

- Determining STOL ride quality criteria—passenger acceptance. Ira D. Jacobson and A. Robert Kuhlthau (JA) 163
- Estimation of control surface dynamic derivatives from flight test data. B. M. Hall, M. S. Sholar, and A. P. Allred (AIAA J) 312
- Analysis of airplane response to nonstationary turbulence including wing bending flexibility. Yoshinori Fujimori and Y. K. Lin (AIAA J) 334
- Analysis of airplane response to nonstationary turbulence including wing bending flexibility II. Yoshinori Fujimori and Y. K. Lin (AIAA J, TN) 1343
- Analysis of normal shock noise measurements on nose-cylinder bodies. J. Peter Reding and Lars E. Ericsson (JSR) 421
- Synthesis of shuttle vehicle damping using substructure test results. Daniel D. Kana and Stephen Huzar (JSR) 790
- Response of a rigid aircraft to nonstationary atmospheric turbulence. Joseph M. Verdon and Roy Steiner (AIAA J) 1086
- Digital tuning as an exploratory tool in the modal analysis of randomly-loaded vibrating structures. D. R. Cruise and R. G. Christiansen (AIAA J) 1539
- Normal mode solution to the equations of motion of a flexible airplane. Peter D. Schmitz (JA, EN) 318
- The influence of pitch and twist on blade vibrations. Maurice I. Young (JA, EN) 383
- Galerkin finite element method for vibration problems. K. S. R. K. Prasad and A. V. Krishna Murty (AIAA J, TN) 544
- Lowest critical velocity of rotating shafts. Bruno Atzori and Graziano Curti (AIAA J, TN) 885
- Flexibility coefficients for bending of a disk under sinusoidal edge loading. Joseph A. Dopkin and Terry E. Shoup (AIAA J, TN) 1339

Air Transportation Systems

- Recent advances in aerodynamics for transport aircraft. Part I. Lloyd T. Goodmanson and Louis B. Gratzner (A/A, December) 30
- Door to door short haul. Fred R. Steven (A/A, March) 32
- Structures for air transports. Eugene Styer (A/A, July) 36
- The next careful steps in commercial aircraft structures. Paul L. Sandoz (A/A, July) 38
- The many uses of the dirigible. Jack R. Hunt, Ben B. Levitt, Francis Morse, Kurt R. Stehling, and J. Gordon Vaeth (A/A, October) 58
- Determining STOL ride quality criteria—passenger acceptance. Ira D. Jacobson and A. Robert Kuhlthau (JA) 163
- Advanced technology applications to present and future transport aircraft. Richard E. Black and David G. Murphy (JA) 259
- Hypersonic transports—Economics and environmental effects. Richard H. Petersen and Mark H. Waters (JA) 324
- A view of air traffic control in future terminal areas. W. E. Wilhelm and J. W. Schmidt (JA) 366
- Dynamics of slung bodies utilizing a rotating wheel for stability. Edward C. Micale and Corrado Poli (JA, EN) 760

General Aviation Systems

- Influences of international operations on aircraft-transport design. John G. Borger (Second William Littlewood Memorial Lecture; A/A, July) 24
- Buckling of orthotropic, curved, sandwich panels in shear and axial compression. Otha B. Davenport and Charles W. Bert (JA, EN) 632
- Design of crashworthy aircraft cabins based on dynamic buckling. Cary A. Fisher and Charles W. Bert (JA, EN) 693

Ground Support Systems

- Door to door short haul. Fred R. Steven (A/A, March) 32

Military Aircraft Missions

- DAIS: A major crossroad in the development of avionic systems. Bernard List (A/A, January) 55
- Differential turns. Henry J. Kelley and Leon Lefton (AIAA J) 858

AIRCRAFT TECHNOLOGY, VTOL

Ground (or Water-Surface) Effect Machines

- Design loadings and structural considerations for tracked air cushion research vehicle. John D. Pierson (JA) 503
- Minimum induced drag of a hemi-circular ground effect wing. Hiroshi Mamada and Shigenori Ando (JA) 660

Rotary Wing Aerodynamics

- A perturbation solution of helicopter rotor flapping stability. Wayne Johnson (JA, SYN) 257
- Calculation of unsteady and three-dimensional boundary-layer flows. H. A. Dwyer (AIAA J, SYN) 773

- Rotor blade response to random loads: A direct time-domain approach. F. Y. M. Wan and C. Lakshmikantham (AIAA J) 24
- Complex coordinates in near hovering rotor dynamics. H. C. Curtiss Jr. (JA) 289
- Inviscid flowfield of an unsteady airfoil. W. J. McCroskey (AIAA J) 1130
- A preliminary analytical and experimental investigation of helicopter rotor boundary layers. Dwight A. Blaser and Henry R. Velkoff (AIAA J) 1660
- Model tests on unsteady rotor wake effects. Kurt H. Hohenemser and S. T. Crews (JA, EN) 58
- The dynamics of blade pitch control. Maurice I. Young (JA, EN) 446
- An unsteady wake model for a hingeless rotor. S. T. Crews, K. H. Hohenemser, and R. A. Ormiston (JA, EN) 758

VTOL Aircraft Design

- Conformal mapping for potential flow about airfoils with attached flap. Vernon J. Rossow (JA, EN) 60
- A simple estimate of the effect of ejector length on thrust augmentation. Brian Quinn (JA, EN) 313
- Installation effects on performance of multiple model V/STOL lift fans. J. H. Diedrich, N. Clough, and S. Lieblein (JA) 355
- The influence of pitch and twist on blade vibrations. Maurice I. Young (JA, EN) 383

VTOL Cabin Habitability and Design

VTOL Flight Operations

- Reduction of VTOL operational noise through flight trajectory management. Fredric H. Schmitz and W. Z. Stepniewski (JA) 385
- Flight director design for a STOL aircraft. W. R. Seitz and R. E. Goodson (JA) 491

VTOL Ground Support Systems

VTOL Handling, Stability, and Control

- Dynamics of slung bodies using a single-point suspension system. Corrado Poli and Duane Cromack (JA) 80
- Identification and optimization of aircraft dynamics. Kumpati S. Narendra and Shiva S. Tripathi (JA) 193
- Inclusion of rotor dynamics in controller design for helicopters. W. E. Hall Jr. and A. E. Bryson Jr. (JA) 200
- Complex coordinates in near hovering rotor dynamics. H. C. Curtiss Jr. (JA) 289
- Effect of steady state coning angle and damping on whirl flutter stability. Krishna Rao Venkata Kaza (JA) 664
- The dynamics of blade pitch control. Maurice I. Young (JA, EN) 446
- Dynamics of slung bodies utilizing a rotating wheel for stability. Edward C. Micale and Corrado Poli (JA, EN) 760

VTOL Landing Dynamics

VTOL Missions and Transportation Systems

- Reduction of VTOL operational noise through flight trajectory management. Fredric H. Schmitz and W. Z. Stepniewski (JA) 385

VTOL Powerplant Design and Installation

- Performance characteristics of a model VTOL lift fan in crossflow. S. Lieblein, J. A. Yuska, and J. H. Diedrich (JA) 131
- A simple estimate of the effect of ejector length on thrust augmentation. Brian Quinn (JA, EN) 313
- Installation effects on performance of multiple model V/STOL lift fans. J. H. Diedrich, N. Clough, and S. Lieblein (JA) 355

VTOL Structural Design (including Loads)

VTOL Testing

- Performance characteristics of a model VTOL lift fan in crossflow. S. Lieblein, J. A. Yuska, and J. H. Diedrich (JA) 131
- Installation effects on performance of multiple model V/STOL lift fans. J. H. Diedrich, N. Clough, and S. Lieblein (JA) 355
- An experimental investigation of a jet issuing from a wing in crossflow. W. Mikolowsky and H. McMahon (JA) 546

VTOL Vibration

- Rotor blade response to random loads: A direct time-domain approach. F. Y. M. Wan and C. Lakshmikantham (AIAA J) 24
- Aeroelastic instabilities of hingeless helicopter blades. Peretz Friedmann (JA) 623
- The influence of pitch and twist on blade vibrations. Maurice I. Young (JA, EN) 383
- Flexibility coefficients for bending of a disk under sinusoidal edge loading. Joseph A. Dopkin and Terry E. Shoup (AIAA J, TN) 1339

FLUID DYNAMICS

Boundary Layers and Convective Heat Transfer—Laminar

- Magnus effect on spinning bodies of revolution. H. L. Power and J. D. Iversen (AIAA J, SYN) 417
- Downstream influence of film-cooling in a high-speed laminar boundary layer. Anthony L. Laganelli and Richard P. Fogaroli (AIAA J, SYN) 581
- Calculation of unsteady and three-dimensional boundary-layer flows. H. A. Dwyer (AIAA J, SYN) 773
- A survey of the effects of small protuberances on boundary-layer flows. Raymond Sedney (AIAA J, SA) 782
- Heat-transfer and ablation-rate correlations for re-entry heat shield and nosetip applications. Kurt E. Putz and Eugene P. Barlett (JSR) 15
- Density stratified, viscous flow past a flat plate. Joseph A. Schetz, Stanley Favin, and Louis W. Ehrlich (JH) 22
- Laminar film boiling on inclined isothermal flat plates. H. R. Nagendra (AIAA J) 72
- PAET entry heating and heat protection experiment. Nick S. Vojvodich (JSR) 181
- Surface curvature and lateral pressure gradient effects on laminar boundary-layer separation. G. R. Inger and B. Dutt (JA) 200
- Inviscid surface streamlines and heat transfer on shuttle-type configurations. Fred R. De Jarnette and H. Harris Hamilton (JSR) 314
- Laminar boundary layer on a cone near a plane of symmetry. Peter Wu and Paul A. Libby (AIAA J) 326
- Initial conditions for the hypersonic-shock/boundary-layer interaction problem. M. J. Werle, D. L. Dwyer, and W. L. Hankey (AIAA J) 525
- Prevention of transition over a backward step by suction. Mansop Hahn and W. Pfenninger (JA) 618
- Effect of surface catalytic activity on stagnation heat-transfer rates. L. A. Anderson (AIAA J) 649
- Fin induced laminar interactions on sharp and spherically blunted cones. T. Taz Bramlette, Richard R. Smith, and Neil J. Sliski (JSR) 696
- Shuttle orbiter re-entry flowfields at high angle of attack. William C. Rochelle, Barney B. Roberts, Leo d'Attorre, and M. A. Bilyk (JSR) 783
- Mathematical formulation of viscous-inviscid interaction problems in supersonic flow. Gabriel Miller (AIAA J) 938
- A Magnus theory. H. R. Vaughn and G. E. Reis (AIAA J) 1396
- Effect of disturbances on the heat transfer of a laminar axisymmetric boundary layer. R. D. Small and J. Rom (AIAA J) 1503
- A preliminary analytical and experimental investigation of helicopter rotor boundary layers. Dwight A. Blaser and Henry R. Velkoff (AIAA J) 1660
- Experimental study of supersonic laminar base flow with and without suction. Antoni K. Jakubowski and Clark H. Lewis (AIAA J) 1670
- Analysis of the chemically reacting laminar boundary layer during hybrid combustion. Herman Krier and Harold Kerzner (AIAA J) 1691
- Nonsimilar flows between the solution branches of the Falkner-Skan equation. Peter Wu and Paul A. Libby (AIAA J, TN) 112
- Asymptotic suction flow of power-law fluids. Chang-yu Liu (JH, EN) 135
- Approximate method for calculating heat transfer to yawed cylinders in laminar flow. Shoichi Sayano and George F. Greenwald (JSR, EN) 157
- Heat-transfer measurements for cylindrical configurations in hypersonic streams. John J. Bertin, J. Parker Lamb, Jeffrey L. Zickler, and Winston D. Goodrich (JSR, EN) 217
- Contribution in unsteady flow of power-law fluids. Sreedhan Roy (AIAA J, TN) 238
- An experimental investigation of base heating on typical Mars entry body shapes. O. L. Zappa and W. G. Reinecke (JSR, EN) 273
- Atomic recombination rate determination through heat-transfer measurement. Chul Park, Lewis A. Anderson, and Robert E. Sheldahl (AIAA J, TN) 372
- Engineering analysis of reattaching shear layer heat transfer. D. E. Nestler (AIAA J, TN) 390
- Entrance region heat transfer between parallel plates with uniform wall temperature. Y. S. Lou and L. O. Barton (AIAA J, TN) 393
- Nonlinear problem of a shock-tube interaction-region boundary layer. Roop N. Gupta (AIAA J, TN) 548
- Laminar symmetry-plane boundary layer on a sharp spinning body at incidence. C. B. Watkins (AIAA J, TN) 559
- Cold-plate design analysis for electronic equipment. Eugene D. Veilleux (JSR, EN) 680
- Entropy layer effects in constant pressure hypersonic boundary layers. P. A. Sullivan and W. W. Koziak (AIAA J, TN) 730
- Increase of boundary-layer heat transfer by mass injection. K. Gersten and J. F. Gross (AIAA J, TN) 738
- Transient forced convection heat transfer from an isothermal flat plate. H. R. Nagendra (AIAA J, TN) 876
- Local potential variational method applied to Hiemenz flow. Robert T. Doty and Edward F. Blick (AIAA J, TN) 880
- Approximate method of solution for three-dimensional boundary layers. Y. S. Chou (AIAA J, TN) 1025
- Correlation of the mass flow rate in the laminar boundary layer on a sphere-cone. Frederick G. Blottner (AIAA J, TN) 1044
- Numerical stability of boundary layers with massive blowing. T.-M. Liu and P. R. Nachtsheim (AIAA J, TN) 1197
- Improvement to Klineberg's method for the calculation of viscous-inviscid interactions in supersonic flow. Bernard G. Gautier and Jean J. Ginoux (AIAA J, TN) 1323
- Branching solutions for supersonic interacting boundary layers. W. L. Hankey, D. L. Dwyer, and M. J. Werle (AIAA J, TN) 1349
- Multiple slot laminar film cooling. Arthur Sherman, Hsuan Yeh, Eli Reshotko, and Edward McAssey Jr. (AIAA J, TN) 1413
- Reattachment of a separated boundary layer to a convex surface. James L. Amick and Tariq Masoud (AIAA J, TN) 1426
- Solution of nonlinear problems in magnetofluidynamics and non-Newtonian fluid mechanics through parametric differentiation. G. Nath (AIAA J, TN) 1429
- Transpiration cooling in three-dimensional laminar boundary-layer flow near a stagnation point. D. R. Jeng and Donald W. Williams (AIAA J, TN) 1560
- Unsteady boundary-layer flow of power law fluids. Sreedhan Roy (AIAA J, TN) 1581
- Shooting method for solution of boundary-layer flows with massive blowing. Tsong-Mou Liu and Philip R. Nachtsheim (AIAA J, TN) 1584
- Sweep effects on supersonic separated flows—A numerical study. M. J. Werle, V. N. Vatsa, and S. D. Bertke (AIAA J, TN) 1763
- Laminar boundary layer in noncentered unsteady waves. J. Gordon Hall, G. Srinivasan, and Jaipal S. Rathi (AIAA J, TN) 1770
- Comment on "Laminar thermal boundary layers on continuous surfaces." H. E. Eickhoff (AIAA J, TC) 895
- Reply by authors to H. E. Eickhoff. C. A. Rhodes and H. Kaminer Jr. (AIAA J, TC) 895
- Comment on "Skin friction on porous surfaces calculated by a simple integral method." G. R. Inger (AIAA J, TC) 1356
- Reply by author to G. R. Inger. Tse-Fou Zien (AIAA J, TC) 1357
- Comment on "Compressible boundary-layer equations solved by the method of parameter differentiation." Tsung Y. Na (AIAA J, TC) 1790
- Reply by authors to Tsung Y. Na. C. L. Narayana and P. Ramamoorthy (AIAA J, TC) 1791

Boundary Layers and Convective Heat Transfer—Turbulent

- Shock wave/turbulent boundary-layer interactions in rectangular channels. Daniel C. Reda and John D. Murphy (AIAA J, SYN) 139
- Parametric relations for ordinary and confluent turbulent boundary-layer flows. Suresh H. Goradia and Gene T. Colwell (AIAA J, SYN) 583
- Experimental study of slot injection into a supersonic stream. Michael Kenworthy and Joseph A. Schetz (AIAA J, SYN) 585
- Sidewall boundary-layer influence on shock wave/turbulent boundary-layer interactions. Daniel C. Reda and John D. Murphy (AIAA J, SYN) 1367
- Evaluation of Preston tube calibration equations in supersonic flow. Jerry M. Allen (AIAA J, SYN) 1461
- A survey of the mean turbulent field closure models. George L. Mellor and H. James Herring (AIAA J, SA) 590
- A survey of the effects of small protuberances on boundary-layer flows. Raymond Sedney (AIAA J, SA) 782
- Heat-transfer and ablation-rate correlations for re-entry heat-shield and nosetip applications. Kurt E. Putz and Eugene P. Bartlett (JSR) 15
- Dual-hologram interferometry: A new technique for wind-tunnel testing. (AIAA, December) 27
- Supersonic turbulent boundary layer subjected to adverse pressure gradients. P. J. Waltrup and J. A. Schetz (AIAA J) 50
- Measurements of the boundary-layer growth in annular diffusers. Stanley J. Stevens and Peter Fry (JA) 73
- Inviscid surface streamlines and heat transfer on shuttle-type configurations. Fred R. De Jarnette and H. Harris Hamilton (JSR) 314
- Mean velocity profiles in three-dimensional incompressible turbulent boundary layers. T. S. Prahlad (AIAA J) 359
- Calculation of turbulent boundary layers and wall jets over curved surfaces. F. A. Dvorak (AIAA J) 517
- Surface temperature effect on subsonic stall. David J. Norton, John M. Macha, and James C. Young (JSR) 581
- Aerodynamics of high-performance Ludwig tubes. David A. Russell and Kwok-On Tong (AIAA J) 642
- Shuttle orbiter re-entry flowfields at high angle of attack. William C. Rochelle, Barney B. Roberts, Leo d'Attorre, and M. A. Bilyk (JSR) 783
- Analysis of turbulent skin friction in thick axisymmetric boundary layers. F. M. White, R. C. Lessmann, and G. H. Christoph (AIAA J) 821
- A small cross flow theory for three-dimensional, compressible, turbulent boundary layers on adiabatic walls. J. Richard Shanebrook and William J. Sumner (AIAA J) 950
- Prediction of inert turbulent swirl flows. David G. Lilley (AIAA J) 955
- Turbulent boundary-layer flow from stationary to moving surfaces. J. S. Tennant and T. Yang (AIAA J) 1156
- Crosshatch surface patterns—Comparison of experiment with theory. C. O. White and R. M. Grabow (AIAA J) 1316
- Numerical analysis of eddy viscosity models in supersonic turbulent boundary layers. J. S. Shang, W. L. Hankey Jr., and D. L. Dwyer (AIAA J) 1677
- Kinematic eddy viscosity at low Reynolds numbers. Tuncer Cebeci (AIAA J, TN) 102

- Heat transfer downstream of attachment of a turbulent supersonic shear layer. Philip M. Gerhart (AIAA J, TN) 104
- Axisymmetrical turbulent boundary layer along a slender cylinder. Chang-yu Liu and Yau-tien Dai (JH, EN) 133
- Variation of the Van Driest damping parameter with mass transfer. Tuncer Cebeci (AIAA J, TN) 237
- Reference temperature method for predicting turbulent compressible skin-friction coefficient. Frank L. Clark and Theodore R. Creel Jr. (AIAA J, TN) 239
- A subsonic diffuser with moving walls for boundary-layer control. Jeffrey S. Tennant (AIAA J, TN) 240
- A generalized correlation of roughness density effects on the turbulent boundary layer. Roger L. Simpson (AIAA J, TN) 242
- Influence of moderate wall cooling on cone transition at $M_e = 13.7$ in helium. Michael C. Fischer (JSR, EN) 282
- A modified wall wake velocity profile for turbulent compressible boundary layers. Chen-Chih Sun and Morris E. Childs (JA, EN) 381
- Engineering analysis of reattaching shear layer heat transfer. D. E. Nestler (AIAA J, TN) 390
- Scaling of performance and thermal environment in fuel-vortex cooled rocket engines. K. Berman, T. Ferger, N. Roth, and A. Blessing (JSR, EN) 476
- Calculation of turbulent skin friction on a rotating disk. Richard C. Lessman and George H. Christoph (AIAA J, TN) 542
- Calculation of turbulent skin friction on a rotating disk. Richard C. Lessmann and George H. Christoph (AIAA J, ERR) 1600
- Prediction of heat transfer for turbulent boundary layer with pressure gradient. P. M. Gerhart and L. C. Thomas (AIAA J, TN) 552
- Calculation of transitional boundary-layer flows. D. M. Bushnell and D. W. Alston (AIAA J, TN) 554
- Effects of upstream wall temperatures on hypersonic tunnel wall boundary-layer profile measurements. William V. Feller (AIAA J, TN) 556
- Diffusion of heat from a line source downstream of a turbulent grid. Paul A. Libby and Carl A. Scragg (AIAA J, TN) 562
- Turbulent heat transfer to a fin leading edge—Flight test results. E. Clark Lemmon and Hugh W. Coleman (AIAA J, TN) 571
- Thermodynamic expansion processes for argon plasma in a convergent-divergent nozzle. Tarit K. Bose (JSR, EN) 613
- Simultaneous comparison of turbulent gas fluctuations by laser Doppler and hot wire. William C. Cliff, Charles E. Fuller III, and Virgil A. Sandborn (AIAA J, TN) 748
- Incipient separation pressure rise for a Mach 3.8 turbulent boundary layer. William C. Rose, Richard J. Page, and Morris E. Childs (AIAA J, TN) 761
- Turbulent interference heating on several small fin configurations. Hugh W. Coleman and E. Clark Lemmon (JSR, EN) 820
- Calculation of turbulent heat transfer and skin friction. George H. Christoph, Richard C. Lessmann, and Frank M. White (AIAA J, TN) 1046
- Application of dual hologram interferometry to wind-tunnel testing. Roger J. Radley Jr. and Albert G. Havener (AIAA J, TN) 1332
- Aerodynamic interference of pitot tubes in a turbulent boundary layer at supersonic speed. R. E. Wilson (AIAA J, TN) 1420
- Reattachment of a separated boundary layer to a convex surface. James L. Amick and Tariq Masoud (AIAA J, TN) 1426
- Three-dimensional separation for interaction of shock waves with turbulent boundary layers. Theodore J. Goldberg (AIAA J, TN) 1573
- A simple correlation for incipient turbulent boundary-layer separation due to a skewed shock wave. R. H. Korkegi (AIAA J, TN) 1578
- Calculation of turbulent boundary-layer shock-wave interaction. David C. Wilcox (AIAA J, TN) 1592
- Reynolds stress measurements in a hypersonic boundary layer. A. Demetriades and A. J. Laderman (AIAA J, TN) 1594
- Selected statistical properties in the inner region of a transpired turbulent boundary layer. L. K. Isaacson and R. L. Peterson (AIAA J, TN) 1758
- Hot-wire coil probe for high-speed flows. Leonard M. Weinstein (AIAA J, TN) 1772
- Van Driest generalization applied to turbulent skin friction and velocity profiles measured on the wall of a Mach 7.4 wind tunnel. Earl R. Keener and Edward J. Hopkins (AIAA J, TN) 1784
- Hypersonic flight results showing Reynolds-number influence on turbulent base pressure. Bruce M. Bulmer (AIAA J, TN) 1785
- Comment on "Wall layer of plane turbulent wall jets without pressure gradients." Peter Bradshaw (JA, TC) 698
- Comment on "Mean velocity profile of a thick turbulent boundary layer along a circular cylinder." Peter Bradshaw and V. C. Patel (AIAA J, TC) 893
- Reply by author to P. Bradshaw and V. C. Patel. David M. Chase (AIAA J, TC) 894

Boundary-Layer Stability and Transition

- Influence of boundary-layer stability on the Magnus effect. Ira D. Jacobson and J. B. Morton (AIAA J, SYN) 8
- A survey of the effects of small protuberances on boundary-layer flows. Raymond Sedney (AIAA J, SA) 782

- A force field theory: Part I. Laminar flow instability. Joshua C. Anyiwo (AIAA J) 43
- Experimental determination of the aeroacoustic environment about a slender cone. A. Martellucci, L. Chaump, D. Rogers, and D. Smith (AIAA J) 635
- Detection of flight vehicle transition from base measurements. Bruce M. Bulmer (JSR, EN) 280
- Influence of moderate wall cooling on cone transition at $M_e = 13.7$ in helium. Michael C. Fischer (JSR, EN) 282
- Boundary-layer distortion on a spinning cone. Walter B. Sturek (AIAA J, TN) 395
- Influence of total temperature on transition in supersonic flow. R. Ross (AIAA J, TN) 563
- Sensitivity of boundary-layer transition to surface irregularities for space shuttle applications. S. R. Pate and R. J. Eaves Jr. (JSR, EN) 813
- The effect of angle of attack on boundary-layer transition on cones. George C. Mateer (AIAA J, ERR) 256

Hydrodynamics

- Measurement of system inertia tensors in precessing nonrigid systems. James P. Vanyo (AIAA J, SYN) 577
- Study of the effects of pressure-induced viscosity changes on the fluid flow characteristics in a circular tube. Robert L. Davis and Robert C. Weber (AIAA J, SYN) 905
- Potential flow about body in finite stream. K. S. Satija (JH) 17
- Density stratified, viscous flow past a flat plate. Joseph A. Schetz, Stanley Favin, and Louis W. Ehrlich (JH) 22
- The lift force due to von Kármán's vortex wake. D. W. Sallet (JH) 161
- Theoretical, quasi-static analysis of cavitation compliance in turbopumps. C. Brennen and A. J. Acosta (JSR) 175
- Exact method of designing airfoils with given velocity distribution in incompressible flow. T. Strand (JA) 651
- Swirling flows in streamtubes of variable cross section. Hartmut H. Bossel (AIAA J) 1161
- Thermal and momentum diffusivity measurements in a turbulent stratified flow. Gordon Merritt and George Rudinger (AIAA J) 1465
- Analysis of gas bubble-liquid coflow systems. Robert L. Stoy and Peter P. Ostrowski (JH, EN) 46
- Bubble track technique for velocity measurement in stratified liquids. H. E. Gilreath and R. T. Fretz (JH, EN) 93
- Nose pressure distribution and separation on an inclined axisymmetric body. Russell A. Smith and S. Nosakhare Eybouma (AIAA J, TN) 125
- Injection of drag-reducing polymers into a turbulent boundary layer. Jin Wu (JH, EN) 129
- Explanation of forces on a surface piercing strut after ventilation. R. C. McGregor, A. J. Wright, and P. D. Swales (JH, EN) 132
- Frequency response of stationary internal wave probes. H. E. Gilreath and C. R. Walton (JH, EN) 170
- A subsonic diffuser with moving walls for boundary-layer control. Jeffrey S. Tennant (AIAA J, TN) 240
- Aerodynamic characteristics of vehicles traveling in perforated tubes. Steven F. Grittner and Bruce R. Munson (AIAA J, TN) 251
- Hydrodynamic stability of density-stratified spiral flows. R. K. Rathy and Kailash Chandra (AIAA J, TN) 544
- Earliest classic result for the turbulent hydraulic wake behind body of revolution. Raymond H. Cramer (JH, TC) 95
- Reply by authors to R. H. Cramer. P. K. Chang and Y. H. Oh (JH, TC) 96
- Comment on "Added mass of a circular cylinder in contact with a rigid boundary." Theodore R. Goodman (JH, TC) 96
- Comment on "Laminar thermal boundary layers on continuous surfaces." H. E. Eickhoff (AIAA J, TC) 895
- Reply by authors to H. E. Eickhoff. C. A. Rhodes and H. Kaminer Jr. (AIAA J, TC) 895
- Drift of buoyant wing-tip vortices. Robert C. Costen (JA, ERR) 320

Jets, Wakes, and Viscid-Inviscid Flow Interactions

- Interaction between an upstream facing wall jet and a supersonic stream. Renzo Piva (AIAA J, SYN) 6
- Shock wave/turbulent boundary-layer interactions in rectangular channels. Daniel C. Reda and John D. Murphy (AIAA J, SYN) 139
- Aerothermodynamic aspects of shock-interference patterns for shuttle configurations during entry. John J. Bertin, Bruce W. Graumann, and Winston D. Goodrich (JSR, SYN) 545
- Parametric relations for ordinary and confluent turbulent boundary-layer flows. Suresh H. Goradia and Gene T. Colwell (AIAA J, SYN) 583
- Experimental study of slot injection into a supersonic stream. Michael Kenworthy and Joseph A. Schetz (AIAA J, SYN) 585
- Interaction of a laminar hypersonic boundary layer with a corner expansion wave. W. W. Koziak and P. A. Sullivan (AIAA J, SYN) 1057
- Shock impingement caused by boundary-layer separation ahead of blunt fins. Louis G. Kaufman II, Robert H. Korkegi, and Leo C. Morton (AIAA J, SYN) 1363
- Sidewall boundary-layer influence on shock wave/turbulent boundary-layer interactions. Daniel C. Reda and John D. Murphy (AIAA J, SYN) 1367

- Boundary layer electron profiles for high-altitude entry of a blunt slender body. J. S. Evans, C. J. Schexnayder Jr., and Paul W. Huber (AIAA J, SYN) 1371
- Decay of far-flowfield in trailing vortices. B. S. Baldwin, N. A. Chigier, and Y. S. Sheaffer (AIAA J, SYN) 1601
- SSTs, ozone, and skin cancer. Francis S. Johnson (A/A, July) 16
- An experimental study of a plane mixing layer. Rajni P. Patel (AIAA J) 67
- The lift force due to von Kármán's vortex wake. D. W. Sallet (JH) 161
- Flow properties of submerged heated effluents in a waterway. James F. Campbell and Joseph A. Schetz (AIAA J) 223
- A base pressure experiment for determining the atmospheric pressure profile of planets. J. M. Cassanto (JSR) 253
- Analysis of the interaction of jets and airfoils in two dimensions. C. A. Shollenberger (JA) 267
- Effects of delta wing separation on shuttle dynamics. J. Peter Reding and Lars E. Ericsson (JSR) 421
- Viking pitch damping derivatives as influenced by support interference and test techniques. Sy Steinberg, Bob L. Uselton, and Paul M. Siemers III (JSR) 443
- Initial conditions for the hypersonic-shock/boundary-layer interaction problem. M. J. Werle, D. L. Dwyer, and W. L. Hankey (AIAA J) 525
- An experimental investigation of a jet issuing from a wing in crossflow. W. Mikolowsky and H. McMahon (JA) 546
- An experimental investigation of turbulent transonic viscous-inviscid interactions. Irwin E. Alber, John W. Bacon, Bruce S. Masson, and Donald J. Collins (AIAA J) 620
- Observations of atmospheric effects on vortex wake behavior. Ivar Tombach (JA) 641
- Glow-discharge flow visualization in low-density free jets. S. S. Fisher and D. Bharathan (JSR) 658
- Annular truncated plug nozzle flowfield and base pressure characteristics. Wayne P. Sule and Thomas J. Mueller (JSR) 689
- Fin induced laminar interactions on sharp and spherically blunted cones. T. Taz Bramlette, Richard R. Smith, and Neil J. Sliski (JSR) 696
- Dispersion and subsidence of the exhaust of a supersonic transport in the stratosphere. Thomas J. Overcamp and James A. Fay (JA) 720
- Mathematical formulation of viscous-inviscid interaction problems in supersonic flow. Gabriel Müller (AIAA J) 938
- Prediction of inert turbulent swirl flows. David G. Lilley (AIAA J) 955
- Discrete vortex method of two-dimensional jet flaps. Junzo Sato (AIAA J) 968
- Turbulent scattering spectra of electron density fluctuations in Mach 16 projectile wakes. Jay Fox and Harald Rungaldier (AIAA J) 1059
- Inviscid flowfield of an unsteady airfoil. W. J. McCroskey (AIAA J) 1130
- Hypersonic wake aerodynamics at high Reynolds numbers. Michael L. Finson (AIAA J) 1137
- Turbulent correlation measurements in a two-stream mixing layer. B. G. Jones, H. P. Planchon, and R. J. Hammersley (AIAA J) 1146
- Shear stress and turbulence intensity models for coflowing axisymmetric streams. S. W. Zelazny, J. H. Morgenthaler, and D. L. Herendeen (AIAA J) 1165
- Effects of blunting and cooling on separation of laminar supersonic flow. J. Don Gray and R. W. Rhudy (AIAA J) 1296
- Thermal and momentum diffusivity measurements in a turbulent stratified flow. Gordon Merritt and George Rudinger (AIAA J) 1465
- Numerical and experimental investigation of the oscillating wake of a blunt-based body. A. E. Fanning and T. J. Mueller (AIAA J) 1486
- Experimental study of supersonic laminar base flow with and without suction. Antoni K. Jakubowski and Clark H. Lewis (AIAA J) 1670
- Turbulent wall-jets in conical diffusers. B. R. Ramaprian (AIAA J) 1684
- Chemical modeling experimental facility. A. Mandl, S. A. Fogelson, and S. D. Hester (AIAA J) 1711
- Aircraft wing-tip vortex modification. Philip O. Jarvinen (JA, EN) 63
- Penetration of retrorocket exhausts into subsonic counterflows. Philip O. Jarvinen and Jacques A. F. Hill (JSR, EN) 85
- Heat transfer downstream of attachment of a turbulent supersonic shear layer. Philip M. Gerhart (AIAA J, TN) 104
- Application of hot wires to measurements in freely expanding jets. Michael Richard Davis (AIAA J, TN) 113
- Flight test correlation technique for turbulent base heat transfer with low ablation. Bruce M. Bulmer (JSR, EN) 222
- Experimental investigation of two-dimensional, supersonic flow impingement on a normal surface. Charles V. Knight (AIAA J, TN) 233
- An experimental investigation of base heating on typical Mars entry body shapes. O. L. Zappa and W. G. Reinecke (JSR, EN) 273
- Detection of flight vehicle transition from base measurements. Bruce M. Bulmer (JSR, EN) 280
- Base drag calculations in supersonic turbulent axisymmetric flows. Patrick J. Roache (JSR, EN) 285
- Effect of base mounted cylinders on a supersonic near wake. Richard A. Merz, Robert H. Page, and Christian E. G. Przirembel (JSR, EN) 470
- Support wire disturbances in near viscous wakes of slender supersonic bodies. Kenneth A. Mirly and B. P. Selberg (JSR, EN) 474
- Unique characteristics of exhaust-plume interference. Dave Bergman (JA, EN) 508
- Influence of total temperature on transition in supersonic flow. R. Ross (AIAA J, TN) 563
- Experimental study on optimization parameters of a supersonic jet ejector thrust augmentor. Dah Yu Cheng, Peter Wang, and Dean M. Chisel (JA, EN) 569
- Turbulent heat transfer to a fin leading edge—Flight test results. E. Clark Lemmon and Hugh W. Coleman (AIAA J, TN) 571
- Prediction of airfoil shock location in transonic flow. Victor E. Studwell and Jain-Ming Wu (JA, EN) 636
- A nomogram for high-altitude plume structures. James Stark Draper and Emmett A. Sutton (JSR, EN) 682
- Structure of Betz vortex cores. Peter F. Jordan (JA, EN) 691
- Incipient separation pressure rise for a Mach 3.8 turbulent boundary layer. William C. Rose, Richard J. Page, and Morris E. Childs (AIAA J, TN) 761
- Inviscid wake-airfoil interaction on multielement high lift systems. Alfred Moser and Carl A. Shollenberger (JA, EN) 765
- Jet penetration at a sonic throat. Robert H. Nunn and Kenneth E. Frick (JSR, EN) 819
- Supersonic combustion aid for liquid and gaseous fuels. J. J. Isaac and R. A. Cookson (AIAA J, TN) 1036
- Plume boundary jump on an underexpanded jet exhausting counter to a freestream. D. L. Whitfield, H. K. Smithson, and L. L. Price (AIAA J, TN) 1336
- Branching solutions for supersonic interacting boundary layers. W. L. Hankey, D. L. Dwyer, and M. J. Werle (AIAA J, TN) 1349
- Coherence measurements in an axisymmetric wake. J. B. Roberts (AIAA J, TN) 1569
- Three-dimensional separation for interaction of shock waves with turbulent boundary layers. Theodore J. Goldberg (AIAA J, TN) 1573
- A simple correlation for incipient turbulent boundary-layer separation due to a skewed shock wave. R. H. Korkegi (AIAA J, TN) 1578
- Near-field trajectory of turbulent jets discharged at various inclinations into a uniform crossflow. Jin Wu (AIAA J, TN) 1579
- Calculation of turbulent boundary-layer shock-wave interaction. David C. Wilcox (AIAA J, TN) 1592
- Reynolds stress measurements in a hypersonic boundary layer. A. Demetriades and A. J. Laderman (AIAA J, TN) 1594
- Sweep effects on supersonic separated flows—A numerical study. M. J. Werle, V. N. Vatsa, and S. D. Bertke (AIAA J, TN) 1763
- Hypersonic flight results showing Reynolds-number influence on turbulent base pressure. Bruce M. Bulmer (AIAA J, TN) 1785
- Earliest classic result for the turbulent hydraulic wake behind body of revolution. Raymond H. Cramer (JH, TC) 95
- Reply by authors to R. H. Cramer. P. K. Chang and Y. H. Oh (JH, TC) 96
- Comment on "Reduction of noise from supersonic jet flows." Arthur G. Kurn (AIAA J, TC) 254
- Reply by authors to A. G. Kurn. Darshan S. Dosanjh and James C. Yu (AIAA J, TC) 415
- Comments on "Low-area ratio, thrust-augmenting ejectors." Philip A. Graham (JA, TC) 701
- Reply to Comment by Philip A. Graham. Paul M. Bevilacqua (JA, TC) 703
- Comment on the Comment by Philip A. Graham and Reply by Paul M. Bevilacqua. William K. Greathouse (JA, TC) 704
- Drift of buoyant wing-tip vortices. Robert C. Costen (JA, ERR) 320

Multiphase Flows

- Two-phase Mach numbers in heat pipe analysis. Joseph W. Bursik (AIAA J, SYN) 781
- Liquid jet injection into a supersonic flow. Edward A. Kush Jr. and Joseph A. Schetz (AIAA J, SYN) 1223
- Thrust of an air-augmented waterjet. Robert G. Amos, Glennon Maples, and David F. Dyer (JH) 64
- Theoretical, quasi-static analysis of cavitation compliance in turbopumps. C. Brennen and A. J. Acosta (JSR) 175
- Dynamic behavior of solid particles suspended by polluted flow in a turbine stage. M. Fathy Hussein and W. Tabakoff (JA) 434
- Iterative modeling of interior ballistics of small arms. A. M. Joglekar, M. S. Phadke, and S. M. Wu (JSR) 450
- Optimum design of space storable gas/liquid coaxial injectors. R. J. Burick (JSR) 663
- Drop size distribution resulting from liquid jet injection across a supersonic stream. D. W. Harvey (AIAA J) 826
- Dusty hypersonic wedge flow. John Peddieson Jr. and Chung-Hsein Lyu (AIAA J, TN) 110
- Simultaneous comparison of turbulent gas fluctuations by laser Doppler and hot wire. William C. Cliff, Charles E. Fuller III, and Virgil A. Sandborn (AIAA J, TN) 748

Nonsteady Aerodynamics

- Experimental investigation of hypersonic buzz on a delta configuration. Robert L. Goldman and Henry J. Obrenski (AIAA J, SYN) 1361
- Stall-flutter analysis. Lars E. Ericsson and J. Peter Reding (JA) 5
- Unsteady aerodynamics of nonplanar wings and wing-tail configurations of elastic flight vehicles in supersonic flight. Jack Morito II and William S. Rowe (JA) 19

- Fluctuating lift and moment coefficients for cascaded airfoils in a nonuniform compressible flow. Sanford Fleeter (JA) 93
- Unsteady thin-airfoil theory for subsonic flow. Colin Osborne (AIAA J) 205
- Closed-form lift and moment for Osborne's unsteady thin-airfoil theory. Nelson H. Kemp (AIAA J, TC) 1358
- Elastic launch vehicle response to sinusoidal gusts. Lars E. Ericsson, J. Peter Reding, and Rolf A. Guenther (JSR) 244
- Vortex noise of isolated airfoils. Robert W. Paterson, Paul G. Vogt, Martin R. Fink, and C. Lee Munch (JA) 296
- Compressible unsteady interactions between blade rows. Colin Osborne (AIAA J) 340
- Compressible unsteady interactions between blade rows. Colin Osborne (AIAA J, ERR) 1360
- Estimation of possible excitation frequencies for shallow rectangular cavities. Alan J. Bilanin and Eugene E. Covert (AIAA J) 347
- Effects of delta wing separation on shuttle dynamics. J. Peter Reding and Lars E. Ericsson (JSR) 421
- Analysis of normal shock noise measurements on nose-cylinder bodies. J. Peter Reding and Rolf A. Guenther (JSR) 429
- Effect of thermally expanding surfaces on aerodynamic roll torques for cones. John B. McDevitt (AIAA J) 505
- Lifting-surface theory for a wing oscillating in yaw and sideslip with an angle of attack. Koji Isogai and Teruo Ichikawa (AIAA J) 599
- Downwash-velocity potential method for oscillating surfaces. John Kenneth Haviland and Young Sik Yoo (AIAA J) 607
- A fluidic sounding rocket motor ignition system. V. P. Marchese, E. L. Rakowsky, and L. J. Bement (JSR) 731
- Aerodynamic boundary layer effects on flutter and damping of plates. E. H. Dowell (JA) 734
- Refinements in high-Reynolds number shock-tunnel technology. Roy Scott Hickman and James B. Kyser (AIAA J) 961
- Inviscid flowfield of an unsteady airfoil. W. J. McCroskey (AIAA J) 1130
- Linearized characteristics method for supersonic flow past vibrating shells. M. F. Platzler, C. W. Brix Jr. and K. A. Webster (AIAA J) 1302
- Simplified aerodynamic theory of oscillating thin surfaces in subsonic flow. W. P. Jones and Jimmie A. Moore (AIAA J) 1305
- Finite-element analysis of unsteady incompressible flow around an oscillating obstacle of arbitrary shape. Theodore Bratanow, Akin Ecer, and Michael Kobiske (AIAA J) 1471
- Numerical and experimental investigation of the oscillating wake of a blunt-based body. A. E. Fanning and T. J. Mueller (AIAA J) 1486
- An improved kernel function formulation for unsteady subsonic flow. Frederick D. Eichenbaum (AIAA J, TN) 123
- Dynamic instability caused by forebody blowing. Lars E. Ericsson and Rolf A. Guenther (AIAA J, TN) 231
- Contribution in unsteady flow of power-law fluids. Sreedhan Roy (AIAA J, TN) 238
- Relative magnitudes of stresses caused by static and dynamic launch vehicle loads. Lars E. Ericsson, J. Peter Reding, and Rolf A. Guenther (JSR, EN) 276
- Aerodynamic loading on high-speed ground vehicles. Peter Crimi and Ronald A. Johnson (JA, EN) 317
- Flow properties fluctuations in a convergent-divergent nozzle. Tarit K. Bose (JSR, EN) 530
- Helium bubble survey of an opening parachute flowfield. Paul C. Klimas (JA, EN) 567
- Determination of rocket ignition induced silo transient pressures using an expansion tube. Michael J. Wayte and Fredric A. Gruenich (JSR, EN) 602
- Linear theory of stall flutter. Jon D. Raggett (AIAA J, TN) 733
- Diffraction and reflection of shocks from corners. M. G. Chopra (AIAA J, TN) 1452
- Unsteady boundary-layer flow of power law fluids. Sreedhan Roy (AIAA J, TN) 1581
- Derivation of aerodynamic Kernel functions. E. H. Dowell and C. S. Ventres (AIAA J, TN) 1586
- Unsteady flow of power-law fluids. I. S. Habib and T. Y. Na (AIAA J, TN) 1588
- Laminar boundary layer in noncentered unsteady waves. J. Gordon Hall, G. Srinivasan, and Jaipal S. Rath (AIAA J, TN) 1770
- Integral equation for small perturbations of irrotational flows. John Kenneth Haviland (AIAA J, TN) 1778
- Closed-form lift and moment for Osborne's unsteady thin-airfoil theory. Nelson H. Kemp (AIAA J, TC) 1358
- Nozzle and Channel Flow**
- Entropy in nonequilibrium nozzle flows of vibrationally relaxing diatomic gases. Ryuji Ishii (AIAA J, SYN) 137
- Shock wave/turbulent boundary-layer interactions in rectangular channels. Daniel C. Reda and John D. Murphy (AIAA J, SYN) 139
- Time-dependent analysis of nonequilibrium nozzle flows with complex chemistry. J. S. Vamos and J. D. Anderson Jr. (JSR, SYN) 225
- Starting process in the nozzle of a nonreflected shock tunnel. R. J. Stalker and N. R. Mudford (AIAA J, SYN) 265
- Sidewall boundary-layer influence on shock wave/turbulent boundary-layer interactions. Daniel C. Reda and John D. Murphy (AIAA J, SYN) 1367
- Nonequilibrium nozzle expansions of carbon dioxide from a high-enthalpy reservoir. N. A. Ebrahim and H. G. Hornung (AIAA J, SYN) 1369
- Laser-heated hypersonic wind tunnel. Victor R. Buonadonna, Charles J. Knight, and A. Hertzberg (AIAA J, SYN) 1457
- Thrust of an air-augmented waterjet. Robert G. Amos, Glennon Maples, and David F. Dyer (JH) 64
- Analytical and experimental investigations of laminar mixing of confined heterogeneous jets. Gideon Shavit and Zalman Lavan (AIAA J) 352
- Compact ejector thrust augmentation. Brian Quinn (JA) 481
- Calculation of nozzle flows using Padé fractions. Andrew H. Van Tuyl (AIAA J) 537
- Transonic flow quality improvements in a blowdown wind tunnel. James M. Cooksey and John W. Arnold (JA) 554
- Aerodynamics of high-performance Ludwig tubes. David A. Russell and Kwok-On Tong (AIAA J) 642
- Supersonic flow aerodynamic windows for high-power lasers. E. M. Parmentier and R. A. Greenberg (AIAA J) 943
- Structure of shock waves in cylindrical ducts. P. J. Waltrup and F. S. Billig (AIAA J) 1404
- Starting transient of solid-propellant rocket motors with high internal gas velocities. A. Peretz, K. K. Kuo, L. H. Caveny, and M. Summerfield (AIAA J) 1719
- Experimental investigation of two-dimensional, supersonic flow impingement on a normal surface. Charles V. Knight (AIAA J, TN) 233
- A subsonic diffuser with moving walls for boundary-layer control. Jeffrey S. Tennant (AIAA J, TN) 240
- A simple estimate of the effect of ejector length on thrust augmentation. Brian Quinn (JA, EN) 313
- Flow areas for series-parallel compartment venting to satisfy pressure differential requirements. Cecil E. Kirby and George W. Ivy (JSR, EN) 350
- Pumping capacity of venturi exhausts. Jacques A. F. Hill and Philip O. Jarvinen (JA, EN) 444
- Flow properties fluctuations in a convergent-divergent nozzle. Tarit K. Bose (JSR, EN) 530
- Effects of upstream wall temperatures on hypersonic tunnel wall boundary-layer profile measurements. William V. Feller (AIAA J, TN) 556
- Sonic line for a coaxial axisymmetric nozzle. William J. H. Smithey and Michael E. Naber (AIAA J, TN) 569
- Thermodynamic expansion processes for argon plasma in a convergent-divergent nozzle. Tarit K. Bose (JSR, EN) 613
- Prediction of precombustion wall pressure distributions in scramjet engines. P. J. Waltrup and F. S. Billig (JSR, EN) 620
- Base pressures in flow expansions by hydraulic analogy. H. S. Ningappa and S. Narasimhan (AIAA J, TN) 727
- Striated nozzle flow with small radius of curvature ratio throats. D. J. Norton and R. E. White (JSR, EN) 747
- Jet penetration at a sonic throat. Robert H. Nunn and Kenneth E. Frick (JSR, EN) 819
- An analytical study of hypersonic inlets in free molecule flow. Max Kinslow (AIAA J, TN) 1205
- Nitrogen temperature determination in arc tunnel air flows. S. S. Lazdinis and R. F. Carpenter (AIAA J, TN) 1416
- Analysis of the effects of a probe in the transonic region of a nozzle. Joseph A. Schetz and Stanley Favin (AIAA J, TN) 1453
- Inviscid swirling flows through a choked nozzle. C. T. Hsu and A. D. DeJode (AIAA J, TN) 1564
- Comments on "Low-area ratio, thrust-augmenting ejectors." Philip A. Graham (JA, TC) 701
- Reply to Comment by Philip A. Graham. Paul M. Bevilacqua (JA, TC) 703
- Comment on the Comment by Philip A. Graham and Reply by Paul M. Bevilacqua. William K. Greathouse (JA, TC) 704
- Plasma Dynamics and MHD**
- Influence of magnetic fields on anode losses in MPD-arcs. Wolfgang Schall (AIAA J, SYN) 10
- Pressure and current effects on the thermal efficiency of an MPD arc used as a plasma source. Thomas J. Pivrotto (AIAA J, SYN) 12
- A laboratory simulation of the ionospheric plasma. Daniel R. Pigache (AIAA J, SYN) 129
- Establishment of quasi-steady operation in a pulsed MPD arcjet. Kyoichi Kuriki and Masaaki Inutake (AIAA J, SYN) 133
- Exhaust flow and propulsion characteristics of a pulsed MPD-arc thruster. Charles J. Michels and Thomas M. York (AIAA J, SYN) 579
- Steady-state interactions in plasma accelerators. R. S. Steinolfson (AIAA J, SYN) 779
- Continuum electrostatic probes in the presence of negative ions: A numerical solution. Paul B. Bailey and Kenell J. Touryan (AIAA J, SYN) 1225
- Heat transfer to a hemispherical body in a supersonic argon plasma. Robert J. Nowak and M. C. Yuen (AIAA J, SYN) 1463
- Electrode and gasdynamic effects in a large nonequilibrium MHD generator. B. Zauderer and E. Tate (AIAA J) 149
- Microwave and electrostatic probe measurements on a blunt re-entry vehicle. Dallas T. Hayes and Walter Rotman (AIAA J) 675
- Discharge characteristics in cesium-seeded argon. Norman A. Evans (AIAA J) 683

- Motion of solid D₂ under laser irradiation. Ralph S. Cooper (AIAA J) 831
- Effects of channel size on the ionization instability in MHD generators. R. M. Evans and C. H. Kruger (AIAA J) 1006
- Ion boundary layer on a flat plate. P. C. T. de Boer (AIAA J) 1012
- Turbulent scattering spectra of electron density fluctuations in Mach 16 projectile wakes. Jay Fox and Harald Rungaldier (AIAA J) 1059
- Investigation of the discharge structure in a noble gas alkali MHD generator plasma: Part I. G. Brederlow, K. J. Witte, and H. Zinko (AIAA J) 1065
- Investigation of the discharge structure in a rare gas alkali MHD generator plasma: Part II. G. Brederlow and K. J. Witte (AIAA J) 1072
- Boundary-layer plasma of a re-entry vehicle: A comparison of prediction models and flight measurements. R. E. Kiel, R. F. Bergeron Jr., T. J. Kessler, and A. E. Kaplan (AIAA J) 1235
- Nonequilibrium flow calculations for the hydrogen constricted arc. Robert K. Scott and Frank P. Incropera (AIAA J) 1714
- Ion-current distributions around an electrically conductive body in ionized gas flow. Hiroshi Tsuji and Toshisuke Hirano (AIAA J, TN) 100
- Numerical analysis of the viscous, hypersonic, MDH blunt-body problem. Chong-Yul Yoo and Robert W. Porter (AIAA J, TN) 383
- Ion current at the forward stagnation region of an electrically conducting body. Toshisuke Hirano, Hirozo Shiratori, and Hiroshi Tsuji (AIAA J, TN) 887
- Approximation to the collisional-radiative recombination coefficient in a partially ionized gas. Barry R. Maxwell and F. C. Wessling (AIAA J, TN) 1048
- Multiring probe in a flowing ionospheric plasma. John W. Sheldon and Nobie H. Stone (AIAA J, TN) 1051
- Coupled radiation with turbulent convection in electric arcs. R. Pyare and M. M. Abu-Romia (AIAA J, TN) 1188
- Shock formation by a moving force field. R. S. Steinolfson (AIAA J, TN) 1201
- The numerical prediction of streamer growth in MHD ducts. R. J. Uncles (AIAA J, TN) 1436
- Measurement of arc radiation for selected spectral regions. J. B. Lee, F. P. Incropera, and R. C. Peterson (AIAA J, TN) 1455
- Shock tube flow passing through a section of a linear MHD generator. J. J. Rosciszewski and T. T. Yeh (AIAA J, TN) 1756
- Comments on "Theory of ion boundary layer." A. G. Hammitt (AIAA J, TC) 1597
- Reply by authors to A. G. Hammitt. P. C. T. deBoer and R. A. Johnson (AIAA J, TC) 1598

Radiatively Coupled Flows and Heat Transfer

- Laser-heated hypersonic wind tunnel. Victor R. Buonadonna, Charles J. Knight, and A. Hertzberg (AIAA J, SYN) 1457
- Ablation and radiation coupled viscous hypersonic shock layers. Carl D. Engel, Richard C. Farmer, and Ralph W. Pike (AIAA J) 1174
- Influence of gradient of velocity upon the resonant radiative transfer in plasma flows. P. Valentin, M. Pinegre, and M. Terrier (AIAA J) 1698
- Stagnation region radiative heating with steady-state ablation during Venus entry. Kenneth Sutton and R. A. Falanga (JSR, EN) 155
- Coupled radiation with turbulent convection in electric arcs. R. Pyare and M. M. Abu-Romia (AIAA J, TN) 1188
- Exact steady-state analogy of transient gas compression by coalescing waves. L. L. Lengyel (AIAA J, TN) 1347

Rarefied Flows

- Glow-discharge flow visualization in low-density free jets. S. S. Fisher and D. Bharathan (JSR) 658
- Analysis of gas flow through a multilayer insulation system. J. T. Lin (AIAA J) 995
- Mean free path of emitted molecules and correlation of sphere drag data. David L. Whitfield (AIAA J) 1666
- Application of hot wires to measurements in freely expanding jets. Michael Richard Davis (AIAA J, TN) 113
- Drag coefficients for cones and cylinders according to Schamberg's model. Mildred M. Moe and Louis C. Tsang (AIAA J, TN) 396
- Multiring probe in a flowing ionosphere plasma. John W. Sheldon and Nobie H. Stone (AIAA J, TN) 1051
- An analytical study of hypersonic inlets in free molecule flow. Max Kinslow (AIAA J, TN) 1205
- Plume boundary jump of an underexpanded jet exhausting counter to a freestream. D. L. Whitfield, H. K. Smithson, and L. L. Price (AIAA J, TN) 1336
- Probe interference in high-speed rarefied flows. D. M. Cogan and J. K. Harvey (AIAA J, TN) 1765

Reactive Flows

- Time-dependent analysis of nonequilibrium nozzle flows with complex chemistry. J. S. Vamos and J. D. Anderson Jr. (JSR, SYN) 225
- An analytical and experimental study of supersonic combustion of hydrogen in vitiated air stream. Marshall C. Burrows and Anatole P. Kurkov (AIAA J, SYN) 1217
- Nonequilibrium nozzle expansions of carbon dioxide from a high-enthalpy reservoir. N. A. Ebrahim and H. G. Hornung (AIAA J, SYN) 1369

- Boundary layer electron profiles for high-altitude entry of a blunt slender body. J. S. Evans, C. J. Schexnayder Jr., and Paul W. Huber (AIAA J, SYN) 1371
- Simplified model of CW diffusion-type chemical laser. H. Mirels, R. Hofland, and W. S. King (AIAA J) 156
- Effect of surface catalytic activity on stagnation heat-transfer rates. L. A. Anderson (AIAA J) 649
- Multishocked, three-dimensional supersonic flowfields with real gas effects. P. Kutler, W. A. Reinhardt, and R. F. Warming (AIAA J) 657
- Nitric oxide formation in gas turbine combustors. R. Kollrack and L. D. Aceto (AIAA J) 664
- Experimental CW chemical laser studies. D. J. Spencer and R. L. Varwig (AIAA J) 1000
- Turbulent scattering spectra of electron density fluctuations in Mach 16 projectile wakes. Jay Fox and Harald Rungaldier (AIAA J) 1059
- Boundary-layer plasma of a re-entry vehicle: A comparison of prediction models and flight measurements. R. E. Kiel, R. F. Bergeron Jr., T. J. Kessler, and A. E. Kaplan (AIAA J) 1235
- Analysis of the chemically reacting laminar boundary layer during hybrid combustion. Herman Krier and Harold Kerzner (AIAA J) 1691
- Calculation of shock wave relaxation zones including dissipative transport phenomena. D. Weihs and B. Gal-Or (AIAA J, TN) 108
- Atomic recombination rate determination through heat-transfer measurement. Chul Park, Lewis A. Anderson, and Robert E. Sheldahl (AIAA J, TN) 372
- Ion intensity measurement in a plasma reaction channel. J. H. Mullen, J. M. Madson, and L. N. Medgyesi-Mitschang (AIAA J, TN) 1031
- Performance of turbulent chemical laser. Paul M. Chung (AIAA J, TN) 1040
- Assessment of chemical nonequilibrium for massively ablating graphite. Kenneth A. Lincoln, John T. Howe, and Tsong-Mou Liu (AIAA J, TN) 1198
- Verification of a simple relationship for shock-wave reflection of a relaxing gas. Ronald K. Hanson and William Flower (AIAA J, TN) 1777

Shock Waves and Detonations

- Review of current sonic boom studies. Edward J. Kane (JA) 395
- Plastic bonded, thermally stable explosive for an Apollo experiment. E. E. Kilmer (JSR) 463
- Motion of solid D₂ under laser irradiation. Ralph S. Cooper (AIAA J) 831
- Laser produced hemispherical shock waves. Barrett S. Robb and Donald L. Turcotte (AIAA J) 836
- Structure of shock waves in cylindrical ducts. P. J. Waltrup and F. S. Billig (AIAA J) 1404
- Vibrational relaxation of carbon monoxide studies by two-wavelength infrared emission. Charles Chackerian Jr. (AIAA J) 1706
- Calculation of shock wave relaxation zones including dissipative transport phenomena. D. Weihs and B. Gal-Or (AIAA J, TN) 108
- Application of hot wires to measurements in freely expanding jets. Michael Richard Davis (AIAA J, TN) 113
- Unsteady flow processes in a rapidly filling plenum. Jacob B. Romero and Frederic A. Gruenich (AIAA J, TN) 368
- Locus of a one-dimensional shock front caused by a disturbance moving on a circle. F. Meyer (AIAA J, TN) 408
- Fuel tank wall response to hydraulic ram during the shock phase. R. E. Ball, H. L. Power, and A. E. Fuhs (JA, EN) 571
- Prediction of precombustion wall pressure distributions in scramjet engines. P. J. Waltrup and F. S. Billig (JSR, EN) 620
- Streamline curvature and velocity gradient behind curved shocks. Prabhakara P. Rao (AIAA J, TN) 1352
- Diffraction and reflection of shocks from corners. M. G. Chopra (AIAA J, TN) 1452
- Verification of a simple relationship for shock-wave reflection in a relaxing gas. Ronald K. Hanson and William Flower (AIAA J, TN) 1777
- Comment on "Laminar thermal boundary layers on continuous surfaces." H. E. Eickhoff (AIAA J, TC) 895
- Reply by authors to H. E. Eickhoff. C. A. Rhodes and H. Kaminer Jr. (AIAA J, TC) 895

Subsonic and Transonic Flow

- Shock waves and drag in the numerical calculation of compressible, irrotational transonic flow. Joseph L. Steger and Barrett S. Baldwin (AIAA J, SYN) 903
- Inverse method of designing two-dimensional transonic airfoil sections. Junzo Sato (AIAA J) 58
- A method for transonic wind-tunnel corrections. Antonio Ferri and Paolo Baronti (AIAA J) 63
- Surface curvature and lateral pressure gradient effects on laminar boundary-layer separation. G. R. Inger and B. Dutt (JA) 200
- Unsteady thin-airfoil theory for subsonic flow. Colin Osborne (AIAA J) 205
- Closed-form lift and moment for Osborne's unsteady thin-airfoil theory. Nelson H. Kemp (AIAA J, TC) 1358
- Transonic nozzle flow with nonuniform gas properties. Stanton Boraas (AIAA J) 210
- Correlation of Magnus force data for slender spinning cylinders. James D. Iversen (JSR) 268
- Relaxation techniques for three-dimensional transonic flow about wings.

- F. R. Bailey and J. L. Steger (AIAA J) 318
- Compressible unsteady interactions between blade rows. Colin Osborne (AIAA J) 340
- Compressible unsteady interactions between blade rows. Colin Osborne (AIAA J, ERR) 1360
- Analysis of normal shock noise measurements on nose-cylinder bodies. J. Peter Reding and Rolf A. Guenther (JSR) 429
- Viking pitch damping derivatives as influenced by support interference and test techniques. Sy Steinberg, Bob L. Uselton, and Paul M. Siemers III (JSR) 443
- Calculation of nozzle flows using Padé fractions. Andrew H. Van Tuyl (AIAA J) 537
- An experimental investigation of turbulent transonic viscous-inviscid interactions. Irwin E. Alber, John W. Bacon, Bruce S. Masson, and Donald J. Collins (AIAA J) 620
- A finite-difference method for transonic airfoil design. Joseph L. Steger and John M. Klineberg (AIAA J) 628
- Exact method of designing airfoils with given velocity distribution in incompressible flow. T. Strand (JA) 651
- Discrete vortex method of two-dimensional jet flaps. Junzo Sato (AIAA J) 968
- Study of vortex rings using a laser Doppler velocimeter. John P. Sullivan, Sheila E. Widnall, and Shaoul Ezekiel (AIAA J) 1384
- Variational approach to the lifting surface problem. S. F. Shen and Stevens T. K. Chan (AIAA J) 1390
- A preliminary analytical and experimental investigation of helicopter rotor boundary layers. Dwight A. Blaser and Henry R. Velkoff (AIAA J) 1660
- Aircraft wing-tip vortex modification. Philip O. Jarvinen (JA, EN) 63
- An improved kernel function formulation for unsteady subsonic flow. Frederick D. Eichenbaum (AIAA J, TN) 123
- Toward simpler prediction of transonic airfoil lift, drag, and moment. Frederick O. Smetana and Donald P. Knepper (JA, EN) 124
- Study of slat-airfoil combinations using computer graphics. R. H. Liebeck and D. N. Smyth (JA, EN) 254
- High Reynolds number experimental data for forebody axial force. John William Davis and Robert F. Graham (AIAA J, TN) 379
- Vortex-lift prediction for complex wing planforms. R. G. Bradley, C. W. Smith, and I. C. Bhatelley (JA, EN) 379
- Pumping capacity of venturi exhausts. Jacques A. F. Hill and Philip O. Jarvinen (JA, EN) 444
- Decay of anisotropic turbulence. Henry J. Tucker and S. Firasat Ali (AIAA J, TN) 546
- Prediction of airfoil shock location in transonic flow. Victor E. Studwell and Jain-Ming Wu (JA, EN) 636
- A criterion for assessing wind-tunnel wall interference at Mach 1. Theodore R. Goodman (JA, EN) 695
- Striated nozzle flow with small radius of curvature ratio throats. D. J. Norton and R. E. White (JSR, EN) 747
- Transonic flow past lifting wings. Helge Nørstrud (AIAA J, TN) 754
- Transonic flow about lifting configurations. R. W. Barnwell (AIAA J, TN) 764
- Inviscid wake-airfoil interaction on multielement high lift systems. Alfred Moser and Carl A. Shollenberger (JA, EN) 765
- Equivalence rule and transonic flow theory involving lift. H. K. Cheng and M. M. Hafez (AIAA J, TN) 1210
- Transonic flow past lifting airfoils. N. R. Subramanian and M. Balakrishnan (AIAA J, TN) 1766
- Comment on "A compressibility correction for internal flow solutions." M. V. Herbert (JA, TC) 574
- Comments on "Low-area ratio, thrust-augmenting ejectors." Philip A. Graham (JA, TC) 701
- Reply to Comment by Philip A. Graham. Paul M. Bevilacqua (JA, TC) 703
- Comment on the Comment by Philip A. Graham and Reply by Paul M. Bevilacqua. William K. Greathouse (JA, TC) 704
- Closed-form lift and moment for Osborne's unsteady thin-airfoil theory. Nelson H. Kemp (AIAA J, TC) 1358
- elastic flight vehicles in supersonic flight. Jack Morito Ii and William S. Rowe (JA) 19
- Hypersonic flows in large-scale inlet models. William R. Seebaugh (JA) 38
- Second- and third-order noncentered difference schemes for nonlinear hyperbolic equations. R. F. Warming, Paul Kutler, and Harvard Lomax (AIAA J) 189
- Computation of space shuttle flowfields using noncentered finite-difference schemes. Paul Kutler, R. F. Warming, and Harvard Lomax (AIAA J) 196
- Electron beam visualization in hypersonic airflows. H. F. Lee and S. L. Petrie (JA) 239
- Correlation of Magnus force data for slender spinning cylinders. James D. Iversen (JSR) 268
- Newtonian aerodynamic forces from Poisson's equation. Jack Pike (AIAA J) 499
- Initial conditions for the hypersonic-shock/boundary-layer interaction problem. M. J. Werle, D. L. Dwyer, and W. L. Hankey (AIAA J) 525
- Experimental determination of the aeroacoustic environment about a slender cone. A. Martellucci, L. Chaump, D. Rogers, and D. Smith (AIAA J) 635
- Multishocked, three-dimensional supersonic flowfields with real gas effects. P. Kutler, W. A. Reinhardt, and R. F. Warming (AIAA J) 657
- Microwave and electrostatic probe measurements on a blunt re-entry vehicle. Dallas T. Hayes and Walter Rotman (AIAA J) 675
- Fin induced laminar interactions on sharp and spherically blunted cones. T. Taz Bramlette, Richard R. Smith, and Neil J. Sliski (JSR) 696
- Shuttle orbiter re-entry flowfields at high angle of attack. William C. Rochelle, Barney B. Roberts, Leo d'Attorre, and M. A. Bilyk (JSR) 783
- Analysis of turbulent skin friction in thick axisymmetric boundary layers. F. M. White, R. C. Lessmann, and G. H. Christoph (AIAA J) 821
- A surface flow approach for predicting crosshatch patterns. R. M. Grabow and C. O. White (AIAA J) 841
- Supersonic flow aerodynamic windows for high-power lasers. E. M. Parmentier and R. A. Greenberg (AIAA J) 943
- Refinements in high-Reynolds number shock-tunnel technology. Roy Scott Hickman and James B. Kyser (AIAA J) 961
- Hypersonic wake aerodynamics at high Reynolds numbers. Michael L. Finson (AIAA J) 1137
- Investigation of the expansion side of a delta wing at supersonic speed. W. J. Bannink and C. Nebbeling (AIAA J) 1151
- Effects of blunting and cooling on separation of laminar supersonic flow. J. Don Gray and R. W. Rhudy (AIAA J) 1296
- Approximation for hypersonic flow past an inclined cone. Robert T. Doty and Maurice L. Rasmussen (AIAA J) 1310
- Time-split finite-volume method for three-dimensional blunt-body flow. Arthur W. Rizzi and Mamoru Inouye (AIAA J) 1478
- Effect of disturbances on the heat transfer of a laminar axisymmetric boundary layer. R. D. Small and J. Rom (AIAA J) 1503
- Mean free path of emitted molecules and correlation of sphere drag data. David L. Whitfield (AIAA J) 1666
- Experimental study of supersonic laminar base flow with and without suction. Antoni K. Jakubowski and Clark H. Lewis (AIAA J) 1670
- Corner pressures and fillet shock locations for symmetrical corners by an approximate method. Ralph D. Watson (JSR, EN) 90
- Dusty hypersonic wedge flow. John Peddieson Jr. and Chung-Hsein Lyu (AIAA J, TN) 110
- Approximate method for calculating heat transfer to yawed cylinders in laminar flow. Shoichi Sayano and George F. Greenwald (JSR, EN) 157
- Heat-transfer measurements for cylindrical configurations in hypersonic streams. John J. Bertin, J. Parker Lamb, Jeffrey L. Zickler, and Winston D. Goodrich (JSR, EN) 217
- Dynamic instability caused by forebody blowing. Lars E. Ericsson and Rolf A. Guenther (AIAA J, TN) 231
- Influence of moderate wall cooling on cone transition at $Me = 13.7$ in helium. Michael C. Fischer (JSR, EN) 282
- Unsteady flow processes in a rapidly filling plenum. Jacob B. Romero and Frederic A. Gruenich (AIAA J, TN) 368
- Density inhomogeneity in a laser cavity due to energy release. Allen E. Fuhs (AIAA J, TN) 374
- A modified wall wake velocity profile for turbulent compressible boundary layers. Chen-Chih Sun and Morris E. Childs (JA, EN) 381
- Boundary-layer distortion on a spinning cone. Walter B. Sturek (AIAA J, TN) 395
- Locus of a one-dimensional shock front caused by a disturbance moving on a circle. F. Meyer (AIAA J, TN) 408
- Base pressures in flow expansions by hydraulic analogy. H. S. Ningappa and S. Narasimhan (AIAA J, TN) 727
- Entropy layer effects in constant pressure hypersonic boundary layers. P. A. Sullivan and W. W. Koziak (AIAA J, TN) 730
- Supersonic flow about slab delta wings and wing-body configurations. Chong-Wei Chu (JSR, EN) 741
- Experimental study of a high life re-entry vehicle configuration. Roel Houwink and Bryan E. Richards (AIAA J, TN) 749
- Sensitivity of boundary-layer transition to surface irregularities for space shuttle applications. S. R. Pate and R. J. Eaves Jr. (JSR, EN) 813

Supersonic and Hypersonic Flow

- Method for increasing wind tunnel Mach number for large-scale inlet testing. Eldon A. Latham and Norman E. Sorensen (JA, SYN) 577
- Remote sensing of CF_4 number density in a hypersonic flow using Raman scattering. Mervin E. Hillard Jr., M. Lawrence Emory, and A. R. Bandy (AIAA J, SYN) 775
- Interaction of a laminar hypersonic boundary layer with a corner expansion wave. W. W. Koziak and P. A. Sullivan (AIAA J, SYN) 1057
- Experimental investigation of hypersonic buzz on a delta configuration. Robert L. Goldman and Henry J. Obremski (AIAA J, SYN) 1361
- Shock impingement caused by boundary-layer separation ahead of blunt fins. Louis G. Kaufman II, Robert H. Korkegi, and Leo C. Morton (AIAA J, SYN) 1363
- Boundary layer electron profiles for high-altitude entry of a blunt slender body. J. S. Evans, C. J. Schexnayder Jr., and Paul W. Huber (AIAA J, SYN) 1371
- Unsteady aerodynamics of nonplanar wings and wing-tail configurations of

- Geometry of relaxing gas flows. Rama Shankar (AIAA J, TN) 1214
- Improvement to Klineberg's method for the calculation of viscous-inviscid interactions in supersonic flow. Bernard G. Gautier and Jean J. Ginoux (AIAA J, TN) 1323
- Application of dual hologram interferometry to wind-tunnel testing. Roger J. Radley Jr. and Albert G. Havener (AIAA J, TN) 1332
- Plume boundary jump of an underexpanded jet exhausting counter to a freestream. D. L. Whitfield, H. K. Smithson, and L. L. Price (AIAA J, TN) 1336
- Exact steady-state analogy of transient gas compression by coalescing waves. L. L. Lengyel (AIAA J, TN) 1347
- Branching solutions for supersonic interacting boundary layers. W. L. Hankey, D. L. Dwyer, and M. J. Werle (AIAA J, TN) 1349
- Streamline curvature and velocity gradient behind curved shocks. Prabhakara P. Rao (AIAA J, TN) 1352
- Reattachment of a separated boundary layer to a convex surface. James L. Amick and Tariq Masoud (AIAA J, TN) 1426
- Methods for calculating nonlinear flows with attached shock waves over conical wings. W. H. Hui (AIAA J, TN) 1443
- Diffraction and reflection of shocks from corners. M. G. Chopra (AIAA J, TN) 1452
- Three-dimensional separation for interaction of shock waves with turbulent boundary layers. Theodore J. Goldberg (AIAA J, TN) 1573
- An attempted improvement of the method of integral relations for a blunt body in a supersonic flow. B. L. Hunt (AIAA J, TN) 1575
- A simple correlation for incipient turbulent boundary-layer separation due to a skewed shock wave. R. H. Korkegi (AIAA J, TN) 1578
- A graphical method for the investigation of shock interference phenomena. Davis H. Crawford (AIAA J, TN) 1590
- Hot-wire coil probe for high-speed flows. Leonard M. Weinstein (AIAA J, TN) 1772
- Van Driest generalization applied to turbulent skin friction and velocity profiles measured on the wall of a Mach 7.4 wind tunnel. Earl R. Keener and Edward J. Hopkins (AIAA J, TN) 1784
- Spherically-symmetric supersonic source flow: A new use for the Prandtl-Meyer function. Walter F. Reddall III (AIAA J, TN) 1787
- Numerical method for hypersonic internal flow over blunt leading edges and two blunt bodies. Norbert D'Souza, Sannu Molder, and Gino Moretti (AIAA J, ERR) 256
- Role of the anelastic behavior of the ablation material on cross-hatching. Hans W. Stock (AIAA J, ERR) 1056

Viscous Nonboundary-Layer Flows

- Magnus effect on spinning bodies of revolution. H. L. Power and J. D. Iversen (AIAA J, SYN) 417
- Study of the effects of pressure-induced viscosity changes on the fluid flow characteristics in a circular tube. Robert L. Davis and Robert C. Weber (AIAA J, SYN) 905
- Decay of far-flowfield in trailing vortices. B. S. Baldwin, N. A. Chigier, and Y. S. Sheaffer (AIAA J, SYN) 1601
- Theoretical and measured electron-density distributions at high altitudes. Sang-Wook Kang, W. Linwood Jones, and Michael G. Dunn (AIAA J) 141
- Flow properties of submerged heated effluents in a waterway. James F. Campbell and Joseph A. Schetz (AIAA J) 223
- Analytical and experimental investigations of laminar mixing of confined heterogeneous jets. Gideon Shavit and Zalman Lavan (AIAA J) 352
- Rapid scanning, three-dimensional hot-wire anemometer surveys of wing-tip vortices. V. R. Corsiglia, R. G. Schwind, and N. A. Chigier (JA) 752
- Hypersonic wake aerodynamics at high Reynolds numbers. Michael L. Finson (AIAA J) 1137
- Swirling flows in streamtubes of variable cross section. Hartmut H. Bossel (AIAA J) 1161
- Transformation of the hypersonic compressible Navier-Stokes equations. David F. Rogers (AIAA J, TN) 119
- Viscous shock layer flow in the windward plane of cones at angle of attack. Roger R. Eaton and Peter C. Kaestner (AIAA J, TN) 1337
- Unsteady flow of power-law fluids. I. S. Habib and T. Y. Na (AIAA J, TN) 1588

Wave Motion and Sloshing

- Cavity radius vs energy dissipation rate in liquid-filled, precessing, spherical cavities. James P. Vanyo (AIAA J, SYN) 261
- Experimental study of the effects of low Bond number sloshing on thermal stratification. Robert J. Krane and Leroy A. Holmes (AIAA J, SYN) 1219
- Liquid jet injection into a supersonic flow. Edward A. Kush Jr. and Joseph A. Schetz (AIAA J, SYN) 1223
- Drop size distribution resulting from liquid jet injection across a supersonic stream. D. W. Harvey (AIAA J) 826
- Exact hydroelastic solution for an ideal fluid in a hemispherical container. Robert N. Coppolino (JSR, EN) 612
- Comment on "Discrete element idealization of an incompressible liquid for vibration analysis" and "Discrete element structural theory of fluids." Robert D. Cook (AIAA J, TC) 766

INTERDISCIPLINARY TOPICS

Aerospace Management

- When do we cooperate and when do we compete? Kenneth W. Gatland (A/A, July) 12
- Government spending and innovation. Murray L. Weidenbaum (A/A, November) 32
- U. S. aerospace industry at the crossroads. Robert S. Attiyeh, Eric G. Friberg, and Richard E. Cohen (A/A, November) 44
- Space systems summaries: Orbiting astronomical observatory programs. (A/A, December) 75

Aerospace Technology Utilization

- NASTRAN: A preliminary discussion of user impacts. Joseph M. Carlson and Judson O. Harrison III (JA, SYN) 65
- NASA contributions to fluidic systems. Terry M. Weathers (JSR, SYN) 417
- Parameters of technological growth. Chauncey Starr and Richard Rudman (A/A, June) 20
- Planetary quarantine goes to work in the hospital. Michael D. Wardle, Alexander S. Irons, and Richard H. Green (A/A, June) 32
- Energy: Lifeblood of our cities. Jerry Grey (A/A, December) 52
- A view of air traffic control in future terminal areas. W. E. Willhelm and J. W. Schmidt (JA) 366

Atmospheric, Space, and Oceanographic Sciences

- A laboratory simulation of the ionospheric plasma. Daniel R. Pigache (AIAA J, SYN) 129
- Observability of high-altitude atmospheric scattering layers. Derek M. Cunlold (JSR, SYN) 419
- Application of Fabry-Perot interferometry to detection of Raman scattering from atmospheric pollutants. William Hayden Smith and J. J. Barrett (AIAA J, SYN) 589
- Remote measurement of carbon monoxide by a gas filter correlation instrument. L. L. Acton, M. Griggs, G. D. Hall, C. B. Ludwig, W. Malkmus, W. D. Hesketh, and H. Reichle (AIAA J, SYN) 899
- SSTs, Ozone, and skin cancer. Francis S. Johnson (A/A, July) 16
- Looking at the solar system in the far-ultraviolet. Robert R. Meier (A/A, October) 18
- Variational solution to the radiative equation by the use of a step function II. Extension to nonlinear case by iteration method. Kenneth K. Yoshikawa (AIAA J) 19
- Density stratified, viscous flow past a flat plate. Joseph A. Schetz, Stanley Favin, and Louis W. Ehrlich (JH) 22
- Optical space astronomy and goals of the large space telescope. C. R. O'Dell (A/A, April) 22
- A great comet coming . . . KOHOUTEK. Stephen P. Maran and Robert W. Hobbs (A/A, October) 48
- The opening message from an extraterrestrial probe. Ronald N. Bracewell (A/A, May) 58
- Aerosol monitoring by satellite horizon scanning. C. R. Gray, H. L. Malchow, D. C. Merritt, and R. E. Var (JSR) 71
- Raman scattering from pollutant gases and air-water interfaces. Ronald L. Schwiesow (AIAA J) 87
- Low-altitude atmospheric turbulence around an airport. Stanley D. Cass, James R. Scoggins, and Howard L. Chevalier (JA) 157
- Mountain waves and CAT encountered by the XB-70 in the stratosphere. James R. Scoggins and Thomas P. Incrocci (JA) 172
- The remote measurement of nitric oxide from an airplane or space platform. I. M. Pikus, H. W. Goldstein, and T. R. Riethof (JSR) 190
- Exhaust cloud rise and growth for Apollo Saturn engines. Michael Susko and John W. Kaufman (JSR) 341
- Measurement of emissions from jet engines in altitude test cells. J. Lloyd Grissom (JA) 475
- Ballistic range investigation of sonic-boom overpressures in water. Peter F. Intrieri and Gerald N. Malcolm (AIAA J) 510
- Observations of atmospheric effects on vortex wake behavior. Ivar Tombach (JA) 641
- Abundance of NH₃ on Jupiter inferred from microwave radiometry data. Robert J. Richardson (JSR) 647
- Ozone, aerosols, and solar radiation in the stratosphere. Elmar R. Reiter (JA) 710
- Dispersion and subsidence of the exhaust of a supersonic transport in the stratosphere. Thomas J. Overcamp and James A. Fay (JA) 720
- Uniform representation of the gravitational potential and its derivatives. Samuel Pines (AIAA J) 1508
- Turbulence variations during the high altitude clear air turbulence (HICAT) program. David E. Waco and Edward V. Ashburn (JA, EN) 56
- Lidar techniques for pollution studies. M. P. McCormick and W. H. Fuller Jr. (AIAA J, TN) 244
- Remote sensing of atmospheric turbidity variation by satellite. Alden McLellan (JSR, EN) 743
- Eigenvalues and eigenvectors for solutions to the radiative transport equation. J. A. Roux, D. C. Todd, and A. M. Smith (AIAA J, ERR) 767

Checkout Systems

Airborne-science techniques aid shuttle planning. Donald R. Mulholland and Carr B. Neel (A/A, May) 24

Computer Technology and Computer Simulation Techniques

- NASTRAN: A preliminary discussion of user impacts. Joseph M. Carlson and Judson O. Harrison III (JA, SYN) 65
- Man-computer graphics in preliminary ship design. Robert S. Johnson, Arthur L. Fuller, James A. Claffey, Fritz R. Bjorklund, and Bernard M. Thompson (JH) 11
- Centralized data banks—where public technology can go wrong. Francis W. Sargent (A/A, November) 18
- The future shock of information networks. Eugene Levin (A/A, November) 52
- DAIS: A major crossroad in the development of avionic systems. Bernard List (A/A, January) 55
- An analysis of desired maneuvering characteristics of large Arctic SEV'S. E. N. Brooks Jr. and W. Zeitfuss Jr. (JH) 112
- A general purpose computer program for the dynamic simulation of vehicle-guideway interactions. George Dailey, William C. Caywood, and James S. O'Connor (AIAA J) 278
- An interactive real time simulation for scheduling and monitoring of STOL aircraft in the terminal area. John D. McLean and Leonard Tobias (JA) 372
- Automated structural synthesis using a reduced number of design coordinates. R. M. Pickett Jr., M. F. Rubinstein, and R. B. Nelson (AIAA J) 489
- Advanced fighter controls flight simulator for all-systems compatibility testing. David R. Rolston, Stephen M. Rayhawk, and Benny B. Barnes (JA) 602
- Direct statistical analysis of nonlinear systems: CADET. A. Gelb and R. S. Warren (AIAA J) 689
- Computer aided design-drafting (CADD)—Engineering/manufacturing tool. C. H. English (JA) 747
- Identification of parameters by the continuation method. Eliahu Wasserstrom (AIAA J) 1097
- Uniform representation of the gravitational potential and its derivatives. Samuel Pines (AIAA J) 1508
- Digital tuning as an exploratory tool in the modal analysis of randomly-loaded vibrating structures. D. R. Cruise and R. G. Christiansen (AIAA J) 1539
- Remote sensing of atmospheric turbidity variation by satellite. Alden McLellan (JSR, EN) 743
- Elimination of square roots from ballistics equations. Ralph M. Toms (JSR, EN) 815
- Comment on Moretti's method. Karl M. Förster (AIAA J, TC) 576

Electric Power Generation Research

- Our R&D challenge for national energy policy. Raymond L. Bisplinghoff (A/A, August) 18
- Prospecting for energy. Jerry Grey (A/A, August) 24
- Laser-initiated fusion—Key experiments looming. Keith Boyer (A/A, January) 28
- Harnessing solar energy: The potential. William R. Cherry (A/A, August) 30
- Hydrogen transportable storable energy medium. Derek P. Gregory (A/A, August) 38
- Power from laser-initiated nuclear fusion. Keith Boyer (A/A, August) 44
- Nuclear fusion by magnetic confinement. R. F. Post (A/A, August) 50
- Energy: Lifeblood of our cities. Jerry Grey (A/A, December) 52
- Solar power via satellite. Peter E. Glaser (A/A, August) 60
- Electrode and gasdynamic effects in a large nonequilibrium MHD generator. B. Zauderer and E. Tate (AIAA J) 149
- Investigation of the discharge structure in a noble gas alkali MHD generator plasma: Part I. G. Brederlow, K. J. Witte, and H. Zinko (AIAA J) 1065
- Investigation of the discharge structure in a rare gas alkali MHD generator plasma: Part II. G. Brederlow and K. J. Witte (AIAA J) 1072
- The numerical prediction of streamer growth in MHD ducts. R. J. Uncles (AIAA J, TN) 1436
- Shock tube flow passing through a section of a linear MHD generator. J. J. Rosciszewski and T. T. Yeh (AIAA J, TN) 1756

Lasers

- Interferometric density measurements in the arc of a pulsed plasma thruster. K. I. Thomassen and D. Tong (JSR, SYN) 163
- Laser-heated hypersonic wind tunnel. Victor R. Buonadonna, Charles J. Knight, and A. Hertzberg (AIAA J, SYN) 1457
- Laser-initiated fusion—Key experiments looming. Keith Boyer (A/A, January) 28
- Power from laser-initiated nuclear fusion. Keith Boyer (A/A, August) 44
- Raman scattering from pollutant gases and air-water interfaces. Ronald L. Schwiesow (AIAA J) 87
- Simplified model of CW diffusion-type chemical laser. H. Mirels, R. Hofland, and W. S. King (AIAA J) 156
- Motion of solid D₂ under laser irradiation. Ralph S. Cooper (AIAA J) 831

- Laser produced hemispherical shock waves. Barrett S. Robb and Donald L. Turcotte (AIAA J) 836
- Supersonic flow aerodynamic windows for high-power lasers. E. M. Parmentier and R. A. Greenberg (AIAA J) 943
- Experimental CW chemical laser studies. D. J. Spencer and R. L. Varwig (AIAA J) 1000
- Lidar techniques for pollution studies. M. P. McCormick and W. H. Fuller Jr. (AIAA J, TN) 244
- Unsteady flow processes in a rapidly filling plenum. Jacob B. Romero and Frederic A. Gruenich (AIAA J, TN) 368
- Density inhomogeneity in a laser cavity due to energy release. Allen E. Fuhs (AIAA J, TN) 374
- Simultaneous comparison of turbulent gas fluctuations by laser Doppler and hot wire. William C. Cliff, Charles E. Fuller III, and Virgil A. Sandborn (AIAA J, TN) 748
- Insensitivity of single particle time domain measurements to laser velocimeter "Doppler ambiguity." Dennis A. Johnson (AIAA J, TN) 890
- Application of dual hologram interferometry to wind-tunnel testing. Roger J. Radley Jr. and Albert G. Havener (AIAA J, TN) 1332
- Exact steady-state analogy of transient gas compression by coalescing waves. L. L. Lengyel (AIAA J, TN) 1347

Law, History, Policy, and Sociology

- New space transportation systems. J. Preston Layton and Jerry Grey (A/A, February) 12
- When do we cooperate and when do we compete? Kenneth W. Gatland (A/A, July) 12
- Parameters of technological growth. Chauncey Starr and Richard Rudman (A/A, June) 20
- Resources and pollution—Time (Past?) for engineers to act. Aaron J. Teller (A/A, June) 28
- Planetary quarantine goes to work in the hospital. Michael D. Wardle, Alexander S. Irons, and Richard H. Green (A/A, June) 32
- Government spending and innovation. Murray L. Weidenbaum (A/A, November) 32
- NSF's experimental R&D incentives program. C. Branson Smith (A/A, May) 54

Navigation, Control, and Guidance Theory

- Some effects of bias errors in redundant flight control systems. Robert F. Stengel (JA) 150
- Minimum fuel rocket maneuvers in horizontal flight. N. X. Vinh (AIAA J) 165
- An optimal control approach to terminal area air traffic control. David K. Schmidt and Robert L. Swaim (JA) 181
- Inclusion of rotor dynamics in controller design for helicopters. W. E. Hall Jr. and A. E. Bryson Jr. (JA) 200
- Computerized optimal control system design for boost vehicles. Wolfgang Trautwein and John M. Livingston (JSR) 227
- Minimax failure detection and identification in redundant gyro and accelerometer systems. James E. Potter and James C. Deckert (JSR) 236
- Star scanner attitude determination for the OSO-7 spacecraft. D. L. Mackison, R. L. Gutshall, and F. Volpe (JSR) 262
- Enlarging the region of convergence of Kalman filters employing range measurements. William S. Widnall (AIAA J) 283
- Quasi-linearization technique for estimating aircraft states from flight data. Rodney C. Wingrove (JA) 303
- Optimal evasive tactics against a proportional navigation missile with time delay. Gary L. Slater and William R. Wells (JSR) 309
- A view of air traffic control in future terminal areas. W. E. Wilhelm and J. W. Schmidt (JA) 366
- An interactive real time simulation for scheduling and monitoring of STOL aircraft in the terminal area. John D. McLean and Leonard Tobias (JA) 372
- Strapdown inertial system alignment using statistical filters: A simplified formulation. John J. Deyst Jr. and Arthur A. Sutherland Jr. (AIAA J) 452
- An omnidirectional gliding ribbon parachute and control system. William B. Pepper and John R. Biesterveld (JA) 678
- Minimax design of Kalman-like filters in the presence of large-parameter uncertainties. G. E. Hutchinson, J. A. D'Appolito, and P. L. Bongiovanni (AIAA J) 694
- Integrals of the motion for optimal trajectories in atmospheric flight. Nguyen X. Vinh (AIAA J) 700
- Application of sequential filtering to estimation of the interplanetary orbit of Mariner 9. Kenneth H. Rourke and James F. Jordan (JSR) 773
- Propellant requirements for midcourse velocity corrections. B. G. Lee and R. J. Boain (JSR) 779
- Rotations about nonorthogonal axes. Paul B. Davenport (AIAA J) 853
- Differential turns. Henry J. Kelley and Leon Lefton (AIAA J) 858
- Error analysis of Euler angle transformations. Richard L. Pio (AIAA J) 871
- Roll-modulated lifting entry optimization. Henry J. Kelley and Henry C. Sullivan (AIAA J) 913
- Nonlinear and adaptive estimation in re-entry. Andrew H. Jazwinski (AIAA J) 922

- Reachable sets analysis—An efficient technique for performing missile/sensor tradeoff studies. David M. Salmon and Walter Heine (AIAA J) 927
- An application of Kalman techniques to aircraft and missile radar tracking. G. T. Aldrich and W. B. Krabill (AIAA J) 932
- Neighboring extremals for optimal control problems. C. E. Hyman, R. K. Cavin III, and D. Colunga (AIAA J) 1101
- Second-order optimality conditions for variable end time terminal control problems. Lincoln J. Wood and Arthur E. Bryson Jr. (AIAA J) 1241
- Fast triangular formulation of the square root filter. Neal A. Carlson (AIAA J) 1259
- Real-time optimal guidance for orbital maneuvering. Audrey O. Cohen and Kenneth R. Brown (AIAA J) 1266
- N-burn optimal analytic trajectories. Donald J. Jezewski (AIAA J) 1373
- Phase lead S-plane compensation. Itzhack Y. Bar-Itzhack (AIAA J) 1521
- Effects of resonant tesseral gravity coefficients on Viking-type orbits. Harold R. Compton, James R. Schiess, and William J. Breedlove Jr. (AIAA J) 1743
- Multipoint guidance—An efficient implementation of predictive guidance. David M. Salmon (AIAA J) 1749
- Use of accelerometers to determine tilts and displacements. Michael Reichle and Hugh Bradner (AIAA J, TN) 735
- On the fuel optimality of cruise. Jason L. Speyer (JA, EN) 763
- Elimination of square roots from ballistics equations. Ralph M. Toms (JSR, EN) 815
- Riccati transformation for gradient optimization techniques. W. E. Williamson and T. J. Eller (AIAA J, TN) 881
- Application of nonlinear estimators to hereditary systems. J. R. Schiess, V. R. Roland, and W. R. Wells (AIAA J, TN) 1414
- Integrals for optimal flight over a spherical Earth. H. Gardner Moyer (AIAA J, TN) 1441
- A universal three-angle basis for rotational kinematic analysis, simulation and control. James Nohl Churchyard (JSR, ERR) 480
- Optimal desaturation of momentum exchange control systems. C. D. Johnson (AIAA J, ERR) 768

Reliability, Quality Control, and Maintainability

- Needed: Rational testing of aerospace vehicles. Anthony M. Smith and Thomas D. Matteson (A/A, August) 69
- Fracture mechanics applications in materials selection, fabrication sequencing and inspection. William E. Krupp and David W. Hoepfner (JA) 682

Research Facilities and Instrumentation

- Pressure and current effects on the thermal efficiency of an MPD arc used as a plasma source. Thomas J. Pivrotto (AIAA J, SYN) 12
- A laboratory simulation of the ionospheric plasma. Daniel R. Pigache (AIAA J, SYN) 129
- Starting process in the nozzle of a nonreflected shock tunnel. R. J. Stalker and N. R. Mudford (AIAA J, SYN) 265
- Remote sensing of CF_4 number density in a hypersonic flow using Raman scattering. Mervin E. Hillard Jr., M. Lawrence Emory, and A. R. Bandy (AIAA J, SYN) 775
- Linear and rotational quartz fiber accelerometers for geophysical and inertial use. B. Bartholomew, B. Block, and J. Dratler Jr. (AIAA J, SYN) 1227
- Dual-hologram interferometry: A new technique for wind-tunnel testing. (A/A, December) 27
- A facility for long-term ion thruster system testing. Howard F. McKinney and Richard A. Dutton (JSR) 42
- A method for transonic wind-tunnel corrections. Antonio Ferri and Paolo Baronti (AIAA J) 63
- Electron beam visualization in hypersonic airflows. H. F. Lee and S. L. Petrie (JA) 239
- Design and development of the United Aircraft Research Laboratories Acoustic Research Tunnel. Robert W. Paterson, Paul G. Vogt, and William M. Foley (JA) 427
- Transonic flow quality improvements in a blowdown wind tunnel. James M. Cooksey and John W. Arnold (JA) 554
- High-Reynolds-number cryogenic wind tunnel. Michael J. Goodyer and Robert A. Kilgore (AIAA J) 613
- Rapid scanning, three-dimensional hot-wire anemometer surveys of wing-tip vortices. V. R. Corsiglia, R. G. Schwind, and N. A. Chigier (JA) 752
- Thermal and momentum diffusivity measurements in a turbulent stratified flow. Gordon Merritt and George Rudinger (AIAA J) 1465
- Visual display of the spatial distribution of colloidal particle beams. J. D. Hepburn, F. S. Chute, and F. E. Vermeulen (AIAA J, TN) 370
- High Reynolds number experimental data for forebody axial force. John William Davis and Robert F. Graham (AIAA J, TN) 379
- Spacecraft applications of high-temperature electrically conducting ceramics. Carl R. Halbach, Russell J. Page, and Owen J. McCaughey (JSR, EN) 415
- Blockage corrections for large bluff bodies near a wall in a closed jet wind tunnel. T. N. Krishnaswamy, G. N. V. Rao, and K. R. Reddy (JA, EN) 634
- Insensitivity of single particle time domain measurements to laser

- velocimeter "Doppler ambiguity." Dennis A. Johnson (AIAA J, TN) 890
- Heat flux probe as a flowfield diagnostic. Irwin E. Vas (AIAA J, TN) 1576
- Comments on "Theory of ion boundary layer." A. G. Hammitt (AIAA J, TC) 1597
- Reply by authors to A. G. Hammitt. P. C. T. deBoer and R. A. Johnson (AIAA J, TC) 1598

Safety

- Modeling of aircraft position errors with independent surveillance. David E. Stepper (AIAA J) 1273
- Blockage corrections for large bluff bodies near a wall in a closed jet wind tunnel. T. N. Krishnaswamy, G. N. V. Rao, and K. R. Reddy (JA, EN) 634

LAUNCH VEHICLE AND MISSILE (LV/M) TECHNOLOGY

LV/M Aerodynamic Heating

- Approximate method for calculating heat transfer to yawed cylinders in laminar flow. Shoichi Sayano and George F. Greenwald (JSR, EN) 157
- Flight test correlation technique for turbulent base heat transfer with low ablation. Bruce M. Bulmer (JSR, EN) 222
- Mach number and Reynolds number effect on orbiter/tank interference heating. Theodore R. Creel Jr. (JSR, EN) 535
- Turbulent heat transfer to a fin leading edge—Flight test results. E. Clark Lemmon and Hugh W. Coleman (AIAA J, TN) 571
- Turbulent interference heating on several small fin configurations. Hugh W. Coleman and E. Clark Lemmon (JSR, EN) 820
- New thermodynamic functions for the C_3 molecule. W. E. Pearson and W. C. Davy (AIAA J, TN) 1207
- Transpiration cooling in three-dimensional laminar boundary-layer flow near a stagnation point. D. R. Jeng and Donald W. Williams (AIAA J, TN) 1560

LV/M Aerodynamics

- Influence of boundary-layer stability on the Magnus effect. Ira D. Jacobson and J. B. Morton (AIAA J, SYN) 8
- Magnus effect on spinning bodies of revolution. H. L. Power and J. D. Iversen (AIAA J, SYN) 417
- Experimental correlation between the flow and Magnus characteristics of a spinning ogive-nose cylinder. James M. Martin and Charles W. Ingram (AIAA J, SYN) 901
- Verification of ground test data by interrupted flight test of an artillery shell. Stanley D. Kahn, Vural Oskay and John Whiteside (JA) 143
- Correlation of Magnus force data for slender spinning cylinders. James D. Iversen (JSR) 268
- Newtonian aerodynamic forces from Poisson's equation. Jack Pike (AIAA J) 499
- Occurrence and inhibition of large yawing moments during high-incidence flight of slender missile configurations. W. H. Clark, J. R. Peoples, and M. M. Briggs (JSR) 510
- Calculation of turbulent boundary layers and wall jets over curved surfaces. F. A. Dvorak (AIAA J) 517
- Static stability and drag studies for bodies of revolution in supersonic flow. Hans-Joachim Luckert (JSR) 703
- Perturbation methods in atmospheric flight mechanics. Peter H. Zipfel (AIAA J) 1247
- Estimation of aerodynamics for slender bodies alone and with lifting surfaces at α 's from 0° to 90° . Leland H. Jorgensen (AIAA J, TN) 409
- Effect of base mounted cylinders on a supersonic near wake. Richard A. Merz, Robert H. Page, and Christian E. G. Przirembel (JSR, EN) 470
- Correlation of hypersonic zero-life drag data. John J. Rehder (JSR, EN) 622
- Supersonic flow about slab delta wings and wing-body configurations. Chong-Wei Chu (JSR, EN) 741
- A graphical method for the investigation of shock interference phenomena. Davis H. Crawford (AIAA J, TN) 1590
- Comment on "Wind-tunnel Magnus testing of a canted fin or self-rotating configuration." F. J. Regan (AIAA J, TC) 413
- Reply by author to F. J. Regan. Anders S. Platou (AIAA J, TC) 415
- Comment on "Simplification of the wing-body problem." Alexander H. Flax (JA, TC) 640
- Comment on "Lift of wing-body combination." Alexander H. Flax (AIAA J, TC) 896
- Reply by author to A. H. Flax. H. T. Yang (AIAA J, TC) 896

LV/M Configurational Design

- A graphical method for the investigation of shock interference phenomena. Davis H. Crawford (AIAA J, TN) 1590
- Optimum stage weight distribution of multistage rockets. James A. Martin (AIAA J, TC) 255