p. 737) Article based on AIAA Paper 83-1794
- C85-137 Convergence Characteristics of a Vortex-Lattice Method for Nonlinear Configuration Aerodynamics. Z. Rusak, Technion-Israel Institute of Technology; A. Seginer, NASA Ames Research Center; and E. Wasserstrom, Technion-Israel Institute of Technology (22, 9, p. 743) Article based on AIAA Paper 83-1882 CP834
- C85-138 Computational Technique for Compressible Vortex Flows Past Wings at Large Incidence. Osama A. Kandil, *Old Dominion University* (22, 9, p. 750) Article based on AIAA Paper 83-2078
- C85-139 Effects of Viscosity and Modes on Transonic Aerodynamic Characteristics of Wings. Guru P. Guruswamy, NASA Ames Research Center; John W. Marstiller and Henry T. Y. Yang, Purdue University; and Peter M. Goorjian, NASA Ames Research Center (22, 9, p. 756) Article based on AIAA Paper 84-0870 CP844
- C85-140 The Influence of Laminar Separation and Transition on Low Reynolds Number Airfoil Hysteresis. Thomas J. Mueller, University of Notre Dame (22, 9, p. 763) Article based on AIAA Paper 84-1617
- **C85-141 Effects of a Central Fence on Upwash Flows.** William G. Hill Jr., *Grumman Corporation* (22, 9, p. 771) Article based on AIAA Paper 84-0533
- C85-142 Noise Radiation Patterns of Counter-Rotation and Unsteadily Loaded Single-Rotation Propellers. P. J. W. Block, NASA Langley Research Center (22, 9, p. 776) Article based on AIAA Paper 84-2263
- C85-143 Effects of Acoustic Treatment on the Interior Noise of a Twin-Engine Propeller Airplane. T. B. Beyer, C. A. Powell and E. F. Daniels, NASA Langley Research Center; and L. D. Pope, The Woodlands (22, 9, p. 784) Article based on AIAA Paper 84-2331
- C85-144 Low-Cost Demonstrators for Maturing Technologies. G. Rosenthal, S. A. Powers and W. V. Stirling, Fairchild Republic Company; A. W. Baldwin and D. L. Carter, U. S. Air Force, Wright-Patterson Air Force Base (22, 9, p. 789) Article based on AIAA Paper 84-2472
- C85-145 Computational Aerodynamic Design of the Gulfstream IV Wing. Reuben M. Chandrasekharan and William R. Murphy, Gulfstream Aerospace Corporation; Frank P. Taverna and Charles W. Boppe, Grumman Aerospace Corporation (22, 9, p. 797) Article based on AIAA Paper 85-0427

- C85-146 Equations of Motion of a Quasisteady Flight Vehicle Utilizing Restrained Static Aeroelastic Characteristics. William P. Rodden and J. Richard Love, *Northrop Corporation* (22, 9, p. 802) Article based on AIAA Paper 84-0986 CP844
- C85-147 Stochastic Crack Propagation in Fastener Holes. J. N. Yang and W. H. Hsi, The George Washington University; S. D. Manning, General Dynamics Corporation; and J. L. Rudd, Air Force Wright Aeronautical Laboratories, Wright-Patterson Air Force Base (22, 9, p. 810) Article
- C85-148 Crack Growth Analyses and Correlations for Attachment Lugs. K. Kathiresan, Lockheed-Georgia Company; T. R. Brussat, Lockheed-California Company; and J. L. Rudd, Air Force Wright Aeronautical Laboratories, Wright-Patterson Air Force Base (22, 9, p. 818) Article based on AIAA Paper 83-0842 CP831
- C85-149 Probabilistic Combination of Vehicle Dynamic Vibration and Acoustically Induced Random Accelerations. Richard W. Schock and Lenox P. Tuell, *NASA Marshall Space Flight Center* (22, 9, p. 825) Engineering Note based on AIAA Paper 84-0908 CP844
- C85-150 Time-Invariant Structure of Nonstationary Atmospheric Turbulence. George Trevino, Michigan Technological University (22, 9, p. 827) Engineering Note based on AIAA Paper 85-1834
- C85-151 Subcritical Damping Ratios of a Two-Dimensional Airfoil in Transonic Flow. B. H. K. Lee, *National Research Council Canada* (22, 9, p. 828) Engineering Note
- C85-152 Wing Span Loads of Complex High-Lift Systems from Wake Measurements. G. W. Brune and T. H. Hallstaff, *Boeing Commercial Airplane Company* (22, 9, p. 831) Engineering Note
- C85-153 Verification of Calculation Methods for Unsteady Airloads in the Prediction of Transonic Flutter. R. J. Zwaan, National Aerospace Laboratory (NLR) (The Netherlands) (22, 10, p. 833) Article based on AIAA Paper 84-0871 CP844
- C85-154 Sunrise, the World's First Solar-Powered Airplane. Robert J. Boucher, *Astro Flight Inc.* (22, 10, p. 840) Article based on AIAA Paper 84-1429
- C85-155 The Theoretical Minimum Induced Drag of Three-Surface Airplanes in Trim. Eric R. Kendall, *Gates Learjet Corporation* (22, 10, p. 847) Article based on AIAA Paper 84-2164
- C85-156 Grid Generation and Flow Calculations for Aircraft Geometries. N. P. Weatherill and C. R. Forsey, Aircraft Research Association Limited (UK) (22, 10, p. 855) Article based on AIAA Paper 84-1665
- C85-157 Pool Fire-Ventilation Crossflow Experiments in a Simulated Aircraft Cabin Interior. C. P. Bankston and L. H. Back, Jet Propulsion Laboratory, California Institute of Technology (22, 10, p. 861) Article
- C85-158 Numerical Optimization of Circulation Control Airfoil at High Subsonic Speed. Tsze C. Tai, David Taylor Naval Ship Research and Development Center; and George H. Kidwell Jr., NASA Ames Research Center (22, 10, p. 869) Article based on AIAA Paper 84-2162
- C85-159 Handling Qualities Related to Stall/Spin Accidents of Supersonic Fighter Aircraft. Seth B. Anderson, NASA Ames Research Center (22, 10, p. 875) Article based on AIAA Paper 84-2093 CP849

- C85-160 Full Potential Solutions of Three-Dimensional Supersonic Flows. Kenneth M. Jones and Noel A. Talcott Jr., NASA Langley Research Center; and Vijaya Shankar, Rockwell International Science Center (22, 10, p. 881) Article based on AIAA Paper 84-0139
- C85-161 The MCA Method of Determining Thrust of Jet Aircraft in Flight. Richard E. Rosenberg and Gert Schuch, German Forces Flight Test Center (22, 10, p. 888) Article
- C85-162 Projected Advantage of an Oblique Wing Design on a Fleet Air Defense Mission. C. D. Wiler and S. N. White, Rockwell International Corporation (22, 10, p. 896) Article based on AIAA Paper 84-2474
- C85-163 Arrays of Bodies of Revolution for Minimum Wave Drag. Jack N. Nielsen, NASA Ames Research Center (22, 10, p. 901) Article based on AIAA Paper 85-0449
- C85-164 Acoustic Intensity Techniques for Airplane Cabin Applications. G. A. Dalan and R. L. Cohen, *Boeing Commercial Airplane Company* (22, 10, p. 910) Article based on AIAA Paper 83-0716
- C85-165 Is Any Free Flight/Wind Tunnel Equivalence Concept Valid for Unsteady Viscous Flow?. L. E. Ericsson, Lockheed Missiles & Space Company, Inc. (22, 10, p. 915) Article based on AIAA Paper 85-0378
- C85-166 Theory of Wing Rock. Chung-Hao Hsu and C. Edward Lan, *University of Kansas* (22, 10, p. 920) Article based on AIAA Paper 85-0199
- C85-167 A Nonlinear Solution for Parachute Suspension Line Deformation. Edward W. Ross Jr., U. S. Army Natick Research and Development Center (22, 10, p. 925) Engineering Note
- **C85-168 A Wind Tunnel Inlet Flow Simulation.** Upernder K. Kaul, *NASA Ames Research Center* (22, 10, p. 927) Engineering Note based on AIAA Paper 85-0437
- C85-169 Large Deflection, Large Amplitude Vibrations and Random Response of Symmetrically Laminated Plates. Carl E. Gray Jr., NASA Langley Research Center; Kamolphan Decha-Umphai and Chuh Mei, Old Dominion University (22, 11, p. 929) Synoptic based on AIAA Paper 84-0909 CP844
- C85-170 Review of Recent Research on Interior Noise of Propeller Aircraft. John S. Mixson and Clemans A. Powell, NASA Langley Research Center (22, 11, p. 931) Survey Paper
- C85-171 Subscale-Model and Full-Scale Engine Mixed-Flow Exhaust System Performance Comparison. A. P. Kuchar, General Electric Company; and R. Chamberlin, NASA Lewis Research Center (22, 11, p. 950) Article based on AIAA Paper 84-0283
- C85-172 Separated Flow Unsteady Aerodynamic Theory. R. M. Chi, *United Technologies Research Center* (22, 11, p. 956) Article based on AIAA Paper 84-0874 CP844
- C85-173 Aeromechanical Stability Analysis of a Hybrid Heavy Lift Multirotor Vehicle in Hover. C. Venkatesan and P. P. Friedmann, *University of California, Los Angeles* (22, 11, p. 965) Article based on AIAA Paper 84-0987 CP844
- C85-174 Impact of Flying Qualities on Mission Effectiveness for Helicopter Air Combat. T. M. Harris and D. A. Beerman, Flight Systems Inc.; and Courtland C. Bivens, NASA Ames Research Center (22, 11, p. 973) Article based on AIAA Paper 84-2106 CP849

- **C85-175 Improved Drag Element for Wind Tunnel Sting Balances.** M. Ringel and D. Levin, *Technion--Israel Institute of Technology* (22, 11, p. 979) Article
- C85-176 Free-Falling Autorotating Plate--A Coupled Fluid and Flight Mechanics Problem. C. R. Gallaway and W. L. Hankey, Air Force Wright Aeronautical Laboratories, Wright-Patterson Air Force Base (22, 11, p. 983) Article based on AIAA Paper 84-2080 CP849
- C85-177 The Numerical Computation of Aircraft Response to Arbitrary Vertical Gust Distributions. Jiguang An, The Chinese Aerodynamic Research and Development Center; Zhen Yan, Shanghai Jiao Tong University; Chuanren Qiu, Shanghai Aircraft Company; and Wenbo Zhou, Shanghai Jiao Tong University (22, 11, p. 988) Article based on AIAA Paper 84-2075 CP849
- C85-178 Bonded-Bolted Composite Joints. L. J. Hart-Smith, Douglas Aircraft Company (22, 11, p. 993) Article based on AIAA Paper 84-0914 CP844
- C85-179 Flutter and Divergence Aeroelastic Characteristics for Composite Forward Swept Cantilevered Wing. I. Lottati, Technion--Israel Institute of Technology (22, 11, p. 1001) Article
- C85-180 Doublet Strip Method for Oscillating Swept Tapered Wings in Incompressible Flow. A. Ichikawa, Civil Aviation College (Japan) (22, 11, p. 1008) Article
- C85-181 Productivity Improvements Through the Use of CAD/CAM. Marvin D. Wehrman, Boeing Commercial Airplane Company (22, 11, p. 1013) Article
- C85-182 Evaluation of Low Reynolds Number Turbulence Models for Attached and Separated Flows. A. Sugavanam, Lockheed-Georgia Company (22, 11, p. 1018) Engineering Note based on AIAA Paper 85-0375
- C85-183 A Simple Device for Wind Shear Measurement. H. Nelles and R. W. Staufenbiel, Aachen University of Technology (22, 11, p. 1020) Engineering Note
- **C85-187 Helicopter Linear Noise.** Hans R. Aggarwal, *Helicopter Aerodynamics and Noise* (22, 12, p. 1025) Synoptic based on AIAA Paper 84-2267
- C85-188 Propulsion System Integration Configurations for Future Prop-Fan Powered Aircraft. J. Godston and C. N. Reynolds, *Pratt & Whitney* (22, 12, p. 1027) Article based on AIAA Paper 83-1157
- C85-189 Application of NLR's Calculation Methods to Transonic Flow About Oscillating Wings. M. H. L. Hounjet, J. T. van der Kolk and J. J. Meijer, *National Aerospace Laboratory (NLR) (The Netherlands)* (22, 12, p. 1034) Article based on AIAA Paper 84-1564
- C85-190 Nonplanar, Subsonic, Three-Dimensional Oscillatory Piecewise Continuous Kernel Function Method. I. Lottati and E. Nissim, *Technion--Israel Institute of Technology* (22, 12, p. 1043) Article
- C85-191 Surface Wetting Effects on a Laminar Flow Airfoil in Simulated Heavy Rain. R. John Hansman Jr. and Martitia F. Barsotti, *Massachusetts Institute of Technology* (22, 12, p. 1049) Article based on AIAA Paper 85-0260
- C85-192 Interactive Graphics for Geometry Generation--A Program with a Contemporary Design. Walter F. LaBozzetta and Paul E. Cole, *Lockheed-Georgia Company* (22, 12, p. 1054) Article based on AIAA Paper 84-2389

C85-193 Radar for Storm Forecasting and Weather Hazard Warning. Richard J. Doviak and Jean T. Lee, *National Severe Storms Laboratory* (22, 12, p. 1059) Article based on AIAA Paper 85-0092

C85-194 Evaluation of a Correction for Sound Propagation Through Free-Jet Shear Layers. W. H. Herkes and F. G. Strout, The Boeing Commercial Airplane Company; and R. Ross, National Aerospace Laboratory (NLR) (The Netherlands) (22, 12, p. 1065) Article based on AIAA Paper 83-0757

C85-195 Flight Evaluation of a Digital Electronic Engine Control in an F-15 Airplane. Frank W. Burcham Jr., Lawrence P. Myers and Kevin R. Walsh, NASA Ames Research Center (22, 12, p. 1072) Article based on AIAA Paper 83-2073

C85-196 Computation of Supersonic Flows over Three-Dimensional Configurations. Kuo-Yen Szema, William L. Riba, Vijaya Shankar and Joseph J. Gorski, *Rockwell International Science Center* (22, 12, p. 1079) Article based on AIAA Paper 85-0272

C85-197 Deformable Adaptive Wall Test Section for Three-Dimensional Wind Tunnel Testing. E. Wedemeyer, A. Heddergott and D. Kuczka, Deutsche Forschungs- und Versuchsanstalt für Luft- und Raumfahrt e.V (22, 12, p. 1085) Article

C85-198 High-Speed Braking of an Aircraft Tire on Grooved Surfaces. S. K. Agrawal, Federal Aviation Administration Technical Center (22, 12, p. 1092) Article

C85-199 Noise of Counter-rotation Propellers with Nonsynchronous Rotors. D. B. Hanson and C. J. McColgan, Hamilton Standard (22, 12, p. 1097) Engineering Note

C85-200 Stresses Around Holes in Pin-Loaded Orthotropic Plates. M. W. Hyer, *University of Maryland*; and E. C. Klang, *University of Illinois* (22, 12, p. 1099) Engineering Note based on AIAA Paper 84-0915 CP844

C85-201 Impact of Loads Recording Methodology on Crack-Growth-Based Individual Aircraft Tracking. Robert M. Engle Jr., Flight Dynamics Laboratory, Wright-Patterson Air Force Base; and Thomas F. Christian Jr., Damage Tolerance Analysis Laboratory (22, 12, p. 1101) Engineering Note based on AIAA Paper 84-2410

C85-202 A Methodology for Analyzing Laser-Induced Structural Damage. Sheryl K. Bryan and Peter J. Torvik, Air Force Institute of Technology, Wright-Patterson Air Force Base; and Vipperla B. Venkayya, Air Force Wright Aeronautical Laboratories, Wright-Patterson Air Force Base (22, 12, p. 1103) Engineering Note based on AIAA Paper 84-2521

U.S. Pool STATEMENT OF OWNERSHIP OF BY 3" Required by 3"	NAGEMENT AND CIRCULA	TION
1A, TITLE OF PUBLICATION	18. PUBLICATION NO	
JOURNAL OF AIRCRAFT	2 7 8 0	8 0 Oct. 9,1985
JOURNAL OF ATROPATE 3. PREQUENCY OF ISSUE	JA. NO. OF ISSUES PUBLISH	EDI 38 ANNUAL SUBSCRIPTION
MONTHLY	1.2	520.00
4. COMPLETE MAILING ADDRESS OF KNOWN OFFICE OF PUBLICATION	Street, City, County, State and ZIP+4	Code: (Not printers)
1612 BECANNAY NEW YORK, N.Y. 10019		
16.13 BROADWAY, NEW YORK, N.Y. 10019 B. COMPLETE MAILING ADDRESS OF THE HEADQUARTERS OF GENER	AL BUSINESS OFFICES OF THE PUB	LISHER (Not printer)
CAME AC ADOLE		
SAME AS ABOVE 6. FULL NAMES AND COMPLETE MAILING ADDRESS OF PUBLISHER, E	DITUR, AND MANAGING EDITOR (T	his irem MUST NOT be blank)
PUBLISHER (Name and Complete Mailing Address)		
AMERICAN INSTITUTE OF AERONAUTICS AND	ASTRONAUTICS, INC. S	AME AS ABOVE
EDITOR (Name and Complete Mailing Address)		
THOMAS M. WEEKS SAME AS ABOVE MANAGING EDITOR (Name and Complete Massing Address)		
MANAGING EDITOR (Name and Complete Mailing Address)		
ELAINE J. CAMHI SAME AS ABOVE		
 OWNER (If owned by a corporation, its name and address must be stated a owning or holding it percent or more of total amount of stock. If not owned 	nd size immediately thereunder the name	er and addresses of stockholders
be given. If owned by a partnership or other unincorporated firm, its neme alon is published by a nonprofit organization. Its name and address must be	and address, as well as their of each man	edual must be given. If the publica-
FULL NAME	COMPLETE MAILING ADDRESS	
AMERICAN INSTITUTE OF AERONAUTICS		
AND ASTRONAUTICS, INC.	SAME AS ABOVE	
8. KNOWN BONDHOLDERS MORTGAGEES AND OTHER SECURITY H	OLDERS OWNING OR HOLDING LES	MOENT OF MORE OF TOTAL
 KNOWN BONDHOLDERS, MORTGAGESTAND OTHER SECURITY H AMOUNT OF BONDS, MORTGAGES OR OTHER SECURITIES (If Increase) 		
FULL NAME	COMPLETE MA	ILING ADORESS
NONE	<u> </u>	
9. FOR COMPLETION BY NONPROFIT ORGANIZATIONS AUTHORIZED The purpose, function, and nonorofic status of this organization and the ex-	O TO MAIL AT SPECIAL RATES (Section of the Polymer of the Polymer (Section of the Polymer) (Section of the Polymer)	ion +2.) 12 OMM unity: poses (Chres unit)
(1) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	MING (Manager)	suplicaer must submit explanation of
HAS NOT CHANGED DURING HAS CHANGED DO PRECEDING 12 MONTHS PRECEDING 12 MONTHS		ing settment.
10. EXTENT AND NATURE OF CIRCULATION (See or time thing on covering lide)	AVERAGE NO COPIES EACH ISSUE DURING PRECEDING 12 MONTHS	ACTUAL NG. COPIES OF SING ISSUE PUBLISHED NEAREST TO FILING DATE
A. TOTAL NO. COPIES INET Press Runs	4174	4300
8. PAID ANDIOR REQUESTED CIRCULATION	1 1111	
Seles through dealers and carriers, street vandors and counter sales Mail Subscription		
-Food and/or requested)	3665	3783
C. TOTAL PAID AND/OR REQUESTED CIRCULATION - Sum of 1081 and 10821	3665	3783
D. FREE DISTRIBUTION BY WAIL, CARRIER OR OTHER MEANS SAMPLES, COMPLIMENTARY, AND OTHER FREE COPIES	81	73
E. TOTAL DISTRIBUTION /Swm of C and DI	3746	3856
F COPIES NOT DISTRIBUTED 1. Office use, aftiover, unaccounted, soldied after printing	429	444
2. Return from Neves Agents	967	
G. TOTAL :Sum of E. St. and I - moved equal net press run shown in A)		4300
11. Learning that the contempor made by	A175 EANO TITLE OF BOITOR, PUBLISHE	R. BUSINESS VIANAGER OR OWNER
me above are correct and complete	TROIL CONTROLLER	Stay
75 Form 3526, July 1984		