PUBLICATIONS
Compilation of principal recently published books and technical articles written by APL staff members.


PATENTS
J. A. Persch—Output Controller for Initiating Delayed or Conditional Commands via a General Purpose Computer, No. 3,934,131
O. M. Martin, Jr.—Helicopter Blind Landing/Hover System, No. 3,934,250
W. G. James—Instantaneous Frequency Measurement System, No. 3,939,411
ADDRESSES  
Principal recent addresses made by APL staff members to groups and organizations outside the Laboratory.

F. J. Adrian and V. A. Bowers, “g-Tensor and Spin-Doubling Constant in the $^{12}$ Molecules CN and C$_{2}H_{2},$” 12th International Symposium on Free Radicals, Laguna Beach, CA, January 2–9, 1976.


The following papers were presented at the Fall Annual Meeting of the American Geophysical Union, San Francisco, CA, December 8–21, 1975:


T. A. Potemra and T. Iijima, “The Correlation of High-Latitude Field-Aligned Currents with the Geomagnetic S$_{6}^{2}$ Field and the Interplanetary Magnetic Field.”


E. P. Keath, E. C. Roelof, and C. O. Bostrom (APL) and D. J. Williams (National Oceanic and Atmospheric Administration, Boulder), “Correlation of ≅ 50 keV Proton and ≅ 30 keV Electron Events in Interplanetary Space, the Magnetosheath and the Magnetotail at 35 R$_{e}$. “

B. L. Gotwols and E. C. Roelof (APL) and W. M. Cronyn, F. Erskine, and S. D. Shawhan (University of Iowa), “Statistical Analysis of Variations in Interplanetary Radio Scintillation Indices at 34.3 MHz.”

APL COLLOQUIA

Jan. 9—“Low Energy Electrons as a Probe of a Solid Surface,” by R. L. Park, Univ. of Maryland.

Jan. 16—“Title VII—Ten Years Later,” by H. A. Glickstein, Howard Univ.

Jan. 23—“Computer Predictions of Energy Atmospheric Effects,” by P. Handler, Univ. of Illinois.

Jan. 30—“Coal—A Past and Future King,” by A. M. Squires, City Univ. of New York.

Feb. 6—“A Scientist Joins the Congressional Staff,” by A. R. Hoffman, Senate Committee for Commerce.


Mar. 5—“Beam and Waveguide Couplers,” by T. Tamir, Polytechnic Institute of New York.


Mar. 19—“SST’s, Ozone and Skin Cancer,” by S. F. Singer, Univ. of Virginia.

Dr. Hannes Alfven was born in Sweden in 1908 and received the Ph.D. from the University of Uppsala. Between 1940 and 1973 he was successively Professor of the theory of electricity, of electronics, and of plasma physics at the Royal Institute of Technology in Stockholm. Since 1967 he has been with the Department of Applied Physics and Information Sciences at the University of California at San Diego. Among his many scientific papers and books are *Cosmical Electrodynamics, On the Origin of the Solar System, Funda-mental Principles* (with C.-G. Fälthammer) and *Worlds-Antiworlds*. Dr. Alfven was Nobel Laureate in Physics in 1970. He has received the Lomonosov, Franklin, and Royal Astronomical Society (U.K.) gold medals. He is a member of the Royal Swedish Academy of Sciences, the Swedish Science Advisory Council, the Swedish Academy of Engineering Sciences, the U. S. Academy of Sciences, and the Academy of Sciences of the U.S.S.R.

Dr. Riccardo Giacconi received the Ph.D. from the University of Milan. After serving on the faculties of the University of Milan and of Indiana and Princeton Universities, he joined American Science and Engineering, Inc. in 1959, where he became Executive Vice President. Concurrently, during the period 1970–72, he was an Associate of the Harvard College Observatory. Since leaving AS&E in 1973, Dr. Giacconi has been Professor of astronomy at Harvard University and Associate Director, High Energy Astrophysics Division of the Center for Astrophysics. He is a member of many professional organizations, including the U.S. National Academy of Sciences, as well as of five scientific boards and committees. Among the honors Dr. Giacconi has received are a Fulbright Fellowship (1956–58), the Como Prize of the Italian Physical Society (1966), the Röntgen Prize in Astrophysics (1971), the NASA Medal for Exceptional Scientific Achievement (1971), the NASA Distinguished Public Service Award (1972), and the AIAA Space Science Award (1976). Dr. Giacconi has authored more than 100 scientific papers and articles.