

# S.T. PAUL CAMPUS COMPUTING NEWSLETTER

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April 1975  
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University of Minnesota

27 North Hall  
St. Paul Campus  
373-0987 - 0990

## COMPUTING CENTER (North Hall)

### 1. KEYPUNCH WORKLOADS

It is most difficult to predict the fluctuations the Computing Center experiences in key punching demands. The Data Entry Section is presently up-to-date in satisfying those demands. But, if you have data ready for key punching, please submit them now to avoid delays later on, when key punching demands are high.

### 2. INTRODUCTORY AND ORIENTATION SEMINAR

An introductory seminar for new and prospective users of the equipment and services available in the Computing Center is scheduled for Thursday, May 8, from 3:05 to 4:30 p.m. in room 6A North Hall. Those wishing to attend this seminar should call or write Mrs. Eva Klein, 27 North Hall (373-0987), providing her with your name, department, and telephone number. Topics will include:

#### Equipment

- IBM 360 model 30
- Univac 1004 terminal
- Teletype Terminal (MIRJE)
- Unit-record equipment (sorters, reproducers, etc.)
- Key punch equipment
- Miscellaneous equipment (copier, burster, decollator, etc.)

#### Services

- Application programming
- Computer programming consulting
- Key punching
- Unit-record and computer equipment operations
- Software available

#### Miscellaneous

- Card and paper supplies available
- Magnetic tape, card and printout storage facilities
- Open-shop operations
- Account numbers and cost of services
- Access to facilities and hours of work
- Tours, demonstrations and short courses available

### 3. HEWLETT-PACKARD 9100B CALCULATOR SYSTEM

The information below is provided to acquaint prospective users with the capabilities and use of the Hewlett-Packard system located in 20a North Hall. This system is made available to the University staff on an open-shop, first-come, first-served basis (no charges are levied for its use).

#### Description

The Hewlett-Packard 9100B is a programmable calculator with a wide range of capabilities. It can be used for adding machine calculations (trigonometric, logarithmic, and mathematical functions can be performed with single key strokes), or it can be programmed to provide solutions to complex computations. The calculator's computer-like memory enables it to store instructions and data for repetitive and iterative solutions. Conditional branching, which allows the calculator to make decisions while performing a program, and the use of subroutines provide complete programming capability. Knowledge of a special machine language is not required.

Once programmed, instructions can be recorded on magnetic cards. Recorded programs can be reinserted and stored in the calculator for program execution at a later date. Users of the 9100B calculator have access to a program library containing 150+ programs that provide solutions to many

practical problems in the fields of business, science, mathematics, statistics, and engineering. Also available are sample programs that demonstrate the use of the peripheral equipment (input-output devices) attached to the calculator.

#### Peripheral Equipment

- 9107A Digitizer:** This input device quickly and accurately enters data into the calculator from almost any type of graphic record. The calculator can use these data to determine lengths, integrals, average and RMS values, centroids, areas, volumes, and many other results.
- 9125A X-Y Plotter:** This output device provides permanent, accurate graphic solutions of problems solved by the calculator. It can be controlled either manually or by programming the calculator.
- Typewriter:** The typewriter can be used as an output device, under calculator control, to provide users with a hard-copy of the computed information that appears on the calculator's lighted display unit.
- 9160A Marked Card Reader:** This is an input device capable of detecting pencil marks in formatted boxes on standard cards and transferring this information to the calculator. It can be used to load programs and also data into the calculator.

#### Operating and Scheduling

- Short jobs (less than 15 minutes) will be given priority, and users should relinquish the equipment for this purpose as soon as possible (within 15 minutes). The equipment can be scheduled in advance by contacting the Operations staff (24 North Hall, 373-0994), or by making the appropriate entries on the signup sheet in 20a North Hall.
- Users must carefully follow the power-up and power-down sequences as documented at the location.
- Documentation on the operation and programming of the equipment must not be removed from the Computing Center (there is only one copy of some manuals).
- Even though some supplies are provided at the location, extensive users are expected to provide their own supplies.
- All equipment malfunctions should be reported to the Operations staff as soon as possible.

## MINNESOTA ANALYSIS AND PLANNING SYSTEM (MAPS)

### 1. MAPS USERS SEMINAR

The next MAPS Users Seminar, presented in a new half-day format, will be held April 22 from 8:30 a.m. to noon. To register or for additional information, call the MAPS office (612/376-7003). There is no charge for the April seminar.

### 2. 1974 MINNESOTA ELECTION RETURNS

The 1974 Minnesota election returns will soon be part of the MAPS data base, and the resultant file will be utilized to provide the election return tables that will be reproduced in the 1975-76 Minnesota Legislative Manual.

Once the file is completed and released by the Secretary of State, MAPS will provide access to interested organizations either through MAPS services or through release of a copy of the tape on a cost-reimbursement basis.

MAPS also has available in its tape library the 1970 and 1972 general election returns.

### 3. MINNESOTA ECONOMIC DATA PUBLICATION

An in-depth analysis of the per capita receipts and disbursements of cities and villages in Minnesota for fiscal 1972 and 1973 is presented in the latest issue of Minnesota Economic Data, Counties & Regions.

The basis data used for the study can be found in the Report of the State Auditor of Minnesota on the Revenue, Expenditures and Debt of the Cities and Villages in Minnesota, 1972 and 1973.

Besides the written analysis, several data tables are presented that provide per capita receipts and disbursements, along with dollar and percentage change for each category.

The authors of Issue 26 of Minnesota Economic Data, Counties & Regions are John S. Hoyt, Jr., John B. Lilja, and Frederick A. Zeman.

### CLASSROOM OFFICE BUILDING COMPUTING FACILITIES

Both the Univac 1004 RJE Station to the CYBER 74 and the MECC/MERITSS Instructional Laboratory will be open on the same schedule as last quarter (MWF 8 a.m.-9 p.m., TT 8:30 a.m.-9 p.m., Sat 9 a.m.-1 p.m.). A consultant is on duty during the open hours except on Monday 9-10, 2-3; Tuesday 9-1; Wednesday 2-5; Thursday 12-3; and Friday 2-4. As usual, individual terminals in the Instructional Lab can be reserved in advance by signing up. Also, it is important that users sign-in in the book provided. The entire lab can be reserved for classroom use by calling Sanford Weisberg at 373-1068.

The schedule for statistics related consulting is: G. Chun, Monday and Wednesday 1-5; R. Mensch, Tuesday and Thursday 11-3; and L. Thibodeau, Tuesday 9-11 and Friday 2:30-4:30.

The statistical clinic is open as follows: Monday 2-4 (S. K. Lee); Tuesday 9-11 (L. Thibodeau); Wednesday 1-3 (C. P. Cheng); Thursday 11-1 (R. Mensch); and Friday 9-11 (P. Knack). All the consultants are graduate students in the School of Statistics.

### GENERAL INFORMATION ABOUT COMPUTING EQUIPMENT BY LOCATION

Equipment Type	Location	Hours of Service	Key Staff Personnel	Telephone
IBM 360/30 computer	22 North Hall	8:00 a.m.—4:30 p.m. (M-F)	Dave Schempp (consultant)	373-0987
		7:00 a.m.—5:30 p.m. (M-F)	Key Punch Supervisors	373-0992
		8:00 a.m.—4:30 p.m. (M-F)	Secretary (Account clerk)	373-0990
		8:00 a.m.—Midnight (M-F)	Operations staff	373-0990
		8:00 a.m.—Noon, Sat.	Operations staff	373-0990
Univac 1004 terminal	24 North Hall	8:00 a.m.—4:30 p.m. (M-F)	Jim Colten (consultant)	373-0987
		8:00 a.m.—Midnight (M-F)	Operations staff	373-0990
		8:00 a.m.—Noon, Sat.	Operations staff	373-0990
MIRJE teletype terminal (for research use only)	24 North Hall	8:00 a.m.—4:30 p.m. (M-F)	Jim Colten (consultant)	373-0987
		8:00 a.m.—Midnight (M-F)	Operations staff	373-0990
		8:00 a.m.—Noon, Sat.	Operations staff	373-0990
Hewlett-Packard 9100B	20 North Hall	By arrangement	Secretary or Operations staff	373-0990
CDC 200 terminal	415 Coffey Hall	7:45 a.m.—9:30 p.m. (M-F)	Dave Nelson	376-7003
		7:45 a.m.—9:30 p.m. (M-F)	Tom Ehlen	376-7003
		7:45 a.m.—4:30 p.m. (M-F)	Elaine Greenfield	376-7003
		(after hours use by arrangement)	(office supervisor)	
MIRJE teletype terminal (for research use only)	415 Coffey Hall	7:45 a.m.—9:30 p.m. (M-F)	Dave Nelson	376-7003
		7:45 a.m.—9:30 p.m. (M-F)	Tom Ehlen	376-7003
		7:45 a.m.—4:30 p.m. (M-F)	Elaine Greenfield	376-7003
		(after hours use by arrangement)	(office supervisor)	
Univac 1004 terminal	125G Classroom Office Building	8:00 a.m.—9:00 p.m. (M,W,F)	Consultant	373-0829, 376-3846
		8:30 a.m.—9:00 p.m. (T,Th)	L. Lawton (secretary)	373-1037
		9:00 a.m.—2:00 p.m. (Sat)	C. Bingham S. Weisberg	373-0988 373-1068
Interactive instructional lab	125E Classroom Office Building	8:00 a.m.—9:00 p.m. (M,W,F)	Consultant	373-0829, 376-3846
		8:30 a.m.—9:00 p.m. (T,Th)	L. Lawton (secretary)	373-1037
		9:00 a.m.—2:00 p.m. (Sat)	C. Bingham S. Weisberg	373-0988 373-1068
Univac 1004 terminal	257 Biological Science	8:30 a.m.—4:30 p.m. (M-F)	Alan J. Katz (consultant)	376-3067

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