SPECIAL REPORT OF THE
JOINT LEGISLATIVE
AUDIT AND REVIEW COMMISSION ON

The Virginia State Library's Contract with The Computer Company

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

House Document No. 5

MEMBERS OF THE
JOINT LEGISLATIVE AUDIT
AND REVIEW COMMISSION

COMMONWEALTH of VIRGINIA

Joint Legislative Audit and Review Commission
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November 12, 1984

Delegate L. Cleaves Manning
Chairman
Joint Legislative Audit and Review Commission
910 Capitol Street
Richmond, Virginia 23219

Dear Delegate Manning:

I am pleased to send you a copy of the special study "Virginia State Library Contract With The Computer Company". This study examines whether the State Library followed State procedures in awarding the contract to TCC and whether public libraries are satisfied with the services being provided by TCC.

We wish to acknowledge the cooperation and assistance extended to our staff by the State Library and The Computer Company.

Sincerely,

Ray D. Pethtel
Director

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THE VIRGINIA STATE LIBRARY'S CONTRACT WITH THE COMPUTER COMPANY

On March 12, 1984 Speaker A. L. Philpott requested a special review of the contract between the Virginia State Library and The Computer Company (TCC). This contract calls for TCC to convert card catalogs of local libraries to machine readable form. During April 1984, the commission authorized three issues to be examined during the course of the inquiry: (a) Did the VSL follow State procedures in awarding a contract to TCC? (b) Are there provisions in the contract protecting VSL's proprietary interests in computer software? and (c) Are public libraries satisfied with the services being provided by TCC?

Findings and conclusions contained in this report are based on interviews with State Library and TCC personnel; letters and documentation supplied by several local libraries; and a telephone survey of 19 public libraries which have received funds under the State contract. Key findings of the study are:

1. State procurement procedures for computer services were followed by the State Library in awarding the catalog conversion project to TCC.

2. The State contract clearly specifies the State Library's ownership rights in certain computer software.

3. Public libraries believe that the quality of TCC services and products have improved since the conversion project was initiated in 1980. However, most of the libraries which received grants in 1980 and 1981 reported dissatisfaction with TCC's overall performance. This is the period of time when the project was in its developmental stages and TCC, the public libraries, and the State Library were novices in catalog conversion. Public libraries had certain service expectations of TCC which were not always met. As time passed, TCC was better able to deliver on its earlier promises of services and the public libraries gained more experience with catalog conversion. Today, many public libraries believe that TCC's catalog conversion system has great promise and have opted to continue their business relationship with the company.

4. Better project management and communication by the State Library at the outset of the project could have averted some of the problems public libraries were having with TCC's services. The contract with TCC should have been revised in subsequent years to better reflect TCC's contractual and performance responsibilities. Greater attention needs to be given by the State Library to

monitoring the performance of TCC and to improving
communication with public libraries on matters related
to the catalog conversion project.

TCC CONTRACT

Automating public libraries in Virginia is a major goal of
the State Library. Many local libraries still rely on manually
operated systems, such as card catalogs and shelf lists to locate and
circulate books. Library automation is viewed as a more efficient and
cost effective way to enhance library circulation control and to
foster interlibrary cooperation. However, substantial expenditures
are required to build large bibliographic data bases, computerize card
catalogs, and acquire electronic equipment and systems.

An important first step toward library automation occurred
in 1979 when the State Library, through the Department of Management
Analysis and Systems Development (MASD), hired TCC to establish and
maintain a statewide data base of over a million book titles. The
State Library acquired from the Online Computer Library Center (OCLC)
in Columbus, Ohio, archival tapes containing the cataloging data for
about 30 Virginia libraries including the major State universities.
Today, 93 libraries are adding their holdings to the Virginia data
base. TCC is responsible for merging the tapes into a single data
base for the production of a microfiche union catalog. The union
catalog is referred to as CAVALIR and identifies the titles of books
and their specific locations around the State. The union catalog is
used by libraries all over the Commonwealth to support interlibrary
loan and reciprocal borrowing activities.

Another significant milestone in library automation took
place in July 1980 when the State Library contracted with TCC to begin
converting manual card catalogs of public libraries to machine
readable form consistent with the Library of Congress Machine Readable
Cataloging (LC-MARC) format. Seven public libraries (Blue Ridge,
Chesapeake, Chesterfield, Jefferson-Madison, Lonesome Pine, Norfolk,
Portsmouth) applied for grants during the first phase of the project.
Although Chesterfield withdrew voluntarily from the project, 13 public
libraries were added during subsequent phases of the program. As
stated in the contract specifications, the ultimate use of the data
produced under the conversion project was to support networking on a
regional or statewide basis. Local libraries perceived the project as
an excellent opportunity to computerize their holdings and to lay the
groundwork for the development of automated circulation and
acquisition systems.

Contract Award and Project Funding

A review of the contract and accompanying documentation
indicates that State procedures for computer services were followed in
awarding the 1980 contract to TCC.

Original Contract. MASD was requested to assist in the preparation of a "Request for Proposal" letter, as required under Section 2.1-410 of the *Code of Virginia*, describing the requirements of the conversion project. The RFP was sent to several vendors on February 8, 1980. Three firms responded to the RFP:

(1) Baker and Taylor "Libris" Company, Somerville, New Jersey

(2) Bro-Dart, Inc., Williamsport, Pennsylvania

(3) The Computer Company, Richmond, Virginia

The selection committee was composed of officials representing the State Library, Virginia Tech, Department of Community Colleges, and MASD. Each of the proposals was rated. TCC scored the highest and its bid was the lowest.

TCC is a subsidiary of Blue Cross and Blue Shield (BC/BS) of Virginia. BC/BS acquired TCC to compete with other computer service companies which were entering the health care claims processing business. TCC is known for its processing of Medicaid claims for Virginia and other states. As a result of the acquisition, BC/BS also became the owner of several incidental business activities within TCC such as the library services group. TCC's annual sales are over $30 million, of which about three percent is generated from the sale of services to public libraries.

Contract Renewals. Subsequent renewals of the contract have been handled by MASD. The State Library intends to renew the contract for FY 1984-85 and plans to convert the card catalogs of at least 9 public libraries at a cost not to exceed $625,000. For the first time, a local library is being given the option of choosing a vendor outside the State contract, but records must be in a standardized MARC format. One library has contracted with another vendor. Local libraries prefer to have their work done under the State contract rather than follow cumbersome local procurement procedures.

Two other changes in the 1984-85 contract are worth noting. The State Library has requested TCC to input catalog data rather than local library personnel. State Library officials believe that this may be a less costly alternative than paying the salaries of local library staff to input data. Since 1980, the State Library has reimbursed public libraries about $1 million for temporary employees to perform this work.

The second change recognizes OCLC's ownership rights in its data base. Recently, the U.S. Register of Copyright certified OCLC's copyright of its data base. The State Library has requested TCC to eliminate the use of OCLC records in the conversion projects. The State Library has also filed for copyright of the Virginia data base,

but no response has been received from the Register of Copyright. State Library officials believe that there will be no significant impact on the quality of Virginia's data base.

Funding. State and federal funds have been used to finance the conversion of card catalogs, the production of microfiche catalogs, and other related services. Almost $2 million has been spent on this effort. About half of this amount has been spent on services provided by TCC, and the remainder on local library salaries. Expenditures for each conversion project are listed on the following page. State funds comprise about 30 percent of all project costs.

Federal funds are received under the Library Services and Construction Act (LSCA). Two objectives of the act are to strengthen State library administrative agencies and to promote interlibrary cooperation among all types of libraries. State funds are authorized by Title 42.1 of the *Code of Virginia* and Item 354 of the 1984-86 Appropriations Act.

Proprietary Rights In Computer Software

A major legislative concern is the extent to which the existing TCC contract safeguards the State Library's proprietary rights in computer software. This concern has been prompted by a statement which appears in the TCC business plan for marketing library services in Virginia. An excerpt from the business plan was given to JLARC staff during the course of its inquiry. It reads:

> ...We have a contract with VSL to offer retrospective conversion services and COM (computer output microforms) catalogues. We must continue to expand our software capability to fulfill obligations under this contract. These enhancements are pointing us in the direction we need to be going to capture additional market share. <u>In essence, VSL is our consultant paying us to develop software to service them and the software is the property of TCC.</u> (emphasis added)

Loyd C. Lane, Senior Vice President of TCC, requested that he be given an opportunity to clarify the meaning of this statement. In a letter dated May 18, 1984, Mr. Lane writes:

> "Before explaining the statement in question, I feel it is important that you understand the purpose of the document and how it was put together.
>
> First, the document is an internal document which attempts to convey a basic understanding of the Library Division's history and plans to management, and to the Budgeting Committee within The Computer Company. In reality, the plan is more informational than strategic.

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EXPENDITURES FOR CATALOG CONVERSION PROJECTS
(1980-1984)

Library	Expenditures
Alexandria	$ 9,635
*Amherst	49,180
Arlington	28,087
*Bedford	58,715
*Blue Ridge Regional	99,047
*Central Rappahannock	60,272
*Central Virginia Community College	27,005
*Chesapeake	109,618
*Falls Church	76,575
*Hampton	136,459
Henrico	47,312
*Jefferson-Madison Regional	135,497
*Lonesome Pine Regional	184,046
*Lynchburg College	48,802
*Lynchburg Public	72,845
*Norfolk Public	231,786
*Pamunkey Regional	52,204
*Portsmouth Public	143,555
*Prince William Public	109,983
*Roanoke Public	128,498
*Sweet Briar College	55,515
*Williamsburg Public	61,470
Total	$1,926,106

*Received catalog conversion services from The Computer Company and included in JLARC telephone survey.

Source: Virginia State Library.

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As to the development of the document, each product group or division within the Commercial Group is responsible for its own basic plan. This responsibility belongs to the Product or Division Manager, who further delegates the responsibility such that Marketing, Sales, Technical, and Administrative personnel each have a part in developing the narrative. The intent is to have everyone involved in the process, and to use the process as an educational tool. Consequently, it should not be surprising that the statement does not accurately reflect The Computer Company's position.

Relative to the statement itself, it is erroneous and misleading. The Virginia State Library is not our consultant and they are not paying The Computer Company to develop software to service them. You will find by examining our contract with the Commonwealth of Virginia, Virginia State Library, and the Department of Management Analysis and Systems Development, that The Computer Company has contracted to provide Library Services--not software. The specific services are conversion, microfilm catalog publication, provision of a complete copy of a library's machine readable data base, on going catalog maintenance, and provision of a magnetic tape containing a library's local holdings."

A key point of Mr. Lane is that TCC has been hired by the State Library to provide library services and that any software associated with the provision of these services is the property of TCC, not the State of Virginia. A review of the contract indicates that TCC is indeed responsible for providing services to libraries. On page 7, the contract provision on "OWNERSHIP AND USAGE" specifies ownership rights in computer software. A Bibliographic Data Management System, a system of computer programs designed by TCC at its own expense, is the exclusive property of TCC. LC-MARC tapes, purchased regularly by TCC, are also the property of the contractor. An OCLC COM Catalog Processing Module, consisting of four separate programs, is the property of the State Library.

The contract clearly spells out the proprietary rights of the State Library and TCC in computer software. However, the statement in the TCC business plan is not as far off-the-mark as Mr. Lane points out in his letter. Our research shows that TCC was not well-prepared to enter the card catalog conversion business. Many public libraries complained about the inexperience of TCC in library matters at the inception of the project. In fact, librarians believe that they taught TCC a great deal about the technical nuances of card cataloging. In a way, the State Library and public libraries have provided an opportunity for TCC to establish its library business and develop computer software which is the property of the company. Thus, it is understandable why a TCC planner would characterize this as a "consultant relationship".

CONTRACTOR PERFORMANCE

For each local library authorized by the State Library to receive conversion services, TCC

1. Converts the existing library catalog to a standard bibliographic format in machine readable form;

2. Produces one microfilm copy of the converted catalog;

3. Maintains the resultant computer file or catalog file;

4. Provides a magnetic tape containing holdings on request.

Local libraries receiving these services were contacted to assess the performance of TCC in meeting the terms and conditions of the contract.

Quality of Service

Each local library that has converted (or is in the process of converting) its manual card catalog to machine readable form was asked to rate the quality of services provided by TCC and to elaborate on its response. Additional questions were asked related to the conversion rate and to the customer's satisfaction with TCC services and products. Specific problems or concerns identified by the respondents are discussed in the next section.

Nineteen library directors and/or their heads of technical services were contacted by telephone. Eight of the libraries responded that the overall quality of services provided by TCC was poor. Public libraries which initiated projects in 1980 and 1981 were the most critical of TCC (see table). This is the period of time when the conversion project was in its early stages of development. In contrast, none of the libraries starting projects in 1982 rated TCC poorly. Even those libraries which gave a fair, good or excellent rating qualified their response by saying that they encountered countless problems at the beginning of their project. One head of technical services followed up the telephone survey with a lengthy letter. She wrote:

> "...After our conversation on May 29, I decided this information would give you a better insight into what I have told you. A year and a half ago it would have been less generous than fair, because I have been pleased with the improvements they have made. The fact that it took over three years for The Computer Company to develop their system bothers me. The system has developed at all of our expenses, including Virginia's. We have paid for their mistakes."

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HOW WOULD YOU RATE THE
QUALITY OF SERVICES PROVIDED TO YOU
BY THE COMPUTER COMPANY?

| | Year Project Initiated | | |
	1980	1981	1982
Excellent	1	1	−
Good	−	1	1
Fair	1	1	3
Poor	3	5	−
Not Categorized	1[1]	1[2]	−
	6	9	4

[1] One respondent said "they got better as time progressed."

[2] One respondent said the service was "good to excellent."

Source: JLARC Telephone Survey Conducted May 21 − May 31, 1984.

Another library questioned the commitment of resources by TCC to complete the project:

"Why has a project estimated to take no more than a year dragged on for 3 1/2 years? This is a pilot project intended to develop a system, so one could expect the unexpected, but it is clear that both The Computer Company and the State Library underestimated the complexity and the size of the conversion. The fact that is has dragged on this long, with no end in sight, suggests The Computer Company has failed to provide enough personnel and equipment to finish the project in a reasonable time. And that the State Library has failed to make The Computer Company provide it."

Many of the librarians surveyed echoed similar concerns. The following statements are illustrative of the views expressed by library staff. Each statement represents a different library.

"It took awhile for them to get the bugs out... It was all new at the beginning, but things have been refined."

"Not good businessmen. They were in over their heads and they promised too much."

"It wasn't perfect, but it went real well. We are quite pleased with the project."

"Slow starting, but improved as they went on.... At the beginning they overpromised, but finally delivered."

"Didn't know what they were doing. Didn't understand local library problems."   .

"At the beginning, experience in library field was poor. Many questions were answered unsatisfactorily. Original proposals didn't work. The data base was too small."

"TCC grew up with this project. At the beginning they didn't know anything, but they were responsive to change. Rank amateurs at the beginning."

"Awful service since day one.... Library was a test bed. TCC didn't know what they were doing."

"System has developed over time. Primitive at first, but much more sophisticated now. Maintenance system is a real plus."

None of the participants in the project -- TCC, the State Library, or the public libraries -- had prior experience in catalog conversion. In retrospect, TCC was probably not fully prepared to carry out the requirements of the contract as promised and underestimated the problems of catalog conversion. According to librarians, TCC seems to have learned a great deal from its early mistakes and has developed a good system for converting and maintaining card catalogs. TCC has reported that 13 of the 19 libraries have contracted with the company for continued services after their conversion grants ended.

During the course of the project, however, TCC failed at times to deliver the type and quality of services stipulated in the State contract and expected by users. As a result, the company's inconsistent performance affected its business credibility among users. Problems with TCC services are discussed in the next section.

Problems and Concerns with TCC Services

Local public libraries have three specific problems or concerns with the conversion services being provided by TCC. These problems are related to: (1) the timeliness and quality of the data base and resulting products, (2) the compatibility of magnetic tapes with other automated circulation systems, and (3) communication with TCC and the State Library.

Some of the more vocal critics of TCC are the libraries which were selected for catalog conversion during the first two years, when TCC was still a novice in retrospective conversion. TCC has made progress in overcoming earlier problems, but certain technical judgements made during the initial phases of the contract have greatly frustrated these libraries.

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The Data Base. Cataloging for a conversion project requires a high quality data base as well as high cataloging standards to achieve and maintain that quality. Every library is required to follow LC-MARC grade cataloging and expects perfect copy in return. Nearly every library surveyed indicated that at some point during the course of their project they had problems with the quality of the data base or products produced from the data base.

Under the State contract, TCC is responsible for ongoing maintenance of the data base and for regularly acquiring LC-MARC tapes used to match local records. These tapes usually encompass a large percentage of a local library's holdings. The experience of one library is presented below:

> ... "having the MARC tapes in the Virginia data base and having them in there as promptly as LC issues them (which is weekly) is of the utmost importance for efficient conversion, especially in a public library where most items bought are recently issued and must be put out for the public as quickly as possible. The MARC tapes were supposed to have been in the data base at the beginning of the conversion, in November 1980. Instead it was well in 1981 before the majority were in. After that date we found that not all the tapes for 1969-71 and 1980-81 had been input, and it was months before they were in."

The following case example illustrates the problems local libraries have encountered in getting TCC to enter LC-MARC tapes on time.

> *In July 1981 the State Librarian was informed by users that TCC had not entered Library of Congress supplements to the data base since August 1980. He wrote the President of TCC warning that failure to maintain the data base "can constitute a breach of contract." On August 11, 1981, the President of TCC assured the State Librarian that "the data base will be updated on a monthly basis." He added, "The Computer Company is fully dedicated to providing high quality, state of the art service to the Commonwealth." On August 31, 1981, TCC distributed a memorandum to all conversion users stating that "The future updating of the data base is scheduled monthly for the first weekend after receipt of the tapes...."*

> *About six months later, on February 18, 1982, Blue Ridge Regional Library notified the State Librarian that it had learned that no tapes had been entered into the system since August 1981. One week later the State Librarian once again*

*wrote the TCC President expressing his concern
about the monthly update of the data base. He
wrote, "If we are to continue our contract we must
insist that all available LC-MARC records be
accessible to users of the library data base by
March 1, 1982. We must further insist that the
terms of the contract be honored by updating the
data base each month as you assured in your August
11 letter." The President of TCC ensured "timely
updates for the future" in a letter dated March 1,
1982.*

*The most recent problem occurred in late
1983. No new tapes were added during the period
November 1983 until March 1984. Libraries were
not notified of this action by TCC.*

The State Library believes that a deficiency in the
conversion project is that it has no way of knowing when LC-MARC tapes
are added to the system. State Library officials feel that they must
depend on system users to inform them when the contractor is not
performing adequately.

One system user suggested that the State Library simply
"pick up the phone and ask them on a monthly basis if the tapes have
been inputted." In a letter dated October 21, 1982 to TCC, the
Director of Library Services for the State Library emphasized that
tapes should be loaded regularly as required by the State contract and
it should not be necessary to have to call to find out when tapes are
loaded. He stated, "I disagree that someone from the State Library
need call every month to ensure that The Computer Company honors the
terms of our contract. Is a performance clause necessary when we
negotiate renewal?" Since then, no performance standards on the
LC-MARC tapes have been added to the contract.

The consistency and quality of information produced by the
data base is also cited as a problem by local libraries. Letters sent
to JLARC document instances of technical problems related to incorrect
coding, incomplete records, and improper formatting of information. A
few libraries have received microfiche or microfilm catalogs produced
from the data base that were considered poor quality and returned to
TCC. One head of technical services stated that "there is virtually
no documentation. The manuals given to us in 1981 have never been
updated even though the system has changed completely." It seems that
some of the technical problems and misunderstandings can be overcome
with updated technical instructions related to such areas as CIP
(Cataloging in Publication) and the Name Authority.

TCC has made progress in correcting technical problems
identified by local libraries. However, the State Library should
ensure that TCC abides by the terms of the contract and corrects all
problems caused by its inconsistent handling of LC-MARC tapes.

Performance standards related to the timely loading of the tapes should be included in the State contract. The State Library should closely monitor TCC compliance with these standards.

Magnetic Tape. One product of a conversion project is a magnetic tape containing a library's holdings. This tape is of critical importance to a library because it is supposed to contain a complete and accurate data base which can serve as the foundation for other automated systems. Because many libraries are in the final stages of their conversion projects and are considering the acquisition of automated circulation systems, they have requested tapes from TCC. A few libraries have found that their tapes are not totally compatible with the technical specifications of certain circulation systems. It is not entirely clear whether these problems are the fault of TCC or the local library. What is clear, however, is that a number of misunderstandings and rumors exist regarding the responsibilities and capabilities of TCC to correct deficiencies with magnetic tapes under the State contract.

Lynchburg College and Sweet Briar College have not been able to read their tapes, but they have not formally notified the State Library of their problems. Prince William Library reported that it has spent to date over 2,000 hours of staff time and 200 hours of volunteer time in projects to clean up TCC records in its automated data base. They estimate spending at least another 2857 hours to complete the work. Rumors abound that TCC lost 2000 records in processing tapes for the Pamunkey Regional Library. However, an employee of the regional library stated that this was not true and that the missing records were on the tapes all along. As a result of these problems and misinformation, other libraries such as Blue Ridge and Lonesome Pine are apprehensive about the quality and accuracy of their data bases.

(Note: Since October 1, 1984, several libraries have reported that their tapes ran correctly and are in good condition -- Roanoke Public Library, Lynchburg College, and Jefferson-Madison.)

A key objective of the State contract with TCC is to "Develop a single, complete., comprehensive machine-readable data base for any participating library. That data base must be compatible with the existing State data base." Under the contract, libraries are required to follow the LC-MARC format. A number of local libraries are contemplating the purchase of an automated circulation system which requires an accurate and reliable data base. The State Library and TCC have an obligation to correct any problems with computer tapes at no additional expense to the State Library or public library. TCC and the State Library should develop a clear policy with regard to the production of magnetic tapes for use in automated circulation systems. This policy should clarify the responsibilities of the contractor and the State Library in assisting a public library to prepare its tapes for circulation systems. This policy should be distributed to all users as soon as possible.

Communication. Communication between TCC and local
libraries and between the State Library and local libraries appears to
be diffused and inconsistent. Libraries are not entirely sure who is
really in charge of the project, TCC or the State Library. Some
libraries indicated that their business relationships with TCC were
very good and that they frequently used the toll free number to
communicate with TCC personnel on technical matters. On the other
hand, several libraries believe that communication is not regular or
dependable. At times, their questions are answered unsatisfactorily
or they receive no response.

Public libraries report that they sometimes learn about the
conversion problems of other libraries and modifications to the TCC
system through informal contacts with their colleagues. This means of
communication may not always be entirely accurate, as pointed out in
the discussion on the quality of magnetic tapes. Turnover in the TCC
customer relations representative position has affected continuity in
communications, according to TCC. The average tenure of an individual
in this position is about one year. TCC admits that they have had
problems in this area but they are trying to improve.

Public libraries also indicate that they have had
difficulties communicating with the State Library. Some perceive that
their continuing problems with TCC have not been given adequate
attention by the State Library, and that the State Library tends to
side with the contractor rather than the user. One mechanism employed
by the State Library to enhance communication has been user group
meetings. These public meetings are usually structured around a
formal agenda and attended by representatives of the State Library,
local libraries, and TCC. A review of past agendas revealed that
meetings were not held between September 15, 1981, and November 30,
1983, a period of time that was critical in the development of the
conversion projects. An open, public forum such as this is viewed by
librarians as a good way to exchange information on the status of user
projects, but not appropriate for airing complaints about the project
or contractor.

The creation of a users group committee composed of public
libraries could help alleviate the problem of communications and
provide local libraries with a vehicle for exchanging information on
matters related to catalog conversion.

Project Monitoring

Project monitoring is essential to ensure that the vendor
adheres to the conditions of the contract. Close monitoring and
supervision is also necessary for the agency to get maximum benefit
from the vendor project.

Although the State Library receives monthly statistical
reports from TCC on the status of a local conversion project, it does
not receive nor does it require any narrative reports on a regular

basis from the vendor or local libraries. Essentially the monitoring process employed by the State Library is a reactive one. That is, State Library personnel wait until a problem is reported by a user before any action is taken.

An employee of the State Library is designated on a part-time basis as the Consultant for Library Automation. In addition, this employee serves as a Library Consultant for most of eastern Virginia reporting to the head of the library development branch. The former employee who held this position until April 1984 had six years of computer programming experience but no prior knowledge of catalog conversion. (This position has been vacant since then.) In addition, because the State Library does not subscribe to TCC's conversion services, this person did not have access to a computer terminal. Public Library contacts mentioned that the former Consultant for Library Automation was a capable consultant, but she did not have sufficient time to oversee the TCC contract. One library wrote:

> "... Why didn't the State Library appoint a full-time overseer for so large and costly a project?..."

> "One would have expected such an overseer to check periodically with each of the converting libraries to see how things were going. _____ may have checked once with me in 3 1/2 years but no more than that. I had to report almost every problem we had, and I was repeatedly told that we were the first to report a given problem."

According to the State Librarian, there is no formal way of evaluating the services of TCC after a project is completed. The Consultant for Library Automation has never conducted on-site exit interviews or project assessments with a local library. A few libraries were concerned because State Library staff never conducted an on-site visit without TCC personnel accompanying them. They indicated that it would be difficult to speak candidly about TCC's services with their staff in the same room.

In light of the 9 new projects being planned for 1984-85, the State Library should assign one staff member primary responsibility for monitoring TCC's adherence to the State contract and for assisting local library staff with any technical problems or concerns. Regular on-site visits should be conducted by the State Library staff, and an exit interview should be held with the public library at the conclusion of each project. Questions should be asked regarding the quality of services provided by TCC.

CONCLUSION AND RECOMMENDATIONS

Although the State Library followed State procedures in procuring the services of TCC, public libraries perceive the

performance of the firm as fair or poor in many instances. These perceptions of sub-par performance have to some degree, affected TCC's business credibility among local libraries in Virginia. Libraries which received grants in 1980 and 1981 are the most vocal critics of TCC. During these two years, the project was in its early stages of development and TCC, the public libraries, and the State Library were novices in catalog conversion. Public libraries had certain service expectations of TCC which were not always met. Today, a number of libraries seem to share the belief that TCC has learned a great deal during the past three years and that the quality of the company's services and products is improving. Many libraries believe that the system has great promise and that the on-line catalog maintenance capability is a positive feature. As a result, public libraries are continuing to maintain business relationships with the company.

The State Library needs to play a more prominent role in monitoring the performance of the contractor and in acquiring a working knowledge of the TCC system for converting card catalogs to machine readable form. Communication between TCC, the State Librarian, and local public libraries needs to be focused and consistent. Specific recommendations follow.

1. The State Librarian should ensure that all outstanding problems caused by TCC be resolved as quickly as possible. Any problems or errors with the records, microfiche, microfilm, or magnetic tape produced by TCC should be corrected by TCC at no cost to the State or local library. Specific performance standards related to the LC-MARC tapes should be included in the next contract with TCC. If TCC does not abide by the terms and conditions of the contract, the State Library should terminate its business relationship with the company.

2. TCC and the State Library should develop a clear policy with regard to the production of magnetic tapes for use in automated circulation systems. The policy should sort out the responsibilities of TCC, the State Library, and public library in planning and preparing catalog conversion data for use in local circulation systems. This policy and any accompanying technical guidelines should be distributed to all users.

3. The State Librarian should establish a users group committee to serve as a focus for exchanging information on the status of catalog conversion projects. Meetings should be scheduled at least twice a year. This committee should serve as a forum for identifying and airing concerns regarding catalog conversion and for improving communication between the State Librarian, local libraries, and vendors. The committee should be composed of individuals representing different library user interests. Representatives of TCC or other vendors should not be members of the committee.

4. Local libraries should continue to be given the option of procuring the services of other vendors in converting their card catalogs to machine readable form. Local contracts should be

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consistent with guidelines developed by the State Library to ensure uniformity of data among various libraries for use in the State data base. Before renewing the 1985-86 contract with TCC, the State Library, with the assistance of the users group committee, should evaluate and compare the services and costs of other vendors.

5. Greater attention needs to be given by the State Library to monitoring the performance of TCC and to improving communication with public libraries. The State Librarian should assign one staff member to monitor vendor performance and to provide consultative services to public libraries on matters related to catalog conversion. This should be the employee's primary work responsibility. The person should (a) be trained in the technical aspects of retrospective conversion, (b) have access to a computer terminal linked to TCC, (c) conduct exit interviews with local libraries at the conclusion of each catalog conversion project to assess the contractor's performance, and (d) provide technical support to the users group.

AGENCY RESPONSES

State agencies and other parties involved in a JLARC evaluation effort are given the opportunity to comment on an exposure draft of the report, and appropriate corrections are made. Page references in the responses may not correspond to the page numbers in this final report.

The following documents are attached as an appendix to this report:

• Response from the State Library

• JLARC Comments on the State Library Response

• Response from The Computer Company

• JLARC Comments on The Computer Company Response

COMMONWEALTH of VIRGINIA

VIRGINIA STATE LIBRARY
RICHMOND 23219-3491

DONALD HAYNES
STATE LIBRARIAN

24 August 1984

Mr. Ray D. Pethtel, Director
Joint Legislative Audit and Review Commission
Suite 1100, 910 Capitol Street
Richmond, Virginia 23219

Dear Mr. Pethtel:

Enclosed herewith are two copies of my comments on the JLARC exposure draft <u>Virginia State Library Contract with The Computer Company</u>. On the first two pages I have made general comments about our intent upon entering into the contract. The numbered comments that follow those pages refer to sections that I have numbered correspondingly in the margins of the JLARC draft. The final comments refer to your recommendations and are numbered accordingly.

I shall expect to hear from you again concerning your scheduled presentation. Some members of The Library Board have expressed interest in hearing the report when it is made to the Commission and the Speaker.

If you have questions, please let me hear.

With all best wishes,

Yours very truly,

Donald Haynes

DH/wp

Enclosures

ADMINISTRATIVE SERVICES DIVISION
Nolan T. Yelich
Director of Administrative Services

LIBRARY DIVISION
William J. Hubbard
Director of Library Services

ARCHIVES AND RECORDS DIVISION
Louis H. Manarin
State Archivist

RESPONSE FROM THE STATE LIBRARY*

The State Library initially sought a contract for the retrospective conversion of library catalogs because it had received seven requests for grants to support public library conversions and expected to receive others. The state already had a large and valuable data base made up of the cataloging of more than forty libraries in Virginia. The records in that data base were in the Library of Congress machine-readable cataloging format (LC-MARC) that had become a national standard for cataloging. It appeared wise to require that any further records created from grant money be in a compatible format. Such a format permits the use of the records in various operations in local libraries and permits the State Library to add the records to the existing data base to support the production of a union catalog for the state (CAVALIR), which provides a source for interlibrary lending, cataloging, reference, and planning. The State Librarian held a meeting of the directors of the seven applying libraries to ask whether they wished the State Library to seek a contract that would permit any of them to convert their data bases to the LC-MARC standard. All agreed that such a contract should be sought. We went to some lengths to locate all companies that might be interested in bidding on such a contract, put out a request for proposal, and received three proposals. No company at the time was offering the full LC-MARC format in retrospective conversion services. (See No. 6 below for comments on what was available.) The State Library had to find a contractor that would allocate the resources needed to develop such a system on the prospect of regaining that investment at some time in the future. The Computer Company returned the best proposal at the lowest bid, proposing the use of interactive terminals. The other two proposals were for conversion using optical character-recognition only, a tedious and less accurate method. The Computer Company offered from the beginning a better system than was required in the request for proposal, and has developed a system over the years that exceeds the requirements of the contract. Their failure to load LC records frequently was a failing to meet the terms of the contract. However, the inconvenience to the participating libraries because of lateness in loading records was in the difficulty of finding catalog records for new acquisitions, the cataloging of which was not to have been part of the contract.

Some libraries were better prepared for conversion than others, and some projects were better managed than others. I feel that some libraries had done too little planning for the changes they were making; some directors took too little interest in the conversion and the resulting changes in the operation of their libraries. Changing such major library operations cannot be accomplished without trauma and frustration, even with the best of planning. Although we remained always ready to advise, neither the State Library nor the contractor could make decisions that properly should be made locally.

1.   We have renewed the contract for 1984-85; we plan to convert the catalogs of nine libraries at an estimated cost of $625,000. Eight libraries will use the contract; one library has contracted with another vendor.

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* This response has been retyped in a single-spaced format for printing.

2. Under the renewal, input of data will be done on The Computer Company's site by its personnel. If errors are made, there should be little confusion about where they are made.

3. It is expected that the change will also reduce the length of time required, as there will be no cataloging of new acquisitions after a shelf list is sent to the vendor.

4. The State Library has filed for copyright of the Virginia data base, but no reponse has been received from the register of copyright. We believe there will be no significant diminishing of utility of the data base for the public libraries by restricting use of OCLC-derived records.

5. Payments to The Computer Company have been made on the basis of each transaction; the State Library has not paid for development of software. We have been in touch with the staff of The Computer Company as often as daily to be sure we were getting useful modifications to their system. We have advised them freely, using our highly competent cataloging staff; the purpose was to insure that the commonwealth got a good service. We became consultants inasmuch as monitoring and advising are consulting.

6. In 1979 almost no one in the country had any experience in catalog conversion in LC-MARC format. The staff of the State Library had considerable experience in cataloging in that format, and that experience was drawn upon frequently. Some libraries (including this one) had begun to convert catalogs through OCLC as part of their cataloging functions; OCLC later offered a contractual conversion service, but their copyright demands conflict with those of the federal government. Autographics, Inc., had in 1979 signed a conversion contract with the state of Alabama and was invited to submit a proposal in Virginia; the company had decided against any further conversions because of difficulties experienced in their Alabama contract. Check-a-book Co. had an agreement with Arlington Public Library from 1970 to 1975 to produce a library system; by 1975 they gave up and sold out to 3M Corp. The 3M Corp. devoted considerable resources to developing the system, and after several years the new librarian at Princeton University installed the system there. The Princeton administration soon removed the system and the librarian, who is now the leading national consultant on library automation. Henrico County Public Library had an agreement in 1979 with Cincinnati Electronics to produce a library system and a catalog; three-and-a-half years later, after signing similar agreements with Lexington, Ky., the state of Wyoming, and others, Cincinnati Electronics announced that it had developed no usable software and got out of the library systems business.

The foregoing is illustrative of the newness and complexity of library programs. What we attempted to do was to find a company likely to commit the required resources to developing a system. We expected the development to be difficult.

The State Library chose this way to respond to requests for grants. We could have made the grants individually to the libraries and let them look for acceptable contractors. I believe that would have led to far greater frustration.

7. It appears that most data base problems reported to JLARC have arisen in the "local" fields--those fields in which a library can put local information, such as call number, labels, holdings information, sources, etc. Each library must determine what will be put in these fields according to how the information will be used. There is some uncertainty as to whether information in these fields was entered with long-range plans in mind.

8. This comment does not pertain to retrospective conversion, but to cataloging of new acquisitions.

9. The loading of tapes had to be stopped in November because we had asked to have the entire data base and all of the individual data bases run against the new Library of Congress authority file that conforms to the Anglo-American Cataloging Rules, 2d ed., which is now the international standard. Being able to do this by computer was one of the compelling reasons for converting catalogs. The LC tapes could not be loaded until this was completed. All libraries were notified in advance that the "flip" would be taking place.

10. The excerpt from the letter of the director of library services is out of context and does not represent the intent of the letter. What he was saying is that all tapes should be loaded as promised but that he believes it should not be necessary to have to call to find out when tapes are loaded; that should be done regularly without any checking. He asks whether adding a performance clause is the only way to get the contractor to do what is promised.

11. I have not seen the letters sent to JLARC documenting instances of technical errors; I am willing to pursue these claims and to achieve a fair resolution of them.

12. The State Library has attempted at all times to insure that the contractor abide by the terms of the contract, and we have insured that the contractor correct all problems we knew of caused by any faulty action on the contractor's part.

13. I fully agree that we and The Computer Company have obligations to correct any deficiencies with computer tapes that are the fault of The Computer Company or the State Library, and we shall see that any such deficiencies are remedied. A clear policy will be stated and distributed.

14. We shall create a formal users group to meet and exchange information.

15. One person was assigned to monitoring the contract and was asked to use as much of her time as was required; it is true that she had other duties, but the contract was to have priority. I feel that the State Library is understaffed in most areas. The person who held this job left in April 1984, not 1983; we have had to reopen advertising for want of qualified applicants.

16. There appears to be general agreement that the present system is a good one and that service has improved steadily. It should be noted that the system now offered is vastly better than the one requested in the request for proposal.

RECOMMENDATIONS

1. The state librarian has at all times attempted to have all problems associated with the conversion projects resolved as quickly as possible. Any problems with any product that were the fault of the contractor have been corrected by the contractor at no cost to the state or the local library.

2. The State Library will develop a statement of policy concerning magnetic tapes and their use, and will advise public libraries as to what plans they should be making to use the tapes. It will be distributed to all users.

3. The state librarian invited all users and prospective users of the conversion system to meet in Richmond on 24 July 1984. Not all directors came; some sent no representative. We met without representatives of any vendor. Librarians were encouraged to discuss problems with the performance of the contractor and to discuss the advisability of the changes proposed to the system. They were further given questionnaires to return to the State Library describing the pros and cons of the system and any problems that needed to be rectified. When all of these have been returned, we shall pursue any reported problems to reach a fair resolution.

4. Local libraries have never been denied the option of procuring services from other vendors, nor will they be. If other vendors produce tapes that meet the State Library's published standards, there may be no need to continue a State Library contract for catalog conversion. We can award grants and let local libraries seek the most competitive prices.

5. Although I feel that the State Library is critically understaffed in several areas, I have transferred a position from another section to the Library Development Branch so that we can have adequate supervision of the retrospective conversion activity, although it is unlikely that as much supervision will be required with work being done on site by the vendor; certainly, less supervision will be needed if the contract is abandoned. The state librarian has requested an organization and management study by MASD of the entire State Library operation in order to help us make decisions about proper staffing and management.

JLARC COMMENTS ON STATE LIBRARY RESPONSE

The response of the State Librarian clarifies several points made in the JLARC Special Study. Particular emphasis is given to describing the events leading to the initiation of the catalog conversion project and to the hiring of The Computer Company (TCC) to carry out this project. We are pleased that the State Librarian has already taken action to implement the study's recommendations.

Several of the comments made by the State Librarian have been incorporated in the final copy of the special study. JLARC staff comments follow.

New Acquisitions

On page 2 of the agency response, the State Librarian contends that the cataloging of new acquisitions was not to have been part of the contract. However, we have been advised by local librarians that there was no verbal or written understanding that public libraries could not add new acquisitions while the project was in progress. In fact, a paper prepared by The Computer Company titled "Virginia State Library Automation By The Computer Company" (1980) and distributed to public libraries states that "During the course of retrospective conversion, each user will also use the system to search for new acquisitions. Provisions for on-going cataloging after the conversion process is finished will be available through a varied number of input methods".(emphasis added) As this statement illustrates, TCC and the State Library expected a local library to input new acquisitions during the course of its retrospective conversion project.

Other Vendor Options

According to the State Librarian, local libraries have never been denied the option of procuring services from other vendors (page 8). However, after the first seven projects were started, other libraries entering the program believed that there was no other vendor option but TCC. Not until this past Spring (1984) did the State Library issue written guidelines informing prospective applicants that they could contract with another vendor. One library has taken advantage of this option.

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August 24, 1984

Mr. Ray D. Pethtel
Director
Commonwealth of Virginia
Joint Legislative Audit and Review Commission
Suite 1100, 910 Capitol Street
Richmond, Virginia 23219

Dear Mr. Pethtel:

This letter is in response to the JLARC exposure draft "Virginia State Library with the Computer Company," dated August 16, 1984.

Please be assured that the Computer Company wishes to cooperate in any way possible to promote better services and communications among the Virginia State Library, Virginia Libraries and the Computer Company. The purpose of this letter is to clarify some of the issues highlighted in the exposure draft such that a better understanding of our service levels and communication is achieved. We hope you will find our response helpful towards this end.

Since the first two issues examined by JLARC relating to the contract award procedures and ownership of software were resolved in a positive manner, our response will focus on the issue of perceived service levels. In some instances we are forced to give rather lengthy technical explanations to clarify issues. The intent is not to confuse, but to promote a better understanding of how some of the communications perceptions have arisen.

Relative to the conclusions and recommendations in the exposure draft, The Computer Company would welcome the opportunity to incorporate reasonable terms into the contract which would better define service levels.

1. While a BC/BS spokesperson may have, in good faith, stated that "TCC's systems designers are kept busy between claims processing jobs by working on library services projects", this person was mistaken. The Library Division, as well as all other Commercial Group businesses, has dedicated systems designers and programmers. In the case of the Library Division, this has always been true. Due to the complexity of the MARC record, it would be impractical to do otherwise.

2. The Computer Company has not surveyed the 19 libraries and cannot refute that 8 of the libraries gave us a "poor" rating. We have analyzed your survey and subsequent report. We are extremely concerned that the accuracy of the data may be less than what both JLARC and The Computer Company would like. We further suggest that the public libraries may have expectations that are inconsistent with deliverables specified by the contract.

Market research is a field unto itself, and requires the use of sophisticated data collection techniques. Inaccuracy can creep into a study due to a variety of reasons; among which are questionnaire design, wording, interview techniques, and words with more than one meaning.

It is because of one of the survey choices having multiple meanings that we request you recalculate the survey data to separate the "poor" responses from the "fair" responses. The percentage of respondents giving us a "poor" rating would thus be 47%, 44.4%, or 42.1%, depending upon which way you decide to present the data. If the survey is to be used, we believe this change will lead to a more accurate reflection of the information.

Perhaps another helpful method for evaluating the librarians' perception of The Computer Company's performance would be to analyze their actions, not just their responses to the survey. Of the 19 libraries utilizing our conversion services, 68% (13 libraries) chose to contract with us for continued services after their conversion grants ended. Of the six that did not contract with The Computer Company:
   -one decided not to continue with automated cataloging
   -one could not continue automation due to funding restrictions
   -one purchased circulation system hardware rather than automated cataloging services
   -one chose another vendor
   -two chose to continue current cataloging with the vendor they had been using before and during retro-spective conversion.

While it may be easier to contract through local library agreements under the state contract, we believe it highly unlikely that these libraries would contract with The Computer Company if they were as dissatisfied with our service as the survey indicates.

To further substantiate the validity of analyzing the libraries' actions, I have included "Exhibit A". This is a photocopy of two pages from Marketing Research Text and Cases, fifth edition, by Boyd, Westfall, and Stasch. I quote from page 96 of this text (underlined on Exhibit A):

"Surveys have become so commonplace in today's world that the average person seldom questions the idea that useful information can be obtained in this manner. The fact that findings of one type or another are developed and usually seem plausible furthers this acceptance. When formal efforts are made to check the accuracy of survey data, however, the results are often disquieting."

The following quote is from page 97 of this text (underlined on Exhibit A):

"In general, observation data are more accurate than questionnaire data, especially when observation of an action can be obtained in place of a verbal report of what action the respondent would take."

3. We are somewhat confused by several of the quotes in the exposure draft related to "length of time to develop the system" and "length of the project".

Most likely, these comments refer to the actual conversion time experienced by the libraries. The Computer Company has been well aware of the variance in conversion speed from library to library and has worked with them to speed their efforts. Attached is "Exhibit B" which shows the relative comparisons of individual libraries. The key points to compare are:

A. The Computer Company contends that our system is, and has been, capable of supporting a higher title claim average than the users maintained.

This can be shown by comparing column 8 (the highest number of titles converted at one terminal in one month) with column 7 (the average number of titles converted at one terminal in one month). Note that the differences from one column to the next are dramatic. The highest number in column 8 is 6303 titles while the highest average in column 7 is 3101 titles.

B. The libraries' estimate of number of titles to be converted was actually lower in most cases than the number they have actually converted. Naturally, this would cause the conversion effort to take longer than estimated. This can be seen by comparing column 1 with column 2.

C. In addition to the above two points, The Computer Company believes that preparation by the library at the beginning of the project, individual attention paid to the project by local library management, and motivation to complete the task are also key ingredients in determining the length of a conversion project.

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4. Relative to the statement "librarians believe that they taught The Computer Company a great deal about the technical nuances of card cataloging", I believe this belief has evolved quite naturally due to the normal client-vendor relationship.

   We have discussed card cataloging rules with the libraries such that we could offer necessary flexibility to the individual local library. Unfortunately, cataloging rules have many subjective and gray areas. We have found that even catalogers within a library may not agree as to how a particular rule will affect a specific situation. After discussing such rules with librarians, we then make a decision as to how we want our system to function and design it accordingly. We abide by American Library Association Cataloging Rules in making these decisions. It is important to make a distinction between interpretation of card cataloging rules and actual technical manipulation of the MARC records themselves. The public libraries could not have taught us in this area because they have had very little experience in processing machine readable MARC cataloging.

5. "The timeliness and quality of the data base and resulting products" are recognized by The Computer Company as very important issues.

   The Computer Company is obligated to maintain a database of Virginia contributed records from OCLC, Library of Congress records, and originally cataloged records from contributing libraries. A database lacking in size, depth or compatibility to a library collection would require the library to originally catalog many records, and produce a low matching or "claim" rate. The claim rates experienced by conversion libraries range from 86.4% to 98.9% (see "Exhibit B"). The median claim rate of 96.7% indicates the size of the database has been a positive feature of our service.

   The Computer Company recently bid against three vendors to provide conversion services to an independent public library. The other three vendors anticipated claim rates ranging from 79% to 85%. Comparing these claim rates with those experienced by Virginia libraries would further substantiate that our database size has not been a limiting factor.

   The Virginia State Library and The Computer Company have instituted strict cataloging guidelines which must be followed before an originally cataloged record can be accepted for inclusion in the database. These rules have ensured that originally cataloged records are of high quality. Some of the records received from OCLC and the Library of Congress have errors in them. Both OCLC and LC are aware of this problem as is the Virginia State Library. Neither OCLC nor LC offer any method by which you can correct their records. It is important to note that The Computer Company did not do anything to damage the records. If they were

correct when received, they are still correct. Correction of the database is outside the scope of the existing state contract. I should make note that we are investigating methods to correct these problem records. Once we implement a solution, we will be among the first bibliographic utilities offering this capability.

The updating of our database is important to us and is something we constantly strive to improve upon. In reality, the complete LC tapes are not received on a weekly basis. LC monographs and serials are received weekly and the other formats are received monthly. The OCLC tapes are also received monthly. The update process is a cumbersome one and takes a significant amount of processing effort. Unfortunately, if one of the update tapes received from LC or OCLC is defective, the entire update process must be delayed. It is true that when we have experienced delays for whatever reason, we have not always notified the libraries. At times the delays were conscious efforts on our part to implement system enhancements before updating the database.

When we have consciously delayed updating the Master Data Base, we have not considered it to be unreasonable since under the terms of our contract, our system was intended for retrospective conversion and not new acquisitions cataloging. We felt that the delays would not appreciably affect any library.

6. In responding to concerns about the useability of The Computer Company's bibliographic records in automated systems, I reassure you that our records will load in any circulation system which accepts the international standard.

   However, we must know the MARC II communications format required by the circulation vendor such that we can correctly code the library's local information. Records prepared for one circulation vendor may not load for another circulation vendor.

   Several examples of magnetic tape problems are cited in the report. We believe some background material will help you further evaluate these instances.

   A. In a letter dated August 3, 1982, the bibliographic systems librarian for Prince William Public Library wrote "The format Prince William Public Library was told to use to code holdings and copy information in the 049 MARC tag is not fully compatible with our Dataphase automated system. Fault for this problem no doubt belongs to both TCC and Dataphase." We suggest that the problem was caused by lack of communication by the library. A change in systems personnel occured at the library during the middle of the project.

We have documentation which proves considerable effort was expended to try to help the library. Once the problem was brought to our attention, we offered to provide services to solve it.

B. In a letter dated October 1, 1982, the director of the Sweet Briar Library requested we send tapes containing their records. The request stated the records be "1600 BPI, EBCDIC, 9 track, block size less than or equal to 4096, record size less than or equal to 4096, unlabeled." Verbal communication was given to the library that the standard transfer code for MARC tapes was ASCII and that processing these records would prove to be much more complex than the standard fixed length records their data center was used to processing. The library agreed that their request would be changed from EBCDIC to ASCII. On January 17, 1983, two magnetic tapes were sent to the director of Sweet Briar with a letter stating the following "enclosed are two (2) magnetic tapes representing your retrospective data base in the Library of Congress MARC format, as you requested. I am enclosing a copy of the documentation on the Library of Congress specifications for magnetic tape for your convenience.......the tapes are unlabeled, 1600 BPI in ASCII. If you have any questions, please feel free to call." Further documentation in our files states that our technical personnel did talk directly with the data processing manager at Sweet Briar. The tape was readable, but not by his system. More importantly, even if he could read the tape he could not handle the MARC format containing variable fields controlled through a directory. The question of fixing the length of the fields was addressed again. It was explained that even if we were to do this, the fixed length of any field could change with his next update records. It was stated that fixing the length of the fields was not a feasible solution to the problem.

To further illustrate the complexities involved in processing the MARC record, we have attached "Exhibit C". This is an excerpt from Library Hi Tech Issue Five, 1984.

C. Relative to Lynchburg College having difficulty with their records, we are not aware of any complaints, or of any attempts they have made to utilize their tapes.

D. The Computer Company prepared a magnetic tape for loading into Pamunkey's Library circulation system. All their records loaded into the circulation system without further intervention on our part. The difficulty they experienced proved to be an error on the part of the person loading the system. Unfortunately, the rumor

referred to in the JLARC draft persists that our tape was the cause of this problem.

E. In summary, The Computer Company feels the rumors began when Prince William Library experienced difficulty loading their Dataphase system. They were further exacerbated by the Sweet Briar and Pamunkey issues. The only way to stop the rumor is to perform successfully again and again. It should be noted that we have provided test tapes for Blue Ridge Regional Library and Jefferson Madison Regional Library and these tapes have been successfully loaded into their selected circulation systems.

7. The Computer Company has worked closely with the Virginia State Library to ensure good communications among the libraries. Educational materials and newsletters have been distributed, group meetings held, and a toll free number has been in existence since the beginning of the project. But, we also recognize that communication is dynamic and inter-active. It is something all parties must work at in order to succeed. In this vein, we are renewing our efforts to try harder in this area. With the libraries' participation, communications can be improved.

In conclusion, The Computer Company contends that it has materially met its contractual obligations and has provided, at a minimum, satisfactory service levels. We have routinely worked at improving and enhancing our conversion system. These enhancements have allowed the Virginia State Library to fund a greater number of unit conversions than would have been possible with other systems available in the market.

We have continually made efforts at promoting clear communications. But communication is dynamic and requires maximum effort from all involved. The complexity of the conversion project is such that there are opportunities for miscommunication. While we may not be blameless in this area, we certainly are not totally at fault.

The Computer Company values the relationships of the libraries we serve and looks forward to working with them in the future.

Thank you for the opportunity to respond to the exposure draft.

Sincerely,

Loyd C. Lane
Senior Vice President
The Computer Company

LCL/aha

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LIBRARY NAME	TOTAL TITLE COUNT		(3) TOTAL TITLES CLAIMED	(4) TOTAL TITLES ORIGINALLY CATALOGED	AVERAGE MONTHLY TITLES			(8) HIGHEST # TITLES CONVERTED AT ONE TERMINAL IN ONE MONTH (THIS COLUMN RELATES TO COL. 7)
	(1) Projected by Library	(2) Actually Converted (Col 3 & 4)			(5) Claimed per Terminal	(6) Originally Cataloged per Terminal	(7) Converted per Terminal	
PORTSMOUTH PUBLIC	55,000	130,924*	128,163	2,761	1,456	31	1,488	5,437
NORFOLK PUBLIC	230,000	167,094	163,106	3,988	1,026	25	1,051	4,528
ROANOKE	N/A	110,278	106,335	3,943	1,381	51	1,432	4,208
LYNCHBURG COLLEGE	N/A	73,447	73,447	-	2,720	-	2,720	5,248
HAMPTON	N/A	109,445	105,626	3,819	1,187	43	1,230	5,304
PRINCE WILLIAM	N/A	88,811	83,266	5,545	1,461	97	1,558	4,295
CHESAPEAKE	75,000	82,623	81,076	1,547	1,175	22	1,197	3,248
BLUE RIDGE	40,000	69,635	64,784	4,851	1,012	76	1,088	2,934
JEFFERSON MADISON	N/A	90,808	88,877	1,931	1,252	27	1,279	2,216
LONESOME PINE	100,000	120,933	104,501	16,432	909	143	1,052	2,187
SWEET BRIAR	N/A	74,421	74,421	-	3,101	-	3,101	5,531
LYNCHBURG PUBLIC	N/A	75,369	73,556	1,813	1,839	45	1,884	6,303
AMHERST	N/A	28,690	24,793	3,897	708	111	820	3,186
BEDFORD	N/A	46,359	40,324	6,035	1,061	159	1,220	3,504
WILLIAMSBURG	N/A	59,608	57,503	2,105	1,743	64	1,806	3,521
CENTRAL RAPPAHANNOCK	N/A	65,680	62,804	2,876	2,026	93	2,119	5,013
FALLS CHURCH	N/A	78,042	75,681	2,361	2,293	72	2,365	4,674
PAMUNKEY	N/A	40,905	38,800	2,105	1,293	70	1,364	4,189
TOTALS	N/A	1,513,072	1,447,063	66,009	27,643	1,129	28,774	60,452
AVERAGE	N/A	84,060	80,392	4,126	1,536	71	1,599	4,030

*Conversion thru 7/31/84; actual conversion project completion
date, 9/31/84.

A primary objective of the JLARC special study was to assess the performance of The Computer Company (TCC) in carryina out the terms of its contract with the State Library. This assessment was concerned with finding out how well the company did its job over the past four years on 19 separate catalog conversion projects. Although the finding was not favorable, most of the public libraries seemed to conclude that the services provided by TCC today are far better than those provided two to three years ago. For this reason, many have opted to continue their business relationship with the company.

We are pleased that TCC welcomes the opportunity to incorporate reasonable terms into the State contract which would better define service levels.

Several suggestions offered by TCC in regard to data presentation have been incorporated in the final report. JLARC staff comments follow.

Duties of Systems Designers

On page one of its response. TCC states that its Library Division has dedicated systems designers and programmers. Apparently, the BC/BS spokesperson interviewed by JLARC staff was misinformed about the staffing assignments within the Library Division. Since this statement is not that germane to the study analysis, it was deleted from the final report.

Accuracy of the Survey Data

With regard to comment 2 in the TCC response concerning the survey of libraries, the following comments are offered. In lieu of a more sensitive instrument to measure customer satisfaction, JLARC staff chose a more global measure. The basic measurement distortion when using a global measure, however, is a "halo effect". That is, a tendency for respondents to give an overall favorable impression of the service or product. In our study, the responses were skewed to the negative rather than to the positive end of the scale. This finding suggests that there is some general dissatisfaction with TCC's services among the librarians and may, in fact, be more negative than our survey revealed. In addition, having used a balanced four point scale (i.e., an equal number of favorable and unfavorable items), it is not likely that the measure created a negative bias in response.

It is not inappropriate to report that "Nearly 70% of the public libraries rated the quality of TCC services as either fair or poor. In the final version of the special study, however, we reported

the actual number of libraries responding to each response. In addition the results are presented in the context of the measure. For example, "Thirteen of the 19 public libraries responding to the JLARC telephone survey rated the quality of TCC services as either fair or poor in contrast to good or excellent".

TCC's point about observation data implicitly questions the validity of the survey results. Although behavior observations can be sensitive measures, they are not viewed in the research literature as replacements for attitudinal measures. The fact that there is a discrepancy between respondents' reports of satisfaction and their actions with respect to continuing contracts suggests that their interactions with TCC are not unequivocally positive or negative. Moreover, observation data are more accurate than questionnaire data in the measurement of <u>actual</u> <u>behaviors</u>, not necessarily in the measurement of perceptions and attitudes.

Length of Project

In item number 3 of its response, TCC states that it is somewhat confused by several of the quotes in the exposure draft related to project length.

Several public libraries expressed concern about the length of their project. Specific examples of problems encountered by libraries which led to project delays were: (a) absence of knowledgeable TCC personnel working on the evening shift when catalog data were being input; the staff of one library sat idle three nights out of four (1981); (b) problems with equipment resulted in a library being able to use its computer terminals only 50% of the available time (1981); (c) delays in receiving edit fiche (1980,81,82); (d) delayed implementation of the original cataloging module (1982).

As these examples show, TCC is partly to blame for the delays experienced during catalog conversion projects. However, we do not entirely disagree with TCC in its statement that "preparation by the library at the beginning of the project, individual attention paid to the project by local library management, and motivation to complete the task are also key ingredients in determining the length of a conversion project".

Claim Rates and New Acquisitions

In item number 5, TCC contends that its claim rate has not been a problem. However, during the early stages of the conversion project libraries frequently complained about the limited size of the Virginia data base and the tardiness of TCC in loading the MARC tapes. Today, the data base is much larger and the claim rate is higher.

TCC also states in item 5 that "When we have consciously delayed updating the Master Data Base, we have not considered it to be unreasonable since under the terms of our contract, our system was intended for retrospective conversion and not new acquisitions cataloging". However, libraries have been notified by TCC to enter current and old materials. In August 1980, a paper was prepared by TCC, "Virginia State Library Automation By The Computer Company", stating that "During the course of retrospective conversion, each user will also use the system to search for new acquisitions. Provisions for on-going cataloguing after the conversion process is finished will be available through a varied number of input methods."(emphasis added) This statement clearly demonstrates that TCC and the State Library expected local libraries to catalog new acquisitions.

Magnetic Tape Problems

In item number 6, TCC provides background information on several examples of magnetic tape problems cited in the special study. As reported in the JLARC special study, "It is not entirely clear whether these problems are the fault of TCC or the local library. What is clear, however, is that a number of misunderstandings and rumors exist regarding the responsibilities and capabilities of TCC to correct deficiencies with magnetic tapes under the State contract". A clear policy is needed with regard to the production of magnetic tapes for use in automated circulation systems. The State Library, in its response, has indicated that a such a policy will be developed.

Communication

TCC has made efforts to communicate with public libraries. But these efforts have been inconsistently carried out. Newsletters have not been prepared on a regular basis and user group meetings have been sporadic. Turnover in TCC customer relations personnel has also contributed to this problem. We are pleased that TCC is renewing its efforts to try harder in this area. (Item 7)

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