This survey of 57 members of the Association of Research Libraries (ARL) examines technical and management issues in providing remote access to their online catalogs, as well as with instructions and services for remote users. It is noted that most ARL libraries have not yet conducted studies to project the extent of use of remote access, although it is a viable reality in more than half of them, and more respondents believe it is too soon or the issues are too complex to identify causal relationships between the introduction of remote access and changes in other library services. In addition to the complete survey instrument and a summary of the findings of the survey, this kit contains examples of instruction for remote access users from the University of Kentucky, Ohio State University, and the University of California at Berkeley; examples of user aids from the University of California at Berkeley, University of Cincinnati, Georgetown University, Northwestern University, Virginia Polytechnic and State University, Wayne State University, Ohio State University, University of Waterloo (Ontario), North Carolina State University, and University of Utah; and materials on management of remote access, including job descriptions, from the University of Illinois and Rice University; a policy statement from the University of Kentucky; formats for user input from Michigan State University, State University of New York at Albany, and Dartmouth College; and access proposals from the University of Pittsburgh, University of Tennessee, and North Carolina State University. (9 references) (EW)
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SEE BACK 3

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REMOTE ACCESS TO ONLINE CATALOGS

In the 1980s, with advances in technology and reductions in hardware costs, a number of Association of Research Libraries (ARL) members are offering access to their online catalogs from remote locations. The current situation is one of flux: Some libraries are just beginning to offer remote access to their online catalogs; some are changing to systems with remote access capabilities; and some are adding new searching capabilities to their systems. At the same time, the scope of remote users is broadening from a restricted local community to anyone with access to a telephone line. Remote access to an online catalog frees a user from the limitations of the library's physical confines when searching for bibliographic or locational information on its holdings. For a library, remote access allows opportunities to offer non-traditional types of services and to go beyond the mere automation of features found in the card catalog.

This flyer and kit is based on returns from 57 ARL institutions surveyed in fall 1987. Libraries selected to participate were those that were identified as offering remote access in 1986. In this publication, remote access refers to the availability of an institution's online catalog through microcomputers with modems or through terminals—regardless of location—that contend for computer ports via phone lines or via local or wide-area networks. Terminals that are hard-wired or that use dedicated leased lines to systems have been excluded, again, regardless of location. It is assumed that institutions have some degree of control over and support for users at known locations.

TECHNICAL ISSUES. New remote access users are frequently unfamiliar with the telecommunications gauntlet that must be mastered to reach an online public access catalog. In turn, librarians often are unaware of the dozens of possible modem-microcomputer-communications software combinations used by their patrons to access the online catalog. This marriage of two uncertain parties can pose initial confusion when remote access is introduced. The confusion is frequently compounded by the presence of the campus computing center as the provider of the telecommunications data switch, local and wide-area networks, and, in some cases, the host computer for the catalog. Little uniformity exists among the telecommunications hardware and software of the institutions surveyed.

Three technical factors common to most remote access configurations are:

1. Number of simultaneous sessions that can be supported. Survey results show that, while the mode is 8 sessions, the average number of sessions is 18. Responses ranged from 1 to 265. As for rate of growth, few libraries provided definite projections, although most foresaw some growth. Growth can depend on a number of factors, including funding for computer upgrades to support increased remote use. The number of available ports or simultaneous sessions for remote access can be increased not only by adding new ports, but also by determining where and how to reassign existing ones. Both growth and rate of growth can be exponential if a library offers connections to a local area network.

2. Communication speeds supported by the system. Currently, owners of personal microcomputers are more likely to have access to systems operating at 1200 bits per second (bps), which is the speed most frequently supported by ARL libraries. The majority, however, support a variety of communication speeds, the most frequent combination being 300, 1200, 2400, and 9600 bps. About half of the libraries surveyed also offer an automatic baud rate recognition feature, which allows a system to adjust automatically to differing baud rates.

3. Parity setting required for communication. Parity must be adjusted to match the online catalog's computer. In most institutions, a specific parity is required (e.g., 7-E-1, 8-N-1). In some institutions, the data switch is able to sense and adjust the user parity.

Access to a system from remote locations has allowed some libraries to extend their hours of service: 24 offer remote access 24 hours a day, except for scheduled maintenance and downtime. Many, however, are still limited by the working hours of their library's staff or physical facilities, or of their campus computing center. The majority of institutions do not attempt to control remote access through use of a password or other regulating device, despite the fact that it is feasible for them to do so. In the few institutions that do use such a system, passwords help to discern among university-affiliated users, users from other academic institutions, and other non-academic users.

USER INSTRUCTION AND SERVICES. Most remote access user aids devote considerable text to coaching the novice user through the methods and problems of the communications software connection. Less emphasis is given to instruction in searching the online catalog. Printed searching instructions generally are available through tools developed for all online catalog users, regardless of how they access the system. Several libraries have initiated innovative forms of assistance, including the use of electronic mail for queries and answers, the inclusion of online catalog news on electronic bulletin boards, and the development of computer-assisted instruction modules. Even more specialized services exist. At one library, the staff maintains a file containing names of remote users and the equipment and communications software they use. Patrons with similar equipment or software are then referred to these users, with their permission, for help.
One of the more problematic service issues is how to inform remote access users of changes in the system or services. With a centralized catalog or with terminals hard-wired in a library building, the library can focus its information dissemination at known locations. Since most libraries lack control over their remote users, they have no easy way of keeping users up-to-date. Changes in system features are often announced online as users log on. If a dial-up telephone number changes, however, the remote user may be unable even to log on. A strategy to surmount this obstacle is to publicize and maintain a mailing list of remote users' names and addresses to receive periodical printed updates. Libraries that regulate access through passwords can create mailing lists through password registration records.

Once remote access users have the technical capability to access their institution's online catalog, they are usually offered the same search and retrieval options as those using hard-wired or dedicated terminals. Where differences exist, remote users lack access to the full array of system features. Examples of inaccessible features are circulation status information, keyword or Boolean searching, and function keys.

The ability to search a library's catalog from a remote location further distances the user from the human and printed resources available within the library building and may increase users' tendencies to limit their searching to materials represented in the online catalog. To offset this tendency, one ARL institution is undertaking a project designed to add a microcomputer front-end program to the online catalog, whereby users are specifically directed to other possible sources of information, such as newspapers, government documents, encyclopedia articles, or indexes to journals.

MANAGEMENT ISSUES. For administrators, the introduction of remote access constitutes another area to be managed by policies, analyzed for performance, and supported by funds and personnel. While each institution responding to the survey had made a conscious decision to offer remote access, only four had some sort of formal statement of policy on its use. Most libraries have not redefined or added positions to perform services or operations related to remote access. Such duties appear to have been added to existing ones in most cases.

Funding for remote access can be substantial if numerous ports and additional activity must be supported. Most libraries fund remote access through their own automation budgets. Partial costs are borne by the campus computing center at institutions where the online catalog is managed for the library by the computing center, or where dial access is offered through the computing center's data switch, with additional charges for the library. Occasionally the computing center has helped to pay for the library's computer-related equipment. Only a few institutions subsidize remote access charges to their users (e.g., through annual billings of academic departments to support local area networks).

Because remote access is part of an automated system, institutions can easily generate statistical or management reports. In decreasing order of frequency, libraries create reports on: use by time of day, number of transactions (i.e., user request and system response) per user, number of sessions (i.e., number of log-ons), duration of each session, availability of dial-up ports, categories of users, number of busy signals or refusals, and number of users waiting in queue. In almost all cases, however, it is thought that the reports produced are not necessarily useful to the library, and few libraries have analyzed the data gathered. The absence of analysis may be a function of the relative newness of remote access and of a lack of staff time to evaluate its activities. In addition, many libraries may lack a management program that delineates the purposes that such data gathering serves and the most appropriate measures of performance.

TRENDS AND NEEDS. A close and harmonious working relationship with the academic computing center is vital to the success of remote access. Not only must the computing center staff be knowledgeable about the problems that can arise for a remote access user, but they must be willing to accept the responsibility for helping these users with their technical problems. At many institutions, such a responsibility is assigned, but no training programs or resources are committed; as a result, librarians face all types of questions about equipment and communications. At institutions where the online catalog is merely one of many services offered through the computing center, planning activities for remote access (e.g., capacity planning) become issues that must be resolved in conjunction with other units on campus, such as the computing center or a campus-wide telecommunications committee.

Most ARL libraries have not yet conducted studies to project the extent of use of remote access, although most plan to do so in the future. Libraries conducting studies relied on transaction logs or used institutional data projecting faculty and student growth. Few have studied the ability of remote access users to connect to the online catalog, or their ability to perform "successful" searches.

Most respondents believe it is too soon or issues are too complex to identify causal relationships between the introduction of remote access and changes in other library services. Some effects observed informally are increases in interlibrary lending, reference queries, queries to systems personnel, circulation, document delivery, use of the physical facilities, and use of the online catalog. In the case of queries, some libraries noted increases only when remote access was offered initially or only when the system is down. No decreases in any of these services were reported.

Remote access to library online catalogs is a viable reality in more than half the ARL libraries. Access to bibliographic data is only the beginning of the potential services to be offered through an online system. A few libraries are planning for its extension as a gateway to a variety of other databases as well, from commercially produced journal articles files to locally created databases.

The SPEC Kit on Remote Access to Online Catalogs (#142, March 1988) contains a summary of SPEC survey results, 4 examples of use: instruction, 12 examples of user aids, 3 job descriptions, 1 policy statement, 3 examples of formats for user input, 3 proposals, and a selected reading list.

This flyer and kit was prepared by Jinnie Y. Davis, Assistant to the Director for Planning and Development, and John P. Abbott, Head, Forest Resources Library, North Carolina State University, as part of the OMS Collaborative Research Writing Program.

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*Kit #142*  
*March 1988*

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SELECTED READING LIST                                                                              |
SPEC SURVEY
September 25, 1987

TO: SPEC Liaisons

FROM: SPEC Center, Maxine K. Sitts, Collaborative Research/Writers Jinnie Y. Davis and John P. Abbott

For a SPEC Kit to be published in early 1988, we are surveying the extent and nature of remote access to online library catalogs in a select number of ARL libraries.

By remote access, we mean availability of the online catalog through terminals or microcomputers with modems --- regardless of location --- that contend for computer ports via phone lines or via local or wide-area networks. Our assumption is that your library has some degree of control over and support for users at known locations. We exclude terminals that are hard-wired or that use dedicated leased lines to your system (again, regardless of location).

By online catalog, we refer to an automated system that offers bibliographic, intellectual, and locational access to materials and information in a library's collection. It is possible that some automated circulation systems can serve these functions and therefore fit our definition. Please feel free to call Collaborative Research/Writers Jinnie Davis (919) 737-2680 or John Abbott (919) 737-2308 at North Carolina State for clarification.

Following a literature review and telephone inquiries to vendors, we have attempted to confine this survey to those ARL libraries indicating on the 1987 Automation Inventory that they have functional remote access systems. Because of changing local situations, this survey may reach libraries not offering remote access. If your library is one of these, we apologize for the inconvenience and ask that you return the survey after noting the library name below:

Library: _______________________________

For libraries with remote access, we ask that the appropriate person fill out as much of this survey as is easily possible. We have tested the survey at several libraries to assure that responses can be made quickly, without time-consuming research. If you are unable to answer all questions, please respond to those that you can. Return the survey, along with readily-available requested materials, to Jinnie Y. Davis, Assistant to the Director for Planning, D.H. Hill Library, Box 7111, North Carolina State University, Raleigh, N.C. 27695-7111. To be most useful, responses and documents are needed by October 30, 1987.
REMOTE ACCESS TO ONLINE CATALOGS IN ARL LIBRARIES

For the purposes of this survey, "remote access" is defined as availability of the online catalog through terminals or microcomputers with modems -- regardless of location -- that contend for computer ports via phone lines or via local or wide-area networks. Hard-wired terminals and those that use dedicated leased lines to your system are excluded, regardless of location. "Online catalog" can also include automated circulation systems that function as substitutes for online catalogs.

Library __________________________________________

Contact Person __________________________________

Phone _________________________________________

TECHNICAL ISSUES

1. Give the number of simultaneous remote access sessions to which your system can provide access:
   a. current number: ______
   b. rate of growth per year: ______

2. Which communication speeds does your system support? (Check all that apply.)
   a. _____ 300 bps
   b. _____ 1200 bps
   c. _____ 2400 bps
   d. _____ 9600 bps
   e. _____ abr (automatic baud recognition) feature
   f. _____ other (specify):

3. What hours is remote access available?

4. Do your remote access users have access to the same search and retrieval options as those using hard-wired or dedicated terminals? (Circle one.) Yes ______ No ______

If not, how do the options differ?
USER ISSUES

1. Do you use a password or other system to regulate use by categories of users? (Check all that apply.)
   a. __ yes, for university-affiliated users
   b. __ yes, for users from other academic institutions
   c. __ yes, for other non-academic users
   d. __ no, not technically feasible
   e. __ no, feasible but rejected
   f. __ other (describe):

2. Do you set a time limit on the length of a remote access session? (Check all that apply.)
   a. __ yes (how long):
   b. __ no, not technically feasible
   c. __ no, feasible but rejected
   d. __ other (describe):

3. In your opinion, do remote access users spend more time per session online than those using hard-wired or dedicated terminals? (Circle one.)
   Yes
   No

4. Do you have ways (whether online or in printed form) of obtaining suggestions or evaluative comments from your remote access users? (Circle one.)
   Yes
   No

   If yes, send a copy of form or screen displays.

5. Has your library evaluated comments (see question 4, above) from remote access users? (Circle one.)
   Yes
   No

   If yes, send a copy of reports and findings.

SERVICE ISSUES

1. Which formats are used in offering support for remote access users? (Check all that apply.)
   a. __ printed materials
   b. __ training sessions in the library
   c. __ training sessions outside the library
   d. __ telephone assistance
   e. __ computer assisted instruction
   f. __ assistance through queries and answers via electronic mail
   g. __ online catalog news via electronic bulletin board
   h. __ other (describe):

   If any of above are checked, send a copy of materials.
MANAGEMENT ISSUES

1. In the allocation of resources (e.g., computer resources, reference assistance), do you have a policy statement on remote access to guide your decision making?  
(Circle one.)  Yes  No

   If yes, send a copy of policy statement.

2. Has your library conducted any studies to project the extent of remote access use?  
(Circle one.)  Yes  No

   If yes, send a copy of study reports.

3. What kinds of statistics or management reports relating to remote access does your system or communications mechanism routinely generate? Which have been useful in managing and planning for remote access?  
(Check all that apply.)

   GENERATED  USEFUL
   a.  ____  ____  number of sessions by individual users (e.g., number of log-ons)
   b.  ____  ____  categories of users
   c.  ____  ____  time of day of use
   d.  ____  ____  duration of each use
   e.  ____  ____  number of transactions (i.e., user request and system response) per user
   f.  ____  ____  number of busy signals or refusals
   g.  ____  ____  number of users waiting in queue
   h.  ____  ____  availability of dial-up ports
   i.  ____  ____  other (describe):

4. Has your library used data from question 3, above, to analyze the extent or quantity of remote access use patterns?  
(Circle one.)  Yes  No

   If yes, send a copy of reports and key findings.

5. How is remote access funded in your library?  (Check all that apply.)

   a.  ____  library's automation budget
   b.  ____  library's public services budget
   c.  ____  grant funding
   d.  ____  user fees
   e.  ____  elsewhere in university's budget (specify):
   f.  ____  other (specify): 

   Send documents describing how remote access is funded.
6. Has your library redefined any present jobs to accommodate remote access or added any new positions that deal directly with remote access? (Circle one.) Yes No

If yes, send a copy of job descriptions.

7. Since offering remote access, what effect has your library seen on its other services (e.g., interlibrary loan, reference, circulation, document delivery, use of physical facilities)? Discuss briefly below or send pertinent studies.

8. Has your library conducted studies on:
   a. ___ the ability of remote access users to connect to the online catalog
   b. ___ the ability of remote access users to perform "successful" searches

   Send a copy of study reports.

9. Other issues or comments?

Return survey and documents by October 30, 1987 to:

Jinnie Y. Davis, Assistant to the Director for Planning
North Carolina State University
D.H. Hill Library
Box 7111
Raleigh, N.C. 27695-7111
A. TECHNICAL ISSUES

1. Give the number of simultaneous remote access sessions to which your system can provide access:

   a. current number: average = 19
      mode = 8
      range = 1-256

   b. rate of growth/year: no response = 16 libraries
      no growth = 5
      unknown = 9
      10 per year = 2
      5 per year = 1
      4 per year = 1
      20 in 1988 = 1
      16 in 1988 = 1
      12 in 1988 = 1
      10 in 1988 = 1
      2 in 1988 = 1
      add to a maximum of 14 = 1
      add to a maximum of 25 = 1
      add to a maximum of 60 = 1
      LAN access expected = 4
      more planned, but number unknown = 4
      5 to 10 percent/year = 1
      not applicable = 2

2. Which communication speeds does your system support (check all that apply)?

   a. 300 baud = 46 (86%) libraries
   b. 1200 baud = 52 (99%)
   c. 2400 baud = 34 (64%)
   d. 9600 baud = 24 (45%)
   e. ABR (autobaud recognition) = 23 (43%)

Note: These analyses are based on 53 of the 57 responses received.
3. What hours is remote access available?
   --average = 129 hours/week (1 week = 168 hours)
   --In 45% of libraries, remote access is available 24 hours/day (except scheduled downtime).

4. Do your remote access users have access to the same search and retrieval options as those using hard-wired or dedicated terminals?
   yes = 46 (87%)
   no = 6 (11%)
   not applicable = 1
   If not, how do the options differ?
   --circulation and user records not available via RA
   --no Boolean, save, or keyword searching via RA
   --reserve by course not available
   --no function keys
   --all options available, but not on RA menu

B. USER ISSUES

1. Do you use a password or other system to regulate use by categories of users (check all that apply)?
   a. yes, for university-affiliated users = 6 (11%)
   b. yes, for users from other academic institutions = 6
   c. yes, for other non-academic users = 6
   d. no, not technically feasible = 3
   e. no, feasible, but rejected = 40 (75%)
   f. other = 1 (investigating feasibility)
   Comments: Password rejected to enhance system security.

2. Do you set a time limit on the length of a remote access session?
   a. yes (how long?) = 5 (9%) libraries (range= 15-60 min.)
   b. no, not technically feasible = 12 (23%)
   c. no, feasible but rejected = 27 (51%)
   d. other = 2 (4%) --no reason to limit
      --not considered
   e. responses not applicable = 8

3. In your opinion, do remote access users spend more time per session online than those using hard-wired or dedicated terminals?
   yes = 7 (13%)
   no = 23 (43%)
   no opinion or response = 23 (43%)
4. Do you have ways (whether online or in printed form) of obtaining suggestions or evaluative comments from your remote access users?

   yes = 14 (26%)
   no = 39 (74%)

5. Has your library evaluated the comments (#4 above) from remote users?

   Of those responding "yes" in B.4:
   
   yes = 5
   no = 8
   no response = 1

C. SERVICE ISSUES

1. Which formats are used in offering support for remote access users (check all that apply)?

   a. printed materials = 48 (91%)
   b. training sessions in the library = 19 (36%)
   c. training sessions outside the library = 8 (15%)
   d. telephone assistance = 45 (85%)
   e. computer assisted instruction = 7 (13%)
   f. electronic mail = 14 (26%)
   g. news via electronic bulletin boards = 11 (21%)
   h. other
      --newsletter articles
      --user services librarian
      --video on RA
      --copious online help screens

D. MANAGEMENT ISSUES

1. In the allocation of resources (e.g., computer resources, reference assistance), do you have a policy statement on remote access to guide your decision making?

   yes = 4 (8%)
   no = 47 (87%)
   other = 2 (5%) --unwritten policy
       --policy in progress

2. Has your library conducted any studies to project the extent of remote access use?

   yes = 8 (15%)
   no = 45 (85%)
3. What kind of statistics or management reports relating to remote access does your system or communications mechanism routinely generate? Which have been useful in managing and planning for remote access? (Check all that apply.)

<table>
<thead>
<tr>
<th>Generated</th>
<th>Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 14</td>
<td>8</td>
</tr>
<tr>
<td>b. 4</td>
<td>3</td>
</tr>
<tr>
<td>c. 27</td>
<td>12</td>
</tr>
<tr>
<td>d. 10</td>
<td>5</td>
</tr>
<tr>
<td>e. 23</td>
<td>13</td>
</tr>
<tr>
<td>f. 2</td>
<td>0</td>
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<tr>
<td>g. 1</td>
<td>0</td>
</tr>
<tr>
<td>h. 7</td>
<td>1</td>
</tr>
<tr>
<td>i. 8</td>
<td>4</td>
</tr>
</tbody>
</table>

Generated: number of sessions by individual users (e.g., number of log-ons)
Categories of users
time of day of use
duration of each use
number of transactions (i.e., user request and system response) per user
number of busy signals or refusals
number of users waiting in queue
availability of dial-up ports
other -- which database accessed
-- response time
-- transactions/port
-- # of searches/session

No response = 23 libraries

4. Has your library used data from question D.3, above, to analyze the extent or quantity of remote access use patterns?

yes = 10 (75%)
no = 43 (25%)

5. How is remote access funded in your library (check all that apply)?

a. library's automation budget = 37 (70%)
b. library's public services budget = 3 (6%)
c. grant funding = 2 (4%)
d. user fees = 2 (4%)
e. elsewhere in university's budget = 17 (32%)
   -- computing center budget = 9
   -- departmental LAN fees = 2
   -- not specified = 6
f. other = 6 (11%)
   -- university system level funding
   -- library telecommunications equipment budget
   -- special university allocations

6. Has your library redefined any present positions to accommodate remote access or added any new positions that deal directly with remote access?

yes = 6 (11%)
no = 45 (87%)
no response = 1
7. Since offering remote access, what effect has your library seen on its other services (e.g., ILL, reference, circulation, document delivery, use of physical facilities)?

No studies or data available = 11 (21%)
No effects noted = 9 (17%)
Too early to tell = 7 (13%)
Document delivery implemented or increased = 2 (4%)
Increase in reference or library systems telephone inquiries = 2 (4%)
Decrease in use of physical facilities = 2 (4%)
Branch library circulation increased = 1 (2%)
Intra-university ILL increased = 1 (2%)
Increase in ILL = 1 (2%)
Other contributing factors = 8 (15%)
No response = 9 (16%)

8. Has your library conducted studies on:
   a. The ability of RA users to connect to the online catalog?
      yes = 1 (2%)
      no = 25 (47%)
      no response = 27 (51%)
   b. The ability of RA users to perform "successful" searches?
      yes = 0
      no = 26 (49%)
      no response = 27 (51%)

9. Other issues or comments? (Includes responses from follow-up conversations and discussions.)

   --This questionnaire seems to assume that 1) RA is different from (harder than) local access and 2) People need additional training. I have not seen either premise vindicated here. People are not going to acquire a modem to access an OPAC. Our system is quite easy to use, and we simply have not experienced difficulties.

   --Underestimated the need for technical assistance: 200 calls in the first few weeks of RA service, all related to technical, e.g., communication software, problems. User categories are roughly: 10% computer literate, 20-30% curious one-time users, and over 50% "frightened."

   --Dial access is utilized heavily by local corporations and by local high school libraries. Dial access users are provided a questionnaire to be completed on their RA use; the return rate is approximately 50 percent; responses have been positive. Most RA users are computer literate. RA users favor direct command language over menu driven.

   --We have no way of distinguishing between dial-up and direct access. All access is through the LAN, which can be accessed through dial-up or hardwired terminals.
RA has helped our off-campus students tremendously. The Extension Librarian has promoted its use and it has increased her workload, since she delivers the book requests for these students. Faculty are pleased to search from their offices or homes. Something to think about is maintaining a file of users and their equipment. We cannot be experts on all hardware and software, but our users can help each other.

Dial-up access on our campus is managed by the computer center. The OPAC is one function among several available on the mainframes.

Plan to expand RA access to 200 simultaneous users.

Dial-up instructions for the OPAC have been distributed widely in the state; dial-up use represents less than 2 percent of our total use. Some were afraid dial-up OPAC users would monopolize all available mainframe network ports (serving several other systems), but the fear has not been validated.

The university LAN is the primary means of remote access to the OPAC. Currently, the OPAC is the only utility on the LAN, and very few departments are connected.

Does the OPAC run on the library's own machine or does the library pay for time on someone else's equipment? This may have a lot to do with a library's willingness to provide free RA. We would probably not consider it, except that it costs us virtually nothing extra to provide the service on our own machine.

We are encouraging our public services staff to learn enough of the technicalities to be able to answer questions and help patrons having trouble, rather than referring all calls to Systems.

OPAC access is provided through the campus LAN. Off-campus users must dial into the LAN, and this requires an account and incurs charges. These charges are assessed by the network administration, not the library.

Gained cooperation of hackers to get software/hardware problems worked out. Registered users to provide mailing lists to communicate system changes, e.g., telephone number changed four times in six years. Discovered computing center newsletter doesn't reach RA user population. Purge mailing list of student names regularly.

Communication between computing center and library frequently inadequate. Computing center consultants need to be informed about new features and problems.

Created and distributed Kermit (freeware) and Procomm (shareware) with OPAC RA macro file already written in.
LIST OF RESPONDENTS

1. University of Alabama
2. University of Alberta
3. Arizona State University
4. Boston University
5. Brigham Young University
6. University of California at Berkeley
7. University of California at Irvine
8. University of California at Riverside
9. University of California at Santa Barbara
10. Case Western University
11. University of Cincinnati
12. University of Colorado
13. Columbia University
14. Dartmouth College
15. Duke University
16. University of Florida
17. Florida State University
18. Georgetown University
19. Georgia Institute of Technology
20. University of Illinois
21. University of Iowa
22. Iowa State University
23. University of Kentucky
24. Louisiana State University
25. University of Manitoba
26. University of Maryland
27. Massachusetts Institute of Technology
28. University of Miami
29. University of Michigan
30. Michigan State University
31. University of Minnesota
32. University of Missouri
33. University of New Mexico
34. New York University
35. University of North Carolina at Chapel Hill
36. North Carolina State University
37. Northwestern University
38. University of Notre Dame
39. Ohio State University
40. University of Pennsylvania
41. Pennsylvania State University
42. University of Pittsburgh
43. Princeton University
44. Queens University
45. Rice University
46. University of Rochester
47. Stanford University
48. State University of New York--Albany
49. Syracuse University
50. Temple University
51. University of Tennessee
52. University of Utah
53. Vanderbilt University
54. Virginia Polytechnic Institute and State University
55. Wayne State University
56. York University
57. University of Waterloo
MATERIALS FOR INSTRUCTING REMOTE ACCESS USERS
Outline for Presentation on Remote Access

I) Introductory comments

A) Identify self and position

B) Briefly assess audience familiarity w/ system
   (statement about terminology)
   1) LS/2000
   2) Ungerman-Bass Network
   3) Modem communications
   4) Equipment currently using (or anticipated)

C) Briefly describe scope of presentation

   1) What is Remote Access
      a) Access with dumb or intelligent (micro) terminals
         * Dumb terminals with a modem
         * Intelligent terminals or microcomputers
            with modems and software

   2) What session is intended to accomplish
      a) Limitations
         * Forum on searching techniques/CAI
            (Give dates, time, locations)
         * For training on use of modems/software
         * Consult manual or vendor or users group
      b) Protocols/handouts/registration
      c) Possibly small groups /user's groups
         * Hardware (IBM, APPLE, RADIO SHACK, ETC.)
         * Software (hardware specific)
      d) Questions/ answers

II) General Protocols

A) What happens in Remote Access
   1) Discuss system/links (Graphics?)

B) Setting parameters

   1) Word length (7)
   2) Baud rate (300 or 1200 phone)
   3) Parity (Even)
   4) Stop bits (1)
   5) X-on X-off (on)

C) Dial-in

   1) Demonstration - Limelite

   2) Port #'s Bypass locked ports
D) Logoff with /EXIT
   1) Be sure to logoff so as not to lock up ports

III) Registration
   A) Fill out & send to Systems office
      1) To aid in troubleshooting
      2) To keep informed on new functions/changes
   B) Pick up 10 page guide

IV) Questions/Answers
   A) Consult manuals, vendors, P-C user's groups
   B) Systems office
   C) Remote Access Committee members
Welcome to the Remote Access Orientation Program. My name is ___________. My position is ___________. We are here today to discuss with you the process involved in accessing the U.K. Library Online Public Access Catalog, LS2000, from a remote location whether it be on campus or off. This discussion will involve the use of terminology which may for some be unfamiliar, depending upon their personal experience with computers. How many here are familiar with LS/2090 (pause for show of hands). How many are familiar with the UK data network (Ungermann-Bass), (pause). How many are familiar with computer to computer communications, such as with a modem and a Personal Computer or a Dumb terminal. (pause)

What I hope to cover today is an overview of remote access. We do not have the time here to go into searching techniques, however we have some handouts which may be helpful, and there are forums scheduled thru the reference department to aid you in searching. In addition, there is a Computer Assisted Instruction package on the UK Prime computer which is available via the data network. The reference department has information on this as well. Also we cannot focus on specific hardware or software applications due to the wide variety of equipment and combinations available.

We will, however, be able to discuss the communications settings you will need for remote access to LS/2000. We also have copies of registration forms, and sheets to follow when logging on to the system. We want to encourage those who have a need for remote access and the equipment to do so to try it and we offer our assistance in this process. At the end of this presentation, I will open the floor for questions and comments.

The transparency illustrates the connections which are made in terms of remote access to LS/2000. Access can be accomplished in three basic ways. (1) You may be familiar with LS/2000 access thru the dedicated terminals located in King Library and the branch libraries. These terminals are directly wired to the LS/2000 computer located in Mcvey Hall. Remote access is accomplished thru the other two ways, which we will discuss today. (2) One of these ways is via the terminals located at several locations on campus. These terminals are wired directly to the Ungermann Bass network and from there you can connect to the library computer.
The third (and probably the most complex) way is thru phone lines with a modem and a terminal or a microcomputer. (point out on transparency). Here we must call up the dataswitch, then connect to Ungermann Bass (UKNET) and finally connect to the library computer. At the risk of scaring some of you away, problems with communications between these links can be frustrating for the novice bu' we will be glad to help.

In all types of remote access, once the connection is made the terminal or PC (if properly configured) will act much like a terminal located in King Library. While there are some differences in terms of equipment, (particularly keyboard differences), in most cases you should be able to determine if a book is in the UK library system and if it is available for use or checkout.

The initial step to doing any type of computer to computer communications is to locate a terminal or microcomputer with a modem and appropriate software. However the terminal or software must be configured or set up to ensure that the computers will be able to communicate effectively. The parameters which we have found necessary for this purpose are as follows:

1) Word Length (7)
2) Baud rate (1200 or 300 for phone) (9600 for direct)
3) Parity (EVEN)
4) Stop bits (1)
5) Echo off (half duplex)
6) X-on (not relevant in most applications)

Once the settings have been established, the next step is to dial-in. The important thing to keep in mind in this process is that one must have patience. Remote access while convenient is not without costs in terms of initial effort. I dont want to overemphasize this factor, but at the same time I want to warn you not to be too easily discouraged. For those of you who have attempted to connect your terminal or micro to a host computer, I need not say more. For those of you who haven't, I can only say that the reward of mastering this process was profoundly satisfying for me, and I hope it will be for you also. Today we are using a Televideo 955 with a US Robotics modem and a University telephone. (Demonstration)
When you are finished with your searching, it is essential for you to logoff from the LS/2000 system properly. The LS/2000 computer will not respond appropriately to the next person who uses the communications port if you do not exit correctly (with /EXIT). We can only ask that you pay particular attention to this detail to insure that the next person will be able to use remote access. If you experience difficulty with your connection to LS/2000, at the point of connecting to the library computer please let us know.

We would like for those of you who would like to try remote access to fill out a registration form (point them out). Please fill them out as completely as possible and if you plan to set up a departmental terminal or access point, please indicate that on the form and who can be contacted to keep your department up to date on recent developments. We need these forms in order to aid you if you have problems and to keep you informed on any changes or enhancements in the system. We also have some handouts for specific hardware and software setups and copies of the 10 page searching guide for those registrants who are sure they would like to use remote access.

I would like to mention that we are interested in feedback and comments regarding remote access. We also will try to help in the case of problems you may encounter. Other useful sources of information are your software and hardware manuals, the vendors who sold you your equipment or software, and the others who have gone thru the process. If you are willing to assist us or your fellow remote access users please indicate this on the registration form.

Are there any questions or comments?
1. **Question:** What is remote access?
   **Answer:** Given that the term "remote" means outside the library, it is a way of accessing the library's online public catalog from a remote location; on campus or off campus.

2. **Question:** What do I need to get started?
   **Answer:** A terminal or microcomputer with a modem and appropriate software. Additional information may be picked up in the Reference Department of King Library or at any branch library, or community college library.

3. **Question:** How do I configure the terminal or software?
   **Answer:** The parameters necessary for communication are as follows:
   1) Word length (7 for phone) (8 for direct)
   2) Baud rate (1200 or 300 for phone) (9600 for direct)
   3) Parity (even)
   4) Stop bits (1)
   5) Echo off (full duplex)

4. **Question:** What are the telephone numbers for remote access?
   **Answer:** On campus 7-4861. Off campus (606) 257-4861.

5. **Question:** Is it possible to download?
   **Answer:** Yes. For "terminal type," use DUMB instead of VT/100, VT52, etc.

6. **Question:** Are there any free software packages that I can copy?
   **Answer:** Yes. Kermit and Y-Term are free. Call the microlab in McVey Hall at 257-2900. Or other PC's, contact your local use: group.

7. **Question:** What time is remote access available?
   **Answer:** Any day from 8:00 a.m. to midnight. Notification of changes will be displayed on screen.

8. **Question:** Do U.K. Community Colleges have access to the service?
   **Answer:** Yes. Community Colleges are part of the University community.

9. **Question:** Do UK's alumni have access to the service?
   **Answer:** No. One must have a current campus mailing address or one must be on UK's payroll.
General

--If upon signing on, you notice a problem with searching your port may be frozen. When a port is frozen, you should exit and sign on again selecting a different port by entering LIB-072 or 073, etc. Available ports are 071-078, 094 and 098, 102 and 103. Be sure to enter all three digits including the zero. Also report the frozen port to Tari Keller at 257-2643.

--The system will automatically log you off if there is no activity within 15 minutes. If you've turned your machine off without logging off you may lock or freeze a port and no one else will be able to use that port until it is freed.

--Each user should be encouraged to register with the systems office (Room. 201 King Library South - 257-2643) so that we may inform them of changes in the system as well as be better able to address problems that they might encounter.
I. Starting PROCOMM Software
   A. Insert the DOS diskett into Drive A, then turn-on the microcomputer.
   B. Tap the return key after the date prompt.
   C. Tap the return key after the time.
   D. When the A > prompt displays, replace the DOS diskette with the PROCOMM diskette.
   E. Type the command, PROCOMM and tap the return key.
   F. Press any key when the software prompts you to do so.
   G. Read the prompt line at the bottom of the screen. This line indicates that you may receive help by entering the "ALT-F10". The remaining information on this line indicates the terminal settings which are currently established in the PROCOMM software.
   H. Follow the first prompt by holding down the "Alt" key and tapping the "F10" key. The computer will respond with the PROCOMM Help Screen. (For your reference, a copy of this screen is included in your COMPASS folder.)
   I. To illustrate how PROCOMM works, read the first line under the heading "MAJOR FUNCTIONS": "Dialing Directory...... Alt-D".

Now request the dialing directory by holding down the "Alt" key and tapping the "D" key.

The dialing directory has been set up to include three different capabilities for dialing LCS: 1) office modem, 2) home modem, and 3) PBX modem. The line for dialing LCS from a PBX system will be deleted later in the class.
J. At the bottom of the screen display, the dialing directory indicates (at the lower left) the "Modem Dial Cmd: ATDT." In this modem dialing command, the "AT" secures the attention of the modem; the "D" indicates "dial"; and the "T" indicates "touch tone dialing." The lines in room 122 of the Library are "pulse" or "rotary" so this setting will be changed in order for the modem to be able to dial correctly using these lines.

Also observe "Com Port Active: COM1" (at the lower right). The modem in the Panasonic Executive Partners is installed in "communications port 2." Thus, the "Com Port Active:" must be changed to "COM2.

Return to "Procomm Help:" press the "ESC" key, then hold down the "Alt" key and tap the "F10" key.

K. To change ATDT to ATDP, the Setup Screen ("Alt-S") is used. Look under the UTILITY FUNCTIONS heading for "Setup Screen."

To adjust the ATDT to ATDP, request the Setup Screen by holding down the "Alt" key and tapping the "S" key. From the menu, select option 1 (Modem Setup) and tap the return key. From the Modem Setup menu, select option "2" (Dialing command) followed by tapping the return key.

In the blank space following the arrow, enter "ATDP" in capital letters followed by tapping the return key. The "ATDP" should now display on line 2, following the words "Dialing command." Press the "ESC" key. You should now see the SETUP MENU; note the last item listed in the menu "S) SAVE SETUP TO DISK." To save "ATDP" in the Modem Setup, type "S" followed by tapping the return key. The message "Parm Files Updated" will appear and then will disappear when the update is completed. Tap the "ESC" key to exit from this menu.

Return to "Procomm Help:" press the "ESC" key, then hold down the "Alt" key and tap the "F10" key.

L. To change COM1 to COM2, the Line Settings screen ("Alt-P") is used. Look under the MAJOR FUNCTIONS heading for "Line Settings."

To adjust the COM1 to COM2, request the Line Settings screen by holding down the "Alt" key and tapping the "P" key. Note that line 2, CURRENT SETTINGS:, indicates "COM1." From the Line Settings menu, select option 21 (for COM2) by typing "21" followed by tapping the return key. Note that CURRENT SETTINGS: now indicates "COM2." To save the change to COM2 to disk, select option 24 by typing "24" followed by tapping the return key. Immediately under the heading LINE SETTINGS the program will flash a message indicating that it is saving the new setting to disk. When the save process is completed, the system will automatically perform an escape (ESC).

M. Now return to the "HELP" by holding down the "Alt" key while tapping the "F10" key.
II. Dialing LCS from the microcomputer

A. Note under "MAJOR FUNCTIONS" that PROCOMM has a Dialing Directory. Request the PROCOMM Dialing Directory by holding down the "Alt" key and tapping the "D" key.

B. Look at line 2 on the Dialing Directory. This entry has been set up to dial LCS from a campus telephone. The telephone number is 2-3112. Note the following information, appearing in labeled columns: BAUD rate is 1200; Parity is Space or None; Data bits count is 7; Stop bit count is 1; Echo is set at N for no echo.

C. Note that the microcomputer cursor (blinking line) is near the left edge, in the middle of the screen, to the right of the arrow. In order to dial 2-3112, type 2 and tap the return key. PROCOMM will instruct the internal modem to dial IRCC's Network Switch.

D. You will receive "CONNECT 1200" message from PROCOMM. Tap the return key once or twice and the following message from IRCC will display:

   The Ohio State University
   Hosts are TSO, WYLBUR, CMS, DEC20, LCS, FS
   Host Name?

   If you wait more that 5 seconds before responding, the IRCC switch will "disconnect" or hang-up.

E. After the prompt "Host Name?, type lcs and tap the return key.

F. You will receive the following message:

   For 9600 BPS operation type LCS
   For 1200 BPS operation type \ LCS
   For 300 BPS operation type OLCS
   GO

G. After "GO", type \lcs (the \ is a shift 6) and tap the return key. (If the computer responds "BUSY, WAIT? 00#" and you wish to wait, type yes. However, in the COMPASS course, see the instructor.)

H. Read the LCS welcome message.

I. Type help and tap the return key. Read the Help screen.

J. As an example of an LCS HELP display, type help-title and tap the return key. Read the Help-title screen.

K. You may type "help" followed by the LCS location code to learn where a desired item is held. Type help-edu
L. Type bye

M. Hold down the "Alt" key and tap the "H" key to disconnect from the IRCC Network Switch. Watch the lowerleft corner of the screen for the "disconnecting message," which appears briefly. The screen does not clear.

III. Modify the PROCOMM Dialing Directory

A. Request the PROCOMM Dialing Directory by holding down the "Alt" key and tapping the "D" key.

B. Note that line 4 provided for dialing LCS from a PBX system. Theoretically, this would allow you to dial off-campus and back onto campus to reach the IRCC Switch. With the recent changes in the University Telephone System, this is not currently possible. Therefore, you should now delete this line.

C. Type D to request the delete entry function. Type 4, which is the line number of the "LCS (From PBX Sys)" and tap the return key. Type another 4 followed by return. Respond to the question "Are you sure? by typing a Y for yes.

D. To give you practice in adding a number to the Dialing Directory, you should pretend that you have a computer at home which you wish to dial from your office. The number, including the 9, should be entered as the telephone number. The computer at home is set to 300 baud, even parity, 8 data bits, 1 stop bit, and needs the echo to be on. This practice exercise, which is called "Home Phone," may be entered on one of the unused lines in the dialing directory. Type "R" and tap the return key to request the "Revise" function. In response to line number type the number of an unused line and follow the entry instructions and the information from the preceding paragraph. You may provide this line in the directory with any name (e.g. "Home telephone"). (In the instructions, the CR is an abbreviation to indicate the "Carriage Return" key.) When you finish you should store this new entry to disk. (At a later time you will probably delete this line.)

E. Press the Esc key to leave the Dialing Directory.

F. Hold down the "Alt" key and tapping the "F10" key to return to the PROCOMM Help Screen.

G. Exit is listed under "MAJOR FUNCTIONS" as "Alt-x". Exit from PROCOMM by holding down the "Alt" key and tapping the "X" key.
Instructing Online Remote Users at UC Berkeley

Myrtis Collins

In August and October, 1987, a seminar was presented on dialup access to the library online catalogs at the University of California, Berkeley. The seminar was given four times to a total audience of 109 persons. Although these sessions targeted faculty, graduate students, and library staff, they provided the basis for another informal instruction session for undergraduates. As this was the first seminar offered for online remote users at UC Berkeley, we learned a great deal from the experience.

The Seminar

The seminar was two and one-half hours long, including a ten to fifteen minute break. A brief introduction gave an overview of the seminar. The coverage of the two online catalogs, GLADIS and MELVYL, and the card catalog was explained.

Basic concepts of computer communications were introduced. A demonstration followed, in which an IBM-compatible shareware communications program (ProComm) was used to dialup the library online catalogs, search them, and download records. This program was given to seminar participants and was set up to automatically dialup the online catalogs from a beginning menu. We also included a form for registering their use of this shareware program, and another handout which explained how to use the disk. The freeware program Kermit was also on the disk.

To demonstrate dialup access to a roomful of seminar participants, we used a portable computer with an internal modem, an overhead projector, and a projector panel designed to connect to the computer and sit on top of the overhead projector. With this projector panel, everything we did on the microcomputer was projected onto a screen.

Instruction in searching the catalogs followed a short break. We found it useful to use sophisticated searching techniques during the dialup demonstration to stimulate interest in the second half of the seminar. Thus even library users who thought they were knowledgeable searchers found that there was more to learn about the catalogs.

We handed out two categories of materials: library orientation leaflets which existed before the seminar and others which were developed specifically for the seminar. Most of the first category of materials consisted of online catalog explanatory leaflets. The second category of materials were primarily in support of computer communications concepts and the diskette we gave to seminar participants.
Lessons

* Provide for two separate sessions: one for IBM-compatible PC users and another for Macintosh users. If a significant portion of your intended audience uses other types of equipment, be prepared to answer their questions.
* If possible, allow for hands-on instruction.
* Explain the concepts of computer communications simply (explain jargon if you must use it) and use graphics whenever possible.
* Prepare handouts with care. Cover only what is truly useful and make them clear and easy to use.
* Do not advertise dialup access to the library catalog unless support is available for users who have problems.
* If you distribute a communications program, customize it to make it as easy as possible to dialup your online catalog. Also, demonstrate the disk you are distributing—not your personal copy. If it is a shareware program, include a registration form with your handouts and encourage seminar participants to register if they use the program.
* Use the microcomputer demonstration of connecting to the library catalog as the seminar “bait.” Set the hook by using sophisticated searching techniques for the demonstration and when it comes time to teach them to search the catalog they will be eager to learn.

Issues

* What are the best methods for instructing remote users?
* How can remote users best be supported?
* How do we help users find what they need when they are not in the library?
* Can online catalog users receive adequate help online?
REMOTE ACCESS USER AIDS
DIALUP ACCESS TO THE LIBRARY CATALOG

The GLADIS online library catalog may be accessed from your personal computer by using a modem and communications software. This page will give you the basic information you need to dialup the catalog. For additional assistance and publications providing fuller information, please refer to the bottom of this page.

Set your computer to:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baud Rate</td>
<td>1200 or 300</td>
</tr>
<tr>
<td>Parity</td>
<td>Even</td>
</tr>
<tr>
<td>Data Bits</td>
<td>7</td>
</tr>
<tr>
<td>Stop Bits</td>
<td>1</td>
</tr>
<tr>
<td>Duplex</td>
<td>Full</td>
</tr>
<tr>
<td>Auto LF</td>
<td>No</td>
</tr>
<tr>
<td>Strip Chars</td>
<td>No</td>
</tr>
<tr>
<td>Xon/Xoff</td>
<td>No</td>
</tr>
</tbody>
</table>

Dial one of these numbers:

- 642-7400 1200 baud
- 642-6870 1200 baud (Racal-Vadic modems work only with this number)
- 642-9721 300 baud

At the "Request" prompt:

Enter "GLADIS"

In GLADIS, you are automatically set as a "generic" terminal. Enter "help set term" for information after entering the catalog.

For assistance:

- Searching the catalogs: 643-9999, Library Information Desk
- 1-hour free hands-on instruction: 643-9999, ask for schedule
- Failure to connect to the port selectors: 642-4774, Computing Facilities Status Tape
- 642-4072, Academic Computing Services Consulting
- Communications software help: 642-9325, Myrtis Collins, Main Library Reference
- 642-5070, Roy Tennant, Moffitt Library Reference

Additional publications:

Connecting to the UCB Library Online Catalogs via Remote Access
Guide to GLADIS

Available at the Library Copy Service, 145 Main Library, $1.00 each.
UCLID DIAL ACCESS

SMARTCOM II

Hardware/Software Combination: IBM PC, Hayes 1200 Baud Smart modem, SMARTCOM II software.

The Library Systems Development Office has successfully used SMARTCOM II for dial access to UCLID. We have found that the following SMARTCOM II parameters will work:

**PARAMETERS**

Name of Set: R - UCLID

TRANSMISSION PARAMETERS

<table>
<thead>
<tr>
<th>Duplex:</th>
<th>FULL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baud:</td>
<td>1200</td>
</tr>
<tr>
<td>Character Processing:</td>
<td>FORMATTED</td>
</tr>
<tr>
<td>Show Control Codes:</td>
<td>NO</td>
</tr>
<tr>
<td>Page Pause:</td>
<td>NO</td>
</tr>
<tr>
<td>Show Status Lines:</td>
<td>NO</td>
</tr>
<tr>
<td>Confidential:</td>
<td>NO</td>
</tr>
<tr>
<td>Include Line Feeds:</td>
<td>NO</td>
</tr>
<tr>
<td>Character Delay:</td>
<td>0 (0.001 sec.)</td>
</tr>
<tr>
<td>Line Delay:</td>
<td>0 (0.01 sec.)</td>
</tr>
<tr>
<td>Character Format:</td>
<td>7 DATA + EVEN + 1 STOP</td>
</tr>
<tr>
<td>Emulator:</td>
<td>VT102 / VT100</td>
</tr>
</tbody>
</table>

TELEPHONE PARAMETERS

| Answer On Ring: | 1 |
| Remote Access: | NONE |
| Phone Number: | 961-0018 |

Press F2 For Help

KEYBOARD DEFINITIONS

| Escape Key: | 128 (F1) |
| Help Key: | 129 (F2) |
| Printer Key: | 130 (F3) |
| Capture Key: | 131 (F4) |
| Macro Prefix Key: | 132 (F5) |
| Break Key: | 133 (F6) |
| Break Length: | 35 (0.01 sec.) |
| Protect Key: | 134 (F7) |

PROTOCOL PARAMETERS

| Receive Time-out: | 60 (sec.) |
| Send Time-out: | 10 (sec.) |
| Error-Free Protocol: | HAYES |
| Stop/Start-Stop Char: | 19 (DC3) |
| Start Char: | 17 (DC1) |
| Send Lines-EOF Char: | 10 (LF) |
| Prompt Char: | 32 (""") |

Record To Disk? (Y/N): Y

In particular, be sure that Duplex is Full, that the BAUD rate matches your modem and that the Character Format is 7 DATA + EVEN + 1 STOP. The Emulator should be VT102/VT100. Page Pause and Show Status Lines should both be set to NO, otherwise the last two lines of some UCLID screens will be covered up by the SMARTCOM II status lines.

SMARTCOM II requires 256K of memory and a Hayes modem, or, according to Hayes, a "Hayes-compatible" modem. Current version 2.1 will work with the IBM PC, the PC-AT, and the PC-XT. For more information about SMARTCOM II, call Hayes Microcomputer Products at (404) 441-1617.

The following pages show how your control and cursor movement keys should behave, while logged on to UCLID. (Please note that this applies to a standard IBM keyboard. If you have a non-IBM keyboard, such as the Keytronics, your keyboard behavior may be different.)
IBM PC (with standard keyboard) with SMARTCOM II emulating the VT100:
Control and Cursor Movement Keys

Function: **ENTER**
Corresponding Key Sequence Required: **RETURN**

Function: **RESET**
Corresponding Key Sequence Required: **CTRL (and) G** or try: **CTRL (and) R**

Function: **ERASE EOF**
Corresponding Key Sequence Required: **ESC (then) BACKSPACE**
(Erase to the End-Of-Field)

Function: **DELETE CHARACTER**
Corresponding Key Sequence Required: **BACKSPACE**

Function: **ENTER & EXIT INSERT MODE**
Corresponding Key Sequence Required: **The Period (".")) on the Numeric Keypad.**

Function: **HOME**
Corresponding Key Sequence Required: **SHIFT (and) BACKSPACE**

Function: **CURSOR UP**
Corresponding Key Sequence Required: **ALT (and) ^**

Function: **CURSOR DOWN**
Corresponding Key Sequence Required: **ALT (and) ↓**

Function: **CURSOR RIGHT**
Corresponding Key Sequence Required: **ALT (and) -->**

Function: **CURSOR LEFT**
Corresponding Key Sequence Required: **ALT (and) <--**

Function: **NEWLINE**
Corresponding Key Sequence Required: **CTRL (and) RETURN**

Function Keys:
Corresponding Key Sequence Required:

PFK 1
Corresponding Key Sequence Required: **ESC (then) 1**

PFK 2
Corresponding Key Sequence Required: **ESC (then) 2**

PFK 3
Corresponding Key Sequence Required: **ESC (then) 3**

PFK 4
Corresponding Key Sequence Required: **ESC (then) 4**

PFK 5
Corresponding Key Sequence Required: **ESC (then) 5**

PFK 6
Corresponding Key Sequence Required: **ESC (then) 6**

28

con't.
Function Keys:

<table>
<thead>
<tr>
<th>Function Key</th>
<th>Corresponding Key Sequence Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFK 7</td>
<td>ESC (then) 7</td>
</tr>
<tr>
<td>PFK 8</td>
<td>ESC (then) 8</td>
</tr>
<tr>
<td>PFK 9</td>
<td>ESC (then) 9</td>
</tr>
<tr>
<td>PFK 10</td>
<td>ESC (then) 0</td>
</tr>
<tr>
<td>PFK 11</td>
<td>ESC (then) HYPHEN (&quot;-&quot;)</td>
</tr>
<tr>
<td>PFK 12</td>
<td>ESC (then) EQUALS (&quot;=&quot;)</td>
</tr>
</tbody>
</table>

Use the main keypad, NOT the numeric keypad when emulating PFK Keys using ESCAPE followed by numbers 0-9, the HYPHEN or the EQUALS sign.

The SCROLL LOCK Key is your switch key which will return you to your modem commands, to change your parameters, hang-up, etc.

When using CTRL or ALT followed by another key, hold down CTRL or ALT while pressing the other key. When using ESC (escape), this is not necessary.

Caution: If you press CTRL and S, which with other applications is used to control scrolling, you will have essentially put the terminal "on hold". CTRL and Q will restore online communications.

Caution: If you get the message of "No Default TID defined", simply press RETURN to continue. This message occurs if you have used any of these key sequences: Minus Key ("-") on the numeric keypad
ESC (and) Period (".") on the numeric keypad
ESC (and) Greater Than (">").

Linda Newman
Library Systems Development Office
11-86
UCLID DIAL ACCESS (for technical users)

IBM PC with SMARTCOM II emulating the VT100:
Keys needed for Direct Command Language:

<table>
<thead>
<tr>
<th>Function:</th>
<th>Corresponding Key Sequence Required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEAR</td>
<td>The PLUS Key (&quot;+&quot;&quot;) on the numeric keypad. (It could also be labeled &quot;ENTER&quot; on the numeric keypad.)</td>
</tr>
<tr>
<td></td>
<td>(applicable if in &quot;True&quot; direct command, or using a COM-PASS User ID.)</td>
</tr>
<tr>
<td>PA1</td>
<td>PF4</td>
</tr>
<tr>
<td>(applicable if using a &quot;COM-PASS&quot; User ID)</td>
<td>also: ESC (then) Comma (&quot;,&quot;)</td>
</tr>
<tr>
<td></td>
<td>also: ESC (then) Less Than (&quot;&lt;&quot;)</td>
</tr>
</tbody>
</table>

Note: We have not been able to determine a key sequence that will emulate TAB or BACKTAB. Please call the Library Systems Development Office (475-5861) if you discover how.

Linda Newman
Library Systems Development Office
11-86
DIAL ACCESS TO UCLID

(University of Cincinnati Libraries Information Database)

Library Systems Development Office
476 Langsam Library
(513) 475-5861

Prepared by:
Linda Newman
November, 1986
Revised January, 1987
# DIAL ACCESS TO UCLID

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information about UCLID.</td>
<td>1</td>
</tr>
<tr>
<td>Dial In and Logon Procedure.</td>
<td>2</td>
</tr>
<tr>
<td>Ending the Session.</td>
<td>6</td>
</tr>
<tr>
<td>Display of Special Characters in UCLID.</td>
<td>6</td>
</tr>
<tr>
<td>Help</td>
<td>7</td>
</tr>
<tr>
<td>Hardware/Software:</td>
<td></td>
</tr>
<tr>
<td>Requirements and Communications Parameters</td>
<td>8</td>
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<tr>
<td>Software for the IBM PC.</td>
<td>9</td>
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<tr>
<td>Software for Apples.</td>
<td>10</td>
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<tr>
<td>Software for Other Microcomputers.</td>
<td>11</td>
</tr>
<tr>
<td>Other Terminals</td>
<td>11</td>
</tr>
<tr>
<td>UCLID Without Terminal Emulation</td>
<td>11</td>
</tr>
<tr>
<td>Printing</td>
<td>11</td>
</tr>
<tr>
<td>Library Locations and Telephone Numbers</td>
<td>12</td>
</tr>
</tbody>
</table>
The University of Cincinnati Libraries Information Database (UCLID) is a computer based alternative to the library card catalog. UCLID currently contains over 770,000 citations to books and journals held collectively by the eighteen libraries in the UC system. This number represents more than two-thirds of the total collection, and is increasing monthly as records are added for new and old titles.

There are two search systems available in UCLID: Easy Access and Direct Command Access. Easy Access is a menu driven system with Help Screens available on request, and it requires no instruction. Direct Command requires knowledge of UCLID command language, but it is more powerful. Some of the search approaches available in Direct Command searching are browsing by call numbers, boolean searches, and browsing lists of subject terms. (If you are interested in more information about Direct Command Language, see the Response Form accompanying this booklet.)

UCLID can be accessed from your home or office, from a terminal or microcomputer equipped with a modem and terminal emulation capabilities. Read the information in this booklet under "Hardware/Software" beginning on page 8. After you set up your equipment according to those instructions, then follow the instructions under "Dial In and Logon Procedure" to get online.

We hope that you find UCLID a valuable addition to your research. Any questions can be referred to the Library Systems Development Office, (513) 475-5861.
DIAL IN AND LOGON PROCEDURE

Note: UCLID is available from 7:30 a.m. to Midnight, 7 days per week.

#1 RULE - Don't Hurry. Do it slowly and deliberately.

1. Set your parameters according to the instructions, at the end of this booklet, called "Hardware/Software Requirements and Communications Parameters".

2. Dial in using this telephone number: 961-0018.

   Note: If you are dialing from within the University of Cincinnati, add 9. For example: 9,961-0018.

   Follow the dialing instructions in the manual accompanying your modem and/or communications software.

   Note: The telephone number you are using accesses a "hunt group" of 48 lines. If the first line is busy, the next available line will be used. If you get a busy signal or your modem responds "No Carrier", all lines are in use or the system is down. Try again. (Also, see the section in this booklet called HELP.)

3. When your modem signals you that you have connected, press ENTER or the carriage return, whatever your terminal uses for the ENTER function.

4. A message will appear saying "ENTER TERMINAL TYPE". Type in your terminal type and press ENTER (or RETURN).

   If you are unsure of the terminal type, type the letter "m" and press ENTER (or RETURN). The screen will display a menu of choices. -------------------------->

   At the bottom of the menu is a place to type in your choice; type it in exactly as it is shown in the menu. Press ENTER (or RETURN).

5. This is how the screen should look now --->

   THIS TERMINAL IS LOGGED ON TO THE UCC NETWORK
6. Now, type UCLID (upper or lower case). Press ENTER (or RETURN).

The screen will look like this ————>

![User ID and Password Screen]

The screen tells you what User ID is currently available for your session. It will NOT be the same each time you dial in to UCLID, but will vary depending on how many dial-access users are online at that time. The Password will ALWAYS, however, be UCLID.

Record the User ID and Password. Press ENTER (or RETURN) once to continue.

Note: If the screen shown above did not appear, and instead you received a message such as "SESSION NOT BOUND", or "APPLID INVALID", then the Library System may not be up and running. Hang up and try again later. (Also, see the section in this booklet called HELP.)

7. The screen will look like this ————>

![Terminal Connected to Comp-lete] ZY10003 — THIS TERMINAL IS CONNECTED TO COM-PLETE.

If you remember your User ID and Password, simply press ENTER to continue.

If, however, you have forgotten the User ID and Password given to you for this session, type *ULOG OFF and press ENTER. You can then start over beginning with step 5.

8. If a screen appears next that says "LOGON REQUIRED", simply press ENTER (or RETURN) to continue.

9. Now the screen will look like this ———>

![User ID and Password Screen]

Type in the User ID. Cursor will jump down to "password". Type in the word UCLID.
10. Now, push ENTER.

The screen will look like this

If the screen does not look like this and says "Wrong ID" or "Wrong Password", you have probably made a typing error. Try again. If you continue to be unable to get in, break the connection (hang up or power off your terminal), and start over.

11. Push ENTER.

The screen will look like this

12. Type in one of the signons from the next page, called, "Signing on to Easy Access".

For example, type:
EXEC EZLANG

Then press ENTER.

The screen should look like this

Congratulations! You have successfully dialed in and logged on to UCLID, the University of Cincinnati Libraries Information Database. From now on, there will be help screens to guide you with your search.
SIGNING ON TO EASY ACCESS

At the screen that says "Please signon", type one of the following EXEC signons:

<table>
<thead>
<tr>
<th>EXEC</th>
<th>SIGNON</th>
<th>INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EZAPPL</td>
<td>EXEC</td>
<td>OCAS</td>
</tr>
<tr>
<td>EZARB1</td>
<td>EXEC</td>
<td>Archives &amp; Rare Books</td>
</tr>
<tr>
<td>EZCCM1</td>
<td>EXEC</td>
<td>CCM</td>
</tr>
<tr>
<td>EZCHEM</td>
<td>EXEC</td>
<td>Chemistry Biology</td>
</tr>
<tr>
<td>EZCLAS</td>
<td>EXEC</td>
<td>Classics</td>
</tr>
<tr>
<td>EZCLER</td>
<td>EXEC</td>
<td>Clermont College</td>
</tr>
<tr>
<td>EZCRC1</td>
<td>EXEC</td>
<td>CRC</td>
</tr>
<tr>
<td>EZDAAP</td>
<td>EXEC</td>
<td>DAAP</td>
</tr>
<tr>
<td>EZELL1</td>
<td>EXEC</td>
<td>Elliston</td>
</tr>
<tr>
<td>EZENGI</td>
<td>EXEC</td>
<td>Engineering</td>
</tr>
<tr>
<td>EZGEO</td>
<td>EXEC</td>
<td>Geology</td>
</tr>
<tr>
<td>EZLANG</td>
<td>EXEC</td>
<td>Langsam</td>
</tr>
<tr>
<td>EZMATH</td>
<td>EXEC</td>
<td>Mathematics</td>
</tr>
<tr>
<td>EZMARX</td>
<td>EXEC</td>
<td>Marx Law</td>
</tr>
<tr>
<td>EZMCIC</td>
<td>EXEC</td>
<td>MCIC (Medical Center Information and Communications)</td>
</tr>
<tr>
<td>EZMEDI</td>
<td>EXEC</td>
<td>Media</td>
</tr>
<tr>
<td>EZPHYS</td>
<td>EXEC</td>
<td>Physics</td>
</tr>
<tr>
<td>EZRWC1</td>
<td>EXEC</td>
<td>Raymond Walters College</td>
</tr>
</tbody>
</table>

The signon which you choose from the list above determines to which library you will be signed on. At the present time, your choice of library does not affect the results of Easy Access searching itself.

However, if you choose the option of Direct Command Access to the UCLID Online Catalog, your choice of library will affect the results of call number browsing and call number searches. If you would like to receive documentation on Direct Command Language searching, please check the appropriate box on the response form accompanying this booklet. If you are interested in instruction in Direct Command Language, see a Reference librarian at the University of Cincinnati Library which you frequent most often.

Rev. 12/29/86
ENDING THE SESSION

Follow the hang-up instructions for your modem or communications software, or simply break the connection by powering off your terminal or microcomputer.

Note: If at any time during your session, you fail to send a command (or hit the ENTER key) for more than 15 minutes, you will be logged off from UCLID.

DISPLAY OF SPECIAL CHARACTERS IN UCLID

Some records, especially titles in foreign languages, contain diacritical marks, such as accent marks, that will display correctly only on the hard-wired terminals found in the libraries. On your terminal or microcomputer these diacritical marks will display as one character, probably an asterisk (*), colon (:), or at sign (@).
HELP

Dialing In or Log On/Log Off Questions: Call the Library Systems Development Office at (513) 475-5851.

General Questions: Call the Library Systems Development Office, (513) 475-5861 which is staffed between the hours of 8 to 5, Monday through Friday. At any other time, please leave a message on the recorder, and your call will be returned the next working day.

Hardware/Software Questions: If you have questions about what equipment and/or software will work for dial access to UCLID, call the Library Systems Development Office at (513) 475-5861.

Help If Your Function Keys Don't Work: The Library Systems Development Office can send you information on how to emulate function keys, and other keyboard information, if you let us know what equipment and/or software you are using for dial access to UCLID. (See the response form accompanying this booklet.) You can also make the substitutions listed below, to mimic function keys:

<table>
<thead>
<tr>
<th>To Mimic:</th>
<th>Type:</th>
<th>Function:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFK1 (PF1)</td>
<td>? then press ENTER</td>
<td>HELP within the Easy Access Interface</td>
</tr>
<tr>
<td>PFK5 (PF5)</td>
<td>* then press ENTER</td>
<td>Exit the Direct Command Interface (Return to Easy Access Interface)</td>
</tr>
<tr>
<td>PFK7 (PF7)</td>
<td>&lt; (Less Than) then press ENTER</td>
<td>Scroll up within the Direct Command Interface</td>
</tr>
<tr>
<td>PFK8 (PF3)</td>
<td>&gt; (Greater Than) then press ENTER</td>
<td>Scroll down within the Direct Command Interface</td>
</tr>
</tbody>
</table>

Instruction in UCLID searching: Ask at the Reference Desk (or ask a librarian) at the Library which you frequent most often. If you are not familiar with any of the University of Cincinnati Libraries, call the Library Systems Development Office, at (513) 475-5861.

System Availability: UCLID is available from 7:30 a.m. to Midnight, 7 days per week.

If you are unsuccessful at dialing in to UCLID, call the Library Systems Development Office at (513) 475-5861. (If no one answers at the 475-5861 number, you may also call the University of Cincinnati Library which you frequent most often and ask if UCLID is up and available.)
HARDWARE/SOFTWARE REQUIREMENTS AND COMMUNICATIONS PARAMETERS:

UCLID, the University of Cincinnati Libraries Information Database, runs on the IBM/Amdahl mainframe network at the University of Cincinnati Computing Center. You will be dialing in through an IBM 7171 protocol converter. These are the general hardware/software requirements:

1. You need a modem and a serial interface port with your terminal or microcomputer. All phone lines which access UCLID support 300 or 1200 BAUD modems. A 1200 BAUD modem must meet Bell 212 format standards. (If your modem uses the older VADIC 3400 format, call the Library Systems Development Office, 475-5861, for information.) Selected phone lines also support 2400 BAUD access; if you are interested in 2400 BAUD access to UCLID, call the Library Systems Development Office for more information.

2. Set your modem, terminal and/or communications software for the following parameters:
   - BAUD rate of 300 or 1200, depending on your modem
   - Full duplex
   - 7 bit data words
   - 1 stop bit
   - Even Parity
   - No Local Echo

   If your communications software gives you control over these parameters, choose:
   - XON/XOFF Handshaking
   - Parity Check set to ON

3. You should have one of the following terminals, or if you have a microcomputer, you need software that will emulate one of these terminals:

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Terminal</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDS100</td>
<td>ADDS3A</td>
<td>ADDS580</td>
</tr>
<tr>
<td>ADM31</td>
<td>ADM3A</td>
<td></td>
</tr>
<tr>
<td>AMBASS24</td>
<td>AMBASS43</td>
<td></td>
</tr>
<tr>
<td>DM1520</td>
<td>DM1521</td>
<td>DM3045</td>
</tr>
<tr>
<td>HAZEL14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM3101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TVI912</td>
<td>TVI920</td>
<td>TVI950</td>
</tr>
<tr>
<td>TVI95OR</td>
<td></td>
<td>TVI950</td>
</tr>
<tr>
<td>VT52</td>
<td>VT100</td>
<td></td>
</tr>
</tbody>
</table>

There is information on the following pages about several communications software programs which do VT52 and/or VT100 emulation for IBM PC's or Apple microcomputers. If you have difficulty locating software which offers terminal emulation for your microcomputer, please call the Library Systems Development Office, (513) 475-5861.

If you indicate on the response form accompanying this booklet which terminal you have or are emulating, we can send you specific information on how your keyboard should behave (cursor movement, function keys, etc.) when dialing into UCLID.

If you do not have one of the terminals listed above, and you cannot do terminal emulation, see "UCLID Without Terminal Emulation", page 11.
SOFTWARE FOR THE IBM PC

The following are some examples of communications software packages which do terminal emulation and run on IBM PC's.

SMARTCOM II (Hayes Microcomputer Products, Inc.)
(available commercially)

ProComm (Shareware)

PC-VT (Shareware)

"Shareware", or "User Supported Software", is software that may be freely copied and passed on to others and tried out at no obligation. The publishers of the software ask that you send in a fee to register your copy, if you decide that you will use the product. For help with obtaining a copy of either PC-VT or ProComm, call the University of Cincinnati Computing Center's Microcomputer Support Group at (513) 475-3907 (West Campus Office), or (513) 872-6031 (East Campus Office).

The Library Systems Development Office has used all three of the above software packages for dial access to UCLID. (We have a slight preference for ProComm, based on its menus and the keyboard behavior of its VT100 terminal emulation.) More detailed information on parameters to set and keyboard behavior (control and cursor movement keys) is available; each software package has its slight differences. Simply indicate on the response form accompanying this booklet that you would like additional information.
Software for Apples

Apple // Series:

You need an 80 column card if you do not already have one installed.

You need terminal emulation, preferably VT52 or VT100. No VT52-100 Shareware terminal emulation software has been identified. Commercially available terminal emulation packages identified to date are:

ACCESS // (Apple)

ASCII Express Professional (United Software). For information, call (303) 671-0033.

COMMWORKS (PBI Software)
For information, call (415) 349-8765.

The requirements for the new Apple //gs are unknown at this time.

Apple Macintosh:

Red Ryder is a "shareware" program which does terminal emulation. It is available from the MACincinnatus Bulletin Board System provided by AppleSiders of Cincinnati (see below). Two commercially available terminal emulation programs are:

MacTerminal (Apple, Inc.)
SMARTCOM II (Hayes Microcomputer Products)

General Information:

The Library Systems Development Office has not tested any specific software packages for Apples. We would appreciate feedback from you about what you find is successful on your Apple (see the response form accompanying this booklet).

If you have specific questions about Apple computers, one possible resource is the local group called AppleSiders of Cincinnati. Write them at:

AppleSiders
P.O. Box 14277
Cincinnati, OH. 45214

or call their contact line at (513) 741-4329.
Software for Other Microcomputers

If you have difficulty locating communications software which offers terminal emulation for your microcomputer, please call the Library Systems Development Office, (513) 475-5861.

Other Terminals

Both the Wyse WY85 terminal and Digital Equipment Corporation VT220 terminal can emulate either a VT100 or VT52 terminal, by setting the parameters in the SET-UP menu.

Please fill in and mail the response form accompanying this booklet for more information about set-up parameters or keyboard behavior (control and cursor movement keys) for dialing into UCLID, using either the VT220 or the Wyse WY85.

UCLID Without Terminal Emulation

If you have a terminal which is not on the menu of supported terminals (page 8) and you cannot emulate one of those terminals, there is a method to access UCLID as a typical ASCII typewriter terminal, without specifying a brand or model. However, you will lose full screen access to UCLID, and the line by line access this alternative provides can be confusing at first. Please call the Library Systems Development Office, (513) 475-5861, for information about this option.

Printing

When using UCLID you should print one full screen at a time, using a print screen key sequence, not continuous list printing. If your terminal does not have a print key, or print screen key sequence, and your printer normally prints whatever displays on the screen while the printer is turned on, then you may have problems printing UCLID displays. Call the Library Systems Development Office, (513) 475-5861, for more information.
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Library Name and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLIEDS</td>
<td>CMI-College of Applied Science Library (OCAS), 100 E. Central Parkway, Cincinnati, Phone: 475-6553</td>
</tr>
<tr>
<td>ARB</td>
<td>Archives and Rare Books, 808 Blegen Library, West Campus, Phone: 475-6459</td>
</tr>
<tr>
<td>CCM</td>
<td>College Conservatory of Music Library, 417 Blegen Library, West Campus, Phone: 475-4471</td>
</tr>
<tr>
<td>CHEMBIOL</td>
<td>Chemistry Biology Library, 503 Brodie, West Campus, Phone: 475-4524</td>
</tr>
<tr>
<td>CLASSICS</td>
<td>Classics Library, 320 Blegen Library, West Campus, Phone: 475-6724</td>
</tr>
<tr>
<td>CLERMONT</td>
<td>Clermont College Library, (Branch Campus), Batavia, Phone: 732-2990</td>
</tr>
<tr>
<td>CRC</td>
<td>Curriculum Resources Center, 600 Blegen Library, West Campus, Phone: 475-2161</td>
</tr>
<tr>
<td>DAAP</td>
<td>Design, Architecture, Art and Planning Library, 800 Alms, West Campus, Phone: 475-3238</td>
</tr>
<tr>
<td>ELLISTON</td>
<td>Elliston Poetry Room, 646 Langsam Library, West Campus, Phone: 475-4709</td>
</tr>
<tr>
<td>ENGINEER</td>
<td>Engineering Library, 880 Baldwin, West Campus, Phone: 475-3761</td>
</tr>
<tr>
<td>GEOLOGY</td>
<td>Geology Library, 103 Old Tech, West Campus, Phone: 475-4332</td>
</tr>
<tr>
<td>LANGSAM</td>
<td>Langsam Library, West Campus, Phone: 475-2535</td>
</tr>
<tr>
<td>MARX LAW</td>
<td>Marx Law Library, 3rd floor, College of Law building, West Campus, Phone: 475-3016</td>
</tr>
<tr>
<td>MATH</td>
<td>Mathematics Library, 840 Old Chemistry, West Campus, Phone: 475-4449</td>
</tr>
<tr>
<td>MCIC HHSLM</td>
<td>History of Health Sciences Library, Medical Center Information and Communications, 121 Wherry Hall, East Campus, Phone: 872-5120</td>
</tr>
<tr>
<td>MCIC HSL</td>
<td>Health Sciences Library, Medical Center Information and Communications, Medical Sciences Building, East Campus, Phone: 872-5627</td>
</tr>
<tr>
<td>MCIC HSL MRC</td>
<td>Media Resources Center, Health Sciences Library, Medical Center Information and Communications, Medical Sciences Building, East Campus, Phone: 872-4173</td>
</tr>
<tr>
<td>MCIC N&amp;H LIB</td>
<td>Nursing and Health Library, Medical Center Information and Communications, 276 Procter Hall, East Campus, Phone: 872-5543</td>
</tr>
<tr>
<td>MCIC N&amp;H LRC</td>
<td>Learning Resources Center, Medical Center Information &amp; Communications, 115 Procter Hall, East Campus, Phone: 872-4249</td>
</tr>
<tr>
<td>MEDIA MEDIACLFC</td>
<td>Media Center, 410 Zimmer, West Campus, Phone: 475-6801</td>
</tr>
<tr>
<td>MEDIA LANG</td>
<td>Language Lab, 728 Old Chemistry Bldg., West Campus, Phone: 475-3398</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>Physics Library, 406 Braunstein, West Campus, Phone: 475-2331</td>
</tr>
<tr>
<td>RWC</td>
<td>Raymond Walters College Library, (branch campus), Blue Ash Phone: 745-4313</td>
</tr>
</tbody>
</table>

Each of the libraries has its own circulation policy. Contact each library for information about borrowing policies or any restrictions which may apply.

Rev. 12/29/86
The Library Systems Development Office is interested in hearing about your experience with dial access to UCLID (both good and bad). We would also like to add your name to our mailing list of dial access users, so that in the future we can send you new information about dial access and UCLID. Please fill in this form, and mail it to the address on the back.

Terminal or MicroComputer Used to Dial in to UCLID: _____________________________

Communications Software (if applicable): _________________________________________

Modem Brand and BAUD rate: ________________________________________________

Please send me more information about the following:
- Keyboard Behavior (control and cursor movement keys) for the terminal listed above _____________________________
- Communications Parameters and Keyboard Behavior for the IBM/PC with:
  - PROCOMM ________________
  - PC/VT ________________
  - SMARTCOM II ________________
- Set-Up Menu Parameters and Keyboard Behavior for the:
  - Wyse 85 terminal ________________
  - DEC VT 220 terminal ________________
  - Other (Please describe) ________________
- Access to UCLID without Terminal Emulation ____________________________________

Please send me documentation on Direct Command Language Searching: ________________

Comments on Dial Access to UCLID
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Name: _____________________________

Address: _____________________________
(include city and zip code)

University of Cincinnati affiliation (if any): _____________________________

Telephone Number: _____________________________
5. ENDING YOUR SEARCH SESSION
- When you have finished searching, type END. The system will return to the initial screen.
- Terminate your connection using your telecommunications software.
- The system has a time out feature which will drop you if no interaction has taken place for 5 minutes. However a warning message is sent one minute before termination, and simply pressing the return key will reset the timer.

6. CALLGEORGE can be used to search the library's holdings but it is not possible to charge books out or place holds from CALLGEORGE.

IF...

1. the phone rings but call does not connect

   GEORGE may not be up. It is only available when the libraries are open. Call 625-3300 for library hours. If the problem occurs when the library is open try calling 625-4173 for assistance.

2. there is a busy signal

   Someone else is using CALLGEORGE, try again in a few minutes.
GEORGE, the online catalog for Lauinger Library and the Blommer Science Library can be accessed from a personal computer in your home or office using a system called CALLGEORGE. It is available all hours that either library is open. For library hours call 625-3300.

1. EQUIPMENT REQUIRED
   - a microcomputer
   - a modem
   - telecommunications software

2. PARAMETERS
   - 1200 baud
   - Odd parity, full duplex
   - 7 data bits, 1 stop bit
   - Phone numbers

3. LOGGING ON
   - After your terminal is connected press the return key once
   - The first screen to appear displays the hours the system is available, including any special holiday hours. It also has general news about GEORGE and any conditions that might affect your search. Press the return key until you reach the Choose Search screen.

4. SEARCHING THE CATALOG
   - Searching GEORGE on CALLGEORGE is very similar to searching it on the dedicated terminals in the library. For general information on using the catalog, pick up a copy of the GEORGE brochure in the Reference Department of Lauinger Library or in the Science Library.
   - Unlike the GEORGE terminals in the library, CALLGEORGE does not support function keys, however you may type in commands that correspond to the function keys.

<table>
<thead>
<tr>
<th>TYPE:</th>
<th>TO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW USER</td>
<td>See an overview of the online catalog</td>
</tr>
<tr>
<td>HELP</td>
<td>View a screen explaining any message on GEORGE in more detail, can be entered at any point in a search</td>
</tr>
<tr>
<td>COMMAND HELP</td>
<td>View a description of the various types of searches and commands that are available on GEORGE</td>
</tr>
<tr>
<td>ADVANCED HELP</td>
<td>View instructions on a number of advanced search techniques</td>
</tr>
<tr>
<td>PREVIOUS SCREEN</td>
<td>Back up to the previous screen</td>
</tr>
<tr>
<td>START OVER</td>
<td>View a screen listing types of searches available</td>
</tr>
<tr>
<td>END</td>
<td>End your session</td>
</tr>
</tbody>
</table>

   - You must press the return key to send each message to GEORGE. When using CALLGEORGE the return (or carriage return or new line) key on your keyboard functions like the send key on the terminals in the library.
   - At any point in your search you may type HELP to get an explanation of the instructions you see on the screen.
6 How To Access the LUIS Computer Catalog
From a Microcomputer or Remote Terminal

If you have a microcomputer or terminal with a modem, you can use Northwestern University Library's LUIS computer catalog remotely. The LUIS catalog can also be used from any terminal which is wired into the Vogelback Computing Center network, as well as from terminals on the Northwestern campus which are equipped with an NTS Data Interface Unit (DIU). This guide provides basic instructions for accessing LUIS, for 1) microcomputer users or others "dialing in" through a modem and telephone line; 2) for those who wish to use LUIS from a Vogelback terminal; and 3) for those with DIU's.

USING LUIS FROM YOUR MICROCOMPUTER OR TERMINAL AND MODEM

Any 300 baud or 1200 baud Bell-212 modem can be used with a microcomputer or terminal to access LUIS. If you have a microcomputer, you will also need communications software. Software which provides a common terminal emulation such as VT100, VT52, or IBM3101 will improve the readability of terminal screens, though such terminal emulation is not essential (and may need to be "turned off" if you wish to download to a floppy disk).

Switch settings on your terminal or software settings on your communication program must be set as follows before you dial into LUIS:

EVEN Parity
SEVEN (7) Data Bits Word Length
ONE (1) Stop Bit
FULL Duplex

Once these are set, use your modem at 300 or 1200 baud to dial:

491-3070 (or simply 1-3070 if you're on campus)

Once connected, press ENTER once; you will get the following prompt:

ENTER TERMINAL TYPE:

At this point, you should enter the model number of the terminal you are using, or the name of the terminal emulation you are using. These are the terminal types currently supported: ADM3A, DM1521, IBM3101, IBM 316X, IQ120, IQ130, TTY, TVI912, TVI925, TVI925M, VT52, VT100, and Z19. If your terminal type is not on this list, use TTY, which is for a standard "dumb" terminal, and press ENTER or RETURN at this prompt. (Should you require your specific terminal type supported, call Alex Vrenios at 491-8306 during business hours.) The screen will go blank. Pressing ENTER again will give you the LUIS introductory screen.
There is no need to "sign off" from LUIS if you are dialing in; simply hang up your phone.

USING LUIS FROM A VOGELBACK NETWORK TERMINAL

Terminals on the Vogelback network can access LUIS at 9600 baud. First turn on the terminal, then hit BREAK, RETURN, BREAK, RETURN for the "enter class" prompt. Type 60 and press RETURN twice. You will receive the prompt "ENTER TERMINAL TYPE:"; on most Vogelback terminals you should respond with VT100, including the Cobar terminals in the Library. Two RETURNS will get you into LUIS. On the Vogelback network you do need to log off of LUIS by entering simply a percent sign (%) at any LUIS prompt.

USING LUIS FROM A TERMINAL EQUIPPED WITH A DIU

With a DIU attached to your terminal or microcomputer, you can access LUIS at 9600 baud. Use the same terminal or software communications settings as you would for a modem: EVEN parity, SEVEN bit word length, ONE stop bit, FULL duplex. Your DIU speed setting should be on 9600. The number you dial is:

491-4194

Once you are connected, proceed as you would if you were dialing in through a modem.

YOUR KEYBOARD AND LUIS

There is wide variation among terminals in the way keys are laid out and labelled, making for occasional difficulties when communicating with another computer. Special key functions which can be particularly useful when using LUIS include CLEAR, RESET, and TAB, especially if you receive a garbled screen because of communication line problems. If your keyboard does not have these keys, try ESC, CTRL/Z, or the 0 on the numeric keypad for the CLEAR function, CTRL/G or BLOCK CONV for the RESET function, and CTRL/I for the TAB function. A more detailed and specific list of key equivalencies is available in the Library's Reference Department.

Microcomputer Support Group staff (491-3889) can provide general help with microcomputer communications. If you have any questions about LUIS itself, call the Library's Reference Department at 491-7656.

08/22/86

tbn.dial
TELEPHONE ACCESS TO VTLS

Introduction

Telecommunications access to VTLS is provided through LocalNet, the Virginia Tech local area network. Telephone access to LocalNet, and hence to VTLS, is provided through the 2400 Baud Dial-In Service available from Communications Network Services (CNS). This document describes procedures for accessing VTLS through this Service.

Communications software

The reader is assumed to be familiar with procedures for communicating over telephone lines using a modem and communications software. Note that a 2400 baud modem is NOT required, as the more common 1200 baud rate is handled transparently by the system. Any standard communications software, such as SmartCom, QMODEM, KERMIT, or YTERM may be used. Your choice may be determined by the convenience of switching among applications available through the Dial-In Service. For example, it is possible to logoff from a VTLS session on the Library's Hewlett-Packard computer and switch to a CMS session on the Virginia Tech mainframe without breaking the communications link and redialing.

Communications parameters

Parity should be set to NONE or SPACE. Note that YTERM defaults to even parity. To use YTERM with VTLS it must be invoked with the command T 1 S (for use at 1200 baud) or T 2 S (for use at 2400 baud) in order to communicate with VTLS. Since this parity setting also works with CMS on the Tech mainframe, it is convenient to invoke YTERM from a batch file containing this command, rather than remembering the necessary options each time.

Charges

There is no direct charge to the user for accessing VTLS on LocalNet. However, in order to use the CNS Dial-In Service, the user must establish an account with Communications Network Services. At present there is a $10 fee to open an account, with a usage charge of $1.20/connect hour. Arrangements for this access must be made with Communications Network Services. Note that it is not necessary to have a mainframe computer account, nor to be affiliated with Virginia Tech, in order to use this service.
### Connection Procedure

<table>
<thead>
<tr>
<th>System prompt or message:</th>
<th>You enter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONNECT</td>
<td></td>
</tr>
<tr>
<td>Request:</td>
<td>ATD9614242 &lt;return&gt;</td>
</tr>
<tr>
<td>Account:</td>
<td>Hayes compatible dial command followed by a dial tone and sound of dialing.</td>
</tr>
<tr>
<td>Password:</td>
<td>After one ring, the Dial-In Service will answer and sound two tones.</td>
</tr>
<tr>
<td>Trying</td>
<td>&lt;return&gt;</td>
</tr>
<tr>
<td>Resource found.</td>
<td>VTLS &lt;return&gt;</td>
</tr>
<tr>
<td>VTLS General Help Screen</td>
<td>Enter your CNS account number</td>
</tr>
<tr>
<td></td>
<td>Enter your CNS password</td>
</tr>
<tr>
<td></td>
<td>&lt;return&gt;</td>
</tr>
<tr>
<td></td>
<td>Enter any VTLS command</td>
</tr>
<tr>
<td></td>
<td>To terminate your VTLS session enter:</td>
</tr>
<tr>
<td></td>
<td>/LOGOFF &lt;return&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;return&gt;</td>
</tr>
<tr>
<td>Please wait. If no response after 1 or 2 seconds, please call again.</td>
<td></td>
</tr>
<tr>
<td>CNS NameServer (V1.15) (2/17/87)</td>
<td></td>
</tr>
<tr>
<td>Type ? for help</td>
<td>Enter any host service name or LocalNet rotary address or hang up the phone.</td>
</tr>
<tr>
<td>Request:</td>
<td>On a Hayes compatible modem enter:</td>
</tr>
<tr>
<td></td>
<td>+ + +</td>
</tr>
<tr>
<td></td>
<td>ATH</td>
</tr>
<tr>
<td></td>
<td>Exit your communications software</td>
</tr>
</tbody>
</table>

When you are using VTLS, your connection will be maintained as long as you continue to enter commands. If no commands are entered for a period of 3 minutes, the message **WARNING** Press space bar to retain current screen will appear on your screen. If there is no response within 15 seconds, you will be disconnected from VTLS.

**NOTE:** VTLS is not available for use from Midnight until 6:00 a.m. on Wednesday, and Friday mornings, and from 10:00 p.m. Saturday night until 11:00 a.m. Sunday morning when system maintenance is performed.
## Trouble Shooting Hints

<table>
<thead>
<tr>
<th>Problem:</th>
<th>Solution:</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTLS help screen does not appear</td>
<td>Make sure parity is space</td>
</tr>
<tr>
<td></td>
<td>If you are using Y-term, start with: t 1 s or t 2 s</td>
</tr>
<tr>
<td>Backspace key doesn’t work</td>
<td>Depress Control and H simultaneously</td>
</tr>
<tr>
<td>Don’t understand VTLS messages</td>
<td>Call the General Reference Desk at x6170</td>
</tr>
<tr>
<td>Dial-In Service Problems</td>
<td>Call CNS at x6780</td>
</tr>
<tr>
<td>Other problems or questions</td>
<td>Call Automation Services in Newman Library at x4987</td>
</tr>
</tbody>
</table>

### OTHER MESSAGES

Several messages may originate with the CNS NameServer when you try to access an application. These are explained in the documentation supplied by CNS when you subscribe to the 2400 Baud Dial-In Service. Messages which may appear after you type VTLS in response to the Request: prompt include:

- **Invalid request.** - You mistyped the word VTLS.

- **Resource not found.** - VTLS is not currently available. Various hardware and software problems can lead to this condition. Please call Automation Services at x4987 to report the problem.

- **Resource unavailable.** - All VTLS ports are busy. The CNS NameServer will prompt you for procedures which will place you in a queue until a port is available.

---

*Automation Services Department*
*University Libraries*
*Virginia Tech*
### Connection Procedure

<table>
<thead>
<tr>
<th>System prompt or message:</th>
<th>You enter:</th>
</tr>
</thead>
<tbody>
<tr>
<td># (the Local Net prompt)</td>
<td>call abc &lt;return&gt;</td>
</tr>
<tr>
<td># CALL COMPLETED TO OABC,n</td>
<td>&lt;return&gt;</td>
</tr>
<tr>
<td>VTLS General Help Screen</td>
<td>Enter any VTLS command</td>
</tr>
<tr>
<td>SESSION CLOSED TO OABC,n</td>
<td>To terminate your VTLS session enter: /logoff</td>
</tr>
<tr>
<td>#</td>
<td></td>
</tr>
</tbody>
</table>

Once you have entered VTLS, your connection will be maintained as long as you continue to enter commands. If no commands are entered for a period of 3 minutes, the message **WARNING** Press space bar to retain current screen will appear on your screen. If there is no response within 15 seconds, you will be disconnected from VTLS.

### Trouble Shooting Hints

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<td>VTLS help screen does not appear</td>
<td>Make sure parity is space. If you are using Y-term, start with: t 9 s</td>
</tr>
<tr>
<td>Local net responds with the message No Sessions and #</td>
<td>Enter done &lt;return&gt; &lt;return&gt;</td>
</tr>
<tr>
<td>Backspace key doesn’t work</td>
<td>Depress Control and H simultaneously</td>
</tr>
<tr>
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</tr>
</tbody>
</table>
REMOTE ACCESS TO LUIS VIA WSUnet

LUIS, the Library User Information System, is the online catalog for the Wayne State University Library System and other DALNET (Detroit Area Library Network) libraries. LUIS is accessible to anyone using one of over 1,000 on-campus WSUnet terminals and to users dialing in on the Merit Computer Network throughout metropolitan Detroit and across the State of Michigan. Access to LUIS requires no special IDs or passwords and is free to use.

CONNECTING TO WSUnet

• HARDWIRED TERMINALS ON WSU CAMPUS
  Hardwired terminals are permanently connected to WSUnet. When turned on, the first screen displayed is the WSUNET menu.

• DIAL-UP ACCESS
  Dial-up access to WSUnet is through the statewide Merit Computer network. You will need either a supported terminal (see list on the back) or a microcomputer, like an IBM, Macintosh or Zenith, with a modem and terminal communications/emulation software. WSU’s Computing and Information Technology (C&IT) division recommends and supports SIM/PC communications software for IBM computers and compatibles, and VERSATERM software for Macintosh computers. Call C&IT’s Consulting Office at 313/577-4778 for information about these products, their configurations, and how to use them.

1. Dial a Merit telephone number (see Merit’s “Access” brochure).
   In metropolitan Detroit:
   - Detroit: 577-0335  Downriver: 283-8822  Sterling Heights: 939-3370
   - Dearborn: 593-5484  Southfield: 827-7600  Western Wayne County: 722-1500

2. Merit displays a “% terminal*” prompt. Press <Enter>

3. Then Merit asks “Which host?”. Type: WSUNET<Enter>

4. “CONNECTED WSUNET” is displayed, followed by “Please enter your terminal ID”.
   Type the appropriate number and press <Enter>. To display a list of terminals and their ID numbers, enter a question mark (?).

5. The WSUNET menu is now displayed.

CONNECTING TO LUIS

Select LUIS from the WSUNET menu by typing: LUIS<Enter>

The “Welcome to LUIS” screen is displayed, showing LUIS hours, your terminal ID, and LUIS logoff instructions. Type again: LUIS<Enter>

For assistance with using LUIS, use the LUIS online Help screens by typing h<enter> or see the “LUIS SEARCHING Guide” available at library reference desks and on MTS using the command $copy LUIS:(EARCHING
LOGGING OFF

- From LUIS
  First, CLEAR the screen. On the blank screen, type: Logoff<Enter>. The WSUNET menu is then displayed.

- From WSUnet
  Dial-up users typo: Logoff<Enter> again to return to Merit. Follow the instructions for your communications software to return to DOS.

GETTING HELP

For additional help using LUIS, call the WSU Purdy Library Reference Desk, 313/577-4040, or call the appropriate library phone number on the "Welcome to LUIS" help screen.

For help connecting to WSUnet or LUIS, call C&IT’s Consulting Office, 313/577-4778, or Network Control Center, 313/577-4746.

TERMINALS FOR ACCESSING LUIS THROUGH WSUnet

Listed below are the terminals that currently can be used with SIM 3278 to access LUIS through WSUnet. Call 313/577-4778 for additional information about connecting to WSUnet.

ADDS Viewpoint, Viewpoint 60
Ann Arbor Ambassador, Genie
BEEHIVE DM-5, DM-5A; Bell Canada VUCOM-4
Concept HDS AVT; CDC Viking 721
Cybermex XL-94, XL87-M, XM-3270, MDL-S110
Datamedia '52, 3045
Digital VT100, DEC VT52 or VT100 in VT52 mode
GTE XT300; Hazeltine 1520
Hewlett-Packard 2621A, 2382A/2622/2622A, HP150
IBM 3101 Model 20, BLOCK mode or Model 10/20 CHAR mode
IBM 3161 ECHO mode
IBM 3163 emulating or in IBM 3101 BLOCK mode
IBM PC running SIM/PC or AZPC2
Infoton 100; Kimtron ABM-85
Lear Siegler ADM42, ADM3A, ADM5
Macintosh running VERSATERM emulating Digital VT100
Microterm ACT5A native mode
Northern Telecom Displayphone (ANSI/VT100 & IBM/3101 modes)
SOROC Challenger 530; Teleray T10M, 16M
Televideo 910 Plus, 921/920, 920, 921, 925, 950, 970
Televideo Personal Terminal, 925 & 950 Formatted
Tymshare SCANSET 415: Visual 300
Volker-Craig VC404, VC415; Wyse 50
Access—

Phone Numbers and Terminal Settings for the Merit Network in Michigan
Michigan Phone Numbers

The phone numbers for dial-in access in Michigan are listed below. The 1200-bps numbers service both Bell 212A and Vadic 3400-series modems unless marked with a B for Bell only or V for Vadic only. The 2400-bps numbers service modems that conform to the V.22-bis standard.

The Autonet, Telenet, and Tymnet numbers listed below are as current as possible. If you find that a number is out of service or incorrect, please call the customer assistance number for the network involved*** or the central office of the Merit Network ((313) 764-9423).

<table>
<thead>
<tr>
<th>City</th>
<th>Network</th>
<th>110-300 bps</th>
<th>1200 bps</th>
<th>2400 bps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ann Arbor</td>
<td>Autonet</td>
<td>313/663-7618</td>
<td>313/663-7618</td>
<td>313/761-8344</td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>313/763-4800</td>
<td>313/763-6500(V)</td>
<td>313/764-4800</td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>313/996-5995</td>
<td>313/996-5995</td>
<td></td>
</tr>
<tr>
<td>Battle Creek</td>
<td>Autonet</td>
<td>616/963-9269</td>
<td>616/963-9269</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telenet</td>
<td>616/968-0929</td>
<td>616/968-0929</td>
<td></td>
</tr>
<tr>
<td>Birmingham</td>
<td>Merit</td>
<td>313/258-6811*</td>
<td>313/258-6811*</td>
<td></td>
</tr>
<tr>
<td>Cadillac</td>
<td>Merit</td>
<td>616/775-3760**</td>
<td>616/775-3760(B)**</td>
<td></td>
</tr>
<tr>
<td>Cheboygan</td>
<td>Merit</td>
<td>616/627-2214*</td>
<td>616/627-2214(B)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>616/627-2220*</td>
<td>616/627-2220(B)*</td>
<td></td>
</tr>
<tr>
<td>Dearborn</td>
<td>Merit</td>
<td>313/593-5484*</td>
<td>313/593-5484(B)*</td>
<td></td>
</tr>
<tr>
<td>Detroit</td>
<td>Autonet</td>
<td>313/271-9100</td>
<td>313/271-9100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>313/577-0335*</td>
<td>313/577-0335*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telenet</td>
<td>313/964-2988</td>
<td>313/964-2988</td>
<td>313/963-2274</td>
</tr>
<tr>
<td>East Lansing</td>
<td>Merit</td>
<td>517/353-3500*</td>
<td>517/353-3500(B)*</td>
<td>517/353-3500*</td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td></td>
<td>517/353-4854(V)</td>
<td></td>
</tr>
<tr>
<td>Flint</td>
<td>Autonet</td>
<td>313/767-4505</td>
<td>313/767-4505</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>313/762-3311*</td>
<td>313/762-3311*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telenet</td>
<td>313/235-8517</td>
<td>313/235-8517</td>
<td></td>
</tr>
<tr>
<td>Grand Rapids</td>
<td>Autonet</td>
<td>616/957-0291</td>
<td>616/957-0291</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>616/774-9521*</td>
<td>616/774-9521(B)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telenet</td>
<td>616/774-0966</td>
<td>616/774-0966</td>
<td></td>
</tr>
<tr>
<td>Holland</td>
<td>Autonet</td>
<td>616/399-0734</td>
<td>616/399-0734</td>
<td></td>
</tr>
<tr>
<td>Houghton</td>
<td>Merit</td>
<td>906/487-1519*</td>
<td>906/487-1519(B)*</td>
<td></td>
</tr>
<tr>
<td>Jackson</td>
<td>Autonet</td>
<td>517/750-4031</td>
<td>517/750-4031</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telenet</td>
<td>517/782-8111</td>
<td>517/782-8111</td>
<td></td>
</tr>
<tr>
<td>Kalamazoo</td>
<td>Autonet</td>
<td>616/381-1890</td>
<td>616/381-1890</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>616/383-1360*</td>
<td>616/383-1360(B)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telenet</td>
<td>616/345-3088</td>
<td>616/345-3088</td>
<td></td>
</tr>
<tr>
<td>Lansing</td>
<td>Autonet</td>
<td>517/694-3236</td>
<td>517/694-3236</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telenet</td>
<td>517/484-0062</td>
<td>517/484-0062</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Service</td>
<td>Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manistee</td>
<td>Merit</td>
<td>616/464-5542**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marquette</td>
<td>Merit</td>
<td>906/225-0222*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midland</td>
<td>Tymnet</td>
<td>517/695-6751</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mt. Pleasant</td>
<td>Merit</td>
<td>517/774-3790*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muskegon</td>
<td>Autonet</td>
<td>616/722-7782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petoskey</td>
<td>Merit</td>
<td>616/347-8884**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port Huron</td>
<td>Tymnet</td>
<td>313/982-0301</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rochester</td>
<td>Merit</td>
<td>313/370-4310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saginaw</td>
<td>Autonet</td>
<td>517/790-1141</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southfield</td>
<td>Autonet</td>
<td>313/827-7300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southgate</td>
<td>Merit</td>
<td>313/283-8822*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Joseph</td>
<td>Autonet</td>
<td>616/428-2741</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterling Heights</td>
<td>Merit</td>
<td>313/939-3370*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traverse City</td>
<td>Merit</td>
<td>616/941-9826**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warren</td>
<td>Telenet</td>
<td>313/575-9152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wayne</td>
<td>Merit</td>
<td>313/722-1500*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

* These numbers provide autospeed service. In East Lansing and Mt. Pleasant, the service is provided at 300, 1200, and 2400 bps. In the other cities, autospeed service is provided at 110, 300, and 1200 bps. If you are using a terminal for which you have set automatic answerback, such as a microcomputer running Winword, AMIE, Kermit, or Smartcom, your speed will be determined automatically.

If you have not or cannot set automatic answerback, wait a couple of seconds after the call is answered and then press carriage return twice.

** If you are dialing into Merit from Cadillac, Manistee, Petoskey, or Traverse City, note that there is a $2.00/minute charge for use of these numbers. This charge will be deducted automatically from the host account being accessed. These numbers also provide autospeed service; see the previous note.

Switch Settings for Modems, Terminals, and Terminal Emulators
For Dial-In Access to the Merit Computer Network

These switches and settings are recommended for all terminals and microcomputers running terminal emulators. These settings will work for dial-in access to Merit as well as for the public data networks Telenet, Autonet, Datapac, and Tymnet.

<table>
<thead>
<tr>
<th>Switch</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td></td>
</tr>
<tr>
<td>if labeled on-line/off-line</td>
<td>ON-LINE</td>
</tr>
<tr>
<td>if labeled local/remote</td>
<td>REMOTE</td>
</tr>
<tr>
<td>Data Rate (transmission speed)</td>
<td>110, 300, 1200, or 2400 bps</td>
</tr>
<tr>
<td>Parity</td>
<td>EVEN or NONE; with Kermit over Autonet and Telenet, use MARK</td>
</tr>
<tr>
<td>Auto-Line-Feed</td>
<td>OFF</td>
</tr>
<tr>
<td>Duplex</td>
<td></td>
</tr>
<tr>
<td>if labeled FDX/HDX</td>
<td>FDX</td>
</tr>
<tr>
<td>if labeled FULL/HALF</td>
<td>FULL</td>
</tr>
<tr>
<td>if labeled COPY/NOT COPY</td>
<td>NOT COPY</td>
</tr>
<tr>
<td>Data Bits</td>
<td>With Parity EVEN: 7</td>
</tr>
<tr>
<td></td>
<td>With Parity NONE: 8</td>
</tr>
<tr>
<td></td>
<td>With Parity MARK: 7</td>
</tr>
<tr>
<td>Stop Bits</td>
<td>1 (one)</td>
</tr>
<tr>
<td>Flow Control</td>
<td></td>
</tr>
<tr>
<td>if labeled XON/XOFF</td>
<td>XON</td>
</tr>
<tr>
<td>if labeled XON/CONT</td>
<td>XON</td>
</tr>
<tr>
<td>if labeled YES/NO</td>
<td>YES</td>
</tr>
<tr>
<td>if labeled DC1-DC3/DC2-DC4</td>
<td>DC1/DC3</td>
</tr>
</tbody>
</table>

By default, Merit passes ASCII XON/XOFF flow control to your terminal in response to host or network congestion. It uses the standard ASCII CTRL-Q and CTRL-S characters (ASCII DC1 and DC3, respectively).

It is possible that some of these switches will not apply to your terminal, or that you cannot set some of them. If you have problems getting your terminal or micro to function properly, call the Merit Computer Network Central Office at (313) 764-9423 for assistance.
MEMORANDUM

SUBJECT: Welcome to LCS Dial Access

FROM: Susan Logan, Coordinator of Automated Library Services

TO: Applicants for Dial Access

Enclosed is the information you requested which describes how to use LCS from terminals or microcomputers outside of the Libraries. This remote access is available at no charge to individuals affiliated with the Ohio State University and other registered borrowers.

Your interest in the Libraries is appreciated. We are pleased to be able to provide this access to the nation's 17th largest university library. As a library user, you may be interested in supporting development of collections and services through membership in Friends of the Libraries. A brochure describing Friends is enclosed.

LCS dial access is a recently developed library service. Please let the Automation Office know if you experience problems, or have questions or suggestions about this service or the materials which describe its use.
INTRODUCTION

This document presents an overview of the hardware and software needed to communicate with the LCS computer to search the Library's online catalog from home or office. For individuals new to the University or to LCS, we suggest that you learn to use LCS at one of the LCS terminals located in all University Libraries.

LCS may be accessed using a microcomputer and a modem.

MICROCOMPUTER

The keyboard of a microcomputer or non-LCS terminal will not be the same as the keyboard of a Library LCS terminal. The microcomputer keyboard will not have special keys for the LCS page turning, e.g. PD+, PG+, PS+, PS-, etc. You must type these commands, although some microcomputer software will allow you to program the microcomputer function keys to send these characters. Some important keys on the keyboard of the microcomputer include the key which has the graphic caret (the shift 6 key on the IBM PC keyboard); the ALT key; and the return key, which is often marked with a down left arrow. The return key on the microcomputer serves as the ENTER key.

At the present time, LCS expects your microcomputer to act like a dumb terminal. This is often referred to as teletype terminal (TTY) or as "bulletin board service" (ANSI-BBS).

MODEM

The addition of a modem to your microcomputer will allow you to access remote computers which have telecommunications ports, including the mainframe computer on which LCS resides. The modem is the equipment that connects the computer to the telephone line and that converts the computer's signals to a signal that can be sent over regular telephone lines. The "direct connect modem" plugs directly into the telephone line using a telephone jack or an adapter. Many modems will automatically answer the telephone as well as dial the number you request.

Modems operate at 300 baud (about 30 characters per second), 1200 baud (about 120 characters per second), and 2400 baud (about 240 characters per second). Normally a 2400 baud modem may be set to work at either 300 or 1200 baud. LCS is currently available at 300 and 1200 baud. The term "baud" represents the speed at which the signals (characters) are sent from one computer to the second computer.
Modems are of two types, internal or external. The internal modem is an electronic card, which is placed in a slot inside the microcomputer. The external modem is a small (8"x12"x2", for example) box which sits outside the microcomputer. One advantage of the internal modem is that it reduces the number of wires around the microcomputer and does not require additional space; however, the external modem is easier to exchange. Both modems are connected to the microcomputer through a communications port. Usually, the microcomputer has two communication ports, one of which will be connected to the modem.

Many modems are "Hayes compatible," which is almost an industry standard.

TELECOMMUNICATIONS SOFTWARE

Telecommunications software serves several functions. 1) It describes the hardware associated with the owner's microcomputer installation, e.g. is the telephone line tone or pulse (rotary) dial, is the modem in communications port 1 or 2, etc. 2) It also provides for the descriptions of the computer systems with which the owner's microcomputer is often connected, e.g. baud (speed), parity, echo, telephone number, etc. 3) The software also provides for specific functions, e.g. dialing, downloading information from the host computer, printer control, etc. The software may be programmed to have specific keys on the microcomputer simulate special keys to communicate with the host computer. With software it is possible through terminal emulation to make a microcomputer operate like many types of terminals, including full screen editing.

There are several telecommunications software programs available for distribution from the OSU Instructional and Research Computer Center (IRCC). These currently include PC-Talk, FL78PC, Kermit, and PROCOMM.

In addition to LCS, you may communicate via microcomputer, modem, and software to use the services of IRCC's mainframe systems. Once you have mastered dialing into LCS, there are several other information systems which you may dial, e.g. Knowledge Index, BRS After Dark, Compuserve, Easynet. Whenever you use an information system it is helpful if you know what is in the database and understand how to access the information.

2/24/87
1556a formerly 1486a
I. GUIDELINES FOR USE

USERS

The Ohio State University Libraries offers dial access at no cost to the University's faculty, staff and students, and to others registered as borrowers with the University Libraries.

DATABASE

LCS is both a catalog and a circulation system for The Ohio State University Libraries and the State Library of Ohio. In addition, records have been added for recently cataloged items available from the Center for Research Libraries, in Chicago, and for recently cataloged materials owned by the OSU Law Library.

The database provides location and availability of items owned by the libraries. For all titles, a short Location Record shows call number, author, title, copies owned and circulation status. For all State Library titles and for OSU titles cataloged since 1972, LCS also includes complete descriptive information in a Full Catalog Record.

SEARCHING

LCS dial access allows catalog searches for books, journals and other library materials. (This capability does not include access to authors and titles of articles within journals.)

The catalog may be searched by:

- AUTHOR (personal, corporate, or conference name)
- TITLE (book, journal, magazine, etc.)
- SERIES TITLE (for books issued with a collective title)
- CALL NUMBER (specific item or shelf-browsing)
- SUBJECT (OSU materials cataloged since 1972 and all State Library of Ohio books)

Searching instructions are available in the LCS brochure or by using the HELP commands on LCS.

BORROWING

In order to borrow materials, dial access users may call the Libraries' Telephone Center (292-3900) and/or visit the library location which has the desired title. A currently valid borrower ID is required (OSU ID number or other borrower ID).
II. CONNECTING TO LCS

LCS HOURS

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon. - Thur.</td>
<td>7:30 a.m. - 1:00 a.m.</td>
</tr>
<tr>
<td>Friday</td>
<td>7:30 a.m. - 10:00 p.m.</td>
</tr>
<tr>
<td>Saturday</td>
<td>9:00 a.m. - midnight</td>
</tr>
<tr>
<td>Sunday</td>
<td>1:00 p.m. - 1:00 a.m.</td>
</tr>
</tbody>
</table>

[Sunday hours often begin at 11:00 a.m.]

NOTE: LCS is available during hours when some or all OSU Libraries are closed.

TELEPHONE NUMBER
(IRCC NETWORK SWITCH)

<table>
<thead>
<tr>
<th>Baud Rate</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 baud</td>
<td>(614) 292-3103</td>
</tr>
<tr>
<td>1200 baud</td>
<td>(614) 292-3112</td>
</tr>
<tr>
<td>9600 baud</td>
<td>(614) 292-9750</td>
</tr>
</tbody>
</table>

TERMINAL TYPE

ASCII compatible

TERMINAL SETTINGS

Parity: No or Space
Data Bits: 7
Stop Bits: 1
Duplex: Full

FEATURES NOT SUPPORTED ON LCS

XON/XOFF
BREAK
ESCAPE

SIGN ON

1. After establishing the connection with the computer, immediately enter at most two "carriage return" characters.

2. At prompt HOST NAME?: Type LCS then tap RETURN

3. At prompt GO:
   - 300 baud: Type OLCS [letter "oh", not zero]
   - 1200 baud: Type ^A LCS [caret graphic, not CONTROL]
   - 9600 baud: Type LCS then tap RETURN

ENTER

Tap RETURN

SIGN OFF

Type BYE; tap RETURN

PROBLEMS

See section III. TROUBLE-SHOOTING GUIDE.

Call the Libraries' Automation Office, at 292-6151 (106-E, 1858 Neil Ave. Mall, Columbus, Ohio 43210) during office hours, 8:00 am - 5:00 pm, Mon. - Fri.

Send E-Mail to S. Logan, Automation Coordinator:
  - HP-DESK: lelgan
  - DEC20: Logan
  - CMS: TS1091

PLEASE REMEMBER

Dial access is shared; avoid tying up the line for extended periods.
III. TROUBLE SHOOTING GUIDE

RING, NO CONNECT Hang up and try again. If you cannot make a connection, the IRCC Network Switch might not be functioning. Call 292-4843.

RESPONSE If, after connecting, you select LCS as the HOST but receive the response "UNAVAILABLE" you may be calling at a time when LCS is not scheduled to be available (see LCS HOURS in section II. CONNECTING TO LCS). Or, LCS may be down. Call the Libraries' Telephone Center at 292-3900 to verify availability of LCS.

RESPONSE If, after connecting, you select LCS as the HOST but receive the response "UNASSIGNED" the Switch did not receive the letters "LCS." Try typing LCS again.

CONNECT, NO RESPONSE If, after the prompt GO, you typed OLCS (300 baud), ^LCS (1200 baud) or LCS (9600 baud), and there was no response for 20-30 seconds, hang up and try again.

If you connect, but your terminal does not perform, your baud rate, parity, or duplex may be set incorrectly. These three factors must be correct in order for dial-access to work.

BUSY, WAIT? If you sign on but receive the message BUSY, WAIT?00#, the lines are busy. The number indicates how many people are in the queue for LCS. You may respond YES or NO.

If you respond YES, the system response will be "WAITING," and you will be placed in the queue. Your place in the queue will be reported every minute. If you are in the queue for 15 minutes without a change in your status, call 292-0430 and ask if all the Network Switch lines are busy.

BUSY SIGNAL If you have been getting a busy signal for the entire day, the lines are probably in use. However, if busy several days in a row, call the Libraries' Automation Office at 292-6151.

OVERPRINTING If your terminal overprints: 1) Your paper may be loose. Check the position of the paper in the terminal and check the tightness of the paper as it rolls over the platen. 2) There may be a telecommunications problem. The very last character of a line tells the terminal to advance the line and return to the left margin. If the communication line that you have obtained is not good, then the last character might be dropped. Hang up, and dial again.

GARBLED RESPONSES This may be a telecommunications problem. The line between you and the computer is not carrying a pure signal. Hang up, and dial again. Also, check parity setting.

SLOW RESPONSES This is probably due to LCS itself. During peak times of the day the response may be longer than ten seconds. Also, some searches take longer than others.
WHAT'S WRONG? If you cannot determine what is wrong - the connection or LCS - call the OSU Libraries Circulation Department at 292-6154 to find out if LCS is up or down. If LCS is up and you are still experiencing problems, ask for the Circulation Desk supervisor (292-6154) or call the Libraries' Automation Office (292-6151).

ITEM NOT FOUND If you connect to LCS but have difficulty in locating a desired item, you may call the Main Library Reference Department at 292-6175 for assistance.
USING LCS:
NON-LIBRARY TERMINALS OR MICROCOMPUTERS

Searching LCS on public terminals in the Libraries and searching on other terminals or microcomputers differs in three areas: keyboard use, location of entered search and LCS response, and display of characters which have diacritical marks.

**KEYBOARD USE**

"ENTER"

To enter a search on a library terminal, tap the key labelled ENTER (lower right hand side of the keyboard).

To enter a search on other terminals or microcomputers, tap the RETURN key [←]. This key is usually located on the right hand side of terminal and microcomputer keyboards, but labeling varies.

**SPECIAL KEYS**

The library public terminals have special keys that are designed to perform specific functions: page turning (PG+, PS-, etc.), flip between the catalog record (CAT) and the location record (LOC) for a single item, and to request HELP.

These functions may be performed on other terminals or microcomputers by typing the command and tapping the RETURN key (for example, type: pg+ then tap <RETURN>).

Most terminals or microcomputers have function or program function keys (F1, F2, etc., ^PF1, PF2, etc.) which may be located across the top of the keyboard or on either side. Some telecommunications software will allow these keys to be defined by the user to create and enter a desired command, such as the LCS commands assigned to special keys on the library terminals.

**SEARCH ENTRY AND LCS RESPONSE**

**SEARCH**

On library terminals, the search must be typed beginning at the left edge, on line 15.

On other terminals or microcomputers, the search is entered at any line on the screen, following the LCS response to the last request entered.

**RESPONSE**

On library terminals, the LCS response always appears at the top of the screen, beginning on line 1.

On non-library terminals or microcomputers, the response appears below the search entered. (In some cases, the line of search input may be "written over" by the first line of the response. This may be corrected by adding a line feed to the carriage return, if permitted in the microcomputer software.)
DIACRITICAL MARKS IN LCS DISPLAYS

The library terminals (Telex brand) allow the correct display of diacritical marks (accent, umlaut, etc.) in LCS displays. Other terminals or microcomputers do not have this feature.

On terminals or microcomputers which do not allow correct display of diacritical marks, the existence of the mark is usually indicated by a colon (:) preceding the letter to which the diacritical mark belongs.

When entering a search, diacritical marks should be omitted.

**Diacritical Mark Display on Telex Terminal**

This example shows an accent mark over the letter "e" in a French title:

```
TLS/MEM3 MA WA
found these titles:
  DBL/ LIB 1-1 OF 1 TITLE ---AUTHOR--- DATE FBL/
  1  OSU Mémories de Mary Watson: roman  Dutourd, J 1980 1
END OF TITLE
FOR LOCATION ENTER: DBL/number FOR FULL CATALOG RECORD, ENTER: FBL/number
```

tls/memoires de mary watson

**Diacritical Mark Indicator On a Microcomputer**

This example, obtained using dial access, shows the colon preceding the letter "e", indicating that a diacritical mark is stored in LCS for that letter.

```
TLS/MEMO MA WA
found these titles:
  DBL/ LIB 1-1 OF 1 TITLE ---AUTHOR--- DATE FBL/
  1  OSU Mémories de Mary Watson: roman  Dutourd, J 1980 1
END OF TITLE
FOR LOCATION ENTER: DBL/number FOR FULL CATALOG RECORD, ENTER: FBL/number
```

tls/memoires de mary watson

Letters in non-Roman alphabets (e.g., bar-L) should be entered as the nearest Roman equivalent (e.g., L). In some cases, for older LCS records, the non-Roman letter should be omitted and the word entered with only the remaining letters. This inconsistency, due to changes in computer capabilities, may require that a search be tried both ways.
The Ohio State University
LIBRARIES
SEARCH LCS FROM HOME!
DIAL ACCESS INFORMATION

If you have a microcomputer, modem and appropriate telecommunications software, you can search LCS, the OSU Libraries' computerized catalog, by telephone.

Dial access to LCS is available at no cost to faculty, staff and students of The Ohio State University, and to others registered as borrowers with the University Libraries. To receive the dial access telephone number and related information, please complete the attached form and return it to the Libraries' Automation Office.

If you are not a registered borrower, you may inquire about eligibility and application procedures at the Libraries' Circulation Dept., 132 Main Library, 1858 Neil Avenue Mall, Columbus, Ohio 43210 (Phone: 292-6154). Once you have obtained borrower status, you may submit this request for LCS dial access.

DIAL ACCESS APPLICATION

DATE

NAME

OSU/BORROWER ID

STATUS: FACULTY STAFF GRAD. STUDENT UNDERGRAD OTHER

ADDRESS (CAMPUS PREFERRED):

TELEPHONE (DAYTIME)

RETURN TO:

AUTOMATION OFFICE, OSU LIBRARIES
106-E Main Library
1858 Neil Avenue Mall
CAMPUS (Columbus, Ohio 43210)
(614) 292-6151

OFFICE USE ONLY

REC'D: Date
Location

SENT: Date
Initials

0175h:4/87
Limitations of the System

**Time Limit** for any one session is 15 minutes, after which a user is automatically signed-off the system. After 8:00 p.m. the time limit is extended to 20 minutes.

**Diacritical Marks**, i.e. modifying marks used to indicate a phonetic or semantic value and special characters such as the Swedish 0, cannot be displayed on a normal ASCII terminal. These have been removed from the data and replaced with spaces. As a result, words containing diacritical marks will appear as broken words. Words with diacritics and special characters are filed as though the marks or characters were not present, thus the user may ignore them in entering search keys.

**Filing Order** of the Query Module is alphabetical, but it is important to note that the alphabetical arrangement is LETTER BY LETTER, rather than word by word as in the case of the card catalogue.

<table>
<thead>
<tr>
<th>LETTER BY LETTER</th>
<th>WORD BY WORD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newark</td>
<td>New England</td>
</tr>
<tr>
<td>New England</td>
<td>New Wives for Old</td>
</tr>
<tr>
<td>New Wives for Old</td>
<td>Newark</td>
</tr>
</tbody>
</table>

**NON-SIGNIFICANT WORDS** are ignored in the Title Index. These words are:

- a
- an
- as
- at
- for
- by
- but
- or
- on
- in
- lo
- the
- of

**Deposit Accounts**

Institutional users who frequently request photocopies through CAM are reminded that they may establish a deposit account, which can be used to pay copying charges. For further information call Jorn Jorgensen at (519) 885-1211, ext. 2641.

**CAM Service**

Community Access Module (CAM) is a service operating on the UW Library computer that permits on-campus and off-campus users to access the bibliographic Query Module and the Message Module of the automated circulation system.

**Query Module** enables a user to search the Library's holdings by author, title and call number. In addition, this service provides a request facility for use by institutional borrowers.

**Message Module** permits a user to send messages to a library department e.g. Administration, Serials, and to receive messages, in return, from library staff.

**Hours of Service**

8:30 a.m. to 10:45 p.m. Monday to Thursday and 8:30 a.m. Friday to 10:45 p.m. Sunday (continuously)

University of Waterloo Library
September 1986
How to Access CAM Services

To use CAM, you must have a valid UW identification number (found on the front of ID cards for UW faculty, staff and students). Institutional users may obtain an identification number without charge by calling the Systems Development Department at (519) 885-1211, ext. 3750.

ON-CAMPUS users equipped with a terminal and a GANDALF 105 data set or its equivalent must be connected to DCS and the thumb-wheel switch set at 03. The FULL/HALF duplex switch must be set at FULL; the baud rate set at 2400 on a no parity setting (switches are normally located at the back of the terminal).

ON-CAMPUS users with SYTEK ports may access CAM by first typing <CALL 100> and pressing the return key twice. An asterisk * will appear, then type <03> and press return. CAM will then prompt for the user's ID and password.

OFF-CAMPUS users can access CAM through Bell Canada's DATAPAC service listed under DATAPAC in the white pages of your telephone book. The UW Library's DATAPAC address is 33500024.

Kitchener-Waterloo 300 baud - 579-0009
1200 baud - 579-0310

Cambridge 300 baud - 622-1714

Need Help?
If you have problems or questions, call the CAM Service number, (519) 885-1211, ext. 3750.

Query Module - System Commands

Instructions for use of the Query Module have been written into the system in the form of a menu which can be displayed after each response from the computer or as needed. Remember to complete each command to the computer by pressing the RETURN or SEND key (depending on type of terminal).

A = Search by author
T = Search by title
C = Search by call number
S = Stop displaying this menu
E = End this session (or Q for Quit)
B = Browse forward
D## = Display book by author ##
L = List more authors
M## = Show more about book ## (see note)
J = Jump (to Message Module from Query Module)
I = Request for interlibrary loan
G = Bibliographic data extract request (institutional users only)

CAMILL (Interlibrary Loan) is a special function for use only by institutional borrowers. The I command will begin requests for this group of users.

Note: The (M##) Show more about book ## command must have been used to display a full system record before the request process is implemented.

Message Module - System Commands

The MESSAGE module consists of five major functions which are entered by using the following commands:

E = Editor function with its own command structure that allows the user to compose, edit and send a message to a predetermined set of library addresses. The command structure includes C (Compose text), M (Modify block of text), R (Replace block of text), D (Display block of text), I (Insert block of text), E (Erase block of text), P (Post text), Q (Quit edit mode).

D = Display: function that allows the user to display a message which has been sent to his/her I.D.

P = Print: function which allows library staff (only) to print messages received from users.

C = Clear function which allows the user to clear a message from his/her I.D.

Q = Quit: signs the user off the Message Module

J = Jump (from Message Module to Query Module).

Note: A comprehensive User Guide for the Message Module appears by request after the initial sign-on.
INTRODUCTION

BIS (Bibliographic Information System) is the machine-readable version of much of the NCSU, UNC-CH, and Duke card catalogs. The machine-readable file is still under development and does not contain all library holdings. The card catalog at the D.H. Hill Library is still available.

Scope:

Books: More than 97% of the NCSU Libraries' book records are available through BIS. A smaller percentage of UNC-CH and Duke's book records are currently in the database.

Journals: Journals and other serial records are incomplete in all three university databases. No information about which volumes are owned is currently available online. BIS is not an index to articles.

Government Documents and NTIS reports: These items are not contained in the BIS database.

Check with the Documents Dept, 2nd floor, East Wing, D.H. Hill Library.

How the database can be searched:

- Searching the Author, Title, or Subject Indexes
- Author Searching
- Title Searching
- Subject Heading Searching
- ISBN, ISSN, and LC card number Searching

CONNECTING TO BIS

Access to BIS is via the NCSU Computing Center data switch. You may connect to the data switch using either terminals or microcomputers on campus that are directly connected to the switch, or by dialing into the switch using microcomputers or terminals connected to a modem.

- Terminal, microcomputer and modem requirements

  Terminals: Most terminals commonly used on campus are suitable.

  Microcomputer: Most familiar brands are suitable.

  Communications Software: Kermit is recommended and is available free from Rm. 106, Hillsborough Bldg. Red Ryder and PC Talk are also suitable. The communications parameters should be set for full duplex. Any parity is acceptable; word length may be 7 or 8 data bits.

  Modem: Any modem capable of asynchronous communication at 300, 1200, or 2400 baud is suitable.
To connect to the data switch using a modem

Dial 737-3980 (300, 1200 baud) or 737-2299 (300, 1200, 2400 baud) to connect to the data switch.

When you connect to the data switch it will respond with: "Enter Destination"

You type: Lib* and press the Return key. (your typing will not show.)

The data switch will respond with: "Connected to nn-nn" (where n is a number)

If the switch responds with "Destination busy or disabled or unavailable", all connections to BIS are busy, or BIS is unavailable. Hang up and try again.

If a port is available, the welcoming screen to BIS will roll up in a few seconds.

If the welcoming screen does not appear after 10 seconds, BIS may not be available - OR -
your communication software configuration is set improperly.

Terminals* connected directly to the NCSU Data Switch

No software or modem is needed. Make sure the terminal is in character mode and full duplex. If the terminal has a mode switch on the front, set to line mode (TSO) position.

Press the Return key until you receive: "Enter Destination"

You type: Lib* and press the Return key. (your typing will not show.)

The data switch will respond with: "Connected to nn-nn" (where n is a number)

If the switch responds with:

"Enter Destination": type Lib* and press the Return key.

"Destination disabled" or "Destination unavailable": all connections to BIS are busy, or BIS is unavailable. Try again later.

"Destination Busy": try again with the terminal set for 1200 baud.

If a port is available, the welcoming screen to BIS will roll up in a few seconds.

If the welcoming screen does not appear after 10 seconds, BIS may not be available - OR -
there is a problem with the data switch.

Terminals* connected to an NCSU campus network (Ethernet, DecNet, etc.)

You must reach the data switch via your network. When you reach the data switch, follow instructions for directly connected terminals.

Ethernet users should contact Library Systems, 737-2339, for a supplement * to these instructions addressing problems unique to Ethernet.

* Graphics terminals (VT-nnn, Tektronics, et. al.) may be unable to access BIS.
HEY!!! Assistance with problems in connecting to BIS should be directed to the NCSU Computing Center's User Services consultants or the Communications Services consultants during service hours, at 737-3035.

- Disconnecting from BIS:
  Type end, quit, logoff, or bye.
  Press the [Return] key.

SEARCHING THE CATALOG

If you have used the BIS terminals in the D.H. Hill Library, you have used the function keys to accomplish certain BIS operations. Your microcomputer or terminal does not have these keys programmed, and all commands must be typed and entered.

General Searching Tips

1. Only one title, subject, or author may be searched at a time.
2. Help can be had at any time, by typing help menu, pressing the [Return] key, and reading the help options.
3. Index searching is currently the most powerful feature.
4. Capitalization is not necessary.
5. Type all numbers, abbreviations -acronyms and initialisms as you see them.
6. Enter each search by pressing the [Return] key.
7. To view the previous screen, type ps and press the [Return] key.
   To view the next screen, type ns and press the [Return] key.
8. Read the command options at the bottom of your screen.
9. Subject searching is actually SUBJECT HEADING searching, based on the Library of Congress Subject Headings. This is NOT keyword or free-text searching.
10. Don't be afraid to experiment!

Partial recall, plus good luck provide a library tool of considerable power. -Pete Evans

Index Searching

The most powerful current searching feature, it may allow you to find an author, title or subject when you are not sure of the author's name, do not have an exact title, or do not know the exact Library of Congress Subject Heading.

1. Type in followed be either au, ti, sub
2. Type the author, title, or subject in the form below.
3. Press the [Return] key.
4. To select from the index, read commands at the bottom of the screen.

Examples: in sub insect
           in au dickens
           in ti look homeward
Author Searching

1. Type au followed by a space.
2. Type author's last name, leave a space, and the first name or initial, if known.
3. Press the Return key.

Example: au michener j
au sas institute

Title Searching

1. Type ti followed by a space.
2. Omit initial articles in a title, e.g., a, an, the, la.
3. Type the title or a portion of it (the system allows right truncation).
4. Press the Return key.

Example: ti old man and the sea

Subject Heading Searching (see General Search Tips #49)

1. Type sub followed by a space.
2. Type the subject heading or beginning fragment you want to search.
3. Press the Return key.

Example: sub chemistry organic
sub historical poetry

Number Searching

Type: ISBN or ISSN or LCCN followed by the number w/o hyphens.
Press the Return key.

Example: ISBN 0816014051
ISSN 00368075
LCCN 8527591

Multi-library Searching

The database currently contains UNC-CH items cataloged since 1975, and Duke items cataloged since 1979.
BIS can search the catalogs at Duke (du), NC State (ncsu), UNC-Chapel (unc) or all three at once (all).
There are several ways to do this.

*When you enter a search:

Begin your search with all or any combination of du ncsu unc.
Example: du ncsu ti grapes of wrath looks for copies of The Grapes of Wrath at Duke and NCSU.

*After you have entered a search:

Type all or any combination of du ncsu unc to forward your search to another institution's database.
Example unc would look for Grapes of Wrath at UNC-CH.
HELP!

For a list of help screens, type help menu and press the [Return] key.

For help in a specific function, type help ti, help au, etc.

For further assistance, contact the D.H. Hill Reference Desk during service hours @ 737-2935.

UPDATES TO THESE INSTRUCTIONS

The BIS system is not completed, and new features will be added. As enhancements are made available, notices will be posted in campus communication sources, to tell you when to get BIS updates. Watch for them!
REMOTE ACCESS TO THE CATALOG - A Tutorial

University of Utah

I. How the computer terminal communicates.

A. Each letter or number is coded as a pattern of seven "bits." For example, 'A' is represented as 1000001, '2' is represented as 0110010.

Seven bits can be arranged in 128 different patterns. The American Standard Code for Information Interchange, defines which pattern is assigned to each alphabetic, numeric and special character, and those codes are collectively known as ASCII codes, pronounced ASSKEE.

B. As an error check, the computer adds an eighth bit according to the agreed-upon "parity setting" which may be Odd, Even, Mark, or Space. (NOTIS uses Even parity.) Parity is based on the number of '1' bits in the pattern. Thus, for Even Parity, the computer adds a '1' bit only if needed to make the pattern have an even number of '1' bits. For example:

- A = 10000010 (the parity bit is a zero)
- 2 = 01100101 (the parity bit is a one)

For Mark parity, the parity bit is always a one. For Space parity, the parity bit is always a zero.

In some applications, the parity bit is not checked and although it must be present for timing purposes, its value is ignored. In other cases, the eighth bit is not used for parity but is used to extend the assignable codes to 256. NOTIS seems to work with parity ignored, as well as with Even parity.

C. The eight-bit packet (called a 'byte') can be sent sequentially without special timing pulses, (Asynchronous), or under the control of separate timing circuits (synchronous). Our system uses Asynchronous communication. In place of the timing pulses, the terminal attaches a single start bit, always set to '1', and one or more stop bits, always set to '0', to each eight-bit packet. Our system uses a single stop bit, so our 'communication protocol' is 'Seven-Even-One Asynch.'

D. The ten-bit packet is sent at one of several standard rates: 120 per second = 1200 baud (named after Baudot)
- 30 per second = 300 baud
- 240 per second = 2400 baud.

Our system will work at any of these three rates.
II. How the telephone carries the communication.

A. The computer terminal supplies each character pattern as a sequence of electrical voltage pulses:

<table>
<thead>
<tr>
<th>Start</th>
<th>ASCII Code</th>
<th>Prty Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>A:</td>
<td>1 1 0 0 0 0 0 0 1 0 0</td>
<td></td>
</tr>
<tr>
<td>2:</td>
<td>1 0 1 1 0 0 1 0 1 0</td>
<td></td>
</tr>
</tbody>
</table>

B. Because these pulses are silent, we need a device to make sounds in the same pattern for transmission over the telephone lines. A Modulator/Demodulator, or Modem, is such a device. Modems can be acoustic (real sounds), or direct-connect (audio-frequency electrical pulses.)

C. There must be a modem at each end of the telephone line to provide two-way translation between the telephone and computer systems.

III. How the telephone call connects to our computer.

A: Patrons call the University Computer Center: 581-5650.

An automatic modem connects the call to a data switch. The data switch asks "Enter destination or Network:" Patron types "LIB" Response may be Unavailable or Busy.

B: Computer Center's switch connects patron to NOTIS computer.

The call comes to the same device that supports our terminals inside the library, called IBM 7171. The 7171 asks the patron to "ENTER TERMINAL TYPE:"

C: The patron identifies the type of terminal being used.

A list of available types is shown by pressing CR. Terminals differ in their processing of cursor location codes and in the codes sent by their function keys. Most Personal Computers require use of a terminal emulator. If terminal type is not known, use TYPETERM to cause the computer to treat the terminal as a generic printer.
IV. What happens during the session.

A. There should be no difference from use within the library.

B. If a connection is made to a previous search, just continue or start over with 'e'.

C. If an error occurs and a message containing "Abend" appears, indicating an abnormal end to a program, initialize the system by typing '1uuu' on a blank line at the top of the screen.

V. How to disconnect from the catalog.

A. If no keys are pressed for ten minutes the session will be disconnected by the Notis computer.
   If no keys are pressed for thirty seconds during the time before the patron has selected the LIB destination, the University Computer Center machine will disconnect automatically. Just press CR to begin again.

B. Patrons should press 'e' when quitting or the next caller will be connected to their search. No harm comes if that happens.

C. Signal to the Computer Center's data switch by holding down the Control key and sending two or three Y's, followed by a CR. The data switch will again ask for the destination or network.

D. Hang up the telephone.

Ken Luker
September 1987
MANAGEMENT OF REMOTE ACCESS
The job description of Coordinator of the Online Catalog User Services and Training

1. The Coordinator has primary responsibility for the production, distribution and maintenance of training manuals and user aids and for the training of the library staff in the use of the catalog (the technical manual will be maintained by the Coordinator of Online Catalog Development and Operations). The Coordinator shares responsibility with the Coordinator of Online Catalog Development and Operations for calling meetings of the library staff as needed to discuss system changes.

2. The Coordinator is responsible for public relations, promotion, and demonstrations of the online catalog both internally and externally.

3. The Coordinator is responsible for transmitting suggestions and comments from the users to the author and maintainer of the user-friendly interface itself. The Coordinator is a member of the committee to develop the statewide online catalog, is a member of and rotates with the Coordinator of Online Catalog Users Services and Training as chair of the Library's Online Catalog Advisory Committee and as convenor of the Online Catalog Steering Committee.

4. The Coordinator is responsible for finding the solution for public services problems with the online catalog and for bringing those problems to the attention of the Coordinator of the Online Catalog Development and Operations when appropriate.

5. The Coordinator is responsible for bringing to the attention of the various unit librarians the instructions on testing equipment for breakdown and the procedures for the replacement and repair of equipment.

6. The Coordinator has general responsibility for the instruction and training of the users of the online catalog.
The job description of Coordinator of Online Catalog Development and Operations

1. The Coordinator is responsible for the operation and changes to the online catalog including both the Full Bibliographic Records section and the LCS section.

2. The Coordinator has responsibility for changes to the database and for directing any programming changes to the applications programs and is responsible for making sure that a wide variety of library input goes into the development and change.

3. The Coordinator is responsible for noting approval to pay fees and charges submitted to the Library by the computer center.

4. The Coordinator is responsible for working closely with the Coordinator of the Online Catalog User Services and Training in the development of application programs and is responsible for receiving from the Coordinator of Online Users Services the user needs and translating those needs into programming requirements.

5. The Coordinator of Online Catalog Development and Operations is the primary liaison with the Office of Administrative Information Systems and Services for the development of the programs and with the Administrative Computer Center for the operations of the catalog. The Coordinator chairs the Advisory Committee for the Statewide Development (the state library grant), chairs the Technical Committee, chairs the Library's Online Catalog Contacts Group, is a member of and rotates with the Coordinator of Online Catalog Users Services and Training as chair of the Library's Online Catalog Advisory Committee and as convenor of the Online Catalog Steering Committee.

6. The Coordinator has primary responsibility for the future development of the statewide online union catalog, for liaison with libraries around the state, and is principle investigator on the state library grant.

7. The Coordinator has primary responsibility for the production, distribution and maintenance of the technical manuals. (The training and user manuals will be maintained by the Coordinator of Online Catalog User Services and Training).

8. The Coordinator is responsible for overseeing production and distribution of the user-friendly interface.

9. The Coordinator is responsible for resolving problems with remote access to the system by individual users.
Microcomputing Coordinator

A. Purpose of Position: to supervise and coordinate the implementation, maintenance, and support of microcomputing, optical technology, and office automation in Fondren Library, integrating with the mainframe system where possible.

B. Major Duties:

35% 1. Hardware: for all microcomputers and non-computer room peripherals:
   a. evaluate hardware offerings in systems and peripherals, evaluating applicability, reliability, and costs, and recommend for purchase
   b. install all hardware and systems (or coordinate installation with vendor if necessary for warranty), checking all power, cable and phone line requirements
   c. maintain an inventory, including warranty and maintenance history, on all equipment for which responsible
   d. perform preventive maintenance, be familiar with user manuals, and perform first level trouble-shooting and maintenance as necessary
   e. develop and maintain maintenance contracts or contacts; monitor onsite maintenance or arrange depot maintenance as necessary

30% 2. Microcomputer software:
   a. review software, evaluating for applicability and usefulness in Fondren Library, and recommend purchase
   b. become familiar with a variety of software in several areas
   c. provide in-depth support for those packages chosen for use in Fondren (ex. Wordperfect 4.2) answering technical questions upon demand from staff
   d. follow-up on all warranties, registrations and licenses, being sure all new information and releases are received and all licenses complied with
   e. keep software inventory and library, making sure all programs are backed up adequately

20% 3. Microcomputer/CD-ROM training and documentation:
   a. provide introductory staff training on all software chosen for Fondren, coordinating with ICSA or others as possible, both classroom and one-on-one
   b. prepare handouts and other manuals as needed
   c. maintain documentation library of supported software

10% 4. Provide help for those dialing-in to the library computing system, NOTIS. This involves answering hardware and software questions from inexperienced users.
Occasional duties (5%):

Provide information for staff newsletters
Review literature on microcomputing and optical disc technology
Share information with Computing Resource Center (ICSA) and the Center for Scholarly Information (Fondren), combining efforts where practical
Provide statistics as needed
Monitor copyright compliance on Library owned software
Other duties as assigned

C. Knowledge and Skills Required

1. Education/Training/Experience necessary to perform job:

Some college, and demonstrated familiarity with academic libraries and the research process REQUIRED; BA/BS preferred.
Demonstrated excellent oral and written communication skills in English REQUIRED; recent experience writing manuals, guides, etc. preferred.
Recent documented experience with microcomputers, including business applications REQUIRED; IBM PCs or compatibles preferred
Experience in training or teaching at secondary level or above REQUIRED
Basic understanding of microcomputer hardware and elementary electronics, or willingness and demonstrated ability to learn, REQUIRED
Software experience with WordPerfect, Lotus 1-2-3, or dBase III+ preferred.
Academic library experience preferred; familiarity with library automation preferred
Positive experience working with people and record of successful work with minimal supervision REQUIRED

2. Equipment used:

PC's Limited Turbo PC; IBM PC; various printers; CD-ROM readers

D. Application of Knowledge and Skills

Must be able to interact favorably with both library staff and computer vendors to determine best configuration of hardware and software to meet departmental and overall library needs. Must use creativity in determining how software could be adapted to certain library uses. Training requires the ability to put difficult concepts in familiar language, often dealing with personnel who are afraid of machines. The microcomputer coordinator will help determine how microcomputers are accepted in the library and insure maximum
efficiency in their use by providing the best combination of hardware, software and training.

E. Supervision.

Reports to the Assistant University Librarian for Automated Services through the Head of the Systems Department.

After initial training, has minimal supervision; consults as needed with either the AUL/Automated Services or Head of Systems.

External rules are Rice University procedures and policies.

Supervises no one.

F. Extent of Public Contact

1. Within University

   Daily contact in training and trouble-shooting with other library departments.
   Frequent contact with ICSA (Computing Resource Center) and Center for Scholarship and Information (Fondren) on microcomputer related matters (maintenance, information)

2. Outside the University

   Frequent contact with vendors of hardware and software as well as repair services.
   Frequent contact with off-campus users (including donors and community members) who need assistance when calling the library's online system.
The purpose of remote access at the University of Kentucky is to communicate with the Library's Online Public Access Catalog (OPAC) from a distant location, whether it be on campus or off campus. The function of UK's Libraries is to provide adequate library services to its faculty, staff and students; therefore, at this time, remote access is available only to the University community. All users of the service must have a campus mailing address, or must be on the University's payroll, e.g. graduate or research assistants. When the library is satisfied that there are an adequate number of remote access ports for the University community, remote access will be made available to other interested people.
Michigan State University

Welcome to the MSU Library Bulletin Board!

This service is aimed at providing access to man, library services for personal computer users with a modem and communications software.

The system runs on a dedicated IBM PC, and is available 24 hours a day, seven days a week (barring short periods of down-time for system maintenance). Both 300 and 1200 baud access are supported.

New users should be sure to read bulletins 4, 5 and 6 - they contain important information concerning the policies and procedures for the use of this system.

Questions or comments concerning the use of this system can be left as suggestions on the bulletin board, or you can call Pete Cookingham at 333-7209; questions concerning the library circulation or interlibrary loan services should be addressed to the appropriate department, as detailed in the bulletins.

PLEASE NOTE the altered dial-up procedures for using CLSI on MSUNet. See Bulletin #3 for details.

What is your FIRST Name? xxxx
What is your LAST Name? xxxxxxxxxx
Welcome back, xxxx
Checking User File...

Password (dots will echo)? .......

Logging xxxx xxxxxxxxxx to disk...
You have signed on 3 times.

Entering message subsystem...

RBBS-PC Version CPC12.2A --(compiled)
You are caller # -> 4733
# of Active msgs -> 32
Next msg # will be-> 227

Time remaining = 14 min.


* <Ctrl K> to abort. <Ctrl S> to suspend *

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The library bulletin board is a modification of RBBS-PC, a
public-domain bulletin board system. In the process of making this
bulletin board library-specific, we have eliminated some of the
functions of the original system and added others, as will be evident
if you have used other bulletin board systems.

The public electronic mail capacity has been eliminated. You cannot
use this system to leave messages for other users. Communication is
restricted to library business, and the "messages" function is limited
to messages from the library to the users concerning the status of
their requests.

The capacity to upload and download files has also been eliminated, as
we have no library-specific material appropriate for such function.
This decision could be reconsidered, if users of the system can suggest
appropriate material they would like to see available.

At present, the added functions include routines that prompt the user
for interlibrary loan requests, faculty photoduplication requests, book
holds, and faculty and handicapped delivery.

Please leave your reactions to this system in the "suggestion box".
More (Y),N,NS? y
Please include any thoughts on improvements, additions, etc.

Most of the holdings of the library are accessible through the CLSI
computer system. Access to CLSI is possible in two ways; 1) via MSUNet,
and 2) via the Merit Network. Access via MSUNet is recommended if
it is a local call. CLSI is generally not available between 11 pm
and 4 am.
1. ACCESS VIA MSUNet

1. If MSUNet is a local call, dial:
   353-8500 (300-2400 autobaud modems -- 1200 Baud, Bell 212 only)
   353-8530 (300-1200 baud modems -- 1200 Baud, Bell 212 & Vadic 3400)

2. When the MSUNet connection is established, some "garbage" will appear on the screen. Press <RETURN> once or twice to allow the network to identify the speed at which you are transmitting (110, 300, 1200, or 2400)

3. The screen will print, "%terminal="; press <RETURN>.

3. The screen will print, "Which host?"; type CLSI, then <RETURN>.

More (Y),N,NS? y

4. When the CLSI connection is established, the screen will display the CLSI prompt: TITLE?
   If when connected to CLSI you are in the midst of a scrolling display, hold down the <CTRL> key, touch <P>, the type: 'proc', and <return>. The CLSI prompt TITLE? should appear.

5. You may then......
   Type .TITLE of book$ (or journal$) <return>
   Example: .future shock$ <return>
   .newsweek$ <return>
   or
   ,AUTHOR's last name, first name, or initials$ <return>
   Example: ,lundborg, louis$ <return>
   ,lundberg, l$ <return>
   or
   ;SUBJECT HEADINGS$ <return>
   Example: ;engineering$ <return>
   ;engineering-data processing$ <return>
   or
   /CALL NUMBER <return>
   Example: /JX1901.J6$ <return>

More (Y),N,NS? y

For detailed searching instructions, consult the printed instructions available from the Information Desk (353-8700).

6. For online HELP, type: HELP??? <return>

To BACKSPACE, hold down the <SHIFT> key and touch the <DEL> key.

To INTERRUPT a search:
   a. Hold down the <CTRL> key and touch <P>.
   b. At the CLSI prompt 'what do you want to do?' type: proc <return>
   c. When the CLSI prompt 'TITLE?' appears, you are ready to start a new search.
To temporarily INTERRUPT a search,
   a. Hold down the <CTRL> key and touch <s>.
   b. To resume the display of your search, hold down the <CTRL> key
      and touch <q>.

7. To leave CLSI, at the CLSI prompt 'TITLE?' send a "break" to the system. (In Smartcom, press <F6>, in ProComm, press <Alt><F7>,
   etc.) Check you software documentation to find how to send this command.

More (Y),N,NS? y
   The screen will then print one character, probably an exclamation point. Type %QUIT, the press <RETURN>.
   The screen will then say, "Which host?", type QUIT.

You are then disconnected from MSUNet.

2. VIA MERIT NETWORK

Use the Merit Network if you are elsewhere in the state. A list of Merit Network access telephone numbers appears below.

1. Dial the Merit access telephone number.

2. At the prompt '%terminal', press <return>. Merit will then display -
   the message '%Merit=Hermes'.

3. At the prompt '%Which Host?', type MSUNET-CLSI.

4. Then follow the instructions above.

More (Y),N,NS? y

<table>
<thead>
<tr>
<th>City</th>
<th>100/300 bps</th>
<th>1200 bps</th>
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<tbody>
<tr>
<td>Ann Arbor</td>
<td>(313)763-4800</td>
<td>(313)763-6500 (Vadic)</td>
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<td>(313)763-6520 (Bell)</td>
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<td>Birmingham</td>
<td>(313)258-6811</td>
<td>(313)775-3760</td>
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<td>Cadillac</td>
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<td>Cheboygan</td>
<td>(616)627-2214</td>
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<td>Dearborn</td>
<td>(313)593-5059</td>
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<td>Detroit</td>
<td>(313)577-0335</td>
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<td>(313)762-3311</td>
<td>(313)762-3319</td>
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<td>(616)774-9521</td>
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<td>Grand Rapids</td>
<td>(906)487-1519</td>
<td>(906)487-1519</td>
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<tr>
<td>Houghton</td>
<td>(616)383-1360</td>
<td>(616)383-1360</td>
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<tr>
<td>Kalamazoo</td>
<td>(616)464-5542</td>
<td>(616)464-5542</td>
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<tr>
<td>Manistee</td>
<td>(906)225-0222</td>
<td>(906)225-0222</td>
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<td>Marquette</td>
<td>(616)941-9826</td>
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<td>(313)827-7600</td>
<td>(313)827-7600</td>
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<tr>
<td>Sterling Heights</td>
<td>(313)939-3370</td>
<td>(313)939-3370</td>
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<tr>
<td>Traverse City</td>
<td>(616)941-9826</td>
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PLEASE OBSERVE THESE GUIDELINES TO HELP EXPEDITE YOUR REQUEST

1. Requests are handled separately. Therefore, each request must be as complete as possible.

2. We may have to try several different libraries before your request is filled. Your patience is appreciated.

3. Please do not use abbreviations for titles of books or journals or for words in an article title. REQUESTS THAT ARE SENT IN WITH ABBREVIATIONS WILL BE SLOWED DOWN APPRECIABLY. If you need help, ask at the Science or General Reference desks, or at a Branch Library. (An incorrect guess wastes valuable time.)

4. Please include a complete campus mailing address with your department's name spelled out in full.

5. Lending libraries require a complete source of information
   (title, date, page nos.). If you need help, ask at the Science or General Reference desks, or at a Branch Library.

6. In consideration of all users, no one borrower should request more than two loans or ten photocopies in any one week.

7. Most libraries (in accordance with the National Interlibrary Loan Code) will not lend current year imprint titles. You may make an order request for such an item.

8. If you fail to observe these guidelines, a message will be sent notifying you that your request was incomplete, and needs to be resubmitted.

When you choose Interlibrary Loan from the main menu, you will be prompted for the various elements of an interlibrary loan request. After it is completed and saved you will be given the number of the request. Make a note of this number, as it may be used in further correspondence with the library concerning this request.

Requests on this system will be treated just as if they were through the mail. You will receive further notification either by mail or phone. In the future you will be able to request notification via this BBS.

More (Y), N, NS? y
Faculty Photoduplication Service

This service is restricted to MSU faculty members and researchers only.

In an effort to provide better service and to recover some of the costs involved (labor, materials, etc.), there is a charge for checking the call number, locating the item, and photocopying. At this time, the service is limited to charges against University accounts.

The pricing structure is as follows:

$1.00 per transaction *and*
$0.05 per exposure from journal or book *or*
$0.10 per exposure from microfiche

The minimum charge for one article will be $1.05.

A valid University Account Number must be entered for a request to be accepted.

Since all requests will be processed by students working separately and at irregular times, the progress of a request cannot be traced. However, it is our intent to have a rather short turn-around time. We will be able to do this only with your assistance in following these procedural guidelines:

1. Each request must include the requestor's department, campus address, and a University account number.

2. A complete reference (author, title, etc.) should be supplied. Incomplete or incorrect references cannot be processed.

3. Requests are handled as they are received. However, a large number of requests from one person will be interspaced with other requests to prevent "log-jamming".

4. The intent of the service is to provide copies in a reasonably short time. We cannot guarantee completion of requests by a set date, nor can we provide progress reports (as explained above).

FURTHER QUESTIONS CONCERNING THIS SERVICE SHOULD BE ADDRESSED TO THE DOCUMENT DELIVERY STAFF AT 355-7641.

More (Y), N, NS? Y
WARNING CONCERNING COPYRIGHT RESTRICTIONS

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research". If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use", that user may be liable for copyright infringement.

This institution reserves the right to refuse to accept a copying order if, in its judgement, fulfillment of the order would involve violation of copyright law.

Bulletin # <1 through 6, L>ist or C/R to end? 6

* <Ctrl K> to abort. <Ctrl S> to suspend *

================================ CIRCULATION SUBSYSTEM ======================

Currently, there are two circulation services available on this system: book holds and faculty/handicapper deliveries. Future possibilities include book renewals. Please leave us a note in the "suggestions box" on this system if you think this would be a service you would like to see and would make use of.

GUIDELINES:

In order to use these circulation services you will need to register your university identification card at the main library circulation desk if you have not already done so. If you have a bar code on your faculty identification card or library permit, you are registered; students who have previously checked out materials from the Main Library are registered. All others must come to the Circulation Desk before using the BBS circulation functions.

Use of this subsystem also presumes prior searching of the Library's CLSI computer system for the desired item.

More (Y),N,NS? y
Use these functions once CLSI has been consulted, and you have determined that the desired item is owned by the library. Remember that CLSI is not a complete listing of the library's holdings. The card catalog must be consulted in order to determine with certainty whether or not the library owns the desired item.

Be sure to note the number of the request once it is completed. This number will be used to refer to this request in future correspondence with the library. Notification of action will be sent through the mail, although in the future you may be able to request notification on this
system. Please leave us a suggestion if this is a service you would like available.

QUESTIONS REGARDING THESE SERVICES SHOULD BE ADDRESSED TO THE LIBRARY INFORMATION STAFF AT 353-8700

Bulletin # <1 through 6, 'list or C/R to end>?
TO: Online Catalog Implementation Taskforce
FROM: Bill Young
DATE: 1/27/87
SUBJECT: GEAC Online Catalog Questions/Reactions since 9/30/86

I. Suggestions:
   
   "We need more terminals!"

   "Should be an option for choosing a new name for author or title once one has been chosen or retrieved"

   "Should be an option for choosing another title/author etc."

   "Instead of writing out possible sources by hand, attach printer so you can choose when to hand copy info"

   "Why isn't it possible to call up author's list of works, then get call #, location & status without having to CAT for new search as title?"

   "Blurb stating content of book or source"

   "Proquesta Polemico Sobre Arte Puertorriqueno No. ND312T7"

   "In BRF include a little information about contents of book—an abstract"

   "When searching by call # it would be helpful if titles could be listed (to facilitate browsing)."

   "Date material checked out; when FULL material listing is continued there should be a BACK command to return to previous screen"

   "Get it to give only the subject desired"

   "Please provide scrap paper for writing down book information..."

   "Allow conjunctions of commands or exclusions Ex: Subj: Automobile NOT by Smith or TITLE FLOWERS OR PLANT"

   "...... can't I try another entry in say title mode without going through the master menu. Last year worked better"
"Nice, friendly system to use but very limited is scope, expansion necessary for efficient use."

"Put the terminals back on different floors"

"What happened to the chairs?? This is silly!!"

II. Description of problems in unsuccessful searching

"Painting and sculpture of the Puerto Ricans - Peter Bloch N6612555"

"sources not available"

"It was successful. Why does the computer search beyond the desired subject? i.e. typed Graduate Exams went all the way through Grain Congresses.

"Info Services Belgium should be Info Services Belgium".

"Nothing on Repeat Offenders, Punishment of"

Very little on gun control, NRA of America, PLAC's, nothing on Supreme Court, etc."

"Subject not on file"

III. First Experience with GEAC online catalog

Yes: 11
No: 15

IV. Search Function(s) Used

Title: 11
Author: 8
Subject: 15
Author-title: 5
Number: 5
V. GEAC's rating 1-10, 10 being the highest

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WFY/emd
1/26/87
3320L/132

cc: R. Gifford
    J. Gavryck
    E. Gossen
    J. Hudson
    M. Trotter
Suggestion Screen:

Please type your comment in the space below. Press RETURN twice to conclude your message. Press BREAK to cancel your message.

This is a suggestion.

If you would like a response, please type your name. Press RETURN if you do not want to leave your name.
-> katny Klemperer
Please type your e-mail address, or your Hinman Box number.
-> katny@u3

News Screen:

The following commands are available:

BREAK: FIND SHOW
BYE: HELP START
CLEAN: PRINT SUGGEST
DISPLAY: SELECT
EXPLAIN: SET

For instructions in the use of any command, type EXPLAIN, followed by the command name. For example:

EXPLAIN BREAK EXP FIND EXP DISPLAY EXP EXPLAIN

The following databases are available:
BOOKS - 820000 records representing all cataloging through May, 1987.
SERIALS - Periodicals owned by the Library.
ORDERS - items on order or in process by the Library.

Welcome Screen (at signon):

Welcome to the Dartmouth College Library Online Catalog
Copyright 1987
by the Trustees of Dartmouth College

October 16, 1987: The online catalog will be unavailable from 8 a.m. to 9 a.m. on Monday, Oct. 19.

If you have questions or comments about the new online catalog, please type SUGGEST.

You are now searching the ORDERS file. To search another file, type SELECT FILE.

Please type SHOW NEWS to find out what commands are available.

Type one of the following commands, or type HELP for more information:
FIND - to search for items
SELECT FILE - to search another file
BYE - to end your session
SET MODE BRIEF - to use brief mode
PROPOSAL FOR NETWORK ACCESS TO PITTCAT

BACKGROUND

The University Libraries' automated catalog is one of the services that will be provided via the Information Services Network (ISN), Pitt's fiber optic data network. The automated catalog is called PITTCAT. The software package which provides PITTCAT as well as other library functions is called NOTIS, Northwestern Online Total Information System. The test of PITTCAT is scheduled to begin in November 1986. The test will include the use of PITTCAT in the libraries as well as through the ISN from non-library locations.

Access to the University Libraries' card catalogs has traditionally been provided as a free service to users; the University Libraries' operating budgets covered the costs of maintaining the card catalogs. Recently the University's Steering Committee for Telecommunications and Computing unanimously recommended to the Provost "that initially the use of the PITTCAT system from terminals maintained by the University Libraries be supported by properly adjusted library computing budgets." The intention of the motion was to continue to provide the catalog as a free service to users when it is automated. Recognizing that there were issues in accessing PITTCAT from non-library maintained terminals which required further study, the SCTC referred network access to a working group made up of representatives from the University Libraries and CIS and urged them to make a proposal as soon as possible.

The working group members are: Marian Dougan, Jo Ann Polk, Bill Soo-Hoo and Dan Temple from CIS and Jo-Ann Michalak (chair) and Barbara Epstein from the University Libraries.

I. CHARGE

Propose a policy for ISN access to PITTCAT, taking into account technical and direct charge (SPI 78) considerations. Since the scheduled implementation date for PITTCAT is November 1986, the proposal must have been drafted, referred to appropriate committees for endorsement and implemented before November 1986.

After discussion of anticipated delivery dates for future versions of ISN and their capabilities, the working group added its own stipulation that the proposal must be able to be implemented using the ISN version 1 in case future versions are not delivered on schedule.

The following technical and financial issues were identified and discussed:
II. TECHNICAL ISSUES

1. Access to PITTCAT will be through terminals and devices on ports connected to the ISN. Departments can order and pay for port installation and associated monthly charges at any location on the ISN. Dialup ports into PITTCAT from campus locations and off campus devices will be provided by the University Libraries. PITTCAT will be accessible from devices in CIS' Computing Labs.

2. PITTCAT software does not require the user to sign-on or identify him/herself, but instead presents the "Welcome to PITTCAT" introductory screen.

3. PITTCAT software provides a transaction log record of each use of PITTCAT. The transaction log identifies the terminal used, the time the search was initiated, the actual search performed and the number of "hits" resulting from the search. Records of individual usage on PITTCAT are considered confidential and are not preserved.

4. A record of PITTCAT traffic/activity is needed for planning for such items as efficient terminal deployment and expansion. The information available per terminal should include the number of transactions, the length of each transaction and the record of CPU time used. (CIS has advised that length of transaction information is not available now but probably can be provided in the future.)

5. The schedule and capability of ISN versions are discussed below.

   ISN version 1 (current installed version). This version will require library staff to dial into PITTCAT at the beginning of each day. Users could dial into other CIS systems but those systems would require the user to input his/her PPN and accrue direct charges. Because hitting the break key at any time would disconnect the terminal from the ISN, library staff would need to decide if users will be provided instructions to re-establish the PITTCAT connection or if library staff would do the reconnection. (The break key should not be disabled because it is needed to dial into PITTCAT if the ISN goes down.) Because the "time out" feature of disconnecting inactive terminals on the ISN after 30 minutes would cause considerable inconvenience to PITTCAT users and library staff, it would be disabled for PITTCAT use.

   ISN version 2 (permanent virtual circuits. -- September 1986). This version of ISN seems to provide the best options for public terminals located in the libraries. Terminals would appear to be hardwired to PITTCAT so users would not be able to access other CIS systems. Hitting the break key would not disconnect the terminal from PITTCAT. The "time out" feature could be disabled.
ISN version 3 (closed user groups. Pitt. installation date not later than January 1987). This version will allow the ISN to restrict the systems into which a terminal on an ISN port is permitted to dial. The break key is still effective.

6. Whatever network access to PITTCAT is finally implemented, it needs to be flexible enough to allow for future access to additional information services outlined in the University’s approved Long Range Plan for Computing and Telecommunications as well as the University Libraries’ 5 Year Automation Plan. Examples of additional information services are access to other libraries' databases and commercial databases.

7. In PITTCAT the maximum search results for an author, title or subject heading search is 5000 items. For keyword searches, Pitt can set the maximum search results. (In the keyword test file, the maximum has been set at 100 to limit the CPU time and to keep the response time acceptable.) There will be a "stoplist" of the most common words in the database. For example, the stoplist would prevent the user from searching for all titles with the word "the" if "the" is on the stoplist.

8. CIS has devised security provisions for the NAS which will allow access to PITTCAT and also limit access to Administrative Information Systems. These security provisions are covered in CIS' document entitled Administrative System Security.

III. DIRECT CHARGE ISSUES

1. The costs incurred to assign user IDs on the NAS would be considerable. Current CIS academic system users are not necessarily administrative or PITTCAT users. It is impossible to estimate the number of additional users which would need to be registered or the amount of overlap with academic PPNs. In 1985/86 the 5 automated libraries recorded usage by 19,770 unique IDs (social security numbers). (Note: There are 17 additional libraries in the University. The 5 libraries represent approximately 51% of the total circulation in all the University Libraries).

2. Publicity for the Campus of the Future has indicated that PITTCAT will be one of the services available on the ISN. The assumption has been that the user will not be charged for PITTCAT usage.

3. The Comptroller’s Office has indicated that they perceive one of the Federal Auditor’s principles as consistency of charges, i.e. if usage in the library is not charged for, then network usage of PITTCAT should also not be charged for. In addition, the Comptroller’s Office indicated that, if users are required to sign on, the Federal Auditor may want users to identify type of PITTCAT usage, e.g. instructional, research, etc. Currently an annual one-week survey is used to determine the
overhead breakdown for library usage. Number 4 below covers other libraries' charging for automated systems.

4. A survey was conducted by the working group to determine if other libraries are charging for use of an automated catalog. No other NOTIS customer or any member of the Association of Research Libraries (the 104 largest research libraries in US and Canada) could be identified which charged users or user's departments for the use of an automated catalog.

5. Some NOTIS universities do record computer use statistics, indeed, Clemson transfers internal funds to the library to cover NOTIS usage in the library. However, it is impossible to predict reliably what resources would need to be transferred to the University Libraries to cover PITTCAT expenses because of the uniqueness of each NOTIS installation due to different hardware configurations, different functions in NOTIS being used and different volumes of activity in each library installation.

6. Possible direct charge models were investigated. Two Pitt models are currently in use: accrual of charges to user's department for academic computer usage and accrual of charges to the Provost for computer use in Computing Labs. A third model has been proposed and is currently under discussion within the University: establishment of universal student accounts for all registered students. The decision to implement universal computing accounts will not be made until after November 1986 when network access to PITTCAT needs to have been implemented. If universal computing accounts are established provision for PITTCAT usage will need to be made.

IV. PROPOSAL

Based on the issues outlined above, the working group:

1. Endorses the SCTC motion that the Provost provide users with free access to PITTCAT from library-maintained terminals by allocating sufficient resources to the University Libraries' computing budget.

2. Proposes that the resources allocated to the University Libraries' computing budget also cover network access to PITTCAT.
MEMORANDUM

DATE 3 September 1987
TO Betty Bengtson
FROM Tamara Miller
RE Remote online catalog access

Below is a short chronology of our work in providing remote access to the online catalog. Feel free to use any of this information in your memo to Phil Scheurer that may be helpful.

August 1986 Pretest conducted with one direct dial up port and the cooperation of the Colleges of Engineering and Communication as well as the Graduate School of Library and Information Science. Comments from those faculties and their graduate students were used to plan our broader implementation.

January 1987 Two Geac ports were connected to the campus DCA computing network. The access was broadened to anyone with either dial up ability (modem) or access to any UTCC remote terminal room. The online catalog was made available during the same hours that the libraries were open. An instruction sheet was created and made available through the Reference Departments of all libraries. Articles appeared in the UTK Librarian and Context. The systems office began answering questions from faculty and students having some trouble using a wide variety of privately owned personal computers and modems. There was even a brief mention of this expanded catalog availability in a Beacon story.

March 1987 The DCA connection was expanded to 4 ports due to reports of waits up to 3 minutes to connect with the catalog. Our transaction logs showed the heaviest activity in the late afternoon and early evening.

September 1987 DCA connections will again be expanded. Eight Geac ports will be connected to the DCA network for a short time in the Fall. Once the Ethernet network is in place, a further expansion to 16 ports will be complete.

Future plans We anticipate a heavy demand for remote access to the online catalog and have made plans to expand the number of ports to 32 during the school year. We also plan to extend the hours of availability to approximately 11 hours per day. In effect the catalog will be available around the clock, seven days a week with a short time each day set aside for system maintenance.

I will get you some use data this afternoon.
REPORT
OF THE
REMOTE ACCESS SUBCOMMITTEE
OF THE
TRLN LIAISON AND IMPLEMENTATION COMMITTEE

Committee: John Abbott, chair
          Barbara Best-Nichols
          Tracy Boucher
          Ebba King
          Laura Osegueda
          John Ulmschneider

December 1987
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1. Principal Findings.........................................................1
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3. The Charge to the Committee and Committee Findings.........3
1. Principal Findings:

1.1 Remote access to BIS is operational at NCSU. Access is available via personal computers with modems or terminals connected to the NCSU Computing Center (CC) data switch.

1.2 Users may access BIS at any parity or any baud rate (300-9600).

1.3 User instructions are available through the Reference Department.

1.4 User aid is provided by the Reference Department for searching problems and the CC consultants for hardware or computing problems.

1.5 Remote access to the Tandem is now provided by 6 ports.

1.6 Two branch libraries also compete for BIS access on the 6 available ports.

1.7 BIS access was designed for synchronous service, and problems still exist in asynchronous access transactions. TRLN has no plans to remedy these problems in the near future.

1.8 Passwords and fees for BIS were studied and rejected as not technically or operationally practical and not in keeping with the library's mission.
2. Executive Summary:

The committee received its charge in July 1986, a few months before the introduction of NCSU's asynchronous remote access to BIS. Remote access was then available at UNC-Chapel Hill and Duke, but the service was unpublicized and the use was very light. Little planning for remote access had been done at those sites.

At first, remote access was available only through the ECS switch via a coded port address. The initial experience by the library staff, a few patrons, and other campus personnel was disappointing. The committee successfully urged the withholding of public remote access until some of the problems were solved. Library Systems resolved parity and baud rate problems, allowing users to access BIS with less confusion and difficulty.

BIS was designed for synchronous access with Telex terminals. Remote users access BIS asynchronously, and asynchronous access continues to have problems, including garbled printing unless users reconfigure their printers, and the scrolling loss of the first line in Summary displays. BIS also does not disconnect the remote user properly, often remaining connected even after the user has requested an end to the session several times. Conversely, BIS very frequently and spontaneously disconnects in the middle of a user's session. When this happens, the remote user's port is put into 'disconnect mode', and the users is
dropped within seconds of logging back on to BIS. This condition also occurs with branch users and asynchronous users in the D.H. Hill Library.

Remote access has been available to the public since August 1986 and the concept has proven very popular. Problems with dependable access by remote users, including the branch libraries, are still unsolved.

3. The Charge to the Committee and the Committee Findings:

This section presents the committee's charge point-by-point, followed by the committee's findings for each charge.

The Committee Charge:

1. To determine (together with Library Systems and the Computing Center) the structure of dial-up access to BIS, including:

   a. investigate the number of lines initially available to various classes of users (e.g., branch libraries vs. others)

   Several port arrangements were considered to meet the needs of the branch libraries and the remote access patrons. The committee recommended to the director of libraries that all 8
ports be assigned dial-up status, and as the branches came online, ports would be dedicated for branch use. The director agreed.

Currently, 3 branches have BIS access. The Forest Resources Library (FRL) and the Veterinary Medical Library (VML) do not have dedicated Tandem ports and are contending for BIS access. VML is scheduled to be assigned dedicated ports when a new board of ports is purchased. When FRL moves to the NRRC, dedicated ports are planned. Textiles access to BIS is via telephone leased lines, rather than the CC data switch. The Design Library is in the process of obtaining access via a leased line.

b. determine the types of lines to be offered (e.g., dedicated lines only for the branches? Number of 300, 1200, 2400 baud lines needed?)

With the acquisition of new asynchronous Tandem ports, the branches that have the technical capability should be assigned a dedicated port(s). Currently, there are insufficient ports to dedicate the branch lines and still offer acceptable service to the remote user.

It will not be necessary to allocate ports by baud rate.

Library Systems arranged for the CC to perform a speed
conversion at the data switch, allowing users at any baud rate to access the Tandem fixed speed ports.

c. project an estimated rate of need for future ports

Future need will result from a) increased growth of the user population, and b) increased interest among the user population. The NCSU Office of Institutional Research projects a 5.4 percent growth of student and faculty numbers through 1990. Beyond 1990 and with the construction of the Centennial Campus, growth figures are uncertain.

Interest among the user population is expected to increase as more students and faculty acquire personal computers and modems. The closing of the card catalog will force patrons into a familiarity with electronic access. Growth in demand will probably outstrip the library's capability to supply access. The underpowered Tandem CPU will limit the extent of new access that can be provided. Tandem system utilities combined with data switch logging can provide accurate information on current port use, including refusal rates (e.g., how often users are refused service because all ports are busy), port response time, and general port activity. Refusal rates will reflect demand growth. After reaching a certain threshold (i.e., 10 refusals per hour), the library should consider adding new ports for remote users.
d. determine the log-on procedure for dial-up users (e.g., should charges be levied to search? Is a password needed? Do different microcomputers and terminals need to meet certain specifications to use BIS?)

To determine whether to charge for access, the committee examined the results of an informal survey conducted by Joe Hewitt at UNC-Chapel Hill for the TRLN Board. Hewitt’s report indicates 1) that charging fees for access violates the ideal of open access to collections, and 2) there is no practical way to control or charge some dial access users and not others.

Dial-up access to BIS is still imperfect and unreliable. By offering access without fee, the library is less open to criticism when users encounter unsatisfactory service. When service is improved to an acceptable level, however, passwords and fees should not be implemented. The attendant bookkeeping will not justify the fees recouped or the demand suppressed. If non-university demand is thought to present a problem, publicity should be limited to only the university environment.
The initially rigid parity and baud rate requirements for BIS remote access have been altered to allow any parity or common baud rate (300, 1200, 2400, 4800, 9600) to be handled transparently to the caller. Any common microcomputer communications software is able to connect to the CC data switch and, therefore, to BIS. The log-on procedure is detailed in the Access to BIS: The Online Catalog at NCSU instruction manual for remote users produced by this committee (Appendix I).

The Ethernet communications environment in the Mechanical and Aeronautical Engineering (MAES) and Mathematics Departments is currently unable to access BIS because of bit/parity incompatibility. A low cost, but labor intensive solution, may be possible by reconfiguring the Tandem to permit communications with Ethernet. An expensive hardware solution is the alternative in the event that reconfiguring is not successful.

e. decide what scope of aid dial-up users can expect from NCSU Libraries or the Computing Center

User aid is divided into technical assistance and searching assistance. Carl Malstrom, Director, NCSU Computing Center, agreed that his consultants would provide aid to patrons having trouble connecting to the data switch. This includes
modem, communication software, and terminal/microcomputer problems. The D.H. Hill Reference Department accepted responsibility for distributing remote access user documentation and providing searching assistance. Assistance in both cases will only be provided during regular hours of service.

In practice, the Computing Center consultants are still unfamiliar with their responsibilities to BIS callers. Rather than assisting the caller, a frequent response is to advise the caller to contact the library. Users interpret any problem accessing BIS as a communications problem, and call the consultants for assistance. The consultants are able to determine the up/down status of BIS and to run diagnostics isolating problems to BIS or to the data switch. There is an apparent lack of systematic routine by the consultants when attempting to determine problems with BIS access.

2. To create training aids for remote access users, including:

   a. a brochure or flyer with log-on instructions

      See Access to BIS: the online catalog at NCSU (Appendix I).

   b. articles for internal and external consumption about remote access to BIS
See three articles in the NCSU Computing Center Newsletter, May 1987 (reprinted in a Computing Center User Memo), and Focus article, Spring 1987 (Appendix II).

c. what training sessions are needed

No remote access training session have been offered. This decision was based on the lack of an acceptable training facility to demonstrate online access, the poor attendance for the general BIS training sessions, and the remaining asynchronous BIS idiosyncracies. Remote access is mentioned in all general library tours and explained in more detail in advanced library instruction sessions. Special arrangements can be made on demand for training individuals or groups. On demand sessions have been conducted with the Department of Sociology faculty by Ebba K. King, and for a group of Wake County public school librarians by Rhonda Hunter.
3. To make a recommendation on the future of this subcommittee

3.1 Appoint a committee to maintain the remote access documentation and to advise Library Systems and the Computing Center about problems.

3.2 Reduce the committee to 3 or 4 persons having ready access to remote access and its users.

3.3 Formalize the current ad hoc communications with the NCSU Computing Center staff for more effective interaction, especially in the area of BIS user assistance offered by the CC.

3.4 Request that Carl Malstrom charge a member of his staff with responsibility for BIS relations with the library. The appointed person should interact with either the head of Library Systems or the chair of the Remote Access Subcommittee.

3.5 Reconfigure and reprogram the Tandem to allow Ethernet users access to BIS.
SELECTED READING LIST
SELECTED READING LIST


USES OF SPEC KITS

The Systems and Procedures Exchange Center (SPEC) is a clearinghouse operated by the Association of Research Libraries, Office of Management Studies that provides a central source of timely information and materials on the management and operations of large academic and research libraries. It facilitates the exchange of knowledge and documents through SPEC Kits, which are distributed ten times each year to ARL members and other interested libraries. The Kits include topically-arranged groupings of unedited primary source documents — selected for their value to administrators and decision-makers — that illustrate a wide range of alternative approaches to specific issues.

Kit documents come from general membership surveys and from selected libraries contacted directly by SPEC, and most Kits are produced within six months of surveys. The Documents' value comes from their variety of ideas, methods, and solutions. They are not viewed as finished products, but rather as points of departure for a library's planning efforts and as stimulants to innovative approaches to problem-solving. As such, Kits do not present answers or prescriptions for any one library, instead they illustrate how selected ARL members are planning for or dealing with particular issues. The worth of any one Kit to a particular library will depend upon the specific topic covered and the library's stage of development in that area.

Materials are selected according to the following criteria:
- Presents an approach of potential value to administrators and decision-makers
- Timely, and dealing directly with the topic under consideration
- Probability of application of ideas or thinking to other library situations
- Illustrative of actual practice, rather than theoretical
- Understandable, readable communication

All together, the materials should provide a range of alternative approaches that complement each other, provide variety, and stimulate comparison and contrast.

Libraries can take advantage of the Kit compilations in a number of ways. Administrators can evaluate the assumptions, methods, and results of other libraries' approaches; compare and contrast them; and use the learnings in their own situations. Library staff members can use the Kits as professional development and current awareness tools. Committees and task forces can use them to begin a review of current practices. And the Kits can identify other persons or places to contact for further information. Back-up files in the SPEC office are also available for loan to member libraries. In addition, SPEC will conduct on-demand surveys or analyses geared specifically for a single library.

EVALUATION

Kit Title/Number ____________________________

1. Which uses did the library make of this Kit?

2. Please indicate how useful the Kit was for these purposes.

- [ ] Very Useful
- [ ] Quite Useful
- [ ] Somewhat Useful
- [ ] Not Useful

3. Do you have suggestions for this Kit or for future Kits?

[optional]

NAME ____________________________

LIBRARY ____________________________

PHONE ____________________________

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