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# S. PAUL CAMPUS COMPUTING NEWSLETTER

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University of Minnesota

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

## ANNOUNCEMENT

The Hewlett-Packard digitizing, plotting and programmable calculator equipment was recently transferred from room 125a in the Classroom Office Building to room 20 in North Hall. Accordingly, the responsibility of coordinating the use of this equipment was transferred from the Applied Statistics department to the St. Paul Campus Computing Center. The ground rules for the use of this equipment will be maintained as before—please make arrangements for the use of this equipment with the Computing Center's secretary or operations staff. Because room 125a of the Classroom Office Building is earmarked for immediate office use, all personal computing materials should be removed from this room within the next few days.

## COMPUTING CENTER (North Hall)

### 1. HOLIDAY SCHEDULE AND 360 COMPUTER WORKLOADS

Due to our year-ending summarization commitments that we have for various departments, the 360 system frequently becomes saturated with demands at this time of the year. The Center generally experiences its heaviest workloads between October 1 and March 1 every year and at times forces us to operate 24 hours per day. Unfortunately, when the demand for the system goes beyond its capacity, backlogging occurs and turnaround times are less than desirable.

Our apologies go to those whose turnaround times have been affected by some rescheduling of lengthy computer runs during the daytime hours. This practice of rescheduling is done only out of dire necessity and is kept to a bare minimum. So please bear with us a little longer, we think we are beginning to see some light at the end of the tunnel.

Generally the 360 system is available to users for short-term debugging and production runs daily from 7:45 a.m. to 7:00 p.m. Monday through Friday. Lengthy computer runs are generally scheduled after 7:00 p.m. daily and also on weekends.

#### Christmas—hours of operation: \*

Closed — 10:00 p.m. December 23rd  
Open — 7:45 a.m. December 26th

#### New Years—hours of operation: \*

Closed — 8:00 p.m. December 31st  
Open — 7:45 a.m. January 2nd

### 2. DATA ENTRY WORKLOADS AND EQUIPMENT CHANGE

On September 23, 1974, the Center replaced its full complement of 029 Key Punch and 059 Verifier equipment that was located in the Key Punch Section, with eighteen IBM 129 Data Recorders. Rather than experiencing a slowdown during the transition period as we expected, the Center be-

gan to immediately realize substantial increases in performance and throughput with this new equipment. This new equipment has now placed the Center in an excellent position to provide prompt service for most data entry requests.

Being that we are on this subject and because data entry is such an integral part of computing, it might be well to advise users of the totally unpredictable demands we have for this service. Although the Center generally averages 350,000 to 425,000 records punched and verified monthly, it has experienced the extremities of having no work at all to having backlogs of work running 6-7 weeks. We therefore earnestly request that users always submit their work at the earliest possible time so that Data Entry Supervisors have as much flexibility as possible in setting priorities and scheduling work assignments for the Data Entry Section.

### 3. DATA ENTRY CONVENTIONS

In submitting punching jobs to our data entry section, it is best (speedier, less apt to err and generally less expensive) if the following rules are adhered to:

- a. The letters 'I' and 'O' should be recorded as I and Ø.
- b. The numbers one and zero should be recorded as 1 and 0.
- c. Dashes or lines should not be used to indicate missing data or blank columns; instead its corresponding space should be left blank.
- d. When card corrections are indicated on the card itself, they should be written on the opposite end of the card.
- e. When possible it is desirable that 40x80 sheets (which can contain forty 80-column card images—available free of charge from the Center) be utilized for recording data. These sheets are large enough so data can be legibly recorded with adequate dimensions. The use of these sheets will generally effect a substantial reduction in cost to the user.
- f. FORTRAN programs should be coded on FORTRAN coding sheets when available.
- g. Data containing special characters, such as FORTRAN programs, which are to be run on the CDC equipment should be noted as such. By this, operators will be alerted to the need of using the 48-character punch codes that are compatible to the CDC equipment. Unless indicated otherwise, the 64-character punch codes (those common to the IBM 360 operation) will be assumed.
- h. Generally, the Center's first priority is to keep its ongoing reoccurring projects as up-to-date as possible and also to oblige the user having small amounts of data to be punched—most of the other data entry demands fall into a first-come first-served category. We therefore emphasize that users who have large amounts of data for punching, submit their work at the earliest possible time to allow ample time for data entry and subsequent data analysis.

\*Keys may be obtained for access to the facilities when the Center is closed.

#### 4. MIRJE TELETYPE TERMINAL

The Computing Center recently converted its teletype terminal operation from the MERITSS system on the CDC 6400 to the MIRJE system (Minnesota Interactive Remote Job Entry) on the CYBER 74 computer system. MIRJE has essentially all the software that was available under MERITSS and has basically the same command and control language. Most of the CYBER 74 software which is available to 1004 users can also be accessed through the MIRJE system.

Some of the ground rules for the use of this open-shop interactive teletype terminal are listed below.

- a. This interactive teletype terminal continues to be made available to the University staff on an experimental basis.
- b. This terminal is being made available for research use only on an open-shop, first-come, first-served basis.
- c. Although our Computing Center will not levy charges to the departments utilizing the terminal, it requires that users record the information requested on the 'Terminal Equipment Utilization Record' that is provided at the site for each use of this equipment.
- d. The terminal is not open to students or instructional use. Students should make use of the facilities made available to them in the instructional laboratories.
- e. Because of the excessive costs that could ultimately be incurred by the Computing Center from the accumulation of files on the system, saving files on the system utilizing open-shop accounts will be controlled rigidly. Researchers should not leave permanent files on the system. Permanent files that are foreign to our Computing Center control personnel (Terminal Supervisors) will be purged nightly from the Computing Center's open-shop accounts.
- f. This terminal has a paper tape attachment for reading or punching files and also has a paper tape utility handling device located nearby for the convenience of the users.

#### 5. 1004 TERMINAL USERS

In recent weeks we have had a greater incidence of 1004 printouts being reported missing. This problem reportedly occurs most often outside the normal working hours (after 4:30 p.m.). Therefore we ask that evening and weekend users of the 1004 be especially careful to take only their own printouts and placing printouts that are foreign to them in the location designated at the site. Should you discover that you have inadvertently picked up another's printout along with your own, please return it to the designated location at the earliest possible time.

#### 6. 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 Wednesday, January 15th, 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.

The subject matter of the seminar will relate to the following topics:

##### Equipment

- a. IBM 360 model 30
- b. Univac 1004 terminal

- c. Teletype Terminal (MIRJE)
- d. Unit-record equipment (sorters, reproducers, etc.)
- e. Key punch equipment
- f. Miscellaneous equipment (copier, burster, decollator, etc.)

##### Services

- a. Application programming
- b. Computer programming consulting
- c. Key punching
- d. Unit-record and computer equipment operations
- e. Software available

##### Miscellaneous

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

#### CLASSROOM OFFICE BUILDING COMPUTING FACILITIES

The Classroom Office Building 1004 RJE station to the Cyber 74 in ClaOff 125G and the MECC/MERITSS Laboratory in ClaOff 125E will be open on a reduced schedule over the inter-quarter break. Consultants will be on duty from 1:30 to 5:30 Monday through Friday with the exception of Christmas Eve, Christmas, New Years Eve, and New Years Day. If there is sufficient demand, the facility will also be open without a consultant during the morning. Regular hours will resume on January 6.

A new modem (blue box on top of the 1004) has been installed. This allows transmission to and from the Cyber 74 at the rate of 2400 bits/sec and should speed up both job reading and printing.

The Hewlett Packard 9100B programmable calculator with plotter and digitizer that was located in ClaOff 125A has been moved to the St. Paul Campus Computing Center in North Hall. It will, however, continue to be available for general use.

The MECC/MERITSS lab in ClaOff 125E is an all-University facility for support of instruction related computing. There are 11 lines to the MECC/MERITSS Cyber 72 in Lauderdale. In the lab are 8 teletype model 33's, two Hazeltone 2000 CRT terminals, a Di-An teleprinter terminal, and a Tektronix 4013 CRT Graphics terminal with APL capability. Those users who have become accustomed to seeing an "out of order" sign on the Di-An will be glad to learn it is now in excellent running condition, complete with a basket for paper, and is getting increasing use, especially by those needing longer print lines than the 72 characters on model 33's. About half the terminals may be reserved in advance. In addition, the entire lab may be reserved by an instructor for up to an hour at a time. Call C. Bingham at 373-0988 or S. Weisberg at 373-1068 to arrange this. Account numbers for use in the lab should be obtained from each department's computer coordinator. If in doubt as to who this is, Thea Hodge at 373-4599 can probably find this out for you.

A Winter Quarter schedule for statistical computing consulting and for the Statistical Clinic will be posted in ClaOff 125 when it has been arranged.

**GENERAL INFORMATION OF 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)	(principal secretary)	
Univac 1004 terminal	125G Classroom Office Building	8:00 a.m.—8:00 p.m. Mon.	Consultant	376-3846
		8:30 a.m.—6:00 p.m. Tues.	L. Lawton (secretary)	373-1037
		8:00 a.m.—8:00 p.m. Wed.	C. Bingham	373-0988
		8:30 a.m.—8:00 p.m. Thur.	S. Weisberg	373-1068
		8:00 a.m.—6:00 p.m. Fri.		
		9:00 a.m.—Noon, Sat.		
Interactive instructional lab	125E Classroom Office Building	8:00 a.m.—8:00 p.m. Mon.	Consultant	376-3846
		8:30 a.m.—6:00 p.m. Tues.	L. Lawton (secretary)	373-1037
		8:00 a.m.—8:00 p.m. Wed.	C. Bingham	373-0988
		8:30 a.m.—8:00 p.m. Thur.	S. Weisberg	373-1068
		8:00 a.m.—6:00 p.m. Fri.		
		9:00 a.m.—Noon, Sat.		
Univac 1004 terminal	257 Biological Science	8:30 a.m.—4:30 p.m. (M-F)	Ricardo Cardellino (consultant)	376-3407