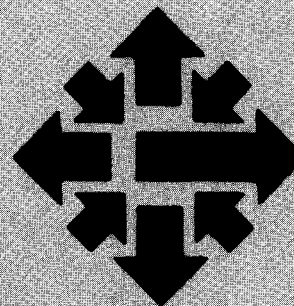


mtw  
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# University Computer Center Newsletter

University of Minnesota  
Twin Cities

February 1983  
Volume 17, Number 2



## SYSTEM NEWS/NOTES

### USERS' MEETING

We will hold our first general users' meeting of 1983 on Wednesday, February 9, from 3:15-5 p.m., in Mayo 100 on the Minneapolis east bank campus. Agenda items to date include system upgrades (Lawrence Liddiard, deputy director), budget and the CRAY-1 (Peter Patton, director), and user services (Richard Hotchkiss, deputy director). A question-and-answer session will follow the presentations.

### VAX Service

#### VAX OUTPUT

How does output work on the VAX/VMS system? When do you use the PRINT command? When do you use the ENQUEUE command instead? How do you get your files sent to the special graphics and printing devices? How can you have your output sent to other sites more convenient to your office? What are these other sites? How long should you have to wait for your output? How can you see what files you have queued for printing? How can you cancel a print job you don't want?

A new entry in the MOREHELP help library provides the answers to these questions. To find out about VAX output enter:

#### morehelp output

in response to the VMS \$ prompt. This lists basic output information followed by a list of subtopics. To access the information on the subtopics, enter MOREHELP OUTPUT subtopic. For example:

#### morehelp output routing

provides information on routing output to other sites. If you enter:

#### morehelp output...

all information available on output is listed. All components of the command can be abbreviated to uniqueness. MOR OUT CAN is equivalent to MOREHELP OUTPUT CANCELLING.

(Linda Merims, 376-9287)

#### VMS VERSION 3 UPDATE

We plan to upgrade the VMS operating system on our VAX to version 3 in early March. This upgrade is upward compatible with the current system and we do not anticipate conversion problems for VMS users. More information about this change will appear in the system notes.

### CYBER Notes

#### COBOL 4 TO BE REMOVED IN FALL

We will remove the COBOL 4 compiler from the system at the beginning of fall quarter 1983. You must convert your COBOL 4 programs to COBOL 5 by then. If you have questions about this change, or need assistance, call our Information Management Systems Group at 376-1761. COBOL 5 documentation is available at the Computer Store. At that time, we will also remove CYBER Record Manager Advanced Access Methods Version 1.

(Steve Reisman)

#### SYSTEM UPGRADE STILL COMING

The upgrade of our CYBER systems to R5 (NOS 1.4-552) will take place in the near future. To prepare for this change, see WRITEUP (UPGRADE), which describes what you need to know and do about this change.

#### ALGOL VANISHES

On January 2, the limping CDC ALGOL compiler was removed from our CYBER 74+730 and MERITSS systems because of lack of use.

News/Notes to 15

# UCC COMPUTER STORE

*for all your computing needs*

- floppy disks, cards, paper
- short course registration
- microcomputer access cards
- software
- documentation

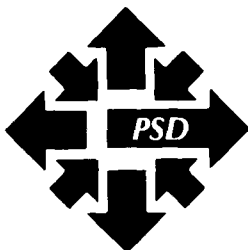


**211 Experimental Engineering  
East Bank, University of Minnesota  
373-4877**

**FEBRUARY FEATURE  
5 1/4" and 8" library storage boxes  
for your floppy disks**

## **P**ROFESSIONAL **S**ERVICES **D**IVISION

- |                             |   |
|-----------------------------|---|
| graphics development:       | computer graphics for data presentation                     |
| statistical analysis:       | full range of services available                            |
| system analysis and design: | analysis of existing systems; design of new systems         |
| financial analysis:         | forecasting, accounting                                     |
| data base development:      | design and implementation using state-of-the-art technology |
| tape conversion:            | conversion of off-site tapes to UCC internal format         |
| customized programming:     | COBOL, FORTRAN, Pascal for virtually any application        |
| research applications:      | scientific or social research environments                  |



If you qualify for a University Computer Center account, and are interested in our services, please contact us.

376-1764 • 227 Experimental Engineering • 208 Union St. S.E.

## Computer Store

### STILL IN BUSINESS IN 211

The most recent editions of UCC's *Guide to CYBER Interactive Computing* and *Guide to CYBER Batch Computing* list the location of our Computer Store as 140B Experimental Engineering. The Store's planned move has not occurred, however, and until further notice, it is still doing business in 211 Experimental Engineering.

### DOCUMENTATION FOR CLASSES

Instructors who would like their students to purchase documentation or supplies (floppy disks, for example) from the Computer Store for spring quarter courses should send their requests on departmental stationery to the Store by March 1. Requests should include:

- the documentation required
- the department and class number
- the quarter for which you're requesting the material
- the number of students expected to register

If you have any questions, call Marv Mohr, 373-9613.

## Non-Traditional Computing

### LECTURE ON OLD NORSE

Professor Lewis Janus of the University's Department of Scandinavian Languages will lecture on "The Collection and Analyses of Set Phrases in Old Norse," Tuesday, February 15, at 3:15 p.m. in 203 Folwell Hall on the Minneapolis east bank campus. Everyone interested in the uses of computing in liberal arts fields is encouraged to attend.

## Grants for Research

If you're looking for funding to support your research, both the government and private foundations have money available for a variety of projects. Here are three:

- The United States Office of Human Development Services offers support for research on the use of Management Information Systems, especially existing systems and their data bases that draw on state-of-the-art technology to evaluate service programs or which are used as policy making tools.
- The Alfred P. Sloan Foundation will grant up to three million dollars annually for the next five or six years to improve quantitative reasoning skills in liberal arts students. The foundation notes that many students, especially in the humanities and social sciences, lack the skills in quantitative reasoning, applied mathematics, and technology that they will need in a high technology society.
- The Corporation for Public Broadcasting will award ten million dollars to support the use of telecommunications in providing alternative ways for Americans to secure a college level education. Approaches using electronic text, computer networks, software, and computer-video merging are included.

(Vicky Walsh)

## All Systems Bulletins

### NEW MACHINE AND FAMILY NAMES

Have you been confused by the machine identifiers (MIDs) and family names on our three CYBERs? We believe we have eradicated this problem forever. Those of you who have been at the University for a long time will recognize some method to the madness of these dusty hieroglyphs:

#### OLD MACHINE IDS

64	MERITSS System
72	Interactive CYBER
74	Batch CYBER
CR	CRAY-1

#### FAMILY NAMES

C172	Interactive CYBER family
C74	Batch CYBER family

Our new R5 (NOS 1.4-552) operating system, now undergoing its final testing, will soon be brought up as our production system on all three CYBERs. This system uses less confusing names, as follows:

#### NEW MACHINE IDS

ME	MERITSS CYBER
CA	Interactive CYBER
CB	Batch CYBER
CR	CRAY-1

#### FAMILY NAMES

CA	Interactive CYBER family
CB	Batch CYBER family

Obviously these names will not lose their meaning as the machines are upgraded to more powerful and more recent architectures.

We have "backstitched" these machine IDs and family names into our current R4 (NOS 1.3-485) production system, so you can use all the new names exclusively and immediately. Use them at log-in time, and on the FAMILY, USER, and SUBMIT statements.

And remember, after R5 crossover, *only* the new names will be accepted by the system.

(T. E. Kovarik)

### PRESIDENTS' DAY HOURS

Monday, February 21, is Presidents' Day, an official University holiday. UCC will maintain its regular operating hours.

### FOR SALE

Hewlett Packard 9845B desktop computer (190 K RAM; I/O, graphics, assembly ROM; HP BASIC, Pascal), 8" disk drive, thermal printer-plotter, impact printer, digitizer, payroll software. Contact Dr. Pierre Robert, (612) 376-9183.

## Microcosm

### REQUIRED CLASS DISKS

Any instructor who would like a low cost "required class disk" available in UCC's Computer Store should contact Michael Collins (376-2975) of the Microcomputer Group to make the necessary arrangements. We'll be happy to prepare a special disk package that has the software and documentation you need. The minimum time required to package a special disk is two weeks.

### NEW MICROCOMPUTERS

Many people thinking about purchasing a microcomputer today are very interested in the new 16-bit micros. The Micro Systems Group has done some serious investigation of these machines. This article discusses some of what we discovered.

When they buy a microcomputer, most University and personal users are primarily interested in purchasing an immediately usable tool rather than a loose collection of parts. The main distinction between these two approaches is the degree of integration of the hardware and software components you purchase. These parts must work together in gross, simple ways as well as subtle and complex ways. When you buy a tool, this integration is the vendor's responsibility, not the user's. The vendor of such a packaged system guarantees that the components all function properly. This frees you to make purchasing decisions based on what the machine is supposed to do, rather than on its potential.

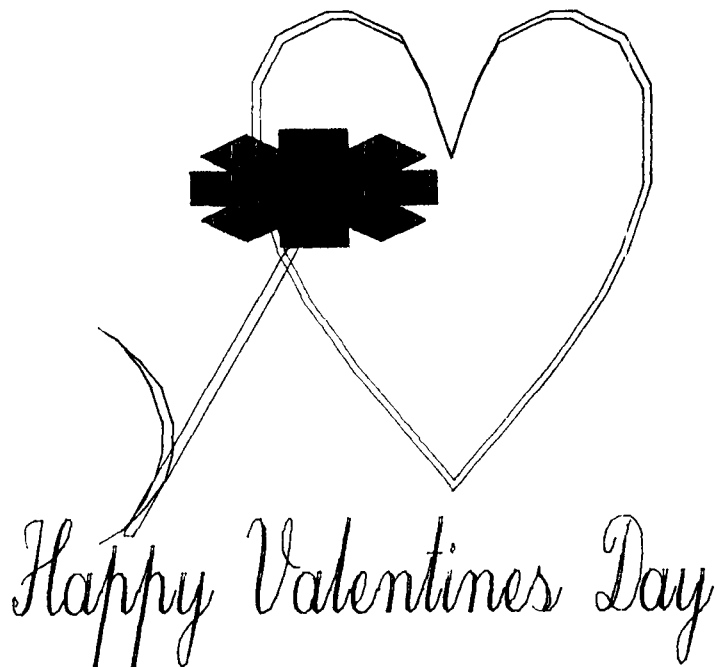
In most cases, correct software selection is more critical than hardware because the operator uses the hardware indirectly via the software. When you do word processing, for example, your choice of microprocessor CPU is of no significance at all, nor is the amount of memory. These hardware parameters only become significant when you ask if a particular word processing software product operates within these hardware constraints.

The fundamental software product in any microcomputer system is the operating system. Its selection affects all subsequent hardware and software selection decisions. We strongly recommend one of the standard operating systems. In the 8-bit microcomputer world, the de facto standard is CP/M. While it's not a wonderful or exhilarating operating system, the enormous quantity of high-quality, proven application software, and its machine-independent nature are sound recommendations.

In the newer 16-bit micros, no standard operating system yet exists. But there are at least three strong and incompatible competitors. This places you in a considerably more hazardous situation. At the present time, the available range of application software for the 16-bit machines is severely limited; where it does exist, it is often exactly the same software as that for the 8-bit machines. You must remember that if you ride the cutting edge of technology you may well get sliced.

Once you have made basic software decisions, you can consider selecting hardware that supports it. Here we strongly recommend that the microcomputer *not* be of the "Barbie Doll" school of marketing. Such machines have a very low cost associated with the base machine, but do very little without additional parts; the required accessories can often cost more than the base machine. Look for a machine in which the hardware in its most basic form as sold by the vendor does all the tasks you require.

In the past few months, the Micro Systems Group has made extensive evaluations of the following micros: Zenith Z-100, DEC Rainbow, IBM Personal Computer, Victor 9000. We are more than willing to discuss the merits and demerits of these machines as they apply to your situation. Please contact the Micro Systems Group HELP-line (376-4276, 10-12 a.m. and 2-4 p.m. Monday through Friday) for more information.



—Graphic by Harry Hovland

## MICRO SOFTWARE AT THE STORE

The following disks are currently available at the Computer Store. The name of each microcomputer is followed by the disk format(s) available: SS=single sided, DS=double sided, SD=single density, DD=double density. Below that is the price, disk name, and a short description of the contents.

### TERAK 8510 ( 8" SS SD )

- |      |                |  |
|------|----------------|--|
| \$50 | MMOS           | The complete operating system, including: run-time system, Pascal compiler, screen editor and file manager.  |
| \$35 | MMOS Utilities | General MMOS utility programs, including:<br>Calc     A "desk top calculator" program.<br>ChEdit   A character set editor, design your own characters.<br>Declist   An optimized listing program for a DEC writer.<br>Epson     A graphics screen dump utility for an Epson MX-80 or MX-100.<br>Input     "User-proof" integer and real input procedures.<br>Plot      A package of graphics utility routines.<br>Prose     A text formatting program.<br>Spruce    A Pascal pretty printer.<br>Seek     Pascal random access file routines.<br>RT-11     A program to allow reading and writing of RT-11 format disks under the MMOS system.<br>XRef      A fully scoped Pascal cross referencer. |
| \$50 | MMOS COM       | MMOS communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers.  |
| \$50 | MMOS SimTek    | A Tektronix 4010 series graphic terminal simulator. Provides almost all 4010 features as well as multi-page memory and image storage on floppy disk.   |

### APPLE II (5-1/4" floppy)

- |      |                   |   |
|------|-------------------|---|
| \$35 | APPLE Utilities   | General Pascal utility programs, including:<br>PeekPoke Pascal procedures to allow BASIC style peeking and poking.<br>Input     "User proof" integer and real input procedures.<br>Prose     A text formatting program.<br>Spruce    A Pascal pretty printer. |
| \$50 | APPLE COM         | UCSD communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers.   |
| \$50 | APPLE CP/M COM    | CP/M communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers. Requires a CP/M card and 64K of memory.   |
| \$50 | APPLE SimTek      | A Tektronix 4010 series graphic terminal simulator. Provides almost all 4010 features.  |
| \$25 | APPLE Application | Two application programs for the Pascal APPLE , including:<br>Journal    A key word filing system for journal article abstracts.<br>Catalog    A system for providing a master catalog of the contents of all your disks.                                     |

\$50	APPLE Plotting	A collection of Pascal procedures for using a Houston Instruments desk top digital plotter or the graphics display screen for drawing graphs, pictures, etc.
<b>XEROX 820 Model I and II (8" SS SD or 5-1/4" SS SD)</b>		
\$35	820 Utilities	A collection of CP/M programs, including: Restore A program to allow restoration of disk files that have been accidentally erased. WSClean Converts a Wordstar document file to a standard ASCII file that can be shipped to other computers or used by other programs. WSPrep Converts a standard ASCII file into a Wordstar document file. Configur A program that allows the 820 to use printers other than the Diablo 630 (not for 820-II). BaudSet Allows setting the baud rates of either serial port to any standard baud rate from 110 to 19200.
\$50	820 Plotting	A collection of Pascal procedures for using a Houston Instruments desk top digital plotter for drawing graphs, pictures, etc.
\$50	820 COM	A CP/M communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers.
<b>IBM Personal Computer (5-1/4" SS DD)</b>		
\$50	PC-UCSD COM	UCSD communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers.
\$50	PC-DOS COM	PC-DOS communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers.
\$50	PC-DOS Plotting	A collection of Pascal procedures for using a Houston Instruments desk top digital plotter or the graphics display screen for drawing graphics, pictures, etc. For plotting only does not require the color graphics card.
\$50	PC-DOS SimTek	A Tektronix 4010 series graphic terminal simulator. Provides almost all 4010 features.
<b>Heath/Zenith 89 (8" SS SD or 5-1/4" SS SD soft sector)</b>		
\$50	Z89 COM	A CP/M communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers.
<b>Osborne OS-1 (5-1/4" SS SD)</b>		
\$50	OS1 COM	A CP/M communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers. Works only with Osborne single density operating system. Will not work with the Osborne internal modem.
<b>Vector Graphics (5-1/4" DS DD)</b>		
\$50	Vector COM	A CP/M communications program; provides many intelligent terminal functions. Allows you to communicate with most other computers.

## PHONE NUMBERS

<p>Budgets .....373-2521</p> <p>Computer-Aided Instruction .....376-2975</p> <p>Computer Hours (recorded message) .....373-4927</p> <p>Computer Store .....373-4877</p> <p>Consulting</p> <p>  HELP-line .....376-5592</p> <p>    9 a.m.-5 p.m., Monday-Friday</p> <p>  Business Data Products .....376-1761</p> <p>    1-3 p.m., Monday-Friday</p> <p>  Statistics Packages .....376-5062</p> <p>    1-2 p.m., Monday-Friday</p> <p>  Data Bases .....376-1761</p> <p>    1-3 p.m., Monday-Friday</p> <p>  Microcomputers .....376-4276</p> <p>    10-12 a.m. and 2-4 p.m., Monday-Friday</p> <p>  Non-Traditional Computing .....373-5780</p> <p>    10:30-11:30 a.m., Monday, Wednesday, Friday</p> <p>  TELL-A-GRAF/DISSPLA .....376-2663</p> <p>    1-3 p.m. Tuesday, Thursday</p> <p>Text Processing .....376-2943</p> <p>  9 a.m.-noon Tuesday-Thursday</p> <p>Contract Programming .....376-1764</p> <p>Data Base Applications .....376-1764</p> <p>Educational Services .....376-3963</p> <p>EDUNET Liaison .....373-7745</p> <p>Engineering Services .....376-1023, 376-8153</p> <p>Equipment Purchase/Information .....376-8153</p> <p>Experimental Engineering I/O .....373-4596</p> <p>Field Engineering .....376-7584</p> <p>Graphics Software .....376-5592</p>	<p>HELP-line .....376-5592</p> <p>  9 a.m.-5 p.m., Monday-Friday</p> <p>HOURS-line (recorded message) .....373-4927</p> <p>Image Processing .....376-2895</p> <p>Information, Experimental Engineering .....373-4360</p> <p>Information, Lauderdale .....373-4912</p> <p>Information Systems .....376-1764</p> <p>Instructional Labs .....376-2703</p> <p>Job Status, ExpEng (recorded message) .....373-4994</p> <p>Lauderdale Computer Room .....373-4940</p> <p>Lauderdale Services .....373-4995</p> <p>Lauderdale Services Manager .....373-7538</p> <p>Lauderdale Users' Room .....373-4921</p> <p>MECC Liaison .....373-7745</p> <p>Newsletter Subscription .....373-4912</p> <p>Permanent File Restoration .....376-5605</p> <p>Professional Services Division (PSD) .....376-1764</p> <p>Project Assistance .....376-1764</p> <p>Program Librarian .....376-1636</p> <p>Programming Languages .....376-7290</p> <p>Reference Room .....373-7744</p> <p>Remote Batch (RJE) Services .....376-2703</p> <p>Short Courses .....376-8806</p> <p>Shuttle Bus Service .....376-3068</p> <p>System Status (recorded message) .....373-4927</p> <p>Tape Librarian: see Lauderdale Services</p> <p>Text Processing Services .....376-2943</p> <p>User Accounts .....373-4548</p> <p>User Services .....376-3963</p>
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## OPERATING HOURS

	Cyber 74/730	Low rate/No frills	Cray	MERITSS (Cyber 172)	VAX
M-F	8 a.m. - 4 a.m.	11 p.m. - 4 a.m.	8 a.m. - midnight	7:45 a.m. - 1:30 a.m.	8 a.m. - 6 a.m.
Sat	4 a.m. - 5:15 p.m.	4 a.m. - 5:15 p.m.	8 a.m. - 5 p.m.	7:45 a.m. - 1:30 a.m.	24 hours
Sun	4 p.m. - 1 a.m.	4 p.m. - 1 a.m.	4 p.m. - midnight	4 p.m. - midnight	24 hours

## PUBLIC LABS—TWIN CITIES CAMPUS

Location	Batch	Interactive	Micro	Location	Batch	Interactive	Micro
<i>East Bank</i>				<i>West Bank</i>			
Arch 160		X	X	BlegH 90	X		
CentH		X		BlegH 91T			X
ComH		X		BlegH 140		X	
DieIH 270, 207		X		MdbH		X	
EltH 121, 125		X		OMWL 2		X	
EltH N640	X			SocSci 167		X*	
ExpE 130	?			<i>St. Paul</i>			
FolH 14, 14a	X	X*	X	BaH		X	
LindH 25, 26	?	X		ClaOff 125	X	X	
MasCan 39	X			NorH 24	X		
MechE 308		X					
Physics 69		*?					
SanfH		X					
TerrH		X					
Vinch 4		X					
WaLib 204		X					

\* Research cluster; access to Cyber 730 and VAX/VMS

X in interactive column indicates access to MERITSS

? Unknown at the present time

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Director: Peter C. Patton  
Editor: Christine Mack Gordon

Comments about the content of this newsletter, or suggestions for changes may be directed to the editor, 235a Experimental Engineering, or call 612/376-9832.

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# University Computer Center Newsletter

User Services  
227 Experimental Engineering  
University of Minnesota  
208 Union Street SE  
Minneapolis, Minnesota 55455

UNIVERSITY ARCHIVES  
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