existence proofs and with the construction of solutions by finite-difference methods and other procedures."

J. B. DIAZ

University of Maryland
College Park, Maryland

98[V, Z].—K. N. DODD, *Mathematics in Aeronautical Research*, Oxford University Press, New York, 1964, xiii + 130 p., 21 cm. Price $3.40.

Teachers of calculus and elementary differential equations frequently feel the need for fresh, up-to-date applications of the mathematics which they are presenting to the students. Many good textbooks either ignore applications altogether or give a rather bloodless treatment to a succession of stock problems. The present book is designed to supplement these texts by presenting a collection of real problems taken from aeronautical research.

The book was designed for use in the British school systems, but there should be no trouble in using it in first or second year college programs in the United States. The book could also be used by advanced high school students who have had some calculus and a smattering of differential equations.

The book has two strong points: (1) it is directed toward digital computing, and (2) the variety and novelty of the applications is excellent. The chapter titles illustrate these points. They are: 1. Mathematical Concepts, 2. Electronic Computers, 3. Air Composition in an Ascending Fuel Tank, 4. Atmospheric Scattering of a Searchlight Beam, 5. A Computer-Controlled Milling Machine, 6. Accurate Position Determination Using the Gee System, 7. Dynamics of an Ejection Seat Sled, 8. Charge on a Transmission Line, 9. Radiation Doses from Nuclear Attacks, 10. Shattering of Raindrops by Aircraft, 11. More about Raindrops, 12. A Computer Aid to Air Traffic Control, and 13. Supersonic Flow Calculations in Gases.

The reviewer has two criticisms: (1) the treatment of the material, including the introductory chapters, is sometimes overly sketchy even for a book of this type; and (2) there are no references to sources where more information could be found. This latter deficiency limits the use of the book for self-study. A great many teachers should welcome the fresh examples and should find little difficulty in using the book as a supplement to their courses.

RICHARD C. ROBERTS

99[X].—EDWARD OTTO, *Nomography*, Pergamon Press, Ltd., Oxford, England, distributed by The Macmillan Co., New York, 1963, 313 p., 21 cm. Price $10.00.

This book is intended as a text and is not a collection of nomograms. The mathematical level required for an understanding of the subject is quite low (a good high school student should have no difficulty). There are five chapters. Chapter I, as an introduction, deals with analytic geometry and related considerations. Chapters II, III, and IV take up equations with two, three, and many variables, respectively. Chapter V discusses some problems of theoretical nomography.

Y. L. L.