

## An Introduction and Appreciation

**I**N the words of a distinguished Editor Emeritus, Martin Summerfield, "Editors are usually a quiet breed who do their work in serenity behind the scenes" (*sic?*) This is Issue 1, Volume 2; it is dated January 1964, a customary time for taking stock, viewing with pleasure or alarm; there are some new faces in this "quiet breed," and the scenes have shifted somewhat. It thus seems appropriate to the Editors to present their credentials to the authors and the readers of the *Journal*.

We also wish to express the deep appreciation of the Society and the professional community to our former editors who, having given freely of their time and effort for a long period of time, have earned our gratitude and Emeritus status. May they prosper, regain their friends and families, and write good reviews.

It is a distinct pleasure to recognize the assistance received from our referees. Conscientious manuscript review is a vital ingredient of professional activity; the dialogue initiated by constructive criticism and detailed suggestions and comment assures the community of the vital "control of quality" in the field and the author of recognition by his colleagues and peers. In the name of the authors, the professional community, and as individuals may we express our sincere appreciation to the leading scientists and engineers listed below who have read and reviewed the papers published in Volume 1. Their assistance has been essential to the success of this *Journal*.

We have made some changes in keeping with the expanding spectrum of AIAA publications. We are indebted to Miss Norma Herrin and Maurice H. Smith for their conscientious

### LEO STEG

#### Editor-in-Chief

B S (Mechanical Engineering) 1947, College of the City of New York

M S (Mechanical Engineering) 1948, University of Missouri

Ph D (Mechanics, Mathematics, Physics) 1951, Cornell University

Research interests include: space and re-entry technology, systems engineering, nonlinear mechanics, stability in dynamical systems, applied mechanics and mathematics

Manager, Space Sciences Laboratory, Missile and Space Division, General Electric Company, Philadelphia, Pa.



editorial work on the Book Notes and the Technical Literature Digest which will appear henceforth in other publications of the Society.

Finally, may we share with the authors the intellectual stimulation and pleasure we derive from our role in contributing to the exposure of their creative ideas.

Leo Steg

### Associate Technical Editor

#### IRVIN GLASSMAN

B E (Chemical Engineering) 1943, The Johns Hopkins University

Dr Eng (Chemical Engineering) 1950, The Johns Hopkins University

Research interests include: propulsion, combustion, aerothermodynamics, heat transfer, and high temperature chemical kinetics

Associate Professor, Department of Aerospace and Mechanical Sciences, Princeton University, Princeton, N J



### Associate Editor, Russian Supplement

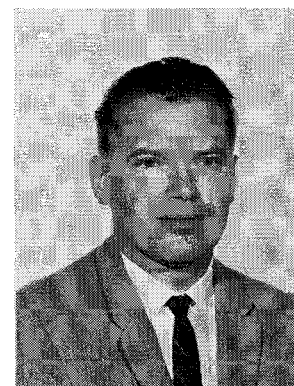
#### IGOR JURKEVICH

B S (Mathematics) 1952, Denison University

M S (Physics) 1955, University of Pennsylvania; graduate studies in Astronomy, Flower and Cook Observatory, University of Pennsylvania

Research interests include: studies of the motion of artificial satellites and space probes and of the orbital mechanics and physics of close binary systems

Astronomer, Space Sciences Laboratory, Missile and Space Division, General Electric Company, Philadelphia, Pa.



## Associate Editors

**HOLT ASHLEY**

B S (Meteorology) 1944, University of Chicago

S M (Aeronautical Engineering) 1948, Massachusetts Institute of Technology

Sc D (Aeronautical Engineering) 1951, Massachusetts Institute of Technology

Research interests include: theoretical and experimental methods of flutter of low-aspect-ratio-wings, rudder-free lateral oscillations of aircraft, and unsteady flow over wings and rotors

Professor of Aeronautics and Astronautics, Massachusetts Institute of Technology, Cambridge, Mass

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B S (Engineering) 1937, Carnegie Institute of Technology  
M S (Chemistry) 1939, Harvard University

Ph D (Physical Chemistry) 1941, Carnegie Institute of Technology

Research interests include: combustion, explosives, jet engines, electrochemistry, and instrumental chemical analysis

Principal Staff Chemist, Applied Physics Laboratory, The Johns Hopkins University, Silver Spring, Md

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B S (Aeronautical Engineering) 1946, Iowa State University

Ph D (Aeronautics) 1951, California Institute of Technology

Research interests include: flight mechanics, optimal control, fluid mechanics, heat transfer

Professor of Mechanical Engineering, Division of Engineering and Applied Physics, Harvard University, Cambridge, Mass

**BERNARD BUDIANSKY**

B C E, 1944, The City College, New York

Sc M (Applied Mathematics) 1948, Brown University

Ph D (Applied Mathematics) 1950, Brown University

Research interests include: elasticity, plasticity, buckling, shell theory, vibration, and aeroelasticity

Professor of Structural Mechanics, Harvard University, Cambridge, Mass

**ALFRED M FREUDENTHAL**

M A (Physics) 1930, Charles University, Prague

D Sc (Engineering) 1930, Technical University, Prague

Research interests include: mechanical properties of materials, mathematical theories of inelastic continuum, and reliability of mechanical systems

Professor of Civil Engineering, Columbia University, New York, N Y

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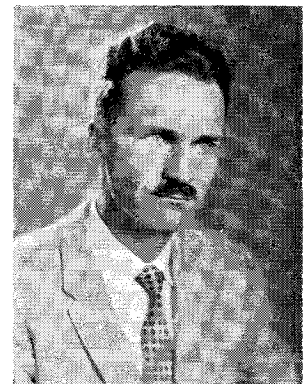
B S (Civil Engineering) 1950, Stanford University

M S (Civil Engineering) 1951, Stanford University

Ph D (Engineering Mechanics) 1954, Stanford University

Research interests include: perturbation studies of satellite orbits and space probe trajectories, orbit determination and guidance, mission analysis, structural mechanics, and experimental stress analysis

Head, Analytical and Aerospace Mechanics, Bell Telephone Laboratories, Inc., Whippany, N J

**ROBERT G JAHN**

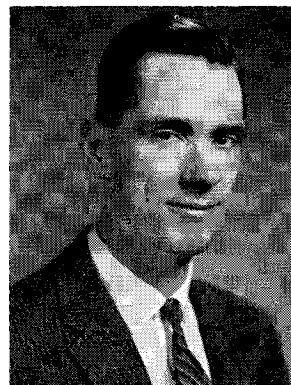
B S (Mechanical Engineering) 1951, Princeton University

M A (Physics) 1953, Princeton University

Ph D (Physics) 1955, Princeton University

Research interests include: experimental and theoretical research in high temperature gasdynamics, ionization phenomena, electrical propulsion, shock waves, electromagnetic wave propagation, and related subjects

Assistant Professor, Aeronautical Engineering Princeton University, Princeton N J

**PAUL A LIBBY**

B A E 1942, Polytechnic Institute of Brooklyn

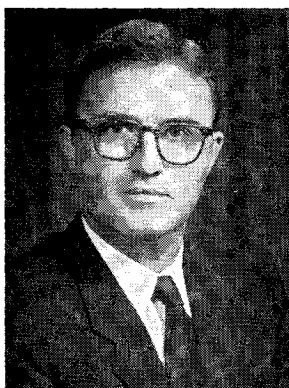
M S (Applied Mechanics) 1947, Polytechnic Institute of Brooklyn

Ph D (Applied Mechanics) 1949, Polytechnic Institute of Brooklyn

Research interests include: fluid mechanics, gas dynamics, heat transfer, aerothermochemistry

Professor of Aerospace Engineering, Polytechnic Institute of Brooklyn, N Y



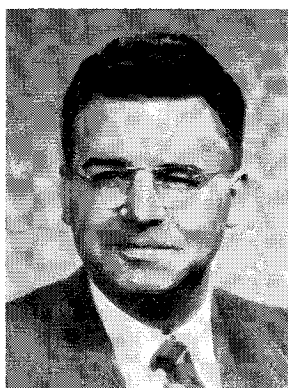
**WINSTON R. MARKEY**

S B (Aeronautical Engineering) 1951, Massachusetts Institute of Technology

Sc D (Instrumentation) 1956, Massachusetts Institute of Technology

Research interests include: design of navigation systems and instrumentation for automatic geometric measurements

Associate Professor of Aeronautics and Astronautics, Massachusetts Institute of Technology, Cambridge, Mass

**ERALDUS SCALA**

B S (Chemistry) 1943, City College of New York

M S (Metallurgical Engineering) 1948, Columbia University

D Eng (Metallurgy) 1953, Yale University

Research interests include: refractory metals and compounds, high-temperature behavior and techniques, composites, thermal protection systems

Professor and Chairman, Materials and Metallurgy, Cornell University, Ithaca, N Y

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B S (Aeronautical Engineering) 1947, University of Notre Dame

Ph D (Aeronautical Engineering) 1951, Cornell University

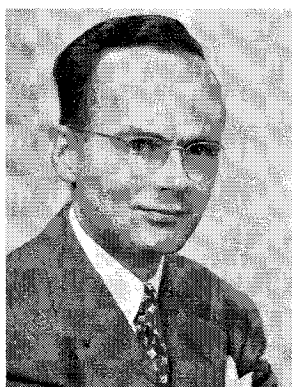
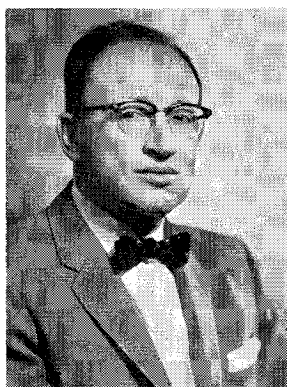
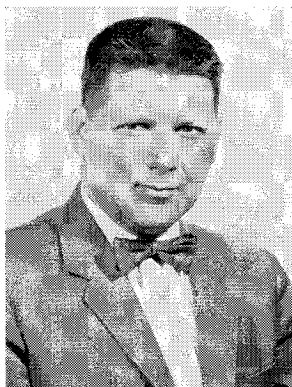
Research interests include: experimental and theoretical aspects of the fluid mechanics of real gases, including chemical reactions, electromagnetic fields, etc

Professor of Aerospace Engineering, Engineering Physics, and Astronomy and Space Sciences, Cornell University, Ithaca N Y

**Managing Editor****RUTH F. BRYANS**

B A (Geology and Geography) 1936, Mount Holyoke College

Editorial Assistant, American Society of Civil Engineers 1937-1945; Assistant Publication Manager and Publication Manager, American Institute of Physics 1945-1961  
Managing Editor, *ARS Journal* 1962

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