a result of a warehouse fire (Sandoz incident 1986, Basle, Switzerland). Each chapter has well developed bibliographic reading lists.

In summary, I found this to be a broad-based book with wide coverage, thoroughly modern and up to date on current key U.S. environmental topics, and lots of good advice. It would be an excellent addition to the professional bookshelf.

## GARY F. BENNETT,

The SFPE Handbook of Fire Protection Engineering, by P.J. DiNenno, C.L. Beyler, R.L.P. Custer, W.D. Walton and J.M. Watts, Jr., National Fire Protection Association, Quincy, MA and Society of Fire Protection Engineers, Boston, MA, 1986, ISBN 0-87765-353-4, 841 pp., US \$125 (non-member).

On the dust jacket is written: "The main purpose (of this book) is to integrate fire protection theory and practice in a readily accessible form, concentrated on quantifiable calculation methods."

The reviewer, not a fire protection engineer, cannot (or at least should not try) to critically review whether or not the fire protection sections are sound, but I am a chemical engineer and an educator and can evaluate the soundness of the fundamental theory of fluid flow and the quality of the explanations and the pertinence of the examples given. From that standpoint based on my reading of the hydraulic section, I can say the authors have produced an excellent book and a very large one at that, being the 841 pages of  $8.5 \times 11$  in. size.

Organized into four sections, the Handbook presents a sound, theoretical discussion of the state-of-the-art of fire protection technology. The first and largest section at 400 pages is a book itself and discusses fundamentals that range from a basic discussion of hydraulics, to heat and mass transfer in fires and finally structural mechanics; Section 2, "Hazard Analysis" and Section 3 "Design Calculations" use the theoretical material of the prior section to provide a practical discussion of solving analytical and design problems. The last (and shortest) Section No. 4 entitled "Risk Analysis" gives a detailed overview of the newly emerging field of risk analysis in fire protection.

In summation, I found the book almost overwhelming in the amount of material presented. It clearly is a most valuable contribution to the field of fire protection engineering and should become the standard reference.

GARY F. BENNETT