LETTERS
Mechanical Translation: Two Views: M. Taube and A. Kaltman; Two Camps in Science: B. Fullman; Civil Defense Testimony Misread: W. F. Schreiber and N. Rosa; Krebiozen and Retine: A. Szent-Györgi, A. Hegyi, J. A. McLaughlin; Superfluous Textbooks: S. A. Hoenig; Timing of Research on Social Change: J. A. Pechman; All in the Same Boat: F. Costin; Logical Conclusion?: R. Milkman

EDITORIAL
The Birthdays of Science

ARTICLES
Geological Aspects of High-Pressure Research: F. R. Boyd
High-pressure experimentation is providing a new look at problems in geophysics and petrology.

Biological Complexity and Radiosensitivity: H. S. Kaplan and L. E. Moses
Radiation lethality in cells and viruses is correlated with nucleic acid content, structure, and ploidy.

Metallic Emissions from the Upper Atmosphere: D. M. Hunten
Photometry of twilight emissions from alkali metals gives information on upper-atmospheric processes.

NEWS AND COMMENT
Science in Cincinnati—Taft Engineering Center; N. S. Savannah—Problems and Prospects

Report from Europe: Laboratory of Molecular Biology, Cambridge, II: V. K. McElheny

BOOK REVIEWS

REPORTS
Environmental Radiation: Measurements of Dose Rates: P. F. Gustafson, J. Kastner, J. Luetzelschwab

Infrared Study of Selective Deuteration of Kaolinite and Halloysite at Room Temperature: R. L. Ledoux and J. L. White

Viscosity and Self-Diffusion of Liquid Metals: A. V. Grosse
Direct Readout of Sediment Analyses by Settling Tube for Computer Processing:  
J. M. Zeigler, C. R. Hayes, D. C. Webb ................................................................. 51

Delayed Hypersensitivity in Man: Transfer by Lymphocyte Preparations of Peripheral  
Blood: R. G. Slavin and J. E. Garvin ........................................................................ 52

Benz(a)pyrene and Other Polynuclear Hydrocarbons in Charcoal-Broiled Meat:  
W. Lijinsky and P. Shubik ......................................................................................... 53

Mitomycins and Porphrymicin: Chemical Mechanism of Activation and Cross-Linking  
of DNA: V. N. Iyer and W. Szybalski ....................................................................... 55

Pyruvate Metabolism and Control: Factors Affecting Pyruvic Carboxylase Activity:  
A. D. Freedman and L. Kohn ..................................................................................... 58

1-Octopamine in Citrus: Isolation and Identification: I. Stewart and T. A. Wheaton .  60

Pacemaker Neurons: Effects of Regularly Spaced Synaptic Input: D. H. Perkel et al.  61

5-Methoxytryptohol: Effect on Estrus and Ovarian Weight: W. M. McIsaac,  
R. G. Taborsky, G. Farrell ......................................................................................... 63

Tonic Influence of Rostral Brain Structures on Pressure Regulatory Mechanisms in  
the Cat: D. J. Reis and M. Cuénod ........................................................................... 64

Distributive Pairing and Aneuploidy in Man: R. F. Grell and J. I. Valencia ......... 66

Phenoloxidase System of the Blowfly, Calliphora erythrocephala:  
C. E. Sekeris and D. Mergenhagen .......................................................................... 68

Dynamics of Motion Perception in the Desert Locust: J. Thorson ......................... 69

Comments on Reports: Fluctuating Brightness of Quasi-Stellar Radio Sources:  
A. T. Young; Action of Tetrodotoxin: A Reply: C. A. Terzuolo and  
W. R. Loewenstein; Visual Display of Speech by Means of Oscillographic  
Roulette Figures: B. O. Pyron and F. R. Williamson, Jr. ........................................ 70

Alaska Earthquake, 27 March 1964: D. Landen; Artificial Internal Organs:  
J. F. Maher and S. A. Wesolowski; Forthcoming Events ................................. 74

New Products ............................................................... 79

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE  

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scientists, to facilitate cooperation among them, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the method's of science in human progress.

COVERAGE

Facsimile of the seismogram of the Alaskan earthquake which was made by the visible recording instrument at the U.S. Department of Commerce, Washington, D.C. The record covers approximately 48 hours. Each horizontal line represents 1 hour and the vertical lines occur at 1-minute intervals. The preliminary wave of the main shock arrived in Washington at 03 hr 44' 46" U.T., 28 March (white arrow). The computed time of origin in Alaska was 03 hr 36' 13" U.T., 28 March. See page 74. [U.S. Department of Commerce]