

# AUTHOR INDEX

## A

- ADRIAN, F. J.—See COCHRAN, E. L.  
AKRIDGE, J. M.—See HILL, M. L.  
APEL, J. R.—*Ways and Means of Boat Design*, 5, 2, November–December 1965, pp. 18–23  
—, E. P. GRAY, and A. M. STONE—*Beam-Plasma Interactions*, 3, 5, May–June 1964, pp. 2–11  
AVERY, W. H.—*Status and Future Trends in High-Speed Chemical Propulsion*, 4, 6, July–August 1965, pp. 2–9  
— See HILL, M. L.

## B

- BEAL, R. C.—*Design and Performance of the DODGE Cameras*, 6, 5, May–June 1967, pp. 9–14  
BERGIN, T. G.—*For A Space Prober*, 2, 2, November–December 1962, p. 2  
BILLERBECK, W. J.—See OAKES, J. B.  
BOSTROM, C. O.—See WILLIAMS, D. J.  
BOWERS, V. A.—See COCHRAN, E. L.  
BRUCK, S. D.—*The Domain of Polymeric Materials*, 3, 2, November–December 1963, pp. 2–12  
BUNT, E. A. and H. L. OLSEN—*Plasma Arc Heating for Hypersonic Wind Tunnels*, 1, 2, November–December 1961, pp. 16–18

## C

- CHESTON, T. C.—*Criteria for Conically Scanned Tracking Antennas*, 1, 5, May–June 1962, pp. 12–18  
— and E. J. LUOMA—*Constant-K Lenses*, 2, 4, March–April 1963, pp. 8–11  
CHUBBUCK, J. G.—*Small-Motion Biological Stimulator*, 5, 5, May–June 1966, pp. 18–23  
COCHRAN, E. L., F. J. ADRIAN, and V. A. BOWERS—*Trapped Free Radicals*, 2, 3, January–February 1963, pp. 2–9  
COTE, A. J., JR.—*The Frog and the Radar Display*, 1, 4, March–April 1962, pp. 8–14

## D

- DEHAAS, N.—See WESTENBERG, A. A.  
DUNNELL, C. A.—*TRANET Doppler Tracking System*, 6, 4, March–April 1967, pp. 17–23

## E

- ELDER, S. A.—*Physicists and Fipple Flutes at APL*, 3, 3, January–February 1964, pp. 15–18  
EVANS, R. C.—*The APL Resistance Welder and Its Role in Satellite Reliability*, 5, 1, September–October 1965, pp. 2–7

## F

- FASTIE, W. G.—*Rockets and the Aurora Borealis*, 5, 5, May–June 1966, pp. 5–10  
FEHLNER, L. F.—*Improved Data for the Classical Determination of Radar Detection Range*, 3, 2, November–December 1963, pp. 17–24  
FISCHELL, R. E.—*The TRAAC Satellite*, 1, 3, January–February 1962, pp. 2–9  
— *Effect of the Artificial Radiation Belt on Solar Power Systems*, 2, 2, November–December 1962, pp. 8–13  
— *Gravity Gradient Stabilization of Earth Satellites*, 3, 5, May–June 1964, pp. 12–21  
— *Spin Control for Earth Satellites*, 5, 1, September–October 1965, pp. 8–13  
FONER, S. N. and R. L. HUDSON—*Mass Spectrometry of Free Radicals and Metastable Molecules*, 5, 4, March–April 1966, pp. 2–11  
FRIEDMAN, G. E.—See NAGY, A. W.  
FRISTROM, R. M. and A. A. WESTENBERG—*Fundamental Processes and Laminar Flame Structure*, 1, 3, January–February 1962, pp. 10–15  
— See WILSON, W. E., JR.

## G

- GIBSON, R. E.—*Excerpts from the Report of the Director*, 1, 3, January–February 1962, pp. 25–26; 2, 3, January–February 1963, pp. 24–26; 3, 3, January–February 1964, pp. 19–22; 4, 3, January–February 1965, pp. 18–22; 5, 3, January–February 1966, pp. 18–22; 6, 3, January–February 1967, pp. 16–22  
— *An Appreciation*, 5, 5, May–June 1966, p. 2  
GOOD, W. A.—*A Scientist and His Hobby*, 2, 3, January–February 1963, pp. 18–23  
GOSS, W. H.—*George W. Gardiner and New Mexico State University*, 1, 2, November–December 1961, pp. 20–21  
GRAY, E. P.—See APEL, J. R.  
GUIER, W. H.—*Satellite Geodesy*, 4, 3, January–February 1965, pp. 2–12

## H

- HAAVE, C. R., A. J. ZMUDA, and B. W. SHAW—*VLF Phase Perturbations Associated with High-Altitude Nuclear Bursts*, **2**, 2, November–December 1962, pp. 14–19  
——— and B. W. SHAW—*Frequency Monitoring and Nuclear Burst Detection: Some Aspects of VLF*, **4**, 4, March–April 1965, pp. 2–10  
——— See SHAW, B. W.  
HALLENDORFF, R. H.—*A Method of Radome Compensation with Broadband Capability*, **4**, 1, September–October 1964, pp. 10–16  
HART, R. W.—*Combustion Instability in Solid Rockets*, **1**, 6, July–August 1962, pp. 8–18  
HENDERSON, R. W.—See MAKOFSKI, R. A.  
HICKS, R. E.—*Chemical Milling of Space Flight Hardware*, **6**, 4, March–April 1967, pp. 11–16  
HILL, M. L.—*Materials for Structural Use Above 3000 Degrees F.*, **3**, 4, March–April 1964, pp. 2–13  
——— *Old Faithful, World Endurance Record Radioplane*, **4**, 5, May–June 1965, pp. 17–22  
———, J. M. AKRIDGE, and W. H. AVERY—*Thermal Insulation for Hypersonic Vehicles*, **1**, 6, July–August 1962, pp. 2–7  
HOCHHEIMER, B. F. and J. T. MASSEY—*Laser Modes*, **3**, 3, January–February 1964, pp. 2–8  
HUDSON, R. L.—See FONER, S. N.  
HUGGINS, W. H.—*Computer Pantomimes*, **5**, 5, May–June 1966, pp. 11–17  
HUNT, R. J.—*Availability Model for Shipboard Equipment*, **2**, 5, May–June 1963, pp. 9–16

## K

- KATZ, I.—*Radar Reflectivity of the Earth's Surface*, **2**, 3, January–February 1963, pp. 10–17  
——— *Ocean Wave Measurements*, **4**, 1, September–October 1964, pp. 2–6  
——— *Probing the Clear Atmosphere with Radar*, **6**, 1, September–October 1966, pp. 2–8  
KEARNS, J. P.—*Missile-Wing Flutter Simulation*, **2**, 4, March–April 1963, pp. 12–16  
KELLEY, M. R.—*The Terrier—A Capsule History of Missile Development*, **4**, 6, July–August 1965, pp. 18–26  
KERSHNER, R. B.—*Present State of Navigation by Doppler Measurement from Near Earth Satellites*, **5**, 2, November–December 1965, pp. 2–9  
KIRK, H. F., JR.—See OLSEN, H. L.  
KOMISKE, P. T.—*Error Detection and Correction Codes*, **5**, 2, November–December 1965, pp. 10–17

## L

- LIBEN, W.—*Microelectronics at the Applied Physics Laboratory*, **3**, 1, September–October 1963, pp. 2–12  
LUOMA, E. J.—See CHESTON, T. C.

## M

- MACARTHUR, J. L.—See TAYLOR, S. A.  
MAKOFSKI, R. A.—*The Helium Hypersonic Wind Tunnel*, **2**, 5, May–June 1963, pp. 2–8  
——— and R. W. HENDERSON—*Considerations in the Design and Performance of Hypersonic Gun Tunnels*, **6**, 3, January–February 1967, pp. 2–8  
MASON, E. A.—See MONCHICK, L.  
MASSEY, J. T.—See HOCHHEIMER, B. F.  
McDOWELL, R. B.—*Improved Detection of PCM Waveforms*, **5**, 4, March–April 1966, pp. 12–18  
MONCHICK, L.—*Quantum Effects in Molecular Scattering*, **5**, 3, January–February 1966, pp. 11–15  
——— and E. A. MASON—*Relaxation Phenomena in the Kinetic Theory of Gases*, **1**, 6, July–August 1962, pp. 19–23  
MOORE, R. C.—*Computer-Aided Layout of Ministick Artwork*, **6**, 3, January–February 1967, pp. 9–15  
MORTON, H. S.—*Unique bowsprit Assures Greater Control for Sailing Catamaran*, **4**, 4, March–April 1965, pp. 17–23  
MOWBRAY, G. H.—*A Scientist and His Hobby—The Technology of Wine Making*, **3**, 6, July–August 1964, pp. 18–23  
——— *Some Human Perceptual Limits*, **1**, 3, January–February 1962, pp. 21–24  
MUNSTERMAN, G. T.—*Tunnel-Diode Microwave Amplifiers*, **4**, 5, May–June 1965, pp. 2–10

## N

- NAGY, A. W. and G. E. FRIEDMAN—*Zero-Field Maser*, **3**, 6, July–August 1964, pp. 2–12  
NISSON, C. J.—*A Triode-Diode Function Generator*, **2**, 6, July–August 1963, pp. 15–17  
NOYES, C. F.—*Ministick Packaging—A Further Aid to Satellite Reliability*, **5**, 3, January–February 1966, pp. 2–10

## O

- OAKES, J. B., W. J. BILLERBECK, and K. F. READ—*Design of an Ultrastable Oscillator for Satellites*, **2**, 1, September–October 1962, pp. 10–14

- O'BRIEN, V.—*Moving Bubbles, Drops, and Other Fluid Blobs*, **1**, 5, May–June 1962, pp. 2–6  
 ——— *Eggs and Other Deformed Spheroids in Stokes Flow*, **4**, 4, March–April 1965, pp. 11–16  
 OLSEN, H. L. and H. F. KIRK, JR.—*APL Propulsion Research Laboratory*, **1**, 1, September–October 1961, pp. 13–15  
 ——— *See* BUNT, E. A.

## P

- PARKER, J. G. and R. H. SWOPE—*Radiation-Produced Sound*, **5**, 6, July–August 1966, pp. 17–21  
 PIEPER, G. F.—*Injun, A Radiation Research Satellite*, **1**, 1, September–October 1961, pp. 3–7  
 ——— *The Artificial Radiation Belt*, **2**, 2, November–December 1962, pp. 3–9

- PIETRANGELI, G. J.—*An Airbreathing Mach 7.0 Transport*, **1**, 2, November–December 1961, pp. 2–9

## R

- RABENHORST, D. W.—*A Simplified Passive Spacecraft Separation System*, **6**, 2, November–December 1966, pp. 9–17  
 RAEZER, S. D.—*The Mass Transient and Plasma Arc Instability*, **4**, 1, September–October 1964, pp. 7–9  
 RANDOLPH, J. P., JR.—*New Trends in Telemetry*, **1**, 1, September–October 1961, pp. 8–12  
 RANKIN, T. M.—*See* RIVELLO, R. M.  
 READ, K. F.—*See* OAKES, J. B.  
 REESE, W. P.—*The Reese Bros. Dragster*, **4**, 1, September–October 1964, pp. 17–21  
 RICH, R. P. and H. SHAW, JR.—*An Application of Digital Filtering*, **4**, 3, January–February 1965, pp. 13–17  
 RIVELLO, R. M.—*A Design Method for Optimizing Insulated Structures for Hypersonic Vehicles*, **4**, 5, May–June 1965, pp. 11–16  
 ——— and T. M. RANKIN—*A Method of Analysis for Clamped-Free Cylindrical Shells*, **3**, 1, September–October 1963, pp. 19–23

## S

- SCHENKEL, F. W.—*Photometric and Optical Considerations in the DODGE Satellite TV Camera Design*, **6**, 5, May–June 1967, pp. 15–19  
 SCHROADER, I. H.—*A Scientist and His Hobby—Reflections of a Telescope Maker*, **2**, 6, July–August 1963, pp. 8–14

- SCHULTHEIS, A. C.—*Experimental 3-D Radar Display*, **2**, 1, September–October 1962, pp. 2–9  
 SCOTT, D. D. and L. M. SNIDER—*Explosive Lens Flashblindness Protection System*, **5**, 6, July–August 1966, pp. 11–16

- SEAMONE, W.—*Feedback Technique Improves Efficiency of Hydraulic Servos*, **4**, 2, November–December 1964, pp. 12–16

- SHANDOR, M., A. R. STONE, and R. E. WALKER—*Secondary Gas Injection Thrust Vector Control*, **2**, 4, March–April 1963, pp. 2–7

- SHAW, B. W. and C. R. HAAVE—*Frequency Monitoring of VLF Transmissions*, **1**, 5, May–June 1962, pp. 7–11

——— *See* HAAVE, C. R.

SHAW, H., JR.—*See* RICH, R. P.

SNIDER, L. M.—*See* SCOTT, D. D.

## STAFF ARTICLES

- A Correlator of Time Intervals Between Pulses*, **5**, 1, September–October 1965, pp. 14–15  
*An Electromechanical Time-Code Generator*, **3**, 2, November–December 1963, pp. 24–25  
*APL and the VT Fuze*, **2**, 1, September–October 1962, pp. 18–22  
*Damping Spring for Gravity-Stabilized Satellites*, **2**, 2, November–December 1962, pp. 20–21  
*Four-Channel Video Integrator*, **2**, 4, March–April 1963, pp. 20–21  
*Information Retrieval with a Small Computer*, **2**, 4, March–April 1963, pp. 17–19  
*Intermittent Thermometer*, **1**, 4, March–April 1962, p. 19  
*Miniaturized Satellite Tracking Receiver*, **5**, 4, March–April 1966, pp. 19–20  
*New Coaxial Cable Design*, **2**, 6, July–August 1963, pp. 18–19  
*On Improving the Chance of Hitting the Target*, **5**, 1, September–October 1965, pp. 17–18  
*P. Stewart Macaulay*, **5**, 5, May–June 1966, pp. 3–4  
*Polaris Fluid Magnetic Spring*, **2**, 1, September–October 1962, pp. 16–17  
*Self-Erecting Missile Fin*, **4**, 2, November–December 1964, pp. 17–18  
*Strength of High-Temperature Materials*, **6**, 1, September–October 1966, pp. 16–17  
*System for Checking Hazardous Electrical Circuits*, **1**, 2, November–December 1961, pp. 19–20  
*The Coupling That Went Into Space*, **5**, 3, January–February 1966, pp. 16–17  
*The Mobile Automaton*, **2**, 1, September–October 1962, pp. 15–16

*Tilted-Disc Device*, **1**, 4, March–April 1962, pp. 20–21

*Time Synchronization Between Remote Locations*, **3**, 4, March–April 1964, pp. 22–23

*Transistorized Pyrometer—With and Without Feedback*, **2**, 5, May–June 1963, pp. 17–18

*Unique Microwave Switches*, **1**, 1, September–October 1961, p. 21

*Welded Cordwood, Last Step in Conventional Circuits?* **1**, 1, September–October 1961, p. 20

STONE, A. M.—See APEL, J. R.

STONE, A. R.—See SHANDOR, M.

SUESS, R. P. and L. B. WECKESSER—*Radome Thermal Design for a Mach 4 Missile*, **3**, 6, July–August 1964, pp. 13–17

SWET, C. J.—*Cornucopia in Space*, **3**, 1, September–October 1963, pp. 13–18

SWOPE, R. H.—See PARKER, J. G.

## T

TAYLOR, S. A. and J. L. MACARTHUR—*Digital Pulse Compression Radar Receiver*, **6**, 4, March–April 1967, pp. 2–10

THOMPSON, T.—*Varactor Multipliers*, **4**, 2, November–December 1964, pp. 2–11

— — — *The DODGE Television System*, **6**, 5, May–June 1967, pp. 2–8

THOMPSON, W. S.—*Low-Angle Beam Riding Over the Ocean*, **1**, 2, November–December 1961, pp. 10–15

## U

UNGER, H. J.—*Development of Infrared Spectrometer for Rocket Gas Analysis*, **1**, 4, March–April 1962, pp. 15–18

## V

VETH, G. J.—*Optical Soldering and Microelectronic Interconnections*, **3**, 3, January–February 1964, pp. 9–14

VICARS, R. J.—*Survival in Metropolitan-Area Nuclear Attacks*, **2**, 5, May–June 1963, pp. 18–26

## W

WADDELL, M. C.—*A Strategic Force Deterrence Model*, **1**, 1, September–October 1961, pp. 16–19

WALKER, R. E.—See SHANDOR, M.

WECKESSER, L. B.—See SUESS, R. P.

WESTENBERG, A. A.—*Applications of ESR to the Chemical Kinetics of Gases*, **6**, 1, September–October 1966, pp. 9–15

— — — and N. DEHAAS—*High-Temperature Gas Transport Property Measurements by Source-in-Flow Method*, **1**, 4, March–April 1962, pp. 2–7

— — — See FRISTROM, R. M.

WESTERFIELD, E. E.—*A Dynamic Phase-Difference Measurement System*, **3**, 2, November–December 1963, pp. 13–16

— — — and G. WORSLEY—*Translocation by Navigation Satellite*, **5**, 6, July–August 1966, pp. 2–10

WILLIAMS, D. J.—*Albedo Neutron Conference Report*, **3**, 2, November–December 1963, pp. 25–26

— — — *Studies of the Earth's Outer Radiation Zone*, **4**, 6, July–August 1965, pp. 10–17

— — — and C. O. BOSTROM—*The Earth's Albedo Neutron Flux*, **3**, 4, March–April 1964, pp. 14–21

WILLIS, S. E., JR.—*Thermal Design of Current Navigation Satellites*, **6**, 2, November–December 1966, pp. 18–26

WILSON, W. E., JR. and R. M. FRISTROM—*Radiicals in Flames*, **2**, 6, July–August 1963, pp. 2–7.

WORSLEY, G.—See WESTERFIELD, E. E.

## Z

ZMUDA, A. J.—*Solar-Terrestrial Disturbances and Solar Protons in July 1961*, **1**, 3, January–February 1962, pp. 16–20

— — — *The Auroral Oval*, **6**, 2, November–December 1966, pp. 2–8.

— — — See HAAVE, C. R.