



# SPCS Newsletter

September 1986

St. Paul Computing Services

University of Minnesota

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## SPSS-X RELEASE

SPCS is now releasing SPSS-X to users. For now, we will provide limited user support to this software system. We plan to continue to support SAS as the main statistical software system available at SPCS. However, if there is a procedure or statistic that you need that is not computed by SAS, but is by SPSS-X, please check with us for information on how to use SPSS-X at SPCS. Look for documentation notes later this fall describing how to access and use SPSS-X at SPCS.

SPSS-X manuals available for purchase through SPCS are:

- o SPSS-X User's Guide
- o SPSS-X Basics
- o SPSS-X Introductory Statistics Guide
- o SPSS-X Advanced Statistics Guide

To run SPSS-X online, first access the SPSS-X software disk by issuing the command:

GET SPSSX

Your SPSS-X online programs should have a filetype of SPSSX. To process your SPSS-X program, issue the SPSSX command followed by the filename of your SPSS-X program file. For example, to process an SPSS-X program with filename DOSTATS, enter:

SPSSX DOSTATS

When the program completes, a file called DOSTATS LISTING will be on your A disk containing the output from your SPSS-X job.

Currently, it is possible to transfer a SAS data set to SPSS-X. Issue the following SPSS-X command to see a description of this process.

INFO GET SAS

Unfortunately, under the current version of SAS, it is not possible to transfer an SPSS-X system file to SAS. To transfer your data from SPSS-X to SAS will require that you dump the contents of your SPSS-X system file to a CMS file. Then you must write a SAS data step to read in the raw data to make a SAS data set.

## RATE CHANGES

### An Overall Decrease of More than Fifteen Percent

With the recent installation of the 4381 processor and the 3380 type disk drives, SPCS is now able to reduce processing and disk storage rates by more than fifteen percent. The new rates were effective July 1, 1986.

SPCS offers an additional twenty-five percent discount for processing done in non-Prime Time. Prime Time is defined as 6:45 AM to 5 PM, Monday through Friday; Off-Hour computing (discounted processing) is that done between 5 PM and 6:45 AM during weekdays and all day Saturday and Sunday. Users must logon after 5 PM to get the discount on their CMS logon session. To get a discount on BATCH jobs, the /SET RATE=BASIC must be included in the batch job control statements.

The table below lists the old and the new rates and the differences.

#### A. Central Processor, High-Speed I/O and Connect Charges

Computer Resource	Unit	University		Commercial	
		Prime Time	Off-Hours	Prime Time	Off-Hours
Central Processor Time	Old Minute	\$16.00	\$12.00	\$21.33	\$16.00
	New Minute	\$14.40	\$10.80	\$19.20	\$14.40
	Diff	-10.0%	-10.0%	-10.0%	-10.0%
Disk/Tape Input/Output	Old Block	\$.0012	\$.0009	\$.0016	\$.0012
	New Block	\$.00096	\$.00072	\$.00128	\$.00096
	Diff Block	-20.0%	-20.0%	-20.0%	-20.0%
Interactive connect time	Same Hour	\$2.00	\$1.50	\$2.75	\$2.00

## B. Other Computer Related Charges

Computer Resource	Unit	Old	New	Diff	Description
Virtual Reader	Record	\$.00015	.00015	Same	
Virtual Punch	Record	\$.00015	.00015	Same	
Lines Printed	Line	\$.00075	.00075	Same	
Archive storage/month	Byte	\$.000003	.000003	Same	
Disk Storage/month	Byte	\$.000018	.000015	-16.6%	< 10 megabytes
		\$.000014	.000012	-14.3%	> 10 megabytes, < 25 megabytes
		\$.000010	.000009	-10.0%	> 25 megabytes, < 50 megabytes
		\$.000006	.000006	Same	> 50 megabytes, < 100 megabytes
		\$.000003	.000003	Same	> 100 megabytes
		\$.000003	.000003	Same	> 100 megabytes
Reader Storage/day	Byte	\$.00	.00	Same	First 2 days
		\$.0000009	.0000005	-44.4%	> 2 days

Old = Existing Charges (Fiscal 86)

New = Proposed Charges (Fiscal 87)

Same = No Rate Change

## SPCS GEOGRAPHY

SPCS has made a few small changes in the organization of the users' rooms in 90 Coffey Hall. The IBM 3278 Emulation Upload/Download PC has been moved from 90 D Coffey Hall to 90 C (the small user room). Software consulting will take place in 90 D Coffey Hall during the Help Desk hours (see the article below).

## SPCS HELP DESK

Over the summer, we have added two new consultants at the Help Desk and have changed the way we handle user questions. Now there are two consultants on duty during scheduled Help Desk hours (Monday - Friday 10-12, Monday-Thursday 1-4, and Friday 1-3).

The associate consultant will handle all initial telephone and walk-in inquiries. The associate consultant's responsibilities are to provide answers to the more general questions covering such topics as opening accounts and connecting to the SPCS mainframe. Also, this person will be able to help you with some of your programming questions.

If the associate consultant cannot answer your programming question, it will be referred to the software consultant on duty. All software consultants at SPCS are familiar in general with all the software products and services SPCS provides. However, if the software consultant on duty cannot resolve the problem, it will be passed on to the software consultant who specializes in the area. SPCS will try to resolve the problem for you at that point within one working day.

The software consultants at SPCS are part of the applications programming staff. Besides providing assistance to users, testing new software products, and writing documentation, they also write application programs in the software available at SPCS.

# FALL SHORT COURSES

St. Paul Computing Services will be offering the following short courses during the Fall Quarter.

SHORT COURSE NAME	DATE		TIME
Introduction to CMS	Sept 29, Oct 1,3,6	(M,W,F,M)	3:00-5:00
User Orientation	Oct 9	(Th)	3:00-5:00
Introduction to NOMAD2	Oct 8	(W)	3:00-5:00
CMS Mail and BITNET	Oct 7	(Th)	3:00-5:00
CMS Advanced Topics	Oct 10	(F)	2:00-5:00
NOMAD2 Application Development	Oct 20,22,24,27,29,31	(2*M,W,F)	2:30-5:00
SAS (Statistical Analysis System)	Oct 21,23,28	(T,Th,T)	3:00-5:00
PC SAS Overview	Oct 30	(Th)	3:00-5:00
NOMAD2 Collection Demonstration	Nov 13	(Th)	3:00-5:00
NOMAD2 DBEDIT Demonstration	Nov 20	(Th)	3:00-5:00
Introduction to CMS SCRIPT	Nov 10,12	(M,W)	3:00-5:00

## User Orientation

Introduces new and prospective users to the SPCS facility. following a brief description of the hardware and software available at SPCS, a short tour of the Computer Center will be given.

## Introduction to CMS

Introduces the Conversational Monitor System (CMS), an operating system that allows one to edit and save files, submit batch jobs, and run jobs interactively.

## Introduction to SAS

Covers the Statistical Analysis System (SAS). In addition to statistics, SAS provides software tools for data storage and retrieval, report writing, general programming, and graphics. A computer-based training package for SAS will be part of the course. Users not attending the short course may also have access to this self-study course. Those interested should obtain the handout named "Using CBT for SAS".

## PC SAS Overview

Discusses some of the features specific to the PC version of SAS.

## Introduction to NOMAD2

NOMAD2 is a fourth generation language, which may be used for data management, retrievals, application programming, report writing, and graphics. This demo will emphasize database description and organization using NOMAD2 syntax.

## CMS Mail and BITNET

Introduces the CMS commands necessary to send messages and files to other computer users. BITNET is an international network of over 400 research and educational institutions through which electronic mail, messages and files may be sent.

## NOMAD2 Application Development

Teaches the steps necessary to set up a NOMAD2 application. Topics covered include: problem definition, writing a schema, entering, maintaining, and retrieving data, writing procedures, and report writing.

## Introduction to SCRIPT

Presents the basic features of SCRIPT, a text formatting language that allows you to prepare finished typed material such as letters, reports, manuscripts and other similar documents.

## NOMAD2 DBEDIT Demonstration

The NOMAD2 DBEDIT Demo will introduce the NOMAD2 database editor (DBEDIT). DBEDIT is a full screen facility designed to allow the user to view and modify data in a NOMAD2 database. The class will cover the basic commands for moving through the database, editing data, and schema statements needed to format DBEDIT screens.

### **NOMAD2 Collection Demonstration**

Introduces the NOMAD2 Collection, which consists of special tools and support facilities to enhance the basic NOMAD2 environment. Emphasis will be on new NOMAD2 tools such as: BROWSE, LISTER, and SPROMPT.

### **CMS Advanced Topics**

Presents information on the use of tapes, requesting information about the computing environment, and the SPOOL command.

The first hour of each of the days of the SAS and CMS and SCRIPT short courses is lecture, and the second hour is a terminal session in which the students may apply what they have just learned.

Previous registration in a CMS class is required for registration in the SAS, NOMAD2 Applications Development, SCRIPT and and CMS Advanced Topics short courses.

Previous registration in SAS is required for registration in PC SAS Overview. Because of our contract with SAS Institute for the PC SAS product, this class is open only to University of Minnesota faculty, staff, and registered students with a current fee statement.

All courses will be offered on the St. Paul Campus.

The User Orientation will be held in B35 COB (St. Paul Campus), with no registration required. To register for the courses, please obtain and complete a short course registration form from SPCS (624-7788; 50 Coffey Hall). Return it to the Main Office, 50 Coffey Hall, prior to the start of the class. Most short courses have a modest fee associated with them and require full payment before the class begins. Sorry, no refunds are made after the class begins.

If you have questions about short courses, their cost, or registration, please call Jan Jannett or Diane Suski (624-7788).

Additional Introduction to CMS classes will be scheduled, depending upon user interest. NOMAD2 Application Development, NOMAD2 DBEDIT Demonstration, and NOMAD2 Collection Demonstration classes will be offered if there is sufficient user demand. Leave your name and phone number with Diane Suski at 624-7788, if you are interested in these classes.

If you have a group of 6 or more people interested in any of the short courses, SPCS can schedule a class just for your group. Please contact Jan Jannett at 624-7788 to make the necessary arrangements.

### **Project ASSIST**

Project ASSIST, the campus-based group that was established to help faculty who want to use computers for instruction, will be offering a variety of workshops during fall quarter on the instructional uses of computers and related topics. The workshops are free to University of Minnesota faculty.

The University recently acquired a PLATO system, and Project ASSIST will introduce faculty to the powerful instructional computing resources available to them on this system through a workshop called Introduction to PLATO. The workshop will be offered each Thursday during Fall Quarter.

Other workshops offered this Fall will include:

- o Evaluating Instructional Software
- o Design Considerations for Computer Based Instruction
- o An Instructional Design Model
- o A Programmer's Guide to Instructional Software
- o Pilot
- o Evaluating Authoring Systems

Please call Project ASSIST at 625-1323 to request a complete list of workshop offerings and registration information.

#### SCANNING SERVICE NOW AVAILABLE

Academic Computing Services and Systems now offers a Kurzweil 4000 scanning service at 128B Lind Hall on the Minneapolis Campus. The scanner can read both typewritten and typeset material and convert it into ASCII code for computer processing. Inputs for text revisions, text storage, and text analyses are major applications. Contact Carol Winther at 625-9525 between 10:00 am and 12:00 noon for further information and scheduling.

#### CMS NOTES

##### CP Release 4

CP Release 4 was installed and made the current version in July. You may have noticed the change in the LOGON screen; you are now presented with the LOGON and LOGOFF command formats. There were very few other changes that are noticeable to users. The changes involved increased efficiency and system capability.

##### CMS Release 4

SPCS plans to make CMS Release 4 the current version in the near future. There is a HELP UM VMSP4 file listing the changes in the new release of CP, and information on Release 4 of CMS will be added when the product is released for testing. There will be a LOGON message when Release 4 CMS is ready for testing.

Some of the changes are listed below.

1. There are four new commands that affect the execution and storage of execs, they are: EXECDROP, EXECLOAD, EXECMAP, and EXECSTAT.

EXECLOAD -- loads an EXEC into storage and prepares the EXEC for execution.  
EXECDROP -- purges the specified EXEC from storage.  
EXECMAP -- lists the the storage-resident EXECs.  
EXECSTAT -- verifies the existence of an EXEC in storage and on disk.

2. The MACLIST command is provided to display (in a FILELIST format) all the members of a specified MACLIB, with the ability to edit and issue commands from the list.
3. XEDIT information lines appear in mixed case.
4. Changes to the HELP command allow new operands and options.

The changes to the HELP system are shown below.

- \* If you enter 'HELP' or 'HELP TASK', a new top-level HELP screen will appear. The screen is shown below.

```
====>
                                                    Macro-read 2 Files
==> HELP TASK <=====> HELP  INFORMATION <=====>line ==> 1 of 17

To use VM Help, move the cursor to any topic below,
then press the ENTER key or the PF1 key.

TASKS      - Helps if you don't know VM commands.
             Good choice for beginners.
MESSAGE    - Explains how to get help for VM messages.
HELP       - Explains some ways for using HELP.
MENUS      - Lists the HELP component MENUS.
COMMANDS   - Lists VM commands that you can use.
CMS        - Shows only CMS commands.
CP         - Shows only CP commands.
XEDIT     - Lists System Product Editor items.
REXX      - Helps you use the REXX language.
DEBUG     - Helps you debug programs.
SQLDS     - Shows SQL/Data System items.
* * * End of File * * *
1= Help    2= Top    3= Quit   4= Return    5= Clocate    6= ?
7= Backward 8= Forward 9= PFkey 10= Backward 1/2 11= Forward 1/2 12= Cursor
```

If you select the TASKS menu, you will be presented with a screen similar to the one below.

```
==> TASK TASK <=====> HELP  INFORMATION <=====>line ==> 1 of 16
Each VM task below leads to a more detailed
list of tasks for you to choose from.

Move the cursor to the task that you want.
Then press the ENTER key or the PF 1 key.

Create or change (edit) files
Manage files (copy, rename, erase, etc.)
Communicate with other users
Develop and debug programs and EXECs
Ask questions about the system
Customize your system
Print files
Use disks
Use tapes
* * * End of File * * *

1= Help    2= Top    3= Quit   4= Return    5= Clocate    6= ?
7= Backward 8= Forward 9= PFkey 10= Backward 1/2 11= Forward 1/2 12= Cursor
```

- \* You can now specify the HELP command with either the full message or the way as in the past, leaving out the module identifier.

For example, under CMS Release 4, you can enter:

help dms250s      or      help dmshlp250s

- \* You can request different types of help information to be displayed from the help file by using one of the following options: ALL, DESCRIPT, FORMAT, PARMS, NOTES, OPTIONS, ERRORS. ALL is the default.

The HELP command is documented and illustrated in the CMS User's Guide.

#### Documentation

There are new releases of the documentation to go along with the updates to the system. The following are among the revised documentation for the CMS operating system.

- o CMS User's Guide (Release 4)
- o CMS Command and Macro Reference (Release 4)

The manuals listed above are available for reference in 90 Coffey Hall and for sale in 50 Coffey hall.

#### SAS NOTES

##### SAS/GRAPH and the Zeta 887 Plotter

As mentioned in an earlier newsletter, SPCS has a Zeta 887 color graphics plotter available to SAS users. Request Documentation Note 9, "Using the Zeta 887 Plotter with SAS/GRAPH Version 5", for information on how to send your SAS/GRAPH output to the Zeta 887 plotter.

##### SAS/GRAPH Version 5 Manual

Note that the index in the current edition of the SAS/GRAPH Version 5 manual is incorrect. SPCS has corrected copies of the index. All SAS/GRAPH Version 5 manuals purchased from now on will contain a corrected index. If you have already purchased a Version 5 SAS/GRAPH manual from SPCS, you may stop in and pick up a corrected index at no charge. Or, you may contact the Publications Department at SAS Institute directly, (919) 467-8000 to request a corrected version.

##### PC SAS

SPCS began distributing two SAS microcomputer products in June: Base SAS and SAS/STAT. These products are now available to University of Minnesota faculty and staff. Use of these products is limited to academic studies and/or research and does not include any profit-making or commercial use.

Beginning this fall quarter, SPCS will offer a class in using PC SAS. See the SPCS short course schedule. If demand warrants, an additional class will be offered later in the quarter. Prerequisite to this class is the three day Introduction to SAS class or permission of the instructor. The Introduction to SAS class covers the SAS system in general with emphasis on the mainframe version of SAS at SPCS. The PC SAS class will cover some SAS topics specific to the PC version of SAS and assumes some knowledge of the SAS system.



## PC SAS Fixes

SAS Institute has notified all PC SAS sites of four problems in the PC SAS Base product. SAS Institute has provided us with fixes for these problems and we will be sending each PC SAS Base user three diskettes with the fixes and instructions for applying the fixes. If you do not receive the diskettes from us by mid-October, please call us.

The four problems as described by SAS Institute are:

1. BEST format. A problem may occur when using BEST4. or BEST5. formats with negative numeric values or with numeric values with negative exponents.
2. PROC TABULATE. If the procedure runs out of memory while generating tables, it may output incorrect row and column percentages.
3. PROC APPEND. Incorrect values are generated when appending data sets where the BASE data set contains numeric values shorter than the default width of 8.
4. ATAN function. When ATAN is called with -1 as an argument and a math co-processor is installed, the resulting value is +.78 rather than -.78.

## **NOMAD2 NOTES**

The NOMAD2 Collection has been installed and is available for testing. The Collection consists of new versions of the NOMAD2 Tools and educational/training databases. These are available via the GET command as future versions of N2TOOLS, N2DEMO and N2EDUCDB. There is also a brand new NOMAD2 HELP facility available via the GET command as N2HELP FUTURE. The HELP facility requires that future N2TOOLS also be accessed.

The following is a brief description of some of the new products available.

- o Three new tools have been added to N2TOOLS with the release of the NOMAD2 Collection: LISTER, BROWSE, and SPROMPT.

**LISTER** is a screen-oriented facility that helps you create your LIST request interactively, gives you the ability to save your LIST command as a procedure, and allows you to scroll the output. LISTER also allows you to query the database schema as you are creating your LIST command.

**BROWSE** is a facility for scrolling through NOMAD2 output. It provides a simple way to scroll LIST output, as well as external files or datasets.

**SPROMPT** is a full screen version of the PROMPT command, and allows you to input or modify data in the database using screens instead of line by line prompting.

- o All of the existing tools have been modified to use a number of consistent conventions and to increase efficiency.
- o The NOMAD2 HELP facility is a screen-driven application that provides online access to the NOMAD2 reference manual and other related documents.

Documentation for these changes is contained in the NOMAD2 COLLECTION Reference Manual. This manual can be purchased from SPCS in 50 Coffey Hall.

## ELECTRONIC MAIL NOTES

### BITNET

SPCS is a member of BITNET (Because It's Time NETWORK). BITNET includes more than 400 educational and research centers in the U.S. and world wide. It is directly connected to two networks: EARN and NETNORTH. EARN (European Academic Research Network) is a network of over 100 institutions in 18 countries. NETNORTH is the Canadian network linking over 20 academic and research sites.

The map below shows the linkages within the United States as of August 1986.



To see a list of the nodes, you may enter the following:

```
help bitnet nodes
```

To get a printed list of the nodes, you can SCRIPT the help file and direct the output to any available printer.

To access the 3262 printer in the user area, enter the 'IBMRROUTE PRINTER2 PRT' command before scripting the file.

An example of a sequence to get the printed output on the 3262 printer is shown below.

```
ibmroute printer2 prt
script nodes helpbitn (prof(ssprof) print
spool printer close
```

### The MAILER

Many users have inquired about sending mail or files to non-BITNET sites. To send files to non-BITNET sites, the file must be sent through a gateway. A GATEWAY is a specialized system which connects two dissimilar networks. Several gateways connect BITNET with other national and international networks. To send BITNET files through gateways, you must create a file with the information that you wish to transmit and ARPANET-style headers. In addition, to use some gateways, you must embed BSMTMP (Batch Simple Message Transfer Protocol) commands in your file so that it can be transmitted through the gateway. The MAIL command and the MAILER facility do this for you.

Below is a list of the most common networks.

<b>Network</b>	<b>Sample address</b>	<b>Description</b>
ARPA	userid at domain.ARPA	ARPANET is the Advanced Research Projects Agency - US DOD. There are some restrictions as to the use of this network.
BITNET	userid at nodeid	Because It's Time NETWORK.
CSNET	userid at domain.CSNET	CSNET is a network of Computer Science Research Departments.
UUCP	userid at nodeid.UUCP	UNIX based network.
MAILNET	userid at nodeid.MAILNET	MAILNET is a network of Educom InterUniversity Electronic Mail.

There are many other networks available. Ask the Help Desk consultant, if you have difficulty or questions in sending a file(s).

### Using Electronic Mail

To send electronic mail, you will have to know the electronic address of your correspondent. Electronic addresses are composed of the following parts:

**userid** The computer user's identification on their system. Userids at SPCS are 4 characters and may be numbers and/or letters. Our userids are all upper case. Other institutions may have very different types of userids, including mixed case (upper and/or lower case), or much longer character strings.

**nodeid** The identification of the computer site for the user you will correspond with. The NODEID for SPCS is UMINN1.

**domain** The upper level name recognized by MAILER. This is sometimes the network name or abbreviation (e.g.ARPA).

In the brief descriptions of the commands presented below, the electronic address of the user is represented by the word "name". The list below illustrates some examples of "names".

<u>Name</u>	<u>User</u>
userid	Another user at SPCS
userid at nodeid	A user at a node within BITNET
userid at nodeid.network	A user at a node not in BITNET, but in an associated network (e.g., ARPA or MAILNET).
nickname	A userid address that you have entered in your NAMES file

There are two types of electronic mail; files and messages. Files may be plain text or data files created with XEDIT or output from your program. Files are received by your correspondent in their virtual reader, if they are on a computer with the CMS operating system or in some form of mail area, if they are on a different system. These files are sent and received even if the correspondent is not logged on when you send them. Messages are short (usually one line communications) that will only be received if your correspondent is logged on at the time that you send the message. Messages may be sent with the TELL command.

#### Sending Files:

Files may be sent and received or read in many ways. Among the commands for sending and receiving files, are PROFS, MAIL, NOTE, SENDFILE, and RDRLIST. These commands are briefly described below.

#### o PROFS

The Professional Office Facility System (PROFS) provides scheduling facilities as well as electronic mail service (SPCS authorization is required for schedule processing). You may send and receive mail through PROFS to any BITNET site. The program is nearly 100 percent PF key driven and therefore is very easy to use.

Special groups of users have direct links to the PROFS software. If you do not have a direct link, you may issue the command

```
get profs
```

Then, to start the PROFS program, type in

```
profs
```

You will be presented with a screen from which you may:

- \* get help
- \* process schedules
- \* open mail
- \* process mail and messages
- \* add an automatic reminder (to be displayed on any day at any time during a PROFS session).

Documentation about PROFS is available in 50 Coffey Hall in the following manuals.

Introducing the Professional Office System  
Price: \$6.80  
An overview of the PROFS system.

## Getting Started with the Professional Office System

Price: \$13.50

Self instructional lessons to get you acquainted with PROFS and to help you get comfortable with the full screen terminal keyboard.

## Using the Professional Office System

Price: \$28.00

Step-by-step instructions for running PROFS tasks on a full screen terminal.

### o MAIL and MAILBOOK utilities

MIT MAIL (the MAIL program available at SPCS) functions as an interface between the user and BITNET and other networks. It provides an alternate way to send and receive mail. As was pointed out above, MAIL may be the only utility that can send electronic mail to some non-BITNET sites.

#### To send MAIL:

1. Type in "mail name" to start the creation of a mail item.
2. You will be prompted for the name of the person you are sending the communication to and the subject of the note.
3. You will then be brought into XEDIT (the CMS full screen editor). There are PF keys to add and delete lines, send the note or quit, to get help on MAIL, and to move around within the file. You may use many XEDIT commands from the command line, such as GET to bring in the contents of another file.
4. Once you have finished entering the text of your note, press the appropriate PF key to send it.

#### To Read MAIL:

1. Type "mail (menu)" to get a menu of the mail items in your virtual reader.
2. You will be brought into a menu of mail items in your virtual reader if you have any mail items. Move the cursor to the file on the screen that you wish to read and type an "r" in the prefix area (====) on the left of the list of files, then press PF2. You will be brought into read mode in that file.
3. Once you are reading the file, you may use PF keys to scroll through the file. You may log the file or cause it to be moved from the virtual reader to a file on CMS minidisk. By default, mail items are received into the file named ALL NOTEBOOK.

You may also reply or forward the item, delete the item, or quit the program.

You can manage the items received or logged into your NOTEBOOK files with the MAILBOOK command. To enter MAILBOOK, just type in

```
mailbook
```

You will be brought into a FILELIST of all of your NOTEBOOK files. Move your cursor to the NOTEBOOK file that you wish to process and press PF10. You will be brought into a list of the mail items in that notebook. From MAILBOOK, you may read, reply to, or forward entries, print or delete entries or get help.

For more information on the MAIL and MAILBOOK commands, you can get on line help with the following commands:

```
help mail
help mailbook
help mailbook menu
```

The following documentation is also available.

Introduction to MAILER (Documentation Note 15) free

MAILER Reference Guide

o CMS NOTE, SENDFILE, and RDRLIST

The NOTE command allows users to send a correspondence type file to another computer user at SPCS or at another BITNET site. To begin preparation of a note, enter the following command:

```
note name
```

You will be brought into a full screen XEDIT screen. To begin entering the text of your note, type the INPUT command on the command line and press ENTER. To return to XEDIT mode press ENTER twice. You can move around in the file, send the note, get help, add blank lines, or enter power input by using PF keys.

The file will be sent to the virtual reader of the user you indicated.

By default, the text of your note will be added to the ALL NOTEBOOK file, and a record added to the file named YOUR-USERID NETLOG.

The SENDFILE command may be used to send files to other computer users at SPCS or to users at other BITNET sites.

You may enter a full screen SENDFILE session by entering just the command.

```
sendfile
```

You may also type a one line command in the form below.

```
sendfile filename filetype filemode to name
```

The file will be sent to the virtual reader of the user you indicated.

A record indicating that you sent the file will also be added to the file YOUR-USERID NETLOG.

You may use the RDRLIST command to see a list of the files in your virtual reader. Type in:

```
rdrlist
```

You will be brought into the full screen RDRLIST program. There are PF keys available to get help, to peek at your reader files, to sort the list in different order, to move the file from your virtual reader onto CMS minidisk, and to move through the list (if it occupies more than one screen).

More information on using the CMS commands NOTE, SENDFILE, and RDRLIST can be found in the following documentation:

Beginner's Guide to CMS - Full Screen  
CMS Primer - Full Screen  
CMS User's Guide  
CMS Command and Macro Reference  
BITNET Announcement and User Guide (Documentation Note 18)

#### Sending Messages:

To send messages to other computer users at SPCS or at other BITNET sites, you may use the TELL command.

The format of the TELL command is as follows:

```
tell name text of the message (up to 130 characters)
```

The message will be received only if the user that you are sending it to is logged on. If the user is not logged on, the message is lost.

#### MICRO NOTES

##### PC Mainframe Look Alikes

There are two microcomputer products available from Mansfield Software Group that many of our IBM PC users might find useful: KEDIT and Personal REXX.

KEDIT is a full screen text editor for the IBM PC, IBM PC/XT and IBM PC/AT whose commands are very similar to XEDIT under CMS. Requirements for KEDIT include 1 diskette drive, PC DOS 2.0 or later, an 80 column monitor, and at least 192K of memory.

With KEDIT, you can tailor your editing screen to look like the SPCS XEDIT screen. Three commands can be put in your PROFILE.KED to do this:

```
PREFIX ON RI  
CURLINE ON 3  
CMDL TOP
```

The other product, Personal REXX, might be of use to those who write REXX EXECs on the SPCS computer. REXX (Restructured Extended Executor) is a high-level programming language with structured programming instructions like IF, SELECT, DO WHILE, and LEAVE. REXX also has a number of useful built-in functions.

Both of these products come with complete documentation. For further information contact:

Mansfield Software Group  
P.O. Box 532  
Storrs, CT 06268

## Macintosh Cables

The Microcomputer Systems Group announced in their August Newsletter that there is a Mac-DOB Cable upgrade available. Some SPCS users were unable to dial in to the IBM mainframe with the old cables.

## KERMIT

The Micro Help Lab announced in their August Newsletter that they will distribute KERMIT for the IBM PC. See that article for information on that package. KERMIT can be used to connect to the SPCS IBM mainframe and to upload and download files.

## **C O M M U N I C A T I O N S**

### Old Phone Number to be Deactivated

All dial-in users should now be using the new phone number (624-4220). The new phone number brings the user in to SPCS through the 7171 communications controller. There are significant changes in the method of connecting to SPCS's IBM 4381 when coming in through the 7171.

The old phone number will be deactivated in the near future.

Users who have hard copy terminals or who have not been able to dial in to the new phone number successfully should call the Help Desk (between the hours of 10 am - 12 noon, and 1 pm - 4 pm), describe their terminal (manufacturer and model), and leave their name and a phone number.

Documentation is available in 90 Coffey Hall with instructions for dialing in to SPCS using the IBM 3101 terminal, the IBM 3101 Emulation software package, and the DEC VT100 terminal (see Documentation Notes 11, 12, and 13 respectively). If you need information about dialing in from another type of terminal, inquire at the help desk, 90 Coffey Hall.

### IBM PC Communications

SPCS is distributing YTERM, a package of system services and terminal emulation software for the IBM PC. See the June 1986 SPCS Newsletter for more information on YTERM and its distribution or call the SPCS main office at 624-7788.

### Macintosh Communications

SPCS plans to distribute a terminal emulation product, named TINCAN, which provides terminal emulation and file transfer capabilities for the Macintosh personal computer. TINCAN was developed at Yale University and is quite similar in function to the YTERM product for the IBM PC. SPCS has elected to wait to obtain a distribution license until the next version of TINCAN is available. Yale has indicated that the new version will be available by early next year. Users wishing to obtain the current version of TINCAN may obtain an application form from the SPCS main office, 50 Coffey Hall, and order it directly from Yale. The price is \$50.00 for version 1.01.

SPCS hopes to begin distribution of TINCAN during the Winter Quarter at a reduced cost (similar to YTERM).

Many users have reported success in accessing SPCS with Macintoshes running MacTerminal. There is a draft document, Using MacTerminal to Connect to the SPCS Computer, available from the Help Desk.



## Dial-in Problems

Due to an autobaud problem, users may experience difficulties in uploading and downloading files and in using the TPRINT command from YTERM on personal computers connected through non-ITE phones. The Telecommunications Services Department is attempting to resolve this problem.

## YTERM NOTES

### Screen Saver Programs Present Possible Problems

A Screen Saver program is a program that is designed to turn off the display to the CRT screen after a specified time of inactivity and to turn it back on when activity resumes. Some YTERM users have reported a problem when using YTERM while a Screen Saver program is running on their PC. In competing for control of the terminal, the Screen Saver programs have caused a DISCONNECT to occur while the users have been in their mainframe session. You should be aware of this and either not execute the Screen Saver or find a Screen Saver that is compatible with YTERM.

### Linedel character in PCTTRANS

If during a YTERM session you wish to upload or download a file that requires specification of a path for the file identification, you must first issue the following command from the mainframe:

```
terminal linedel off
```

You may then proceed with your PCTTRANS command. An example of a possible download sequence follows:

```
terminal linedel off
```

```
pctrans down c:xxxx\yyy\zzzz.abc test data a
```

## DATA ENTRY SERVICES

The Data Entry Section of St. Paul Computing Services is open from 8:00 to 4:30, Monday through Friday, in Room 6 North Hall.

Services include:

1. Punching and verifying data from most types of source documents (i.e., coding sheets, questionnaires, etc.). If needed, 80-column coding sheets may be obtained from the Data Entry Section.
2. Providing assistance in preparation of source documents for acquiring the most efficient data entry.
3. Conversion of tape to cards or cards to tape (depending upon card condition).
4. Hard copy available from tape or cards (depending upon card condition).

Jobs are done on a first-come, first-serve basis. Turnaround time may vary with the workload. Output is available on cards or on 800/1600/6250 bpi tapes, which will run on an IBM, CYBER, or other mainframe computers. Unless special arrangements have been made to purchase tapes, tapes are to be returned to the Data Entry Section as soon as you are finished with them.

For information about current turnaround time, cost estimates or other questions, contact Linda Pichner or Cleo Medlock at 624-7297. Account numbers for services may be obtained at 50 Coffey Hall or by calling Diane Suski at 624-7788.

**ST. PAUL CAMPUS MICROCOMPUTER LABORATORY**

Location: B50 St. Paul Library      Equipment:  
 Phone: 624-3269      14 IBM-PC's      2 Apple IIE's      4 Macintosh PC's

Regular Hours:  
 8:00 A.M. - 8:00 P.M. Mon. - Thur.      2 Disk Drives      2 Disk Drives      2 Disk Drives  
 8:00 A.M. - 4:30 P.M. Fri.      8-256K Memory      128k Memory      512k Memory  
 12:00 P.M. - 4:30 P.M. Sat.      1-320K Memory      Appleworks      Basic (Demo only)  
    MouseWrite      MacPaint  
    3-640K Memory      MacWrite

Access cards: \$20.00/Quarter      Wordstar      Chart  
    Lotus 1-2-3      Multiplan  
 This card will permit access to 7      dBase III      MS Basic  
 microlabs on the Twin Cities Cam-      Minitab      File  
 puses (see below). This will      Word Perfect      Word  
 increase availability of      Turbo Pascal      MacPascal  
 hardware/software and some consult-      w/8087 sup.      MacSpell Plus  
 ing services.      DESQView      MacTerminal  
    Sidekick

Printer Access Cards: \$1  
 This card will permit you to print      5 Epson FX-80 printers (attached to IBM)  
 your files on letter quality laser      4 Imagewriter printers (attached to Apple II  
 printers at \$ .10 per page.      and Macintoshes)  
    1 HP Laserjet+ (printer - attached to IBM)  
 You may obtain access and printer      1 Color Display station  
 cards from the Bursars' Offices.      512K IBM with color and monochrome displays  
    1 Mouse for Apple IIE  
    1 Apple LaserWriter Plus (attached to Macintosh)

At the St. Paul Library Lab, attendants will be present to sign out the software and manuals that are available for use in the lab. Instructors may arrange to have assignment materials distributed via the lab attendants. The lab may be reserved by class instructors for two or three class periods during a Quarter. To reserve the lab, or if you have questions, call Karen Bellows at 624-7788.

The micro lab is operated on a first-come, first-serve basis.

<u>Micro-Lab</u>	<u>Location</u>	<u>Phone</u>
St. Paul	B22 COB	
West Bank	170 Anderson Hall	624-6526
Minneapolis	14 Folwell Hall	625-4896
	148 Architecture	624-5708
	306C Lind Hall	625-9032
	9 Walter Library	626-1899

**MICRO HELP LINE**

ACSS Microcomputer Systems Group  
 626-4276 (dial MA MICRO)      9:00-12:00, 1:30-4:00      Monday, Tuesday, Friday  
    9:00- 4:00      Wednesday, Thursday  
 125 Shepherd Labs

## STATISTICAL CLINIC

The Statistical Clinic, on the St. Paul Campus, is staffed by graduate students of the School of Statistics, and supervised by faculty members of the Applied Statistics Department. The Statistical Clinic provides statistical consulting to researchers at the University of Minnesota, generally without charge. Assistance on appropriate experimental designs and methods, data analysis, and the interpretation of results are part of the mission of the Clinic.

Many statistical problems can be handled completely by the personnel in the Clinic. However, more difficult problems will be referred to an Applied Statistics faculty member.

The consulting hours of the Statistical Clinic for the Fall, are

### Hours

Monday, Wednesday, Friday	9:00-4:00	Room: 125G COB
Tuesday, Thursday	9:00-3:00	Phone: 625-3121

## REDUCED RATES FOR OFF-HOUR USERS

Computer processing performed after 5:00 pm daily (Monday thru Friday) and all day Saturday and Sunday receives a 25% reduction on 3 billable components: Central Processor Time, High Speed Input/Output (disk and tape), and Connect Time.

## ACCESS TO FACILITIES

### ST PAUL COMPUTING SERVICES

SPCS hours, locations and telephone numbers:

Main Office	: 50 Coffey Hall	624-7788	8:00 am - 4:30 pm
Users Room and	: 90 Coffey Hall		7:00 am - 11:00 pm M-F,
Computer Hours (1):	: 90 Coffey Hall		8:00 am - 4:00 pm Sat, and
	: 90 Coffey Hall		2:30 pm - 10:00 pm Sun
Help Desk	: 90 Coffey Hall	624-6235	10:00 am - 12:00 pm M-F
			1:00 pm - 4:00 pm M-Th
			1:00 pm - 3:00 pm F
Data Entry	: 6 North Hall	624-7297	8:00 am - 4:30 pm
Interactive Dialup Number:		624-4220	

- (1) After hours, Saturday, and Sunday access to the Center may be achieved by using the tunnel passageway from the Student Center.
- (2) The DOS operating system will be shut down at 10:00 pm M-F.

### MERITSS SYSTEM CONNECTION TO SPCS

Users can gain access to the IBM 4381 computer system at SPCS through the MERITSS System (Interactive Instructional Labs). There are now six ports dedicated to this type of communications traffic. Those wishing to access SPCS in this way can obtain the handout named "Connecting a Terminal Through MERITSS to SPCS" from our Main Office or from 90 Coffey Hall.

CLASSROOM OFFICE BUILDING INTERACTIVE INSTRUCTIONAL LAB HOURS

	Lab Hours	Lab Attendant On Duty
Monday - Friday	8:00 am - 10:00 pm	6:00 pm - 10:00 pm
Saturday	9:00 am - 1:00 pm	9:00 am - 1:00 pm
CLOSED Sundays		

Should you be the last person out of the Lab during the hours shown above, please leave the doors unlocked (SPCS personnel are responsible for locking doors at the designated times). Thank you.

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The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age or veteran status.

St. Paul Computing Services  
50 Coffey Hall  
University of Minnesota  
1420 Eckles Ave.  
St. Paul, MN 55108

ST. PAUL COMPUTING SERVICES  
50 COFFEY HALL  
UNIVERSITY OF MINNESOTA  
ST. PAUL, MN 55108