

University Computer Center newsletter

Director: Peter C. Patton

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LOW SPEED PORTS ON CYBER 74

--by P.C. Patton

Starting September 1, 1974 there will be 32 low speed ports on the CYBER 74. Sixteen of these will be available to research users who require the convenience of remote job entry at a low speed terminal or some degree of interactive computing. The remaining sixteen ports will be devoted to computer aided instruction for the teaching of German, Greek, Logic, the Scandinavian Languages and a few Law School and Medical School courses.

In order to run Telex and handle additional 844 disk activity without loss of batch computing capacity we will install four additional PPUs.

CYBER 74 low speed terminal users will be limited to minimal computer usage so that batch users will not notice any diminution of service. Low speed terminal users will be billed on the same basis as other CYBER 74 users, that is, on a CP time used and PRUs transferred basis.

Although there has been some demand to install an additional 32 ports for instructional time-sharing (beyond the 32 low speed ones already scheduled) on the CYBER 74, we have had to defer this service in favor of maintaining full system availability for batch and batch remote users of the CYBER 74.

University timesharing computer users will continue to be served by the MERITSS system which will be managed for MECC again this year by UCC. We are augmenting the MECC CYBER 72 at MECC's request in order to be able to serve 256 ports next year. Many of the new ports on MERITSS will be utilized by elementary, secondary, and vocational schools.

CONNECT TIME CHARGES FOR REMOTE TERMINALS

--by J.K. Foster

The University Computer Center is instituting a uniform policy regarding the charges for connect time for medium speed remote terminals connecting to the CYBER 74. Beginning July 1, 1974, a standard rate of \$3.50 per hour will be used in computing the connect time charges for all remote medium speed terminals. This increased charge is to cover the general increase in costs of all aspects of medium speed remote computing.

This charge will not affect the individual user who runs a job from a medium speed remote terminal. The charge is assessed against the research group, division, or department which supervises the operation of the terminal.

RATE INCREASE FOR SHELF STORAGE

--by J.K. Foster

The price charged for shelf storage in the Lauderdale Users' Room and in Room 208 ExpEng (Open Shop Keypunch) will be raised beginning July 1, 1974. The charge (which was \$1.00 per shelf per calendar quarter) will be raised to \$2.00 per shelf per calendar quarter (or portion thereof).

Contrary to our previous announcement (see BRIEF NOTES, June '74 newsletter), further consideration of the remodeling plans shows that space for storage at Lauderdale will still be available after the offices are constructed. The exact amount of space will be determined when the project is finished. However, users may still wish to remove materials temporarily to keep them from being disordered during the construction period.

KRONOS 2.1 TEST DATES FOR JULY AND AUGUST

--by L.A. Liddiard

Saturdays (July 6, 13, 20, 27, August 10) from 3:00 - 7:00 PM. This time will not be charged.

Tuesdays (July 9, 16, 23, 30, August 6, 13, 20) from 6:00 PM - 4:00 AM. CP time and pages will be charged.

Tuesdays & Thursdays (August 27, 29) from 8:00 AM - 4:00 AM. CP time and pages will be charged.

In order that summer classroom computing activity not be disrupted, UCC will not turn over a complete weekday to KRONOS until the end of August.

Permanent files created during KRONOS 2.1 time will not be accounted for until the last week of August and are saved on separate disk packs from one KRONOS system time until the next. All users are encouraged to test that their magnetic tape and permanent file jobs work correctly under KRONOS before the changeover date of September 1, 1974. UCC staff members are available during these test periods to help users with any questions or problems with the KRONOS system.

SUPIO was up on June 15 and High Speed Export (ExpEng and West Bank) is expected to be ready by July 9th.

The Target Date For Complete Changeover Is Still September 1, 1974!!!

SYSLIB WILL BE AVAILABLE ON KRONOS
(TEMPORARY & UNSUPPORTED)

--by M.J. Frisch & T.D. Hodge

Originally, we said that we would not carry a copy of SYSLIB over to KRONOS 2.1 since we feel a strong sense of responsibility for anything on UCC disk space. However, we have been persuaded by a few users to put it up temporarily with the condition that we will not make corrections or modifications to it, but are happy to support the required disk space for understanding users.

We plan to make the old SYSLIB available from MOMS file OLDSYS and the current SYSLIB from MOMS file SYSLIB to RUN23 users under KRONOS in the full knowledge that some of the subroutines and functions will not work. Where failures occur, they are due to the absence from KRONOS of several MOMS/SCOPE PP routines. These routines will not be implemented. However, we feel that enough of SYSLIB will work and is wanted by users to justify keeping an unsupported copy of the library on disk.

The control card needed to access OLDSYS or SYSLIB on KRONOS 2.1 is
FETCH,OLDSYS.

or

FETCH,SYSLIB.

which attaches the file and makes it a user library as the LIBRARY control card would. A more complete example is

```
FETCH(OLDSYS) or  FETCH(SYSLIB)
RUN23(S)
LGO.
```

DATA! DATA! DATA!

--by G. Simones

Are you looking for a new and innovative method for storing, maintaining and/or accessing data? If so, why not try System 2000, a generalized data base management system available on the CYBER 74.

System 2000 has been successfully applied to facilitate the management of data in many areas. For example, an application in medical and health care manages data that include a census of patients in the hospital, an inventory of the beds in the hospital, and a register of nursing stations and other service points within the hospital. The application is used to monitor patient admissions and dismissals, patient location, and the services received. Billings are prepared from the data stored and various summary reports and analyses are produced.

Education is another area in which System 2000 is being applied to manage large volumes of data. A major university in the Southwest has implemented ERIC on System 2000. The ERIC data base is an automated index to the microfiche collection of Reports in Education. Index entries are prepared at several centers throughout the United States, encoded in machine-readable form, and filed on magnetic tape for a variety of subsequent uses. The basic method of accessing an article is via the key word descriptions of the article content. The user has the capability of retrieving the journal name, volume, publication date, author, and title for all articles matching any combination of selection criteria.

If you think you might have an application which could be enhanced by System 2000, why not call Steve Nachtsheim (373-7878) or Greg Simones (373-2522) for further information.

CRUNCH! CRUNCH! CRUNCH!

--this is an advertisement--

We would like to hear about any programs which crunch, crush, compress, or otherwise squeeze output in order to save paper. Please drop a note to, or call, Thea Hodge, 232 ExpEng, 373-4599.

LIBRARY CHANGES & ADDITIONS

--by M.J. Frisch

Library changes as of May 24, 1974:

CHSQ	GAMMAF	LINT	PLROOT3	RESTFL
CHSQI	GENREAD	PERMUTE	RANBIN	SYMINV
CINTEG	GENREED	PLROOT1	RAN2F	SYMPACK
CPRFIL	IRAN	PLROOT2	RAN3F	SYMUPK

Changed (or added) on FT3LIB to agree with the versions on SYSLIB. This only affects FTN and MNF(C) users.

Library change as of May 31, 1974:

SPSS Version 5.5

Fixed transformation A**B that was erroneously being done A*B.

Library changes as of June 19, 1974:

CMXCMBN	CMXMOV	CMXMPLY	CMXPLY1	CMXTRP	MXTRP1	RCVECT
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Changed (or added) on FT3LIB to agree with the versions on SYSLIB. This only affects FTN and MNF(C) users.

PROGRAM TROUBLE REPORTS

The Program Trouble Report (PTR) form (see facsimile below) should be used when reporting program bugs. Copies of this form are available at the remote terminal sites from the terminal supervisor and from the UCC consultants.

UCC can follow up on PTR's only if enough information is available to re-create the bug. When submitting a PTR, please include (as a minimum):

- 1) program listing, load map, and dump (if available)
- 2) data listing or sample data
- 3) bug description
- 4) description and/or listings of attempts made to locate bug.

If requested on the PTR form, replies will be made when a solution is found. To obtain a list of current PTR's use the following job setup:

Jobcard with T1 and CM20000
 FETCH,PTRLIST.
 CS(PTRLIST,OUTPUT).

PROGRAM TROUBLE REPORT			
[date]	[consultant]	REPLY REQUESTED?	<input type="checkbox"/> no <input type="checkbox"/> yes
[user's name]	[phone]	Return to: PTR Coordinator 227 ExpEng UoM Minneapolis, MN 55455	
[address or department]			
MACHINE	OPERATING SYSTEM	SYSTEM PROGRAM	RUN DATE
<input type="checkbox"/> ERROR	<input type="checkbox"/> DOCUMENTATION	<input type="checkbox"/> Source deck	<input type="checkbox"/> Program listing
<input type="checkbox"/> INFORMATION ONLY	ENCLOSED:	<input type="checkbox"/> Tape	<input type="checkbox"/> Core dump
<input type="checkbox"/> Other _____			
Problem description and example:			
(use back of card)			

DOCUMENTATION PRODUCED AT UCC

Reprinted:

UMST Statistical Computer Programs Reference Manual is now available at the Engineering Bookstore for \$8.80. Reference copies have been supplied at the remote terminal sites.

Still available:

KRONOS Conversion Guides can be obtained from the Reference Library, 235a ExpEng.

THE SUGGESTION BOX

(Unsigned suggestion cards are ignored. Questions may be reworded for clarity.)

Q/S I've just been waiting for nearly one hour for a program with T5, CM50000. In the last 10 minutes four printouts returned with T > 50, CM > 100000. WHAT IS THE PRIORITY SVSTEM????

A In this case the output was large enough so that it was diverted for printing from ExpEng to Lauderdale and subsequently delivered back to ExpEng by courier. Thus, the job had a built-in delay. If you have to wait a long time at ExpEng for a job, ask the I/O clerk if your job was diverted. For a description of the scheduling procedure, see the June '74 UCC newsletter (THE SUGGESTION BOX, page 8.)

As an aside to this answer, ExpEng users should note that there is a buzzer available on the I/O counter to be used to call the operator in the terminal room. The present buzzer is being replaced since it has been hard to hear over the noise of the machines.

(R. Hursh & T. Hodge)

Q/S Why must the subroutine writeups be so cryptic? A person needs a double major in CICS and Math to interpret them. How about giving us engineers a break by having your writers elucidate a little more? For example, in the writeup for random number generation, the SEED is referred to but I had no idea what number (or numbers) to use for this. The example at the end of the writeup was useless.

A The writeups don't have to be cryptic, of course. In order to keep each writeup from becoming a book though, some level of computer knowledge has to be assumed. Comments and corrections are collected on each writeup. Before a writeup is re-printed, revisions are made. In the example you give, SEED is described three times. If you will let us know what you did not understand (for example, annotate a writeup and send it to us) we can incorporate these suggestions into our next revision.

(R. Hotchkiss)

Q/S How about getting a more reliable way of getting stuff plotted with the STATOS 31? 1) At present, the operators/drivers lose about 20% of the special request slips sent from ExpEng. Since the ExpEng staff is generally unwilling to check on STATOS output (it's easier to say "wait 24 hours") any foulup means a two to three day delay. 2) Are STATOS plots made at a fixed time each day, if so, what times? 3) Why not generate STATOS output when requests come in, thereby giving about 2 hours turnaround?

A 1) Operations is not aware of any missing plot request slips. There are no Missing Output Reports regarding these to my knowledge. If your output isn't returned, these report slips assist us in resolving problems.

2) Jobs have been run as time permits up to this point. Fixed times along with requests are currently being looked at and efforts to improve this service will be made.

3) This is not always possible with our staffing and fluctuating work load. Originally, 24 hour turnaround was our objective. Perhaps running jobs at fixed intervals will enable users to better set up work schedules.

(R. Fleagle)

Q/S The card interpreter is very noisy at Lauderdale.

A A cover will be provided for the interpreter. This will improve the noise problem. In future, the keypunches will be located in an acoustically enclosed room. This should also improve the noise problem.

(A. Franck)

Q/S A pay telephone to augment the one telephone in the Users' Room (at Lauderdale) would be nice.

A A pay telephone has been installed.

(D. Sabre)

Q/S There is a middle aged woman working days in ExpEng. She is a very good influence on the operation and when she is around, jobs are processed very rapidly and cheerfully (that's important). What ever happened to my complaint, Mr. Sabre?

A It is my understanding that Don Sabre has replied to you in writing. We appreciate compliments also for our good works (and Mrs. Lucas thanks you).

(A. Franck)

Q/S Please have the LD routed output returned to the designated bin or, if this is too complicated, at least have all the operators follow the same procedure of returning them to the 'routed' bin.

A We have experienced some mild confusion during various stages of the ROUTE implementation. The May newsletter contained a statement defining the ROUTE procedure which we are currently following. We're sorry for the inconvenience.

(D. Sabre)

Q/S I am an off-campus adult special student taking CICS5101. I came here (Lauderdale) in the evening of April 26th and tried to run my first program. As a first timer I don't know much about your center. I asked for instructions from an operator but he gave me a very bad impression, being very impatient and unfriendly. I have used computers at other schools and in industry but have never received such a bad reception. I would like to see some action in this area. Also, I asked for a phone number to be called to find out the status of the computer, and was told there was none. I suggest you make one available.

A It is the duty of course instructors to sufficiently inform their students (preferably with handout materials) on how to use UCC facilities, so you should not have had this difficulty in the first place. We apologize for the lack of courtesy you received. We constantly attempt to improve User-UCC relations but everyone has bad days. You may call 373-4940 to find out the status of the computer.

(A. Franck)

CYBER 74 OPERATING HOURS

	12:01AM	2AM	3AM	4AM	8AM	4PM	Midnight
Sunday							
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						

.... (Lauderdale only)
 ||||| (Lauderdale, ExpEng)
 //// (Lauderdale, ExpEng, West Bank)**

**[West Bank will close at 10:00 PM during the summer and return to these hours at the beginning of Fall Quarter]

MEDIUM SPEED REMOTE TERMINALS

(Hours will vary from site to site.)

site	Supervisor
38 ElectE (East)	J. Guentzel/373-5404 M. Cook/373-3895
N640 EltH (East)	J. DeWitt/376-7377 N. DeWitt/376-7377
S191 KoltH (East)	T. Faulkner/376-7024 J. Abdallah/373-2348
321 MinMet (East)	C. Swanson/373-5475 R. Oelfke/373-5680
69 Physics (East)	Bob Scarlett/373-0243 Dave Olson/376-7175
167 SocSci (West)	G. Lutgen/373-3608
257 BioSci (StP)	R. Comstock/373-0979 R. Cardellino/376-3407
125G ClaOff (StP)	C. Bingham/373-0988
415 CofH (StP)	D. Nelson/376-7003 T. Ehlen/376-7003
24 NorH (StP)	J. Colten/373-0990 D. Rignell/373-0990
Users Room (Laud)	Shift Supervisor/373-4940

TELEPHONE NUMBERS

373-4548	Account Clerk, CYBER 74
373-7753	Account Clerk, 6400 (MERITSS)
373-4596	ExpEng I/O
376-7067	Field Engineering
373-2521	Keypunch Supervisor
373-4940	Lauderdale Shift Supervisor
373-4995	Microfilm Operator (leave a message)
373-4876	Operations (R. Folden)
373-4994	Recorded Message
373-7744	Reference Librarian
376-3963	Remote Job Entry Coordinator
373-4995	Tape Librarian (leave a message)
373-4360	UCC Office
373-4599	User Services (T. Hodge)
373-4921	Users' Room (Lauderdale)
373-3608	West Bank I/O

KEYPUNCH LOCATIONS

(number of keypunches is in parentheses)

East Bank		St. Paul	West Bank
38 ElectE (1)	321 MinMet (1)	257 BioSci (1)	90 BlegH (1)
N640 EltH (1)	69 Physics (1)	125G ClaOff (1)	167 SocSci (1)
130 ExpEng (2)		415 CofH (1)	
131 ExpEng (1)		24 NorH (1)	
208 ExpEng (8)*			Lauderdale
223 ExpEng (6)			Users' Room (5)*
S191 KoltH (1)			

*includes 1 interpreting card punch.

CONSULTING SCHEDULE

EAST BANK	GENERAL COMPUTING	STATISTICAL COMPUTING
140 ExpEng	Mon-Fri: 10AM-Noon 1PM-3PM	Mon : 1:00PM-4:30PM Tues :10:30AM-4:30PM Wed :10:30AM-4:30PM Thurs: 1:00PM-4:30PM
WEST BANK	GENERAL COMPUTING	STATISTICAL COMPUTING
167 SocSci		Mon : 9:00AM-1:00PM Wed :12:00 -3:00PM Thurs: 9:00AM-12:00N
25 BlegH*	Mon-Fri: 10AM-Noon 1PM-3PM	Mon-Fri: 10AM-Noon 1PM-3PM
ST. PAUL	GENERAL COMPUTING	STATISTICAL COMPUTING
125 ClaOff	<i>Consultant will be available. Hours to be determined (about 20 hours/week).</i>	
LAUDERDALE	GENERAL COMPUTING	STATISTICAL COMPUTING
	Mon- Thurs:1:30PM-3:30PM 7:30PM-9:30PM Fri :1:30PM-3:30PM	

*SSRFC. Social science computing only.

REFERENCE MANUALS

[Copies are available for reference in 140 ExpEng, Lauderdale Users' Room, West Bank Computer Center, and at the medium speed terminal sites.]

APEX I	86615300C
ALGOL version 2	60306100D
COBOL version 3	60253000E
COMPASS version 2	60279900D
CYBER 74, volume 1	60347400
CYBER 74, volume 2	60347300
CYBER 74, volume 3	60347100
FORTRAN EXTENDED version 3	60329100D
FTN DEBUG users' guide	60329400C
FORTRAN (RUN/FUN) version 2.3	60174900F
MIMIC simulation language	44610400E
MODIFY	60281700D
PERT/TIME	60133600C
SCOPE version 3.2	60189400L
SIMSCRIPT version 2	60178300C
SIMULA	60234800E
SORT/MERGE version 3	60252600E
6000/7000 computer systems	60100000W

BMD & BMDX: Biomedical Computer Programs
 IMSL library catalog (library 3, edition 3)
 MNF reference manual
 OMNITAB II programmers reference manual
 OMNITAB II, an introduction to
 SPSS: Statistical Package for the Social Sciences
 SPSS version 5.5 (CYBER 74 implementation)
 System 2000 reference manual
 System 2000 users' guide
 UMST: University of Minnesota statistical programs
 UCC Users' reference manual

SUMMER SESSION SHORT COURSES

KEYPUNCH WORKSHOPS

Each Wednesday from 10:15-11:00 AM.
Use the sign-up sheets on the main
stairway wall. Only one session
should be necessary.

STATISTICAL PACKAGES @ UCC WITH
EMPHASIS ON SPSS

Introducing the statistical packages
available on the CYBER 74 with use of
SPSS (Statistical Package for the
Social Sciences) emphasized. No previous
computer experience is required.

DAYS : July 8,9,10,11 (M-Th)
HOURS : 1:00 - 3:00 PM
ROOM : 113 Space Science Center
INSTRUCTOR: D. Anderson

SNOBOL

See the June newsletter for a good description
of SNOBOL4. Knowledge of at least one higher
level language such as FORTRAN or COBOL is assumed.

DAYS : July 8,10,12 (M,W,F)
HOURS : 3:25 - 5:00 PM
ROOM : 404 BlegH
INSTRUCTOR: A. Mickel

TIMESHARING WORKSHOPS

An opportunity to work under personal supervision
at a terminal and to ask questions about file usage.
Locations and times will be posted.

RPG

Deals with beginning programming in the RPG (Report
Program Generator) language. RPG is an easily learned
language with useful programming capabilities, allowing
creation of business reports along with other
sophisticated applications.

DAYS : July 8,10,12 (M,W,F)
HOURS : 1:25 - 3:20 PM
ROOM : 404 BlegH
INSTRUCTOR: M. Kramer
REFERENCES: Materials from instructor.

SYSTEM 2000

How to use System 2000, a generalized data base management
system. Techniques for defining data bases, retrieving
and updating, and using the data base are discussed.

DAYS : July 15,17,19 (M,W,F)
HOURS : 1:25 - 5:00 PM
ROOM : 404 BlegH
INSTRUCTOR: to be arranged

RETURN TO:

UNIVERSITY COMPUTER CENTER
227 EXPERIMENTAL ENGINEERING
UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MN 55455

IF YOU WISH TO HAVE YOUR NAME
REMOVED FROM THIS MAILING LIST,

WRITE TO:

EDITOR

UCC NEWSLETTER

AT THE ABOVE ADDRESS, OR CALL
373-7744.

UNIVERSITY ARCHIVES
ROOM 11 WA LIP
MINNEAPOLIS CAMPUS