

technical reader for whom the book is intended, the mass of constructional and individual flight details on the rockets might more successfully have been condensed from the five chapters it occupies into one. Some of the space thus saved might then have been profitably devoted to an account of the colorful historical development of rockets and balloons, and perhaps also to some educated guesses as to future trends in this field.

A far more serious objection must be entered on behalf of the many organizations and individuals who have played important parts in pioneering upper air research and whose work, while sometimes mentioned, has not been properly acknowledged. Credit is given several of the various military units involved, the Applied Physics Laboratory of Johns Hopkins, and the General Mills balloon group, while the other universities and industrial organizations involved are left unmentioned. For example, to the ordinary reader one conclusion possible from this book is that the only balloon launchings and investigations in this country are made by Skyhook, which has, according to Vaeth, been solely responsible for this activity. Entirely omitted, to give an instance close to home, has been the original development work of C. B. Moore and others at New York University and subsequent work here on high level, constant altitude (Moby Dick) balloons, as well as the flight operations by other groups.

The available published literature on high altitude research is badly in need of a comprehensive survey of the techniques and limitations of the existing instrumentation in this field for the information of personnel in other fields desiring to conduct or interpret such research. *200 Miles Up*, although unquestionably interesting and informative, does not really satisfy this need.

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Briefly Noted

Plastic Deformation

Progress in understanding how the atomic arrangements within a metal determine its structural properties is summarized in a symposium volume, *Plastic Deformation of Crystalline Solids*, now available to the public, according to the Office of Technical Services of the Commerce Department. Sponsored jointly by the Carnegie Institute of Technology and the Office of Naval Research, the symposium consists of nineteen papers by specialists in the subject. The volume (PB 104 604; 226 pp., \$3.50) may be ordered through the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C. Orders should be accompanied by check or money order payable to the Treasurer of the United States.

National Electronics Conference

Publication has been announced of the *Proceedings of the Seventh National Electronics Conference*, held in Chicago last October under the sponsorship of the

American Institute of Electrical Engineers, the Institute of Radio Engineers, the Illinois Institute of Technology, Northwestern University, and the University of Illinois. The *Proceedings of the 1951 conference* (736 pp.) include a total of seventy-nine papers covering electronic research, development and application of audio systems, components, computers, high frequency measurement, information theory, magnetic amplifiers, medical and industrial applications, microwave propagation servo theory, signal detection, television, and tubes. The volume may be obtained for \$5.00 per copy from S. R. Collis, Chairman, NEC Publicity Committee, 208 W. Washington St., Chicago, Illinois.

Industrial Use of Fission Products

Industrial Uses of Radiological Fission Products (102 pages, illustrated) is a report of the findings of the Stanford Research Institute's 1951 study for the Atomic Energy Commission of technological and economic questions concerned in the industrial use of fission products. Management considerations of safety, public relations, liability and insurance, and regulations covering the use of radioactive materials are discussed. A potential process using fission product radiations is outlined from preliminary operating design through engineering and economic evaluation. A bibliography on radioactivity is included, as are the methods of calculation and formulae derivations used in preparation of the report. Copies of the report may be obtained for \$1.50 from Project 361, Stanford Research Institute, Stanford, California.

Numerical Calculation

Problems for the Numerical Analysis of the Future (NBS Applied Mathematics Series 15, 21 pp.) contains four papers among those presented at the symposia on modern calculating machinery and numerical methods held during the dedicatory exercises for the Institute for Numerical Analysis of the National Bureau of Standards on the campus of the University of California at Los Angeles. The papers included are: "Some Unsolved Problems in Numerical Analysis" by Douglas R. Hartree of the Cavendish Laboratory; "Numerical Calculations in Nonlinear Mechanics" by S. Lefschetz of Princeton; "Wave Propagation in Hydrodynamics and Electrodynamics" by Bernard Friedman of NYU's Institute for Applied Mathematics and Mechanics; and "Linear Programming" by George B. Dantzig of the U. S. Air Force Comptroller's Office. The report can be ordered (20¢ per copy) from the Government Printing Office, Washington 25, D. C.

Physics as a Career

Guidance on avenues of training which lead to professional recognition as a physicist in England, together with information on employment in British industrial, university, government, and other posts, is given in *Physics as a Career*, by Norman Clarke, deputy secretary of the Institute of Physics. (70 pp. The Institute of Physics, London, 1952. 6s.)