FILLING IN THE GAPS: USING MICROCOMPUTERS
WITH AN INTEGRATED LIBRARY SYSTEM

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In 1985 the libraries at Vanderbilt University, including the Medical Center Library, installed the NOTIS integrated online system. NOTIS at Vanderbilt is called Acorn, so when you hear or see references to Acorn, please remember that is our online system. At that time, our Serials Section, which manages the ordering, cataloging, check-in, claiming, and binding of the library's journals and unclassified serials, was an almost completely manual operation (slide 1). We were especially eager to automate as many of our serial functions as possible.

Creating our database took longer than expected, but by mid-1986 most functions performed by the section were done online, and the way we did our work was transformed (slide 2). We now had many access points to a title, patrons could see which issues were received, and printed claims could be generated. However, as much as we appreciated the positive aspects of the system, we soon discovered that there were some things it could not do.

Even though we compiled a "wish list" of enhancements, we realized it would be a long time before "Santa delivered." We also realized that some of the things we needed were unique to our situation and would be too specialized for a vendor to provide. So we began to think of other ways to "fill in the gaps" left by our integrated system.

Using microcomputers was an obvious solution. Because, some of our NOTIS terminals were Zenith microcomputers, we already had the equipment available. In addition, all staff members knew how to do basic operations, and many of them were already beginning to use them for word processing tasks. The next step was to identify the appropriate software.

We looked for software with the following characteristics (slide 3):

Inexpensive - Our library has a small software budget, and we could not afford expensive programs.

Easy to learn - Since we've had a fairly high turnover rate, we didn't want to have to spend a lot of time training people in the use of the programs.

Easy to use - We didn't want programs that were so complicated that reading the instructions and using them took longer than the manual way.

Versatile - We wanted to keep the number of programs people needed to learn to a minimum, so we needed to be able to do several things with the

programs chosen.

We chose two pieces of software, PC-File and Sidekick.

Although there have been several versions of PC-File that we have used, we will concentrate on PC-File+ in this discussion (slide 4). PC-File+ is powerful and versatile file management program that we use to create and maintain several separate databases that we will discuss in a minute. Within each of those databases, field names prompt the person adding the information as to what is wanted (slide 5). If the information being entered is the same as that in the previous record (a frequent occurrence), a Ctrl-F combination copies the data. We can sort the data into almost any sequence, and can print a variety of reports. In the reports, we can select all or just some of the data elements, or fields, and we can print it from all or some of the records. We can also mark fields so that we can ask for totals if necessary.

The set up of the database is crucial. You have to consider what information and reports you want tomorrow, and what you might want next week or next year. Fortunately, although it is somewhat more complicated, the database definition can be modified later. Designing some of our applications required the assistance of library staff members a little more familiar with the program and database construction than the serials staff (slide 6), but many were designed by section staff members themselves.

Our first use of PC-File was to generate a list of journals sent in our

weekly bindery shipments.   We note which volumes are

sent to the bindery on our online system (slide 7), but it cannot cumulate

that information into the alphabetical list our bindery requires. We were

also noting on copies of the bindery slips whether the volumes were of gift

or purchased issues. These were counted by hand for our statistics. We

knew we could use a word processor for the list, but decided that by using

PC-File, we could simplify data entry and easily get some of the

statistical information we needed. So, in addition to the title and volume

information, we included a field for noting whether the volume was a

subscription or gift (slide 8). Now, all the bindery assistant has to do

for each bindery shipment is enter the data as prompted, using the copy key

when more than one volume of a title is bound, and then print the list.

PC-File lets you create macros or smart keys. Using this capability, the

steps in printing the report were memorized by the program, and now only

one keystroke is needed to complete the process. We get a list of items

sent to the bindery with totals of how many subscription volumes and how

many gift volumes were added to the collection (slide 9).

A similar use of the program is to organize the file of issues needed for

completing unbound volumes (slide 10).   Of course, our online system shows

that these issues are missing. But again, it doesn't have the capability

of cumulating that information.   Our "want" list is very similar to the

bindery list, in that once we enter the data, we sort it as needed and

generate a report. Again, this could be done on a word processor, but

using this program gives us more options for selective printing, such as as

listing only those items published before 1980. Also, finding and

retrieving data can be done very quickly, which makes updating easy.

(Slide 11) Although we use the fund accounting component of our online system, our main library, through which our invoices must be funnelled, still uses a locally developed accounting system. Their method of processing invoices requires that several pieces of paper accompany each group of invoices sent for payment. All the required information is not included in the NOTIS system, so the online system reports cannot be used. We were spending a lot of time manually completing forms and adding up (and double-checking) numbers. Because much of the information required was the same, we decided we could improve the situation by creating a PC-File+ database with enough fields to produce all the needed reports. In this case, the information we input includes the locally assigned vendor number, invoice date and vendor invoice number, the NOTIS invoice number, the local fund and purchase order numbers, which for reasons too complicated to go into differ from the NOTIS ones, and the amount of the invoice. From this data, we print a required cover sheet (similar to a voucher) for each invoice as well as this detailed summary sheet which gives us totals for each fund as well as the total for all the invoices.

Another problem solved by using PC-File+ was keeping track of new serial requests. We have been fortunate to have money the last few years with which to purchase new titles. The committee which decides which journals to order only meets a few times a year, but requests are received continuously, so we wanted a way to keep track of them. Since we were dealing with titles not yet in the library, our online system couldn't help us here, so we created an evaluation database with PC-File+ (slide 12).

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Now, when a request is received, we can search the database to see if work on the title has already been done. If not, we enter the title, requestor, price, and any holdings already in the library. Printouts of the database record for each request being considered are then used by the journal evaluation committee members. Before every meeting we print a summary report showing the title and price of each title being considered along with the total cost (slide 13).

After the committee meets and makes its decisions, other fields are added, such as the ordering "decision," and, if the decision is positive, if backfiles will be purchased, and what vendor will be given the order (slide 14).   Then a final report, "Titles to Order," is generated giving the titles to be ordered with the total cost. (slide 15)

The other piece of software that we use a great deal is Sidekick by Borland International (slide 16). This is a "memory resident" program, which means that once you load Sidekick into your computer's memory, it will stay there until you turn off the power or reset your machine. Even if you are using another program for word processing, database management, or, as is our case most of the time, accessing the online catalog, Sidekick is always present and can be activated immediately with two keystrokes. (slide 17)

Sidekick adds a new dimension to our work on our online system, especially since all our machines use floppy disks, because without getting out of what we are working on and back to DOS, we have access to a notepad, calculator, and calendar. Then after using Sidekick, we can easily return

to exactly where we were in our original program. We've found all the features useful, but we mainly use Sidekick's notepad, a text editor (limited word processor), and will focus on that function.

We use the notepad for forms that we need repeatedly that require customizing each time we use them. For example, the receiving assistant can make customized routing slips. As she checks-in a journal that is to be routed she activates Sidekick, then calls up a previously saved general routing form (slide 18), adds the title and issue number of the journal at the top and, if called for by the directions in the online order record, edits the list of persons to whom the journal routes. After the slip is printed, she goes out of Sidekick and is back in the online system at the exact place she left it.

Other similar uses of Sidekick where we have saved forms and customized them with each use include: generating card and pocket labels and ordering items from the MLA Exchange. In the case of the latter, after using our want list to see which issues we might need, we double-check it on our online system. While we are still viewing the online record, an order form is popped up, filled in, and printed off ready for mailing.

In addition, we have saved statistical forms to make recording tallies easier (and we hope more accurate), as well as various memos. Notifying patrons when journals they requested were ordered is now a snap (slide 19). Sidekick is also very useful for generating short, original memos, especially when they pertain to items we are working with in the online catalog.

(Slide 20) We are very excited about what PC-File and Sidekick have done for us, and find that using them makes us think of even more applications. They are effectively "filling in the gaps" for us by doing things our online system does not or cannot do. And perhaps more importantly, these programs add to and make use of the staff's microcomputer skills, as well as enhance their work day and make it more interesting.

LIST OF SLIDES

1. Staff member at kardex

2. Staff member at micro-computers

3. List of software characteristics we needed

4. Acquisition, cost and operational information for PC-File+

5. Sample database record

6. People who assisted us at microcomputer

7. An online record illustrating how our bindery information displays

8. Bindery database record

9. Completed bindery list produced from the database

10. Want list produced from the database

11. Detailed pack cover sheet

12. Evaluation database record partially completed

13. Composite list of titles to be evaluated

14. Evaluation database record completed

15. List of titles to be ordered

16. Acquisition, cost and ordering information for Sidekick

17. Our online catalog screen with Sidekick activated on it

18. Routing slip form saved on Sidekick

19. Order memo activated on Sidekick

20. Entire staff

SOFTWARE CHARACTERISTICS

1. Inexpensive

2. Easy to learn

3. Easy to use

4. Versatile

Slide no. 3

PC-FILE+

* COST:

   $74.95 if ordered direct

   Available from software outlets or direct from:

   ButtonWare, Inc.

   P.O. Box 5786

   Bellevue, WA 98006

   1-800-J-BUTTON (Orders only)

* SYSTEM REQUIREMENTS:

   384K or larger MS-DOS computer

Slide no. 4

==

```
           ACORN
          TITLE [                                    ]
            TI2 [                                    ]
         ACTION [     ]
         VOLUME [         ]
           YEAR [             ]
     SUBSCRIBE# [ ]
          GIFT# [ ]
```

Please respond. Press (F10) when complete.

slide   no. 5

Journal of immunology (1950)
   Journal of immunology. v. 64-   1950- Baltimore, Williams &
Wilkins.
   Monthly.
   Continues: Journal of immunology, virus research and
experimental chemotherapy
   Organ of the American Association of Immunologists.

LOCATION: MED CTR journal stacks (non-circulating)
CALL NUMBER: NO CALL NUMBER. Shelved by title.
LIBRARY HAS:
   v.64 (1950)-v.140 (1988) *supplements bound w/volumes
   CURRENT ISSUES/VOLUMES:
      v.141:no.1-12 (1988) *sent to bindery 4/13
      v.141:no.7:suppl.(1988) *sent to bindery 4/13
      v.142:no.1 (1989:Jan1)-v.142:no.8 (1989:Ap15)

```
       ACORN    ACK1835
       TITLE    AMERICAN JOURNAL OF CLINICAL
         TI2    PATHOLOGY
      ACTION    B
      VOLUME    90
        YEAR    1988
  SUBSCRIBE#    1
       GIFT#    0
```

```
┌─Q───┐   ┌────┐
│ D Delete       │
│ M Modify       │
│ S new Search   │
│ E End of file  │
│ B Beginning "  │
│ N Next record  │
│ P Prior record │
│ R get by Rcd#  │
│ + browse down  │
│ - browse up    │
│ Q Quit finding │
└────────────────┘
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Slide no. 8

RCD.	ACORN	TITLE TI2	ACT	VOLUME	YEAR	S	G
1	ACK8846	BLOOD	R	72-3	1988	1	0
2	ACK8846	BLOOD	R	72-4	1988	1	0
3	ACK2089	BREAST CANCERR RESEARCH AND TREATMENT	B	11	1988	1	0
4	ACK1972	BRITISH JOURNAL OF DERMATOLOGY	B	118	1988	1	0
5	ACK0858	BRITISH JOURNAL OF NUTRITION	B	59	1988	1	0
6	ACK0641	BRITISH JOURNAL OF PHARMACOLOG	B	93	1988	1	0
7	ACK0641	BRITISH JOURNAL OF PHARMACOLOG	B	94	1988	1	0
8	ACK0868	BULLETIN OF THE HISTORY OF MEDICINE	B	61	1987	1	0
9	ACK0872	CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY	B	66-1	1988	1	0
10	ACK0872	CANADIAN JOURNKAL OF PHYSIOLOG AND PHARMAOLOGY	B	66-2	1988	1	0
11	ACK0872	CANADIAN JOURNAL OF PHYSIOLOGY AND PHARAMOCOLOGY	B	66-3	1988	1	0
12	ACK0877	CANCER	B	62-1	1988	1	0
13	ACK0877	CANCER	B	62-2	1988	1	0
14	ACK0877	CANCER	B	62-3	1988	1	0
15	ACK0877	CANCER	B	62-4	1988	1	0
16	ACK2014	CELL CALCIUM	B	9	1988	1	0
17	ACK0885	CELL AND TISSUE KINETICS	B	20	1987	1	0
18	ACK0691	CHEMICO-BIOLOGICAL INTERACTION	B	65-66	1988	1	0
19	ACK0577	CHEMISTRY AND PHYSICS OF LIPIDS	B	45-46	1987-88	1	0
20	ACK0577	CHEMISTRY AND PHYSICS OF LIPIDS	B	47-48	1988	1	0
21	ACK1686	CLINICA CHIMICA ACTA	B	178-179	1988-89	1	0
22	ACK1697	CLINICAL PHARMACOKINETICS	B	13-14	1987-88	1	0
23	ACK0911	COMPUTERS AND BIOMEDICAL RESEARCH	B	21	1988	1	0
24	ACK0619	EMERGENCY MEDICINE	B	20-2	1988	1	0
25	ACK0942	EPILEPSIA	B	29	1988	1	0
26	ACK1850	HERZ	B	12	1987	1	0
27	ACK1850	HERZ	B	13	1988	1	0
28	ACK1236	HISTOCHEMICAL JOURNAL	B	20	1988	1	0

Slide 9

RCD.	ACORN	TITLE TI2	ACT	VOLUME	YEAR	S	G
		PROCEEDINGS					
57	ACK1725	NEUROCHEMICAL RESEARCH	B	13-1	1988	1	0
58	ACK1725	NEUROCHEMICAL RESEARCH	B	13-2	1988	1	0

```
TOTALS:     SUBSCRIBE          58.00
            GIFT                0.00
```

Printed 58 of the 58 records.

PRIMARY SORT FIELD: unsorted

SELECTION CRITERIA:
All records

WANT

TITLE	VOLUM	NO	DATE
abstracts of hospital management studies	4	4	1968
acta odontologica scandinavica	35	6	1977
acta odontologica scandinavica	36	1,5	1978
acta odontologica scandinavica	37	2-5	1979
acta odontologica scandinavica	38	2-6	1980
acta odontologica scandinavica	39		1981
acta odontologica scandinavica	40	1,3-6	1982
acta odontologica scandinavica	41	2,3.6	1983
acta odontologica scandinavica	42		1984
advances in inflammation research	1		1979
advances in neurology	2		1973
advances in perinatal medicine	1		1981
aids	1	1	1987
aids targeted information newsletter	2	2-6	1988
aids; an international bimonthly journal	1	1	1987
alcohol health care association journal	11	6,7	1985
american academy of psychoanalysis journal	4		1976
american anthropologist *exchange only	76	4	1974
american health care association journal	8	6	1982
american journal of gastroenterology	39	1	1963
american journal of gastroenterology	59	6	1973
American journal of medicine	82	5	1987
american journal of nephrology	2	2	1982
american journal of nephrology	4	6	1984
american journal of otology	1	1,2,4	1979-80

Slide 10

VEND	INV_DATE	INV_NO	ACORN_NO	FUND	PO	AMT	FUND TOTAL
5443	11/23/88	J 5950819-A	81212B966	48-08-4800	902429	1578.00	
5443	11/23/88	J 5950819-B	81212B967	48-08-4800	902429	2722.40	
5443	11/23/88	J 5950819-C	81212B968	48-08-4800	902429	333.37	
5443	11/23/88	J 5951689	81212B963	48-08-4800	902429	-757.17	
5443	12/05/88	J 5952037	81212B964	48-08-4800	902429	-182.79	
5443	12/05/88	J 5952038	81212B965	48-08-4800	902429	-5.15	3,688.66
5443	11/23/88	J 5950819	81212B966	48-09-4800	915001	31.00	31.00

PACK TOTAL   3,719.66

Slide no. 11

```
    TITLE [Blood reviews                                              ]
    ACORN [         ]
   PRICE# [204.00   ]
REQUESTOR [Charles H. Wallas                        ]
     DEPT [Blood Bank                   ]
  ADDRESS [4605 TVC            ]
    PHONE [3-9144   ]
  ROUTING [Gift shelf              ]
 HOLDINGS [                    ]
 DECISION [              ]
BACKFILES [              ]
   VENDOR [         ]
     DATE 05/05/89
```

Please respond. Press (F10) when complete.

Slide no. 12

April 22, 1989 at 10:31 p.m.   Page

TITLE	PRICE	DECISION
Blood reviews	102.00	
Clinical and experimental allergy	199.50	
Clinical neurosurgery	52.00	
Current contents : Health services administration	115.00	
Glycoconjugate journal	238.00	

TOTALS: PRICE   706.50

Printed 5 of the 223 records.

PRIMARY SORT FIELD: TITLE

SELECTION CRITERIA:
(date="03/25/89")

Slide no. 13

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```
    TITLE [Blood reviews                                          ]
    ACORN
   PRICE# [204.00   ]
REQUESTOR [Charles H. Wallas                              ]
     DEPT [Blood Bank                        ]
  ADDRESS [4605 TVC                ]
    PHONE [3-9144   ]
  ROUTING [Gift shelf              ]
 HOLDINGS [                        ]
 DECISION [o;v.3 1989]
BACKFILES [v.1-2      ]
   VENDOR [Majors ]
     DATE [05/09/89]
```

Please respond. Press (F10) when complete.

Slide no. 14

May 1, 1989 at 7:45 a.m.   Page   1

TITLE	PRICE	DECISION	BACKFILES
Blood reviews	102.00	o;v.3,1989	v.1-2
Clinical and experimental allergy	199.50	o;v19,1989	
Clinical neurosurgery	52.00	o;1989-	1988
Current contents : Health services administration	115.00	o;v.1,1989	
Glycoconjugate journal	238.00	o;v.6,1989	
Immunodeficiency reviews	124.00	o;v.1,1989	
Journal of adolescence	96.00	o;v12,1989	
Journal of neuropsychiatry and clinical neurosciences	70.00	o;v.1,1989	
Seminars in nephrology	88.00	o;v.9,1989	

_____

TOTALS: PRICE   1,084.50

Printed 9 of the 233 records.

PRIMARY SORT FIELD: TITLE

SELECTION CRITERIA:
(date="03/29/89")

Slide no. 15

SIDEKICK

* COST:

$84.95 if ordered direct

Available from software outlets or direct from:

Borland International

4585 Scotts Valley Drive

Scotts Valley, CA 95066

1-800-543-7543

* SYSTEM REQUIREMENTS:

128K or larger MS-DOS computer

PC-DOS (MS-DOS) 2.0 or greater

Slide no. 16

MC SERL LC sn 87026331   ISSN 0268-960X S/STAT c FREQ q S/T p
Blood reviews. Vol. 1, no. 1 (Mar. 1987)- -- <Edinburgh ; New York> : Churchill
   Livingstone, <c1987-
STATUS a DT 04/04/89 AD none
NOTES
001 2A CN]a peri]b -   ┌─── SideKick Main Menu ───┐   ]d 04/04/89
    NOTES   │   │
    AN-001-001   │ F1   Help   │
002 2A CN   │ F2   NotePad   │   ]d 04/26/89
    NOTES   │ F3   Calculator   │
003 2A CN   │ F4   caLendar   │   ]d 04/26/89
    NOTES   │ F5   Dialer   │
004 2A CN   │ F6   Ascii-table   │   ]d 04/26/89
    NOTES   │ F7   Setup   │
005 2A CN   │ Esc   exit   │   ]d 04/26/89
    NOTES   │   │
006 2A CN   └──────────────────────────┘   ]d 04/26/89
    NOTES
007 2A CN   ]d 04/26/89
    NOTES

--move bar. Select by pressing a highlighted letter, a function k ScrollLock

Slide no. 17

```
LTMC DONE                                                 ACK1706
                                       NOTIS ACQUISITIONS        C2C2
MC SERL LC     42016492 //r842 ISSN 0010-0870 S/STAT c FREQ b S/T p
College & research libraries. v. 1-   Dec. 1939- -- Chicago <etc.> American
   Library Association.
PO#: 001ACK1706  12/16/86 ORDUNIT: OS RECUNIT: OS SCOPE: 2
VENDOR: MAJORSS    ACTINT: 0090 POP: x L1: 380  L2: 192
VA:

NV:
┌──────────────────────────────────────────────────────────────────────┐
│    A:\ROUTING.                    Line 5     Col 47  Overwrite Indent   │
│                                                                        │
│                      SUPERVISORY ROUTING SLIP                          │
│                                                                        │
│                      TITLE College and research libraries             │
│                      v.50:no.1 (1989:Jan)                             │
│                                                                        │
│                      DATE IN                 DATE OUT                  │
│                                                                        │
│                 _____   HODGES     _____                   │
│                 _____   HELGUERA   _____                   │
│                 _____   WEAVER     _____                   │
│                 _____   GRANTHAM   _____                   │
│                                                                        │
└──────────────────────────────────────────────────────────────────────┘
F1-help F2-save F3-new file F4-import data F9-expand F10-contract Esc-exit
```

Slide no. 18

MC SERL LC sn 87026331   ISSN 0268-960X S/STAT c FREQ q S/T p
Blood reviews. Vol. 1, no. 1 (Mar. 1987)- -- <Edinburgh ; New York> : Churchill
   Livingstone, <c1987-
STATUS a DT 04/04/89 AD none
NOTES
001 2A CN]a peri]b -   ]d 04/04/89
     NOTES
     AN-001-001
```
   A:\JORDER.                    Line 1    Col 1   Insert     Indent
                                                5/Apr/89

To:  Charles H. Wallas, Blood Bank, 4605 TVC

From:  Judy Rieke, Serials Librarian

Subject:  Journal subscription - BLOOD REVIEWS

The library will be ordering the journal you recommended.  We
will notify you when the first issue is received.

Thank you for your interest in and continuing support of the
```
F1-help F2-save F3-new file F4-import data F9-expand F10-contract Esc-exit

Slide no. 19