the topics treated. However, it is somewhat disturbing to find occasional misspelled names of authors, and references to *old* editions of rather well-known text books. Also, a little more attention should have been paid to the listing of articles in the bibliography. Almost all of the non-English titles are misspelled—one of them beyond recognition (Ref. 10, p. 300). But these typographical errors will probably create no serious problems for the reader.

The book is a first-rate text on the physical and technological aspects of nondestructive testing. It should be of great value to both the beginner and the person already familiar with the subject.

Einführung in die theoretische Gasdynamik (3rd ed.). By Robert Sauer. 214 pp. Springer-Verlag, Berlin, 1960. DM 29.70. *Reviewed by Robert E. Street, The University of Washington.*

SINCE the appearance of its first edition during the war, when gas dynamics was in its infancy, Sauer's book has been a classic in the field. Although many of us obtained our introduction to gas dynamics, now also referred to as the aerodynamics of a compressible fluid, through Sauer's book (the first edition was soon translated into English), it was never considered a very good textbook and eventually yielded its place to texts such as those by Liepmann and Puckett, Shapiro, etc. One reason for this was that, although Sauer states in the foreword of each edition that he writes for the engineer or physicist, the book was, and still is, a book written in the style of an applied mathematician. No reference is made in any edition to experimental methods or data.

Still there is in Sauer's book a style and flavor which the student of fluid dynamics should know. The first edition gave methods of solution of flow problems, which were not to be found elsewhere, and although these methods are now well known, it is worthwhile to return to their original presentation; for example, the flow about bodies of revolution using the method of characteristics is one.

While the second edition was for the most part the same as the first, the third edition has been entirely rewritten. The arrangement is different, new topics have been added and although it is now a somewhat larger book, it remains a fairly thin and compact introduction. One good feature has been the replacement of the letter c by the letter a to represent the speed of sound, but, in order to retain the old tables, Sauer still takes $\gamma = 1.405$ for air.

New material includes a short discussion of the limiting case of first-order linearized flow over extremely slender bodies of revolution ("überschlanke Körper"), as well as a new section on transsonic and hypersonic plane flows. The section on linearized conical flow which was new in the second edition has been retained. Some topics are still too lightly touched upon, so the book remains what it has always been, an excellent monograph and an "introduction" only for those with some background in the field.

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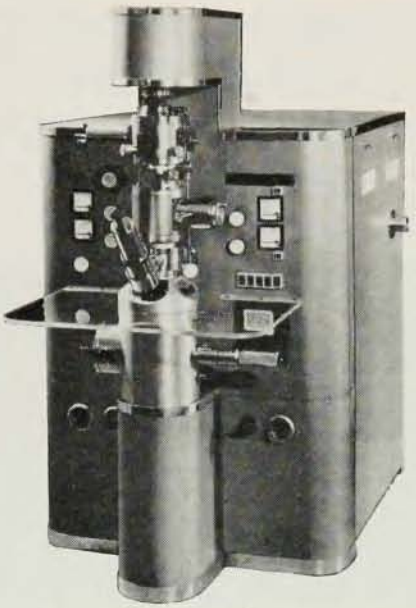

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