

Index of Papers Published in AIAA Journal

Volume 5—January through December 1967

Issue	Pages	Issue	Pages
January	1-192	July	1217-3376
February	193-384	August	1377-1536
March	385-608	September	1537-1728
April	609-832	October	1729-1920
May	833-1056	November	1921-2112
June	1057-1216	December	2113-2304

TN, TC, and SA indicate Technical Note, Technical Comment, and Survey Article, respectively.

AUTHORS

Abarbanel, S. S., Fisher, E. E., and Zwas, G. Trajectory of a rebounding detonation wave (TN)..... 820

Achenbach, J. D. Vibrations of a viscoelastic body (TC)..... 1213

Adams, James A. (see Lowell, Robert L., Jr.)

Adelberg, M. Breakup rate and penetration of a liquid jet in a gas stream..... 1408

Adkins, Richard L. (see Jones, David I. G.)

Adler, B. K. (see Webb, H. G., Jr.)

Agosta, Vito D. (see Seamans, Thomas F.)

Albini, F. (see Rand, S.)

Allen, Richard A. Total air radiation calculations and comparison with recent measurements (TN)..... 589

Allendorf, H. Donald. (see Rosner, Daniel E.)

Allentuch, Arnold, Brady, Kevin, and Kempner, Joseph. Long cylindrical shell under loads applied to a reinforcing ring..... 1863

Altman, Manfred (see Ross, Daniel P.)

Amazigo, John C. (see Hutchinson, John W.)

Amick, James L. (see Hawk, Norman E.)

Ananthachar, V. S. Time dilatation in relativity (TC)..... 2110

Anderson, G. F. Tow cable loading functions (TN)..... 346

—Real gas effects on the time required for establishing a detached bow shock (TN)..... 366

Anderson, Gerald M., Falb, Peter L., and Robinson, Alfred C. One-dimensional minimum-time rendezvous for a thrust-limited rocket (TN)..... 1017

Anderson, J. E. and Eckert, E. R. G. Transpiration cooling of a constricted electric-arc heater..... 699

Anderson, Thomas P. (see Scholz, Paul D.)

Anderson, William J. Supersonic wind-tunnel tests of wavy-walled cylinders (TN)..... 595

Armenakas, Anthony E. Propagation of harmonic waves in composite circular cylindrical shells. I: Theoretical investigation.... 740

Aronowitz, L. (see Loeffler, A. L., Jr.)

Arrington, J. P. (see Bertram, M. H.)

Asher, Gifford W. A note on the effective degrees of freedom of a vibrating structure (TN)..... 822

Ashley, Holt. Observations on the dynamic behavior of large flexible bodies in orbit..... 460

Babcock, Wayne R. (see James, Robert N.)

Babineaux, T. L. (see Horton, T. E.)

Bacon, Merle D. and Bert, Charles W. Unsymmetric free vibrations of orthotropic sandwich shells of revolution..... 413

Bailey, F. R., Rollstin, L. R., and Iversen, J. D. Sonic-point convergence with the method of integral relations (TN)..... 1894

Ball, Joseph E. Preliminary circular orbit from a single station of range-only data (TN)..... 2261

Ball, K. O. W. Wall temperature effect on incipient separation (TN)..... 2283

Barba, P. M. (see Kane, T. R.)

Barber, John B. (see Emery, James C.)

Barger, Raymond L. Sonic booms attributed to subsonic flight (TN)..... 1042

Barnes, John W. (see Tang, Homer H.)

Bartlett, Eugene P. (see Kendall, Robert M.)

Bass, Bennett R. (see Webb, George R.)

Bauer, Andrew B. Some experiments in the near wake of cones (TN)..... 1356

Bauld, Nelson R., Jr. Dynamic stability of sandwich columns under pulsating axial loads (TN)..... 1514

Baum, Eric and Denison, M. Richard. Interacting supersonic laminar wake calculations by a finite difference method..... 1224

Baw, P. S. and Peskin, R. L. Density profiles in gas-solid suspension flow (TN)..... 815

Becker, Herbert. Comment on "Dynamic buckling of cylinders under axial shock-tube loading" (TC)..... 192

Beckstead, M. W. and Hightower, J. D. Surface temperature of deflagrating ammonium perchlorate crystals..... 1785

—and Price, E. W. Nonacoustic combustor instability..... 1989

Beheshti, M. Absorption and scattering of radiation by solid carbon particles (TN)..... 809

Behrens, Wilhelm. The far wake behind cylinders at hypersonic speeds. Part I: Flowfield..... 2135

Beitch, Leonard. Shell structures solved numerically by using a network of partial panels..... 418

Bellantoni, J. F. and Dodge, K. W. A square root formulation of the Kalman-Schmidt filter..... 1309

—Unidentified landmark navigation..... 1478

Bendavid, Dror and Singer, Josef. Buckling of conical shells heated along a generator (TN)..... 1710

Benenson, David M. (see Prelewicz, D. A.)

—Naehier, Carl H., and Gideon, John B. Oscillations of electric arcs in argon cross-flow (TN)..... 1517

Benson, Arthur S. and Mayers, J. General instability and face wrinkling of sandwich plates—unified theory and applications.... 729

Bera, R. Note on the buckling of linear viscoelastic columns of variable cross sections (TN)..... 604

Berger, S. A. (see Pantoni, Ronald)

Berke, J. G. (see Seely, L. B.)

Berman, David. Nonideal behavior of rotating gravitational mass sensors..... 1000

Berman, Richard J. Ballistic coefficients for power law bodies (TN)..... 166

Bershadner, Daniel (see Oettinger, Peter E.)

Bert, Charles W. (see Bacon, Merle D.)

Bertram, M. H., Weinstein, L. M., Cary, A. M., Jr., and Arrington, J. P. Heat transfer to wavy wall in hypersonic flow..... 1760

Bethel, Howard E. On the method of integral relations (TN)..... 802

Bevc, V. (see Horn, K. P.)

Bickford, W. B. (see Warren, W. E.)

Billingham, R. (see Sandri, R.)

Bhandari, R. G. Large deflections of columns of variable flexural rigidity (TN)..... 1486

Bleich, Gary. (see Moretti, Gino)

Blumer, C. B. (see van Driest, E. R.)

Bluston, H. S. Nonadiabatic temperature distributions behind detached shocks (TN)..... 2061

Boddie, W. Lee (see Vermeulen, P. J.)

Bogner, F. K., Fox, R. L., and Schmit, L. A. A cylindrical shell discrete element..... 745

Borland, Christopher J. (see Schindel, Leon H.)

Borucki, William J. Spectrographic observations of polycarbonate, polyethylene, and polyformaldehyde in a ballistic range, an arcjet, and a diffusion flame..... 1329

Bos, Alan (see Zakkay, Victor)

Bostick, W. H. (see Small, R. L.)

Boughner, R. E. (see Deacon, H. J., Jr.)

Bowditch, David N. A Langmuir calorimetric probe to determine average energy per ion in a tenuous plasma beam (TN)..... 362

Bowman, J. E. and Clayden, W. A. Cylindrical afterbodies in supersonic flow with gas ejection (TN)..... 1524

Bowman, R. L. (see Mirtich, M. J.)

Boylan, D. E. and Potter, J. L. Aerodynamics of typical lifting bodies under conditions simulating very high altitudes..... 226

Boynton, Frederick P. Highly underexpanded jet structure: Exact and approximate calculations (TN)..... 1703

Bradshaw, P. Mixing-length velocity profile in boundary layers with transpiration (TN)..... 1674

Brady, Kevin (see Allentuch, Arnold)

Brandmaier, H. E. Radial space charge fields in electro-fluid dynamic generators (TN)..... 1037

Bredfeldt, H. R., Scharfman, W. E., Guthart, H., and Morita, T. Boundary-layer ion density profiles as measured by electrostatic probes..... 91

Breuch, R. A. Studies on the effects of the interplanetary space environment on thermal-control coatings..... 1650

Brigman, George H. and Sodek, Benard A., Jr. Applicability of partition functions at high temperatures (TN)..... 1192

Brockman, P. (see Burlock, J.)

- Brodwin, Morris E. (see Scholz, Paul D.)
- Brofman, Woody. Approximate analytical solution for satellite orbits subjected to small thrust or drag. 1121
- Brooks, D. R. (see Burlock, J.)
- Brown, R. S. (see Deverall, L. I.)
- Muzzy, R. J., and Steinle, M. E. Effect of surface reactions on acoustic response of solid propellants (TN). 1718
- and Jensen, G. E. Dynamic ballistics of combustion termination by fluid injection (TN). 1917
- Brown, W. Byron. Stability of compressible boundary layers. 1753
- Bryson, Arthur E., Jr. (see Speyer, Jason L.)
- Buffum, F. G., Jr., Dehority, G. L., Slates, R. O., and Price, E. W. Acoustic attenuation experiments on subscale, cold-flow rocket motors. 272
- Burlock, J., Brockman, P., Hess, R. V., and Brooks, D. R. Measurement of velocities and acceleration mechanism for coaxial Hall accelerators. 558
- Burrows, Marshall C. Mixing and reaction of hydrazine and nitrogen tetroxide at elevated pressure (TN). 1700
- Bush, William B. and Cross, Arthur K. A comment on hypersonic viscous interaction theory (TC). 1370
- Bushnell, David. Nonlinear axisymmetric behavior of shells of revolution. 432
- Symmetric and nonsymmetric buckling of finitely deformed eccentrically stiffened shells of revolution. 1455
- Bifurcation phenomena in spherical shells under concentrated and ring loads. 2034
- Buckling of spherical shells ring-supported at the edges. 2041
- Byron, S. R. (see Kuby, W.)
- Cambel, Ali Bulent (see Porter, Robert W.)
- Campbell, George S. and Klimas, Paul C. Shock waves in a vibrationally excited gas (TN). 1713
- Cantin, A. (see Kirkpatrick, A.)
- Capener, E. L., Dickinson, L. A., and Kier, R. J. Driving processes of finite-amplitude axial mode instability in solid-propellant rockets. 938
- Carlson, Leland A. (see Nerem, Robert M.)
- Carlson, L. W. and Seader, J. D. Heat-transfer characteristics of hot-gas ignition. 1272
- Carpenter, J. E., Graves, K. W., Tate, S. E., and Klavins, A. An existing facility for SCRAMJET testing—The wave superheater (TN). 1701
- Carpenter, W. C. (see Sack, R. L.)
- Cary, Aubrey M., Jr. (see Watson, Ralph D.)
- (see Bertram, M. H.)
- Cashen, John F. (see Gold, Richard R.)
- Cassanto, John M. Radial base-pressure gradients in laminar flow (TN). 2278
- Caveny, L. H. and Sawyer, T. T. Solid-propellant burning along a tube heated by combustion gas influx. 2004
- Chang, Chin Hao. An asymptotic solution of conical shells of constant thickness. 2028
- Chang, L. K. (see Lu, S. Y.)
- Chang, Yan-Po. A potential treatment of energy transfer by conduction, radiation, and convection (TN). 1024
- Chapkins, Robert L. (see Sanematsu, Henry S.)
- Charwat, A. F. and Redekopp, L. G. Supersonic interference flow along the corner of intersecting wedges. 480
- and Schneider, L. Effect of the boundary-layer profile at separation on the evolution of a wake (TN). 1188
- Chen, C. F. and Mangione, Bruce J. Effect of flow shear on induced drag (TN). 2056
- Cheng, H. K. and Lee, Richard S. Nonequilibrium-transition patterns of a quasi-one-dimensional dissociating-gas flow (TN). 1686
- Ching, A. (see Welsh, W. E., Jr.)
- Chou, Pei Chi, Karpp, Robert R., and Huang, Shih Lien. Numerical calculation of blast waves by the method of characteristics. 618
- Chou, Y. S. and Talbot, L. Source-flow expansion of a partially ionized gas into a vacuum. 2166
- Chow, Chuen-Yen. Propagation of self-similar radiation waves (TN). 2281
- Chow, W. L. Hypersonic rarefied flow past the sharp leading edge of a flat plate. 1549
- Christenson, Edward A. and Moller, Paul S. Ion-neutral propulsion in atmospheric media. 1768
- Chu, Chong-Wei, Niemann, A. F., Jr., Powers, S. A., and Ziegler, H. Interaction of two cylindrical jets (TN). 375
- Compatibility relations and a generalized finite-difference approximation for three-dimensional steady supersonic flow. 493
- Chu, Wen-Hwa and Kana, Daniel D. A theory for nonlinear transverse vibrations of a partially filled elastic tank. 1828
- Clark, John A. (see Goldstein, Marvin E.)
- Clarkson, B. L. (see Soevere, J.)
- Clausen, William E. (see Leissa, Arthur W.)
- Clay, W. G., Slattery, R. E., Ferdinand, A. P., and Kilcline, C. R. Application of nanosecond light pulses to ballistic range measurements (TN). 364
- Clayden, W. A. (see Bowman, J. E.)
- Coates, Ralph L., Cohen, Norman S., and Harvill, Lawrence R. An interpretation of L^* combustion instability in terms of acoustic instability theory. 1097
- Cohen, C. B. (see Ohrenberger, J. T.)
- Cohen, Ira M. Asymptotic theory of ellipsoidal electrostatic probes in a slightly ionized, collision-dominated gas. 63
- Couette flow of a radiating fluid: Optically thick medium. 78
- Strongly radiating hypersonic flow over a sphere: an asymptotic sketch. 501
- (see Schweitzer, S.)
- Cohen, M. L. and Imber, M. Variation of the thermal conductivity of solid propellants in an acoustic field. 1295
- Cohen, Norman S. (see Coates, Ralph L.)
- Coleman, R. L., Hassan, H. A., and Garcia, B. H., Jr. Potential and current distribution in MPD arcs. 2228
- Collins, D. J. Laser photography and shadowgraphs in a free-flight range (TN). 605
- Rogers, W. E., and Sangster, D. K. Microsphere ablation in a free-flight range (TN). 1684
- Connor, J. E. (see Hardner, D.)
- Connor, Michael Albert. Optimization of a lateral turn at constant height (TN). 335
- Coppa, Anthony P. Inextensional buckling configurations of conical shells. 750
- Covert, Eugene E. (see Haldeman, Charles W.)
- Craig, Roger R. and Ortwirth, Paul J. Use of nitrous oxide for obtaining high stagnation enthalpies in shock tunnels (TN). 2271
- Crawford, Davis H. Applications of similar solutions for calculation of laminar boundary-layer characteristics in the presence of a pressure gradient (TN). 799
- Cross, Arthur K. (see Bush, William B.)
- Cross, Ernest J., Jr. (see Hankey, Wilbur L.)
- Crowe, Clayton T. Drag coefficient of particles in a rocket nozzle (TN). 1021
- and Willoughby, Paul G. A study of particle growth in a rocket nozzle. 1300
- Culp, Robert Dudley. Contensou-Busemann conditions for optimal coplanar orbit transfer (TN). 371
- Daley, Howard L. and Perel, Julius. Cesium ion sputtering of aluminum, copper, and titanium. 113
- Daniels, P. and Ingram, C. W. A spin scale theory for rigid body integration using the Frick slip frame (TN). 168
- Dauerman, Leonard. Catalyzed thermal decomposition of ammonium perchlorate (TC). 192
- Salser, G. E., and Tajima, Y. A. Characterization of volatilized species from solid propellants (TN). 1501
- Daivids, Norman (see Raftopoulos, Demetrios)
- Deacon, H. J., Jr. and Boughner, R. E. Equilibrium radiative heating of shocked CO_2 (TN). 1358
- Déak, A. L. and Pian, T. H. H. Application of the smooth-surface interpolation to the finite-element analysis (TN). 187
- de Boer, P. C. T. (see Frohn, A.)
- Dehority, G. L. (see Buffum, F. G., Jr.)
- Demetriades, Anthony. Turbulent fluctuation measurement in compressible, axisymmetric wakes (TN). 1028
- and Doughman, Ernest L. Errata: "Langmuir probe diagnosis of turbulent plasmas" (TC). 2112
- Denison, M. Richard (see Baum, Eric)
- DeRienzo, Philip and Pallone, Adrian J. Convective stagnation-point heating for re-entry speeds up to 70,000 fps including effects of large blowing rates (SA). 193
- and Pallone, Adrian J. Addendum: "Convective stagnation-point heating for re-entry speeds up to 70,000 fps including effects of large blowing rates" (TC). 2289
- Dershin, Harvey, Leonard, Charles A., and Gallaher, William H. Direct measurement of skin friction on a porous flat plate with mass injection. 1934
- Deverall, L. I., Brown, R. S., and Jensen, G. E. Solution of equations for solid propellant ignition (TN). 2107
- Diab, T. A. (see Narasimha, Roddam)
- Diaconis, N. S. (see Metzger, J. W.)
- Dial, O. L. (see Gedeon, G. S.)
- Diamant, E. S. Axisymmetric creep in cylindrical shells. 1870
- Dickens, W. P. (see Hill, F. K.)
- Dickinson, L. A. (see Capener, E. L.)
- Dicks, J. B. (see Powers, W. L.)
- Diederich, F. W. (see Sutton, G. W.)
- Dixon, Sidney C. and Hudson, M. Latrelle. Growth rate of flutter amplitude for stressed panels (TN). 1205
- Dobbins, Richard A. and Temkin, Samuel. Propagation of sound in a gas-particle mixture and acoustic combustion instability. 2182
- Dodge, K. W. (see Bellantoni, J. F.)
- Donaldson, I. S. On the separation of a supersonic flow at a sharp corner. 1086
- Dosanjh, Darshan S. (see Weeks, Thomas M.)
- Doughman, Ernest L. (see Demetriades, Anthony)
- Douglas, William J. Natural vibrations of finitely deformable structures. 2248
- Dowell, Earl H. On the flutter of multibay panels at low supersonic speeds (TN). 1032
- On the nonlinear flexural vibrations of rings (TN). 1508
- Nonlinear oscillations of a fluttering plate. II. 1856
- Dragos, Lazar. Reply by author to P. Greenberg (TC). 1367
- Draper, James Stark (see Jarvinen, Philip O.)
- Reply by author to H. Guthart (TC). 1535
- Dressor, H. S. (see Webb, H. G., Jr.)
- Dudzinsky, S. J. (see Wang, T. C.)
- Dumesnil, Carl E. and Nevill, Gale E., Jr. Deformation of spherical caps impacted into water (TN). 1043
- Dunn, J. (see Van Gelder, A.)
- Dunn, Michael G. (see Kang, Sang-Wook)
- Durrant, D. A. and Grabowsky, W. R. Electrode feed system for segmented electrode MHD accelerator (TN). 1714
- (see Grabowsky, W. R.)
- Durvasula, Somayajulu. Flutter of simply supported, parallelogrammic, flat panels in supersonic flow. 1668
- Eckert, E. R. G. (see Anderson, J. E.)
- (see Wutzke, S. E.)
- Eckstein, Martin C. (see Shi, Yun-Yuan)
- and Shi, Yun-Yuan. Low-thrust elliptic spiral trajectories of a satellite of variable mass (TN). 1491
- Edwards, D. K. Rotation-induced, free-convection heat transfer in a zero-gravity field (TN). 333
- Ellington, D. Binary scaling limits for hypersonic flight (TN). 1705
- Ellinwood, John Webster. Minimum-drag body with specified center of pressure (TN). 826
- Emanuel, George. Blowing from a porous cone or wedge when the contact surface is straight. 534

- Emery, James C., Barber, John B., and Sterrett, James R. Flow visualization of a secondary jet by means of lampblack injection techniques (TN)..... 1039
- Engel, M. J. (see Metzger, J. W.)
- Eppes, Richard, Jr. A finite-difference heat conduction method applicable during surface recession (TN)..... 1679
- Epstein, Melvin. A model of the wall boundary condition in kinetic theory..... 1797
- Ericson, W. B. (see Loeffler, A. L., Jr.)
- Ernst, William D. Turbulent flow of an elasticoviscous non-Newtonian fluid..... 906
- Esin, A. and Jones, W. J. D. Comment on "A mathematical model of the cyclic stress-strain relationships" (TC)..... 1214
- Esker, Donald W. A probe for total-enthalpy measurements in arcjet exhausts (TN)..... 1504
- Euler, Edward A. and Shulman, Yechiel. Second-order solution to the elliptical rendezvous problem (TN)..... 1033
- Evan-Iwanowski, R. M. (see Evensen, H. A.)
- Evans, Marjorie W. (see Seely, L. B.)
- Evans, Norman A. Effect of flow velocity on a single, controlled glow discharge in cesium-seeded argon (TN)..... 1908
- Evensen, H. A. and Evan-Iwanowski, R. M. Dynamic response and stability of shallow spherical shells subject to time-dependent loading..... 969
- Falib, Peter L. (see Anderson, Gerald M.)
- Fan, L. T. (see Hwang, U. P.)
- Fay, James A. (see Goldstein, M. E.)
- and Kaye, Harvey. A finite-difference solution of similar non-equilibrium boundary layers..... 1949
- Fendell, Francis E. Asymptotic treatment of premixed flame structure with diffusion (TN)..... 808
- and Smith, Edward B. Diffusion-flame shape in the wake of a falling droplet..... 1984
- Ferdinand, A. P. (see Clay, W. G.)
- Fine, A. D. A stress-strain approximation in plasticity (TN)..... 1896
- Fink, Martin R. Comment on "Ballistic coefficients for power law bodies" (TC)..... 1535
- Fisher, E. E. (see Abarbanel, S. S.)
- Fishman, Norman. Surface exotherm during ignition of ammonium perchlorate propellants (TN)..... 1500
- Flagella, P. N. High-temperature stress-rupture characteristics of Mo and some Mo alloys..... 281
- Flake, Robert H. and Hartwell, John Graham. A reference orbit useful in integrating between activity spheres (TN)..... 599
- Flugge, W. (see Sobel, L. H.)
- Foster, R. M. (see Kuby, W.)
- Fox, Herbert (see Zakkay, Victor)
- Fox, Jay, Webb, W. H., Jones, Barclay G., and Hammitt, A. G. Hot-wire measurements of wake turbulence in a ballistic range..... 99
- Fox, R. L. (see Bogner, F. K.)
- Francis, Philip H. and Rim, Kwan. A comparison of direct methods in plane elasticity (TN)..... 183
- Frankenthal, Shimshon. Comments on "Self-excited explosive-driven MHD generator" (TC)..... 190
- Series-excited explosively driven MHD generator..... 858
- Franklin, Harold G. Membrane solution of the spirally corrugated shell..... 295
- Fraser, Donald C. (see Potter, James E.)
- Freeman, N. C. Solution of the Boltzmann equation for expanding flows (TN)..... 1696
- Fried, Burton D. and Heflinger, Lee O. Scaling law for MHD acceleration (TN)..... 174
- Friedman, Raymond. Experimental techniques for solid-propellant combustion research (SA)..... 1217
- Frohn, A. Measurements of concentration profiles in jets using Fizeau fringes (TN)..... 185
- and de Boer, P. C. T. Ion density profiles behind shock waves in air..... 261
- Fuller, Gerald H. (see Kordig, James W.)
- Fung, Y. C. (see Olson, Mervyn D.)
- Gabbert, C. H. Similarity for unsteady compressible boundary layers (TN)..... 1198
- Gallagher, R. H., Gellatly, R. A., Padlog, J., and Mallett, R. H. A discrete element procedure for thin-shell instability analysis..... 138
- Gallaher, William H. (see Dershin, Harvey)
- Garcia, B. H., Jr. (see Coleman, R. L.)
- Garrison, G. W. Jr. (see Hassan, H. A.)
- Gaston, Charles Arden. Graphical analysis of singular trajectories for optimal navigation..... 1655
- Gedeon, G. S. and Dial, O. L. Along-track oscillations of a satellite due to tesseral harmonics (TN)..... 593
- Gelb, George H. (see Sense, Karl A.)
- Sense, K. A., Zivi, S. M., and Neal, L. G. Electrical conductivity of high-void-fraction two-phase flow in an MHD generator: I. Experiment (TN)..... 2094
- Gellatly, R. A. (see Gallagher, R. H.)
- George, A. R. Perturbations of plane and axisymmetric entropy layers..... 2155
- George, John H. Interpretation of Liapunov stability regions..... 959
- Gerard, George (see Milligan, Roger)
- Gerber, Nathan. Note on shock reflection coefficient (TN)..... 369
- Gibson, Walter E. A turbulent-wake model with axial, laminar diffusion (TN)..... 348
- Giddens, D. P. (see Huang, A. B.)
- Gideon, John B. (see Benenson, David M.)
- Gilreath, Harold E. (see Schetz, Joseph A.)
- Giovannelli, Raffaele. Comments on "Performance characteristics of a magnetic annular arc" (TC)..... 1530
- Glick, Robert L. Temperature sensitivity of solid propellant burning rate (TN)..... 586
- Gold, Richard R. Effect of wall conductance on magnetohydrodynamic flow through finite cross-section channels..... 539
- and Cashen, John F. Communication through plasmas bounding slender entry vehicles..... 917
- Goldstein, Marvin E., Yang, Wen-Jei, and Clark, John A. Boundary-layer analysis of two-phase flow over an oscillating flat plate..... 43
- and Fay, J. A. The shape of a magnetically balanced arc (TN)..... 1510
- Golian, T. C. (see Vidal, R. J.)
- Goodman, Charles H. (see Webb, George R.)
- Goodman, Malcolm A. (see Webb, George R.)
- Gopinath, R. On flow past blunt bodies by the method of Belotserkovskii (TN)..... 1498
- Gottlieb, Robert G. Rapid convergence to optimum solutions using a Min-H strategy..... 322
- Graber, B. C. (see Nagamatsu, H. T.)
- Grabowsky, W. R. (see Durran, D. A.)
- Durran, D. A., and Spencer, D. J. Hot-shot gas source for pulsed MHD accelerator..... 1811
- Grange, Jean-Marie, Klineberg, John M., and Lees, Lester. Laminar boundary-layer separation and near-wake flow for a smooth blunt body at supersonic and hypersonic speeds..... 1089
- Graves, K. W. (see Carpenter, J. E.)
- Greenberg, Paul. Some magnetohydrodynamics of a thin body in oblique fields (TN)..... 1047
- Comment on "Theory of thin airfoils in magnetoaerodynamics" (TC)..... 1367
- Greif, R. (see Landram, C. S.)
- Grey, Jerry and Jacobs, Paul F. Cool electrostatic probe..... 84
- Groenig, Hans. New MZI-technique for shock tube measurements (TN)..... 1046
- Gruszczynski, J. S. and Warren, W. R., Jr. Study of equilibrium air total radiation..... 517
- Gula, William P. (see Staggs, John F.)
- Gundersen, Roy M. Nonisentropic two-dimensional MHD flow. II (TN)..... 603
- Gupta, A. S. Circulatory flow of a conducting liquid about a porous, rotating cylinder in a radial magnetic field (TN)..... 380
- Guthart, H. (see Bredfeldt, H. R.)
- Comments on "Infrared radiometry of turbulent flows" (TC)..... 1534
- Gutman, V. R. Comment on "Silicon carbide in ablative chars" (TC)..... 1053
- Haft, Everett E. (see Smith, Bert L.)
- Haisler, Walter E. and Stricklin, James A. Rigid-body displacements of curved elements in the analysis of shells by the matrix-displacement method (TN)..... 1525
- Haldeman, Charles W. and Covert, Eugene E. On the use of ionization level as an independent variable for plotting plasma transport properties (TN)..... 600
- Hall, D. B. (see Kaufman, S.)
- Hall, G. R. Interaction of the wake from bluff bodies with an initially laminar boundary layer..... 1386
- Hall, M. G. (see Kovaszny, L. S. G.)
- Hammitt, A. G. (see Fox, Jay)
- Hankey, Wilbur L. Prediction of incipient separation in shock-boundary-layer interactions (TN)..... 355
- and Cross, Ernest J., Jr. Approximate closed-form solutions for supersonic laminar separated flows..... 651
- Harder, D. and Connor, J. E. Filter techniques in planet satellite orbit parameter estimation (TN)..... 1190
- Hartsel, James E. (see Nerem, Robert M.)
- Hartunian, R. A. and Spencer, D. J. Experimental results for massive blowing studies..... 1397
- Hartwell, John Graham (see Flake, Robert H.)
- Harvey, C. A. (see Luh, J. Y. S.)
- Harvill, Lawrence R. (see Coates, Ralph L.)
- Hassan, H. A. Thrust from an MPD arcjet (TN)..... 338
- and Garrison, G. W., Jr. Anode losses in coaxial Hall current accelerators..... 840
- (see Coleman, R. L.)
- Hassig, H. J., Messina, A. F., and Twomey, W. J. Using a partial diaphragm when applying the supersonic Mach box method (TN)..... 356
- Hatch, G. L. (see Sack, R. L.)
- Hawaleshka, O. (see Wygnanski, I.)
- Hawk, Norman E. and Amick, James L. Two-dimensional secondary jet interaction with a supersonic stream..... 655
- Hawkins, Paul F. (see Schetz, Joseph A.)
- Haworth, Donald R. (see Peters, Alexander R.)
- Head, Victor P. Correlation of meteoroid environments in the solar system..... 1976
- Healey, John J. (see Hyman, Barry I.)
- Hearne, L. F. (see Woodruff, L. W.)
- Heckman, D. (see Kirkpatrick, A.)
- Heflinger, Lee O. (see Fried, Burton D.)
- Heicklen, Julian. Gas-phase chemistry of re-entry (SA)..... 4
- Heidmann, Marcus F. Strong, traveling, transverse acoustic modes generated by a rotating gas jet (TN)..... 2105
- Henderson, Arthur Jr. (see Maddalon, Dal V.)
- Hernance, Clarke E. Errata: "A model of composite propellant combustion including surface heterogeneity and heat generation" (TC)..... 608
- Continuous measurement of the burning rate of a composite solid propellant..... 1774
- Herrmann, G. (see Prasad, S. N.)
- Herwig, Lloyd O. and Latham, Thomas S. Nuclear characteristics of large reflector-moderated gaseous-fueled cavity reactors containing hot hydrogen..... 930
- Hess, R. V. (see Burlock, J.)
- Hightower, J. D. (see Beckstead, M. W.)
- Hill, F. K., Unger, H. J., and Dickens, W. P. Spectroscopic measurements of combustion gas composition in supersonic flow..... 873
- Hoelmer, Werner. Laminar boundary-layer separation in hypersonic flow (TN)..... 360

- Hoffman, Joe D. A general method for determining optimum thrust nozzle contours for chemically reacting gas flows 670
- and Thompson, H. Doyle. Optimum thrust-nozzle contours for gas-particle flows (TN) 1886
- Holston, A., Jr. Stability of inhomogeneous anisotropic cylindrical shells containing elastic cores 1135
- Holt, M. (see Kuby, W.)
- Hooks, Lawrence E. and Lewis, Roger C. Simplified magnetoaerodynamic flow relations for axisymmetric blunt bodies 644
- Horanoff, Eugene V. (see Regan, Frank J.)
- Horn, K. P., Bevc, V., and Kolpin, M. A. Evaporation of a droplet in free molecular flow (TN) 1692
- Horowitz, Fred A. (see McAlevy, Robert F., III)
- Horton, Thomas E. and Babineaux, T. L. Influence of atmospheric composition on hypersonic stagnation-point convective heating 36
- and Zeh, Dale W. Effect of uncertainties in transport properties on prediction of stagnation-point heat transfer (TN) 1497
- Hoshizaki, H. and Wilson, K. H. Convective and radiative heat transfer during superorbital entry 25
- Hu, William C. L. and Raney, John P. Experimental and analytical study of vibrations of joined shells 976
- Huang, A. B. and Giddens, D. P. Rayleigh's problem at low Mach numbers based on kinetic theory (TN) 1354
- Huang, Ju-chin (see Kan, Han-pin)
- Huang, Shih Lien (see Chou, Pei Chi)
- Hubbard, Edward W. Expansion of uniform gas clouds into a vacuum (TN) 378
- Hudson, M. Latrelle (see Dixon, Sidney C.)
- Hügel, H., Kruelle, G., and Peters, T. Investigations on plasma thrusters with thermal and self-magnetic acceleration 551
- Hunt, William E. and Nayfeh, Ali Hasan. A nonlinear correction method for orbit determination (TN) 1183
- Hutchinson, John W. and Amazigo, John C. Imperfection-sensitivity of eccentrically stiffened cylindrical shells 392
- Hwang, C. L. (see Hwang, U. P.)
- Hwang, U. P., Fan, L. T., and Hwang, C. L. Compressible laminar MHD flow inside a flat duct with heat transfer 2113
- Hyman, Barry I. and Healey, John J. Buckling of prolate spheroidal shells under hydrostatic pressure 1469
- Imber, M. (see Cohen, M. L.)
- Inger, G. R. Laminar boundary-layer solutions with strong blowing (TN) 1677
- An integral-method solution for massive blowing on slender hypersonic bodies (TN) 2068
- Ingram, C. W. (see Daniels, P.)
- Isogai, Koji (see Nakai, Eiichi)
- Iversen, J. D. (see Bailey, F. R.)
- Jack, John R. Technique for measuring absorptance and emittance by using cyclic incident radiation 1603
- Jacobs, Harold R. Radiation absorption in high-speed laminar boundary layers including the effects of external sources 1337
- Jacobs, Paul F. (see Grey, Jerry)
- Jacobs, P. W. M. and Russell-Jones, A. On the mechanism of the decomposition of ammonium perchlorate (TN) 829
- Jacobson, Allan S. (see Peterson, Laurence E.)
- Jaffe, N. A., Lind, R. C., and Smith, A. M. O. Solution to the binary diffusion laminar boundary-layer equations with second-order transverse curvature 1563
- Jarvinen, Philip O. and Draper, James Stark. Underexpanded gas-particle jets (TN) 824
- Jenkins, J. E. (see Moore, D. R.)
- Jensen, G. E. (see Brown, R. S.)
- (see Deverall, L. I.)
- Jensen, Paul F., Jr. (see Zakkay, Victor)
- Jerde, Rod L. (see Peterson, Laurence E.)
- Johns, D. J. Some heat conduction analyses using Kantorovich's method (TC) 191
- Johnson, Roger W., Leondes, C. T., and Payne, James A. A generalized linear guidance law for aerospace vehicles (TN) 2052
- Jones, Barclay G. (see Fox, Jay)
- Jones, David I. G., Nashif, Ahid D., and Adkins, Richard L. Effect of tuned dampers on vibrations of simple structures 310
- Jones, Robert M. Plastic buckling of eccentrically stiffened circular cylindrical shells 1147
- Jones, W. J. D. (see Esin, A.)
- Jorgenson, G. V. Solar-wind damage to spacecraft thermal control coatings (TN) 1204
- Kan, Han-pin and Huang, Ju-chin. Large deflection of rectangular sandwich plates. (TN) 1706
- Kana, Daniel D. (see Chu, Wen-Hwa)
- Kane, T. R. Addendum: Real solutions of sets of nonlinear equations (TC) 607
- and Barba, P. M. Reply by authors to Y. Pironneau (TC) 1375
- Kang, Sang-Wook. Analysis of condensation droplet growth in rarefied and continuum environments 1288
- Rae, William J. and Dunn, Michael G. Effects of mass injection on compressible, three-dimensional, laminar boundary layers 1738
- Kanzawa, A. and Kimura, I. Measurements of viscosity and thermal conductivity of partially ionized argon plasmas 1315
- Karnopp, Dean. Optimal control of maneuver-induced vibration in flexible aerospace vehicles 2017
- Karpp, Robert R. (see Chou, Pei Chi)
- Kaufman, S. and Hall, D. B. Bending elements for plate and shell networks 402
- Kaul, C. N. One-dimensional magnetogasdynamics (TN) 591
- Kawasaki, Toshio. Favorable thickness distributions for wings in supersonic flow 439
- Kaye, Harvey (see Fay, James A.)
- Kelither, T. J. (see Woodruff, L. W.)
- Kempner, Joseph (see Allentuch, Arnold)
- Kendall, Robert M., Rindal, Roald A., and Bartlett, Eugene P. A multicomponent boundary layer chemically coupled to an ablating surface 1063
- Kennedy, Lawrence, A. (see Prelewicz, D. A.)
- (see Tabaczynski, R. J.)
- Kentzer, Czeslaw P. Instability of numerical solutions of the steady, supersonic blunt-body problem (TN) 1035
- Kerslake, William R., Wasserbauer, Joseph F., and Margosian, Paul M. Experimental mercury bombardment thruster at submillipound thrust 683
- (see Margosian, Paul M.)
- Kessel, P. G. Response of elastic rods, strings, and torsional members to accelerating loads (TN) 1207
- Kessler, Thomas J. Two-stream mixing with finite initial boundary layers (TN) 363
- Comment on the effect of sudden compressions on the turbulent boundary layer (TC) 2109
- Ketter, D. J. Flutter of flat, rectangular, orthotropic panels 116
- Kier, R. J. (see Capener, E. L.)
- Kilcline, C. R. (see Clay, W. G.)
- Kimura, I. (see Kanzawa, A.)
- Kinney, Robert B. Skin-friction drag of a constant-property turbulent boundary layer with uniform injection 624
- Kinser, David E. (see Moses, Fred)
- Kirkpatrick, A., Heckman, D., and Cantin, A. Wake plasma turbulence study using an electrostatic probe array (TN) 1494
- Kirkpatrick, M. E. and Mendelson, R. A. Development of porous ionizer materials 562
- Klavins, A. (see Carpenter, J. E.)
- Klein, Lothar and Penzias, Gunter J. Spectral radiances of model rocket exhaust gases at simulated altitude measured with a rapid-scanning spectrometer (TN) 1690
- Kleinstein, Gdalia. Decay of a disturbance in an incompressible, zero-pressure-gradient flow (TN) 805
- Generalized law of the wall and eddy-viscosity model for wall boundary layers 1402
- Erratum: "Decay of disturbance in an incompressible, zero-pressure-gradient flow" (TC) 2289
- Erratum: "Generalized law of the wall and eddy-viscosity model for wall boundary layers" (TC) 2289
- Kliegel, James R. (see Quan, Victor)
- Klimas, Paul C. (see Campbell, George S.)
- Klineberg, John M. (see Grange, Jean-Marie)
- Klosner, Jerome M. (see Zweben, Carl)
- Knackstedt, Wilhelm F. Reply by author to comments by A. Esin and W. J. D. Jones (TC) 1215
- Knudson, J. Deterministic capture of an augmented V-gyro system (TN) 592
- Knystautas, Romas and Lee, John H. Spark initiation of converging detonation waves (TN) 1209
- Ko, Denny R. S. (see Kubota, Toshi)
- Koch, Kenneth E. Supersonic cone wake-neck geometry (TN) 2087
- Kolpin, M. A. Experimental study of the dynamics of a large inverse pinch 1159
- (see Horn, K. P.)
- Kordig, James W. and Fuller, Gerald H. Correlation of nozzle submergence losses in solid rocket motors (TN) 175
- Kornecki, Aleksander. Buckling of truncated conical shells under uniform static pressure (TN) 2099
- Kosdon, F. J. and Williams, F. A. Pressure dependence of non-metalized hybrid fuel regression rates 774
- Kovaszny, L. S. G. and Hall, M. G. Some impossible similarity solutions (TN) 2065
- Kowalewski, Joachim. Influence functions for displacements and stresses from temperature and heat loads (TN) 1694
- Kozik, T. J. Displacement formulations of the thin elastic shell equations 385
- Krahula, Joseph L. Analysis of bent and twisted bars using the finite element method (TN) 1194
- Kramer, Raymond F. (see Meyer, Rudolf X.)
- Krause, Egon. Numerical solution of the boundary-layer equations 1231
- Kreiss, W. T. (see Palmer, T. Y.)
- Kroulitz, Joseph C. Mass flux and impact pressure probes for use in arcjet exhausts (TN) 1503
- Kruelle, G. (see Hügel, H.)
- Krumins, M. V. (see Levensteins, Z. J.)
- Krupp, R. S. (see Shih, W. C. L.)
- Kubota, Toshi and Ko, Denny R. S. A second-order weak interaction expansion for moderately hypersonic flow past a flat plate (TN) 1915
- Kuby, G. H. (see Liu, S. W.)
- Kuby, W., Foster, R. M., Byron, S. R., and Holt, M. Symmetrical, equilibrium flow past a blunt body at superorbital re-entry speeds 610
- Kuskevics, G. (see Thompson, B.)
- Kussoy, M. I. Drag measurements of cones in the rarefied flow regime (TN) 1901
- LaChance, M. (see Thompson, B.)
- Ladacki, Michael. Reply by author to V. R. Gutman (TC) 1053
- Laderman, A. J. Shock-tube performance with area divergence at the diaphragm section (TN) 1904
- Optimum shock-tube length with divergence at the diaphragm section (TN) 2089
- Lahaye, C., Leger, E. G., and Lemay, A. Wake velocity measurements using a sequence of sparks (TN) 2274
- Lai, Jai-lue (see Yu, Yi-Yuan)
- Land, Karl M. (see Webb, George R.)
- Landahl, Marten T. (see Rubbert, Paul E.)
- Kernel function for nonplanar oscillating surfaces in a subsonic flow (TN) 1045
- Landram, C. S. and Greif, R. Semi-isotropic model for radiation heat transfer 1971

- Lane, Frank. Frequency effects in the radar return from turbulent, weakly ionized missile wakes. 2193
- Lapp, M. Effect of a continuous absorber on spectral line reversal temperature measurements. 2224
- Lardner, Thomas J. Approximate solutions to phase-change problems (TN). 2079
- Lastman, G. J. and Tapley, B. D. A test for the sign of the second variation (TN). 1682
- Latham, Thomas S. (see Herwig, Lloyd O.)
- Lawrence, Kent L. (see Myklestad, Nils O.)
- Lederman, Samuel and Wilson, Daniel S. Microwave resonant cavity measurement of shock produced electron precursors. 70
- Lee, B. H. K. Detonation-driven shocks in a shock tube (TN). 791
- Nonuniform propagation of imploding shocks and detonations. 1997
- Lee, John H. (see Knystautas, Romas)
- Lee, Richard S. (see Cheng, H. K.)
- Lees, Lester (see Grange, Jean-Marie)
- Leger, E. G. (see Lahaye, C.)
- Lehman, Harry (see Schetz, Joseph A.)
- Leissa, Arthur W. and Clausen, William E. Deflection of a circular plate having mixed boundary conditions (TN). 2287
- Lemay, A. (see Lahaye, C.)
- LeMay, Joseph L., Stear, Edwin B., and Nesbit, Richard A. A simplified technique for error analysis of rocket boost inertial navigation systems. 145
- Leonard, Charles A. (see Dershin, Harvey)
- Leondes, C. T. (see Johnson, Roger W.)
- Levensteins, Z. J. and Krumins, M. V. Aerodynamic characteristics of hypersonic wakes. 1596
- Levin, E. Comment on "One-dimensional minimum-time rendezvous for a thrust-limited rocket" (TC). 2112
- Levitch, R. N. (see Mickle, H. S.)
- Lewallen, Jay M. A modified quasi-linearization method for solving trajectory optimization problems. 962
- Lewis, Clark H. Comments on "Displacement thickness for boundary layers with surface mass transfer" (TC). 831
- Lewis, Roger C. (see Hooks, Lawrence E.)
- Li, Ta (see Penner, S. S.)
- Li, Ting Y. (see Polak, Arnold)
- Liaw, Boen-Dar and Little, Robert W. Theory of bending multilayer sandwich plates. 301
- Libby, Paul A. Heat and mass transfer at a general three-dimensional stagnation point. 507
- and Liu, T. M. Further solutions of the Falkner-Skan equation (TN). 1040
- Likins, Peter W. Modal method for analysis of free rotations of spacecraft. 1304
- Stability analysis of mechanical systems with constraint damping (TN). 2091
- Lind, R. C. (see Jaffe, N. A.)
- Lion, Paul Michel. Rapid identification of linear and nonlinear systems. 1835
- Little, Robert W. (see Liaw, Boen-Dar)
- Liu, Han-Shou and Mitchell, Thomas P. Resonant oscillations of a flexible satellite in an elliptic orbit. 1269
- Liu, J. T. C. Shock tube side-wall electrostatic probes. 891
- Liu, S. W. and Kuby, G. H. Interaction of surface chemistry and mass transfer in nonsimilar boundary-layer flows. 526
- Liu, T. M. (see Libby, Paul A.)
- Locke, E. and Plotkin, K. Shock-tube performance of a Langmuir probe suitable for ballistic-range applications (TN). 1350
- Point measurements of the time-averaged turbulent wake density by Rayleigh scattering (TN). 1888
- Lockman, William K. Free-flight base pressure and heating measurements on sharp and blunt cones in a shock tunnel (TN). 1898
- Loeffler, A. L., Jr., Aronowitz, L., and Ericson, W. B. Reply by authors to S. Frankenthal (TC). 190
- Loh, W. H. T. Extension of the second-order theory of entry mechanics to nearly exact solutions. 1823
- Lowell, Robert L., Jr. and Adams, James A. Similarity analysis for multicomponent, free convection (TN). 1360
- Lu, Pau-Chang. A study of Kantorovich's variational method in MHD duct flow (TN). 1519
- and Ostrach, Simon. A study of seeded rotating arcs (TN). 1902
- Lu, S. Y. and Chang, L. K. Thermal buckling of conical shells. 1877
- Ludford, G. S. S. and Yannitelli, D. W. Effect of nonzero Pr_m on hydromagnetic airfoil theory (TN). 1211
- Luh, J. Y. S. and Harvey, C. A. Time-optimal control of a bounded phase-coordinate process: I. Unstable booster with actuator position and rate limits. 949
- Lukasiewicz, J. Constant acceleration flows and applications to high-speed guns. 1955
- Lusty, Arthur H., Jr. (see Miele, Angelo)
- Lutz, Michael A. Radiation and its effect on the nonequilibrium properties of a seeded plasma. 1416
- MacCalden, P. B. and Matthiesen, R. B. Combination torsion and axial compression tests of conical shells. 305
- Maddalon, Dal V., Rogallo, Robert S., and Henderson, Arthur, Jr. Transition measurements at hypersonic Mach numbers (TN). 590
- Magee, Richard S. (see McAlevy, Robert F., III)
- Mallett, R. H. (see Gallagher, R. H.)
- Malliaris, A. C. Phenomena in the cathode region of an MPD accelerator. 1325
- Mangione, Bruce J. (see Chen, C. F.)
- Margosian, Paul M. (see Kerslake, William R.)
- and Kerslake, William R. Experimental evaluation of a two-directional electron-bombardment ion thruster. 833
- Marvin, Joseph G. and Pope, Ronald B. Laminar convection heating and ablation in the Mars atmosphere. 240
- and Sinclair, A. Richard. Convective heating in regions of large favorable pressure gradient. 1940
- Masek, Tommy D. Plasma investigation in a reversed-current electron bombardment ion engine. 692
- Mastrup, F. N. Spectroscopic investigation of a hydrogen arcjet plume (TN). 159
- Matthiesen, R. B. (see MacCalden, P. B.)
- Mayers, J. (see Benson, Arthur S.)
- McAlevy, Robert F., III, Magee, Richard S., Wrubel, John A., and Horowitz, Fred A. Flame spreading over the surface of igniting solid rocket propellants and propellant ingredients. 265
- Magee, Richard S., Wrubel, John A., and Horowitz, Fred A. Erratum: "Flame spreading over the surface of igniting solid rocket propellants and propellant ingredients" (TC). 1216
- McCroskey, W. J. Pressure distributions on sharp cones in rarefied hypersonic flow (TN). 2103
- McCue, Gary A. Quasilinearization determination of optimum finite-thrust orbital transfers. 755
- McDonald, Allan J. (see Peterson, John A.)
- McKenna, William W. Interaction between detonation waves and flowfields. 868
- McLellan, Dale L. Constitutive equations for mechanical properties of structural materials. 446
- Mehta, Pravin K. Cylindrical and spherical elastoplastic stress waves by a unified direct analysis method. 2242
- Meirovitch, Leonard and Wesley, Donald A. On the dynamic characteristics of a variable-mass slender elastic body under high accelerations. 1439
- (see Wallace, Frank B., Jr.)
- Mellor, George L. Incompressible, turbulent boundary layers with arbitrary pressure gradients and divergent or convergent cross flows. 1570
- Melnik, R. E. Vortical singularities in conical flow. 631
- Menard, Wesley A. (see Thomas, George M.)
- Mendelsohn J. (see Van Gelder, A.)
- Mendelson, R. A. (see Kirkpatrick, M. E.)
- Merritt, G. E. and Weatherston, R. C. Condensation of mercury vapor and drop growth processes in a nitrogen flow. 721
- Messina, A. F. (see Hassig, H. J.)
- Metzger, J. W., Engel, M. J., and Diaconis, N. S. Oxidation and sublimation of graphite in simulated re-entry environments. 451
- Meyer, Rudolf X. A space-charge-sheath electric thruster (TN). 2057
- and Kramer, Raymond F. Magnetic field effect on space-charge neutralization in electric propulsion. 2201
- Meyerand, Russell G., Jr. Laser plasma production—A new area of plasmadynamics research (SA). 1730
- Mickle, H. S., Smith, K. A. and Levitch, R. N. Nonequilibrium turbulent boundary layer (TN). 1717
- Miele, Angelo and Lusty, Arthur H., Jr. On optimum wedges and semicones in hypersonic viscous flow (TN). 177
- Miller, H. Ronald. Shock-on-shock simulation and hypervelocity flow measurements with spark-discharge blast waves (TN). 1675
- Miller, Robert E. Use of the field method for numerical integration of two-point boundary-value problems (TN). 811
- Milligan, Roger and Gerard, George. General instability of orthotropically stiffened cylinders under torsion (TN). 2071
- Mirtich, M. J. and Bowman, R. L. Effect of simulated micrometeoroid exposure on performance of N/P silicon solar cells (TN). 1364
- Mitchell, Thomas P. (see Liu, Han-Shou)
- Mitchner, M. (see Schweitzer, S.)
- (see Oliver, D. A.)
- Miyajima, Katsuyuki (see Washizu, Kyuichiro)
- Modica, A. P. Effect of trace fluorocarbon on nitrogen vibrational relaxation (TN). 1513
- Mölder, Sannu. Internal, axisymmetric, conical flow. 1252
- Moller, Paul S. (see Christenson, Edward A.)
- Moore, D. R., Stalmach, C. J., Pope, T. C. and Jenkins, J. E. Dynamic stability wind-tunnel tests of a 10° cone with simulated ablation at $M = 17$ 1377
- Moran, James P. Similarity in high-altitude jets (TN). 1343
- Moretto, Gino. Inviscid flowfield about a pointed cone at an angle of attack (TN). 789
- and Bleich, Gary. Three-dimensional flow around blunt bodies (TN). 1557
- Morita, T. (see Bredfeldt, H. R.)
- Morrisette, E. Leon (see Staylor, W. Frank)
- Moses, Fred and Kinser, David E. Optimum structural design with failure probability constraints. 1152
- Moyer, H. Gardner. An analytic treatment of cotangential transfer (TN). 1197
- Mueller, T. J. and Oberkampf, W. L. Hydraulic analog for the expansion-deflection nozzle (TN). 1200
- Mukherjee, A. One-dimensional compressible flow considering buoyancy forces (TN). 787
- Muzzy, R. J. Surface mass addition into a turbulent boundary layer (TN). 1029
- (see Brown, R. S.)
- Myers, T. W. (see Roman, W. C.)
- Myklestad, Nils O. and Lawrence, Kent L. Transient beam response calculations using Euler's method (TN). 376
- The matrix siren (TN). 1897
- Naehier, Carl H. (see Benenson, David M.)
- Nagamatsu, H. T., Sheer, R. E., Jr., and Graber, B. C. Hypersonic laminar boundary-layer transition on 8-foot-long, 10° cone, $M_1 = 9.1-16$ 1245
- Nakai, Eiichi, Takagi, Toshiro, and Isogai, Koji. Results of supersonic flutter characteristics of low aspect-ratio flat-plate surfaces (TN). 1715
- Narasimha, Roddam, Ravindran, R., and Diab, T. A. Leading shock in two-dimensional secondary fluid injection (TN). 2064
- Narendra, Kumpati S. and Neuman, Charles P. Stability of continuous time dynamical systems with m -feedback nonlinearities. 2021
- Nashif, Ahid D. (see Jones, David I. G.)
- Nayfeh, Ali Hasan (see Hunt, William E.)
- Neal, L. G. (see Gelb, G. H.)
- Needham, David A. A note on hypersonic incipient separation (TN). 2284
- Nemat-Nasser, S. (see Prasad, S. N.)

- (see Roorda, J.)
- Nerem, Robert M., Carlson, Leland A., and Hartsel, James E. Chemical relaxation phenomena behind normal shock waves in a dissociated freestream..... 910
- Nesbit, Richard A. (see LeMay, Joseph L.)
- Ness, Nathan. Some comments on the laminar compressible boundary-layer analysis with arbitrary pressure gradient (TN)..... 330
- Reply by author to J. T. Ohrenberger and C. B. Cohen (TC)..... 1372
- Neuman, Charles P. (see Narendra, Kumpati S.)
- Nevill, Gale E., Jr. (see Dumesnil, Carl E.)
- Newman, M. (see Ojalvo, I. U.)
- Nicholson, F. T. Effect of solar perturbation on motion near the collinear earth-moon libration points..... 2237
- Niemann, A. F., Jr. (see Chu, Chong-Wei.)
- Nordtvedt, Kenneth, Jr. An approach to manual space navigation (TN)..... 1185
- Nowinski, J. L. Transverse perpendicular impact on a cable of a highly elastic material (TN)..... 332
- Oberkampf, W. L. (see Mueller, T. J.)
- Oettinger, Peter E. and Bershadner, Daniel. A unified treatment of the relaxation phenomenon in radiating argon plasma flows..... 1625
- Ohrenberger, J. T. and Cohen, C. B. Comments on a proposed variation of the Cohen-Reshotko method in boundary-layer theory (TC)..... 383
- and Cohen, C. B. Commenter's reply to N. Ness (TC)..... 1373
- Ojalvo, I. U. and Newman, M. Natural vibrations of a stiffened pressurized cylinder with an attached mass..... 1139
- Olfe, D. B. A modification of the differential approximation for radiative transfer..... 638
- Oliver, D. A. and Mitchner, M. Nonuniform electrical conduction in MHD channels..... 1424
- O'Loughlin, J. R. (see Rein, C. R.)
- Olson, Mervyn D. and Fung, Y. C. Comparing theory and experiment for the supersonic flutter of circular cylindrical shells..... 1849
- Finite elements applied to panel flutter (TN)..... 2267
- Oman, Richard A. Numerical calculations of gas-surface interactions..... 1280
- Ormsby, J. F. A. A theorem in rotational analysis (TN)..... 1345
- Ortwerth, Paul J. (see Craig, Roger R.)
- Oskay, Vural. Interferometry with hypersonic free-flight models (TN)..... 156
- Ostrach, Simon (see Lu, Pau-Chang)
- Otey, G. R. and von Rosenberg, D. U. Unsteady discharge of a viscous gas from a duct (TN)..... 1724
- Otis, David R. A source model for predicting the drag force on a moving arc column..... 582
- Padlog, J. (see Gallagher, R. H.)
- Pallone, Adrian J. (see DeRienzo, Philip)
- Palmer, T. Y. and Kreiss, W. T. Radiometric observations and the cloud-melting zone (TN)..... 2075
- Pan, Y. S. and Vaglio-Laurin, R. Trail of an ionospheric satellite I..... 1801
- Panton, Ronald and Berger, S. A. Unsteady compressible boundary layer for flow of gas in a tube..... 2121
- Papirno, Ralph. Experiment plastic buckling of aluminum cylinders at 500°F..... 2266
- Patrick, R. M. (see Schneiderman, A. M.)
- and Schneiderman, A. M. Reply by authors to R. Giovanelli (TC)..... 1531
- Payne, James A. (see Johnson, Roger W.)
- Pearson, G. S. and Sutton, D. Composite solid propellant ignition: ignition of ammonia and other fuels by perchloric acid vapor (TN)..... 344
- and Sutton, D. Catalyzed ignition of composite propellant fuels by perchloric acid vapor (TN)..... 2101
- Penner, S. S. (see Sharma, O. P.)
- and Li, Ta. Thermodynamic considerations of droplets and bubbles (TN)..... 1528
- Penzias, Gunter J. (see Klein, Lothar)
- Percy, John H. Quadrilateral finite element in elastic-plastic plane-stress analysis (TN)..... 367
- Perel, Julius (see Daley, Howard L.)
- Perry, J. C. Comment on "A comparison of solutions to a blunt body problem" (TC)..... 383
- Peskin, R. L. (see Baw, P. S.)
- Polymeropoulos, C. E., and Yeh, P. S. Results from a theoretical study of fuel drop ignition and extinction..... 2173
- Peters, Alexander R. and Haworth, Donald R. Correlation of $C(K)$ in the separated region using the Crocco-Lees method (TN)..... 1506
- Peters, T. (see Hügel, H.)
- Peterson, Laurence, E., Jerde, Rod L., and Jacobson, Allan S. Balloon x-ray astronomy (SA)..... 1921
- Peterson, John A., Reed, Russell Jr., and McDonald, Allan J. Control of pressure deflagration limits of composite solid propellants..... 764
- Pfender, E. (see Wutzke, S. A.)
- Pian, T. H. H. (see Déak, A. L.)
- Pierce, David A. (see Szebehely, Victor)
- Pironneau, Y. Comments on "Effects of energy dissipation on a spinning satellite" (TC)..... 1374
- Pivrotto, T. J. (see Roschke, E. J.)
- Platus, D. H. A note on re-entry vehicle roll resonance (TN)..... 1348
- Plotkin, K. (see Lock, E.)
- Polak, Arnold and Li, Ting Y. Three-dimensional boundary-layer flow over a flat delta wing at a moderate angle of attack..... 233
- Polymeropoulos, C. E. (see Peskin, R. L.)
- Pope, Ronald B. (see Marvin, Joseph G.)
- Measurements of the total surface emittance of charring ablaters (TN)..... 2285
- Pope, T. C. (see Moore, D. R.)
- Porter, Robert W. and Cambel, Ali Bulent. Magnetic coupling in flight magnetoaerodynamics (TN)..... 803
- and Cambel, Ali Bulent. Hall effect in flight magnetogas-dynamics..... 2208
- Postlewaite, John E. Calculation of subsonic flow in annular nozzles (TN)..... 349
- Potter, James E. and Fraser, Donald C. A formula for updating the determinant of the covariance matrix (TN)..... 1352
- Potter, J. L. (see Boylan, D. E.)
- Povinelli, Louis A. Particulate damping in solid-propellant combustion instability..... 1791
- Powers, S. A. (see Chu, Chong-Wei)
- Powers, William E. Measurements of the current density distribution in the exhaust of an MPD arcjet..... 545
- Powers, W. L., Dicks, J. B., and Snyder, W. T. A graphical presentation of magnetogasdynamic accelerator and generator performance characteristics..... 2232
- Prasad, S. N., Nemat-Nasser, S., and Herrmann, G. Bending-torsional flutter of a swept wing in a high-density, low-speed flow..... 316
- Prelewicz, D. A. and Kennedy, Lawrence A. Radiant heating of a rotating thick-walled spherical satellite (TN)..... 179
- and Benenson, D. M. Nonsteady coaxial arcs in fully developed plasma flow..... 1320
- Price, C. F. (see Smoot, L. D.)
- Price, E. W. (see Buffum, F. G., Jr.)
- (see Beckstead, M. W.)
- Prince, David C., Jr. Boundary-layer development in a converging-diverging nozzle throat (TN)..... 597
- Purcell, W. E. (see Smoot, L. D.)
- Quan, Victor and Kliegel, James R. Two-zone transonic flow in nozzles (TN)..... 2264
- Rae, William J. (see Kang, Sang-Wook)
- Raftopoulos, Demetrios and Davids, Norman. Elastoplastic impact on rigid targets..... 2254
- Rakich, John V. Three-dimensional flow calculation by the method of characteristics (TN)..... 1906
- Rand, S. and Albini, F. Radar return from vehicles in the ionosphere..... 1174
- Raney, John P. (see Hu, William C. L.)
- Rasmussen, Maurice L. On hypersonic flow past an unyawed cone (TN)..... 1495
- Ravindran, R. (see Narasimha, Roddam)
- Redekeopp, L. G. (see Charwat, A. F.)
- Reed, Russell Jr. (see Peterson, John A.)
- Regan, Frank J. and Horanoff, Eugene V. Wind-tunnel Magnus measurements at the Naval Ordnance Laboratory (TN)..... 1193
- Rein, C. R. and O'Loughlin, J. R. Correction for radiation absorbed by electrically heated, wire temperature sensors in flame (TN)..... 1900
- Reis, Victor H. Chemiluminescent radiation from the far wake of hypersonic spheres..... 1928
- Ren, Nann and Yu, Yi-Yuan. Flexural and extensional vibrations of two-layered plates (TN)..... 797
- Reshotko, Eli. An analysis of the "laminar instability" problem in gas-cooled nuclear reactor passages..... 1606
- Richley, Edward A. (see Staggs, John F.)
- Richmond, J. Kenneth and Shreeve, Raymond P. Wind-tunnel measurements of ignition delay using shock-induced combustion..... 1777
- Rim, Kwan (see Francis, Philip H.)
- Rindal, Roald A. (see Kendall, Robert M.)
- Roark, A. L. (see Warren, W. E.)
- Robinson, Alfred C. (see Anderson, Gerald M.)
- Robinson, A. R. (see Zarghamee, M. S.)
- Rodden, William P. A method for deriving structural influence coefficients from ground vibration tests..... 991
- Rogallo, Robert S. (see Maddalon, Dal V.)
- Rogers, David F. Hypersonic transverse-curvature effect (TN)..... 2088
- Rogers, W. K. (see Collins, D. J.)
- Rollstin, L. R. (see Bailey, F. R.)
- Roman, W. C. and Myers, T. W. Experimental investigation of an electric arc in transverse aerodynamic and magnetic fields..... 2011
- Romie, Fred E. Carbon-silica reaction in silica-phenolic composites (TN)..... 1511
- Roorda, J. and Nemat-Nasser, S. An energy method for stability analysis of nonlinear, nonconservative systems..... 1262
- Roschke, E. J. and Pivrotto, T. J. End-wall pressure distributions in a confined vortex (TN)..... 817
- Roshko, Anatol and Thomke, Gerald J. Effect of a shoulder modification on turbulent supersonic base flow (TN)..... 827
- Rosner, Daniel E. On liquid droplet combustion at high pressures. (TN)..... 163
- and Allendorf, H. Donald. Ablation rates in mixtures of reactive gases (TN)..... 1489
- Ross, Daniel P. and Altman, Manfred. Reaction of molten metal droplets with a rarefied atmosphere..... 714
- Rossettos, J. N. and Tene, Y. Analysis of prestressed layered shells with applications to buckling (TN)..... 1720
- Rotenberg, M. (see Sharma, O. P.)
- Rubbert, Paul E. and Landahl, Marten T. Solution of the transonic airfoil problem through parametric differentiation..... 470
- Rubin, Stanley G. Compressible turbulent boundary-layer equations (TN)..... 1919
- Ruger, Charles J. Approximate analytic solutions for nonsimilar boundary layers..... 923
- Rushton, George H. (see Stetson, Kenneth F.)
- Russell-Jones, A. (see Jacobs, P. W. M.)
- Sack, R. L., Carpenter, W. C. and Hatch, G. L. Modification of elements in the displacement method (TN)..... 1708
- Sackman, J. L. On the buckling of aging, linearly viscoelastic beam-columns (TN)..... 1726
- Sadeh, W. Z. A note on the general solution of the two-dimensional linear elasticity problem in polar coordinates (TN)..... 354
- Salsler, G. E. (see Dauerman, L.)
- Sandler, Stephen H. Motion of a near-equatorial lunar satellite (TN)..... 588
- Sandri, R. and Billingham, R. Ignition of the hydrogen-oxygen propellant combination by means of chlorine trifluoride..... 770
- Sanematsu, Henry S. and Chapkis, Robert L. A conformal mapping approach to the blunt body problems (TN)..... 2047
- Sangster, D. K. (see Collins, D. J.)

- Sarma, L. V. K. V. (see Seetharamaswamy, R.)
- Sarao, M. S. Flow of a second-order fluid near a spinning cone (TN) 342
- Sastry, M. S. Magneto hypersonic boundary-layer flow past a plate (TN) 167
- Sawyer, T. T. (see Caveny, L. H.)
- Scharfman, W. E. (see Bredfeldt, H. R.)
- Scherberg, Max G. and Smith, Howard E. An experimental study of supersonic flow over a rearward facing step. 51
- Schetz, Joseph A., Hawkins, Paul F., and Lehman, Harry. Structure of highly underexpanded transverse jets in a supersonic stream. 882
- and Gilreath, Harold E. Tangential slot injection in supersonic flow. 2149
- Schindel, Leon H. and Borland, Christopher J. Supersonic gust simulation experiments (TN). 1910
- Schlee, F. H., Standish, C. J., and Toda, N. F. Divergence in the Kalman filter. 1114
- Schmidt, Fred W. and Springer, George S. Forces on spheres inside diffusers (TN). 2054
- Schmit, L. A. (see Bogner, F. K.)
- Schmitz, R. A. (see Winegardner, D. K.)
- Schneider, L. (see Charwat, A. F.)
- Schneiderman, A. M. and Patrick, R. M. Axial current distribution in the exhaust of the magnetic annular arc. 249
- (see Patrick, R. M.)
- Scholz, Paul D., Brodwin, Morris E., and Anderson, Thomas P. Coupling efficiency of the radio frequency plasma torch (TN). 1022
- Schubert, Gerald. Viscous incompressible flow over wall projections and depressions (TN). 373
- Schuerch, H. Performance-weight relations and shape parameters for Maxwell structures (TN). 367
- Addendum: "Performance-weight relations and shape parameters for Maxwell structures (TN)". 1216
- Schultz-Grunow, F. Influence of longitudinal wall curvature on the stability of boundary-layer flow (TN). 2053
- Schwartz, H. S. (see Scharf, R. T.)
- Schwartz, R. T. and Schwartz, H. S. Characteristics of boron fibers and boron-fiber-reinforced plastic composites. 289
- Schweitzer, S. and Mitchner, M. Convergence of successive approximations to the scalar electrical conductivity of some weakly ionized real gases (TN). 351
- Tensor electrical conductivity of atmospheric cesium-seeded argon. 844
- and Cohen, I. M. Flow of a conducting liquid in an annular gap: a restricted nonexistence proof (TN). 2066
- On the accuracy of calculating the scalar electrical conductivity at very low ionization levels (TN). 2086
- Scott, W. E. Free-flight spin decay of a spin-stabilized shell containing a viscous liquid (TN). 2276
- Seader, J. D. (see Carlson, L. W.)
- Seamans, Thomas F., Vanpee, Marcel and Agosta, Vito D. Development of a fundamental model of hypergolic ignition in space-ambient engines. 1616
- Sebacher, Daniel I. A correlation of N_2 vibrational- $\rightarrow$ translational relaxation times (TN). 819
- Seely, L. B., Berke, J. G., and Evans, Marjorie W. Initiation of detonation during gap testing of liquids. 2179
- Seetharamaswamy, R. and Sarma, L. V. K. V. Comment on "Duct-flow of conducting fluids under arbitrarily oriented applied magnetic fields" (TC). 1054
- Seifert, Howard S. (see James, Robert N.)
- Selamoglu, Suha. Experiments on Joule heating of shock-ionized air. 847
- Sense, Karl A. and Gelb, George H. Magneto-hydrodynamic power generation using a bifluid liquid-metal generator. 862
- and Gelb, George H. Cycle analyses for liquid-metal power conversion systems using a bifluid MHD generator. 1818
- (see Gelb, G. H.)
- Electrical conductivity of high-void-fraction two-phase flow in an MHD generator: II. Analysis (TN). 2097
- Seubold, Jason G. (see Shirie, John W.)
- Sforza, Pasquale (see Trentacoste, Nicholas)
- Sharma, O. P., Rotenberg, M., and Penner, S. S. Phase-change problems with variable surface temperatures. 677
- Sheer, R. E., Jr. (see Nagamatsu, H. T.)
- Sherman, Arthur and Yeh, Hsuan. Blowing of current patterns in nonequilibrium plasmas (TN). 1689
- Shi, Yun-Yuan and Eckstein, Martin C. An approximate solution for ascending low-thrust trajectories without singularity (TN). 170
- (see Eckstein, Martin C.)
- Shih, W. C. L. and Krupp, R. S. Viscous nonequilibrium blunt-body flow. 16
- Shirie, John W. and Seubold, Jason G. Length of the supersonic core in high-speed jets (TN). 2062
- Shreeve, Raymond P. (see Richmond, J. Kenneth)
- Shulman, Yechiel (see Euler, Edward A.)
- Sichel, Martin. Computer experiments related to chemical propulsion (SA). 1537
- Siegelman, David. Pressure signature of an axisymmetric body at angle of attack (TN). 2280
- Simites, George J. Axisymmetric dynamic snap-through buckling of shallow spherical caps (TN). 1019
- Instability of orthotropic cylindrical shells under combined torsion and hydrostatic pressure. 1463
- Simmons, Frederick S. Infrared spectroscopic study of hydrogen-fluorine flames. 778
- Sinclair, A. Richard (see Marvin, Joseph G.)
- Singer, Josef (see Bendavid, Dror)
- Singleton, Robert E. Compressible laminar boundary layer on swept infinite cylinder with suction (TN). 2073
- Skinner, John H., Jr. Friction and heat-transfer effects on the non-steady flow behind a detonation (TN). 2069
- Slates, R. O. (see Bufum, F. G., Jr.)
- Slattey, R. E. (see Clay, W. G.)
- Small, R. L., Valsamakis, E. A., and Bostick, W. H. Probe measurements of plasma rings injected into an axial guide field. 853
- Smith, A. M. O. (see Jaffe, N. A.)
- Smith, Bert L. and Haft, Everett E. Vibration of a circular cylindrical shell closed by an elastic plate (TN). 2080
- Smith, Edward B. (see Fendell, Francis E.)
- Smith, Gerald L. Sequential estimation of observation error variances in a trajectory estimation problem. 1964
- Smith, Howard E. (see Scherberg, Max G.)
- Smith, K. A. (see Mickle, H. S.)
- Smoot, L. D. and Price, C. F. Pressure dependence of hybrid fuel regression rates. 102
- and Purcell, W. E. Model for mixing of a compressible free jet with a moving environment (TN). 2049
- Snyder, W. T. (see Powers, W. L.)
- So, Kwan L. Vortex phenomena in a conical diffuser. 1072
- Sobel, L. H. and Flugge, W. Stability of toroidal shells under uniform external pressure. 425
- Sodek, Benard A. Jr. (see Brigman, George H.)
- Soong, Tsai-Chen. Buckling of cylindrical shell under pressure by using Sanders' theory (TN). 1049
- Soovore, J. and Clarkson, B. L. Frequency response functions from cross correlation: Bartlett weighting function (TN). 601
- Spencer, D. J. (see Hartunian, R. A.)
- (see Grabowsky, W. R.)
- Speyer, Jason L. and Bryson, Arthur E., Jr. Explicit guidance law for minimum fuel horizontal translation with bounded control (TN). 340
- Springer, George S. (see Schmidt, Fred W.)
- Srinivasa, D. S. Generalized streamline hypothesis for turbulent boundary-layer flow with spatial variation of viscosity (TN). 1346
- Srinivasan, A. V. Dynamic stability of beam columns (TN). 1685
- Staggs, John F., Richley, Edward A., and Gula, William P. Ion extractor system design (TN). 359
- Stalker, R. J. A study of the free-piston shock tunnel. 2160
- Stalmach, C. J. (see Moore, D. R.)
- Standish, C. J. (see Schlee, F. H.)
- Staylor, W. Frank and Morrisette, E. Leon. Use of moderate-length hot wires to survey a hypersonic boundary layer (TN). 1698
- Stear, Edwin B. (see LeMay, Joseph L.)
- Steg, Leo. How to get into AIAA Journal without really trying, or the Editors and the "system" (Editorial). 1
- Editorial: A time for change. 609
- Steinle, M. E. (see Brown, R. S.)
- Stepp, E. E. Effect of pressure and velocity coupling on low-frequency instability. 945
- Sterrett, James R. (see Emery, James C.)
- Stetson, Kenneth F. and Rushton, George H. Shock tunnel investigation of boundary-layer transition at $M = 5.5$. 899
- Strahle, Warren C. Mass transfer perturbations about Stewartson's reversed flow profiles (TN). 181
- Stricklin, James A. (see Haisler, Walter E.)
- Sugai, Iwao. Steady-state Hartmann MHD coaxial flow between cylinders (TN). 157
- Sussman, J. M. (see Wang, T. M.)
- Sutton, D. (see Pearson, G. S.)
- Sutton, G. W. and Diederich, F. W. Synchronous rotation of a satellite at less than synchronous altitude (TN). 813
- Szebehely, Victor and Pierce, David A. Advantages of regularization in space dynamics (TN). 1520
- Tabaczynski, R. J. and Kennedy, Lawrence A. Thermal radiation effects in laminar boundary-layer flow (TN). 1893
- Tajima, Y. A. (see Dauerman, L.)
- Takagi, Toshiro (see Nakai, Eiichi)
- Talbot, L. (see Chou, Y. S.)
- Tang, Homer H. and Barnes, John W. A combining parameter for base-pressure evaluation (TN). 1722
- Tannas, Lawrence E. Jr. Re-entry guidance through closed-form equations. 1102
- Tapley, B. D. (see Lastman, G. J.)
- Tate, S. E. (see Carpenter, J. E.)
- Taylor, J. E. Minimum mass bar for axial vibration at specified natural frequency (TN). 1911
- Temkin, Samuel (see Dobbins, Richard A.)
- Tene, Y. (see Rossettos, J. N.)
- Teng, R. N. Advances in light-gas gun model-launching techniques (TN). 2082
- Tennekes, H. Law of the wall for turbulent boundary layers in compressible flow. 489
- Tezcan, Semih S. Nonlinear analysis of thin plates by framework method (TN). 1890
- Thomas, George M. and Menard, Wesley A. Measurements of the continuum and atomic line radiation from high-temperature air. 2214
- Thomke, Gerald J. (see Roshko, Anatol)
- Thompson, B., Kuskevics, G., and LaChance, M. Composite cesium ionizers with enhanced lifetime characteristics. 1168
- Thompson, H. Doyle (see Hoffman, Joe D.)
- Tirumalesa, Duvvuri. Nozzle flows with coupled vibrational and dissociational nonequilibrium. 251
- Two-phase flow equations for turbulent boundary-layer-type flows (TN). 2077
- Toda, N. F. (see Schlee, F. H.)
- Tong, Pin. Liquid motion in a circular cylindrical container with a flexible bottom. 1842
- Trentacoste, Nicholas and Sforza, Pasquale. Further experimental results for three-dimensional free jets. 885
- Tsao, C. K. A method for two-dimensional radiation effect (TN). 161
- Tschauer, J. Elliptic orbit rendezvous. 1110
- Tsutsumi, K. A ground tilt isolation platform (TN). 585
- Turner, M. Jonathan. Design of minimum mass structures with specified natural frequencies. 406
- Twomey, W. J. (see Hassig, H. J.)
- Unger, H. J. (see Hill, F. K.)

- Utku, Senol. Stiffness matrices for thin triangular elements of non-zero Gaussian curvature 1659
- Vaglio-Laurin, R. (see Pan, Y. S.)
- Valsamakis, E. A. (see Small, R. L.)
- van Driest, E. R., Blumer, C. B., and Wells, C. S., Jr. Boundary-layer transition on blunt bodies—Effect of roughness (TN) 1913
- VanDyke, Peter. Stresses in a cylindrical shell with a rigid inclusion 125
- Van Gelder, A., Dunn, J., and Mendelsohn J. Final value optimal stochastic control problem with bounded controller 1432
- Vanpee, Marcel (see Seamans, Thomas F.)
- Van Tayl, Andrew H. Use of rational approximations in the calculation of flows past blunt bodies 218
- Vermeulen, P. J., Boddie, W. Lee, and Wierum, F. A. State control of a flowing plasma by means of radio frequency electromagnetic fields (TN) 1015
- Vidal, R. J. and Golian, T. C. Heat-transfer measurements with a catalytic flat plate in dissociated oxygen 1579
- v. Krzywoblocki, M. Z. Reply by author to V. S. Ananthachar (TC) 2111
- von Rosenberg, D. U. (see Otey, G. R.)
- Waiter, S. A. (see Webb, H. G., Jr.)
- Waldron, H. F. Viscous hypersonic flow over pointed cones at low Reynolds numbers 208
- Wallace, Frank B., Jr. and Meirovitch, Leonard. Attitude instability regions of a spinning symmetric satellite in an elliptic orbit 1642
- Wang, Leon Ru-Liang. Discrepancy of experimental buckling pressures of spherical shells (TN) 357
- Wang, T. C. and Dudzinsky, S. J. Theoretical and experimental study of a liquid metal MHD induction generator 107
- and Dudzinsky, S. J. Comparison of MHD induction generator analyses (TN) 2059
- Wang, T. M. and Sussman, J. M. Elastic stability of a simply supported plate under linearly variable compressive stresses (TN) 1362
- Warren, W. E., Roark, A. L. and Bickford, W. B. End effect in semi-infinite transversely isotropic cylinders 1448
- and Roark, A. L. A note on the end effect in isotropic cylinders (TN) 1484
- Warren, W. R., Jr. (see Gruszczynski, J. S.)
- Washizu, Kyuichiro and Miyajima, Katsuyuki. Some consideration on the controllability limit of a human pilot 151
- Wasserbauer, Joseph F. (see Kerslake, William R.)
- Watson, Ralph D. and Cary, Aubrey M., Jr. Transformation of hypersonic turbulent boundary layers to incompressible form (TN) 1202
- and Cary, Aubrey M., Jr. Erratum: "Transformation of hypersonic turbulent boundary layers to incompressible form" (TC) 2112
- Weatherston, R. C. (see Merritt, G. E.)
- Webb, George R., Bass, Bennett R., Goodman, Charles H. Goodman, Malcolm A., and Land, Karl M. Further study on "A stability criterion for panel flutter via the second method of Liapunov" (TN) 2084
- Webb, H. G., Jr., Dresser, H. S., Adler, B. K., and Waiter, S. A. Inverse solution of blunt-body flowfields at large angle of attack 1079
- Webb, W. H. (see Fox, Jay)
- Weeks, Thomas M. and Dosanjh, Darshan S. Sound generation by shock-vortex interaction 660
- Weinstein, L. M. (see Bertram, M. H.)
- Weiss, R. F. A new theoretical solution of the laminar, hypersonic near wake 2142
- Wells, C. Sinclair, Jr. Effects of freestream turbulence on boundary-layer transition (TN) 172
- (see van Driest, E. R.)
- Welsh, W. E., Jr., and Ching, A. A new technique for mechanical strength testing of rapidly charred ablation materials 1882
- Wesley, Donald A. (see Meirovitch, Leonard)
- Weymann, Helmut D. Comments on precursors ahead of pressure driven shock waves (TC) 1375
- Whitney, James M. Elastic properties of fiber-reinforced shells 966
- Wierum, F. A. (see Vermeulen, P. J.)
- Williams, F. A. (see Kosdon, F. J.)
- Williams, Harry E. Axisymmetric thermal stresses in sandwich shells of revolution 981
- Williams, J. C., III. Conical nozzle flow with velocity slip and temperature jump 2128
- Willoughby, Paul G. (see Crowe, Clayton T.)
- Wilson, Daniel S. (see Lederman, Samuel)
- Wilson, G. L. and Woodson, H. H. Excitation and detection of magnetoacoustic waves in a rotating plasma accelerator 1633
- Wilson, K. H. (see Hoshizaki, H.)
- Wilson, L. N. Transition sticking in the wake of a slender hypersonic cone (TN) 1026
- Far wake behavior of hypersonic spheres 1238
- Far-wake behavior of hypersonic blunted cones 1393
- Inflections in bow shock shape at hypersonic speeds (TC) 1532
- Winegardner, D. K. and Schmitz, R. A. Dynamics of heterogeneous reaction at a stagnation point 1589
- Woodruff, L. W., Hearne, L. F., and Keliher, T. J. Interpretation of asymptotic calorimeter measurements (TN) 795
- Woodson, H. H. (see Wilson, G. L.)
- Wrubel, John A. (see McAlevy, Robert F., III)
- Wutzke, S. A., Pfender, E., and Eckert, E. R. G. Study of electric-arc behavior with superimposed flow 707
- Wynanski, I. and Hawaleshka, O. Effect of upstream velocity profile on the free mixing of jets with ambient fluid 1057
- Yang, H. T. Remarks on the vortex model of wing-body interference (TC) 607
- Yang, Wen-Jei (see Goldstein, Marvin E.)
- (see Yeh, Hsu-Chieh)
- and Yeh, Hsu-Chieh. Similarity solution for cone and disk flows of power-law fluids (TN) 1522
- Yannitelli, D. W. (see Ludford, G. S. S.)
- Yeh, Hsu-Chieh and Yang, Wen-Jei. Stagnation-point forced convection in two-phase flow (TN) 1182
- (see Yang, Wen-Jei)
- Yeh, Hsuan (see Sherman, Arthur)
- Yeh, P. S. (see Peskin, R. L.)
- Yen, K. T. Interaction between the solar wind and the sun's general magnetic field 1009
- Role of intermittency in free turbulent flows 2187
- Yin, Frank C. P. Interface core discrete-element for stiffened shells of revolution (TN) 2270
- Yu, Yi-Yuan and Lai, Jai-lue. Application of Galerkin's method to the dynamic analysis of structures (TN) 792
- (see Ren, Nann)
- Zakkay, Victor, Bos, Alan, and Jensen, Paul F., Jr. Laminar, transitional, and turbulent flow with adverse pressure gradient on a cone-flare at Mach 10 201
- and Fox, Herbert. An experimental and theoretical investigation of the turbulent far wake 568
- Bos, Alan and Jensen, Paul F., Jr. Erratum: "Laminar, transitional, and turbulent flow with adverse pressure gradient on a cone-flare at Mach 10" (TC) 2289
- Zarghamee, M. S. and Robinson, A. R. A numerical method for analysis of free vibration of spherical shells 1256
- Zauderer, Bert. Electrical characteristics of linear Hall and Faraday generators at small Hall parameters 575
- Zee, Chong-Hung. Comments on "Approximate analytical solution for satellite orbits subjected to small thrust or drag" (TC) 2111
- Zeh, Dale W. (see Horton, Thomas E.)
- Ziegler, H. (see Chu, Chong Wei)
- Zinman, W. G. Reply by author to H. D. Weymann (TC) 1376
- Zivi, S. M. (see Gelb, G. H.)
- Zonars, D. Nonequilibrium regime of airflows in contoured nozzles: Theory and experiments 57
- Zukoski, Edward E. Turbulent boundary-layer separation in front of a forward-facing step 1746
- Zwas, G. (see Abarbanel, S. S.)
- Zweben, Carl and Klosner, Jerome M. Dynamic instability of circular, cylindrical shells having viscoelastic cores 1128

SUBJECTS

AERODYNAMICS, FLUID MECHANICS, AND PLASMADYNAMICS

Aerodynamic and Re-Entry Heating

- Convective stagnation-point heating for re-entry speeds up to 70,000 fps including effects of large blowing rates. Philip DeRienzo and Adrian J. Pallone (SA) 193
- Viscous nonequilibrium blunt-body flow. W. C. L. Shih and R. S. Krupp 16
- Convective and radiative heat transfer during superorbital entry. H. Hoshizaki and K. H. Wilson 25
- Influence of atmospheric composition on hypersonic stagnation-point convective heating. T. E. Horton and T. L. Babineaux 36
- Laminar convective heating and ablation in the Mars atmosphere. Joseph G. Marvin and Ronald B. Pope 240
- Symmetrical, equilibrium flow past a blunt body at superorbital re-entry speeds. W. Kuby, R. M. Foster, S. R. Byron, and M. Holt 610
- Approximate analytic solutions for nonsimilar boundary layers. Charles J. Ruger 923
- A multicomponent boundary layer chemically coupled to an ablating surface. Robert M. Kendall, Roald A. Rindal, and Eugene P. Bartlett 1063
- Dynamic stability wind-tunnel tests of a 10° cone with simulated ablation at $M = 17$. D. R. Moore, C. J. Stalmach, T. C. Pope, and J. E. Jenkins 1377
- Experimental results for massive blowing studies. R. A. Hartunian and D. J. Spencer 1397
- Heat-transfer measurements with a catalytic flat plate in dissociated oxygen. R. J. Vidal and T. C. Golian 1579
- Heat transfer to wavy wall in hypersonic flow. M. H. Bertram, L. M. Weinstein, A. M. Cary Jr., and J. P. Arrington 1760
- Convective heating in regions of large favorable pressure gradient. Joseph G. Marvin and A. Richard Sinclair 1940
- Interpretation of asymptotic calorimeter measurements. L. W. Woodruff, L. F. Hearne, and T. J. Keliher (TN) 795
- Applications of similar solutions for calculation of laminar boundary-layer characteristics in the presence of a pressure gradient. Davis H. Crawford (TN) 799
- Surface mass addition into a turbulent boundary layer. R. J. Muzzy (TN) 1029
- Transformation of hypersonic turbulent boundary layers to incompressible form. Ralph D. Watson and Aubrey M. Cary Jr. (TN) 1202
- Effect of uncertainties in transport properties on prediction of stagnation-point heat transfer. Thomas E. Horton and Dale W. Zeh (TN) 1497
- Correlation of $C(K)$ in the separated region using the Crocco-Lees method. Alexander R. Peters and Donald R. Haworth (TN) 1506
- Microsphere ablation in a free-flight range. D. J. Collins, W. K. Rogers, and D. K. Sangster (TN) 1684
- Erratum: "Transformation of hypersonic turbulent boundary layers to incompressible form." Ralph D. Watson and Aubrey M. Cary Jr. (TC) 2112
- Addendum: "Convective stagnation-point heating for re-entry speeds up to 70,000 fps including effects of large blowing rates." Philip DeRienzo and Adrian J. Pallone (TC) 2289