

The Society of American Archivists Confronts the Computer

THOMAS ELTON BROWN

Abstract: During the 1960s, the committee structure of the Society of American Archivists began to deal with the twin concerns resulting from automation: automated control techniques and machine-readable records. Until 1975, separate committees dealt with the two facets of computerization. Then the Committee on Automated Records and Techniques launched a broad program of publications, presentations, and projects dealing with both concerns. Many of these activities echoed the efforts and concepts of previous committees. In addition, the Society of American Archivists addressed other facets of automation through the National Information Systems Task Force and its publications program. This progress, however, came in spite of problems resulting from ongoing questions about the proper organizational structure to deal with automation, from communication problems within the Society, and from new technological challenges.

About the author: Thomas Elton Brown is an archivist at the National Archives in the Office of Federal Records Centers. He has worked at the National Archives since 1976, dealing primarily with automated records. Before coming to NARS, he was an assistant professor at Grand Valley State College, Allendale, Michigan. He received a Ph.D. in history and sociology in 1974 from Oklahoma State University. Brown has authored one book, nine articles, and fourteen conference papers on archival and historical subjects. In addition, he has conducted over twenty workshops on automation and machine-readable records and has served on the SAA Task Force on Automated Records and Techniques since 1978.

The author thanks Frank G. Burke, Meyer H. Fishbein, and Carolyn L. Geda for making available copies of the materials distributed to the membership committees and task forces which have dealt with automation. They generously provided insightful comments on the initial drafts of this paper as did Charles M. Dollar and Harold Naugler.

IRONICALLY, IT WAS IN AN ATLANTA HOTEL ROOM CALLED TARA, which harkened back to the antebellum South, that the Society of American Archivists began in 1966 to face post-industrialized America and the computer. A statement made one year earlier on behalf of SAA by Morris Rieger outlined the challenge: "Basically there are two interrelated types of automation that have archival implications: data processing and information retrievals." To trace the efforts of SAA in these areas, one can look at the activities of the organizational structures—that is, committees and task forces—that SAA sponsored to deal with the two-pronged problem. As an SAA Executive Secretary commented, these "volunteer committees . . . perform much of the important work of the Society."¹ A review of the activities of the SAA committees and task forces reveals significant accomplishments.

While SAA did not have an organized structure to deal with automation prior to 1966, it did not ignore the embryonic electronic revolution. As early as 1948, an article by Murray G. Lawson on the potential of automation for historical research was published in the *American Archivist*. Lawson's paper prophetically outlined the capability of the emerging technology to facilitate both intellectual control over resource material and research using statistical techniques. It is interesting to note that although Lawson had presented his paper two years earlier at a meeting of the American Historical Association, the society published it in the same year in which George Orwell's *1984* was published.

As early as 1953, the annual bibliographic compilations in the *American Ar-*

chivist included a section devoted to automated data processing. Also, among the book reviews were critiques of publications dealing with automation, primarily for information retrieval, and the Technical Notes section reported advances in electronic information processing. In 1963, J. J. Hammet delivered one of the first papers to refer to automation at an SAA meeting when he called for answering the "need for a complete reevaluation of retention periods for computer-involved records." Reaching an even wider audience within SAA, Samuel P. Hays spoke at a luncheon meeting of the society in 1964. He focused on the vast historical potential of raw data and outlined the reasons for the establishment of what has become the Inter-University Consortium for Political and Social Research (ICPSR) at the University of Michigan. Even one of SAA's intellectual giants, Theodore R. Schellenberg, added his prestige to the emerging interest with a discussion of "a nationwide system of controlling documentary source materials." After cautioning that "modern gadgetry" is only a tool and not a panacea, Schellenberg stated that a nationwide automated system would be possible "only after descriptive techniques have been defined and standardized." He then proposed a methodology to define the descriptive elements, and named a few elements as well.²

The Society of American Archivists changed its committee structure in 1965. As part of the effort to reduce the number of committees by broadening their concerns, the Committee on Microfilming was restructured as the Committee on Technical Devices and Systems,

¹Morris Rieger, "Archives and Automation," *American Archivist* 29 (January 1966): 109; "Secretary's Annual Report, 1967-68," *American Archivist* 32 (January 1969): 59.

²Lester W. Smith, "Writings on Archives, Current Records, and Historical Manuscripts, July 1952-June 1953," *American Archivist* 16 (October 1953): 321-50; Murray G. Lawson, "The Machine Age in Historical Research," *American Archivist* 11 (April 1948): 141-49; J. J. Hammett, "Government Archives and Records Management," *American Archivist* 28 (April 1965): 221; Samuel P. Hays, "Archival Sources for American Political History," *American Archivist* 28 (January 1965): 17-30; T. R. Schellenberg, "A Nationwide System of Controlling Historical Manuscripts in the United States," *American Archivist* 28 (July 1965): 409-12.

designed to "concern itself, when the need arises, with automation, data retrieval, etc." Apparently, the only need that arose was mechanical microfilm retrieval systems, since the committee never addressed the broader areas of automation.³

One of the more interesting early efforts was Morris Rieger's previously quoted submission on behalf of SAA to the Ninth Archival Round Table in London in 1965. Entitled "Archives and Automation," the document outlined approaches to both machine-readable records and automated techniques. After arguing that automated data processing (ADP) materials should be considered record material eligible for archival preservation, the position paper stated that they "should be appraised in terms of the standard criteria of archival value." Rieger's document noted that accessioning of such material confronts the technical problems of media impermanence, incompatibility of systems, and the cost of computing equipment. Furthermore, Rieger suggested that an interim solution may be the conversion of the materials to microfilm printout until the technology advances to allow "unconverted ADP-type accessions." In the area of information retrieval, Rieger began by pointing out that such systems are already operational in a variety of institutions and that their application to archival administration is technologically feasible. Given the high cost of automation and the acceptable efficiency of conventional finding aids, however, Rieger added "it will probably be found, in most cases, that automation is uneconomic." The reverse may be true, he argued, for collections with special reference problems or for comprehensive subject indexes to large bodies of finding aid

literature, even on a national level. The statement concluded with a final suggestion that archival establishments become associated with data archives preserving machine-readable records to locate needed technical expertise and equipment. This statement submitted on behalf of SAA succinctly summarized the two archival interests of automated records and automated techniques. While focusing on them as separate issues, the statement maintained that both were inherently related through technology. While prophetic in this regard, the conclusions offered essentially conservative solutions to the problems of automation.⁴

Despite these scattered efforts to highlight automation within the society, Everett O. Alldredge delivered his 1964 presidential address entitled "Still to Be Done" at the society's annual banquet without making reference to the computer revolution. Alldredge outlined his vision of the unfinished work of the profession and its society. While the occasion seems to have been a perfect opportunity to mention the challenge of the computer, he completely omitted the subject of automation. This, ironically, from the man who, in a few short years, would be a leader in the society's effort to deal with electronic data processing.⁵

Nevertheless, the foundation had been laid; and the interest burst forth at the annual meeting in 1966. About 300 people crowded into the Tara I room of Atlanta's Marriott Motor Hotel to listen to five presentations outlining computerized applications to specific manuscript and information problems. Covering the country from the Winterthur Museum in Delaware to the Hoover Institution in California, the panelists discussed automated information control at the item, folder, and collection level. At

³W. Kaye Lamb, "President's Page," *American Archivist* 28 (January 1965): 86.

⁴Rieger, "Archives and Automation," p. 109-11.

⁵Everett O. Alldredge, "Still To Be Done," *American Archivist* 28 (January 1965): 3-16.

that session, an announcement was made to the standing-room-only crowd that all the papers would be published in the April 1967 issue of the *American Archivist*. When the issue appeared, new articles appeared as well. One expanded the geographical coverage to include Canada with a discussion of automation of the manuscript catalogue at the Public Archives of Canada. Most of the articles were revised to expand the discussions of the specific applications to raise broad, cross-cutting issues in information retrieval. The issue also included a bibliographic review of material dealing with automated control of archives and manuscripts. While almost entirely devoted to information retrieval, the other archival concerns resulting from automated records were briefly acknowledged. In a rare deviation for the time, the editor subsequently published excerpts from two letters praising the special issue.⁶

As a result of the popular response to the session in Atlanta, Frank G. Burke wrote to SAA President Herbert Angel requesting that a committee be established to deal with automation. Under the bylaws at the time, the president could establish ad hoc committees to deal with specific problems. Consequently, Angel appointed an Ad Hoc Committee on Automated Techniques for Archival Agencies, with Burke as chairman. The initial goal of the committee was to establish a clearinghouse for automated applications. The first step in building this network was a comprehensive survey made in July 1967 of more than 1,300 archives and manuscript collections in the

United States and Canada. The survey asked about the current and planned use of both mechanical and electronic control. The 510 completed questionnaires indicated that nine institutions had mechanical applications and that seven were using electronic computers. Ten reported that they had plans for mechanical devices, and forty-five said they had plans for electronic information retrieval. The survey also indicated that seventy-eight other institutions were associated with parent institutions that had data processing equipment. The survey report concluded, "It is clear that the profession is on the verge of a major innovation in its methods of performing archival functions." Building on this survey, the committee pondered during the summer and fall of 1967 several future steps, such as a secondary survey to obtain more detailed information on current activity, a review of literature to begin a newsletter, and techniques to disseminate information on automated techniques to the general membership. Indeed, Burke did solicit additional information from the sixteen institutions that had reported automation in place. A draft of the first issue of a newsletter was prepared and awaited sources of funding.⁷

The energies for these efforts were soon diverted to a new effort not directly associated with the Society of American Archivists. This was the SPINDEX II project, which began in October 1967. The Council on Library Resources, Inc., funded a two-year project in the National Archives to expand the original Library

⁶"News Notes," *American Archivist* 30 (January 1967): 202-03; *American Archivist* 30 (April 1967): *passim*; "Editor's Forum," *American Archivist* 30 (October 1967): 639.

⁷Herbert Angel, "President's Page," *American Archivist* 30 (January 1967): 196-97; "Automated Techniques for Archival Agencies Committee," n.d., in "The Society of American Archivists, 1967-1973 (April)," Frank G. Burke Papers, Washington, D.C., hereafter cited as FGB Papers; Frank G. Burke, "Report on a Survey of Automation Activities in Archives and Manuscript Repositories in the United States and Canada," *American Archivist* 31 (April 1968): 208-10; Frank G. Burke to Members of Ad Hoc Committee on Automated Techniques for Archival Agencies, 9 October 1967, and 9 November 1967, FGB Papers; Frank G. Burke, "ABSTRACT, Activities of the Committee on Automation, October 1967-October 1968," FGB Papers.

of Congress card-based system into a tape-based system with more fields but to retain the features of numeric tags and hierarchical arrangement of entries. The project's goal was to design a series of computer programs for use by any archives or manuscript repository. Its work involved advice, input, and testing from ten institutions with computer capability and from three others without access to electronic processing.⁸

All members of the Committee on Automated Techniques for Archival Agencies were actively involved in the SPINDEX effort. Burke was chairman of the committee and director of the project at the National Archives. Three of the six committee members were representatives from three of the ten participating computerized institutions, and the other three members were the three who represented institutions without computer capability. While SPINDEX II was not an SAA-sponsored project, every member of the SAA's committee on automation was an active member of the project as a representative of his or her institution. As such, the individuals had moved from trying to establish a clearinghouse on automation to assisting in the development of software.⁹

For the annual meeting in 1969 held in Madison, Wisconsin, Burke proposed to the program committee chairman in October 1968 a session on SPINDEX. In the program chairman's letter organizing the committee's activities, he included the SPINDEX suggestion in his list of possible conference subjects. With this groundwork, it fell to Burke to organize a session that would, incidentally, coin-

cide with the conclusion of the Council on Library Resources project. In Wisconsin, Burke reviewed the goals and accomplishments as two others commented on SPINDEX experiments at their institutions. This session was tantamount to a final report to the society on the initial development of SPINDEX, even though questions of the software maintenance and compatibility with the Library of Congress MARC II remained open.¹⁰

With a software development task behind them, the committee members turned as an organization to address the question of what information the software should process. This interest led Burke, still chairman, to propose that the committee resume its activity by concentrating on standardization of institutional codes and descriptive elements. Specifically, he proposed in 1969 the development of common codes to identify repositories, standards for data notation, consensus on the measurement of records, and accepted definitions on units of description. From this proposal, the committee agreed at the Madison meeting that during 1969 it would study three areas in detail: establishment of code symbols for repositories, adoption of a glossary of terms to be used in finding aids, and establishment of minimum feasible standards for the format and content of finding aids. To effect this new emphasis, the Committee on Automated Techniques for Archival Agencies was renamed Committee on Techniques for the Control and Description of Archives and Manuscripts (COTCADAM), to be chaired by David C. Maslyn. A

⁸Frank G. Burke to Members of the Committee on Automation, 6 June 1969, FGB Papers.

⁹"Report of the Committee on Automated Techniques," *American Archivist* 32 (January 1969): 65-66.

¹⁰Herman Kahn to Frank G. Burke, 6 December 1968, FGB Papers; Herman Kahn to members of the SAA Program Committee—1969, 18 November 1968, FGB Papers; Frank G. Burke to Herman Kahn, 19 March 1969, FGB Papers; Frank G. Burke, "SPINDEX II: Its Goals, Accomplishments and Significance for Archivists," paper delivered at 33rd SAA Annual Meeting in Madison, Wisconsin, 9 October 1969, FGB Papers; "33rd Annual Meeting," *American Archivist* 33 (January 1970): 70-71.

Subcommittee on Automated Techniques was to be chaired by Burke. The next year the subcommittee component was dropped, and only the full COTCADAM structure remained, with Maslyn as chairman.¹¹

Addressing the descriptive elements for archival and manuscript materials, the committee first identified the basic elements recommended in the professional literature. Members then reviewed 204 finding aids from more than 100 federal, state or provincial, private, and religious institutions in the United States and Canada. The comparison of the finding aids with the recommended elements revealed that fewer than half of the inventories and registers contained all of the basic elements. Having defined the basics and determined that repositories were not using them, COTCADAM, under the leadership of Burke (who had replaced Maslyn as chairman), set out in the fall of 1971 to establish standards for each of these elements. In a crash effort, between January and April 1972 individual members of the committee wrote separate parts for the proposed standards. Burke combined and edited the various submissions into a complete document and submitted "Draft Standards for the Preparation of Registers and Inventories" to Council. He also appeared before Council in November 1972 to explain the purpose and background

of the document. At its December meeting, Council discussed the committee's draft and concluded that the information should be a handbook. "If the handbook were published under the auspices of the SAA, archivists would be encouraged to adopt your guidelines as standard procedure." The Council then recommended that the committee further refine the text and then seek the endorsement of the Editorial Board. After revision, the committee submitted the document in August 1973 to the Editorial Board, who then wanted the Committee on Terminology to clear the handbook. After these two approvals, Council on 30 September 1974 recommended publication. In September 1976 the committee's standards appeared as SAA's first handbook, *Inventories and Guides: A Handbook of Techniques and Examples*. As a final note to this evolution from automated retrieval systems to a manual on description, Council at the same meeting at which it approved publication of the document also approved a proposal to change the name of COTCADAM to the Committee on Finding Aids. A few months earlier, in July 1974, Burke had decided not to continue as chairman of the group, and David B. Gracy II became the leader of the committee. Gracy later used the handbook as one of the bases for his *Archives & Manuscripts: Arrangement and Description*, in SAA's Basic Manual Series.¹²

¹¹Frank G. Burke to Members, Committee on Automation, 10 July 1969, FGB Papers; "Secretary's Report on the Committees for 1968-69," *American Archivist* 33 (January 1970): 131; "News Notes," *American Archivist* 33 (April 1970): 232; "News Notes," *American Archivist* 34 (January 1971): 85.

¹²Report on Activities of the Committee on Techniques for the Control and Description of Archives and Manuscripts, n.d. [October 1972(?)], FGB Papers; "35th Annual Meeting," *American Archivist* 35 (January 1972): 18; Frank G. Burke to Members of the Committee on Techniques for the Control and Description of Archives and Manuscripts, 4 January 1972, FGB Papers; Frank G. Burke to the Members of the Committee on Finding Aids, 27 April 1972, FGB Papers; Frank G. Burke to James B. Rhoads, 10 October 1972, FGB Papers; Robert M. Warner to Frank G. Burke, 10 January 1973, FGB Papers; Frank G. Burke to Memory Mitchell, 10 August 1973, FGB Papers; "Report on the Meeting of the Committee on Techniques for the Control and Description of Archives and Manuscripts, Columbus, Ohio," 2 November 1972, FGB Papers; Minutes of Council Meeting, 30 September 1974, *American Archivist* 38 (April 1975): 281; Minutes of Council meeting, 26 September 1976, *American Archivist* 40 (January 1977): 151; "SAA Committees, 1974-75," *American Archivist* 38 (January 1975): 128; David B. Gracy, II, *Archives & Manuscripts: Arrangement and Description* (Chicago: Society of American Archivists, 1978).

This progress from automated information retrieval to descriptive techniques did not address the other challenge to archivists posed by automation, namely machine-readable records and ADP systems. The response to this challenge began, as had the information retrieval question, in the late 1960s; but the effort progressed differently. While the latter program began with a burst of activity and gradually moved away from automation, the machine-readable record program in SAA grew slowly but never deviated from the concern over ADP systems.

SAA's formal involvement with machine-readable records first occurred in April 1967, the same month in which the special issue of the *American Archivist* dealing with automated techniques appeared. At this time, the society cooperated with four other organizations in sponsoring a National Symposium on the Impact of Automation on Documentation. The focus was the problems facing archivists and researchers as a result of records and other historical source materials in machine-readable form. This effort was coincidental with another project at the National Archives. In December 1966 the Archivist of the United States, Robert H. Bahmer, had appointed a Committee on the Disposition of Machine-Readable Records, chaired by Everett O. Alldredge. The committee also included Herbert Angel and Meyer Fishbein. In January 1968, the committee submitted a draft report to Bahmer which strongly argued "that machine-readable media are records." This report not only led the National Archives to initiate a machine-readable records program but also prompted

Alldredge to propose a year later that SAA establish a committee to deal with the problem. In the fall of 1969 Alldredge assumed chairmanship of the new Ad Hoc Committee on Machine-Readable Records and Data Archives. Coincidental with the establishment of this committee was the 1969 annual meeting in Madison. One entire session was devoted to the management of machine-readable records through the use of computer-output microfilm. Rejecting this solution, which Rieger had four years earlier proposed on behalf of SAA, several in the audience, including Alldredge, commented that this technology was not the answer. In an unrelated session on appraisal, Fishbein contended that quantitative computerized data are more useful for varied studies and that archivists must be concerned about the preservation of such records. Thus with a formal structure established and open discussion on techniques for automated records begun, SAA can be said to have begun a program to deal with ADP records in 1969.¹³

During its first year, the Committee on Machine-Readable Records attempted to establish a clearinghouse function by circulating reports to committee members on current developments in the field. To inform members of the society, the committee arranged for a session at the 1970 annual meeting in Washington. Entitled simply "Machine-Readable Records," it confronted head-on the issue of whether archives should accession machine-readable records. In the first paper, "Magnetic Tape as Archival Medium," the speaker expressed "considerable optimism about the durability of magnetic tape." Fishbein delivered the second

¹³"Symposium on Automation," *American Archivist* 30 (July 1967): 533; Robert H. Bahmer to Chairman, Committee on Disposition of Machine-Readable Records, 23 February 1968, Box IIIB, Meyer H. Fishbein Papers, National Archives, Washington, D.C. (hereafter cited as MHF Papers); "33rd Annual Meeting," *American Archivist* 33 (January 1970): 71; Meyer H. Fishbein, "A Viewpoint on Appraisal of National Records," *American Archivist* 33 (April 1970): 175-89.

paper and expanded his earlier thoughts on the appraisal of machine-readable records. He argued strenuously that automated records can have value only as a result of that format. Finally, the session concluded with a discussion of the technical documentation needed to accession machine-readable materials into a repository. Building on this background that demonstrated the necessity and feasibility of accessioning automated records, the committee in 1971 moved toward outlining the procedures for inventorying computer records, calling them the "essence of the accessioning process." Alldredge prepared a draft and circulated it to the committee members. Rather than calling for a session at the annual meeting, the committee proposed publishing the draft in the *American Archivist*. As this project was being completed in the autumn of 1971, Alldredge stepped aside. In turn, Fishbein assumed the chairmanship of the Committee on Data Archives and Machine-Readable Records.¹⁴

Only the chairman and two others attended the first meeting under Fishbein in October 1971. Despite this limited attendance, the committee established two priority projects: a bibliography on data processing systems and a survey of repositories about their plans and programs for machine-readable records. The three members present also discussed the development of a workshop to educate archivists in computerization and preservation of electronic media. During the next twelve months, however, progress was made only on the survey: a questionnaire concerning both computerized control and records was drafted. The

meeting of the committee in November 1972 was better attended: members revised the questionnaire and approved the document for distribution. More importantly, the committee also approved three long-term objectives: to inform SAA members about computerized records, especially appraisal concerns; to develop standards for data archives; and to recommend suitable readings and training programs. To achieve these objectives, the committee adopted a series of projects for the ensuing year. These included conducting the survey, beginning a bibliography, collecting suggestions for training programs for archivists, and developing communication links within and outside of SAA. As a first step in this last proposal for liaison activity, Fishbein became chairman of the automation committee of the International Council on Archives (ICA).¹⁵

During 1973, the survey forms trickled in. More than half of the responding archives in the United States and Canada reported that they did not consider ADP media to be record material and certainly did not plan to accession them. The respondents also reported little interest in the production of automated finding aids. In the Executive Director's annual report, he called the results "disturbing. ... The survey should prompt us to do something about the situation." Since the survey report concluded that "training programs are urgently required for archivists," the committee decided to develop in 1974 a curriculum for archivists and offer a trial course. Fishbein secured permission to offer a course at the National Archives based on the curriculum he had used at a comparable and

¹⁴"News Notes," *American Archivist* 34 (January 1971): 108; "34th Annual Meeting," *American Archivist* 34 (January 1971): 47; Meyer H. Fishbein, "Appraising Information in Machine Language Form," *American Archivist* 35 (January 1972): 35-44; "Report of the Ad Hoc Committee on Machine-Records," *American Archivist* 35 (January 1972): 123; Everett O. Alldredge, "Inventorying Magnetic Media Records," *American Archivist* 35 (July/October 1972): 337-46; Charles Lee to Meyer H. Fishbein, 15 December 1971, MHF Papers.

¹⁵"Report By the Chairman to the Committee on Data Archives and Machine-Readable Records," 23 November 1971, MHF Papers; "Report of the Committee on Data Archives and Machine-Readable Records," 23 August 1972, MHF Papers; "Meeting of the SAA Committee on Data Archives and Machine-Language Records, 2 November 1972, Columbus, Ohio," MHF Papers.

highly successful seminar at the University of Essex under the sponsorship of the International Council on Archives. When only four responded to the announcement in the *SAA Newsletter*—a response that did not justify allocation of staff resources—Fishbein commented that “It seems that archivists in underdeveloped nations are more anxious to learn about the computer than [are] U.S. archivists.”¹⁶

Undaunted by the lack of response, the committee continued its work and organized a session at the 1973 meeting in St. Louis on the “Archival Potential of ADP Media.” Interestingly enough, the St. Louis meeting also included a session sponsored by COTCADAM entitled “The Finding Aid in Perspective,” in which the impact of automation on finding aids in the future was discussed. Unsponsored by either committee was a presentation of a trilogy of “Free-Form Sessions” or open houses dealing with the theme of “Automation for Beginners.” In this first effort to cope with both electronic records and control systems, the sessions dealt with automated retrieval in a university archives, systems analysis, and machine-readable records. As for the committee’s work, the bibliography was compiled in 1974 and accepted for publication in the *American Archivist*. Even as it was finished, Fishbein proposed a revised and

considerably expanded version.¹⁷

At its 1974 meeting, the Committee on Machine-Readable Records discussed possible initiatives into automated finding aids and other archival controls. As a result of the discussion, the committee proposed establishing liaison with other committees. In the spring of 1975, Fishbein wrote to the other committee chairs about the possibility of establishing liaisons. Only a few responded, and only one—the Urban Affairs Committee—reacted favorably to the proposal. Feeling that no other committee was addressing automated applications, Fishbein wrote to SAA President James B. Rhoads. With Rhoads’s support, in September 1975 Council approved a plan to expand the committee’s area of concern to include the application of automated procedures in archival administration. As a result, the Committee on Automated Records and Techniques emerged. Within a year, the committee’s membership reflected this new responsibility. In August 1976, the committee even decided that its principal concern was the production of automated finding aids. To implement this, the major effort for the coming year would be a survey of software systems that might be adopted to meet the needs of state, local, business, religious, and other archives. Before this survey was completed, Richard Lytle became chairman of the committee in October 1976.¹⁸

¹⁶“Report of the Committee on Data Archives and Machine-Readable Records—Fiscal Year 1973,” MHF Papers; “Report of the Executive Director,” *American Archivist* 37 (January 1974): 17; Meyer H. Fishbein to Judith Koucky, 24 October 1973, MHF Papers; “Annual Report of the Data Archives and Machine-Readable Records Committee,” [October 1974 (?)], MHF Papers; Meyer H. Fishbein to August R. Sueflow, 11 January 1974, MHF Papers.

¹⁷*Society of American Archivists, 37th Annual Meeting, St. Louis, Missouri, September 25–28, 1973*, p. 13–14, 19, 25, 27; Meyer H. Fishbein to SAA Committee Members, 27 July 1973, MHF Papers; “Meeting, SAA Committee on Machine-Readable Records, Toronto, October 1, 1974,” MHF Papers; Meyer H. Fishbein, “ADP and Archives: Selected Publications on Automatic Data Processing,” *American Archivist* 38 (January 1975): 31–42.

¹⁸“Meeting, SAA Committee on Machine-Readable Records, Toronto, October 1, 1974,” MHF Papers; Meyer H. Fishbein to James B. Rhoads, 28 May 1975, MHF Papers; James B. Rhoads to Meyer H. Fishbein, 30 May 1975, MHF Papers; “Annual Report, Machine-Readable Records Committee,” June 1975, MHF Papers; Minutes of Council meeting, 29 September 1975, *American Archivist* 39 (April 1976): 249; “Minutes of Meeting, Committee on Machine-Readable Records, Franklin Institute, September 30, 1975, Philadelphia, PA.,” MHF Papers; “Annual Report, Committee on Machine-Readable Records and Automated Techniques,” 30 August 1976, MHF Papers; Ann Morgan Campbell to Meyer H. Fishbein, 10 September 1976, MHF Papers.

During Fishbein's five-year tenure as chairman of the committee, it had laid to rest the idea that computer-output microfilm was the solution to ADP records systems, had begun the effort at developing liaison activity within and outside of the society, had established the importance of training programs as a concept, had developed the importance of maintaining a bibliography on computer processing, and had brought computer applications and records under the same roof within SAA. These successes, however, did not mean that SAA had successfully met all of the challenges posed by the computer. As Fishbein commented, "For some reason my efforts in behalf of SAA were not as successful as those in behalf of ICA. It was not failure to try." In line with the theme that much remained undone, Wilfred I. Smith argued in his presidential address, "As a society of archivists we have an interest in insuring that the need to identify and preserve machine-readable records of an archival nature is recognized, [and] that procedures are adopted which will insure the transfer and preservation of information in this form." Despite this need, he continued, many professionals "have abdicated their responsibilities" and have permitted information to be destroyed.¹⁹

Lytle's tenure as chairman ended with his election to Council in 1977. During his term the committee organized a session for the 1977 annual meeting on the "Appraisal of Machine-Readable Records." Probably more significant, Lytle proposed two projects for the Committee on Automated Records and Techniques. The first was to prepare another

special issue of the *American Archivist*, which would focus on automated retrieval. The second was to secure grant funding to explore automated access to archives. Both of these proposals would be pursued within SAA, one by the committee under different leadership and the other by another structure under Lytle's leadership.²⁰

When Lytle left the chairmanship of the committee to join Council, Charles M. Dollar and Carolyn L. Geda became co-chairs. Their premise was that "the Society's level of awareness of automation and its impact on archives is quite low and can be raised significantly only through a systematic effort extending over several years." To achieve this goal, the co-chairs proposed a five-year plan for 1978-82 in which they incorporated the unfinished business proposed by Fishbein and Lytle, both of whom remained members of the committee. The plan called for developing workshops on automated records and applications as well as formal sessions for the annual meetings, two special issues of the *American Archivist*, solicitation for funding of an in-depth study of automated access to archives, surveys on the extent of automation and automated records in repositories, and formal liaison activities with other society committees and external organizations. The proposed plan called for the committee to disband after the fifth year. To consider this plan, the co-chairs called for a special meeting of the committee in February 1978. The committee made two revisions before approving the document as its plan of action. Since Lytle had been ap-

¹⁹Meyer Fishbein, "SAA Committee on Automated Records and Techniques," 15 November 1976, MHF Papers; Wilfred I. Smith, "Broad Horizons: Opportunities for Archivists," *American Archivist* 37 (January 1974): 7-8.

²⁰"Proposed Session for 1977 SAA Conference: Appraisal of Machine Readable Records" in SAA Committee files, Inter-University Consortium for Political and Social Research, Ann Arbor, Michigan, (hereafter cited ICPSR Records); Richard H. Lytle to [Committee Members], 10 March 1977, ICPSR Records.

pointed as chairman of the SAA Task Force on National Information Systems for Archives and Manuscript Collections, the committee agreed to assist with Lytle's task force in whatever way it could. Rather than disbanding after five years, the committee concurred in a proposal to reassess its existence at that time. In April 1978 Dollar forwarded the revision to society headquarters requesting approval. In his cover letter, Dollar admitted that years four and five of the plan "of necessity are fuzzy now. ... the bottom line for year five is organizing the annual meeting around the theme of automation and archives." The vagueness was addressed in 1979 and 1980 by the group, which in 1979 became the Task Force on Automated Records and Techniques, or the ART Task Force, as a result of the reorganization of the society's committees into Professional Affinity Groups (PAGs), standing committees, and task forces. Rather than just developing specifics for the concluding years, the ART Task Force evolved over two years a new five-year plan for 1980-84. This new action plan included the elements of the old plan and incorporated new projects in which the task force had found itself engaged. These new initiatives included the development of training programs for automated access, publication of a bibliography, and the inclusion of automated records in SAA's Basic Manual Series. The main deviation from the earlier plan was to de-

emphasize the organization of sessions at the annual meetings and emphasize the development of workshops. The rationale behind this was that "a considerable number of suggestions for sessions dealing with automation and machine-readable records came from the general membership and not only from Task Force members." Therefore the emphasis should be on providing society members with opportunities for educational programs on automated applications and computerized records. The exception would be the 1984 annual meeting at the conclusion of the five-year program. The task force proposed that "every session, seminar, and workshop ... be directed in some way to the field of automation." Council modified the proposal to "encourage" the task force "to develop a major thematic element on automation" for the annual meeting.²¹

These five-year plans laid the foundation for the accomplishments of the ART Task Force and also provided for continuity in the program when in September 1979 Harold Naugler replaced Dollar as a co-chair with Carolyn Geda. Also providing a structure and continuity to the task force was the concept of holding mid-year meetings every spring in Washington, D.C. In this sense, the February 1978 meeting, which ratified the first five-year plan, was the first mid-year meeting. As the Report of the Committee for the 1970s stated, "It is generally recognized that not all committee work

²¹Charles M. Dollar to Walter Rundell, Jr., 26 October 1977, ICPSR Records; Carolyn L. Geda and Charles Dollar to [Committee Members], 23 December 1977, ICPSR Records; "Proposed Five Year Plan for SAA Committee on Automated Records and Techniques Committee [sic]," [December 1977], ICPSR Records; Charles Dollar to Automated Records and Techniques Committee, 22 February 1978, ICPSR Records; Charles M. Dollar to Ann Morgan Campbell, 7 April 1978, ICPSR Records; "Proposed Five Year Plan for SAA Committee on Automated Records and Techniques: Second Version," April 1978, ICPSR Records; "Minutes of Mid-Year Meeting Held in Washington, 27-28 March 1980," ICPSR Records; "Minutes of the Annual Business Meeting of the SAA Task Force on Automated Records and Techniques, Cincinnati, 29 September 1980, 1:00-5:00 P.M.," ICPSR Records; "Minutes of the Mid-Year Meeting Held in Washington, 10 April 1981," ICPSR Records; "Five Year Plan of the Task Force on Automated Records and Techniques," [July 1981], ICPSR Records; "T. F. Mtg Monday A.M.," handwritten notes [31 August 1981], ICPSR Records; Minutes of Council meeting, 31 August 1981, *American Archivist* 45 (Spring 1982): 237.

can be conducted profitably by correspondence and brief telephone conversations." These mid-year meetings enabled the committee and then the task force to overcome what an SAA secretary called "a considerable handicap" of conducting activities by mail rather than at periodic meetings.²²

Many of the activities of the committee and task force from 1978 through 1983 mirrored similar ideas and efforts from the early 1970s. For example, echoing a theme, which harkened back to 1967, of establishing liaison with other organizations inside and outside of SAA, the task force had a member assigned to work with more than fifteen different organizations. Implementing the 1974 suggestion to expand the Fishbein bibliography, Richard Kesner agreed in 1979 to coordinate the development of a bibliography on machine-readable records and automated access. His efforts resulted in his publication of *Automation, Machine-Readable Records, and Archival Administration: An Annotated Bibliography* in 1980 and the revised edition in 1983. In the tradition of the earlier surveys conducted by the Committee on Machine-Readable Records and COTCADAM, the ART Task Force established a program for a series of surveys dealing with different types of repositories. In 1978 Ben DeWhitt surveyed state and provincial establishments in the United States and Canada; in 1981 Leon Stout and Donald Baird contacted college and

university archives; and in 1982 Kesner polled business repositories. All of the surveys questioned both the use of automated techniques and the administration of machine-readable records. Once the results were tabulated, the summary reports appeared in the *American Archivist*.²³

Also in the area of publication, the ART Task Force put together two special issues of the *American Archivist*, the first one in April 1979. This Fall 1984 issue is the second. Although the five-year plan originally proposed a series of manuals on machine-readable records, Council approved in 1981 the development of one comprehensive manual on the subject. Margaret Hedstrom agreed to undertake the writing of this booklet and had a draft prepared in 1983 for publication the following year. In 1980 DeWhitt and Victoria Irons Walch agreed to survey systems with archival applications, a project originally suggested in 1976. Concluding that such a one-time survey would be quickly dated due to technological advance, they proposed a new column in the *American Archivist* that would allow reporting of new developments as they occurred. Since the journal was under space constraints, a new column was not feasible. As a consequence, in 1981 DeWhitt assumed the editorship of the Technical Notes column and made it his purpose to include more information on automation.²⁴

²²"Report of the Committee for the 1970s," *American Archivist* 35 (April 1972): 202; Report of the Secretary, 1968-69, *American Archivist* 33 (January 1970): 119.

²³Richard M. Kesner to Committee on Automated Records and Techniques, 20 February 1979, ICPSR Records; Richard M. Kesner, *Information Management, Machine-Readable Records, and Administration: An Annotated Bibliography* (Chicago: Society of American Archivists, 1983); Ben DeWhitt, "Archival Uses of Computers in the United States and Canada," *American Archivist* 42 (April 1979): 152-57; Richard M. Kesner, "Automated Records and Techniques in Business Archives: A Survey Report," *American Archivist* 46 (Winter 1983): 92-95.

See also Leon J. Stout and Donald A. Baird, "Automation in North American College and University Archives: A Survey," *American Archivist* 47 (Fall 1984): 394-404.

²⁴Ben DeWhitt and Victoria Irons Walch to SAA Task Force on Automated Records and Techniques, 26 September 1980, ICPSR Records; "Minutes of the Annual Business Meeting of the SAA Task Force on Automated Records and Techniques, Cincinnati, 29 September 1980," ICPSR Records; "Society of American Archivists Task Force on Automated Records and Techniques Minutes of the Mid-Year Meeting Held in Washington, 10 April 1981," ICPSR Records; *American Archivist* 42 (April 1979): *passim*; "Mid-Year Meeting of the Task Force on Automated Records and Techniques, 5 April 1982," ICPSR Records.

The educational program developed by the task force can trace its roots to 1972 when the Committee on Machine-Readable Records established training programs as one of its long-term objectives. The training program of the ART Task Force, however, was more an evolution than anything else. The five-year plans called for training workshops to be held during the annual meetings, and the Committee on Automated Records and Techniques sponsored its first such workshop on appraisal in 1978. This workshop was repeated in later years, and either co-chairs or individual members organized additional training workshops and seminars on Automated Access to Archives (1979), Training Programs for Handling Machine-Readable Records (1979), Electronic and Non-Electronic Storage Media (1980), and The Use of Micro and Mini Computers in Archival Administration and Information Management (1980). At the annual meeting of the task force in 1980, the discussion turned toward educational activities. It appeared that the efforts of the task force lacked an underlying structure. To coordinate the contents of the various workshops conducted by different people, the group agreed to consider the development of a core curriculum. The following spring at the mid-year meeting, a document dealing only with machine-readable records was considered and was approved in principle. The proposal outlined the behavioral objectives of the workshops held at the annual meetings. The ra-

tionale was to prepare workshops that would deal with various archival functions based on a common curriculum. Once the content was developed, the core curriculum could tie the individual workshops together into a two-day pre-conference educational program.

This core curriculum, designed to structure the task force's training program, was approved by Council in September 1981. As this document was evolving, the task force began developing a comparable curriculum for workshops on automated techniques. Once again, the goal was to have a common curriculum underpinning each workshop in order to combine the separate elements into a two-day pre-conference program. In 1982, the task force began sponsoring these workshops on automated techniques during the annual meeting and planned to combine them into a pre-conference educational program in 1985. In 1983, the task force did merge the individual workshops on computer records offered during earlier annual meetings into a sixteen-hour training program which was first presented as a pre-conference workshop at the society's annual meeting in Minneapolis.²⁵

Obviously, many of the accomplishments of the ART Task Force from 1977 through 1983 reflected earlier ideas and suggestions. Even the mid-year meeting was proposed as early as 1971, when a member of the Committee on Machine-Readable Records suggested a special spring meeting of the committee in

²⁵Charles Dollar and Carolyn L. Geda to Members of the Automated Records and Techniques Committee, Subject: Nashville [September 1978], ICPSR Records; Untitled [List of Task Force Sessions for the 1980 SAA Annual Meeting], ICPSR Records; "Summary of 1980 SAA Activities," ICPSR Records; "Minutes of the Annual Business Meeting of the SAA Task Force on Automated Records and Techniques, Cincinnati, 29 September 1980," ICPSR Records; "Minutes of the Mid-Year Meeting Held in Washington, 10 April 1981," ICPSR Records; Minutes of Council meeting, 31 August 1981, *American Archivist* 42 (Spring 1982): 237; "Mid-Year Meeting of the Task Force on Automated Records and Techniques, 5 April 1982," ICPSR Records; "Task Force on Automated Records and Techniques Business Meeting, Monday, October 18, 1982, Boston," ICPSR Records; "Society of American Archivists Automated Records and Techniques Mid-Year Meeting, Monday, 11 April 1983, Washington, D.C., Record of Decisions," ICPSR Records; "Society of American Archivists Task Force on Automated Records and Techniques Annual Meeting, Tuesday, October 4, 1983, Minneapolis, MN," ICPSR Records.

Washington. The key difference is that during its later years the task force developed proposals and plans made many years earlier into a wide ranging program of publications, presentations, and projects. Reflective of the fact that the task force in later years achieved its early goals was Kesner's dedication of his revised bibliography to Fishbein.²⁶

While the ART Task Force was moving in these areas, it obviously was not the only element within the society to address automation. One of the most visible efforts was the National Information Systems Task Force (NISTF), whose history is detailed elsewhere in this issue. NISTF and the ART Task Force maintained constant communication because a few individuals served on both task forces and because NISTF outlined its activities at each annual and mid-year meeting of the ART Task Force. From an historical perspective, Schellenberg had argued that standardization of descriptive techniques was a prerequisite for a national information system among archives. COTCADAM had developed a statement of the basic or required descriptive elements for use in automated systems. NISTF expanded the effort to describe the basic elements into a statement outlining the common elements.

SAA's publication program included two efforts beyond the sponsorship of either task force. First, as a result of the success of the initial Basic Manual Series supported by the National Historical Publications and Records Commission, the granting agency supported an expansion of the program. As a result, SAA headquarters arranged for H. Thomas

Hickerson to write his *Archives & Manuscripts: An Introduction to Automated Access* for publication in 1980. Similarly, the society's Executive Director, Ann Morgan Campbell, assisted the Inter-University Consortium for Political and Social Research and the Bentley Historical Library in organizing the Conference on Archival Management of Machine-Readable Records sponsored by the National Endowment for the Humanities during February 1979. The proceedings subsequently emerged as an SAA publication, *Archivists and Machine-Readable Records*. Also beyond the activities of any ongoing SAA structure to deal with automation, the *American Archivist* carried a variety of articles dealing with automation, primarily on automated administration. Likewise, a variety of program sessions at each annual meeting dealt with machine-readable records and automated controls. Indeed the 1980 annual meeting had an overall theme of "Agenda for the '80s." One of the seven subthemes was "The Computer and the Archives" because, as the program chairs argued, "Surely most archivists will be forced to come to terms with the computer during the '80s." In turn, they solicited suggestions on both automated control and automated records. For the 1984 meeting, the ART Task Force followed through on the 1981 mandate from Council to develop a major thematic element on automation and proposed to the Program Committee eleven sessions, seminars, and workshops.²⁷

While these developments were taking place, the question of which structure SAA should use in coping with the com-

²⁶Jerome Clubb to Meyer H. Fishbein, 16 January 1971, MHF Papers; Kesner, *Information Management, Machine-Readable Records, and Administration: An Annotated Bibliography*.

²⁷H. Thomas Hickerson, *Archives & Manuscripts: An Introduction to Automated Access* (Chicago: Society of American Archivists, 1980); Carolyn L. Geda, *Archivists and Machine-Readable Records* (Chicago: Society of American Archivists, 1980); for articles in the *American Archivist*, see Kesner, *Information Management, Machine-Readable Records, and Administration: An Annotated Bibliography*; "1980 Program Committee Seeks Suggestions" with "Agenda for the '80s," ICPSR Records; Richard M. Kesner to Fellow Programming Committee Members, 9 November 1983, ICPSR Records.

puter had yet to be decided. This question had arisen as early as the late 1960s and early 1970s, when both the Committee on Automation and the Committee on Machine-Readable Records objected to their Ad Hoc status. In 1977, Lytle directly posed the question of whether the Committee on Automated Records and Techniques should exist at all. In asking the question, he pointed out that the committee had two different concerns: automated access and automated records. "Automated access to archives is inseparable from these problems of data element standardization, subject control, and the like—most of which topics are addressed by the Finding Aids Committee." Secondly, machine-readable records are merely a different format of information and possibly should be addressed by the functional committees. The questions of automation could be addressed by subcommittees within the society's structure. To this proposal, the responses indicated no consensus on the question. Three members responded that the greater issue was how to effect cooperation and communication among committees. Two held the opinion that a possible solution was to have the committee function on a short-term basis, perhaps for three to five years, and then disband into subcommittees; but two others objected to the subcommittee concept out of fear that the broader interests of the main committee would neglect automation concerns. Finally,

one committee member commented that automated records and techniques are so dissimilar that they warrant separate committees.²⁸

This same question arose when the committee adopted the first five-year plan and argued over whether the committee should disband at the conclusion of the outlined program. By agreeing only to evaluate the continued existence at the end of five years, the members had not reached an agreement. The issue arose again in October 1982 as the task force turned to a formal proposal to create an Automated Records PAG and an Automated Techniques Task Force. A wide range of opinions distilled to a consensus to continue the ART Task Force at least through 1984 and the conclusion of the five-year plan—only to have the issue raised again six months later at the mid-year meeting in April 1983.²⁹

A question underlying these arguments is whether automated control can be divorced from descriptive techniques. Similarly for machine-readable records, the question is whether the functional responsibilities for computerized materials should be associated with similar activities dealing with information in other formats. At one time, an organization concerned with computerization was indeed merged into a broader archival concern. This occurred when the Committee on Automated Techniques became COT-CADAM with a Subcommittee on Automated Techniques. Within two years, the

²⁸Frank G. Burke to Members of Ad Hoc Committee on Automated Techniques for Archival Agencies, 9 October 1967, FGB Papers; Frank G. Burke to Committee on Automated Techniques for Archival Agencies, 9 November 1967, FGB Papers; Mike Carroll to R. H. Lytle, 12 August 1977, ICPSR Records; Max Evans to Richard H. Lytle, 25 March 1977, ICPSR Records; Carolyn L. Geda to Richard H. Lytle, 11 April 1977, ICPSR Records; Mike Lewellen to Richard H. Lytle, 15 March 1977, ICPSR Records; Belden Menkus to Richard H. Lytle, 11 March 1977, ICPSR Records; Ben DeWhitt to Richard H. Lytle, 29 March 1977, ICPSR Records.

²⁹Charles M. Dollar to Automated Records and Techniques Committee, 22 February 1978, ICPSR Records; "The Future of the SAA Automated Records and Techniques Task Force," n.d. [Summer 1982], ICPSR Records; "Task Force on Automated Records and Techniques Business Meeting, Monday, October 18, 1982, Boston," ICPSR Records; "Society of American Archivists Automated Records and Techniques Task Force Mid-Year Meeting, Monday, 11 April 1983, Washington, D.C.," ICPSR Records.

interest in automated control had waned to the point that Council expanded the Committee on Machine-Readable Records to include computerized control. While the idea of merging automation concerns with the broader efforts is sound in theory, such a procedure in fact may result in the neglect of automation. As one committee member responded to Lytle's query in 1977 on the subject, "It is much easier to retreat to a concern with the permanence of ball point pen entries in bound books than it is to be concerned with, say, the role of data base management architecture in determining file access structure."³⁰

A possible solution to this dilemma is strong communication between those concerned with automation and the groups dealing with the broader issues. Indeed, Lytle's questioning in 1977 elicited comments from three committee members that the broader question was inter-committee communication and cooperation. Attempts to overcome these problems have failed to achieve overwhelming success. Fishbein's proposal to establish liaison with other SAA committees elicited little response. Similarly in 1978, Dollar and Geda had sent copies of the initial five-year plan to all committee chairs and Council members. To follow up, the Committee on Automated Records and Techniques hosted at the annual meeting a party to provide an opportunity for these people to offer their comments and suggestions. While aware of the existence of the five-year plan, the chairs of the other committees made few suggestions and offers of cooperation.³¹

Similarly, the ART Task Force received little feedback from Council.

After approval of the initial five-year plan in 1978, Council provided little reaction to the activities of the task force. The one exception took place in August 1981 when a Council member explained to the task force the changes which Council had made to the second five-year plan in approving the document. An indication of this lack of communication came when the Committee on Automated Records and Techniques was reconstituted in 1979 as a task force as part of the restructuring of many of the committees into PAGs. Correspondence between Council and the committee's co-chairs revealed that Council felt that the committee's responsibility was limited to only machine-readable records. This misunderstanding occurred even though Council had expanded the committee's responsibilities five years earlier and the committee had been proposing initiatives in automated retrieval.³²

These communication problems were not limited to the automation committees, but were part of a larger concern of the society throughout the 1970s. Minutes of Council meetings and the reports of the Executive Secretary or Executive Director frequently contain statements of concern about intra-society communication and organization. Indeed, SAA reorganized its committee structure twice in seven years, once in 1972 and again in 1979, to address the problem. In other years, SAA presidents periodically proposed or implemented new procedures to increase the information flow. But these efforts have not solved the problem if a meeting in 1982 between a Council representative and the chairs of all SAA task forces is an indica-

³⁰Belden Menkus to Richard H. Lytle, 11 March 1977, ICPSR Records.

³¹"Notes from the Meeting of the Automated Records and Techniques Committee, October 3, 1978," ICPSR Records.

³²Paul McCarthy to Carolyn Geda, 3 January 1980, ICPSR Records; Carolyn Geda to Paul McCarthy, 23 January 1980, ICPSR Records.

tion. At that time the chairs complained again about the level of communication.³³

Despite the society's accomplishments, the ART Task Force identified in April 1983 a number of unfinished or untouched problems. These include the hardware and software specifications for archival systems based on the NISTF data elements. In the area of machine-readable records, the task force acknowledged that little work has been undertaken to solve the archival problems associated with recent technological innovations. These include database management systems, microprocessors, digitized textual information, computerized cartographic information dependent on plotter hardware, optical digital data disk technology, and transborder data flow questions. In the interrelationship between automated control and records, uncertainty remains over differences be-

tween the standardized cataloging format for machine-readable records and the format for archival materials that happen to be machine-readable.³⁴

The organizational structure of committees and task forces made significant strides in coping with the twin challenges of automation. While these advances have taken place, however, three obstacles have posed problems. First, archivists have been unable to decide on an organizational structure best suited to confront the problems of automation. Second, difficulties with communications within the society have hampered the development of a coordinated effort to confront the computer. Finally, the advance of technology has created new and unanswered challenges. Because of this trilogy, it would be premature to propose reconstituting SAA as the Society of Atari Archivists.

³³The most succinct statement about the communication problems within SAA is the Report of the Committee on Committees which appeared in the *SAA Newsletter* (July 1978); Paul McCarthy to Frank Cook, 11 November 1982, ICPSR Records.

³⁴"SAA Task Force on Automated Records and Techniques Goals and Objectives—Automated Techniques—1985–1987," ICPSR Records; "SAA Task Force on Automated Records and Techniques Goals and Objectives—Automated Records—1985–1987," ICPSR Records.