

ity for Systems and Services, 1415 Koll Circle, Suite 101, San Jose, CA 95112.)

The title of this book is somewhat misleading. No real discussion of resource sharing is attempted; nor is much specific guidance offered in making a decision about joining either of the two on-line bibliographic networks described: Stanford University's program, Bibliographic Automation of Large Library Operations Using Time Sharing (BALLOTS), and the Ohio College Library Center (OCLC).

As the authors are careful to point out in their introduction, the book is primarily a comparison between BALLOTS and OCLC, which gives the library administrator a starting point to begin an analysis. This the book does very well. It is written in a clear, concise style. No extensive knowledge of data processing is needed to understand it. Yet, the issues treated are certainly relevant to many automation decisions and even extend to financial and administrative considerations.

The organization of the book is well thought out and makes the book valuable as a primer for those unfamiliar with either or both BALLOTS and OCLC, as a review for those with some familiarity, or as a reference book for almost any interested reader. Most of the text is devoted to making specific comparisons between these two systems on a topic-by-topic basis. The relevance of the topics chosen is insured by the fact that most of them stem from actual questions that were posed to the staff of the California Library Authority for Systems and Services (CLASS). Thus, the book has a freshness of direct response, which is seldom experienced in reading similar publications.

To contrast the comparisons more sharply, for most of the book, characteristics of BALLOTS appear on left-hand pages and characteristics of OCLC appear on right-hand pages. The reader can easily concentrate on one or the other system or consider both together. A detailed table of contents aids the user in selecting specific topics of interest. Those who wish to pursue the subject further are aided by brief bibliographies. In addition to the comparisons, a series of appendixes presents card formats, simulated display of screen formats, and

simulated examples of the most common products. These are of considerable help to the reader in visualizing different aspects of either system.

The authors ought to be congratulated for producing a readable, easy-to-use manual that can be read on many levels and serve the purposes of many different kinds of users. Unfortunately, information of this kind ages rapidly and needs to be updated frequently. Therefore, the value of the book will decline as time passes beyond its publication date of June 1977. Nevertheless, it ought to be well worth the price of \$5 to those readers who will use it over the next year or two.—Richard J. Talbot, *Director of Libraries, University of Massachusetts, Amherst.*

User Studies: An Introductory Guide and Select Bibliography. Edited by Geoffrey Ford. Occasional Paper No.1. Sheffield: University of Sheffield, Centre for Research on User Studies. 1977. 92p. ISBN 0-906088-00-3.

In January 1976 the Centre for Research on User Studies at the University of Sheffield was set up with funds from the British Library Research and Development Department. The Centre set as its first task the investigation of work previously undertaken and the publication of a state-of-the-art report. It is not claimed as an exhaustive bibliography but rather a guide to the literature that the project team considered useful in defining the scope of user studies, in suggesting hypotheses about the behavior of information consumers, in illustrating techniques of study, and in presenting findings about information consumers.

A number of the references are drawn from the American Psychological Association Project on Scientific Information Exchange in Psychology, published in three volumes over the years 1963-69, and from the *Annual Review of Information Science and Technology*, published since 1966. Despite these strong American underpinnings, the rest of the 236 references have an understandably British flavor.

While the tabular data in this stencil-reproduced report are largely drawn from other publications and the reports on research already conducted are rather per-

functory, this document is nevertheless useful in bringing together in one publication references to the growing body of literature on library use studies and user behavior investigations. It will be particularly helpful as a source document for other researchers beginning work in this area. Since this state-of-the-art review at the University of Sheffield necessarily precedes the Centre's own research and testing, further reports in this series of Occasional Papers promise a useful contribution in an area in which we still know far too little.

In a further attempt to disseminate the progress and results of its work, the Centre has begun, as of June 1977, distribution of a newsletter entitled *CRUS News*. While this first four-page issue concentrates on news of the Centre and its own projects, future issues (no frequency prediction is offered) promise to serve as a clearinghouse for other activities as well as its own. Individuals interested in being placed on the distribution list for the newsletter or in receiving a copy of Occasional Paper No. 1 should contact the Centre at the University of Sheffield.—*Herbert S. White, Professor and Director of the Research Center, Graduate Library School, Indiana University, Bloomington.*

Allen, Thomas J. *Managing the Flow of Technology: Technology Transfer and the Dissemination of Technological Information Within the R&D Organization*. Cambridge: MIT Press, 1977. 320p. \$20. LC 76-57670. ISBN 0-262-01048-8.

This work consists of a series of reports on data collected and conclusions drawn by the author from 1963 to 1973. Much of its content has already appeared in journal articles. It is thus not surprising that most of it will already be known by anyone who has been following the literature on the transmission of information over the past decade. On the other hand, it does provide a convenient compendium, a state-of-the-art review on the subject for newcomers and those who wish to refresh their memory on the work reported here.

From his position at the Sloan School of Management at the Massachusetts Institute of Technology, Allen was able to investigate parallel groups of scientists and engineers

who were working on certain problems under government research and development projects. At first the information-gathering processes of those in these projects were measured and compared to the quality of their work. Later, the emphasis shifted to determining how information enters and flows through a research and development organization. As might be expected, a number of conclusions could be drawn from the data—some of them agreeing with commonly held views and some newer and more startling in their implications. Among them are:

1. Engineers think differently from scientists. Scientists are especially interested in choosing their own problems and look to the community of other scientists for evaluation, therefore, the results of their research are fully communicated to the entire research community. Engineers, on the other hand, choose to work in situations where someone else selects the problems on which they will work. Nor is prestige and status dependent upon other engineers, but upon company officials to whom publication means giving secrets to competitors.

2. In science all work up to a point in time is recorded in the literature; in technology the literature is less cumulative, not built on previous literature, and not meant to document the end product or establish priority.

3. Whereas information in science is transferred via the written record, in technology it is more often transferred through personal contacts. Other sources of information in descending order of importance to technologists are: customers, the company's previous research, consultants, and vendors.

4. At different stages in their work, engineers use the published literature differently, spending more time with it at the beginning of a problem and tapering off markedly about one-third of the way through a project. In contrast, internal consulting with colleagues in the company has the same initial peak of use but then adds another surge two-thirds through the project.

5. In order of importance, engineers use textbooks, trade journals, privately sponsored engineering journals, professional en-