

Book Reviews

Atomic Energy for Your Business. Today's key to tomorrow's profit. Arnold Kramish and Eugene M. Zuckert. McKay, New York, 1956. 269 pp. + plates. \$3.95.

The great industrial increase in interest in nuclear applications since the Atomic Energy Act of 1954 became law has resulted in the need for informed guidance available to those business leaders who must make the decisions relative to their company's participation in the field. The present book aims at providing such information. One of the authors, a previous member of the Atomic Energy Commission as well as Assistant Secretary of the Air Force, and now acting as a business consultant in the atomic field, has a rich background for such an objective.

After a brief introduction discussing the typical questions which any non-technical business executive would naturally raise respecting the future of nuclear energy, the authors devote the next three chapters to a very brief historical review and a few very simple physical concepts about the atom and nucleus. A long chapter on applications to industrial processes is followed by a discussion of the political scene in which the nuclear developments have been nurtured. Next, a discussion of atomic developments abroad is followed by specific suggestions and recommendations to be followed by business leaders who desire actively to associate their businesses in this rapidly advancing field of activity.

In various places throughout the book, references are made to the retarding effect upon the program which has resulted from the carrying over of wartime military security into a field where it was too often assumed that the United States held some important "secrets." This has created a wholly new psychology in the United States' mind, and only slowly are we beginning to realize how far into the sands our heads have been buried. Military-weapon design has, of course, always been involved in secrecy, in all countries, but it took the great technologic advance of nuclear fission to becloud our ability to distinguish between fundamental science and engineer-

ing design. The authors clearly bring out this country's indebtedness to various European laboratories for the basic science upon which our wartime engineering development was built.

Certain sections of the political discussions are somewhat colored by the obvious party affiliations of the authors. It is also to be regretted that the contributions of other commissioners who were not directly associated with one of the present authors could not have been evaluated along with those who are included in the discussion.

The book also has a rather long technical appendix, which will probably prove too elementary for a technologist, and by virtue of its being set aside from the general context of the book, the average businessman may unfortunately assume it to be too complex for his perusal. It had better have been included in the proper sections of the text, since it is not of a technical nature which cannot be grasped by any intelligent person. A table of present reactors in the U.S. Power Reactor Program, a dictionary of atomic energy, a section of selected reference material, and a list of the industrial members of the Atomic Industrial Forum constitute the remaining appendices.

The book should be a useful guide to those busy executives who desire to obtain a brief background in the industrial future of nuclear energy.

D. H. LOUGHRIDGE
General Motors Technical Center

Automatic Digital Calculators. Andrew D. Booth and Kathleen H. V. Booth. Academic Press, New York; Butterworths, London; ed. 2, 1956. 261 pp. Illus. \$6.

This second edition of *Automatic Digital Calculators* has a very useful bibliography of the computer field, more than twice as long as that in the first edition, published only 2½ years earlier. This tremendous activity in the computer field readily requires a larger book than the present one to do it justice.

Automatic Digital Calculators is writ-

ten on a slightly more technical level than Bowden's *Faster Than Thought* but does not go into enough of the technical details to be particularly useful to the practicing computer engineer. Its 17 chapters, comprising only 234 pages, tend to give mere glimpses of the complexities of the field. For example, chapter 16, on program design, is mainly taken up with a program for interpolation, giving the reader little feeling for the vast complexity and sophistication in programming now possible. There is little or no mention of Boolean algebra, of information theory, or of the possibilities of digital machines for automation or control purposes.

The book does provide a readable, though faintly archaic, introduction to the field. It gives a little history; a bird's-eye view of the field as a whole; simple discussions of many basic circuits, components, and techniques; and more than a glimpse of the minutiae required to formulate mathematical problems as sets of orders that the machine can follow.

JEROME ROTHSTEIN
Signal Corps Engineering Laboratories

Diseases of the Skin. Richard L. Sutton, Jr. Mosby, St. Louis, Mo., ed. 11, 1956. 1479 pp., 1972 illus. \$29.50.

The 11th edition of this standard atlas and encyclopedia of skin disorders surpasses the preceding volumes that have been the lifework of the author and his late father. Brevity, the use of small type for discussions, and an unconventional style of documentation have enabled Richard Sutton, Jr., to present more dermatologic knowledge in less space than was required in the previous edition. By using abbreviated references in the body of the text, he has been able to continue the Suttons' policy of mentioning practically everything of importance in the increasing dermatologic literature.

After receiving my medical education, I completed the courses in the curriculum of the George Washington University School of Law. I found that the citations used in legal writing are much handier than the footnotes used in medical literature. The practicability of shorter references in scientific reports was discussed in this journal in 1954 and 1955 [*Science* 120, 150, 1038; 122, 108]. Sutton, Jr., has demonstrated that a telegraphic type of documentation is practical in medical writing. He has done well at this stage to retain the figure for the year in each reference, inasmuch as physicians are less accustomed than lawyers to library research and do not associate volume numbers with date of publication.

In the preface, the author's analysis