

HOW TO USE



ELECTRONIC INFORMATION EXCHANGE SYSTEM

by
Murray Turoff
Trudy & Peter Johnson-Lenz
and
numerous contributors and critics

September, 1977

Research Report Number 7

Computerized Conferencing and Communications Center at

New Jersey Institute of Technology

323 High St.
Newark, N.J. 07102
201-645-5503

This work is sponsored from grant NSF-DSI75-06783 of the Division of Science Information of the National Science Foundation. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the National Science Foundation.

TABLE OF CONTENTS

INTRODUCTION	1
USING YOUR TERMINAL	2
setting the proper switches . . . . .	.2
special keys . . . . .	.2
review of terminal switches . . . . .	.2
TELENET	3
access to TELENET service	3
special terminal codes . . . . .	.3
CONNECTING TO EIES	3
attaching the phone to the terminal . . . . .	.3
calling TELENET . . . . .	.4
connecting to EIES . . . . .	.4
if connection cannot be made . . . . .	.4
GETTING INTO EIES	5
name, nickname, and membership number . . . . .	.5
access code . . . . .	.5
use of ? and ?? . . . . .	.5
line and character delete . . . . .	.5
EIES log in information . . . . .	.6
listing those on-line . . . . .	.6
communications waiting . . . . .	.6
confirmations . . . . .	.6
private messages . . . . .	.6
group messages . . . . .	.6
accepting communications . . . . .	.7
interrupting a long printout . . . . .	.7
if you are using a CRT terminal . . . . .	.7
USER'S GUIDE FOR ELECTRONIC INFORMATION EXCHANGE SYSTEM	8
SENDING MESSAGES	10
membership privileges . . . . .	.10
menus . . . . .	.10
INITIAL CHOICE? menu . . . . .	.10
access to messages . . . . .	.11
sending messages . . . . .	.11
using your scratchpad . . . . .	.11
scratchpad limitations . . . . .	.12
erasing your scratchpad . . . . .	.12
composing your first message . . . . .	.12
sending your first message . . . . .	.12
associated messages . . . . .	.13
keys . . . . .	.13
message sent . . . . .	.14
review of sending messages . . . . .	.15
MESSAGE SENDING SHORTCUTS	16
short mode (no menus)	16
answering ahead to get into the scratchpad	16
answering ahead to send messages	17
potential dangers in answering ahead	17
deleting messages	17
use of +CNM and +CM	18
automatic message delivery	18
use of +, ++, -, and --	18
logging off EIES	19
use of ?, ??, and ???	19

TEXT EDITING . . . . .	.20
backspacing	20
deleting whole lines	20
special text editing characters	20
use of =	21
replacement editing	21
image editing	22
use of *	22
inserting a line	22
printing out a line	22
printing the text with line numbers	23
printing the text without line numbers	23
overflowing the line.	23
further information	24
THE EIES DIRECTORY . . . . .	.25
purpose of the directory	25
public and private information	25
filling out your directory information	25
full name	26
nickname	26
telephone	26
zipcode	26
address	26
description	26
access code	27
pen name	27
use of +, -, and ^	27
FINDING OTHERS IN THE DIRECTORY . . . . .	.28
searching by name parts	28
searching by from-to-date	28
searching by word/phrase	29
searching by zipcode	29
accessing the directory information for a specified member	29
listing the names and numbers of a specified set of members	30
PARTICIPATING IN CONFERENCES . . . . .	.31
group conferences	31
private conferences	31
public conferences	31
description of public conferences	31
accessing conferences	32
conference status	32
answering ahead to get into a conference	32
use of +GC #	32
getting items in public conferences	33
interrupting a long printout.	33
adding items to a conference	33
associations and keys	34
signing an item	34
answering ahead to compose an item	34
use of +CNC	34
editing or deleting items	35
moving your conference marker.	35

GETTING PRINTOUTS. . . . .	.36
getting printouts of messages	36
answering ahead to get message printouts.	36
getting printouts of conference comments	37
answering ahead to get conference comment printouts	37
SHORTCUTS FOR GETTING PRINTOUTS. . . . .	.38
use of +GET	38
text item identifying abbreviations	38
SPECIAL ROLES ON EIES. . . . .	.39
group coordinator	39
conference moderator	39
bulletin editor	39
operations manager	39
console operator	39
user consultants	39
system monitor	40
center director	40
evaluator	40
ETIQUETTE AND HINTS FOR USING THIS NEW COMMUNICATIONS FORM . . . . .	.41
informality	41
need for explicit responses	41
maintaining the privacy of private messages	41
recognizing authorship	42
conference comments vs. messages	42
preventing information overload	42
new sources of embarrassment and how to avoid them	43
EIES TERMINOLOGY AND JARGON . . . . .	.44
EIES CHECKLIST . . . . .	.46
if your terminal doesn't work	46
to start	46
to finish	46
ADVANCED FEATURES . . . . .	.48
commands (Chinese command menu and sample commands)	48
addressing or specifying text items	48
reminders (RM).	48
scratchpad (SP) & storage areas (SA).	48
document edit and control commands.	49
adaptive text features	49
string variables (SV) and numeric variables (NV).	49
ADVANCED FEATURES GUIDE . . . . .	.50
SELECTED REFERENCES . . . . .	.52

WHILE THIS USER MANUAL IS FIFTY PLUS PAGES, THE FIRST NINETEEN WILL PROVIDE ENOUGH INFORMATION FOR SOMEONE TO GET STARTED AND LEARN MORE BY EXPERIMENTATION.

INTRODUCTION

This booklet is an introduction to the use of EIES, Electronic Information Exchange System. EIES (pronounced "eyes") is a very powerful computerized system that allows you to communicate with others on the system in a number of different ways. The intent of this booklet is to teach you the simpler parts of the system and to make you comfortable with using the one-page User's Guide For Electronic Information Exchange System. Later on, as you gain more experience with EIES, you may want to learn some of the more advanced features and tricks. EIES has been designed so that you have to learn only what you need.

It's just about impossible to learn how to use a computer system from a booklet without some direct experience with the machine itself. So, don't be discouraged if some of the parts of this booklet seem confusing or hard to understand at first reading. The best way to learn about EIES is to use the instructions in this booklet and try them yourself to see what happens. EIES has been designed to be "forgiving"; that is, if you make a mistake, nothing serious happens. You can't hurt the system, so don't be shy about trying new things.

After reading through this booklet, plan to spend thirty minutes to an hour practicing logging on and learning to send messages. Try to find a time when you will be uninterrupted, if possible. After this beginning practice session, and with the help of this booklet, you should know enough to begin "messaging" other people and participating in any conference to which you belong.

This booklet contains sections on:

- using your terminal
- TELENET
- getting into EIES
- sending messages
- message sending shortcuts
- text editing
- the EIES directory
- finding others in the directory
- participating in conferences
- getting printouts
- shortcuts for getting printouts
- special roles on EIES
- etiquette and hints for using this new communications form
- EIES terminology and jargon
- EIES checklist
- advanced features
- selected references

If all you want to do is learn how to get into EIES and send a message, read only the first four sections. Save the rest for later. Read what you need.

USING YOUR TERMINAL

There are many different brands of computer terminals. Each one has a slightly different set of buttons, switches, and keys, in addition to the standard typewriter keyboard. Examine your terminal to find the buttons or switches that control the functions described below. If there are people around who have used your terminal before, perhaps you can get some help from them. If you can't figure it out and you can't get help, call us at (201) 645-5503.

Power on: Make sure your terminal is plugged in, and then look for the power on/off switch.

Mode: There may be one or two mode switches. One switch controls what is called HALF and FULL duplex. It's not important to know what that means. To use EIES, set the duplex switch to HALF (or HD). The other mode switch you may have controls whether you are using the terminal without being connected to the computer (LOCAL) or with being connected (ON LINE). Set that switch to ON LINE (or REMOTE).

Speed: To use EIES, the speed switch should be set to 30 characters per second. This is the same as 300 baud, or high speed on a terminal with a high speed/low speed switch.

Keyboard mode: There may be a switch that sets the keyboard for upper case use only (TTY, which means teletype compatible), or upper and lower case. You would probably prefer to use upper and lower case letters, but all upper case (TTY) is also allowed on EIES. Upper and lower case may also be indicated by STD or ASCII on some terminals.

Parity: There may be a parity switch on your terminal. EIES pays no attention to the parity, so if there is an OFF position for parity or parity error reset, then set it to OFF or NONE.

Depending on the keyboard mode available to you (above), there may be some difference in whether you have to use the shift key or not for various special characters, such as +, *, #, =, -, :, ;, ^, <, >, (,), /, &. To test this, temporarily set your terminal to LOCAL (or turn off the ON LINE switch) and experiment.

On your terminal, there are several special keys you should identify. CARRIAGE RETURN (variously called CR or RETURN as well) is used when you have finished entering a line of information and want to transmit it to the computer. In this booklet, (CR) means press the return key. The BREAK key (also called ATTN/BREAK or BK) is used when you want to stop something that is happening and start over. The CONTROL key (CTRL) is used in combination with some other key for certain special non-printing characters. Its use will be described later as you need it.

In using the terminal, be sure you distinguish between the 0 (zero) and a capital O (letter o), as well as between 1 (one) and a lower case L. Also,

the minus sign (-) and the underscore (_) are different. If they appear on the same key, be careful.

To review: make sure your terminal is plugged in, the power is ON, it is set to HALF duplex and ON LINE, the speed is 30 characters per second (or 300 baud), it is set to upper and lower case (STD or ASCII), and the parity is OFF. Now you are ready to call up the computer.

TELENET

Rather than using long distance telephone lines to connect you with the EIES computer in Newark, New Jersey, EIES uses a less expensive high-speed communications system called TELENET. TELENET is specifically designed to carry digital data very efficiently, since it collects "packets" of information at each locality and sends them to the appropriate address by the quickest available route. From your point of view, it will seem that your communication to the computer and its communication back to you takes place very quickly -- within a few seconds.

TELENET offers its services through local telephone numbers in many cities in the United States, in major Canadian cities, and in some foreign countries. Look at the TELENET DIAL-IN ACCESS NUMBERS guide in your notebook. Find the TELENET telephone number closest to your location. If it will cost you more than \$15 per hour to call the nearest TELENET number, you should contact TELENET and make arrangements to subscribe to their INWATS or 800 number that may be called from anywhere within the United States. Telephone numbers for TELENET sales offices are included on the guide.

Now look at the yellow brochure called HOW TO USE TELENET: INFORMATION FOR TERMINAL USERS. Look at the list of Terminal Mode Identifiers to see if you need to use a special code to identify your terminal. If your brand of terminal isn't on the list, you probably don't need a special code. For future reference, write down the appropriate TELENET telephone number and terminal code, if any, on your User Access Information for EIES form, which you will find in your red notebook.

CONNECTING TO EIES

Check to see that all the switches are properly set on your terminal. Now dial the appropriate TELENET number. TELENET will answer with a high-pitched continuous tone or whistle. Place the receiver of the telephone securely in the cups on the back, side, or top of the terminal (or on the box that comes with the terminal called the acoustic coupler). There should be an indication of which hole or cup to use for the cord end of the receiver. Depending on what kind of terminal you have, a small light called the carrier may light up on the acoustic coupler attached to your terminal, or the on-line or signal light may light up on your terminal. This indicates that you have a good connection to TELENET. If it doesn't light up, you may need to dial the telephone number again, after making sure the receiver fits snugly in the cups.

If you are using a Dataphone, you will not need an acoustic coupler. After calling the appropriate TELENET number and listening for the high-pitched whistle, simply press the "data" button on your Dataphone to connect to TELENET.

Now press the carriage return key, a semi-colon, and the carriage return again. In this booklet, (CR) means press the carriage return key:

(CR);(CR)

TELENET should then identify itself. If you are using an IBM terminal or a non-standard ASCII (American Standard Code II) terminal, check the TELENET guide for a different procedure to use instead of the (CR);(CR).

TELENET will next ask for any special terminal code by typing:

TERMINAL=

If your terminal is indicated by a special code in the TELENET GUIDE, type it in. Otherwise, you may just enter a carriage return. A (CR) tells TELENET that you have a standard printing terminal that operates at 30 characters per second.

Next, TELENET will respond with an "at" sign (@), waiting for you to indicate where you want to be connected. Enter the letter C (for Connect), a space, and the EIES access number on the TELENET system, 201 25CC:

@C 201 25CC

You will also find the EIES access number on your User Access Information for EIES form in the red notebook.

If all goes well, you will receive a message that you are connected to the EIES access number, and from this point on, you will be interacting with EIES, as described in the next section.

201 25CC CONNECTED

However, you may get one of these messages instead:

- 1) a message that EIES is not available and why; in this case, try again at the time indicated
- 2) a message from TELENET saying the EIES address is NOT RESPONDING, which means that we have "gone down" (the system is not operating) for a few minutes or for scheduled maintenance. We usually inform users a week in advance of scheduled maintenance times, but if you are new to the system or if you haven't used it for a week or more, you may not know that we planned to be down.
- 3) a message from TELENET that the EIES address is BUSY, which means that all our lines are in use. This should occur only rarely. From time to time, a group may have scheduled a simultaneous conference on EIES which will tie up all the lines, but you should receive advance notice of these occasions.

If you have trouble connecting to EIES, call us at (201) 645-5503. If you are having trouble with TELENET (for example, their local phone number doesn't answer), you may call them collect at the TELENET Customer Service number listed on the TELENET brochure.

GETTING INTO EIES

After TELENET tells you that you are connected to the EIES address (last section), you will get the following message from EIES:

```
WELCOME  
NAME OR #?
```

The computer then waits for you to enter either your name or your three-digit membership number exactly as shown on your User Access Information form, even if it is misspelled on the form. Be sure to press the (CR) key to transmit your name or number to the computer. This booklet discusses how to correct or change your name and other directory information in a later section.

Each EIES user has three unique identifiers: a name, a nickname, and a membership number assigned by EIES. You may change your name and nickname at any time, as described in the directory section below. When names are printed out at the top of messages or conference comments, they are in the form:

```
NAME (NICKNAME,###)
```

Next, the computer will ask for your access code or password. The computer will type the word CODE, followed by a series of overstruck characters so you can type in your access code without anyone else being able to read it. This protects your access to EIES. Enter the access code exactly as it appears on your User Access Information form, without any spaces. Later, you should also change your access code so that only you and the computer know what it is.

```
CODE?XXXXXXXXXX
```

If you have any trouble entering your name or number and access code, try again. If you make a mistake in entering the name or number, you may enter a plus (+) when the computer asks for your code to start over again with NAME OR #?. If you've tried several times without success and can't figure out what is wrong, call us for help.

If you are unsure about what to do when the system asks you a question, you may enter a single question mark (?) to get a one-line explanation of what response is appropriate. If you need a longer explanation, enter a double question mark (??).

In entering an answer or any other material you may choose to delete the last character typed by holding down the CONTROL key (CTRL) and hitting the H key. To delete the whole line and then retype it hold down the CONTROL key (CTRL) and hit the X key.

If you are successful at logging in, the system will answer with:

NJIT ELECTRONIC INFORMATION EXCHANGE SYSTEM
YOUR NAME (NICKNAME,###) ON AT 10/ 1/77 9:30 AM ON LINE 10
LAST ACTIVE: 9/27/77 9:22 PM

This will be followed by any special messages of general interest that the SYSTEM MONITOR (EIES,100) wants all users to see. The system will tell you when you were last active, or if you are a new user, when you were established as a member. This information is a useful check to see if anyone else has been using your number and access code to use EIES unbeknownst to you. If you have already seen the messages from the SYSTEM MONITOR, you may interrupt them by pressing the BREAK key on your terminal. If you have a terminal on which the BREAK key lights up when pressed and stays lit, you need to turn it off by depressing the key again.

Next the system will ask:

LIST THOSE NOW ON-LINE (Y/N)?

If you enter a Y, YES, or simply press (CR), the system will tell you who else is currently on-line and what time he or she logged in. Any time you are asked a yes/no question in EIES, you may enter a carriage return to indicate a yes answer. For more about (CR), see "Answer and Help Aids" on the back of the one-page User's Guide.

Incidentally, you may also find out who is on-line at any point in using EIES by typing in +ON when the system asks you a question, such as INITIAL CHOICE?, MESSAGE CHOICE?, OR CONFERENCE CHOICE?:

MESSAGE CHOICE?+ON

(the system then lists those on-line)

The +ON command also appears under "Answer and Help Aids" on the back of the one-page User's Guide.

Next the system tells you if any communications are waiting for you:

WAITING:

3 CONFIRMATIONS
4 PRIVATE MESSAGES
1 GROUP MESSAGE

A confirmation is a one-line message indicating that a message you had sent earlier to an individual has been received. It shows the message number, the receiver's name and number, and the date and time the message was received. A private message is one that has been sent to you (and perhaps others) named explicitly as a recipient. A group message is one sent to an entire group of people named only by group name or number.

Your User Access Information form will indicate the numbers of all the groups to which you belong on EIES. You must be invited to join groups on EIES; you may not simply join at will. (Group numbers are always two-digit numbers. Membership numbers are always three-digit numbers.)

If there are communications waiting for you, the system will ask:

ACCEPT ABOVE COMMUNICATIONS (Y/N/#)?

You may answer yes, no, or with the number of communications that you wish to receive. The confirmations are delivered first, then the private messages, and finally the group messages. Sometimes you may want to get directly to some other activity on EIES and you may not want to get any new messages that are waiting for you. Then you would answer NO or N. Sometimes you may want only some of the communications delivered to you, so you would answer with the number you want to receive. Once again, you may enter a (CR) to indicate a YES answer.

You may interrupt a long printout by pressing the BREAK key while the terminal is printing. The system will pause and then print <BREAK>. The system will then ask for the appropriate menu choice, such as INITIAL CHOICE?. (Menus are explained in the next section).

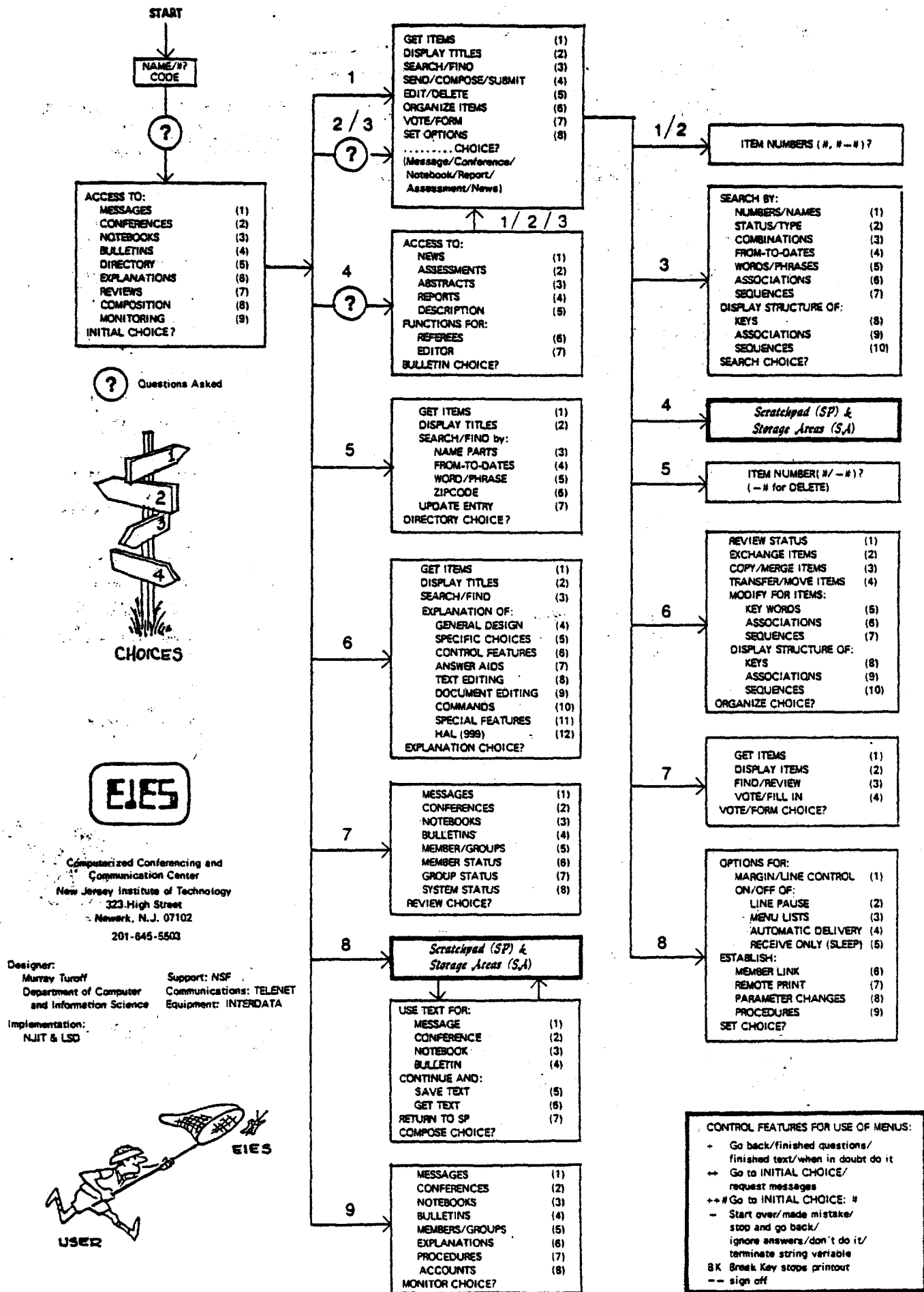
If you are using a CRT (video display) terminal, you will probably want to instruct the computer to pause after a given number of lines so you will have a chance to read the text before it moves up and off the screen. To do this, use the +SLP # command (for Set Line Pause at the given # of lines). If you enter just +SLP, the computer will pause every 23 lines. To have it pause, say, every 11 lines, enter:

+SLP 12

To return to normal, enter +SNLP (for Set No Line Pause).

If you are a new user, there will probably be a message waiting for you from the OPERATIONS MANAGER, welcoming you to EIES and also probably suggesting that you try to send a private message to him or her so that the EIES staff will know that you have begun successful use of the system. Instructions for sending a message appear in the next section.

USER'S GUIDE FOR ELECTRONIC INFORMATION EXCHANGE SYSTEM



ANSWER AND HELP AIDS

Interaction Aids:

or Carriage Return used to end input line/lists menu/
Assumes YES answer/ Makes no change in what is there already

CTRL and X Line Delete (Cancel current line/Start over)

CTRL and H Character Delete (May also be: backarrow/underscore/backspace/terminal dependent)

? short explanation provide

?# Explains CHOICE: #

?? detailed explanation

To get Human help:

??? message Send one line 'message' to console operator

??? #, message Send to Member #

+ON Tells who is on now

+LINK # Request terminal Link to member #

+CNM Compose New Message

When all else fails phone 201-645-5503

Questions may be answered ahead utilizing:

• separate answers

• end multiple answers to one question

• let this question be asked (-...Y)

• equivalent carriage return

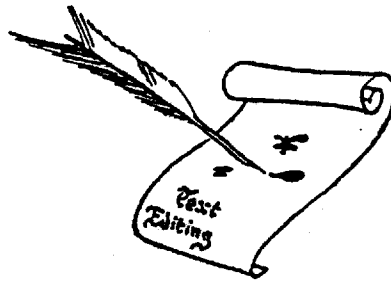
• answer ACCEPT question YES

Line and Item Number Aids:

- # range of item or line numbers

#, # - #, # any combination from # until end from first till #

- all lines or items



TEXT COMPOSE/EDIT COMMANDS

Used in Scratchpad (SP) starting with first character of line.
(# indicates line numbers/range)

+ text complete/finished

=# go to line #

= go to end of text

:# print lines indicated

:- print all lines as typed

:: print all lines after editing

::# do for lines #

:/word/ print first line with 'word'

:/word/a print all lines with 'word'

:/cat/ - /dog/ print from line with 'cat' to line with 'dog' in it

* deletes line printed above

*# delete lines indicated

** delete all of SP

/old/new/ replace 'old' with 'new' in line printed above

/old/new/# do for lines indicated

/old/new/a all occurrences on line

/old/new/a# for lines indicated

/old/new/a- for entire scratchpad

↑ back up one line

↑ cat replace letters printed above with letters 'cat'

↑ *** delete letters above *

↑ * cat * insert 'cat' at first up arrow

| blank this line

|# blank lines indicated

|text| fill this line with 'text'

|text|# do for lines #

|text| (#) place text in column #

< insert one new line here

<# insert lines indicated here

<< insert a series of new lines

> end insert of a series of new lines

&# copy lines #

:| list blank lines

<| insert blank line

=| delete blank lines

: print lines with indirect edits

= 3; < 20; = 13 Use ; to do multiple edits

CONTROL COMMANDS

(May be entered any time)

Text Control Commands for Output:

+left # set left margin at column #

+left set left margin at column 1

+right # set right margin at column #

+right set right margin at column 72

+space normal line spacing

+space -1 eliminates all blank lines

+space # # blank lines between text lines

+trace # copy the next # lines of output into the Scratchpad (up to 100).

+trace # SA # copy into SA # instead of SP

Set Option Commands:

+SAM Set Automatic Message delivery

+SNAM Set No Automatic Message delivery

+SSM Set Short Mode of interaction

+SNSM Set No Short Mode

+SLP # Set Line Pause every # lines (For pauses on output at CRT's)

+SLP Set Line Pause every 23 lines

+SNLP Set No Line Pause

+SCM # Set Conference Marker at item #

+SAC code Set Access Code (up to 12 characters)

+SPEN name Set PEN name (up to 24 characters)

Alerting Control Commands:

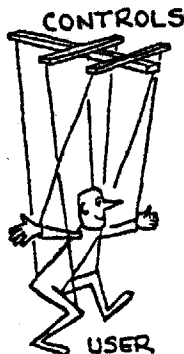
+sleep Terminal goes to sleep until new comment or message delivered

+sleep mm:ss Will print new items until time delay specified is reached

+sleep MGN Will sleep until member # gets on or off the system (break key negates sleep state)

+alarm mm:ss provides an alarm after time delay specified

+alarm MGN provides an alarm when member # gets on or off the system (alarm discontinued when user gets off)



SPECIAL MEMBERS:

name (nickname, number)

SYSTEM MONITOR (EIES, 100)

CONSOLE OPERATOR (HELP, 101)

OPERATIONS MANAGER (REQUEST, 102)

CENTER DIRECTOR (BOSS, 104)

USER CONSULTANTS: 110-119

PUBLIC CONFERENCES:

name	number
PRACTICE	1000
PROBLEMS	1001
SUGGESTIONS	1002
IMPACTS	1003
NOTICES	1004
WISDOM	1005
TERMINALS	1006

SENDING MESSAGES

After you have had a chance to receive any waiting messages, you are at the first choice point in the EIES system. As a member, you have the following privileges on EIES:

- 1) You may SEND a MESSAGE to any other MEMBERS.
- 2) You may have one NOTEBOOK for your private writing or composing.
- 3) You may belong to one or more GROUPS.
- 4) You may establish one temporary CONFERENCE at a time with any set of other MEMBERS.
- 5) You may participate in any CONFERENCE to which you have access (to which you are invited), as well as any CONFERENCES declared PUBLIC.
- 6) You may peruse any BULLETIN in the system.
- 7) You may peruse public information (DIRECTORY information) about other MEMBERS.
- 8) You may also enter and modify the DIRECTORY information stored about yourself for the benefit of other MEMBERS. (See later section on the EIES Directory)
- 9) You may also enter and modify non-public information (your ACCESS CODE and PEN NAME). (See later section on the EIES Directory.)

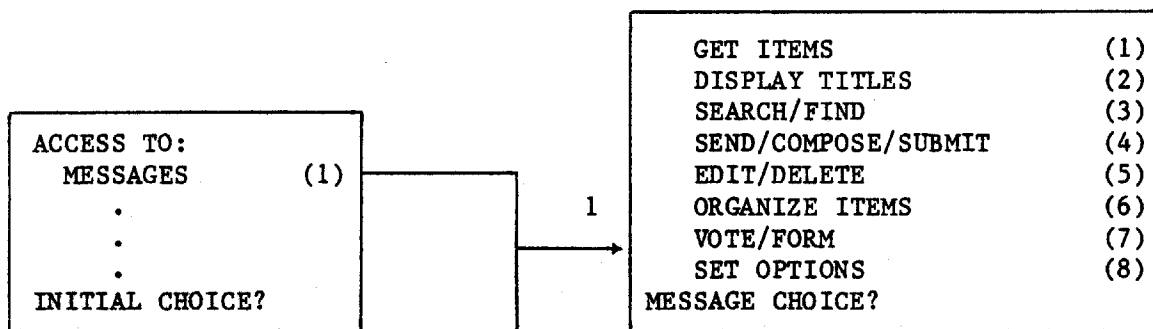
In order to do any of these things on EIES, you must let the computer know what you want to do by giving it the appropriate instructions. The basic structure for EIES instructions is contained in a series of MENUS. Each menu gives you a set of choices. In response to each menu question, you enter the number of the choice you want.

For example, after you have had a chance to receive any waiting messages, you are at the INITIAL CHOICE? point in the system, and you will receive the menu printed in the box at the top left-hand corner of the one-page User's Guide for Electronic Information Exchange System. This menu asks you if you want:

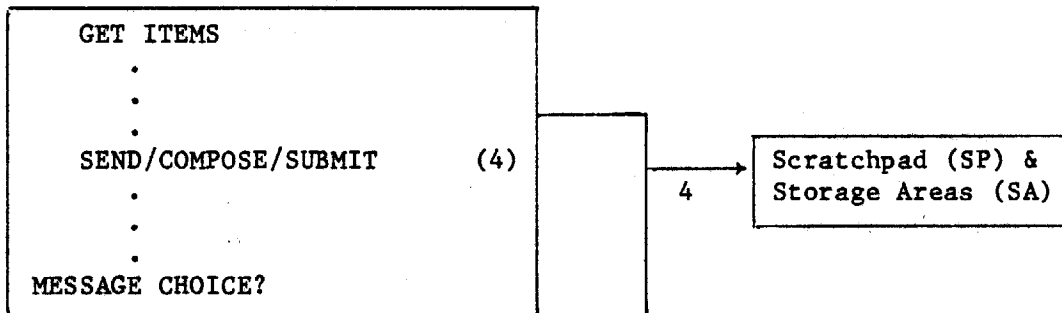
```
ACCESS TO:
MESSAGES          (1)
CONFERENCES       (2)
NOTEBOOKS        (3)
BULLETINS         (4)
DIRECTORY         (5)
EXPLANATIONS      (6)
REVIEWS           (7)
COMPOSITION       (8)
MONITORING        (9)
INITIAL CHOICE?
```

Any time you want to get back to INITIAL CHOICE?, enter a double plus (++) in response to any question or choice.

Suppose you want to send a message. Then you would want access to messages, so you would enter a 1 (the number 1, not a small L) when the system asks INITIAL CHOICE?. In response to that choice, the system then presents you with the MESSAGE CHOICE? menu:



Since you want to send a message, you would enter a 4 when the system asks MESSAGE CHOICE?. In response to that choice, the system will put you into your scratchpad where you may compose your message.



The scratchpad is the place where you may compose messages or conference comments before sending them to others on the system. As you enter your scratchpad, the system will say:

ENTERING SCRATCHPAD:
1?

At this point you are ready to enter your first line of text. At the end of each line, press (CR) to transmit the line to the system. Then wait for the computer to give you the next line number prompt (the line number with a question mark after it) before entering more text. If you don't wait for the prompt, you'll get ahead of the computer and have problems. Each line in the scratchpad is numbered, and you may use up to 57 lines for each message. (That's a maximum, not a requirement!) You may also use up to 72 characters in any one line. If you use more than 72, the line will overflow into the next line like this:

```

1?Pretend that this line has more than 72 text characters.
1:Pretend that this line has more than 72 text
2<characters.
LINE OVERFLOWED
3?
  
```

After the first line was entered and (CR) was pressed, the system printed out the portion of the line that fit within 72 characters without breaking any words in two, and then printed out the remaining overflow on the next line, followed by a message stating that the line overflowed. The word "characters" is the overflow. By using less than 72 characters per line for text (the limit of 72 does NOT include the line numbers and the question mark), this won't

happen. If you do exceed this limit, you can always edit your message to correct the overflow (see the section on text editing) or you can leave the line with the overflow in and just continue entering more lines.

The scratchpad is NOT automatically erased when you go to send a message, unless you made the choice to do so when you last left your scratchpad. The system will put you at the next available line if material was left in the SCRATCHPAD. If you are using the system for the first time, your scratchpad should be clean and the system will put you at line 1, indicated by the 1? prompt. However, if you had just sent a four-line message to someone, and then re-entered the scratchpad, the system would put you at line 5, unless you had cleared the scratchpad yourself. You can imagine the potential embarrassment of forgetting to clear your scratchpad and sending a new message that starts with a message you had sent to someone else previously! Get in the habit of always clearing your scratchpad before composing a new message. To do that, simply type in ** (two asterisks) at the beginning of any line in the scratchpad. The system will then ask if it is okay to delete the contents of your scratchpad. If you answer YES or Y, everything in your scratchpad will be erased.

ENTERING SCRATCHPAD:

4:appreciate your help. Thanks.

5?*

OKAY TO DELETE (Y/N)?Y

1?

Now compose a short message to the OPERATIONS MANAGER and CONSOLE OPERATOR or someone else you know on the system. Just a few lines are enough to give you the idea of how to compose and send messages. For now, don't worry about mistakes or typographical errors.

When you have finished composing your message, enter a + (plus) on the next line. This tells the system you have finished the text. The + must be the first character on a new line.

ENTERING SCRATCHPAD:

1?This is my first message on EIES.

2?So far I understand the system, but

3?being a beginner makes me nervous.

4?Am I doing this right?

5?+

Next the system will ask to whom you want your message sent:

TO (#'S/NAMES)?

You may indicate to whom your message is addressed by his or her number, name, or nickname. We would like you to send your first message to the OPERATIONS MANAGER (REQUEST,102) and the CONSOLE OPERATOR (HELP,101) so that the staff will know that you have begun using the system. You may send it to others, too. There is a group of user consultants on the system who are here to provide assistance when you need it. Their numbers are 110-119. You may wish to send your first message to one of them, too. You may also wish to send this first message to yourself, just to see how it looks when it is delivered.

So, when the system asks:

TO (#'S/NAMES)?

you may respond with

TO (#'S/NAMES)?101,102 (and any others, separated by commas)

or TO (#'S/NAMES)?HELP,REQUEST (and any others, separated by commas)

or TO (#'S/NAMES)?CONSOLE OPERATOR,OPERATIONS MANAGER (and any others, separated by commas)

Note that there is no space after the comma in this list. You may also mix and match numbers and names or nicknames. To send a message to all members of a group, you need only enter the group number, rather than all the individual members' numbers.

The system will then give you the full names of all of those to whom you want to send the message as a double check. Then, if more than one person is indicated as an addressee, it will ask:

CONSOLE OPERATOR (HELP,101)

OPERATIONS MANAGER (REQUEST,102)

ADDRESSEES INDICATED (Y/N)?

A yes response (Y, YES, or (CR)) will let everyone receiving the message know to whom it was addressed by putting a CC: or copy indication at the end of the message. If you enter N or NO, there will be no copy indication on the message (a "blind copy"). If the message is being sent to only one person, this question is not asked.

If you do not wish to answer any more questions you may use a plus sign (+) at any time to skip over those questions providing additional options; or, if you have decided not to send the message you can use a minus sign (-) to terminate the message sending procedure without actually sending the message.

Next the system will ask if there are any associated messages. This gives you the opportunity to link a particular message with a previous message on the same topic. The system will ask for the message number of the associated message.

ASSOCIATED MESSAGE (#)?

Since this is your first message, there are no associated messages so you may enter a (CR) to skip over this question.

Next, the system will ask if there are any keywords or phrases that you would like to assign to your message. This feature will be of great use later when you want to retrieve all messages indexed by a certain keyword or phrase. The system expects the keywords or phrases to be entered with slashes (/) in between.

KEYS (/word/phrase/)?

Again, since this is your first message, it is not necessary to add keywords, so you may simply enter a (CR). In general, you are not required to use associations or keywords or phrases with your messages or conference comments; this facility of the system has been designed to provide an easy and efficient way of retrieving messages at a later time, if you want to use it.

Finally, the system will ask you if it is okay to send your message to the people you have indicated:

OKAY TO SEND (Y/N/-)?

If you respond with a Y, YES, or (CR), the message will be sent and the system will tell you the message number, your name and number, and the date and time the message is sent:

MESSAGE BEING SENT

SENT AS:

M 12345 YOUR NAME (NICK,###) 10/ 7/77 3:45 PM L:35

The L:35 indicates this message contains 35 lines of text. Note the title includes the date and time and a unique identification for the message assigned by the computer.

If you respond with NO or N, the system will ask if you want to sign the message.

SIGNATURE (Y/N/PEN)?

If you respond to this signature question with a yes answer, the system will respond with REGULAR SIGNATURE USED and ask the OKAY TO SEND (Y/N/-)? question again. If you answer no to the signature question, the system will say NO SIGNATURE USED and ask the OKAY TO SEND (Y/N/-)? question again. If you say PEN, indicating that you want to sign it with your pen name, the system will respond with PEN SIGNATURE USED and ask the OKAY TO SEND (Y/N/-)? question again. There is more information about pen names in the section on the EIES directory. If you answer no to OKAY TO SEND (Y/N/-)? the second time it is asked, the computer will respond with MESSAGE NOT SENT and return you to MESSAGE CHOICE?.

If you enter a minus sign (-) the first time OKAY TO SEND (Y/N/-)? is asked, the message will not be sent, you will be asked no questions about signature, and you will be returned to MESSAGE CHOICE?.

After your message has been sent, the system will ask if you want to erase your scratchpad:

ERASE SCRATCHPAD (Y/N)?

If you respond with a yes answer, the text in your scratchpad will be deleted. If you answer no, the text will remain. In either case, the system will return you to MESSAGE CHOICE?.

If you have gone through this entire messaging procedure, CONGRATULATIONS!

To review, to message someone ("to message" or "I will message you" is EIES jargon for sending a message), do the following at each choice point:

INITIAL CHOICE?1

MESSAGE CHOICE?4

ENTERING SCRATCHPAD:

4:Am I doing this right?

5?*

OKAY TO DELETE (Y/N)?Y

1?Enter your message exactly as you want it,

2?with a (CR) at the end of each line of text

3?and a + as the first character of the very

4?last line.

5?+

TO (#'S/NAMES)?101,102 (or the appropriate member number)

CONSOLE OPERATOR (HELP,101)

OPERATIONS MANAGER (REQUEST,102)

ADDRESSEES INDICATED (Y/N)?Y

ASSOCIATED MESSAGE (#)? (CR) (or associated message number)

KEYS(/word/phrase/)? (CR) (or appropriate keywords or phrases)

OKAY TO SEND (Y/N/-)?Y

MESSAGE BEING SENT

SENT AS:

M 12346 YOUR NAME (NICK,###) 10/ 7/77 3:50 PM L:4

ERASE SCRATCHPAD (Y/N)?

In the next section, some of the techniques you can use in messaging are described.

MESSAGE SENDING SHORTCUTS

After you have sent a few messages on EIES, you may find that you don't need the system to show you the available menus each time. If you use the one-page User's Guide, it will show you the available choices at each choice point. If you want the system to stop giving you the menus, enter the command +SSM (for Set Short Mode). Commands like +SSM may be entered any time the system asks you a question, such as INITIAL CHOICE?, MESSAGE CHOICE?, CONFERENCE CHOICE?, etc. You may also set short mode by choice 3 in the SET CHOICE box on your user guide. If you are in short mode (without a menu), the system will just ask you the question appropriate to that menu. Those questions are the last items in the menu choice boxes on the one-page User's Guide.

long mode

ACCESS TO:

MESSAGES	(1)
CONFERENCES	(2)
NOTEBOOKS	(3)
BULLETINS	(4)
DIRECTORY	(5)
EXPLANATIONS	(6)
REVIEWS	(7)
COMPOSITION	(8)
MONITORING	(9)

INITIAL CHOICE?

short mode

INITIAL CHOICE?

To have the system print out the menus for you again, enter either +SLM (for Set Long Mode) or +SNSM (for Set Negation of Short Mode).

EIES has been designed so that you may give the system a series of answers all at once, thus anticipating the questions that the system asks. This feature speeds up the process of using the system. Each answer is separated from the others by a comma or a semi-colon. So, in order to get directly to the message system and to your clean scratchpad, you may enter the following when the system asks for your initial choice:

INITIAL CHOICE?1,4,**,Y

The 1 gets you to message choice, the 4 into your scratchpad, the ** indicates you want to erase the scratchpad, and the Y tells the system it's okay to delete the contents of the scratchpad. The system then responds with ENTERING SCRATCHPAD:

INITIAL CHOICE?1,4,**,Y

ENTERING SCRATCHPAD:

4:Am I doing this right?

1?

Here you are, ready to write in a clean scratchpad.

Similarly, you may anticipate the questions the system asks when sending a message after you have composed it. Suppose you wanted to send a message to the CONSOLE OPERATOR (HELP,101). At the end of the text in your scratchpad,

you could enter:

+ ,101; , ,YY
or + ,101; + ,Y

Notice that there is a semi-colon (;) after the 101. You have to use a semi-colon after the last membership number to which you want your message sent to separate the numbers from the answers to the other questions. Otherwise, the system would think that the answer to the next question (a yes or no in response to ADDRESSEES INDICATED? if more than one addressee, or a message number in response to ASSOCIATIONS?) was supposed to be another membership number. In this example, no associations or keywords were entered, so these questions were skipped over by just entering commas. The Y at the end is a yes response to OKAY TO SEND?.

If you want to send your message to someone (or several people) specified by name or nickname, you must put a comma after the plus and before the name or list of names and a semi-colon at the end.

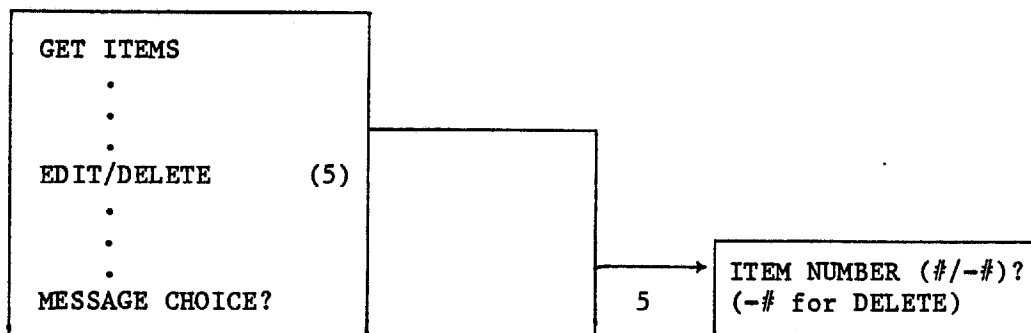
+ ,HELP,REQUEST;

These shortcuts are illustrated in the following example:

```
INITIAL CHOICE?1,4,**,Y
ENTERING SCRATCHPAD:
1?I seem to have figured out how to
2?send messages now. If I need help,
3?I know I can message one of the
4?user consultants. Thanks for getting
5?me started.
6?+,101;+,Y
  CONSOLE OPERATOR (HELP, 101)
MESSAGE BEING SENT.
SENT AS;
M 12347 YOUR NAME (NICK,###) 2/28/78 12:01 PM L:5
```

The major potential dangers in answering ahead of the system's questions like this are that you may forget a question, and so all the answers after that will be for the wrong questions, or you might make a mistake in your list of people to whom you want your message sent, and the wrong person will get the message. If you answer the questions incorrectly, perhaps forgetting one in a sequence or answering in the wrong form, the system will tell you you have entered an invalid command. Just try again.

If you inadvertently send a message to the wrong person, you may delete it. EDIT/DELETE is choice 5 under MESSAGE CHOICE? -- see the top box in the middle column on the User's Guide. Choice 5 takes you to the fourth box down on the right-hand column, which asks for the item number you want to edit or delete. To delete it, you must put a minus sign in front of the item number.



```

MESSAGE CHOICE?5
MODIFY ITEM (#/-#)?-54321
M 54321 YOUR NAME (NICK,###) 3/15/78 9:37 PM L:55
OKAY TO DELETE (Y/N)?Y
MESSAGE CHOICE?
  
```

You could have done the same thing by entering 5,-54321,Y after the system asked for MESSAGE CHOICE?.

Composing messages is such a common activity on EIES that there are commands you may use that are even shorter. +CNM (for Compose New Message) is the same as ++1,4,**,Y; that is, it will take you directly to a clean scratchpad. Similarly, +CM (for Compose Message) is the same as ++1,4; here the scratchpad is not erased.

+CNM = ++1,4,**,Y (insures clean scratchpad)

+CM = ++1,4 (scratchpad not erased if it currently contains something)

These commands may be entered any time the system asks you a question or a menu choice. There is no comparable command for sending a message after it has been composed, since you must tell the system to whom the message is addressed, what associations or keywords to assign, and so forth.

After any message is sent, the system will return to the MESSAGE CHOICE? point. If you wish to see if there are any new communications waiting for you, enter a ++ to return to INITIAL CHOICE?. If any communications are waiting for you, the system will give you a chance to receive them before putting you at the INITIAL CHOICE? point. If you want to have your messages printed out automatically, without having the option of not receiving them or of only receiving a few, you may enter the +SAM (for Set Automatic Message delivery) command any time the system asks you a question such as INITIAL CHOICE? or MESSAGE CHOICE?. To return to the normal state, enter the +SNAM command (for Set No Automatic Message delivery). These commands are listed on the back of the one-page User's Guide under "Control Commands."

You can get back to INITIAL CHOICE? from any point in the system by entering two plus signs (++). A single plus (+) will move you back one level in the menus. You need to go back to INITIAL CHOICE?, finish a MESSAGE CHOICE activity or sign off each time you want to find out the number of messages you have

waiting. This is true whether or not you are using automatic message delivery. The minus sign (-) is used when you want to start over. It tells the system to go back to the beginning of what you were doing, ignoring whatever had been done before the minus was entered. A double minus sign (--) entered at any point will finish your session with EIES and sign you off of the system. Here is an example of logging off:

```
MESSAGE CHOICE?--  
NO MESSAGES WAITING  
YOUR NAME (NICK,###) OFF AT 4/15/78 5:37 PM  
TIME USED: :38  
CUMULATIVE: 2:45  
ALLOCATED: 25:00
```

201 25CC DISCONNECTED

@

The last two lines are from TELENET. They tell you that you are now disconnected from EIES (TELENET uses the EIES access number or address, rather than the word EIES). The @ sign means that you may enter another TELENET access number to be connected to another computer, if you like. At this point you may log back into EIES by entering C 201 25CC, or you may stop by simply hanging up your phone and turning off your terminal (and acoustic coupler, if you have one).

You will find a summary of the use of the +, ++, -, --, etc. in the box at the lower right-hand corner of the User's Guide under "Control Features for Use of Menus."

If you are in short mode (no menus) and you want the system to show you the menu for a particular choice, enter a (CR) when the system asks for your choice. If you want a short explanation at any point, enter a single question mark (?). If you need a more detailed explanation, enter two question marks (??). If you get really stuck and need help in a hurry, enter three question marks (???) and a one-line message. Your message will appear on a special terminal in the conferencing center. The use of the ?, ??, and ??? is also explained on the back of the one-page User's Guide under "Answer and Help Aids."

THIS MIGHT BE A GOOD TIME TO TRY OUT THE SYSTEM BEFORE TRYING TO ABSORB MORE MATERIAL. YOU MAY WISH TO USE THE EIES CHECKLIST (Page 46).

TEXT EDITING

When you are sending messages, it's okay to have occasional typographical errors. But we would like you to enter your address, phone number, and a short description of yourself in the EIES directory so others can find you, and you probably want that to be letter-perfect. So, before the discussion of entering or changing your directory information that appears in the next section, here is a discussion of text editing.

When you are composing a message in the scratchpad, you may make a mistake in typing or want to change your words in some way. Text editing commands allow you to make changes in the text, and the system will automatically rewrite the text to include those changes. If you wish, you may also retype each incorrect line. All the direct edit commands discussed here work immediately after you enter them. They may be used any time you are in your scratchpad and when you are filling out the directory information.

If you are typing a word and you make a mistake, but you haven't yet pressed (CR) to transmit the line of text to the computer, you may simply backspace and type over the word, making the correction. Backspacing is done differently on different terminals: some use the backspace key, some a backwards arrow, some the underscore (_) and still others the control key (CTRL) held down while pressing the H key. Experiment on your terminal to find out how to backspace. If you want to delete the whole line, hold down the control key and press X. If you delete a line in this way, the system will not give you a line number prompt. Go ahead and enter the line correctly, without waiting for the prompt.

If the line of text has already been transmitted to the computer with the (CR), then you need to use the text editing commands. These are triggered by special characters which are entered as the first character of a new line. If these characters are entered at any other point in a line of text, they become part of the text.

These special characters and their meanings are:

```
/
= go to the line specified
: print the line or lines specified
* delete the line or lines specified
/ replace the error
^ image correct the error
! blank the line
< insert a line
& copy a line or lines
```

A summary of the text editing commands is found on the back of the one-page User's Guide.

Let's look at some examples of text editing to see how these special characters are used.

ENTERING SCRATCHPAD:

```
1?We beleive that oneof the most profound
2?impacts of computerized conferencing will
```


3?lie in it's capability to allow geographically
4?dispersed people to work together as if
5?same office.
6?

As you can see, there are a number of errors in this text. In this example, the system is currently waiting for text for line 6. If we want to go back to line 1 to correct the errors there, we must tell the system to go to line 1 with the equals character (=).

6?=1
1:We beleive that oneof the most profound
1?

The system responds by printing out line 1 as entered in the scratchpad and waits to find out what changes, if any, we want to make. Entering a (CR) at this point will keep the line as it is. However, we want to make some changes. We could simply retype the line correctly, or we could use text editing as follows.

One way of making the necessary corrections is to use replacement editing. That is, we tell the system which characters to replace and what to replace them with. Replacement editing takes the form:

/old/new/

So, to correct "beleive" to "believe," we would enter:

6?=1
1:We beleive that oneof the most profound
1?/beleive/believe/
1:We believe that oneof the most profound
1?

The system then responds with the corrected line and waits for the next instruction. It is not necessary to enter entire words for replacement editing. Just enter enough letters so the system can find the place you are indicating. The system will make the correction on the first occurrence it finds of the letter combination you put between the first and second slash marks (/), so be careful. To make our second correction in line 1, we would enter:

1:We believe that oneof the most profound
1?/eo/e o/
1:We believe that one of the most profound
1?

Incidentally, you may also enter the number of the line in which the editing is to occur after the slash marks, rather than having the system move to a particular line with the = character. For example:

```

5?same office.
6?/beleive/believe/l
1:We believe that oneof the most profound
6?/eo/e o/l
1:We believe that one of the most profound
6?

```

Another way to correct mistakes is with image editing. Here, we can space over to the error and correct just the letter or letters that are wrong. Image editing begins with the up arrow character (^). This is probably one of the characters above the numerals on your keyboard that you get by pressing SHIFT and the appropriate key. Here is an example of its use.

```

6?=4
4:dispersed poeple to work together as if
4?^          eo
4:dispersed people to work together as if
4?

```

Another example of image editing shows the use of the delete character (*):

```

4?=3
3:lie in it's capability to allow geographically
3?^          *
3:lie in its capability to allow geographically
3?

```

When the * is used with the image edit character (^), it means delete the character just above. If it is used as the first character in the line, it means delete the entire line last printed.

Finally, we seem to have left out some words in our text, so we need to insert a line. This is done as follows:

```

3?=5
5:same office.
5?<
5?they were in the
6:same office.
6?(CR)
7?

```

The system inserts the new line in front of or before the line indicated (here, line 5) and then rennumbers the rest of the lines. By entering a (CR) on line 6, we indicate that we want line 6 to stay as it has been printed out.

At any point in the scratchpad, you may have the system print out a single line by entering a colon (:) and the number of the line.

```

6?:1
1:We believe that one of the most profound
6?

```

After you have done some editing, you may wish to have the entire text printed out again with line numbers to see if it is correct. To do this, enter a colon minus (:-) at the beginning of a line.

```
7?:-
1:We believe that one of the most profound
2:impacts of computerized conferencing will
3:lie in its capability to allow geographically
4:dispersed people to work together as if
5:they were in the
6:same office.
7?
```

To have the entire text printed out without line numbers, use two colons (::).

```
7?::
We believe that one of the most profound
impacts of computerized conferencing will
lie in its capability to allow geographically
dispersed people to work together as if
they were in the
same office.
7?
```

A common occurrence is to type in a longer line than is allowed. The system automatically takes the last whole word and uses it to start the next line. For casual messages most people just proceed to the next line or use one of the advanced features to provide automatic line adjustment on the printing of items (.TEXT). One may also go back and retype the line. However, a simple way to make corrections is through the use of the append form of the replace command as in the following example:

```
4?This line is too long and will cause an overflow condition
4:This line is too long and will cause an overflow
5<condition
LINE OVERFLOWED
6?// that can be corrected quite easily.
5:condition that can be corrected quite easily.
6?
```

The best way to learn text editing is to experiment in your scratchpad with its various forms. All the direct text editing commands may be found on the back of the one-page User's Guide. Try them out yourself and see how they work. As long as you are in your scratchpad, no one else will see what you're doing. Once you like the contents of your scratchpad, you are ready to send the text to whomever you like. You may even send the message to yourself, just to see how it looks.

EIES is designed to handle both upper and lower case letters. The computer doesn't know that an r and an R are the same letter, so be careful in replacement editing to specify exactly the characters you wish to replace. The computer also thinks that a space or blank is a character, so /this/ is not the same as / this/.

With this introduction, you should be ready to do some beginning text editing when you need it. Since EIES is really a communications system, most users don't bother to correct their typos and other simple mistakes, as long as the idea they are trying to communicate is clear. We believe this informality is healthy for facilitating the general flow of communications between users.

If you would like to learn more about text editing, try EXPLANATION CHOICE? (8); that is, try ++6,8. Or message a user consultant.

THE EIES DIRECTORY

The purpose of the directory is to provide public information about members and groups using EIES so that people can find others with common interests and develop new relationships. The public information for members includes name, nickname, address, telephone, and up to five lines of description of your interests. For groups, the public information includes a description, a list of group members, and the name of the group coordinator. As a member, you may put your directory information into the system and you may modify it at any time. Group directory information is entered by the group coordinator.

In addition to your public information, there are two kinds of private information you may enter which may not be accessed by any other members. The first is your access code. When you first become a member, the EIES staff assigns an access code to you (like a password). However, you should change it soon after beginning to use EIES, and any time you think anyone else has seen it. The second kind of private information is your pen name. Each member is entitled to have a unique pen name to use for signing any item when you do not wish to use your real name.

Now that you have learned how to send and receive messages and how to do basic text editing, we would like you to fill in your directory information.

Start at INITIAL CHOICE?. You can get to INITIAL CHOICE? from anywhere in the system by entering a double plus (++). On the INITIAL CHOICE? menu, ACCESS TO DIRECTORY is choice 5, so enter a 5 in answer to the question.

INITIAL CHOICE?5

The system will respond by giving you the number of members and groups in the directory. Now, looking at the DIRECTORY CHOICE? menu (either given to you by the system or on the one-page User's Guide), you will see that UPDATE ENTRY is choice 7, so enter a 7 in response to that question:

DIRECTORY CHOICE?7

You could have done the same thing by entering your answers ahead of the system's questions. Suppose you were at the point where the system asked for your MESSAGE CHOICE?. You could have entered:

MESSAGE CHOICE?++5,7

At this point the system will give you a listing of the present information in your directory listing. After all the present information is listed, the system will ask:

MODIFY PUBLIC INFORMATION (Y/N)?

If you wish to add to or otherwise change your public information, enter a YES (or Y or (CR)). If you say NO, the system will then ask if you want to modify your private information.

Assuming that you say yes to modifying public information, the system will then ask:

FULL NAME (24C)?

You may use up to 24 characters for your name. It's not necessary to include middle names or initials. If you are satisfied with your name as already entered, leave it as is and go on to the next question by entering a (CR). You may use the (CR) in this manner in response to any question about your directory information. Next the system will ask:

NICKNAME (12C)?

You may use up to 12 characters for your nickname. This is meant to be a short name. Many members use their first names as nicknames. Your nickname should be easy for others to remember. Again, if you are satisfied with your nickname, enter a (CR).

Full names and nicknames are unique to each member on EIES. If the name or nickname you enter has already been used by someone else, the computer will tell you, and you'll have to think of another. Names and nicknames are assigned on a first come, first served basis.

Next the system will ask for your telephone number. Be sure to include your area code, too. With up to 40 characters allowed, you can put in both your home and work phone numbers if you like.

TELEPHONE/S (40C)?

Then it asks for your zipcode. Enter the zipcode that goes with the mailing address you will be asked to enter next.

ZIPCODE (8C)?

Then the computer will ask you to enter or modify your address. You may use up to five lines for this information.

ENTER OR MODIFY ADDRESS (5 LINES):

1?...You may treat this writing space like a five-line
2?...scratchpad. Any of the text editing commands
3?...discussed in the previous section may be used here.
4?...Do NOT include your zipcode here. End your address
5?...with a + in the beginning of the next free line.
WARNING ONLY 5 LINES MAY BE USED FOR THIS TEXT
6?+

The last item of your public information is a description of your work, your interests, or whatever else you would like to tell other EIES members about yourself.

ENTER OR MODIFY DESCRIPTION (5 LINES):

1?...Again, treat this space like a five-line scratchpad.
2?...Think about what kinds of information you would
3?...like to know about other EIES members, and enter
4?...that kind of information about yourself. Again,
5?...end with a + at the beginning of the next free line.
WARNING ONLY 5 LINES MAY BE USED FOR THIS TEXT
6?+

Now the system will ask if you wish to modify your private information.

MODIFY PRIVATE INFORMATION (Y/N)?

If you answer YES or Y, the system will print out your current access code and pen name and then ask:

ACCESS CODE (12C)?
PEN NAME (24C)?

As above, enter any new access code or pen name that you wish. If you are satisfied with either of these as they are, enter a (CR) in response to the question.

The system will then print out your new directory information in full for you to check over, and then it will ask:

OKAY TO MODIFY (Y/N)?

If you answer yes, the new information will replace the old. If you say no, nothing will be modified, and you will be returned to DIRECTORY CHOICE?.

If you are modifying only a portion of your directory information, or if you have made a mistake in answering some question, you might want to consider using the +, -, or ^ characters as the first character in a line to allow you to move in a special way through the directory questions. If you enter a + in response to any question except ENTER OR MODIFY ADDRESS and ENTER OR MODIFY DESCRIPTION, the system will make the modifications you have entered so far and then return you to DIRECTORY CHOICE?. Since the address and description are entered in a small 5 line scratchpad, a + entered there tells the system you have finished entering text there, and it will then give you the next question.

If you enter a - at any point while updating your directory information, no modifications will be made, and the system will return you to DIRECTORY CHOICE?.

If you enter a ^ in response to any question except ENTER OR MODIFY ADDRESS and ENTER OR MODIFY DESCRIPTION, the system will back up to the previously asked question and ask it again. If you enter a ^ at the beginning of a line while filling out your address or description, the system will back up to the line before.

FINDING OTHERS IN THE DIRECTORY

You may wish to use the directory yourself to find out who else is a member on EIES, the interests of someone with whom you have been messaging, or all those on the system with a particular interest. In the DIRECTORY CHOICE? menu, you will see that you may search for or find members by:

NAME PARTS	(3)
FROM-TO-DATES	(4)
WORD/PHRASE	(5)
ZIPCODE	(6)

Suppose you want to find a member, but you don't know exactly how he or she has entered his or her name in the directory. Then you would do a search by name parts. The system will ask you to enter the letters you want used for the search between slash marks (/):

```
INITIAL CHOICE?5
DIRECTORY CHOICE?3
NAME PARTS (/letters/letters/)?/tur/
```

The system will then print out all the full names and numbers of anyone on the system with the letters "tur" in his or her name or nickname. In this example, the system would print out:

```
MURRAY TUROFF (MURRAY,103)
```

You may request several searches on name parts at a time by putting together a whole string of letters between slashes:

```
NAME PARTS (/letters/letters/)?/tur/rox/elaine/

MURRAY TUROFF (MURRAY,103)
,ROXANNE HILTZ (ROXANNE,120)
ELAINE KERR (ELAINE,114)
```

Since the computer prints all names and nicknames in capital letters only, you may request the search for name parts in either upper or lower case. The computer will automatically change the letters to capitals.

The FROM-TO-DATE search choice (4) allows you to search for members who were last active on the system within a certain date and time range. You may also restrict the FROM-TO-DATE search to a specific set of members or to a specific group.

```
FROM (MM/DD HH:MM)?10/01 09:30
TO (MM/DD HH:MM)?10/31 09:30
MEMBER/GROUPS (##-#)?200-299
```

If you want to search for members who have a particular word, phrase, or part of a word in their descriptions, you would use the WORD/PHRASE search choice (5). The system will ask you for the word(s) or phrase(s) on which to search, as well as any particular groups or sets of members to which you want the search restricted.

WORDS/PHRASES (/word/phrase)?/nuclear/transp/
MEMBERS/GROUPS (#/#-#)?72,74,200-299

The system will then print out the names and numbers of all those who have used the words "nuclear" or any word containing "transp" (such as "transportation," "transport," "transpire," "transpose," etc.) in their descriptions, AND who are in either groups 72 or 74 or who have membership numbers between 200 and 299. By combining words or phrases and membership or group numbers, the computer can be instructed to do a very refined search. If you want the system to search through all the members on EIES, rather than specifying a set of members or a group, simply enter a (CR) when the computer asks for MEMBERS/GROUPS (#/#-#)?.

The ZIPCODE search choice (6) allows you to find members in a given geographic area by specifying any portion of a zipcode, beginning with the first digit of the zipcode. For example, if you only specify the digit 0 (zero), you would get a list of all members in New Jersey, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, Puerto Rico, or the Virgin Islands. By specifying 071, you would get all those in the immediate vicinity of Newark, New Jersey. By specifying 07102, you would get all those at the New Jersey Institute of Technology (NJIT) and anyone else whose address is in that zipcode.

If you already know a member's name or number, you may find out the directory information for him or her by using DIRECTORY CHOICE? (1), which is GET ITEMS. GET, in EIES terminology, always means print out.

INITIAL CHOICE?5
DIRECTORY CHOICE?1
MEMBER/GROUP (NAMES/#'s)?103

MURRAY TUROFF (MURRAY,103)
NICKNAME: MURRAY
TELEPHONE: 201-645-5352
LAST ACTIVE: 10/ 2/77 8:27 PM

ADDRESS:
NJIT
323 High Street
Newark, New Jersey
07102

DESCRIPTION:
Concerned with the use of computers as a direct aid to facilitating the human communication process. Also, Delphi Design, Technological Forecasting and Assessment, Design of Interactive User Oriented Computer Systems and MIS.

GROUP MEMBERSHIP:
GROUP: (10)
TITLE: USER CONSULTANTS

GROUP: (98)
TITLE: EIES DEVELOPMENT TEAM

You may also get a list of all those members within a specific group or set of member numbers by using the DIRECTORY CHOICE? (2), DISPLAY TITLES. The system will not print out all the information in this case, but simply the names and numbers. For example, to find out the names of all the user consultants (those whom you may message for help in learning the system), you would enter:

INITIAL CHOICE?5
DIRECTORY CHOICE?2
MEMBER/GROUP (NAMES/#'s)?110-119

If you ask the system to display the title for a group, you will get the group number, the group name, and the name of the group coordinator. If you want the full membership list for a group, use DIRECTORY CHOICE? (1) instead.

PARTICIPATING IN CONFERENCES

Conferences are discussions among a group of people in which the computer stores the comments in the order in which they were entered into the conference. Each new conference entry is placed at the end of the list of conference comments that makes up the transcript of the conference. The computer may also be used to retrieve specific comments at a later time. On EIES there are three kinds of conferences.

A GROUP CONFERENCE is associated with a defined group of members on EIES, and it has the same two-digit identification number as the group. Other EIES members who are not part of the group may be added to a group conference by the conference moderator. The system keeps track of where each member is in the discussion. When entering the conference, the system will tell you how many items have been written into the conference and how many new items are waiting for you.

A PRIVATE CONFERENCE may be started by any EIES member, who may then invite anyone he or she chooses to participate. A private conference has the same three-digit identification number as the member who started it. This member also acts as the conference moderator.

In addition to group and private conferences, there are also PUBLIC CONFERENCES on EIES. A list of public conferences and their four-digit conference numbers is printed on the back of your one-page User's Guide. Anyone may read public conference items or enter new items. Unlike group and private conferences, there is no membership list for public conferences, so the computer does not keep track of which items you have already seen. You'll have to do this yourself. Here is a short description of some of the public conferences:

PRACTICE	1000	a place for practicing writing items into a conference
PROBLEMS	1001	a place to express problems users are having with the system
SUGGESTIONS	1002	recommendations for improving the design or usability of the system
IMPACTS	1003	an open forum on potential or real impacts or consequences of systems of this type
NOTICES	1004	news items of general interest to all members, including any changes or additions we are making to EIES
WISDOM	1005	philosophic views or observations of general interest
TERMINALS	1006	information for those using or attempting to use specialized terminals or local storage devices

You may read conference items and add new conference items to the discussion. First, let's find out how to get into a conference and receive any new items for reading and pondering.

Conferences are accessed through INITIAL CHOICE? (2). On your one-page User's Guide, you will notice that the 2/3 arrow to the top box in the center column contains a question mark (?), which indicates that the computer will ask you a question. In this case, it asks you in turn for the number or name of the conference, whether you want to know the status of conference members, and if there are new items, whether you would like to receive them.

```
INITIAL CHOICE?2
CONFERENCE (NAME/#)?55
CONFERENCE: APPLICATIONS (55)
THERE ARE NOW 2 MEMBERS ACTIVE.
CONFERENCE STATUS (Y/N/A/O)?A
  UP TO: CC123 ACTIVE MEMBER'S NAME (NICK,###)
  UP TO: 120 YOUR NAME (NICK,###)
117 ITEMS. CC123 WRITTEN ON 10/15/77 10:30 AM
  3 NEW TEXT ITEMS.
ACCEPT NEW ITEMS(Y/N)?Y
```

In this example, we are accessing conference 55, called APPLICATIONS. After entering the conference number, the system replies with the name and number of the conference and also how many members are currently actively working in the conference, either reading, writing, or modifying items. The number of active members always includes the person entering the conference (yourself).

Next, the computer asks whether we want to know the conference status of the members. A Y response will get a list of all the conference members and how many items they have received to date. An N response gets no list and goes on to the next question. If we enter an A, only those active in the conference at the moment will be shown. An O brings a list of all those conference members currently on-line, but not necessarily active in the conference.

After this, the system tells us how many text items exist (those remaining after deletions), when the last one was added, and how many new text items are waiting. If the number of items and the number of the last item written are different, it means that some items have been deleted. The system then asks if we want to accept the new text items.

Once again, you may answer the questions ahead of time, if you know the order in which they come. In this case, the system will only ask if you want to accept new items if there are any. To indicate an answer to a question that may or may not be asked, the answer goes in parentheses (). So, for this example we could have entered:

```
++2,55,A,(Y)
```

Just as there is a special command for composing new messages, there is also a special command for getting into conferences. If you want to get into conference 55, for example, the following command will do so:

```
+GC 55          This is equivalent to ++2,55
```

There are no membership lists in public conferences, so the system will not ask you the questions about conference status or whether you want to accept new items. However, if there are others currently active in the public conference, the system will ask whether you would like a list of those active:

MEMBERS ACTIVE NOW (Y/N)?

The system will also tell you how many items there are in the public conference and the date and time the last item was written. It will then ask:

WHERE DO YOU WISH TO START (#)?

After you enter an item number, the system will print out all the items from that number through the end. If you enter a (CR) instead of the item number, the system will ask at which date and time you wish to start. If you enter another (CR), nothing will be printed out, and you will be at CONFERENCE CHOICE?.

You may interrupt a long printout that you don't want by pressing the BREAK KEY while the terminal is printing. The system will pause and then print <BREAK>. The system will then ask for the appropriate menu choice (e.g., CONFERENCE, MESSAGE or NOTEBOOK CHOICE).

In order to add a new item to a conference, you must get into your scratchpad to compose it, just like sending a message. When the computer asks for CONFERENCE CHOICE?, you enter a 4, to indicate you choose to SEND/COMPOSE/SUBMIT, just as in messaging. Entering a 4 will then take you to your scratchpad, where you may write and edit text.

```
INITIAL CHOICE?2,55,N,(N)
CONFERENCE: APPLICATIONS (55)
THERE ARE NOW 2 MEMBERS ACTIVE
117 ITEMS. CC123 WRITTEN ON 10/15/77 10:30 AM
  3 NEW TEXT ITEMS.
CONFERENCE CHOICE?4
ENTERING SCRATCHPAD:
  6:same office.
  7?**
OKAY TO DELETE (Y/N)?Y
1?After clearing the scratchpad with the **, you
2?may now proceed to enter your new conference
3?comment. Just as in messaging, you must end
4?the text with a + so the computer will know
5?you are through.
6?+
```

Then the system will ask if there are any other items associated with this new item or any keywords or phrases you would like to assign to it. It might be very helpful if the members of your conference developed a consistent set of keywords during the conference. Otherwise, one member might enter "introduc-

tion" as a keyword to describe an item, while another might use the keyword "preface" to describe the same thing, thus making subsequent retrieval of both items more difficult.

```
5?you are through.  
6?+  
ASSOCIATED COMMENT (#)?16  
KEYS (/word/phrase)?/scratchpad/conference comment/text/
```

Then the system will ask how the item or comment should be signed and whether it is okay to add it to the conference.

```
ASSOCIATED COMMENT (#)?16  
KEYS (/word/phrase)?/scratchpad/conference comment/text/  
SIGNATURE (Y/N/PEN)?PEN  
OKAY TO ADD (Y/N)?Y  
ADDED AS:  
C55 CC124 WRITER 10/15/77 11:32 AM L:5
```

Here, the comment has been added under the pen name WRITER. In conferences, all items or comments are identified by the conference number and the conference comment number (here, C55 CC124).

After your new comment has been added to the conference, the system will erase your scratchpad. You will not be asked if it is okay to delete the scratchpad; the system erases it automatically, and there is no choice.

Once again, there is a quicker way to get directly into your scratchpad to compose a new conference comment. You may enter:

```
++2,55,N,(N),4,**,Y
```

This gets you to a clean scratchpad. Here, the 55 is the number of the conference.

There is also a special command for composing a new conference comment. If you are already in a conference, at CONFERENCE CHOICE?, you may enter the following to get you to a clean scratchpad:

```
+CNC      This is equivalent to 4,**,Y.
```

If you are not in any conference, you must enter the conference number as part of the command:

```
+CNC 55    This is equivalent to ++2,55,N,(N),4,**,Y
```

After you have entered a conference comment, you may decide to make some change in it or to delete it entirely from the conference. To do this, use CONFERENCE CHOICE? (5), which is EDIT/DELETE. For this choice you will be asked to indicate the number of the item you wish to edit or delete. If you wish to delete an item, you should enter the item number with a minus sign in front. In this case the title of the item will be printed out and you will then be asked:

```
OK TO DELETE (Y/N)?
```

If you wish to edit a conference comment, after entering the number of the item you wish to edit, the system will take you to the scratchpad and then put the item you wish to edit into the scratchpad for you to modify using text editing commands. When you enter the + to terminate the editing in the scratchpad, it will ask you the ASSOCIATED COMMENT and KEYS questions and then ask:

OKAY TO REPLACE AS COMMENT # (Y/N)?

The # indicates the number of the item you are editing. A yes answer will replace the original item with what is now in your scratchpad and then return you to CONFERENCE CHOICE?.

Normally you can only delete or edit items you have authored. When someone else such as the conference moderator does this the title of the item will indicate both the author and the editor of the item.

Sometime you might be asked to join a conference that has been in progress awhile, and someone may have either sent you a transcript or you may have seen a fellow conferee's printouts. If this happens, you will want to change your conference marker so the system will know what you have already seen. A conference marker is like a book marker, and normally the system manages it for you.

To change your marker, use CONFERENCE CHOICE? (8), which is SET OPTIONS. Then use SET CHOICE? (8), which is PARAMETER CHANGES. Then the system will ask to which number you want your marker set. The system will then show you the new marker setting and then ask for another SET CHOICE?. Enter a + to finish, which returns you to CONFERENCE CHOICE?. Here's an example:

```
CONFERENCE CHOICE?8
SET CHOICE?8
MARKER (#)?182
LAST COMMENT SEEN 182
SET CHOICE?+
CONFERENCE CHOICE?
```

Once again, you could have done the same thing at CONFERENCE CHOICE? by entering:

8,8,182,+

There is also a command you could have used, too. +SCM 182 (for Set Conference Marker) is equivalent to 8,8,182,+

GETTING PRINTOUTS

EIES allows you to print out messages and conference comments without having to send, receive, or enter anything. This same facility can be used if you want to print out additional copies of messages or comments previously sent or received. This section describes the procedures you should follow in order to get such printouts.

GETTING PRINTOUTS OF MESSAGES

First, start at INITIAL CHOICE?. To get there, enter two plus signs (++). On the INITIAL CHOICE? menu, ACCESS TO MESSAGES is choice 1, so enter a 1 in answer to the question:

INITIAL CHOICE?1

The system will respond with the menu for MESSAGE CHOICE? if you are in long mode, or simply the question MESSAGE CHOICE? if you are in short mode. On the MESSAGE CHOICE? menu, you will see that GET ITEMS is choice 1, so enter a 1 in response to that question:

MESSAGE CHOICE?1

The system will then ask for the number of the message that you wish to print out. If you wish to have more than one message printed out, you may enter a series of message numbers with commas in between. If you wish to print out a series of messages with consecutive numbers, you may specify the first and last numbers with a dash in between. In response to the question MESSAGES (##-#)?, enter the number(s) of the message(s) you wish to print out. The system will then print out the specified message(s). You may access only those messages you have authored or received.

MESSAGES (##-#)?12345

(the system prints out message number 12345)

MESSAGES (##-#)?

After printing out the specified message(s), the system will again ask for the numbers of any other messages you wish to print out.

As with any other part of the system, you may enter answers in anticipation of the system's questions. The message above could also have been printed with the following sequence:

INITIAL CHOICE?1,1,12345

GETTING PRINTOUTS OF CONFERENCE COMMENTS

Begin by entering two plus signs (++) to get to INITIAL CHOICE?. On the INITIAL CHOICE? menu, ACCESS TO CONFERENCES is choice 2, so enter a 2 in answer to the question:

INITIAL CHOICE?2

The system will respond by asking for the CONFERENCE (NAME/#)? after which it will give you the title of the conference, the number of active members, and then ask for CONFEREE STATUS (Y/N/A/O)?. After printing out whatever status you ask for (see the previous section, "Participating in Conferences"), the system will tell you how many items are in the conference and how many new items there are. Then it will ask if you wish to receive those new items, if any. You should then accept any new items or not, as you like. After printing out any new items, the system will then ask for your CONFERENCE CHOICE?.

On the CONFERENCE CHOICE? menu, you will see that GET ITEMS is choice 1, so enter a 1 in response to that question. Below is an example of this entire interaction.

```
INITIAL CHOICE?2
CONFERENCE (NAME/#)?55
GROUP CONFERENCE: APPLICATIONS (55)
THERE ARE NOW 2 MEMBERS ACTIVE.
CONFEREE STATUS (Y/N/A/O)?N
123 ITEMS. CCI23 WRITTEN ON 1/15/77 10:30 AM

NO ITEMS WAITING.
CONFERENCE CHOICE?1
```

In response to CONFERENCE CHOICE? (1), the system will ask for the number(s) of the item(s) you wish to print out. As with messages, you may specify a single conference comment number, a list of several separated by commas, or a range of numbers by the first and last with a dash in between. So, you should enter the number(s) of the conference comment(s) you wish printed, and the system will respond by printing them out and again asking you for the numbers of any other comments you wish to print out.

```
CONFERENCE CHOICE?1
ITEMS (##-#)?3-6
```

(the system prints out conference comments 3, 4, 5, and 6)

```
ITEMS (##-#)?
```

Once again, you may answer ahead of the questions to speed up the process. The entire example above could have been done this way:

```
INITIAL CHOICE?2,55,N,(N),1,3-6
```

The (N) is included because we don't know if there will be any new items, so we don't know if the question ACCEPT NEW ITEMS (Y/N)? will be asked. The parentheses tell the system that we are answering with N only if the question is asked; otherwise the N is ignored.

SHORTCUTS FOR GETTING PRINTOUTS

There is an even simpler method for getting printouts of any text item in the EIES system. At any point during your interaction with the system, you may use the +GET command to get a printout of messages, conference comments, or notebook pages that you are privileged to access. A special system of abbreviations is used with the +GET command to allow you to access all of these kinds of text items with a single command. For example, to get a printout of message number 12345 you would enter the following:

+GET M12345

To get a printout of conference 55 comment number 14, you would use:

+GET C55C14 or +GET C55CC14

To get a printout of a notebook page (for example page 32 of notebook 118), you would use:

+GET N118P32 or +GET N118NP32

Note here that messages are identified with the letter M (for Message), followed by the number of the message; conference comments are identified with the letter C (for Conference), followed by the conference number, another C (for Comment), and the comment number; and notebook pages are identified by the letter N (for Notebook), followed by the notebook number, the letter P (for Page), and the page number.

After the desired text item has been printed out, the system will return you to wherever you were before the command was executed. For example, if you are at CONFERENCE CHOICE? and you enter +GET M12345, the system will print out message number 12345 and then return you to CONFERENCE CHOICE?.

SPECIAL ROLES ON EIES

The following are brief descriptions of the special roles certain people play on EIES and the associated responsibilities and privileges beyond basic membership.

GROUP COORDINATOR

The group coordinator can add members to or remove them from a group. He or she also has the responsibility for maintaining the description of the group in the EIES directory. The group coordinator may also be the person responsible for allocating time on EIES to individual group members. This role is similar to that of a club or executive secretary for a group, and he or she should help introduce new members to the group.

CONFERENCE MODERATOR

The conference moderator can edit or delete any item in the conference he or she moderates. The conference moderator can also direct the discussion in the conference by using certain organizational structures provided for conference comments. The degree of control exerted by the conference moderator on the discussion is established by the group.

BULLETIN EDITOR

The bulletin editor can select referees for items submitted to the bulletin and can decide if those submissions are to be accepted formally for public viewing as part of the bulletin.

There are also several EIES support roles. You may find out more about the individuals who fill these roles by consulting the EIES directory. Each of these individuals has a membership under his or her personal name as well.

OPERATIONS MANAGER (REQUEST,102)

Any requests for service should be addressed to the operations manager. These might include setting up a new conference, allocating time on EIES, adding new members, and so on.

CONSOLE OPERATOR (HELP,101)

If you need immediate help or a very quick response to a problem, and no user consultant is on-line, you may send a message to the console operator. If you are really having a problem, you may enter three question marks and a one-line message, which will appear on a special terminal at the conferencing center.

??? Am having problems. Can you help?

This feature may be used at any point in the system at any time.

USER CONSULTANTS (110-119)

If you would like to learn more about the system, or if you have a problem that doesn't need an immediate solution, you should message one of the user consultants instead of the console operator. Many of the user consultants have the background and experience with the system to help you use it very effectively for communicating with others. In addition, the user consultants

have expertise in their own individual fields, which may relate to your own interests or the purposes of your conference(s). Feel free to develop a relationship with a user consultant whom you like and to whom you relate well. Console operators are generally students who only know about the mechanics of the system, so for any but the most immediate problems, consult your friendly user consultant.

SYSTEM MONITOR (EIES,100)

The system monitor has the power to get, edit, and delete anything on the system. This is only done by special request by the author of an item (message or conference comment). For example, if you are away from your terminal and you realize you have sent a message to the wrong person, you may call the computer room, identify yourself by your access code, and ask the system monitor to delete the message. If you forget your access code, the system monitor can check it for you.

CENTER DIRECTOR (BOSS,104)

Direct any comments about unsatisfactory service or service above and beyond the call of duty to the center director.

EVALUATOR (EVA,105)

This person is not part of the EIES staff. The evaluator has the responsibility for collecting user comments and presenting a synthesis of the comments without revealing their sources. You should feel free to discuss your views about any aspect of EIES with this person. Your views will be kept in strict confidence.

ETIQUETTE AND HINTS FOR USING THIS NEW COMMUNICATIONS FORM

1. Informality

We have observed that people tend to treat messaging and conferencing somewhat informally. Minor typos and less than exquisite sentence structures are ignored, provided the meaning is clear. Since most of those using the system are casual or even hunt and peck typists, we feel that this should continue to be the norm. If you decide later on to use an item in a report or paper, it's easy to go back and edit it.

Most of the people on EIES have never met each other in person, so there is a great deal of "getting to know you" communication. This is very important, since it makes everyone feel more comfortable about communicating with others in this new way. We suggest that new groups spend some time at the beginning with introductions. In fact, a new group may even want to schedule a simultaneous on-line session where all group members may introduce themselves and explore possible areas of common interest.

2. Need for explicit responses

Since there are no non-verbal cues in computerized conferencing, such as nods, smiles, winks, and so on, it is very important to let others know explicitly whether you understand or agree or disagree with what they have said and to spell out your intentions or expectations. Lacking non-verbal cues, people who cannot hear your tone of voice may not recognize subtle humor or may misinterpret the most innocuous remark. If you need further explanation, you must send a message or enter a conference comment asking for it. It is especially useful to indicate your agreement or support for someone's comments. Otherwise, it's like talking into a tape recorder and getting no feedback at all. Metacommunication (communication about communication) is especially important in computerized conferencing. Metacommunication would include comments like "your second point really makes sense to me," "thanks for supporting my position yesterday," "I appreciate the time you took to look over my report," or "I like the direction you're going, but please clarify what you mean when you say the word 'network.'"

If you are not getting any feedback from others, perhaps it is because you are talking off the subject, or your style is too verbose or difficult to understand. If this happens, consider sending a message to a friend in your group or to the moderator, asking why people seem to be ignoring you.

If you are going to be away from EIES for a few days because of travel or because you are too busy, try to let your group know in advance so they will know not to expect any messages or responses from you.

3. Maintaining the privacy of private messages

If a private message is sent to you, it is considered a breach of confidence to copy it to another person without explicit permission from the author. Because it is very easy to copy to others the messages one receives, without this norm of asking permission to copy, one could never be sure that confidential messages would remain so.

If you send a message to someone like a conference moderator and you don't mind if it is copied into the conference or to other conference members, say so explicitly.

4. Recognizing authorship (credit where credit is due)

If you use something in an article or publication written by someone else on EIES, please treat it as you would any other intellectual property. Footnote it or otherwise give proper credit to the author. (We're not sure of the proper form for an electronic communication citation. Make up your own until the style manuals come up with a standardized form.)

5. Conference comments vs. messages

Conferences are generally meant for items that need to be reviewed or discussed later, or for items that should form part of the transcript of points raised in the discussion. Messages are for more temporary or private items. Since you may copy a message into a conference or turn a conference comment into a message, it is not too important to decide how to enter an item at first. You may always move it later if you need to. If you are unsure about whether to enter an item into a conference, you can always send it as a message to the conference moderator and let him or her decide. However, most people do not keep a copy of messages, so they may soon be "lost." Therefore, if an item is pertinent to the subject of a conference, first choice should be to enter it there. Items can also be deleted quite easily.

6. Preventing information overload

As you get more active in EIES, you may find yourself engaging in a number of simultaneous conversations with people on different subjects, as well as participating in various conferences. This aspect of computerized conferencing can be overwhelming at times, and for many, this is harder to learn how to deal with than the mechanics of the system. Because there is a need to respond explicitly to communications from other members, it is often difficult to stop or break away from a conversation if you have other things to do. Since there is a lag between the time you send a message and when someone receives it, you may be tempted to wait to get the response. This can go on for a long time! You need to develop your own style for dealing with the flow of messages in and out of your world.

The use of associations (items associated with the one you are writing) and keywords and phrases will help you and others keep track of the various threads of a discussion as it takes place. After something like one hundred conference comments have been entered, you may want to go back and list all the titles of the items (using the DISPLAY TITLES choice) to see what has been discussed. The title of an item includes the item number, author name and number, date and time written, date and time modified (if edited), and any associations and keys assigned to the item.

Sometimes the message traffic will be so intense that you will not have time to respond to everything you receive. It's easy to lose track of messages this way, so EIES has a feature that will allow you to enter reminders to yourself. Ask one of the user consultants how to use reminders to help you deal with this kind of information overload.

Different people have different systems for filing away printed copies of messages and conference comments. Some just fold or roll up the paper and put it away somewhere. Others cut the various messages and conference comments apart and paste them up or file them by person, topic, or whatever. Still others have developed color coding schemes. You will have to figure out what kind of system works best for you and your needs.

7. New sources of embarrassment and how to avoid them

Probably the most potentially embarrassing thing you can do on EIES is to forget to clear your scratchpad before sending a new message or writing a new conference comment. If you forget, you may find that a very private, confidential message ends up as the first part of a new conference comment or message. To avoid this, either use +CNM to get into a clean scratchpad, or always check to see what line you are on in your scratchpad before you begin composing. If you are not at line 1, use ** to delete the contents of your scratchpad.

You may also find that you have mistakenly entered a comment into the wrong conference. You can move it and delete it from the incorrect location. If you need help in doing this, ask a user consultant.

If you see that someone else has entered something in the wrong place, you might send him or her a private message asking if he or she meant to do that.

Since this is a written communications medium, people will probably keep copies of the messages and comments you enter. Consider the words you use when you want to make a strong statement to someone, since they are recorded for posterity.

Until you adjust yourself to the pace of computerized conferencing, be careful about responding immediately in a heated, emotional, or potentially controversial situation. One nice feature about computerized conferencing is that you can write your message, "sleep on it," and decide later whether or not to send it.

EIES TERMINOLOGY AND JARGON

There are a number of terms that are unique to computerized conferencing in general or EIES in particular. Here are some basic definitions:

EIES: Electronic Information Exchange System

MESSAGE (n): a private communication exchanged between (or among) individuals; each message is identified with a unique five-digit number, such as M12345

MESSAGE (v): to send a message (also, messaged, messaging, etc.)

CONFERENCE: a common space for mutual exchanges or discussions among members of a specific group; conference items or comments are identified by the number of the conference and the comment number (e.g., C70 CC115)

PUBLIC CONFERENCE: a conference in which any EIES member may enter or read material; public conferences are identified by four-digit numbers or names

NOTEBOOK: a personal space for private composition or mutual authorship; notebooks are identified by the three-digit number of the member to whom it belongs

PUBLIC NOTEBOOK: a notebook with a specific group of allowed writers but open to any member for reading; public notebooks are identified by four-digit numbers or names

BULLETIN: a public space accessible for reading by any EIES member; the content is the responsibility of a human editor

MEMBER: an individual who has been invited to use EIES; a member may belong to groups, may participate in conferences, may have his or her own notebook and/or temporary conference, and may send messages

GROUP: a set of members with a common purpose; a group may have its own conference and its own bulletin; members may belong to one or more groups; each group is identified by a two-digit number which is also assigned to its conference

MENU: a set of choices available at a particular point in the system

ITEM: a general word referring to any item of text in EIES, such as a notebook page, a conference comment, or a private message

GET ITEMS: message/conference/notebook/bulletin choice (1) on the menu; this instructs the system to print out the entire item or items specified

DISPLAY TITLES: message/conference/notebook/bulletin choice (2) on the menu; this instructs the system to print out only the title or titles of the item or items specified

TITLE: identifying information at the beginning of an item, including the message or conference comment number, author, date and time entered, date and time modified (if modified), and any associations or keywords specified

SCRATCHPAD: a space for composing and editing text items

STORAGE AREA: a place for storing already composed text (or fragments of text) before sending it or entering it into a conference or notebook

USER CONSULTANTS: a group of people (#110-119) who are available to help you learn the mechanics and the art of using EIES

EXPLANATIONS: an on-line file of instructions for how to use various parts of the system; access to the explanations file is available through INITIAL CHOICE? (6)

CC: computer conferencing; computerized conferencing; conference comment

INFORMATION OVERLOAD: receiving more information than one can handle at once; one of the hazards of computerized conferencing

FTF: face-to-face, as opposed to communicating via computer

ADVANCED FEATURES: a set of features and procedures for experienced users of the system; message a user consultant to find out more

EIES CHECKLIST

If the terminal doesn't work, or if you have problems getting connected to EIES, check to see:

- Is the power on?
- Is the telephone receiver placed snugly in the cups on the terminal or acoustic coupler?
- Is the telephone cord from the receiver placed correctly (one cup should say "c" or "cord")?
- Is the terminal on a solid desk or table so it won't vibrate? If the acoustic coupler is separate from the terminal, is it cushioned from vibrations?
- If you are using an extension phone, do others know not to pick up the receiver on other phones with the same number, or does your switchboard operator know not to check your line every so often?
- Are the switches on your terminal set correctly? For example:
 - Miniterm: mode half, speed 30, mode std, parity off
 - TI-733: half, 30, even
 - Datapoint 3300: half, 300, remote

If everything listed above is satisfactory and you are still having problems, try pressing the "clear" key if you have one on your terminal to release a possible "break transmission" condition.

If that doesn't work and there is no one around to help, call the conferencing center at (201) 645-5503. If TELENET is not behaving as it should, call your nearest TELENET customer service number: 202-347-2424 (main office).

To start:

1. Dial TELENET and listen for the high-pitched tone.
2. Put the telephone receiver in the coupler or press the data key if you are using a data phone.
3. Enter (CR);(CR) (CR) stands for carriage return
4. When TELENET asks for the terminal code (TERMINAL=), enter the appropriate code, or enter (CR) if you have a standard printing terminal operating at 30 characters per second.
5. When TELENET types @, enter C 201 25CC.
6. When EIES types
WELCOME
NAME OR #?
type in your name or membership number.
7. When EIES types
CODE?XXXXXXXXXX
type in your code over the dark area.

To finish:

1. Enter two minus signs (--).
2. The system will let you know if there are any communications waiting for you and ask if you want to accept them. After this, if you choose to accept any communications, it will ask SIGNOFF (Y/N)?, in case you

have changed your mind after receiving any new messages.

3. If there were no messages, or if you answer yes to the signoff question, the system will respond with the date and time you signed off, as well as how much time you used in this session, how much cumulative time you have used, and how much time is allocated to you.
4. Then TELENET will type 201 25CC DISCONNECTED on one line and @ on another, and you may hang up or enter the system again.

ADVANCED FEATURES

EIES has a number of advanced features that make it possible for you to use the system with great flexibility and even to design your own commands. In a sense, a communications system like this is a living, evolving thing, and it should adapt and mature in response to the needs of its users--the essence of co-evolution. Because of this, the advanced features are always subject to changes and additions, so there is no detailed instruction booklet to help you learn about them. However, there is a one-sheet guide to the advanced features, which follows this brief description.

You should learn about the advanced features only when you feel a need for a specific feature and you are ready to learn more about EIES. The one-sheet guide will give you some information, and those with prior computer experience may find the guide and a little experimentation sufficient. User consultants (#110-119) are also available to help you, and there is further information in the EXPLANATIONS file, which you may access through INITIAL CHOICE? (6).

The following are brief descriptions of the advanced features included on the one-sheet guide.

COMMANDS (CHINESE COMMAND MENU AND SAMPLE COMMANDS)

Instead of using the menus to interact with the system, you may rely on commands. With commands you can do everything included in the menus and more. All commands that are directly executed begin with a plus (+). You may use the Chinese Command Menu to create your own commands (pick one from the verb column and one from the object column). Normally users learn the commands for those things they do frequently, such as:

+CNM (Compose New Message)
+GC # (Get Conference #XX)

ADDRESSING OR SPECIFYING TEXT ITEMS

Although we humans see the text items in EIES as collections of messages, conference comments, notebook pages, and so on, the computer treats these as one large file of compatible text items. By specifying a text item by its type (M for message, C for conference, etc.) and by its number, it is possible to include in a command any text item you are privileged to read or modify. For example:

+G M12345 (Get Message 12345)
+D C55C123 (Display Conference 55 Comment 123)

REMINDERS (RM)

Each user has a private memo pad for leaving one-line reminders for later action. When there is a lot of message traffic, you may want to use the reminders to help you remember to respond to an item at a later time. To enter a reminder, use either the +CRM (Compose Reminder) or the +ARM (Add Reminder) command and one line of text. The system will assign a date, time, and number to each of your reminders.

SCRATCHPAD (SP) & STORAGE AREAS (SA)

Each user has five storage areas which are identical to the scratchpad.

Any time you are composing text in your scratchpad and you want to store it for further composing or editing later on, you may put the text into one of your storage areas. You may do almost any possible combination of inserting, copying, merging, and/or exchanging between your scratchpad and storage areas.

DOCUMENT EDIT AND CONTROL COMMANDS

These indirect edit and control commands may be included within text that you compose in your scratchpad. They are not executed until the message or conference comment is received. They are particularly useful for "dressing up" a text item to make it look good for formal purposes. With these commands, it is possible to include indirectly other text items within the one you are working with, as well as to design special tables and questionnaire forms. The .TABS command is particularly useful for writing something in tabular form and .TEXT will automatically indent and line up paragraphs. Note that these indirect commands all begin with a period (.), while all the direct commands begin with a plus (+).

ADAPTIVE FEATURES

The adaptive text features allow you to write text which will ask questions of the reader, and, based on the reader's responses, which will give the reader additional text material. This feature can be used to write questionnaires or interviewing processes that are quite sensitive to the respondent's answers.

STRING VARIABLES (SV) AND NUMERIC VARIABLES (NV)

These variables allow you to create your own personal commands or procedures to use on EIES. They have no effect on the rest of the system commands, and other users may create their own similar commands. With string and numeric variables, you may literally tailor your own user interface.

CHINESE COMMAND MENU

One may pick a verb abbreviation from column one and an object abbreviation from column two to attempt to form a valid command; no harm is done if not valid.

VERBS	OBJECTS
A Add	A Associations
C Compose/Send	B Bulletin
CA Copy & Add	D Directory
CY Copy	C Conference
D Display	CC Conference Comment
E Explain	F Forms
EX Exchange	G Group
F Find/Search	K Keys
G Get	M Message
L Lat	MG Member/Group
M Modify/Edit	N Notebook
O Organize	NC New Comment
P Print	NM New Message
R Review	NP Notebook Page
S Set/Send	NV Numeric Variable
SN Set Negative	RM Reminder
TA Transfer & Add	S Sequence
TR Transfer	SA Storage Area
V Vote	SP Scratchpad
	SV String Variable
	SS System Status
	T Time and Date
	V Votes

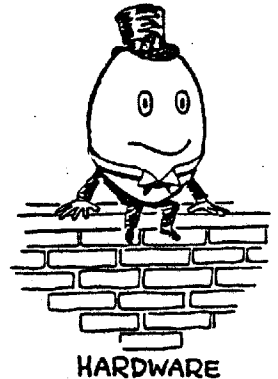


Advanced Features

Computerized Conferencing and
Communication Center
New Jersey Institute of Technology
323 High Street
Newark, N.J. 07102
201-645-5503

REMINDERS (RM)

+CRM reminder Compose or Add
+ARM reminder to end of list
+ORM/+GRM Display or Get
all reminders
Only ones specified
Find reminder with
'word' in it
Modify (delete -)
reminder # and
renumber others
Replace reminder #
Place a warning date
on this reminder



SAMPLE COMMANDS

+GC name/# Get Conference
+RMG name/# Review Member/Group
+G item Get any text item
+D item Display item title
+GM # Get Message #
+DM # Display Message #
+GMG #/name Get Member/Group #
+DMG #/name Display Members/Groups
+MM # Modify Message #
+MM - # Delete Message #

ADDRESSING OR SPECIFYING TEXT ITEMS

ADDRESSING OR SPECIFYING TEXT ITEMS

Building Blocks:

M# Message #
C# Conference #
CC# Conference Comment #
N# Notebook #
NP# Notebook Page # (or P#)
SA# Storage Area #
L# Lines #
H Item Heading Only
T Item Text only

Alternatives:

NP#.#.# Equivalent NP#L#
#.#-#.# ranges allowed for
text items or lines
#A items associated with
item #
#FF items following in
sequence from #

Any meaningful combination allowed:

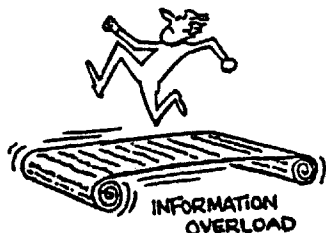
M12384L21-30
C72CC88L1-30
M21458T

Sample Commands:

+G item Get item
+D item Display item
+CY item<item Replace item
+CY item<<item insert or add
+EX item><item Exchange items

Other Text Items:

MA# Member # Address
MG# Member Group # Description
GM# Group # Membership List



SCRATCHPAD (SP) & STORAGE AREAS (SA)

All text composition is done in the scratchpad;
each user has one, as well as five Storage Areas
to save different items of text undergoing composition.
These are identified as:
SA1 SA2 SA3 SA4 SA5
While in scratchpad text may be moved back and
forth as in the following examples:

Exchange SP with SA:

&><SA# Exchange the contents of SP with SA #.
&<>SA# Same as above.
&SA#<>SA# Exchange Storage Areas

Copy into and Replace (<) SP from SA:

&<SA# Copy from SA # into SP beginning at the
line the command is entered.
&<SA#L#-# Copy only selected lines from SA #.

Copy In and Insert (<<) into SP from SA:

&<<SA#L# Insert lines # from SA # without
replacing anything in SP

Copy Out of SP and replace (>) in SA:

&>SA# Copy out SP into SA # beginning at line 1
&#>SA# Copy out lines # in SP into SA #
&>SA#L# Begin at Line # in SA # for copying.

Copy Out and Insert (>>) into SA:

&>>SA# Add SP to end of SA #
&>>SA#L# Insert beginning at line #
&#>>SA# Add indicated lines to end of SA #

General Forms of Above:

Copy out Replace (>) and Insert (>>)
&>item Replace item with SP
&#>item Replace item with some of SP
&>>item Add SP to end of item
&#>>item Add some of SP to end of item
&>>itemL# Insert SP at L# in item.

Copy in Replace (<) and Insert (<<)
&<item Replace from this point
&<<item Insert from this point

Example Item Types:

SA# Storage Area #
SA#L# Only certain lines
M# Message #
C#CC# A Conference Comment
N#NP# A Notebook Page
NP# Your Notebook
SP# Scratchpad Lines #
C#CC#T Text only
C#CC#H Heading only

DOCUMENT EDIT AND CONTROL COMMANDS

Used in text at beginning of line. Applies when final item is printed (at output time). May be seen in SP after editing (use ::).

Indirect Edit Commands:

- . BLANK # Print # blank lines here.
- . BLOCK # - # Block text following from column # to # until NOBLOCK encountered.
- . NOBLOCK Center 'text' within margins.
- . CENTER text Prints text as literally entered.
- . EXACT Ignore other indirect edits.
- . NOEXACT Replace symbol (\$) in text following with blanks.
- . FILL \$ Indent # space for each \$ (any symbol) encountered after column one (blank) in each line following until NOINDENT.
- . NOFILL Set left margin at column #.
- . INDENT \$ # Set to default of column 1.
- . NOINDENT Begins 'text' over # spaces.
- . LEFT # Generate a form feed character.
- . LEFT Set reset all margins and spacing to default settings.
- . OVER # text Set right margin to column #.
- . PAGE Set right margin to column 72.
- . RESET Space # Lines between text
- . RIGHT # Tab output following based upon occurrence of \$ (any symbol) and space.
- . RIGHT Left, Right or Center justify within tabs.
- . SPACE # Formats paragraphs by filling unused blank areas on right of lines.
- . TABS \$ #S, #L, #R, #C Indirect use of direct edit.
- . NOTABS Convert what is in scratchpad to explicit copy of what edits produce (remove edits).
- . TEXT Semicolon used to separate commands on same line.
- . NOTEXT
- . !text! (#)
- . +IMAGE
- . RIGHT # ; . LEFT #

Indirect Control Commands:

- . CHAIN item Will start print of another text item and not return to this one.
- . DELIVER # / C # / N # Take all answers supplied to FORM, QUESTION and ACCEPT (with variables) and send to members, groups, a notebook or a conference.
- . DISPLAY item, item Printout titles only of items.
- . EXEC command Execution allowed of most EIES commands when the text is utilized.
- . EXDIS command Executes and displays command.
- . FORM \$ Same as FILL, but reader asked to supply answers in place of \$ symbols.
- . NOFORM Print out items indicated here and return to next line of this item.
- . GET item, item Return from a GET item if not end of text.
- . END Deliver 'text' with reply, do not print with text of FORM, QUESTION, etc.
- . INCLUDE text Print 'text' and accept and store variable length answer.
- . QUESTION text
- . +INHIBIT Inhibit execution of above commands while in Scratchpad.
- . +NOINHIBIT

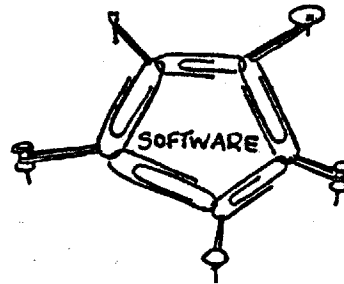
ADAPTIVE TEXT FEATURES

(Abbreviations also shown)

- . ACCEPT: Allow reader to answer a question asked just before.
- . A: Accept answer as a string variable.
- . A: X \$ Accept answer as a numeric variable.
- . A: X # Check if what reader put in matches any of S1 of S2 or ...
- . MATCH: S1, S2, ... Type out 'text' but substitute wherever a string or numeric variable appears.
- . M: S1, S2, ... Type contents of string variable X.
- . TYPE: text Type 'text' if MATCH was Yes.
- . T: text Type 'text' if MATCH was No.
- . T: X \$ Jump to line or item.
- . TY: text Unconditional jump.
- . TN: text Jump if MATCH was Yes.
- . JUMP: line/item Jump if MATCH was No.
- . J: line/item 'text' not printed out, but stored for benefit of author.
- . JY: line/item Use indicated lines or item and return to next line.
- . JN: line/item
- . REMARK: text
- . R: text
- . USE lines/item
- . U: lines/item
- . +NOPILOT Inhibit execution of above commands while in scratchpad.
- . +PILOT



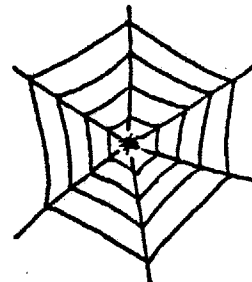
EVALUATION



STRING VARIABLES (SV)

(letters A to Z)

- +SSV A=string Set String Variable A equal to 'string'
- +GSV Get all String Variables
- +GSV A Get only SV A
- +DSV Display letters used
- +FSV / string/ Find SV with 'string' in it
- +AS Use SV A as input to EIES for an answer
- +MSV A/ old/ new/ Replace 'old' with 'new' in string variable A
- +MSV - A Delete String variable A
- +SSV A=S1, +B\$, S2 Incorporating another string
- +ASV A=string Append this string on end of current A string (125 characters allowed)



ORGANIZATION

NUMERIC VARIABLES (NV)

(letters A to Z)

Everything for String Variables applies to numeric variables substituting NV for SV in above and:

- +SNV A=#, N, # Set A equal to a series of numbers separated by commas
- +A# Use NV A as input
- +DNV Display letters used and how many numbers in each separated by commas
- +UNV A=B+C Math operation on NV
- +UNV A(3)=A(3)+1 For single element (Let 1 be added to 3rd element)

SELECTED REFERENCES

- Day, Larry. "Computer Conferencing: An Overview," VIEWS FROM ICC 74, ed. N. Macon. Washington, D.C.: Council for Computer Communications.
- Hiltz, Starr Roxanne. "Computer Conferencing: Assessing the Social Impact of a New Communication Medium." TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE, X, No. 4 (1977).
- Hiltz, Starr Roxanne, and Turoff, Murray. THE NETWORK NATION: HUMAN COMMUNICATION VIA COMPUTERS. Reading, Mass.: Addison Wesley Advanced Books, 1978.
- Linstone, Harold, and Turoff, Murray. THE DELPHI METHOD: TECHNIQUES AND APPLICATIONS. Reading, Mass.: Addison Wesley Advanced Books, 1975.
- Turoff, Murray, and Hiltz, Starr Roxanne. "Computerized Conferencing: Meeting Through Your Computer," IEEE SPECTRUM MAGAZINE, May, 1977.
- Turoff, Murray. "An On-Line Intellectual Community or MEMEX Revisited," TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE, X, No. 4 (1977).
- Turoff, Murray. "The State of the Art of Computerized Conferencing," VIEWS FROM ICC 74, ed. N. Macon. Washington, D.C.: Council for Computer Communications.