

## BOOK REVIEW

NEW TECHNOLOGY IN HYDROMETRY/Developments in the acquisition and management of streamflow data, edited by R. W. Herschy, published by Adam Hilger, 1985, 240 pp (£35 hardcover).

This volume of collected works from British and American authors provides a review of their recent efforts in the collection, transmission and processing of streamflow data. The volume deals with the operational aspects of hydrometry, and is specifically aimed at managers and field personnel who play a decision making and operations role in water management.

There are ten chapters, a table of contents, a glossary of acronyms, references following each chapter and an index. The contributors are R. H. Billings, A. S. Cherdak, R. W. Herschy, R. Huntingdon, T. J. Marsh, R. W. Paulson, C. R. Wagner, S. T. Walker, R. J. Williams and C. E. Wright. The chapter headings are: Introduction; The Organisation of Hydrometric Data Acquisition in the United States; Data Collection Instrumentation; Organisational Aspects of Supporting Hydrometric Instrumentation; Telemetry and Control Systems; An Introduction to Satellite Telemetry Technology; Hydrometric Data Transmission by ESA Satellite Meteosat; An Introduction to Remote Sensing; The Extension of River Flows Using Models and Weather Data; and Microcomputer-Based Hydrometric Data Processing.

The introductory chapter by the editor nicely serves to unite the contributions into a whole. This is followed by an interesting overview of the proposed US hydrometric system (Paulson, Billings and Cherdak). The third chapter (Walker) is what one would expect to find in a book with this title: plenty of examples and discussion of new technology for field workers. The following chapter (Wagner) describes in brochure-style language the US instrument support system. However, chapter five (Huntingdon) is a well written technical account of telemetry hardware and software. Three contributions (Paulson; Herschy; Williams) on satellite and remote sensing themes give good reviews of this area of hydrometry. The ninth chapter (Wright) presents a mathematical model for monthly runoff which is interesting, but possibly no more effective than a simple time-series model. The final chapter by Marsh on hydrological data processing is good value.

Despite its nature, the book is quite evenly written throughout and makes good reading. There are some interesting photographs of new technical gear available overseas. Some chapters could well do with more references however. Perhaps a more appropriate title of the volume would be 'British and American Developments in Hydrometry'. However, for those for whom it is intended, the volume will provide interesting reading and a suitable companion to the editor's text 'Streamflow Measurement' recently reviewed in this journal.

*C. P. Pearson*