UNIVERSITY COMPUTER CENTER

UNIVERSITY COMPUTER CENTER, UNIVERSITY OF MINNESOTA-TWIN CITIES, MINNEAPOLIS, MINNESOTA

CONTENTS

BULLETINS

LONG RANGE PLANNING SUBCOMMITTEE

The Usage Subcommittee of University Computer Services Long Range Planning Committee is surveying the University Community in an attempt to determine future computing needs. The center section of this Newsletter contains a copy of the survey and more detail about the survey. We are asking all users to complete the survey and return it to the address indicated. Thank you.

Don't forget the Winter Quarter User's Meeting

Thursday, February 22nd
2:15 - 4:00 PM
Room 166 Physics, East Bank

UCC SHORT COURSES

There have been some scheduling changes since the first publication of the schedule, and a new short course on the TERAK has been added. Please see page 3 and page 6.

UCC newsletter
Volume 13 Number 1 January, 1979

Director: Peter C. Patton
Editor : A. Koepke

Comments about the content of this newsletter, or suggestions for changes may be directed to the editor, 235a Experimental Engineering, 373-7744.

FROM USER SERVICES

I would like to call your attention to several committees which deal with various aspects of University computing:

Review Committee on Small Computers and Terminals
Chair: D. Riley, Mechanical Engineering

Long-Range Planning Committee
Chair: R. Kain, Electrical Engineering

Subcommittee on Statistical Packages and Programs
Chair: D. Hinkley, Applied Statistics

Timesharing Subcommittee
Chair: T. D. Hodge, University Computer Center

Subcommittee for EDUCOM Relations
Chair: P. G. Roll, Office of Vice President, Academic Affairs

Data Base Management Subcommittee
Chair: S. Nachtsheim, UCC

These are all appointed committees or subcommittees of University Computer Services. Users who want to form special interest groups can also count on our cooperation. Suggested so far are a Number Crunchers Users Group, a CAI users group, and a Small Computers users group. Any others?

Remember that a users group should exist if there are users with common needs and the wish to focus their influence on these needs. Let us know about your ideas.

T. D. Hodge, 373-4599

COMPUTING FOR THE ARTS & HUMANITIES

As part of our efforts to aid and promote the use of computers in the arts and humanities, we are attempting to reach all current users in these fields. We wish to find out about computing projects in the humanities and what information humanities users need to know.

Memos have been sent to all known users, and

```
WRITEUP(SHARE)
```

on all systems asks the same questions. If you have not been contacted, we urge you to send your name, department, project title, and computer application to:

Vicky Walsh
Classics Department
310 Folwell Hall

The result of this project will be an arts and humanities user manual, and we need your help now in order that the manual have the greatest usefulness for current and future arts and humanities users.

V. Walsh, 373-7706

STATISTICAL PACKAGE -- MINITAB

A new command, EIGEN, has been added to MINITAB:

```
EIGEN OF m PUT INTO c
```

calculates the eigenvalues of the square, symmetric matrix m and puts them into column c.

```
EIGEN OF m PUT INTO c, PUT EIGENVECTORS INTO m
```

calculates the eigenvalues of the square, symmetric matrix, m, and puts them into column c and calculates the corresponding eigenvectors and puts them into the columns of the second matrix, m.

To use MINITAB as a batch program, simply enter the command

```
BATCH
```

as the first command in the MINITAB input record. This causes the timesharing prompts to be suppressed and also alters the echo printing default. If this command is followed by the MINITAB command

```
RESTART
```

the output width will be changed from 80 to 123, and BRIEF will be changed from 4 to 5. The batch input job would look like this:

```
MINIRUN,T20.
USER,abc1234,passwrd.
MINITAB.
7-8-9 card
   BATCH
   RESTART                    (MINITAB commands)

6-7-8-9 card
```

The MINITAB manual is available in the University bookstores and the UCC Reference Room at a cost of $2.05 each.

B. Hinkley, 376-2773

DATA BASE MANAGEMENT -- DMS-170

DMS-170, a data management system, is now available on the Cyber 172. COBOL4 and COBOL5 serve as host languages to DMS-170, and Query Update is the self-contained natural language.

Manuals for DMS-170 are available at the Minnesota Book Center in Williamson Hall; the manuals are being sold as sets. Individual manuals may be purchased either through the UCC Reference Room, or directly from Control Data Corporation.

A short course on DMS-170 will be offered in March. This short course will emphasize the Data Definition Language (DDL), the Data Manipulation Language (DML), and Query Update.

Any questions should be directed to
J.C. Cosgrove, 376-1761

DOCUMENTATION

The first UCC User's Manual was published in September, 1978. The manual is designed in a modular fashion, that is, there is a basic manual and several supplements. The supplements contain information about specialized operating system and applications software. Not every user will need or want to acquire all the supplements. We expect that you will purchase a basic manual and only those supplements that are necessary for your computer activities. For example, you might need the "Guide to Magnetic Tape Usage," but have no use for a "Guide to Data Base Management Systems."

We now have four published supplements:

A Guide to Magnetic Tape Usage
The Index To User Libraries
A Guide to Record Manager
A Guide to Graphics Facilities

The other supplements mentioned in the basic User's Manual are being planned, and will cover topics such as the use of permanent files and language processors. As each new supplement becomes available, we will announce it in this newsletter, describing both its contents and where it can be purchased. We hope that this will keep you informed about the availability of the User's Manual Supplements.

The User's Manual and the three "Guide" supplements are available at the Minnesota bookstores. The "Index" is available, free, from the UCC User's Room 140 Experimental Engineering.

If you have any questions or comments about forthcoming supplements, please call

M.C. Boyd, 373-2522

THE STATISTICAL CLINIC

The Statistical Clinic, located in 125F Classroom Office Building on the St. Paul Campus, is operated under the aegis of the Statistical Center in the School of Statistics. This year its activities are being coordinated by Professor Kinley Larntz, of the Department of Applied Statistics. The Clinic is staffed for approximately 30 hours per week, primarily by graduate students in the School of Statistics. It is a source of statistical advice concerning the design of experiments and the collection and statistical analysis of data. It would normally be the point of approach for graduate students who feel the consulting services of the Statistical Center are needed in their research.

Please note that the Statistical Clinic does not consult on problems that are primarily computer related. The University Computer Center does provide such consulting. A current UCC consulting schedule is available through WRITEUP(CONSULT).

NEW SHORT COURSE -- MICROCOMPUTERS

Introduction to TERAK Microcomputers
6:15-7:30 PM
January 30 - February 8 (TTh)
Aero 225
Instructor: R. Rivera, SICL

This course will begin by introducing students to microcomputers: the varieties available; varying capabilities and configurations; basic hardware structure. The instruction will then be directed toward the TERAK microcomputer, its specific hardware and software systems, configurations, and applications. Demonstrations will be given, and time will be scheduled for hands-on experience.

Attendees of the course will be expected to have had previous computing experience of some sort, and knowledge of FORTRAN, Pascal, or BASIC.

L. Fetcher, 376-1637

ACCOUNTING

On January 1, 1979, several changes were made in the methods of accounting at UCC. Most of these have been caused by the combining of the billing systems of the Cyber 172 and the Cyber 74. In addition, several improvements have been made to the overall system.

COMBINED BILLING

Users with account numbers on both the Cyber 74 and the Cyber 172 will now receive a single invoice for each billing period. This invoice will contain SRU billing, separated by machine; all other charges (supplies) will be combined for both machines, although they will continue to be itemized by charge type.

CONNECT TIME

As announced in a previous newsletter, different timesharing connect speeds are billed at different rates. While previously announced, this was not possible until certain modifications were made. These modifications have now been made and users will be billed according to the connect rate used as of the January 1979 billing.

MONTHLY BREAKDOWNS

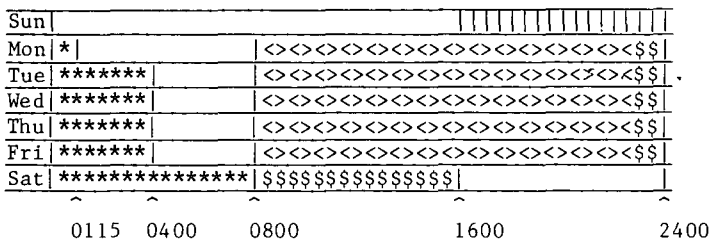
A new service is being made available to users who desire greater detail about the jobs run on the Cyber 74/172 complex. A report is available detailing each job run during the month. Contact Andre Bremanis (376-1762) for details.

ACCSTAT

Several changes have been made to ACCSTAT to accomodate the new accounting changes. Principally, the identification numbers for categories have been changed and some new items added. See WRITEUP(ACCRATE) and WRITEUP(ACCSTAT) for details.

S. Nachtsheim, 373-7878

CYBER 74/172 OPERATING HOURS



******** Lauderdale only, DELAY rate
|||||||| Lauderdale, ExpEng, DELAY rate
<><><><> Lauderdale, ExpEng, West Bank
$$$$$$$$ Lauderdale, ExpEng, West Bank, DELAY rate

SUPIO (RJE terminals) comes up 1/2 hour after operation begins and closes down 1/2 hour before operation ends.

TELEX (MIRJE terminals): the operator will issue a 10 minute warning before TELEX is dropped.

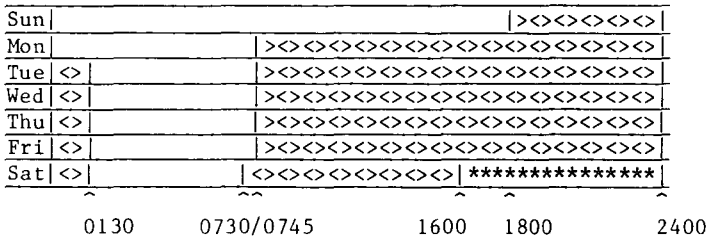
See WRITEUP,HOURS for schedule of batch job pickup/delivery service at Lauderdale and Experimental Engineering.

TWIN CITIES CAMPUS PUBLIC REMOTE JOB ENTRY SITES

Site	ID	supervisor	phone	*
East Bank				
ChemEng	8G	T. Berger	373-2308	
ElectE 38	4V	J. Guentzel	373-5404	2
ElthH N640	4W	D. Anderson	373-5827	2
ExpEng 130	4B	Shift Supervisor	373-4596	1
FrontH	4E	M. Kilbury	373-2740	1
KoltH S191	4Z	G. Schuette	376-7375	4
LindH	4N	M. Schneider	373-7582	
HS-A 1-752	4C	L. Ellis	373-0331	1
MinMet 321	4I	M. Weber	373-2302	3
Physics 69	44	L. Whitney	376-7627	3
SpaSci 134	43	A. Perandi	373-7881	1
TerrH W106	4I	D. Messinger	373-6543	1
Zoology 314	4J	E. Cushing	373-2232	1
West Bank				
SocSci 167	4X	R. Dykstra	373-3608	2
SocSci 1009	4K	T. Cushing	373-0168	1
St. Paul				
BioSci 257A	47	M. Simmons	373-1961	1
ClaOff 125G	48	C. Bingham	373-0988	3
CofH 415	21	D. Nelson	376-7003	1
NorH 24	40	J. Colten	373-0990	2
Lauderdale				
User's Room	49	Secretary	373-4912	5

*additional keypunches in 131 ExpEng,
86 BlegH, 140 ExpEng, and 90 BlegH.
90 BlegH(1).

CDC 6400 OPERATING HOURS



****** up, not attended
<><><> up, attended

TWIN CITIES CAMPUS INSTRUCTIONAL COMPUTER LABORATORIES

Site	Supervisor	phone	equipment
East Bank			
CentH	R. Rickgarn	373-2289	TTY(1)
DiehlH 535	N. Sauro	376-7005	CRT(2)
ElthH 121,125	D. Anderson	373-5827	TTY(6)
			CRT(5)
			Printer(1)
FrontH	M. Kilbury	373-2740	TTY(1)
HS-A 1-752	L. Ellis	373-0331	TTY(6)
			CRT(2)
LindH 25	M. Schneider	373-7582	CRT(6)
			Decwriter(2)
			Printer(1)
MechE 308	D. Riley	373-2977	TTY(10)
			CRT(2)
TerrH	R. Baker	373-3567	TTY(1)
VincentH 4	W. Stenberg	376-7529	TTY(11)
			CRT(2)
WaLib 204*	R. Estelle	373-5195	Decwriter(10)
			CRT(4)
West Bank			
MdbH	W. Bakkenist	373-9818	TTY(1)
SocSci 167	R. Dykstra	373-3608	TTY(8)
			CRT(4)
			Decwriter(1)
SocSci 1009	R. Anderson	373-0177	TTY(3)
			CRT(2)
St. Paul			
ClaOff 125	S. Weisberg	373-1068	TTY(9)
			CRT(3)
			Decwriter(2)
			DI/AN(1)

*for CAI use only

PRODUCTION USAGE SUMMARIES: Cyber 74/172

	Cyber 74 November, 1978	Cyber 74 November, 1977	Cyber 172 November, 1978
System resource units (SRU)	866,406 (967,761)	-	192,095 (436,612)
Batch jobs and MIRJE sessions	96,933 (102,542)	103,372 (114,547)	12,027 (16,782)
Central processor hours inc. DELAY	181 (200)	163 (205)	75 (178)
DELAY queue processor hours	59 (60)	46 (49)	9 (20)
MIRJE terminal hours	6,219 (6,562)	6,098 (7,837)	3,879 (5,442)
Mass storage transfers (KPR)	227,360 (244,119)	255,167 (325,413)	88,781 (168,334)
Magnetic tape transfers (KPR)	5,116 (8,007)	5,123 (7,308)	942 (2,964)
Pages printed, charged from UCC	936,529 (1,030,549)	870,451 (961,629)	32,559 (58,956)
Cards punched	393,044 (592,098)	375,896 (396,447)	-
Microfilm frames produced	12,802 (13,514)	7,818 (298,043)	0 (334,186)
Statos plotting production (feet)	7,240	5,655	-
Tapes mounted	7,762	9,252	3,390
Average file storage (char)	1,511.1 million	1,177.2 million	423.5 million
Mean time between failures	59.5 hours	26.3 hours	66.6 hours
Available during scheduled hours	99.4 percent	99.3 percent	99.5 percent
SUPIO uptime during available hours	95.7 percent	97.5 percent	-

(totals in parentheses include staff development, accounting, and maintenance runs)

DOWNTIME SUMMARY: December, 1978 (Column 1, Cyber 74 : Column 2, Cyber 172)

	Monday-Friday 0800-1800		other		total	
Total possible scheduled uptime hours	190.0	190.0	265.0	265.0	455.0	455.0
Total downtime hours (see Schedule A)	1.6	0.0	0.1	0.0	1.7	0.0
Total uptime hours	188.4	190.0	264.9	265.0	453.3	455.0
Uptime (percent)	99.2	100.0	99.9	100.0	99.6	100.0
Average downtime per occurrence (min)	31.7	0.0	4.0	0.0	20.6	0.0
Mean time between failures (hours)	63.3	-	132.5	-	91.0	-
Subsystem failures						
SUPIO	20	-	1	-	21	-
TELEX	0	0	0	0	0	0
EXPORT	0	-	2	-	2	-

Schedule A: downtime hours

	Number		Total hours		Average minutes	
(1) Preventive maintenance over-runs	0	0	0.0	0.0	0.0	0.0
(2) Software related problems	3	0	1.6	0.0	32.7	0.0
(3) Hardware related problems	1	0	0.1	0.0	4.0	0.0
(4) Indeterminate problems	1	0	0.1	0.0	1.0	0.0
(5) External Problems	0	0	0.0	0.0	0.0	0.0

Corrections to November statistics:
Meantime to failure for the Cyber 172: 158.3 hours (not 66.6)
EXPORT failures on the Cyber 74: 6 prime hours, 2 other, and 8 total (not 16, 21, and 8).

PRODUCTION USAGE SUMMARIES: CDC 6400

	November, 1978	November, 1977
Number of jobs run	227,637	176,434
Central processor hours	145	120
MERITSS terminal hours	26,544	23,260
Number of terminal sessions	51,700	47,786
Maximum number of simultaneous users	139	119
Average file storage (char)	335.5 million	230.7 million
Mean time between failures	220.0 hours	111.4 hours
Available during scheduled hours	99.8 percent	98.9 percent

SUBMISSION SITE USAGE SUMMARY: TELEX EXCLUDED : December, 1978

submitted from	total jobs	%	pages printed	%	cards read	%
Lauderdale	2,583	4.3	364,271	34.2	1,290,340	15.1
ExpEng	6,051	10.0	194,991	18.3	1,983,154	23.2
West Bank	2,352	3.9	46,582	4.4	429,196	5.0
6400	599	1.0				
SUBMIT jobs	11,535	19.0				
SUPIO	37,588	61.9	459,028	43.1	4,839,488	56.7
TOTALS	60,708		1,064,872		8,542,178	

UCC Short Course Schedule for Winter 1979

	Introduction to UCC.....	2:15-4pm, Jan 4 (th), Arch 40, RTF
	Intermediate FORTRAN.....	2:15-4pm, Jan 8 - 26 (mwf), ForH 120, RTF
	Introduction to System 2000..	2:15-4pm, Jan 8 - 19 (mwf), MechE 18, JCC
	PLOTPAC.....	7:30-9:30pm, Jan 16-18 (twth),Laud*,KMM
	SPSS.....	2:15-3:30pm, Jan 22-25 (mtwth), MechE 18, BH
$	Programming Style.....	2:15-4pm, Jan 23-Feb 1 (tth), Arch 25, RTF
	SPSS On-Line.....	2:15-3:30pm, Jan 26 (f), MechE 18, BH
	Advanced System 2000.....	2:15-4pm, Jan 22 - 26 (mwf), ChEng 240, SPN
	NOS Control Statements.....	2:15-4pm, Jan 29-Feb 14 (mwf), Ph 166, RTF
	System 2000/PLI.....	2:15-4pm, Jan 29 - Feb 2 (mwf), ChEng 50, JCC
	Intermediate COMPASS.....	2:15-4pm, Jan 29-Feb 9 (mwf), ForH 160, KCM
	Pascal.....	3:15-5pm, Jan 29-Feb 16 (mwf), ForH 120, ABM
$	Intro - TERAK Microcomputers:	6:15-7:30pm, Jan 30 - Feb 8 (tth), Aero 225, RR
	SPSS (Crosstabs).....	2:15-3:30pm, Jan 30 (t), Arch 40, SPY
	SPSS (Regression).....	2:15-3:30pm, Feb 1 (th), Arch 40, SPY
	System 2000/Report Writer...	2:15-4pm, Feb 5 - 9 (mwf), MechE 18, SPN
	Introduction to Timesharing.:	2:15-4pm, Feb 6 - 8 (tth), MechE 18, RTF
	Scientific Info Retrieval...	2:15-4pm, Feb 6 - 15 (tth), Arch 40, JCC
	Advanced Graphing.....	7:30-9:30pm, Feb 6-8 (twth), Laud*, KMM
	COBOL.....	2:15-4pm, Feb 12-Mar 2 (mwf), Aero 309, JCC
	Beginning FORTRAN.....	6:15-8pm, Feb 13-Mar 8 (tth), MechE 102, RTF
	NOS Control Language.....	2:15-4pm, Feb 16 (f), Ph 166, RTF
	MODIFY.....	2:15-4pm, Feb 19 - 23 (mwf), MechE 18, RTF
	Winter Quarter UCC User Mtg.:	2:15-4pm, Feb 22 (th), Ph 166
	Art Packages.....	2:15-4pm, Feb 27-28 (tw), MechE 18, KMM
	DMS-170.....	2:15-4pm, Mar 5 - 9 (mwf), MechE 18, JCC

* Lauderdale Conference Room, Lauderdale Computer Site, 2520 Broadway Dr.

NOTE: dollar sign ($) indicates change since first publication.

RETURN TO:
PUBLICATIONS GROUP
UNIVERSITY COMPUTER CENTER
227 EXPERIMENTAL ENGINEERING
UNIVERSITY OF MINNESOTA
208 UNION STREET SE
MINNEAPOLIS, MINNESOTA 55455

UNIVERSITY ARCHIVES
11 WALTER LIBRARY
UNIV OF MINNESOTA
EAST BANK
117 PLEASANT STREET S.E.
MINNEAPOLIS MN 55455

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
JANUARY 1 HOLIDAY	2	3	4 INTRO TO UCC	5
8 Intermediate FORTRAN Intro to System 2000	9	10 Intermediate FORTRAN Intro to System 2000	11	12 Intermediate FORTRAN Intro to System 2000
15 Intermediate FORTRAN Intro to System 2000	16 PLOTPAC(n)	17 Intermediate FORTRAN Intro to System 2000 PLOTPAC(n)	18 PLOTPAC(n)	19 Intermediate FORTRAN Intro to System 2000
22 Intermediate FORTRAN SPSS Advanced System 2000	23 SPSS	24 Intermediate FORTRAN SPSS Advanced System 2000	25 SPSS	26 Intermediate FORTRAN SPSS Advanced System 2000
PASCAL 29 Programming Style NOS Control Statements System 2000/PLI Intermediate COMPASS	30 SPSS (crosstabs)	PASCAL 31 Programming Style NOS Control Statements System 2000/PLI Intermediate COMPASS	FEBRUARY 1 SPSS (regression)	PASCAL 2 Programming Style NOS Control Statements System 2000/PLI Intermediate COMPASS
5 PASCAL NOS Control Statements Intermediate COMPASS System 2000/RW	6 Intro to Timesharing SIR Advanced Graphing (n)	PASCAL 7 NOS Control Statements Intermediate COMPASS System 2000/RW Advanced Graphing (n)	8 Intro to Timesharing SIR Advanced Graphing (n)	9 PASCAL NOS Control Statements Intermediate COMPASS System 2000/RW
12 PASCAL NOS Control Statements COBOL	13 SIR Beginning FORTRAN (n)	14 PASCAL NOS Control Statements COBOL	15 SIR Beginning FORTRAN (n)	16 PASCAL NOS Control Statements COBOL
19 COBOL MODIFY	20 Beginning FORTRAN (n)	21 COBOL MODIFY	22 Winter Qtr Users Meeting Beginning FORTRAN (n)	23 COBOL MODIFY
26 COBOL	27 Art Packages Beginning FORTRAN (n)	28 COBOL Art Packages	MARCH 1 Beginning FORTRAN (n)	2 COBOL
5 DMS-170	6 Beginning FORTRAN (n)	7 DMS-170	8 Beginning FORTRAN (n)	9 DMS-170

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These short courses are offered by the Unveversity Computer Center.

They are free and require no registration.

For more information, please call Lincoln Fetcher (376-1637) or see WRITEUP,CLASSES.

* Lauderdale Conference Room, Lauderdale Computer Site, 2520 Broadway Dr.