BOOK REVIEW

Selection of books for review is based on the editors' opinions regarding possible reader interest and on the availability of the book to the editors. Occasional selections may include books on topics somewhat peripheral to the subject matter ordinarily considered acceptable.



Title Boundary Layers of Flow and Temperature

Author Alfred Walz

Publisher MIT Press

Pages 297

Price \$17.50

Reviewer H. C. Perkins

Nuclear engineers will not find the book *Boundary Layers of Flow* and *Temperature* of great use since the text deals with external flow of gases with Prandtl number equal to 1. A great wealth of computational techniques is presented, mostly based on integral techniques and nomograms; empirical formulas, and procedures are given in detail. Fundamental development is not given and the author refers the reader to Schlichting for that material.

The reader who has to make many boundary layer calculations presumably uses a computer approach. This book will be of use for the engineer who must make only an occasional calculation and does not feel the time necessary to set up a program is justified. Those teaching courses in boundary layers may well use this material for illustrations and homework problems.

The material consists of: introduction, approximate (integral) solutions, computational methods for using the integral solutions, and example problems. Laminar and turbulent boundary layers are treated.

The German literature is well referenced by Dr. Walz and researchers can catch up on their homework from the reference list. Again, nuclear engineers will be more interested in books containing internal flow material, such as Kays, than in Walz's book.

H. C. Perkins is professor of aerospace and mechanical engineering at the University of Arizona. He received his degrees from Stanford (1957, 1960, and 1963) and has been active in teaching and research in the thermosciences since graduation. His research activities have centered on variable properties effects in thermal and hydrodynamic internal flow.