Review Essay

ANNE R. KENNEY, editor

Do *Real* Archivists Need Archives & Museum Informatics?

ANN PEDERSON

Abstract: Archives & Museum Informatics disseminates news and analysis of developments in automation and information technologies and their effects within the archival and museum communities through the publication of a quarterly newsletter and a technical reports series, both of which are edited by David Bearman. The author reviews the contents of both the newsletters and the technical reports, concluding that they comprise a unique and badly needed means to help archivists understand the new approaches, techniques, and technologies that are reshaping human communication.

About the author: Ann Pederson is a senior lecturer in archives administration and records management in the School of Librarianship, University of New South Wales, Sydney, Australia. She is a member of the governing council of the Australian Society of Archivists, Inc., and is the editor and coauthor of the critically acclaimed text, Keeping Archives.

THE QUESTION IN THE title certainly provides the central focus of this essay and suggests corollaries: do archivists read Archives & Museum Informatics (AMI) publications? If yes, do they find the content helpful and provocative? If no, why not? and what might change their minds? But before beginning to address these concerns, who or what is Archives & Museum Informatics, and what does it do?

David Bearman formed Archives & Museum Informatics (AMI) in November 1986 as an entrepreneurial research, publishing, teaching, and consultancy venture focusing upon new developments in automation and their effects within archival and museum environments world-wide. The word *informatics* was borrowed from biomedicine where it represented a new systematic application of combined information technologies, techniques, and theories to medical practice. Bearman explains his choice of the term:

> To me the importance of the concept is that it replaces *automation*, or *records*, or *computerization* with a system oriented view of the synergism of information based activities . . . . [It] also . . . expresses a . . . range of new approaches, techniques and technologies which can enhance an organization's profile and achieve its mission.[1]

The publishing aspects of AMI emerged naturally as products of the relentless research required to support Bearman's interests, professional commitments, and consultancy work. Building upon his work as director of the National Information Systems Task Force for the Society of American Archivists and, subsequently, as deputy director for information resource management at the Smithsonian Institution, Bearman realized that he was amassing automation news that was essential for the successful management of modern documentation, but which was virtually inaccessible to the professional archival and museum community. By packaging and distributing the fruits of his research, Bearman could offset some of the costs of his "homework" as a consultant while providing a genuine service to practitioners, though making money was never an expectation.[2]

His vision was to produce a quarterly newsletter that would select, analyze, and present in summarized form information about new developments in, and applications of, automation and provide a forum for discussion of the issues and implications raised by these innovations. He also inaugurated a quarterly series of technical reports that would examine important technologies in greater detail from an archives and museum perspective. Both products were aimed at mainstream archival administrators with the goal of being "extremely practical and directly usable."[3] In other words, the publications were designed for "real" archivists, not reserved only for those with technical expertise and interests. This commitment to providing useful and usable information is underscored through frequent exhortations for readers to express their opinions and reactions, to contribute news or articles, and to suggest ideas, topics, issues, and/or names of prospective authors.

Since the first newsletter appeared in Spring 1987, through the Winter 1989/90 issue, AMI has produced twelve newsletters (average 23 pages) and nine technical reports (average 89 pages). Three more reports were in the final stages of publication when this review was prepared. With three years of work to assess, it is timely to evaluate the AMI output, initially from the per-

---

[1]David Bearman, "What are/is Informatics? And Especially What/Who is Archives & Museum Informatics?" *Archives Informatics Newsletter* 1:1 (Spring 1987): 8.

[2]David Bearman, letter to the author, 22 March 1990.
[3]*Archival Informatics Newsletter* 1:1 (Spring 1987): 1.

spective of what the venture had hoped to accomplish, and secondly, considering the needs of the archival profession for access to accurate and authoritative information on developments in automation.

This essay will describe and evaluate the newsletters and the technical reports separately, highlighting strengths and weaknesses and dealing in depth with selected technical reports. It will then assess the contribution of the AMI publications to the professional literature.

The Newsletter

The AMI newsletters, issued quarterly, present news items, status and performance reports, expositions, reviews, and other highly analyzed and time-dated material to keep readers abreast of informatics within the archival and museum environments. Each newsletter comprises approximately twenty-four letter-size pages. Graphically and descriptively the newsletter has had some distracting teething problems. For example, it was not until late 1989 (Volume 3) that the newsletter stabilized its graphic style, regular features, and order of presentation. The first seven or so issues vary considerably in one or more of the following: type font and boldness, right margin justification, printer quality, and line leading. Decisions affecting the accessibility and retrieval of information included changes to the title (*Archival Informatics Newsletter* for volumes 1 and 2, *Archives and Museum Informatics* beginning with volume 3); pagination scheme (sometimes continuously throughout a volume and sometimes by issue); and regular features that vary in heading, content, and sequence from issue to issue. While these matters are aesthetically and logistically distracting (to catalogers in particular), they are minor and have been remedied by a combination of evolving editorial expertise and experience and improved desktop publishing capabilities.[4]

More important than presentation is content, though the former can certainly facilitate or retard absorption of the latter. From the beginning the newsletter has been a public window into David Bearman's mind, in effect a regular selection and "downloading" of interpreted information about informatics-related developments and issues that he feels is needed by archival and museum administrators. While it was always clear that Bearman would be the directing force of AMI, he hoped that the quality of the publications and his own invitations would inspire contributions from others. Broader authorship would not only present multiple views but also relieve some of the pressure of being both editor and principal author. However, after three years, 75-80 percent of the content of AMI publications is still consistently attributable to Bearman, a fact that he finds disappointing.[5]

What regular features does the newsletter, now called *Archives and Museum Informatics*, contain and what are some of the highlights of the past three years of publication? Each issue begins with an editorial piece by David Bearman, followed by one to three articles that may comprise material from "regular" contributors, such as Thomas E. Brown's excellent "Machine Readable Views," or in-depth examinations of software (MicroMARC:amc, MARCON, AREV, and ARGUS), usually reviewed by Bearman.[6] Several articles have

---

[4]In 1989, Lynn Cox joined Archives & Museum

Informatics as managing editor. She facilitated the production of publications, contributed material to the newsletter and assisted with general editorial work, notably with Bearman's *Archival Methods* (Technical Report No. 9, 1989).

[5]As mentioned previously, Bearman has asked for feedback and specifically invited contributions in most issues of the first three volumes of the newsletter. I asked him whether he had received a good response to his requests. His reply was "informally yes," particularly phone calls, letters, and conversations at meetings, but there have not been many contributions despite colleagues' promises and good intentions. Bearman, letter to author, 22 March 1990.

[6]The review of Micro MARC:amc appears in 1:3

assessed information-sharing opportunities for archives and museum professionals, specifically the work of the Conservation Information Network (CIN), the Committee on Computer Interchange of Museum Information (CIMI), and the International Committee on Documentation (CIDOC).[7]

Problems and issues in informatics are raised, both in articles and in editorial essays. The archival challenges inherent in the management of multi-sensory and electronic records, particularly of online databases, are continuously raised and examined, including those of appraisal, copyright, software dependency, national and international developments in policy and standards, and the applicability of archival principles. While all of the articles are of high quality, two deserve special mention. The combative "Real Archivists Don't Use MARC" by Frank Burke criticizes the profession's apparent fixation with the MARC Archival and Manuscript Control (AMC) format to the detriment of the quality of what is being described and of other archival responsibilities.[8] The second is a short essay by Bearman, "Capturing Rich Content," in which he identifies the key problem of modern documentation: "how to identify and acquire evidence of processes, not just of products" and "how to represent processes and relationships, not just entities."[9]

Occasionally, special-focus bibliographies or review essays are included, such as the very helpful ones on electronic records policy and on fund raising.[10]

Approximately half of each issue consists of brief reports categorized under regular headings. Although these groupings have fluctuated over the life of the newsletter, the consistent departments are Conferences, Calendar, Publications, News, Software, Standards, and Technical Report Summary. As expected, each of these segments presents the basic who, what, when, and where facts, but also intentionally targets issues, implications, and trends of potential interest or concern.

Through the newsletter archivists can keep abreast of important developments in informatics and participate in discussion of issues as they evolve. The immediacy and succinctness of the newsletter format, as opposed to that of a journal, makes the information timely and involving, though it necessarily leaves the responsibility for in-depth exploration and follow-up with the reader.

The Technical Reports

AMI has also sponsored the publication of technical reports. The nine that appeared through Spring 1989 were published quarterly and distributed with issues of the newsletter. The recent title change to *Archives and Museum Informatics Technical Reports* reemphasizes the publisher's commitment to monitoring informatics developments and applications for both archives and museums that he feels are major bands in a continuum of culturally significant information. The technical reports will be issued as an occasional series at intervals suited to the requirements of individual content and research parameters rather than adhere to a Procrustean schedule. For the purposes of this review, the reports have

---

(Fall, 1987): 46-48; MARCON in 1:4 (Winter, 1987-88): 66-70; AREV (by J. Penny Small) in 2:1 (Spring, 1988): 2-5; ARGUS in 2:4 (Winter 1988/89): 73-76.

[7]CIN in 2:4 (Winter 1988/89): 70-73; CIMI in 3:2 (Summer 1989):2-5; and CIDOC (by Jane Sledge) in 3:1 (Spring 1989): 2-5.

[8]3:1 (Spring 1989): 7-12.

[9]1:2 (Summer 1987): 22.

[10]The Electronic Records Policy bibliography appears in 2:4 (Winter 1988/89): 76-79 and the review essay on fund raising is found in 3:3 (Fall 1989): 11-

16. One might wonder about the connection of fund raising with informatics. Membership, development, and participation systems are automation applications that support this vital work in cultural organizations and comprise the subject matter of forthcoming Technical Report No. 11.

been divided into three groupings: (1) topical in-depth studies (five reports: Archival Methods, Optical Media, Collecting Software, Archives and Authority Control, and Appraisal of Online Systems); (2) guides to systems requirements/specifications (four reports, one of which will be issued in 1990); and (3) directories and dictionaries (three reports, two of which will be issued in 1990). Figure 1 provides a list of the twelve technical reports.

Topical studies. The inaugural report, *Optical Media: Their Implications for Archives and Museums* (Spring 1987), is designed to inform readers about the suitability of optical media for archival and museum applications. After a clear and concise explanation of the technical differences among the "family" of optical media (laser-reflective optical videodisc, CD-audio, CD-ROM, CD-interactive, CD-video, and optical digital disk), Bearman sets out checklists of criteria for assessing applications for optical media, for selecting the appropriate technology and vendors, and for carrying out an optical media conversion project. Bearman also provides the reader with important reference tools in addition to the selective, but excellent, glossary and bibliography. These include a list of production firms with archives and museum experience, a compilation of optical media projects, and a guide to sources for regularly updated information about vendors. Whenever possible Bearman includes references for further reading about the topics

Figure 1

Archives & Museum Informatics Technical Reports
(ISSN 1042-1459)

Archival Appraisal of Online Information Systems. By Alan Kowlowitz. Report No. 7. Fall 1988. 74 pp. $20.

Archival Methods. By David Bearman. Report No. 9. Spring 1989. 67 pp. $35.

Archives & Authority Control. Edited by Avra Michelson. Report No. 6. Summer 1988. 62 pp. $20.

Archives & Museum Data Models & Directories. By David Bearman. Report No. 10. Summer 1989. 100 pp. $35.

Automated Systems for Archives and Museums. By David Bearman. Report No. 4. Winter 1987/88. 88 pp. $20.

Collecting Software. By David Bearman. Report No. 2. Summer 1987. 80 pp. $20.

Directory of Software for Archives & Museums. By David Bearman. Report No. 5. Spring 1988. 100 pp. Not available; superceded by Report No. 12.

1990 Directory of Software for Archives & Museums. By Lynn Cox and David Bearman. Report No. 12. Winter 1989/90. 196 pp. $45.

Functional Requirements for Collections Management. By David Bearman. Report No. 3. Fall 1987. 87 pp. $20.

Functional Requirements for Exhibits Management. By Rozell Overmire. Report No. 8. Winter 1988/89. 127 pp. $20.

Functional Requirements for Membership, Development, & Participation Systems. By David Bearman and Gail Lord. Report No. 11. Fall 1989. 71 pp. $35.

Optical Media. By David Bearman. Report No. 1. Spring 1987. 74 pp. $20.

Orders should be addressed to Archives & Museum Informatics, 5501 Walnut Street, Suite 203, Pittsburgh, PA 15232. An additional $5.00 charge applies to billed orders. Payment must be in U.S. currency. The technical reports are also available from the Society of American Archivists, 600 South Federal, Suite 504, Chicago, IL 60605.

described and frequently uses annotation to highlight issues worthy of further exploration. Though written in early 1987, *Optical Media* retains most of its value with its focus on decision making and the "Watch this Space" approach to the issues posed by evolving technology. The fact that it has recently been reprinted attests to its continuing usefulness.

AMI's second technical report (Summer 1987), *Collecting Software; A New Challenge for Archives and Museums*, evolved from an expansion of a 1985 discussion report Bearman prepared for the Computer Museum in Boston to assess the requirements and potential for developing a national software archives. In his introduction, Bearman asserts the importance of software in shaping modern society and calls for immediate action to ensure its selective preservation for future use and study:

> The digital computer['s] . . . impact on our daily lives has been so dramatic . . . that few other events in human history can be appropriately compared . . . . However, it is not them [the machines], but the instructions people have written for them . . . which are redefining the world in which we live.[11]

Following a cogent essay outlining the history of software and its unique impact on modern life, Bearman presents a documentation strategy for software based upon the characteristics, factors, and process of software development and exploitation, followed by designs for its implementation by individual repositories. He then discusses the requirements and considerations involved in establishing a software archives, first defining the scope of the program, then outlining the policies and procedures necessary for each of the major archival functions. Again this report focuses upon management decisions rather than upon technological details and is as relevant today as when it was issued.

Technical Report No. 6 (Summer 1988), *Archives and Authority Control*, edited by Avra Michelson, comprises the proceedings of a one-day seminar on authority control sponsored by the Smithsonian Institution Bibliographic Information System (SIBIS) Archives Descriptive Standards Committee in October 1987. While the purpose of the seminar was to bring together knowledgeable speakers, users, and committee members to define an authority control system suitable for the seven Smithsonian archival repositories, it became obvious that the papers and ensuing discussion articulated the issues surrounding authority control for archives in general. Some of these are: Do access points for record form and function work better for archives than those based on subject? Does *what* one controls and *how* reflect the objectives of the catalog? If so, what is the larger purpose of the catalog? This question expresses a theme emanating from the seminar—the perceived link between authority control and the use of archives, and the ultimate impact of both upon archival survival and growth. Do better words equal better access equal more use equal higher social value equal more resources equal better documentation equal a better society? And, if so, is this not what cultural institutions such as archives and museums are all about?

Technical Report No. 7 (Fall 1988), *Archival Appraisal of Online Information Systems*, by Alan Kowlowitz highlights the issues surrounding the appraisal of machine-readable records through his discussion of the effort to appraise the electronic database and related records comprising the New York State Computerized Criminal History System. In an introductory commentary, John McDonald, Director of the Automated Information Systems Division, Government Records Branch of the National Archives of Canada, sharpens the

---

[11]David Bearman, *Collecting Software: A New Challenge for Archives and Museums*, Archival Informatics Technical Report No. 2 (Pittsburgh, PA: Archives & Museum Informatics, August 1985), 1.

reader's focus on basic issues and congratulates Kowlowitz on helping to "demystify machine-readable records by placing them in context."[12] In his case study, Kowlowitz demonstrates that meaningful appraisal decisions can only emerge when the relationship among machine-readable and other record forms *and* their position within the context of the information system (or systems) underpinning program functions and work activities are accurately identified and understood. Certainly this work illustrates the expanding universe of documentation within which modern appraisal judgements must be made, adding weight to Bearman's thesis that archival methodologies must reflect a world that is increasingly function/system based.

David Bearman's *Archival Methods*, issued in Spring 1989 as Technical Report No. 9, has its roots in inquiries he pursued as an Andrew W. Mellon Fellow in the 1986 Research Seminar on Modern Historical Documentation at the Bentley Historical Library. The essays presented have been refreshed, rewritten, and updated with recent references, but the ideas and conclusions are as provocative now as then. Perhaps they are more likely to be appreciated as intellectual ferment intensifies in archival circles in the struggle to document society's massive technological, social, and political changes. Bearman's thesis is that our archival tasks, roles, and methods, as traditionally applied, are inadequate, and he proposes some adjustments in their application and in archival thinking which, he believes, will improve archivists' position in and contribution to society. The report is arranged in six chapters. The first four explore the major archival tasks of selection, preservation, arrangement and description, and use. The remaining two chapters introduce Bearman's proposals to provide intellectual access to a variety of culturally important information systems in archives "without walls" and his view that archives and archivists should provide the critical link for "cultural connectivity" within society.[13] These six essays argue for a realignment of archival thinking and methods to address the volatile interdependent context of modern documentation, just as traditional archival methodology emerged from and served the documentary needs of an earlier age.

System requirements. Technical Reports Nos. 3, 4, and 8 are related works. Report No. 4 provides the overview for analyzing the requirements and for planning automation projects within archives and museum programs while Reports 3 and 8 focus on the specific applications of collections and exhibits management, respectively.

Designed as a workbook for archives and museum professionals, Technical Report No. 4 (Winter 1987/88), *Automated Systems for Archives and Museums: Acquisitions and Implementation Issues*, is a decision-making guide for determining the requirements to be met by larger automated applications and for planning and managing the process of automation from needs analysis through implementation to system maintenance and updating. Designed to bridge the gap between the archival or museum manager and technical expert, enabling each to communicate more effectively, it does, however, presume a basic understanding of automation features and terminology. Written in a clear style, the report gives an excellent overview of the process, then moves step-by-step to address the considerations and decisions required in each

[12]John McDonald, "Commentary," in Alan Kowlowitz, *Archival Appraisal of Online Information Systems*, Archival Informatics Technical Report No. 7 (Pittsburgh, PA: Archives & Museum Informatics, Fall 1988), 1.

[13]David Bearman, *Archival Methods*, Archives and Museum Informatics Technical Report No. 9 (Pittsburgh, PA: Archives & Museum Informatics, Spring 1989), 66–67.

phase of the project. The appendixes are equally valuable, being checklists for defining system requirements to vendors and for identifying and selecting the data, functions, and features needed within such major applications as accounting, cataloging and description, collections management, preservation, personnel/volunteer management, records management, and membership and development.

Technical Reports No. 3 (Fall 1987), *Functional Requirements for Collection Management Systems*, and No. 8 (Winter 1988/89), *Functional Requirements for Exhibit Management Systems* (the latter by Rozell Overmire) provide detailed analyses of requirements for collections management and exhibits management respectively. The goal of both is to construct a requirements statement for each application suitable for use within one's own institution. *Collection Management Systems* is organized around the "life cycle" of culturally significant materials and describes the requirements for managing these materials as they are located, evaluated, acquired, accessioned, described, stored, referenced, repaired, exhibited, published, and so on. *Exhibit Management Systems* is an expansion of a survey of automated systems in United States art museums and a needs-assessment case study developed by Overmire as her master's thesis. It is more applicable to the museum environment where exhibition is an essential function. While there is never a guarantee against error, these decision-making tools, designed especially for archives and museum environments, will go a long way towards minimizing problems of automation.

Directories and dictionaries. Three of the technical reports, Nos. 5, 10, and 12, are primarily reference tools (directories, dictionaries, and models) designed to help archival and museum administrators compare and select appropriate software, data elements, and system architecture for their automated applications. Report No. 5

(Spring 1988), *Directory of Software for Archives & Museums*, compares the features of thirty-six software products for museum and archives applications. Those included were limited to packages that were specifically sold as archives/museum applications and were commercially available for purchase and installation prior to July 1988. Thus the directory excluded "home grown" systems and generic database management packages, as well as promising potential systems that did not meet the July cutoff date. This selection decision was intentional, for one of the purposes of the directory was to encourage a commercial market for archives/museum software.

The information in the directory was provided by vendors as responses to a detailed questionnaire prepared by Bearman, which included options such as "not applicable," "not stated," and "partially fulfilled" to show the range of capabilities. Bearman also urged vendors and readers alike to comment upon the quality, quantity, accuracy, and presentation of the information in the directory for future editions and stressed the need for purchasers to test products for themselves.

The 1988 directory is arranged in three sections: Descriptive Listing, Comparative Tables (applications and utilities), and Indexes (by hardware operating systems, vendors, applications, utilities). The information is very concise and easy to use, provided one already knows the terminology and understands the nature of the functions and features offered (there is no glossary). It is clearly a tool for the computer literate to use in creating a "short list" of products to explore more fully, rather than a substitute for developing one's own general and functional requirements.[14]

---

[14]*1990 Directory of Software for Archives & Museums*. Technical Report No. 12, which was not available at the time this review was prepared, replaces the 1988 software directory with updated information and expanded explanation and analysis.

The Value of Archives & Museum Informatics

Given this body of work, the answer to the initial question, "Do *Real* Archivists Need Archives & Museum Informatics?" must be overwhelmingly, resoundingly "Yes!" Archivists today are coping with the greatest revolution in human communication since literacy, and we must do so at an unprecedented rate and scale, driven by global social, economic, political, and technological change. Certainly we need all the help we can get, and AMI represents the best kind of help available. It provides a unique bridge, linking the technological expert, the information/human communication specialist, and the archival/museum practitioner. On a theoretical level, AMI identifies informatics problems, issues, and trends, creating textual flags to alert archives and museum professionals and rally them to action. Practically, it offers concepts, methods, and tools for designing strategies and solutions to address the problems of modern documentation.

The structure and content of AMI publications also fill a gap. The newsletter provides hard-to-acquire, but badly needed, technical expertise in a timely, user-friendly manner. The technical reports provide exposure for studies, longer than most journal articles, that seek to explore new technologies, strategies, and ideas. Where else could one find a forum for the suggestion that archivists abandon traditional appraisal and preservation in favor of "natural selection" as a more valid and manageable process for determining future archives?[15]

Yes, it is true that AMI expresses David Bearman's view of which informatics issues, problems, and developments are worth exploring. That fact is announced and re-peatedly confirmed, but his stance is not self-indulgent. Readers are continually invited to react and contribute to the discussion; and Bearman's work is published widely elsewhere. However, it still boils down to one thing: if you have confidence in David Bearman's exceptional achievements and experience in informatics and in his commitment to integrity, productivity, and quality as a researcher, critic, and editor, you will have confidence in AMI publications. If not, they are still worth reading for their thought-provoking views.

But do real archivists *read* AMI? A review of footnotes of the last two years of the *American Archivist* and *Archivaria* (up to Summer 1989) showed few citations and critical comments assessing AMI work other than in articles of which Bearman himself was the author or coauthor. However, it may be too soon to use citations as an indicator of influence. AMI did not publish until early 1987, and there is usually a lag time of at least a year before reviews appear, easily two or longer for readers to synthesize information into conference papers or articles of their own.

Prices also affect readership. AMI is available by subscription at a price much higher than most archival publications; the reports cost between $20 and $45 each. Because many subscribers are institutions, actual readership is diffuse and hard to identify. When asked about his subscribers and pricing policy, Bearman confirmed these impressions. Subscribers to the newsletter have grown from 137 in 1987 to 214 in 1989 (a 56 percent increase) and those for the technical reports from 80 to 155 (up 94 percent). Nonsubscription sales of individual technical reports totalled 500 across all titles for the 1987-89 period.[16]

The price structure for AMI publications

---

[15]David Bearman, *Archival Methods*, Archival Informatics Technical Report No. 9 (Pittsburgh, PA: Archives & Museum Informatics, Spring 1989), 15-16.

[16]David Bearman, letter to author, 22 March 1990. Considering the cost of publication (even with desktop capabilities), it is clear that Bearman is doing this work for love rather than money.

is sensitive to the timeliness of the material and the relatively small market. However, the value-for-money ratio is extremely positive. Practitioners seeking up-to-date information and proven tools for informatics applications will find them to be a great bargain, particularly when one considers the cost of poor decisions in automation matters.

Finally, can AMI publications be *understood* by real archivists? AMI publications express their well-organized content in exceptionally clear language, often providing easy-to-follow glossaries to facilitate understanding of a minimum of well-selected technical terms, but this will not overcome technological ignorance. However, those archivists with basic technological literacy will certainly develop and improve their understanding through reading AMI products. It may be that only those who keep themselves informed and up-to-date with

information essential for the effective management of modern archival programs will qualify as real archivists in the future.

AMI and its publications program are providing a unique and valuable service to the archives and museum professions, one that is worthy of every *real* archivist's interest and support. While it may not be feasible for everyone to subscribe to the newsletter or to purchase every technical report, it is important for archivists to ensure that they have reasonable access to AMI information through their institutions. Some holdings of AMI publications have been reported to the Research Libraries Information Network (RLIN) and may be available through interlibrary loan. Up-to-date information about subscriptions and publications is available from Archives & Museum Informatics, 5501 Walnut Street, Suite 203, Pittsburgh, PA 15232. Telephone (412) 683-9775. FAX (412) 683-7366.