1-1-1981

Guide to the topics system

Computerized Conferencing & Communications Center

Peter Johnson-Lenz

Trudy Johnson-Lenz

Follow this and additional works at: https://digitalcommons.njit.edu/ccccreports

Part of the Digital Communications and Networking Commons

Recommended Citation

Computerized Conferencing & Communications Center; Johnson-Lenz, Peter; and Johnson-Lenz, Trudy, "Guide to the topics system" (1981). Computerized Conferencing and Communications Center Reports. 13.

https://digitalcommons.njit.edu/ccccreports/13

This Report is brought to you for free and open access by the Special Collections at Digital Commons @ NJIT. It has been accepted for inclusion in Computerized Conferencing and Communications Center Reports by an authorized administrator of Digital Commons @ NJIT. For more information, please contact digitalcommons@njit.edu.
COMPUTERIZED CONFERRING
& COMMUNICATIONS CENTER

at

NEW JERSEY
INSTITUTE OF TECHNOLOGY

GUIDE TO THE TOPICS SYSTEM

BY:

Peter and Trudy Johnson-Lenz

RESEARCH REPORT #13

January 1981

c/o Computer & Information Science Department
New Jersey Institute of Technology
323 High Street, Newark, N. J. 07102
ACKNOWLEDGEMENTS

The TOPICS system in its current form has been designed, developed, and documented by Peter and Trudy Johnson-Lenz with the involvement and assistance of many other people.

Special thanks go to: Participation Systems Inc. (PSI) and their Politechs projects (Legitech, Publictech, and Localtech) and to the Computerized Conferencing and Communications Center at the New Jersey Institute of Technology (CCCC at NJIT) for their initial involvement and assistance; to the Cooperative Extension Service offices at Colorado State University, New Mexico State University, and the University of Arizona for support during the Rapid Growth Communities project; and to the many users of the system who provided invaluable criticism and suggestions.

The TOPICS system grew, in part, out of the concepts and design of the original LEGITECH system previously designed and developed on EIES by Participation Systems Inc. and Johnson-Lenz with support from the National Science Foundation under grants DSI 77-17838 and DSI 77-27940.

The development of the TOPICS system was partially supported by grant number MCS 78-00519 from the Division of Mathematical and Computer Sciences of the National Science Foundation.
<table>
<thead>
<tr>
<th>Item</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>User's Guide to the TOPICS System</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to the TOPICS system</td>
<td>1.1</td>
</tr>
<tr>
<td>Summary overview</td>
<td>1.1.1</td>
</tr>
<tr>
<td>Basic concepts: exchange, topics, responses, markers, your selection</td>
<td>1.1.2</td>
</tr>
<tr>
<td>Sketch of use</td>
<td>1.1.3</td>
</tr>
<tr>
<td>How to get around in TOPICS (+ ++ +#,# menus ++0)</td>
<td>1.2</td>
</tr>
<tr>
<td>Flowchart of the TOPICS system</td>
<td>1.2.1</td>
</tr>
<tr>
<td>Moving around and answering ahead</td>
<td>1.2.2</td>
</tr>
<tr>
<td>Using the menus</td>
<td>1.2.3</td>
</tr>
<tr>
<td>Summary of menu choices by name/function</td>
<td>1.3</td>
</tr>
<tr>
<td>Summary of menu choices by number</td>
<td>1.4</td>
</tr>
<tr>
<td>Three ways to begin using TOPICS</td>
<td>1.5</td>
</tr>
<tr>
<td>Regular interactive delivery (Y)</td>
<td>1.5.1</td>
</tr>
<tr>
<td>Batch delivery (B)</td>
<td>1.5.2</td>
</tr>
<tr>
<td>Overview of topics via keyword index (++4), review topics (++1,6)</td>
<td>1.5.3</td>
</tr>
<tr>
<td>Getting waiting topics and responses delivered (++ Y)</td>
<td>1.6</td>
</tr>
<tr>
<td>Other delivery options (B, R, T, K)</td>
<td>1.7</td>
</tr>
<tr>
<td>Entering responses to topics (++2,4)</td>
<td>1.8</td>
</tr>
<tr>
<td>Raising new topics (++1,4)</td>
<td>1.9</td>
</tr>
<tr>
<td>Entering pen and anonymous topics or responses (++1,4 ++2,4)</td>
<td>1.10</td>
</tr>
<tr>
<td>Modifying, closing, or deleting topics and responses (++1,5 ++2,5)</td>
<td>1.11</td>
</tr>
<tr>
<td>Adding another member to a private topic (++5,4)</td>
<td>1.12</td>
</tr>
<tr>
<td>Printing out and listing topics and responses (++1,1 ++1,2 ++2,1 ++2,2)</td>
<td>1.13</td>
</tr>
<tr>
<td>Adding and removing topics to/from your selection (++3,1 ++3,2 ++3,4 ++3,5)</td>
<td>1.14</td>
</tr>
<tr>
<td>Moving your markers (++5,5)</td>
<td>1.15</td>
</tr>
<tr>
<td>The keyword index and keyword searching and retrieval (++4,1 ++4,2 ++4,6)</td>
<td>1.16</td>
</tr>
<tr>
<td>Keeping track of who is reading what (++1,6 ++2,6 ++5,1 ++5,2 ++6,2 ++6,6)</td>
<td>1.17</td>
</tr>
<tr>
<td>Responding to a topic/tally or response/tally and getting feedback (++1,7 ++2,7)</td>
<td>1.18</td>
</tr>
</tbody>
</table>
Adding and removing questions in a topic/tally or response/tally 1.19
(++)1,8 ++2,8)

Pagination and delivery of your own items (+SSW 7 +SSW 13 +SSW 6) 1.20
Copying topics and responses (+TCY and +TCIN) 1.21

Roles and levels of access 1.22

Relationship of TOPICS to EIES (++0) 1.23

Limitations 1.24

Editor's Guide to the TOPICS System 2

Adding keywords to the index and to TOPICS (++4,4) 2.1
Deleting keywords from topics and the index (++4,5) 2.2
Modifying relationships among keywords (++4,7) 2.3

Keeping the exchange tidy (++1,5 ++2,5) 2.4

Gatekeeper's Guide to the TOPICS System 3

Keeping track of members of the exchange (++6,1 ++6,2 ++6,6) 3.1
Keeping track of members of topics (++5,1 ++5,2 ++5,6) 3.2
Adding and removing members (++6,4) 3.3
Modifying a member's access level (++6,4) 3.4
Moving a member's markers (++5,5) 3.5
Adding and removing topics from a member's selection (++3,2 ++3,4 ++3,5) 3.6
Trapping and releasing members (++6,5) 3.7
Tips on helping new members get started
  Beginning with interactive delivery (Y) vs. batch delivery (B) 3.8.1
  Using the default topic marker 3.8.2
  Using the keyword index and reviewing topics to get an overview 3.8.3
  Presetting members' selections and markers 3.8.4

Use of groups with the exchange (++7) 3.9

Monitor's Guide to the TOPICS System 4

Introduction to exchange options (++8) 4.1

Public versus private exchange 4.1.1
Default topic marker 4.1.2

Number of lines per topic/inquiry 4.1.3
Who can respond to a topic -- receivers vs. selectors 4.1.4
Limit on number of topics in selection 4.1.5
Automatic indirect edit enabled 4.1.6
Adding and removing questions in a topic/tally or response/tally (++1,8 ++2,8)

Pagination and delivery of your own items (+SSW 7 +SSW 13 +SSW 6) 1.20
Copying topics and responses (+TCY and +TCIN) 1.21
Roles and levels of access
Relationship of TOPICS to EIES (++0)
Limitations

Editor's Guide to the TOPICS System

Adding keywords to the index and to TOPICS (++4,4) 2.1
Deleting keywords from topics and the index (++4,5) 2.2
Modifying relationships among keywords (++4,7) 2.3
Keeping the exchange tidy (++1,5 ++2,5) 2.4

Gatekeeper's Guide to the TOPICS System

Keeping track of members of the exchange (++6,1 ++6,2 ++6,6) 3.1
Keeping track of members of topics (++5,1 ++5,2 ++5,6) 3.2
Adding and removing members (++6,4) 3.3
Modifying a member's access level (++6,4) 3.4
Moving a member's markers (++5,5) 3.5
Adding and removing topics from a member's selection (++3,2 ++3,4 ++3,5) 3.6
Trapping and releasing members (++6,5) 3.7
Tips on helping new members get started
  Beginning with interactive delivery (Y) vs. batch delivery (B) 3.8.1
  Using the default topic marker 3.8.2
  Using the keyword index and reviewing topics to get an overview 3.8.3
  Presetting members' selections and markers 3.8.4
Use of groups with the exchange (++7) 3.9

Monitor's Guide to the TOPICS System

Introduction to exchange options (++8) 4.1
Public versus private exchange 4.1.1
Default topic marker 4.1.2
Number of lines per topic/inquiry 4.1.3
Who can respond to a topic -- receivers vs. selectors 4.1.4
Limit on number of topics in selection 4.1.5
Automatic indirect edit enabled 4.1.6
USER'S GUIDE TO THE TOPICS SYSTEM
TOPICS is a system for computer-based information exchange among a network of people who share certain areas of interest. The system supports simultaneous discussion of many topics at once by allowing members to raise brief, pointed topics/inquiries and then to enter responses to those inquiries. The responses are shared with all members who express an interest in each topic by selecting it. The system is designed to facilitate the flow of inquiries and responses without overloading members with irrelevant or uninteresting information.

Nested within the Electronic Information Exchange System (EIES), this tailored communication system written in the INTERACT programming language helps regulate the flow of information by allowing network members to select those topics of interest after receiving the brief topic-raising inquiries. Members receive responses only for those topics which they select, and thus most of the irrelevant information is filtered out by the computer. As new topics are raised, they are delivered to members who are given the option of selecting them or not.

In addition, each topic is assigned keywords by its author. An alphabetic index of these keywords is kept up to date by the computer so that members can scan it or search it for specific keywords to find particular topics, even old ones that were not interesting when first raised. Furthermore, if many responses are waiting to be delivered to a user who is in a hurry or otherwise wants to see those on a specific topic only, the system will deliver responses by keyword or topic number, if desired.

Finally, through its membership and access structure, the information flow in the system can be tailored to meet differing needs of specific groups. Topics and members are organized into separate exchanges so that a particular group of people can exchange among themselves while other groups do likewise in other areas without overlap. Within an exchange, topics may be open to all or directed to specific people only. Furthermore, members may be grouped and topics directed to only specific groups of members. Membership in an exchange is available to regular EIES members as well as holders of EIES sub-account memberships who are using a multi-user account.
BASIC CONCEPTS: EXCHANGE, TOPICS, RESPONSES, MARKERS, YOUR SELECTION

The place in which members exchange topics/inquiries and responses is called an EXCHANGE. Exchanges may be public (open to all on EIES) or private. After you enter +TOPICS, the system will ask EXCHANGE?. Enter the name or two-letter abbreviation for the exchange of which you are a member. Note that no master list of exchanges is kept anywhere. This has been done on purpose to keep an measure of privacy between exchanges. If you do not know the name or abbreviation of the exchange in which you wish to participate, ask the person who invited you to participate for such information.

In the TOPICS system, the term "TOPIC" has several meanings. When a new TOPIC/INQUIRY is raised, it is presented as a brief item, usually 3-5 lines long. It is delivered to all designated members of the exchange who then have the opportunity to select it or not. Topics are numbered sequentially as they are raised and are specified by number, as in T16. In the narrowest sense of the word, a TOPIC is the brief topic/inquiry.

Once a topic has been raised, members are encouraged to enter RESPONSES to it. Each response can be up to 57 lines long. You will receive responses automatically only for those topics which you select. Responses are numbered sequentially as they are entered and are specified by number, as in T16R1. When the topic/inquiry raiser and all related responses are combined, this is also called a TOPIC -- this is TOPIC in the broader sense of the word.

The system keeps track of which topics and responses have been delivered to you by maintaining MARKERS. There are two kinds of markers: a topics marker for the brief topic/inquiry raisers, and a response marker for EACH of the topics which you have selected. The system uses these markers to make sure that you get only new topics and new responses within old topics you have selected. You may move or modify your markers at any time (see Section 1.15).

It is likely that some of the topic/inquiry raisers in the exchange will be of interest to you and that others will not. The system allows you to put interesting topics in YOUR SELECTION. Then, any new responses to those topics in your selection will be delivered to you automatically. You will not receive responses to topics which you have not selected. Topics may be added to your selection during interactive delivery (see Sections 1.5.1 and 1.6), or you may add or remove topics to/from your selection with commands at any time (see Section 1.14).
[Section 1.1.3]

SKETCH OF USE

To participate in an exchange, enter the +TOPICS command. The system will ask you for the name of the exchange in which you wish to participate. If you like, you can anticipate this question by answering ahead and entering +TOPICS,XXXX to enter the XXXX exchange. You can use the two-letter abbreviation instead of the full exchange name if you wish.

After welcoming you to the exchange, the system will tell you how many topics and responses have been entered to date and give you an opportunity to ACCEPT any waiting topics and responses you have not yet seen. If you accept what is waiting for you, these items will be delivered automatically. Responses to topics you have already selected will be delivered first. These will be followed by any new topics/inquiries. After each new topic/inquiry is delivered, you will be asked if you want to SELECT it in order to receive any associated responses. If you select a topic/inquiry, any responses entered to date will be delivered BEFORE the next new topic is delivered to you for your consideration. This is regular interactive delivery of topics and responses (see Sections 1.5.1 and 1.6).

If you prefer to find out a little about what is waiting for you before accepting waiting items, you can display a summary of topics and responses that are waiting to be delivered. After displaying the summary the system will give you another opportunity to ACCEPT any waiting items.

In addition to this regular style of delivery, you can choose to have all new topics delivered without being asked if you want to select them or not. You can also choose to receive only waiting responses, or only waiting topics, or you can choose to receive responses on specific topics identified either by topic number or keyword. (See Sections 1.5.2 and 1.7)

Once you have displayed and/or accepted whatever waiting items you wish to receive, you will be taken to EXCHANGE CHOICE? where you have access to the entire system and all its capabilities. From EXCHANGE CHOICE? you can access topics, responses, the keyword index, your selection, and information about other members. The EXCHANGE CHOICE menu can be printed out when you need help in remembering the choices available to you by entering a carriage return when the system asks EXCHANGE CHOICE?. After you enter your choice from the EXCHANGE CHOICE menu, you will be taken to the appropriate second menu that further details the choices at hand. Using these menus you can move around the system freely, composing new topics and responses, using the keyword index, modifying and deleting items needing changes, and otherwise getting your work done. (See Section 1.2 for more information on how to get around in TOPICS.)

When you are finished you can log out of EIES with — (two minus signs) and stop, or you can go to another exchange within TOPICS or into the regular EIES system to send messages and participate in the many communication activities there.
[Section 1.2.1] FLOWCHART OF THE TOPICS SYSTEM

Using the menus to move around the system

+TOPICS
EXCHANGE?

| <<------------------------<-- |
| v

ACCEPT WAITING ITEMS
(Y/B/T/R/K/W/D/?)

| | | | | | | | help---> |
| | | | | | | display---> |
| | | | | | | no------>*
| | | | | | | | keyword-->*
| | | | | | | responses>* |
| | | | | | | topics-->* |
| | | | | | | batch-->* |
| v | v | v | v |
(regular) (options)

delivery of waiting items

| <<------------------------<-- |
| to accept
| waiting items
| enter ++ ->>------>**

[[++]]

to go directly to

EXCHANGE CHOICE #

| enter ++# ->>------>** |
| (or answer-ahead |
| with ++#,#) |
| v

ACCESS TO:

TOPICS/INQUIRIES (1)-> |
BACKGROUND/RESPONSES (2)-->
YOUR SELECTION OF TOPICS (3)->
ALPHABETIC INDEX OF TOPICS (4)->
TOPIC MEMBERS AND MARKERS (5)->
MEMBERS OF THIS EXCHANGE (6)->
GROUPS IN THIS EXCHANGE (7)->
MONITOR OPTIONS (8)->
OTHER EXCHANGES (9)->
EIES (0)->

EXCHANGE CHOICE?

| -->------>DO YOU WISH TO:
| GET TOPICS WITH RESPONSES (1)
| GET TOPIC/INQUIRIES ONLY (2)
| COMPOSE/ADD A NEW TOPIC (4)
| MODIFY/DELETE/CLOSE TOPIC (5)
| REVIEW TOPICS (6)
| RESPOND TO TOPIC/TALLY (7)
| ADD/REMOVE TOPIC/TALLY (8)

TOPIC CHOICE?

[[++]]

*-->------>DO YOU WISH TO:
| GET FULL TEXT OF RESPONSES (1)
| DISPLAY TITLES OF RESPONSES (2)
| COMPOSE/ADD RESPONSES (4)
| MODIFY/DELETE RESPONSES (5)
| REVIEW RESPONSES (6)
| RESPOND TO RESPONSE/TALLY (7)
| ADD/REMOVE RESPONSE/TALLY (8)

RESPONSE CHOICE?

[[++]]

*-->------>DO YOU WISH TO:
| GET TOPICS IN SELECTION (1)
| DISPLAY TOPICS IN SELECTION (2)
| ADD TOPIC TO SELECTION (4)
| DELETE TOPIC FROM SELECTION (5)

SELECTION CHOICE?

[[++]]

*-->------>DO YOU WISH TO:
| GET FULL ALPHABETIC INDEX (1)
| GET ABBREVIATED INDEX (2)
| ADD KEYS TO TOPICS (4)
| DELETE KEYS FROM TOPICS (5)
| RETRIEVE TOPICS BY KEYWORD (6)
| MODIFY KEYWORD RELATIONS (7)

INDEX CHOICE?

[[++]]

*-->------>DO YOU WISH TO:
| GET MEMBERS OF TOPIC (1)
| DISPLAY MEMBERS OF TOPIC (2)
| ADD MEMBERS TO TOPIC (4)
| MODIFY MARKERS (5)
| GET TOPICS/MEMBERS MATRIX (6)

TOPIC MEMBER CHOICE?

[[++]]
1.2.1

**>>DO YOU WISH TO:

| GET MEMBERS OF EXCHANGE (1)
| DISPLAY MEMBERS OF EXCHANGE (2)
| ADD/REMOVE EXCHANGE MEMBERS (4)
| TRAP/RELEASE MEMBERS (5)
| REVIEW MEMBERS OF EXCHANGE (6)
| EXCHANGE MEMBER CHOICE?

[[[++]]]

**-->>DO YOU WISH TO:

| GET GROUP MEMBERS (1)
| DISPLAY GROUP MEMBERS (2)
| ADD/REMOVE GROUPS (4)
| ADD/REMOVE GROUP MEMBERS (5)
| REVIEW GROUPS (6)
| GROUP CHOICE?

[[[++]]]

**-->>-->>DO YOU WISH TO:

| GET MONITOR OPTIONS (1)
| DISPLAY MONITOR OPTIONS (2)
| ADD MONITOR OPTIONS (4)
| MODIFY MONITOR OPTIONS (5)
| REVIEW MONITOR OPTIONS (6)
| MONITOR OPTION CHOICE?

[[[++]]]
[Section 1.2.2]  
MOVING AROUND AND ANSWERING AHEAD  

When you first enter an exchange, the system will welcome you and then ask ACCEPT WAITING ITEMS?. If you wish to skip delivery of waiting items and go directly to EXCHANGE CHOICE?, answer N to ACCEPT WAITING ITEMS. You may even answer ahead on this question when you enter the +TOPICS command: +TOPICS,XXXX,N will take you from EIES directly to EXCHANGE CHOICE? in the XXXX exchange.  

If you wish to return to the ACCEPT WAITING ITEMS question from any other place in the exchange, enter ++ and you will be asked ACCEPT WAITING ITEMS? (For more information on the delivery of waiting items, see Sections 1.5.1, 1.5.2, 1.6, and 1.7.)  

The TOPICS system works with a two-step menu. The initial menu is the EXCHANGE CHOICE menu. Each choice on that menu has an associated second menu as shown in the flowchart in Section 1.2.1. (For details of using the menus, see Section 1.2.3.) You can answer ahead to indicate both menu choices in one command by entering ++#,#. For example, access to BACKGROUND/RESPONSES is choice 2 on the initial EXCHANGE CHOICE menu. This leads to the RESPONSE CHOICE? menu. On this second menu, choice 4 is COMPOSE/ADD RESPONSES. So, to compose a response, you would enter 2 to EXCHANGE CHOICE? and 4 to RESPONSE CHOICE?, or, answering ahead, ++2,4. When you answer ahead like this with ++#,# you will be taken directly through the second menu choice and will not be asked ACCEPT WAITING ITEMS first.  

Since the ++#,# command does not go to the ACCEPT question, you cannot answer ahead on that question from within the exchange. You must enter ++ to get to ACCEPT WAITING ITEMS? and then answer the question when it is asked.  

If you are at one of the second menus (e.g., TOPIC CHOICE?, RESPONSE CHOICE?, INDEX CHOICE?) and you want to return to EXCHANGE CHOICE?, enter a +. You can also enter a + to get out of any repeated question loop further down in the second menu when the system is asking you to specify a topic number or member number or whatever.  

To return to EIES from anywhere in the exchange, enter ++0. Access to EIES is menu choice 0 (zero) on the EXCHANGE CHOICE? menu.  

IN BRIEF: enter N at ACCEPT WAITING ITEMS to skip delivery of waiting items. Enter ++ to go to ACCEPT WAITING ITEMS from anywhere in the exchange. Enter ++#,# to go directly to menu choice #,# from anywhere in the exchange, except during the delivery of waiting items. Enter + to go back one level or to get out of a looping question. Enter ++0 to return to EIES.
[Section 1.2.3]

USING THE MENUS

EXCHANGE CHOICE -- THE INITIAL MENU

Following delivery of any waiting items you will be taken to EXCHANGE CHOICE?.
As a reminder of the exchange you are in at the time, the system will print
out XXXX EXCHANGE CHOICE? (where XXXX is the exchange name). If you are in
long-menu mode the system will print out the following initial menu for you:

ACCESS TO:
- TOPICS/INQUIRIES (1)
- BACKGROUND/RESPONSES (2)
- YOUR SELECTION OF TOPICS (3)
- ALPHABETIC INDEX OF TOPICS (4)
- TOPIC MEMBERS AND MARKERS (5)
- MEMBERS OF THIS EXCHANGE (6)
- GROUPS IN THIS EXCHANGE (7)
- MONITOR OPTIONS (8)
- OTHER EXCHANGES (9)
- EIES (0)

XXXX EXCHANGE CHOICE?

If you are in short-menu mode (menus have been turned off with +SSM), you can
get the menu by entering a carriage return when EXCHANGE CHOICE? is asked.

At this point enter the number of the menu choice which corresponds to the
part of the system to which you want access. After you enter the number for
your choice you will be taken to a second-level menu as shown in detail in the
flowchart in Section 1.2.1. The alternatives available to you through these
second-level menus are briefly described here.

(1) TOPICS/INQUIRIES: This choice gives you access to
topics/inquiries. If you enter 1, you will then be taken to TOPIC
CHOICE? where you will be able to get complete printouts, display
topic headers, compose and modify topics, and get a review of all
topics in the exchange. All topics in an exchange are characterized
by these parts: (a) title: one line summarizing the topic, (b)
keys: for indexing, (c) inquiry text: a few lines of introduction
to the topic, (d) members: those to whom the topic has been sent,
(e) responses to the topic, and (f) a topic number assigned by the
system when the topic is first entered by its author.

(2) BACKGROUND/RESPONSES: This choice gives you access to the
responses to specific topics. If you enter 2, you will then be
taken to RESPONSE CHOICE? where you will be able to get complete
printouts, display response headers, compose and modify responses,
and get a review of responses for specific topics. All responses to
a topic in an exchange are characterized by these parts: (a) title:
one line summarizing the response, (b) response text: as many as 57
lines of background or response to the topic, and (c) a response
number assigned by the system when the response is first entered by
its author, ranging from 1 on up within each topic.
(3) YOUR SELECTION OF TOPICS: This choice gives you access to your selection of topics as well as to the selections of other members of the exchange. If you enter 3, you will be taken to SELECTION CHOICE? where you can modify your own selection as well as review the selections of others.

(4) ALPHABETIC INDEX OF TOPICS: This choice gives you access to the keyword index of topics. If you enter 4, you will be taken to INDEX CHOICE? where you can print out the full or abbreviated versions of the index, add and delete keys from topics you have authored, and retrieve topics by keyword.

(5) TOPIC MEMBERS AND MARKERS: This choice gives you access to two things: the lists of who is a member of which topic and your own markers. The system keeps track of the highest topic number you have received, and within each topic you have selected, the highest response number you have received. These numbers are your markers -- your topic marker and your responses markers. If you enter 5, you will be taken to TOPIC MEMBER CHOICE? where you can print out lists of who is a member of which topic as well as change your topic and response markers. Through this menu choice you can also add members to private topics.

(6) MEMBERS OF THIS EXCHANGE: This choice gives you access to information about the members of the exchange. If you enter 6, you will be taken to EXCHANGE MEMBER CHOICE? where you can print out lists of who is a member and some basic information about each member. Gatekeepers also use this choice for adding and removing members to and from the exchange.

(7) GROUPS IN THIS EXCHANGE: This choice gives you access to information about groups of members in the exchange. If you enter 7, you will be taken to GROUP CHOICE? where you can print out lists of which groups exist and who is a member of which groups. Gatekeepers also use this choice for creating groups and modifying group membership.

(8) MONITOR OPTIONS: This choice gives you access to information about the current settings of the monitor options for the exchange. If you enter 8, you will be taken to MONITOR OPTION CHOICE? where you can print out the current settings. Monitors also use this choice to change these settings.

(9) OTHER EXCHANGES: This choice allows you to go to another exchange within the system without having to go through EIES. If you enter 9, you will be asked EXCHANGE? Respond with either the full name or the two-letter abbreviation of the exchange you wish to enter.

(0) EIES: This choice allows you to leave the exchange and enter the EIES system. If you enter 0, you will leave the exchange and be taken directly to the place in EIES where waiting messages are delivered. From there you can go anywhere you like within EIES. If you enter 0 followed by an answer ahead, such as ++0,+CM or ++0,1,4
the delivery of waiting messages will be bypassed and the answer ahead will be used by EIES as if you were at INITIAL CHOICE?. Thus, leaving TOPICS with a ++0,1,4 would take you directly to the scratchpad for sending a message without stopping to pick up waiting messages.
<table>
<thead>
<tr>
<th>Menu Choice</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>accept waiting items</td>
<td>++</td>
</tr>
<tr>
<td>access to EIES</td>
<td>++0</td>
</tr>
<tr>
<td>access to other exchanges</td>
<td>++9</td>
</tr>
<tr>
<td>add groups</td>
<td>++7,4</td>
</tr>
<tr>
<td>add keys to topics</td>
<td>++4,4</td>
</tr>
<tr>
<td>add members to exchange</td>
<td>++6,4</td>
</tr>
<tr>
<td>add members to group</td>
<td>++7,5</td>
</tr>
<tr>
<td>add members to topic</td>
<td>++5,4</td>
</tr>
<tr>
<td>add monitor options</td>
<td>++8,4</td>
</tr>
<tr>
<td>add responses</td>
<td>++2,4</td>
</tr>
<tr>
<td>add topics</td>
<td>++1,4</td>
</tr>
<tr>
<td>add topics to selection</td>
<td>++3,4</td>
</tr>
<tr>
<td>close topics to responses</td>
<td>++1,5</td>
</tr>
<tr>
<td>compose responses</td>
<td>++2,4</td>
</tr>
<tr>
<td>compose topics</td>
<td>++1,4</td>
</tr>
<tr>
<td>delete keys from topics</td>
<td>++4,5</td>
</tr>
<tr>
<td>delete responses</td>
<td>++2,5</td>
</tr>
<tr>
<td>delete topics</td>
<td>++1,5</td>
</tr>
<tr>
<td>delete topics from selection</td>
<td>++3,5</td>
</tr>
<tr>
<td>display members of exchange</td>
<td>++6,2</td>
</tr>
<tr>
<td>display members of group</td>
<td>++7,2</td>
</tr>
<tr>
<td>display members of topic</td>
<td>++5,2</td>
</tr>
<tr>
<td>display monitor options</td>
<td>++8,2</td>
</tr>
<tr>
<td>display titles of responses</td>
<td>++2,2</td>
</tr>
<tr>
<td>display titles of topics</td>
<td>++1,2</td>
</tr>
<tr>
<td>display topics in selection</td>
<td>++3,2</td>
</tr>
<tr>
<td>display waiting items</td>
<td>++</td>
</tr>
<tr>
<td>get abbreviated index</td>
<td>++4,2</td>
</tr>
<tr>
<td>get full alphabetic index</td>
<td>++4,1</td>
</tr>
<tr>
<td>get members of exchange</td>
<td>++6,1</td>
</tr>
<tr>
<td>get members of group</td>
<td>++7,1</td>
</tr>
<tr>
<td>get members of topic</td>
<td>++5,1</td>
</tr>
<tr>
<td>get monitor options</td>
<td>++1,2</td>
</tr>
<tr>
<td>get responses (full text)</td>
<td>++2,1</td>
</tr>
<tr>
<td>get responses (headers only)</td>
<td>++2,2</td>
</tr>
<tr>
<td>get topics in selection</td>
<td>++3,1</td>
</tr>
<tr>
<td>get topics with responses</td>
<td>++1,1</td>
</tr>
<tr>
<td>get topic/inquiries only</td>
<td>++1,2</td>
</tr>
<tr>
<td>modify a member’s access level</td>
<td>++6,4</td>
</tr>
<tr>
<td>modify keywords</td>
<td>++4,5</td>
</tr>
<tr>
<td>modify markers</td>
<td>++5,5</td>
</tr>
<tr>
<td>modify monitor options</td>
<td>++8,5</td>
</tr>
<tr>
<td>modify responses</td>
<td>++2,5</td>
</tr>
<tr>
<td>modify topics</td>
<td>++1,5</td>
</tr>
<tr>
<td>release members from exchange</td>
<td>++6,5</td>
</tr>
<tr>
<td>remove groups</td>
<td>++7,4</td>
</tr>
<tr>
<td>remove members from exchange</td>
<td>++6,4</td>
</tr>
<tr>
<td>remove members from group</td>
<td>++7,5</td>
</tr>
<tr>
<td>retrieve topics by keyword</td>
<td>++4,6</td>
</tr>
<tr>
<td>review groups</td>
<td>++7,6</td>
</tr>
<tr>
<td>review members of exchange</td>
<td>++6,6</td>
</tr>
<tr>
<td>Task</td>
<td>Page(s)</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>review monitor options</td>
<td>++8,6</td>
</tr>
<tr>
<td>review responses</td>
<td>++2,6</td>
</tr>
<tr>
<td>review topics</td>
<td>++1,6</td>
</tr>
<tr>
<td>select topics</td>
<td>++3,4</td>
</tr>
<tr>
<td>trap members into exchange</td>
<td>++6,5</td>
</tr>
</tbody>
</table>
[Section 1.4]
SUMMARY OF MENU CHOICES BY NUMBER

++  -- display/accept waiting items
++0 -- leave exchange, go to EIES
++1.1 -- get topics with responses
++1.2 -- get topic/inquiries only
++1.4 -- compose/add a new topic
++1.5 -- modify/delete/close topic
++1.6 -- review topics
++1.7 -- respond to topic/tally
++1.8 -- add/remove topic/tally
++2.1 -- get full text of responses
++2.2 -- display titles of responses
++2.4 -- compose/add responses
++2.5 -- modify/delete responses
++2.6 -- review responses
++2.7 -- respond to response/tally
++2.8 -- add/remove response/tally
++3.1 -- get topics in selection
++3.2 -- display topics in selection
++3.4 -- add topic to selection
++3.5 -- delete topic from selection
++4.1 -- get full alphabetic index
++4.2 -- get abbreviated index
++4.4 -- add keys to topics
++4.5 -- delete keys from topics
++4.6 -- retrieve topics by keyword
++4.7 -- modify keyword relations
++5.1 -- get members of topic
++5.2 -- display members of topic
++5.4 -- add members to topic
++5.5 -- modify markers
++5.6 -- get topics/members matrix
++6.1 -- get members of exchange
++6.2 -- display members of exchange
++6.4 -- add/remove exchange members
++6.5 -- trap/release members
++6.6 -- review members of exchange
++7.1 -- get group members
++7.2 -- display group members
++7.4 -- add/remove groups
++7.5 -- add/remove group members
++7.6 -- review groups
++8.1 -- get monitor options
++8.2 -- display monitor options
++8.4 -- add monitor options
++8.5 -- modify monitor options
++8.6 -- review monitor options
++9 -- go to another exchange
THREE WAYS TO BEGIN USING TOPICS

If you are joining an exchange which has been active for some time, there will probably be many topics and responses entered there. Depending on your interests and how many topics and responses there are in the exchange, there are three ways to begin: regular interactive delivery (Y), explained in Section 1.5.1; batch delivery (B), explained in Section 1.5.2; or using the keyword index feature (++) or reviewing the list of topics (++1,6), both explained in Section 1.5.3.

In addition, the gatekeeper(s) for your exchange may have preset your markers and/or put certain topics in your selection to help you get started. (See Section 3.8 and its subsections for tips for gatekeepers on helping new members get started.)

REGULAR INTERACTIVE DELIVERY (Y)

When you first enter an exchange, the system will welcome you and tell you how many topics and responses have been entered to date. Then it will ask ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?)?. If you answer Y to the ACCEPT? question, each new brief topic raiser will be delivered to you, including a line telling you how many associated responses have been entered to date, and you will be given an opportunity to SELECT that topic or not. After you select a topic, the system will print out all waiting responses to that topic. Then the next topic raiser will be presented, you will be asked if you want to select it, etc. This is interactive delivery -- you interact with the system during delivery to decide which topics you wish to select and have responses printed.

You may answer ahead to specify interactive delivery. If you are entering the exchange from EIES, you can type +TOPICS,XX,Y where XX is the two-letter abbreviation for the exchange. If you are already in the exchange and enter ++ to get to ACCEPT WAITING ITEMS?, you can enter Y to go directly into interactive delivery.

BATCH DELIVERY (B)

If there are many topics and responses, you may wish to print out just the topic raisers all at once (in "batch") and then decide later which of them you wish to select in order to receive associated responses.

If you answer B (for Batch) to ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?)?, the system will print out all items waiting for you without asking you any additional questions. If you are new to the exchange and no topics are in your selection yet, the system will print all the topic raisers. If there are topics in your selection, the responses to those topics which you have not yet received will be printed first and then any new topics you have not seen. Topic raisers will be printed, including a line telling you how many associated responses have been entered to date for each topic. This is batch delivery -- the system delivers everything in one large batch and asks you no
questions. Later you can add new topics of interest to your selection with ++3,4 (see Section 1.14).

You may answer ahead on this question. If you are entering the exchange from EIES, you can type +TOPICS,XX,B where XX is the two-letter abbreviation for the exchange. If you return to the ACCEPT WAITING ITEMS question with ++ from within the exchange, you can enter B in response to that question.

[Section 1.5.3]
OVERVIEW OF TOPICS VIA KEYWORD INDEX (++4), REVIEW TOPICS (++1,6)

There may be so many topics in the exchange that you will want to get an overview of the topics available before accepting any waiting items. To skip the delivery of waiting items entirely, answer N to ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?)?. The system will then take you to EXCHANGE CHOICE?. (See Section 1.2.3 for more information on the EXCHANGE CHOICE menu and the other menus.)

Each exchange has its own keyword index of topics. One way to get an overview of the topics in an exchange is to look through the keyword index. You can print out the whole thing or parts only (specified by letter ranges, such as SOLAR-T). On the EXCHANGE CHOICE menu, choice 4 is access to the ALPHABETIC INDEX OF TOPICS. So, ++4 will take you to INDEX CHOICE?. From there you can print out the full or abbreviated form of the index, as well as retrieve topics by keyword. (See Section 1.16 for complete information about the keyword index and keyword retrieval.)

After you find the numbers of interesting topics from the keyword index, you may want to find out a little more about the topic. You can use REVIEW TOPICS (++1,6) to print out the number of responses to the topic entered to date, the author, to whom the topic is open, the keywords assigned to that topic, and the topic title (see also Sections 1.17 and 3.8.3). You can also use DISPLAY TOPICS (++1,2) if you would like to print out the text of the topic raising inquiry as well (see Section 1.13).

Then, you can select those topics of interest with ++3,4 (see Section 1.14) and move your topic marker to the most recently entered topic so that no topics will be delivered to you. You can move your topic marker with ++5,5 (see Section 1.15).

Then, to get all the responses to those topics you have selected, enter ++ and enter either Y or B in response to ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?) (see Sections 1.5.1 and 1.5.2 respectively) to print out the waiting responses. Since there will be no waiting topics, both of these delivery approaches will have the same effect.
Section 1.6
GETTING WAITING TOPICS AND RESPONSES DELIVERED (++ Y)

When you enter an exchange the system will first print the total number of topics and responses entered in that exchange to date and then ask if you wish to ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?)?. Furthermore, from WITHIN an exchange, you can get to this delivery question by typing ++.

When you are asked this question, you can respond in any of the ways summarized in parentheses after the question. The more common responses to this question are to:

- enter Y to have all waiting responses and topics delivered. First, responses to topics previously selected will be delivered. Then new topics will be delivered (just the brief inquiry, title, keys, and the number of associated responses entered to date). After each new topic is delivered you will be asked if you wish to SELECT ABOVE TOPIC TO RECEIVE RESPONSES (Y/N)?. If you respond with a Y, you will have selected that topic. All responses entered to date on that topic will be delivered to you right then. Any further responses will be delivered to you as they are entered into the system later on. If you choose not to select a topic, no responses to it will be delivered. Of course, you can always use menu choice ++3,4 to select a topic later on, as well as ++3,5 to remove a previously selected topic from your selection (see Section 1.14).

- enter N, at which point the system will skip over all waiting items and take you directly to EXCHANGE CHOICE? and the first menu.

- enter D (for Display), at which point the system will begin printing a display list of the topics for which responses are waiting. For each topic with waiting responses the system will print the topic number, title, and the number of waiting responses. It will also tell you how many new topics are waiting and then ask again if you wish to ACCEPT these items.

Example:

INITIAL CHOICE?+topics,test

Welcome to the TEST Exchange. As of 5/18/80 12:10 AM there are 29 topics and 66 responses. Highest topic #: 42

ACCEPT WAITING ITEMS (yes/no/display/batch/topics/responses/key/help) ACCEPT (Y/N/D/B/T/R/K/?)?

Display of Waiting Responses to Topics You Have Selected:

TEST T34 PETER+TRUDY JOHNSON-LENZ (P+T,118) 12/20/79 6:09 PM
KEYS: TOPIC: TEST TOPIC WITH ZERO KEYS
   1 waiting response
WAITING:
1 RESPONSE ON TOPICS YOU HAVE SELECTED
1 INQUIRY ON NEW TOPICS OF POTENTIAL INTEREST
ACCEPT WAITING ITEMS (yes/no/display/batch/topics/responses/key/help)
ACCEPT (Y/N/D/B/T/R/K/?)?y

TEST T34R1 PARTICIPATION SYSTEMS (PSI,700) 5/10/80 3:07 PM
RESPONSE: LOOKS USEFUL BUT I NEED TO TRY EDITOR ROLE TO BE SURE
KEYS:
TOPIC: TEST TOPIC WITH ZERO KEYS

I tried entering keys for this topic, since I thought that I had been
given editor status here in the TEST Exchange temporarily.

Apparently, I don't have that status because I was told I couldn't modify
keys of t34 because I wasn't its author.

If I can be given editor status here, please message me so that I can
come back and try again.

Thanks,
Harry

TEST T37 PETER+TRUDY JOHNSON–LENZ (P+T,118) 5/17/80 11:19 PM
KEYS: /THIS SYSTEM/EXPERIENCE/
TOPIC: WHAT HAS YOUR EXPERIENCE BEEN WITH THIS SYSTEM?

Now that you have had a chance to gain some experience with this
system, we would like to know your opinions of and reactions to this
approach to linking folks in an inquiry/response exchange network.
If you have any reactions you would like to share or if you would like
to see others' reactions, please SELECT this topic.

RESPONSES ENTERED TO DATE: 1

SELECT ABOVE TOPIC TO RECEIVE RESPONSES?
SELECT TOPIC (Y/N)?y

TEST T37R1 PETER+TRUDY JOHNSON–LENZ (P+T,118) 5/17/80 11:34 PM
RESPONSE: OUR EXPERIENCES

Our experiences with this system have been quite varied. We have worked
with some groups who have used the system in a fairly structured
inquiry/response format in which there were only a few responses per
topic but many topics. With other groups who have used the system in a
more unstructured way, fewer topics were raised and some of them had a
a lot of responses. This is but a small example of the flexibility of
this system and the way in which it can be easily adapted to the varied
ebbs and flows of information exchange in different groups.

TEST EXCHANGE CHOICE?
OTHER DELIVERY OPTIONS (B, R, T, K)

In addition to the Y, N, or D response to ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?) question, you can:

- enter B (for Batch option) to have all waiting responses and topics delivered WITHOUT being asked if you wish to select certain topics. Thus, you can have all waiting items printed out on your terminal without having to interact with the system each time a new topic is delivered. With this option, you can get a list of new topics which you can peruse at your leisure and then use menu choice ++3,4 (see Section 1.14) to select those of interest later on. The batch option DOES NOT SELECT any topics for you. (See also Section 1.5.2)

- enter T (for Topics only option) to have only new topics delivered and be asked if you wish to SELECT them or not. No responses will be delivered.

- enter R (for Responses only option) to have only new responses delivered. No topics will be delivered.

- enter K (for Keyword), followed by a comma and one or more keywords and/or key phrases separated by slashes to have responses to topics indexed under those keywords delivered to you. This option will deliver only responses to topics so keyed while leaving any other responses in your "queue" to be delivered some other time. This option is quite useful if you are interested in certain topics only. This option will only work for topics you have already selected.

- enter K (for Keyword), followed by a comma and one or more topic identifiers in the format T#/T#/... where each topic is identified by the letter T and a topic number, and successive entries are separated by slashes. This option will deliver only responses to the specified topics while leaving any other responses in your "queue" to be delivered some other time. Note that topic identifiers can be mixed in with keywords and key phrases as long as they are separated by slashes. Again, this option will only work for topics already in your selection.

ANSWERING AHEAD WITH DELIVERY OPTIONS

Once you become familiar with the delivery options, you can answer ahead from the ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?) question as shown below to speed up the process and eliminate a few steps of interaction:

Enter K,solar/T43/T59 to get all responses keyed "solar" as well as all responses to topics 43 and 59 delivered.

Enter D,N to get a display of waiting items without accepting any of them, thus going directly to EXCHANGE CHOICE? following the display.
[Section 1.8]
ENTERING RESPONSES TO TOPICS ( ++2,4 )

On the initial EXCHANGE CHOICE? menu, access to responses is choice 2. This will take you to the RESPONSE CHOICE? menu. On that menu, COMPOSE/ADD RESPONSES is choice 4. You may answer ahead on these questions with ++2,4.

When you enter 4 at RESPONSE CHOICE? (or have answered ahead with ++2,4), the system will ask ASSOCIATED TOPIC/INQUIRY (#)? to which you can respond with the number of the topic for which you want to compose a response. Normally, any member who has received the topic/inquiry can respond. However, the monitor may have set the exchange option so that only selectors can respond to a topic. In that case, you must add the topic to your selection (if you have not previously selected it) with ++3,4 BEFORE composing a response.

In either case, after you have entered the topic #, the system will print out the topic header, keys, and title as a double check and then take you to your scratchpad where you can compose up to 57 lines of response. If you need more than 57 lines for your text, just repeat the process. Use this choice to enter background for a topic if the limited space in the inquiry is insufficient.

When you are done composing the response, enter a +. The system will then ask you for the RESPONSE TITLE? -- enter one line summarizing your response. When the title has been entered the system will print the title as a double check and then ask OK TO ADD (Y/N)? If you answer Y the response will be added. If you are feeling confident and want to answer ahead, you can enter the following when you are finished composing: + , response title, y

You can add a response under a pen name (or the pen name ANONYMOUS) by answering N to OK TO ADD (Y/N)?, if that option has been enabled for the exchange. See Section 1.10 for details.

The first line of the header will be printed when the response is added. This line begins with the exchange name and a unique response identifier beginning with the letter T, the topic #, the letter R, and finally a response # (as in T6R15). This is followed by your name, nickname, number, and the date and time.

Example:

TEST EXCHANGE CHOICE? ++2,4

ASSOCIATED TOPIC/INQUIRY (#)? 37
ASSOCIATED TOPIC:
TEST T37 PETER+TRUDY JOHNSON-LENZ (P+T,118) 5/17/80 11:19 PM
KEYS: / THIS SYSTEM/EXPERIENCE/
TOPIC: WHAT HAS YOUR EXPERIENCE BEEN WITH THIS SYSTEM?
ENTER RESPONSE: LIMIT 57 LINES.
1? Our experiences with this system have been quite varied. We have 2? worked with some groups who have used the system in a fairly structured 3? inquiry/response format in which there were only a few responses per 4? topic but many topics. With other groups who have used the system in a 5? more unstructured way, fewer topics were raised and some of them had a
6?lot of responses. This is but a small example of the flexibility of
7?this system and the way in which it can be easily adapted to the varied
8?ebbs and flows of information exchange in different groups.
9?+
OK TO ADD TO TOPIC 37 (Y/N)?y
RESPONSE TITLE?our experiences
RESPONSE: OUR EXPERIENCES
OK TO ADD TO TOPIC 37 (Y/N)?y

ADDED AS:
TEST T37R1 PETER+TRUDY JOHNSON-LENS (P+T,118) 5/17/80 11:34 PM

RESPONSE CHOICE?
RAISING NEW TOPICS (++1,4)

On the initial EXCHANGE CHOICE? menu, access to topics/inquiries is choice 1. This will take you to the TOPIC CHOICE? menu. On that menu, COMPOSE/ADD A NEW TOPIC is choice 4. You may answer ahead on these questions with ++1,4.

When you enter 4 at TOPIC CHOICE? (or have answered ahead with ++1,4), the system will take you directly into your scratchpad where you can compose a brief, pointed, topic-raising inquiry. Once the inquiry is completed, enter a + to terminate the composition. At this point the system will ask DELIVER TO ALL MEMBERS OF EXCHANGE (Y/N)?. If you wish all members of the exchange to receive the inquiry and thus have the opportunity to select and respond to the topic, enter Y (for Yes).

If you enter N to DELIVER TO ALL MEMBERS OF EXCHANGE (Y/N)?, the system will ask TO (#'S)? to which you should respond with a list of member numbers and/or exchange group numbers to which you want the inquiry sent. In this way you are specifying that the topic is private. Note that you can add other people and/or groups to a private topic once it has been raised with ++5,4 as detailed in Section 1.12. Then the system will ask if you want to LIST TOPIC IN INDEX (Y/N)?. Here you have the choice of listing your private topic in the index so that others can find out about it and ask you to let them into the discussion, or if you choose, you can make the topic totally private. NOTE, HOWEVER, THAT EVEN IF THE TOPIC NUMBER IS NOT LISTED IN THE INDEX, THE KEYWORDS AND PHRASES YOU ASSIGN WILL BE LISTED. Thus, do not enter private information into the keys unless you want to share it with all members of the exchange through the keyword index. Private information can be entered in the inquiry text as well as the title since these are not listed in the index unless you answer Y to the LIST TOPIC IN INDEX? question.

After these questions have been answered, the system will ask you for the TOPIC TITLE?. Enter a single line of text that briefly summarizes the topic you are raising.

After the TITLE has been entered, the system will ask you to ENTER KEYWORDS AND/OR PHRASES FOR INDEXING AND RETRIEVAL. Please take great care in selecting keys for your topic. If you would like to see which keys have already been used by others, enter a single question mark (?) when the system asks for the KEYS?. It will print a compressed list of all keys used to date. Depending on how the exchange monitor has set the monitor options, there may be some limitations on your choices. First, the monitor may have specified that only keys already in the index may be used; in such situations, if you attempt to enter a keyword or phrase that is new to the index the system will not accept it. Second, the monitor may have placed an upper limit on the number of keys you can use. Each individual key is separated from all others by slashes -- so keys can contain blanks if desired. If you attempt to enter more keys than the monitor has allowed, the system will reject your entry and give you another chance. To see what settings the monitor has chosen for your exchange, enter ++8,1 (Get Monitor Options).

Finally, after the keys have been successfully entered, the system will ask OK TO ADD (Y/N)?. If you enter Y the topic will be added according to your specifications.
You can add a topic under a pen name (or the pen name ANONYMOUS), by answering N to OK TO ADD (Y/N)?, if that option has been enabled in the exchange. See Section 1.10 for details.

When the topic is added the system will print out a line showing the exchange name, followed by the letter T and the number assigned by the system to uniquely identify the topic, followed by your name, nickname, user number, and the date and time.

Example:

TEST EXCHANGE CHOICE?++1,4

ENTER TOPIC/INQUIRY: LIMIT 5 LINES.
1? Now that you have had a chance to gain some experience with this system, we would like to know your opinions of and reactions to this approach to linking folks in an inquiry/response exchange network.
4? If you have any reactions you would like to share or if you would like to see others' reactions, please SELECT this topic.
6+
DELIVER TO ALL MEMBERS OF TEST (Y/N)? y
TOPIC TITLE? What has your experience been with this system?
TOPIC: WHAT HAS YOUR EXPERIENCE BEEN WITH THIS SYSTEM?
ENTER KEYWORDS AND/OR PHRASES FOR INDEXING AND RETRIEVAL.
KEYS (/KEYWORD/KEYPHRASE/)? /this system/experience/
KEYS: /THIS SYSTEM/EXPERIENCE/
OK TO ADD (Y/N)? y

Please wait while this topic is indexed.

ADDED AS:
TEST T37 PETER+TRUDY JOHNSON-LENZ (P+T,118) 5/17/80 11:19 PM

Please use ++2,4 to enter background material about this topic/inquiry.

TOPIC CHOICE?
[Section 1.10]
ENTERING PEN AND ANONYMOUS TOPICS OR RESPONSES (++1,4 ++2,4)

In some exchanges, the exchange monitor will have enabled the monitor option to allow you to enter pennamed or anonymous topics and/or responses. To see what settings the monitor has chosen for your exchange, enter ++8,1 (Get Monitor Options).

Enter your topic or response as you would usually, with ++1,4 or ++2,4 respectively. (See Section 1.8 for details on entering responses and 1.9 on raising new topics.) When you are done composing, enter a + on the next free line. Enter the response title, topic title, and/or keywords when the system asks for them.

Then the system will ask OK TO ADD (Y/N)?. If you answer Y, the topic or response will be added with your regular EIES name, nickname, and number.

If you answer N, you will be asked USE PEN NAME (Y/N)?. If you answer N, you will be asked OK TO ADD (Y/N)? again and if you again answer N the topic or response will not be added and you will be left at either TOPIC CHOICE? or RESPONSE CHOICE?. If you answer Y to USE PEN NAME (Y/N)?, you will be asked for PEN NAME?. Here enter the name of your choice. You can also use the pen name ANONYMOUS. The pen name you choose will be enclosed in quotation marks to indicate that it is a pen name. The system will display the pen name as a double check and then ask again OK TO ADD (Y/N)?. If you answer Y, the topic or response will be added with the specified pen name. If you answer N, the topic or response will not be added.
MODIFYING, CLOSING, OR DELETING TOPICS (+1,5)

On the initial EXCHANGE CHOICE? menu, access to topics is choice 1. This will take you to the TOPIC CHOICE? menu. On that menu, MODIFY/CLOSE/DELETE TOPIC is choice 5. You may answer ahead on these questions with ++1,5. This choice will allow you to modify the text and title of a topic only. If you want to modify the keys you must use ++4,4 and ++4,5 (see Sections 2.1 and 2.2 for details).

When you enter 5 at TOPIC CHOICE? (or have answered ahead with ++1,5), you will be asked for the TOPIC (#/–#)? you wish to modify. If you enter the number of a topic you have authored, the system will print out the title, keys, and header and ask if it is OK TO OVERWRITE SCRATCHPAD (Y/N)?. If you respond with a Y, the text of the topic inquiry will be copied into your scratchpad where you can modify it to taste. Enter a + when you are finished modifying the text.

If you enter the number of a topic you have authored preceded by a minus sign, the system will ask you if you wish to CLOSE TOPIC TO DISCUSSION (Y/N)?. If you answer Y the topic will be closed to further responses. This is useful if you wish to keep the topic in the exchange but do not want any more responses or discussion. If a topic is closed, it will not be delivered as a waiting topic. However, undelivered responses to a closed topic will be delivered to all members who select it, even after it is closed.

After asking if you want to close the topic, the system will ask if you wish to DELETE TOPIC AND RESPONSES (Y/N)?. If you enter Y the system will double check by asking OK TO DELETE (Y/N)?. If you answer Y again, the topic will be completely removed from the exchange, INCLUDING ALL RESPONSES entered by anyone. Please be sure you really want to completely remove the topic completely before using this choice. Also, please be patient while the system removes the topic. It is thorough in that it removes references to the deleted topic from the index, from members' selections, and then removes all responses. This takes time, however. The system will remind you by saying "Please wait...."

MODIFYING OR DELETING RESPONSES (+2,5)

On the initial EXCHANGE CHOICE? menu, access to responses is choice 2. This will take you to the RESPONSE CHOICE? menu. On that menu, MODIFY/DELETE RESPONSES is choice 5. You may answer ahead on these questions with ++2,5.

When you enter 5 at RESPONSE CHOICE? (or have answered ahead with ++2,5), you will be asked for the TOPIC (#) of the response you wish to modify or delete. Then you will be asked for the RESPONSE (#/#–#)?. If you then enter the number of a response you have authored, the system will print out the title and header and ask if it is OK TO OVERWRITE SCRATCHPAD (Y/N)?. If you respond with a Y, the text of the response will be copied into your scratchpad where you can modify it to taste. Enter a + when you are finished modifying the text.

If you enter the number of a response you have authored preceded by a minus
sign, the system will list the header and then ask OK TO DELETE (Y/N)? If you answer Y the response will be deleted from the topic and from the exchange.
[Section 1.12]
ADDING ANOTHER MEMBER TO A PRIVATE TOPIC (++5,4)

On the initial EXCHANGE CHOICE? menu, access to topic members and markers is choice 5. This will take you to the TOPIC MEMBER CHOICE? menu. On that menu, ADD MEMBERS TO TOPIC is choice 4. You may answer ahead on these questions with ++5,4.

When you enter 4 at TOPIC MEMBER CHOICE? (or have answered ahead with ++5,4), you will be asked TOPIC (#)? to which you can respond with the number of a topic which you authored, and which was a private topic sent to specific members and groups within the exchange only. The system will respond by printing a list of the numbers of current members and groups who have access to the topic and then ask TO NEW MEMBERS/GROUPS (#'S)?. Enter the numbers of members and groups to whom you want to give access.

For people specifically given access by member number the system will check to see if their topic markers have already been moved beyond the topic such that they would miss automatic delivery of the inquiry. If so, the system places the topic in their delivery "queue" out of normal sequence. This is not done for groups of members.

A monitor may use this choice to add members to any private topic.
[1.13]

PRINTING OUT AND LISTING TOPICS AND RESPONSES (++1,1 ++1,2 ++2,1 ++2,2)

GETTING TOPICS WITH RESPONSES (++1,1)

On the initial EXCHANGE CHOICE? menu, access to topics/inquiries is choice 1. This will take you to the TOPIC CHOICE? menu. On that menu, GET TOPICS WITH RESPONSES (or print out topics with responses) is choice 1. You may answer ahead on these questions with ++1,1.

When you enter 1 at TOPIC CHOICE? (or have answered ahead with ++1,1), the system will tell you the highest topic number entered to date. Then you will be asked TOPIC (#/#-#) to which you can respond with either a single topic number, a list of numbers separated by commas, or a range of topic numbers such as 4-8. The system will respond by printing out the complete text/title/keys of each topic specified AND all responses to those topics. This choice will work only for those topics to which you have access, i.e., those for which you are a receiver. You do not need to SELECT a topic to use this choice.

GETTING TOPIC/INQUIRIES ONLY (++1,2)

On the initial EXCHANGE CHOICE? menu, access to topics/inquiries is choice 1. This will take you to the TOPIC CHOICE? menu. On that menu, GET TOPIC/INQUIRIES ONLY (or print out just the brief topic/inquiry raisers) is choice 2. You may answer ahead on these questions with ++1,2.

When you enter 2 at TOPIC CHOICE? (or have answered ahead with ++1,2), the system will tell you the highest topic number entered to date. Then you will be asked TOPIC (#/#-#) to which you can respond with either a single topic number, a list of numbers separated by commas, or a range of topic numbers such as 4-8. The system will respond by printing out the complete text/title/keys of each topic specified and just the number of responses entered to date without listing the text of those responses. This choice will only work for those topics to which you have access — for which you are a receiver.

To get a listing of the just the title, keys, author, and number of responses entered to date for topics, without the text of the topic/inquiry, use REVIEW TOPICS, ++1,6 (see Sections 1.5.3 and 1.17).

GETTING FULL TEXT OF RESPONSES (++2,1)

On the initial EXCHANGE CHOICE? menu, access to responses is choice 2. This will take you to the RESPONSE CHOICE? menu. On that menu, GET FULL TEXT OF RESPONSES (printing out in full) is choice 1. You may answer ahead on these questions with ++2,1.

When you answer 1 at RESPONSE CHOICE? (or have answered ahead with ++2,1), you will be asked TOPIC/INQUIRY (#) to which you can respond with the number of the topic for which you wish to print out responses. This choice will work only for topics to which you have access as a receiver. The system will tell
you the highest response number entered to date for that topic and then ask RESPONSE (/#/#-#)? to which you can respond with a single response number, a list of numbers separated by commas, or a range of responses such as 3-16. The system will then print out the headers, titles, and full text of all responses specified.

DISPLAYING TITLES OF RESPONSES (++2,2)

On the initial EXCHANGE CHOICE? menu, access to responses is choice 2. This will take you to the RESPONSE CHOICE? menu. On that menu, DISPLAY TITLES OF RESPONSES is choice 2. You may answer ahead on these questions with ++2,2.

When you enter 2 at RESPONSE CHOICE? (or have answered ahead with ++2,2), you will be asked TOPIC/INQUIRY (#)? to which you can respond with the number of the topic for which you wish to display response titles. This choice will work only for topics to which you have access as a receiver. The system will tell you the highest response number entered to date for that topic and then ask RESPONSE (/#/#-#)? to which you can respond with a single response number, a list of numbers separated by commas, or a range such as 3-16. The system will then print out the headers and titles only of all responses specified.
Section 1.14

Adding and Removing Topics to/From Your Selection (++3,1 ++3,2 ++3,4 ++3,5)

Getting Topics in Selections (++3,1)

On the initial EXCHANGE CHOICE? menu, access to your selection of topics is choice 3. This will take you to the SELECTION CHOICE? menu. On that menu, GET TOPICS IN SELECTION is choice 1. You may answer ahead on these questions with ++3,1.

Your selection contains a list of topics for which you wish to receive responses. Remember that the more topics you select, the more responses you will get. If you are overloaded, delete some topics from your selection with ++3,5 as described below (Removing Topics from Your Selection).

When you enter 1 at SELECTION CHOICE? (or have answered ahead with ++3,1), you will be asked MEMBER (#/#-#)? to which you can respond with the identification number of a member of the exchange, a list of member numbers, or a range of numbers, such as 100-120. The system will then respond by printing, for each member listed, the full header, keys, title, and text of the topic raising inquiry of all topics in his or her selection, excluding any topics to which YOU do not have receiver access to preserve privacy. You can use this choice to list topics in your own selection by putting in your own number when the system asks MEMBER (#/#-#)?, or to list the selections of others.

Displaying Topics in Selection (++3,2)

On the initial EXCHANGE CHOICE? menu, access to your selection of topics is choice 3. This will take you to the SELECTION CHOICE? menu. On that menu, DISPLAY TOPICS IN SELECTION is choice 2. You may answer ahead on these questions with ++3,2.

When you enter 2 at SELECTION CHOICE? (or have answered ahead with ++3,2), you will be asked MEMBER (#/#-#)? to which you can respond with the identification number of a member of the exchange, a list of member numbers, or a range of numbers. The system will then respond by printing, for each member listed, a list of the identification numbers of all topics currently in his or her selection, excluding topics to which YOU do not have receiver access to preserve privacy. The list will show topic numbers only, rather than the full printout you get if you use ++3,1 (GET TOPICS IN SELECTION).

Example:

TEST EXCHANGE CHOICE? ++3,2

MEMBER (#/#-#)? 118

Topics selected by member 118 as of 5/18/80 12:17 AM:

1 2 6 9 10 12 19 23 24 25 26 26 31 34 36

SELECTION CHOICE?
ADDING TOPICS TO SELECTION (++3,4)

On the initial EXCHANGE CHOICE? menu, access to your selection is choice 3. This will take you to the SELECTION CHOICE? menu. On that menu, ADD TOPIC TO SELECTION is choice 4. You may answer ahead on these questions with ++3,4.

When you enter 4 at SELECTION CHOICE? (or have answered ahead with ++3,4), you will be asked TOPIC TO BE ADDED (#)? to which you can respond with the number of any topic you have received and which is not in your selection currently. The system will print the header, keys, and title of the topic and ask OK TO ADD TO SELECTION (Y/N)? If you respond with a Y, the topic will be added and all responses to that topic will delivered to you the next time you accept waiting items (with ++ or when you enter the exchange the next time — see Section 1.6). A gatekeeper can use this choice to modify the selections of any member of the exchange (see Section 3.6).

Remember, the more topics you put in your selection, the more responses you will get delivered to you. If you get overloaded with material, remove some topics from your selection with ++3,5 (below).

Example:

TEST EXCHANGE CHOICE?++3,4
MEMBER (#)?118
TOPIC TO BE ADDED (#)?37
TEST T37 PETER+TRUDY JOHNSON-LENZ (P+T,118) 5/17/80 11:19 PM
KEYS: /THIS SYSTEM/EXPERIENCE/
TOPIC: WHAT HAS YOUR EXPERIENCE BEEN WITH THIS SYSTEM?
OK TO ADD TO SELECTION (Y/N)?y
Topic 37 added to selection. The next time you pick up your waiting items any responses to this topic will be waiting for you.
TOPIC TO BE ADDED (#)?+

SELECTION CHOICE?

DELETING TOPICS FROM SELECTION (++3,5)

On the initial EXCHANGE CHOICE? menu, access to your selection is choice 3. This will take you to the SELECTION CHOICE? menu. On that menu, DELETE TOPIC FROM SELECTION is choice 5. You may answer ahead on these questions with ++3,5.

When you enter 5 at SELECTION CHOICE? (or have answered ahead with ++3,5), you will be asked TOPIC TO BE DELETED (#)? to which you can respond with the number of any topic currently in your selection. The system will print the header, keys, and title of the topic and ask OK TO DELETE (Y/N)? If you respond with a Y, the topic will be deleted from your selection and you will no longer have responses to that topic delivered to you when you accept.
NOTE: when a TOPIC is deleted from the exchange it is automatically removed from your selection by the system, so you don't need to keep track of deleted topics in order to keep your selection limited.

Gatekeepers may use this choice to delete topics from any member's selection (see Section 3.6).

Example:

```
TEST EXCHANGE CHOICE? ++3,5

MEMBER (#)? 118
TOPIC TO BE DELETED (#)? 37

TEST T37 PETER+TRUDY JOHNSON-LENZ (P+T,118) 5/17/80 11:19 PM
KEYS: /THIS SYSTEM/EXPERIENCE/
TOPIC: WHAT HAS YOUR EXPERIENCE BEEN WITH THIS SYSTEM?

OK TO DELETE (Y/N)?
Topic 37 deleted from your selection.
TOPIC TO BE DELETED (#)? +

SELECTION CHOICE?
```
[1.15]

[Section 1.15]
MOVING YOUR MARKERS (++5,5)

On the initial EXCHANGE CHOICE? menu, access to topic members and markers is choice 5. This will take you to the TOPIC MEMBER CHOICE? menu. On that menu, MODIFY MARKERS is choice 5. You may answer ahead on these questions with ++5,5.

When you enter 5 at TOPIC MEMBER CHOICE? (or have answered ahead with ++5,5), the system will ask MODIFY TOPIC MARKER (Y/N)?. If you respond with a Y it will print out the highest topic number entered to date and then your current topic marker (number of highest topic you have received to date). Then the system will ask NEW LAST TOPIC (#)?. Enter the number of the topic you want the system to consider last received by you. For example, enter a 0 if you want to begin receiving all topics from the very first on.

The system will then ask MODIFY RESPONSE MARKERS (Y/N)?. If you enter Y it will then ask TOPIC (#)? to which you can respond with the number of a topic you have selected for which you wish your marker changed. If you have selected that topic, the system will print out the highest response number for that topic to date, your current response marker, and then ask NEW LAST RESPONSE (#)? to which you can answer with the number of the response you want considered the last received. The system will continue in this fashion asking TOPIC (#)?, thus allowing you to change many response markers at once, until you enter a + to terminate the process.

Example:

TEST EXCHANGE CHOICE?++5,5

MEMBER (#)?118
MODIFY TOPIC MARKER (Y/N)?y
Highest topic number used to date: 42
Last topic received by 118: 10
NEW LAST TOPIC (#)?36
Last topic for 118 now 36.
MODIFY RESPONSE MARKERS (Y/N)?y
TOPIC (#)?36
Highest response number used to date: 22
Last response to topic 36 received by 118: 5
NEW LAST RESPONSE (#)?22
Last response to topic 36 for 118 now 22.
TOPIC (#)+

TOPIC MEMBER CHOICE?

Note: if you answered D to ACCEPT WAITING ITEMS (Y/N/D/B/T/R/K/?) sometime in the past to display waiting items but did not get those topics and responses delivered, the system will deliver them when you ACCEPT waiting items, regardless of where your markers are. To keep from getting them delivered, set your topic marker to 0 (zero) and THEN to the desired place.
[Section 1.16]
THE KEYWORD INDEX AND KEYWORD RETRIEVAL (++4,1 ++4,2 ++4,6)

The keyword index contains a list of keywords and key phrases sorted alphabetically. For each key the index contains a list of topic numbers associated with that key. When specifying a printout or retrieval operation using the index you can use one of three methods.

First, you can enter a KEYWORD or PHRASE, in which case you will get information associated with that keyword only. Second, you can enter a KEY PART. This is some portion of a key, starting with the first letter and containing any number of letters. Thus, if you enter the key part S, you will get information associated with all keys beginning with the letter S. If you want to refine your search somewhat you can enter a more detailed part, such as SOL, and you will get information associated with all keys beginning with SOL only. Finally, you can specify a RANGE OF KEYS such as SOLAR-WIND, in which case you will get information associated with any keys in that alphabetical range.

You can also use "Boolean" searches (combining keys in "and," "or," and "not" relationships) for keyword retrieval (++) as explained below.

The index includes topics open to all members of the exchange AND topics open to only certain members if the author specified that these topics be listed in the keyword index. Completely private topic numbers are NOT listed. The index can be used to discover the topics/inquiries that have not been sent to you, and you can thus find out about additional potential topics of interest. If you find one to which you would like to respond or select you should message its author who can then send you the topic/inquiry, thus allowing you to participate in it. The author should use ++5,4 to add you to his/her private topic (see Section 1.12).

If the relational keyword option has been enabled for your exchange and if relational information has been entered, the keyword index will also show which keys are broader than, related to, and narrower than a given key.

GETTING THE FULL ALPHABETIC KEYWORD INDEX (++4,1)

On the initial EXCHANGE CHOICE? menu, access to the alphabetic index of topics is choice 4. This will take you to the INDEX CHOICE? menu. On that menu, GET FULL ALPHABETIC INDEX is choice 1. You may answer ahead on these questions with ++4,1.

When you enter 1 at INDEX CHOICE? (or have answered ahead with ++4,1), the system will ask GET ENTIRE INDEX (Y/N)?. If you answer Y, all keywords in the index will be listed, one at a time in alphabetical order. Following EACH key, the system will list the full headers, keys, titles AND text of the topic raising inquiry of all topics associated with that key. This is a rich, comprehensive form of printout, and you may not wish to print the entire index because of this. Printing out the entire full alphabetic index is also slow, so you may want to consider using ++4,2 to get the abbreviated index, as explained below.
If you answer N to GET ENTIRE INDEX (Y/N)?, the system will ask GET PARTIAL INDEX (KEY PART/AAA-ZZZ)? to which you can respond with a specific key, a key part, or a range of keys. The system will then print the specified portion of the index with full headers, keys, titles and text of all topic raising inquiries of all topics in that portion of the index.

If the exchange monitor has enabled the relational keyword option and relational information has been entered (see Section 2.3), the full alphabetic index will also contain information about which keys are broader than, related to, and narrower than each key listed.

GETTING THE ABBREVIATED KEYWORD INDEX (++4,2)

On the initial EXCHANGE CHOICE? menu, access to the alphabetic index of topics is choice 4. This will take you to the INDEX CHOICE? menu. On that menu, GET ABBREVIATED INDEX is choice 2. You may answer ahead on these questions with ++4,2.

When you enter 2 at INDEX CHOICE? (or have answered ahead with ++4,2), the system will ask GET ENTIRE INDEX (Y/N)? If you answer Y, all keywords in the index will be listed, with the numbers of all topics associated with each key. If you answer N to the question, you will be asked GET PARTIAL INDEX (KEY PART/AAA-ZZZ)? to which you can respond with a specific key, a key part, or a range of keys in order to get a partial listing. If you know that you want only part of the index, you can answer ahead with ++4,2,N,KEY PART OR RANGE.

If the exchange monitor has enabled the relational keyword option and relational information has been entered (see Section 2.3), the partial index will also show which keywords are broader than, related to, and narrower than each key listed.

Example:

TEST EXCHANGE CHOICE?++4,2
GET ENTIRE INDEX (Y/N)?n
GET PARTIAL INDEX (KEY PART/AAA-ZZZ)?ener

ABBREVIATED INDEX TO TOPICS IN THE TEST EXCHANGE
AS OF 5/18/80 12:23 AM:

KEY: TOPIC #S
--------
ENERGY:  4 13 62 68
Broader keys: NATURAL RESOURCES
Related keys: BIOMASS, ENERGY AVAILABILITY
ENERGY AVAILABILITY:  69
Related keys: ENERGY, RESOURCES AVAILABILITY
WATER FOR ENERGY PRODUCTION

INDEX CHOICE?
SEARCHING FOR AND RETRIEVING TOPICS BY KEYWORD (++4,6)

On the initial EXCHANGE CHOICE? menu, access to the alphabetic index of topics is choice 4. This will take you to the INDEX CHOICE? menu. On that menu, RETRIEVE TOPICS BY KEYWORD is choice 6. You may answer ahead on these questions with ++4,6.

When you enter 6 at INDEX CHOICE? (or have answered ahead with ++4,6), you will be asked KEY (KEY/KEY PART/AAA—ZZZ)?. Enter either a single key, a key part, or a range of keys for which you want to retrieve associated topics and responses. The system will quickly search the index looking for a match. This search is much quicker than a search through the text itself. One of the purposes of the index is to support such rapid retrieval by keyword.

If the system finds more than one key that matches or falls within the range, it will list the keys that fit and ask KEY?. At this point only a single key is acceptable. Enter the key you are interested in.

Once the search has been reduced to a single key, the system will print a list of the numbers of all topics associated with that key and then ask GET (Y/N/H/R/K)?. Here you can do any of following:

- enter Y to get a printout of the headers, keys, titles, and text of the topic raising inquiry of all topics listed.
- enter N (for No) to stop.
- enter H to get a printout of the headers, keys, and titles only of all topics listed.
- enter R to get a printout of the headers, keys, titles, and text of all topics PLUS the complete text of all responses to all topics listed.
- enter K to refine your search further. If the relational keyword option is enabled for your exchange and if relational information has been entered, the system will print a list of keywords broader than, related to, and/or narrower than the key you have entered as a way of giving you some suggestions and then ask you for ANOTHER key to further refine your search. If you enter just another key, the list of topics from the first key search will be forgotten and you will start the search from scratch.

"BOOLEAN" SEARCHING: However, when the system asks you for ANOTHER key, you can have it combined with the first key in these ways. If you precede the new keyword with an ampersand (&), the list of topics from the first key will be reduced to include only those which are keyed with BOTH keys you have specified (logically "ANDing" the two lists together). If you precede the new keyword with a slash (/), the list of topics from the first key will be increased to include all topics keyed with EITHER keyword (logically "ORing" the two lists together). Finally, if you precede the new...
keyword with a minus (—), the list of topics from the first key will be reduced to include only those topics NOT also keyed with the second key (logically "NOTing" the lists). Once a second key has been entered in this way for Boolean searching, the system will print out the appropriate list of topics that fits the logically specified combination of keys and again ask GET (Y/N/H/R/K) ?. In this way, you can continue to refine your search until the list of items is neither too long nor too short.

Example:

TEST EXCHANGE CHOICE?++4,6
KEY (KEY/KEY PART/AAA-ZZZ)?ener
Topics are indexed under the following 2 keys:
   ENERGY, ENERGY AVAILABILITY
KEY?energy

4 topics to which you have access indexed under ENERGY:
   4 13 62 68

To get these topics, enter Y (topics only), H (topic headings only),
   R (topics and responses), K (list related keys for nested search),
   or N (go to INDEX CHOICE?).
GET ITEMS (Y/H/R/K/N)?k

Keys related to ENERGY:
   Broader keys: NATURAL RESOURCES
   Related keys: BIOMASS, ENERGY AVAILABILITY

Enter an additional key:
   precede key with & to "and" lists into list with BOTH keys only
   precede key with / to "or" lists into list with EITHER key
   precede key with — to "not" list by removing those with additional key
   enter key only to start over
KEY?&biomass

Combined list has these 2 topics to which you have access:
   4 62

To get these topics, enter Y (topics only), H (topic headings only),
   R (topics and responses), K (list related keys for nested search),
   or N (go to INDEX CHOICE?).
GET ITEMS (Y/H/R/K/N)?n

INDEX CHOICE?
The TOPICS system allows members of an exchange to participate in only those topics of interest. Not everyone will be reading and responding to all topics. Sometimes it is useful to know about the membership of a given topic and how many responses each member has received. There are several different kinds of information that the system can give you about membership in topics.

REVIEWING TOPICS (+1,6)

On the initial EXCHANGE CHOICE? menu, access to topics is choice 1. This will take you to the TOPIC CHOICE? menu. On that menu, REVIEW TOPICS is choice 6. You may answer ahead on these questions with ++1,6.

When you enter 6 at TOPIC CHOICE? (or have answered ahead with ++1,6), the system will tell you the highest topic number entered to date and then ask TOPIC/INQUIRY (#/#-#)? to which you can respond with the number(s) of the topic(s) you wish to review. The system will print out brief information for the topic(s) you have specified to which you have access, excluding deleted topics. Private topics for which you are not a receiver will NOT be listed to preserve their privacy. For those topics listed, the system will tell you the topic number, number of responses entered to date, the number of the author, whether it is open to all members of the exchange or to specific members, whether it is closed to further responses, the keys, and the topic title.

REVIEWING RESPONSES (+2,6)

On the initial EXCHANGE CHOICE? menu, access to responses is choice 2. This will take you to the RESPONSE CHOICE? menu. On that menu, REVIEW RESPONSES is choice 6. You may answer ahead on these questions with ++2,6.

When you enter 6 at RESPONSE CHOICE? (or have answered ahead with ++2,6), you will be asked for the TOPIC (#)? for which you want to review responses. If the topic is one to which you have access as a receiver, the system will then print out a list of non-deleted responses showing their numbers and the identities of their authors.

GETTING MEMBERS OF A TOPIC (+5,1)

On the initial EXCHANGE CHOICE? menu, access to topic members and markers is choice 5. This will take you to the TOPIC MEMBER CHOICE? menu. On that menu, GET MEMBERS OF TOPIC is choice 1. You may answer ahead on these questions with ++5,1.

When you enter 1 at TOPIC MEMBER CHOICE? (or have answered ahead with ++5,1), you will be asked TOPIC (#)? to which you can respond with the number of a topic to which you have access. The system will respond by printing the following information about the topic:

-- who has access to the topic: all members of the exchange, or if
not, which members and groups of members

-- a list of those who have selected the topic showing their names, nicknames, id numbers, the number of the highest response each has received, and the number of responses authored by each

DISPLAYING MEMBERS OF TOPIC (++5,2)

On the initial EXCHANGE CHOICE? menu, access to topic members and markers is choice 5. This will take you to the TOPIC MEMBER CHOICE? menu. On that menu, DISPLAY MEMBERS OF TOPIC is choice 2. You may answer ahead on these questions with ++5,2.

When you enter 2 at TOPIC MEMBER CHOICE? (or have answered ahead with ++5,2), you will be asked TOPIC (?) to which you can respond with the number of a topic to which you have access. The system will respond by printing a list of the identification numbers of members who have selected the topic.

DISPLAYING MEMBERS OF THE EXCHANGE (++6,2)

On the initial EXCHANGE CHOICE? menu, access to members of this exchange is choice 6. This will take you to the EXCHANGE MEMBER CHOICE? menu. On that menu, DISPLAY MEMBERS OF EXCHANGE is choice 2. You may answer ahead on these questions with ++6,2.

When you enter 2 at EXCHANGE MEMBER CHOICE? (or have answered ahead with ++6,2), you will be asked MEMBER (#/#—#?) to which you can respond with a single member number, a series of numbers separated by commas, or a range of numbers. The system will respond by printing out the following information for each member specified:

-- name, nickname, and number; access level and topic marker

-- date/time last active and whether "trapped" into exchange at sign on

-- list of groups to which member belongs

-- the total number of topics in his/her selection (use ++3,2 for the numbers of the topics)

-- the number of topics and responses authored by member; the number of responses received by member

REVIEWING MEMBERS OF THE EXCHANGE (++6,6)

On the initial EXCHANGE CHOICE? menu, access to members of this exchange is choice 6. This will take you to the EXCHANGE MEMBER CHOICE? menu. On that menu, REVIEW MEMBERS OF EXCHANGE is choice 6. You may answer ahead on these questions with ++6,6.
When you enter 6 at EXCHANGE MEMBER CHOICE? (or have answered ahead with ++6,6), the system will print a detailed list of all members of the exchange, showing their full names, nicknames, and numbers; their levels of access; their topic markers; and the dates/times they were last active.
RESPONDING TO A TOPIC/TALLY OR RESPONSE/TALLY (++1,7 ++2,7)

In some exchanges, the exchange monitor will have enabled the optional topic/tally and response/tally feature. These tallies are useful for getting a clear sense of the group's feelings or preferences. They are not called "votes" because groups may wish to check on the current consensus of opinion without taking a formal vote. They may be used as a more formal vote, but that is up to the group.

A TOPIC/TALLY is associated with a given topic, regardless of the number of responses in the topic, and will be printed out EACH TIME new responses are delivered. A topic/tally is best used as an ongoing indication of the group's feeling about the discussion, rather than as a response to a particular proposal. A topic/tally may contain as many questions as desired. Each question may be answered with up to 9 alternatives. These may be scaled (such as "on a scale from 1 to 9...") or be multiple choice options (such as 1=yes, 2=no, 3=maybe, 4=not sure, 5=don't like the question). A response of 0 is reserved for abstentions.

A RESPONSE/TALLY is associated with a particular response within a topic. It will be printed out only once, when that response is delivered. A response/tally is best used to indicate opinions about a specific proposal or other material contained in the response. Like a topic/tally, a response/tally may be answered with up to 9 alternatives, with 0 reserved for abstentions.

ENTERING A RESPONSE IN A TOPIC/TALLY AND GETTING FEEDBACK (++1,7)

If you use interactive delivery (Y -- see Sections 1.5.1 and 1.6), a topic/tally will be printed out for you EACH TIME you get new responses to that topic delivered. The system will print out the question(s) and then wait for your response. After you have entered your response, the system will give you feedback about all the responses entered to date. These responses are anonymous.

If you have already answered the topic/tally, the next time it is presented to you the system will tell you what your previous response was and ask you to enter your new response or else a carriage return to leave your previous response as is. The system will present the topic/tally to you each and every time you have new responses to that topic delivered.

However, if you use batch delivery (B -- see Sections 1.5.2 and 1.7), the system will deliver the topic/tally question(s) but NOT give you a chance to answer it then, since you are not interacting with the system during batch delivery. In this case you must use ++1,7 to enter your response.

On the initial EXCHANGE CHOICE? menu, access to topics is choice 1. This will take you to the TOPIC CHOICE? menu. If the topic/tally option has been enabled for your exchange, RESPOND TO TOPIC/TALLY is choice 7. (If it has not been enabled, choice 7 will NOT print out on the TOPIC CHOICE? menu; enter a carriage return at TOPIC CHOICE? to see if it does.) You may answer ahead on these questions with ++1,7.
KEEPING TRACK OF WHO IS READING WHAT (++1,6 ++2,6 ++5,1 ++5,2 ++6,2 ++6,6)

The TOPICS system allows members of an exchange to participate in only those topics of interest. Not everyone will be reading and responding to all topics. Sometimes it is useful to know about the membership of a given topic and how many responses each member has received. There are several different kinds of information that the system can give you about membership in topics.

REVIEWING TOPICS (++1,6)

On the initial EXCHANGE CHOICE? menu, access to topics is choice 1. This will take you to the TOPIC CHOICE? menu. On that menu, REVIEW TOPICS is choice 6. You may answer ahead on these questions with ++1,6.

When you enter 6 at TOPIC CHOICE? (or have answered ahead with ++1,6), the system will tell you the highest topic number entered to date and then ask TOPIC/INQUIRY (#/#-#)? to which you can respond with the number(s) of the topic(s) you wish to review. The system will print out brief information for the topic(s) you have specified to which you have access, excluding deleted topics. Private topics for which you are not a receiver will NOT be listed to preserve their privacy. For those topics listed, the system will tell you the topic number, number of responses entered to date, the number of the author, whether it is open to all members of the exchange or to specific members, whether it is closed to further responses, the keys, and the topic title.

REVIEWING RESPONSES (++2,6)

On the initial EXCHANGE CHOICE? menu, access to responses is choice 2. This will take you to the RESPONSE CHOICE? menu. On that menu, REVIEW RESPONSES is choice 6. You may answer ahead on these questions with ++2,6.

When you enter 6 at RESPONSE CHOICE? (or have answered ahead with ++2,6), you will be asked for the TOPIC (#)? for which you want to review responses. If the topic is one to which you have access as a receiver, the system will then print out a list of non-deleted responses showing their numbers and the identities of their authors.

GETTING MEMBERS OF A TOPIC (++5,1)

On the initial EXCHANGE CHOICE? menu, access to topic members and markers is choice 5. This will take you to the TOPIC MEMBER CHOICE? menu. On that menu, GET MEMBERS OF TOPIC is choice 1. You may answer ahead on these questions with ++5,1.

When you enter 1 at TOPIC MEMBER CHOICE? (or have answered ahead with ++5,1), you will be asked TOPIC (#)? to which you can respond with the number of a topic to which you have access. The system will respond by printing the following information about the topic:

-- who has access to the topic: all members of the exchange, or if
been enabled for your exchange, RESPOND TO RESPONSE/TALLY is choice 7. (If it has not been enabled, choice 7 will NOT print out on the RESPONSE CHOICE menu; enter a carriage return at RESPONSE CHOICE? to see if it does.) You may answer ahead on these questions with ++2,7.

When you enter 7 at RESPONSE CHOICE? (or have answered ahead with ++2,7), the system will first ask DO YOU WISH TO RESPOND (Y/N)? If you answer N, the results of response/tallies you specify will be printed out, but you will not be asked for your responses. Enter Y if you want to RESPOND. Then the system will ask TOPIC/INQUIRY (#)? to which you can respond with the number of the topic after which the system will ask RESPONSE (#/#-#)? to which you can respond with the number(s) of the response(s) for which you wish to see the results or respond in the response/tally. Unless you have indicated that you only want to see the results, the system will then give you the question(s) and ask for your response. After you have responded, it will give you feedback about how others have responded. If you have responded previously, the system will print out your previous response and give you an opportunity to change it or to leave it as is.
Adding and removing questions in a topic/tally or response/tally

In some exchanges, the exchange monitor will have enabled the optional topic/tally and response/tally feature. (See Section 1.18 for information on topic/tallies and response/tallies.)

A topic/tally is associated with a given topic, regardless of the number of responses in the topic, and will be printed out each time new responses are delivered. A topic/tally is best used as an ongoing indication of the group's feeling about the discussion, rather than as a response to a particular proposal. Since it will be printed out each time new responses are delivered, consider whether the members of that topic will find a topic/tally useful or annoying when adding it to a given topic.

Either the topic author or someone with editor access (level 30 — see Section 1.22) may add topic/tallies. A topic/tally may contain as many questions as desired. Each question may be answered with up to 9 alternatives. These may be scaled (such as "on a scale from 1 to 9...") or be multiple choice options (such as 1=yes, 2=no, 3=maybe, 4=not sure, 5=don't like the question). A response of 0 is reserved for abstentions. All responses are anonymous.

A response/tally may be added by the response author, the author of the topic to which the response is associated, or someone with editor access. A response/tally is associated with a particular response within a topic. It will be printed out only once, when that response is delivered. A response/tally is best used to indicate opinions about a specific proposal or other material contained in the response. Like a topic/tally, a response/tally may be answered with up to 9 alternatives, with 0 reserved for abstentions. All responses are anonymous.

Adding or removing questions in a topic/tally

On the initial exchange choice? menu, access to topics is choice 1. This will take you to the topic choice? menu. If the topic/tally option has been enabled for your exchange, add/remove topic/tally is choice 8. (If it has not been enabled, choice 8 will not print out on the topic choice? menu; enter a carriage return at topic choice? to see if it does.) You may answer ahead on these questions with ++1,8.

When you enter 8 at topic choice? (or have answered ahead with ++1,8), the system will ask topic (#)? to which you can respond with the number of the topic for which you want to add a topic/tally question. The system will then ask do you wish to add a question (y/n)?. If you answer y, the system will put you into the scratchpad to enter the question. Be sure to include what the possible responses mean within the question itself. Make sure that the reader will know how to choose a response. Enter a + when you have finished composing. Then the system will ask maximum response (#)? to which you can respond with the number of the highest response possible (no greater than 9). Then the system will ask ok to add (y/n)?. After adding the question it will ask if you want to add another question (y/n)?.

If you answer n to do you wish to add a question (y/n)?, the system will then
ask DO YOU WISH TO REMOVE A QUESTION (Y/N)? If you answer Y, the system will ask for the QUESTION (#) which you wish to remove. After you enter the number of the question to be removed, the system will ask OK TO REMOVE QUESTION (Y/N)? as a double check. After removing the question it will ask QUESTION (0?) again.

NOTE: if you take choice ++1,8 for a new topic and choose not to add any questions, the system will create a null or dummy tally with zero questions which will come out when the topic is delivered. To remove this dummy tally, you must first add a question and then remove it after which the dummy tally will be gone.

ADDING OR REMOVING A QUESTION IN A RESPONSE/TALLY (++2,8)

On the initial EXCHANGE CHOICE? menu, access to responses is choice 2. This will take you to the RESPONSE CHOICE? menu. If the response/tally option has been enabled for your exchange, ADD/REMOVE RESPONSE/TALLY is choice 8. (If it has not been enabled, choice 8 will NOT print out on the RESPONSE CHOICE? menu; enter a carriage return at RESPONSE CHOICE? to see if it does.) You may answer ahead on these questions with ++2,8.

When you enter 8 at RESPONSE CHOICE? (or have answered ahead with ++2,8), the system will ask TOPIC (#)? to which you can respond with the number of the topic and then RESPONSE (#)? for the number of the response within that topic for which you wish to add a response/tally. The system will then ask DO YOU WISH TO ADD A QUESTION (Y/N)? If you answer Y, the system will put you into the scratchpad to enter the question. BE SURE TO INCLUDE WHAT THE POSSIBLE RESPONSES MEAN WITHIN THE QUESTION ITSELF. Enter a + when you have finished composing. Then the system will ask MAXIMUM RESPONSE (#)? to which you can respond with the number of the highest response possible (no greater than 9). Then the system will ask OK TO ADD (Y/N)? After adding the question the system will ask if you want to ADD ANOTHER QUESTION (Y/N)?.

If you answer N to DO YOU WISH TO ADD A QUESTION (Y/N)?, the system will then ask DO YOU WISH TO REMOVE A QUESTION (Y/N)? If you answer Y, the system will ask for the QUESTION (#) which you wish to remove. After you enter the number of the question to be removed, the system will ask OK TO REMOVE QUESTION (Y/N)? as a double check. After removing the question the system will ask QUESTION (0?) again.

NOTE: if you take choice ++2,8 for a new response and choose not to add any questions, the system will create a null or dummy tally with zero questions which will come out when the response is delivered. To remove this dummy tally, you must first add a question and then remove it after which the dummy tally will be gone.
[1.20]

[Section 1.20]
PAGINATION AND DELIVERY OF YOUR OWN ITEMS (+SSW 7 +SSW 13 +SSW6)

PAGINATION (+SSW 7 +SSW 13)

For those users who have printers with page control (top-of-form or control L), TOPICS has features for paginating your printout. First, if you want the system to skip to the top of the next page each time you enter a new exchange, type +ssw 7 (to set switch 7). This switch will remain set until you turn it off with +rsw 7 (for reset switch 7). You can type +ssw 7 anywhere in EIES (not just within TOPICS).

Second, within an exchange, if you want the system to skip to the top of a new page at the beginning of delivery of new responses for each topic, type +ssw 13 (to set switch 13). You can do this anywhere in EIES. This second setting governs the printing of waiting items in the following ways. Each time a new response to a topic is printed the system will skip to the top of a new page first, and before printing out any new waiting topics it will also skip to a new page. (However, all new waiting topics will be printed on the same page.) Similarly, the system will skip to a new page at the start of each new topic printed with ++1,1 (get topics) as well as ++4,6 (retrieve topics by keyword) -- see Sections 1.13 and 1.16 respectively. When used in conjunction with the EIES +sps (set page size) command (which allows you to skip over the perforations) your printout can be made very neat and easy to work with. Switch 13 will remain set until you turn it off with +rsw 13. (Enter ?+sps for an explanation of this EIES command.)

GETTING YOUR OWN ITEMS DELIVERED (+SSW 6)

As in EIES conferences, your own topics and responses are NOT delivered to you automatically, since it is assumed that you have already seen them. However, you may wish to have them printed out for you to keep your files complete or for future reference. To get your own items delivered along with those entered by others, type +ssw 6 (for set switch 6). This switch setting governs all exchanges of which you are a member. It will remain set until you turn it off with +rsw 6. You can type +ssw 6 (and +rsw 6) anyplace in EIES.
COPYING TOPICS AND RESPONSES (+TCY and +TCIN)

If you want to copy a topic/inquiry or a response to send as an EIES message, enter as a conference comment, copy from one exchange to another, or otherwise make a copy of text in an exchange, you can use the +TCY command (Topics CopY). This command will copy the text AND all the header information: topic or response number, author, date and time, keys, and title.

Before you use +TCY, be sure that you are in the scratchpad. If you are in an exchange just use ++1,4 or ++2,4 depending on whether you want to copy the material into a topic inquiry or a response (see Sections 1.9 or 1.8 respectively for information on adding topics or responses). You can use the +TCY command in your scratchpad in regular EIES as well.

Once in the scratchpad, enter +TCY followed by an item identifier. If you want to copy a topic/inquiry, the identifier will consist of the exchange name or abbreviation, a comma, and a topic number (as in +TCY PT,T11). If you want to copy a response, the identifier will consist of the exchange name or abbreviation, the letter T, the topic number, the letter R, and the response number (as in +TCY PT,T5R17). You can only copy topics and responses to which you have access. Using this command, you can copy from one exchange to another, or from an exchange into EIES, as long as you only copy items to which you have access (which you have received).

The +TCIN command (Topics Copy IN) works just like the +TCY command, except that only the text will be copied WITHOUT the header and that any indirect edits will be retained in their original unedited form. In this way, it is like the EIES "and copy in" commands (see ?CY on EIES for details).
ROLES AND LEVELS OF ACCESS

Each member of an exchange is assigned a level of access. Your level determines the limits on what you can do in the exchange. It is assigned to you by a gatekeeper at the time you are made a member. At the first level, level 0, you are allowed to read information in an exchange, but not to enter responses or raise topics. This is called READ-ONLY access.

The next level, 10, is called RESPOND-ONLY because it allows you to enter a response on a topic, but not to raise topics by entering inquiries. It also allows you to add a response/tally to any response you have entered, if the response/tally option has been turned on by the monitor.

Level 20, REGULAR ACCESS, allows you to respond AND raise topics. It also allows you to add a topic/tally to any topic you have raised, if the topic/tally option has been turned on by the monitor.

Next comes level 30, EDITOR ACCESS. Editors can add and delete keywords from the index of topics. They can correct the spelling of keywords, add new keywords to describe topics and also delete keywords to keep the index trimmed. Normally, only the author of a topic or response can modify or delete it. However, editors have the power to modify and delete any item to which they have access. (See Section 2 and its associated subsections for more on what editors can do in an exchange.)

At level 40 is the GATEKEEPER. A gatekeeper controls access to the exchange by adding and deleting members as well as "trapping" members into an exchange when they log onto EIES so that they are taken directly and automatically into the exchange. A gatekeeper can assign levels of access ranging from 0 through 40. (See Section 3 and its associated subsections for more information about what gatekeepers can do.)

At level 50 is a MONITOR. A monitor has access to each and every item in an exchange, even those sent privately to certain people only. The monitor has the power to modify and delete ANY item in an exchange. Furthermore, a monitor controls the exchange options which govern certain aspects of how each exchange works. These include an option on whether the keyword list is fixed (a thesaurus is used), whether an exchange is open to anyone on EIES, and the limit (if any) on the number of topics you can have in your selection. (See Section 4 and its associated subsections for more information on exchange options.)

The last level, 60, is the IMPLEMENTOR level. Implementors are the computer systems designers and developers. (Section 5 and its associated subsections contain technical information for implementors.)

Each level of access has all the powers of all levels with numbers less than its own number. Thus, an implementor is a monitor and an editor. Similarly, a gatekeeper can also edit any item to which s/he has access.

This system of levels of access makes several things possible. First, some participants may raise topics and discuss them, while other people watch without being able to comment. Second, it creates and supports certain
essential roles needed to keep an exchange going: the editors keep the index trim and the text as neat as desired, the gatekeepers watch the doors, and the monitors and implementors take care of emergency situations. The powers granted to these higher-numbered levels of access can be limited to just a few people if desired. On the other hand, if it seems more appropriate these powers can be shared by all members of an exchange.

The flexibility of this system of access allows the levels to be tailored to the specific needs of each group using the TOPICS system. Furthermore, as needs change, the levels of access for specific users can be changed.
[Section 1.23]
RELATIONSHIP OF TOPICS TO EIES (++)

TOPICS is written in INTERACT, the high-level programming language in which
much of EIES itself is written. Basically it runs as a subsystem within EIES,
although if a user is "trapped" directly into an exchange, s/he may never come
into contact with EIES and does not need to know anything about it. In that
sense, TOPICS is a completely self-contained system.

To get into a TOPICS exchange from EIES, simply type +TOPICS,XXXX where XXXX
is the name or 2-character abbreviation of the exchange. To get from an
exchange back to EIES, simply type +0 and you will be returned to EIES
INITIAL CHOICE after being given a chance to accept any waiting messages (see
Sections 1.2.2 and 1.2.3).

While using TOPICS you can take advantage of many of the features of EIES.
For example, from within an exchange you can use the ??? and +SEN one-line
messaging features to communicate with other users. You can also use a wide
variety of commands such as +DT (Date and Time) and most of the commands for
setting output, margin, and line pause options too numerous to discuss here.
They all work within TOPICS.

You cannot enter a conference or send a message from within TOPICS.

You can copy EIES material into a topic or response, however, by using the
standard EIES copy commands: +CY, &<, etc. (See ?CY for information about
the EIES copy commands.) Furthermore, all the indirect editing commands, such
as .text, .get, and .cent, work within TOPICS, making it possible to format
your text for neat printout. (See ?INDIRECT EDIT for information about the
EIES indirect editing commands.)
LIMITATIONS

This system was designed to have very few limitations. In any design, however, certain trade-off decisions must be made to balance speed, efficiency, and generality. As a result, the following limitations are built into the system.

-- between 400 to 800 topics per exchange -- excluding deleted topics (the actual number depends on how much changeover there is in the list of topics, and on future improvements in INTERACT file handling)

-- between 400 to 800 members per exchange -- excluding removed members (the actual number depends on how much changeover there is in membership and on future improvements in INTERACT file handling)

-- between 400 to 800 keywords per index -- excluding deleted keys (the actual number depends on how much changeover there is in the list of keys and on future improvements in INTERACT file handling)

-- between 400 to 800 responses PLUS members per topic (the actual number depends on how much changeover there is in the membership of a topic and on future improvements in INTERACT file handling)

-- 28 explicitly named receivers of a private topic -- includes groups and individually named members

-- 28 groups per member

All other aspects of the design are, for practical purposes, unlimited.
EDITOR'S GUIDE TO THE TOPICS SYSTEM
Access level 30 (see Section 1.22) in the TOPICS system is for EDITORS. An editor may modify (edit) and delete any topic or response in an exchange to which s/he has access (that is, which s/he has received). This allows an editor to correct typographical errors and otherwise edit text if that kind of service is desired (e.g., if material within an exchange is being prepared for publication). The author may also modify or delete his or her own items. (See Section 1.11 for details on how to modify and delete topics and responses, as well as Section 2.4 below.)

An editor may also edit the keyword index. S/he may add and delete keywords, as well as change the spelling of existing keywords. If the relational keyword option (see Section 4.1.12) is enabled for the exchange, the editor may also add relational information (broader than, related to, narrower than) to the keys in the index. (See Sections 2.1, 2.2, and 2.3)

In some exchanges, where users are not allowed to assign keywords to their topics as they are raised (see Section 4.1.11 for details), the editor is the only person who puts keywords in the index. In this case, regular users of the exchange will not be asked for keys when composing a new topic or response, and the editor will add appropriate keys later on. It is also possible to specify a fixed thesaurus of keywords (see Section 4.1.10 for this exchange option). Only keywords from that thesaurus will be added by the system; any other keys entered will be rejected.
[Section 2.1]

ADDING KEYWORDS TO THE INDEX AND TO TOPICS (++4,4)

On the initial EXCHANGE CHOICE? menu, access to the alphabetic index of topics is choice 4. This will take you to the INDEX CHOICE? menu. On that menu, ADD KEYS TO TOPICS is choice 4. You may answer ahead on these questions with ++4,4.

When you enter 4 at INDEX CHOICE? (or have answered ahead with ++4,4), the system will ask KEY TO BE ADDED (KEY)?. Enter the keyword or phrase you wish to add to a topic. If the key already exists in the index the system will tell you so. If the key is new to the index you will be asked OK TO ADD KEY (Y/N)? as a double check. In either case, the system will then ask ADD TO WHICH TOPIC (#)?. Enter the identification number of the topic you want associated with the keyword. The header, keys, and title of the topic will be displayed as a double check, after which you will be asked OK TO ADD TO TOPIC (Y/N)?. The system will continue asking ADD TO WHICH TOPIC (#)? in this manner until you enter a + to terminate the process. This allows you to associate more than one topic with the same key easily.

EDITORS may use ++4,4 to add keys to any topic to which they have access.

Regular users can only add keys to topics they have authored. If the monitor has set the option that fixes the list of keywords, users cannot add a key to the index with ++4,4 unless they are EDITORS. They can, however, add existing keys to new topics.

To modify keys already in use, use ++4,5 (see Section 2.2) to remove the old key(s) and then use ++4,4 to add the new version(s). This procedure should be followed to change the spelling of a keyword for a single topic or for all occurrences of a keyword as well.

Example:

TEST EXCHANGE CHOICE?++4,4

KEY TO BE ADDED (KEY)?experiences
KEY TO BE ADDED: EXPERIENCES
OK TO ADD KEY (Y/N)?y
Key EXPERIENCES added to index.
ADD TO WHICH TOPIC (#)?37
TEST T37 PETER+TRUDY JOHNSON-LENZ (P+T,118) 5/17/80 11:19 PM
KEYS: /THIS SYSTEM/
TOPIC: WHAT HAS YOUR EXPERIENCE BEEN WITH THIS SYSTEM?
OK TO ADD TOPIC (Y/N)?y
Topic 37 now keyed EXPERIENCES.
ADD TO WHICH TOPIC (#)?+

INDEX CHOICE?
DELETING KEYWORDS FROM TOPICS AND THE INDEX (++4,5)

On the initial EXCHANGE CHOICE? menu, access to the alphabetic index of topics is choice 4. This will take you to the INDEX CHOICE? menu. On that menu, DELETE KEYS FROM TOPICS is choice 5. You may answer ahead on these questions with ++4,5.

When you answer 5 at INDEX CHOICE? (or have answered ahead with ++4,5), the system will ask KEY TO BE DELETED (KEY)?. Enter the keyword or phrase you wish to delete from a topic. If the key exists in the index you will then be asked DELETE FROM WHICH TOPIC (#)?. Enter the identification number of the topic from which you want the key deleted. The header, keys, and title of the topic will be displayed as a double check, after which you will be asked OK TO DELETE FROM TOPIC (Y/N)?. The system will continue asking DELETE FROM WHICH TOPIC (#)? in this manner until you enter a + to terminate the process. This allows you to delete the key from several topics at once.

Once you have entered a +, the system will check to see if any other topics are still associated with the keyword. If no topics remain associated with the key, it will ask DELETE KEY FROM INDEX (Y/N)?. If you enter Y the key will be deleted from the index. Unless you plan to use this key in some way, you should delete the key from the index since it serves no purpose by remaining there.

EDITORS may use ++4,5 to delete keys from any topic to which they have access. Regular users can only delete keys from topics they have authored. If the monitor has set the option that fixes the list of keywords, they cannot delete a key from the index with ++4,5 unless they are EDITORS. They can, however, delete keys from topics they have authored.

To modify keys already in use, use ++4,5 to remove the old key(s) and then use ++4,4 to add the new version(s). This procedure should be followed to change the spelling of a keyword for a single topic or for all occurrences of a keyword as well.

Example:

TEST EXCHANGE CHOICE?++4,5

KEY TO BE DELETED (KEY)?experience
KEY TO BE DELETED: EXPERIENCE
DELETE FROM WHICH TOPIC (#)?37
TEST T37 PETER+TRUDY JOHNSON-LENZ (P+T,118) 5/17/80 11:19 PM
KEYS: /THIS SYSTEM/EXPERIENCE/
TOPIC: WHAT HAS YOUR EXPERIENCE BEEN WITH THIS SYSTEM?
OK TO DELETE FROM TOPIC (Y/N)?Y
Key EXPERIENCE now deleted from topic 37.
DELETE FROM WHICH TOPIC (#)?+
Key EXPERIENCE now points to no topics at all.
DELETE KEY FROM INDEX (Y/N)?Y

Please wait while EXPERIENCE is deleted from the index.
Key EXPERIENCE deleted from index.
MODIFYING RELATIONSHIPS AMONG KEYWORDS (++4,7)

In some exchanges, the monitor will have enabled the option which allows an EDITOR to put relational information into the keyword index. For each keyword, an editor can specify which other keywords are broader, which are narrower, and which are related.

The system allows complete freedom in how keys are related to one another. For example, KEY1 may be specified as narrower than KEY2 and simultaneously broader than KEY2 as well, thus allowing for multiple perspectives on the relationships among controversial keywords or keys whose meaning is evolving.

Furthermore, if a topic is keyed with a narrower key which has other broader keys related to it, the system does not require that the topic also be keyed with all those broader keys. Rather only those keys which are most meaningfully assigned to each topic should be used and the total number of keys per topic kept to a minimum. Then, the editor can add information relating keys to one another without having to rekey topics. In this way a user can find his or her way from one key to another and discover related topics. The relationships between the keywords do not need to be taken into account when raising topics. The relationships exist only within the index itself. This simplifies the work of maintaining the keyword index while providing a highly flexible and adaptive structure for indexing topics.

On the initial EXCHANGE CHOICE? menu, access to the alphabetic index of topics is choice 4. This will take you to the INDEX CHOICE? menu. On that menu, MODIFY KEYWORD RELATIONS is choice 7. This choice will appear on the menu only if the relational keyword option has been enabled for the exchange (enter a carriage return at INDEX CHOICE? to see if it does). You may answer ahead on these questions with ++4,7.

When you enter 7 at INDEX CHOICE? (or have answered ahead with ++4,7), the system will ask KEY TO BE RELATED?. Enter a keyword from the index. (If you need to add a new keyword, use ++4,4 — see Section 2.1). Then the system will ask RELATIONSHIP (B/-B/N/-N/R/-R)?. B stands for BROADER THAN, N for NARROWER THAN, and R for RELATED TO. Enter the appropriate relationship. (Note that the letters preceded by a minus sign are for deleting a relationship from the index; see below.)

When you enter a B, N, or R, the system will ask for the second key by printing out the first key and the relationship you have specified. When you enter the second key, the system will print out the full relationship you have specified (KEY1 relationship KEY2) and then ask OK TO ADD RELATIONSHIP (Y/N)?.

Example:

TEST EXCHANGE CHOICE?++4,7

KEY TO BE RELATED?solar
RELATIONSHIP (B/-B/N/-N/R/-R)?b
SOLAR IS BROADER THAN (KEY)?wind
SOLAR IS BROADER THAN WIND:
OK TO ADD RELATIONSHIP (Y/N)?y
RELATIONSHIP ADDED TO SOLAR.
RELATIONSHIP ADDED TO WIND.
RELATIONSHIP (B/-B/N/-N/R/-R)?+

INDEX CHOICE?

Note that the system adds the specified relationship to both keys. In this example, WIND will appear as a NARROWER KEY under SOLAR in the index, and SOLAR will appear as a BROADER KEY under WIND in the index.

The system will continue to ask for RELATIONSHIP (B/-B/N/-N/R/-R)? for the first key you specify until you enter a + to terminate the process. In this way, you can add many relationships to a given key without having to enter the key over and over again.

To remove a relationship from a key, the appropriate letter is entered with a minus sign: -B, -N, or -R. Just as the system adds the relationship to both keys in the above example, it will also remove the relationship from both keys.

Example:

TEST EXCHANGE CHOICE?++4,7

KEY TO BE RELATED?solar
RELATIONSHIP (B/-B/N/-N/R/-R)?-b
SOLAR IS BROADER THAN (KEY)?wind
SOLAR IS BROADER THAN WIND:
OK TO REMOVE RELATIONSHIP (Y/N)?y
RELATIONSHIP REMOVED FROM SOLAR.
RELATIONSHIP REMOVED FROM WIND.
RELATIONSHIP (B/-B/N/-N/R/-R)?+

INDEX CHOICE?
[Section 2.4]
KEEPING THE EXCHANGE TIDY (++)

As an exchange is used over a period of time, it will be necessary to edit the keyword index to keep it logical and useful (see Sections 2.1, 2.2, and 2.3) and to remove old topics and responses that are no longer of interest to participants. The norms and guidelines for the format of the keyword index and the conditions under which topics and responses are removed must be worked out by the members of the exchange.

An EDITOR may modify or remove any items in an exchange to which s/he has access (those which s/he has received). Of course, authors may also modify or remove their own topics or responses. (See Section 1.11 for details about modifying or removing topics and responses.)

To keep from overloading newcomers to an exchange, an EDITOR (or the author) may also close topics to further responses. Closed topics remain in the exchange, but they are not delivered to new people, and one cannot add responses to them. (See Section 1.11 for information about closing topics.)

The monitor can also enable an option in the exchange to set all newcomers' topic markers to a specific (recent) topic. This is called the "default topic marker" (see Section 4.1.2). Otherwise, the newcomer would get all topics delivered, beginning with topic 1. Use of the default topic marker is most appropriate for exchanges which have been open for some time or in which there are many topics. See also Section 3.8 and its subsections about helping new members get started.
GATEKEEPER'S GUIDE TO THE TOPICS SYSTEM
Access level 40 (see Section 1.22) in the TOPICS system is for GATEKEEPERS. A gatekeeper can add and remove members to/from the exchange, as well as "trap" (and release) members into the exchange when they log on to EIES so that they are taken directly and automatically into the exchange. (See Section 3.3)

A gatekeeper can assign levels of access up to 40 to members of the exchange. See section 1.22 for information on levels of access and section 3.4 on how to modify a member's access level.

A gatekeeper can also help a newcomer to the exchange get started by putting topics of interest into the newcomer's selection (see Section 3.6) and setting his/her markers (see Section 3.5).

Since each level of access has all the powers of all levels with numbers less than its own number, a GATEKEEPER has all the powers of an EDITOR. See Section 2 for the Editor's Guide to the TOPICS System.
[Section 3.1]

KEEPING TRACK OF MEMBERS OF THE EXCHANGE (++6,1 ++6,2 ++6,6)

The gatekeeper for an exchange will probably want to keep track of who is in the exchange, their levels of access, when they were last active in the exchange, where their topics markers are, etc. This information is quite useful for those facilitating and evaluating the use of an exchange. (See Section 3.2 for details on keeping track of members of topics within the exchange.)

GETTING INFORMATION ABOUT MEMBERS OF THE EXCHANGE (++6,1)

On the initial EXCHANGE CHOICE? menu, access to members of this exchange is choice 6. This will take you to the EXCHANGE MEMBER CHOICE? menu. On that menu, GET MEMBERS OF EXCHANGE is choice 1. You may answer ahead on these questions with ++6,1.

When you enter 1 at EXCHANGE MEMBER CHOICE? (or have answered ahead with ++6,6), you will be asked MEMBER (#/#—#)? to which you can respond with a single member number, a series of numbers separated by commas, or a range of numbers. The system will respond by printing out the following information for each member specified:

-- name, nickname, and number; access level and topic marker
-- date/time last active; whether "trapped" into exchange at sign on
-- list of groups to which member belongs; the number of topics in his/her selection
-- the number of topics and responses authored by member; the number of responses received by member

Furthermore, if you enter your own number and the monitor has turned on the author/select trace option, you will get a complete, detailed printout showing the dates and times you authored both topics and responses as well as the dates and times you added topics to your selection. Furthermore, if the activity trace option has been turned on the printout will also include the dates and times when you entered and left the exchange. This is quite useful in tracing and evaluating your experience with the system. This output is printed from most to least recent so that you can stop it in the middle by pressing BREAK if you wish to review your most recent author/select activity only.

A MONITOR can get this author/select and activity trace output for any member. GATEKEEPERS can get this author/select and activity trace output only for themselves.

DISPLAYING AND REVIEWING MEMBERS OF THE EXCHANGE (++6,2 ++6,6)

Information about displaying (++6,2) and reviewing (++6,6) members of the exchange is contained in Section 1.17.
[Section 3.2]
KEEPING TRACK OF MEMBERS OF TOPICS (++5,1 ++5,2 ++5,6)

A GATEKEEPER may want to keep track of who is a member of which topics and which responses have been received by the members of a given topic. GETTING MEMBERS OF A TOPIC (++5,1) and DISPLAYING MEMBERS OF A TOPIC (++5,2) are used to get this information. They are explained in Section 1.17.

GETTING THE TOPICS BY MEMBERS MATRIX (++5,6)

A GATEKEEPER or MONITOR may want a more complete, compressed form of output showing which members have selected and responded to which topics. Choice ++5,6 provides a such information in the form of what is often called an I by P (Interests by Persons) matrix. In the terminology of this system this is called the topics by members matrix. Network analysis of these matrices over time can reveal interesting aspects of the social structure as it evolves within the exchange.

On the initial EXCHANGE CHOICE menu, access to members of topics is choice 5. This will take you to the TOPIC MEMBER CHOICE? menu. On that menu, GET TOPICS/MEMBERS MATRIX is choice 6. You may answer ahead on these questions with ++5,6.

When you enter 6 at TOPIC MEMBER CHOICE? (or have answered ahead with ++5,6), you will be asked CONTENTS OF MATRIX (S/R/A) ?. At this point enter one of the following:

S (for Selection), to get a matrix showing who has SELECTED which topics: a zero will be entered if that member has NOT selected the topic, and a one will be entered if he or she has selected it. Row totals will show the total number of topics selected by each member. Column totals will show the total number of members selecting each topic.

R (for Responses), to get a matrix showing how many responses to each topic each member has received (response markers). The matrix will be blank where a member has NOT selected a topic and will otherwise contain the member's response marker. Row totals will show the total number of responses received by each member. Column totals will show the total number of members selecting each topic.

A (for Authored), to get a matrix showing how many responses to each topic have been authored by each member. The matrix will be blank where a member has NOT selected a topic and will otherwise contain the number of responses authored by each member. Row totals will show the total number of responses authored by each member. Column totals will show the total number of members authoring topics.

After you have specified the contents of the matrix, you will be asked TOPICS
(#/#-#)? to which you can respond with a single topic number, a series of numbers separated by commas, or a range of numbers.

Once these questions have been answered the system will begin printing the matrix out. Only those topics specified will be included in the matrix. Topics will run across the top of the page and members down the left side. The system will break up the printout into sections in order to fit it within the print width of your terminal.
[Section 3.3]

ADDING AND REMOVING MEMBERS (++6,4)

On the initial EXCHANGE CHOICE? menu, access to members of this exchange is choice 6. This will take you to the EXCHANGE MEMBER CHOICE? menu. On that menu, ADD/REMOVE EXCHANGE MEMBERS is choice 4. If you are a GATEKEEPER or a MONITOR, you may use this choice. You may answer ahead on these questions with ++6,4.

When you enter 4 at EXCHANGE MEMBER CHOICE? (or have answered ahead with ++6,4), you will be asked USER (#/-#)? . If you enter a valid EIES user number (either regular or sub-account id) and if that person is not already a member of the exchange, the system will print out his or her name, nickname, and number and then ask ACCESS LEVEL?. (See Section 1.22 for information about levels of access; level 20 is regular access.) The system will print out the access level for the user you have specified and then ask OK TO ADD (Y/N)? . If you answer Y, the system confirm that the member has been added to the exchange with the specified level of access.

If you enter a user number preceded by a minus sign, and that user is a member of the exchange, the system will print out his or her name, nickname, and number and ask OK TO REMOVE (Y/N)?.

The system will continue to ask USER (#/-#)? until you enter a + to terminate the process, thus making it easy to add/remove many members at once.

See Section 3.7 for information about "trapping" and releasing members.

Example:

TEST EXCHANGE CHOICE?++6,4

USER (#/-#)?663
ROBERT COPPEDGE (BC,663)
ACCESS LEVEL?20
Access level for 663: 20
OK TO ADD (Y/N)?y
Member 663 added to TEST with level of access 20.
USER (#/-#)?+

EXCHANGE MEMBER CHOICE?++6,4

USER (#/-#)?-663
ROBERT COPPEDGE (BC,663)
OK TO REMOVE (Y/N)?y

Please wait while member 663's indices are removed.

Member 663 removed from TEST.
USER (#/-#)?+

EXCHANGE MEMBER CHOICE?
MODIFYING A MEMBER’S ACCESS LEVEL (++6,4)

A member’s access level is specified when s/he is added to the exchange by a gatekeeper with ++6,4. Using that same choice, a gatekeeper can change a member’s level of access at some later time.

On the initial EXCHANGE CHOICE? menu, access to members of this exchange is choice 6. This will take you to the EXCHANGE MEMBER CHOICE? menu. On that menu, ADD/REMOVE EXCHANGE MEMBERS is choice 4. You may answer ahead on these questions with ++6,4.

When you enter 4 at EXCHANGE MEMBER CHOICE? (or have answered ahead with ++6,4) you will be asked USER (#/-#)?. If you enter the EIES user number (either regular or sub-account id) of a person who is already a member of the exchange, the system will tell you that s/he is already a member and then ask CHANGE HIS/HER ACCESS LEVEL (Y/N)?. If you answer Y you will be asked ACCESS LEVEL?. (See Section 1.22 on levels of access.) After you enter the new access level, the system will print it out as a double check and then ask OK TO MODIFY (Y/N)?. If you answer Y, the system will confirm that the access level for that user is now what you have just specified.

Example:

TEST EXCHANGE CHOICE?++6,4

USER (#/-#)?663
663 is already a member of TEST.
ROBERT COPPEDGE (BC,663)
CHANGE HIS/HER ACCESS LEVEL (Y/N)?y
ACCESS LEVEL?30
Access Level for 663: 30
OK TO MODIFY (Y/N)?y
Access level for 663 is now 30.
USER (#/-#)?+

EXCHANGE MEMBER CHOICE?
MOVING A MEMBER'S MARKERS (++5,5)

A GATEKEEPER may move the topic and response markers of any member of the exchange. This is often useful to help newcomers to the exchange.

If you are a GATEKEEPER and you use ++5,5, the system will first ask for the MEMBER (#) for whom you want to modify or move the markers. Then the system will ask about modifying the topic marker first and then the response markers, as explained in detail in Section 1.15.
[Section 3.6]
ADDING AND REMOVING TOPICS FROM A MEMBER'S SELECTION (++3,2 ++3,4 ++3,5)

A GATEKEEPER may add or remove topics to/from the selection of any member of the exchange. This is particularly useful to help newcomers to the exchange. The GATEKEEPER can put those topics known to be of interest to the newcomer into his/her selection before s/he enters the exchange for the first time.

When a GATEKEEPER uses the choices for displaying (++3,2), adding (++3,4), or removing (++3,5) topics in one's selection, the system will ask MEMBER (#)?. Enter the appropriate user number. Detailed instructions for adding and removing topics to/from a member's selection are in Section 1.14.

A member may add and remove topics to/from his or her own selection only. A GATEKEEPER (and a monitor) may do this for any member's selection.
TRAPPING AND RELEASING MEMBERS (++6,5)

"Trapping" a member into an exchange means that the member will be taken directly and automatically into the exchange whenever s/he logs on to EIES. S/he will NOT get any waiting messages on EIES or go to INITIAL CHOICE? there. Instead, after entering his/her name (or number) and code, s/he will be welcomed to the exchange.

A GATEKEEPER may "trap" someone into the exchange only after s/he has been made a member of the exchange with ++6,4 (see Section 3.3).

On the initial EXCHANGE CHOICE? menu, access to members of this exchange is choice 6. This will take you to the EXCHANGE MEMBER CHOICE? menu. On that menu, TRAP/RELEASE MEMBERS is choice 5. You may answer ahead on these questions with ++6,5.

If you are a GATEKEEPER and you enter 5 to EXCHANGE MEMBER CHOICE? (or have answered ahead with ++6,5), you will be asked MEMBER TO BE TRAPPED/RELEASED (#/-#)?. If you enter the number of a member of the exchange who has not previously been trapped, the system will print his or her name, nickname, and number and ask OK TO TRAP (Y/N)?. Once trapped in this fashion, the user will be taken directly into the exchange following entry of his or her name/number and access code when logging into EIES. (Note that only regular EIES users can be trapped in this way. If you wish to trap sub-account users into an exchange you must trap all users under a given multi-user account at once by trapping the multi-user id and not each individual sub-account.)

If you enter the number of a member who is already trapped, preceded by a minus sign, the system will print his or her name, nickname, and number and ask OK TO RELEASE (Y/N)?.

The system will continue to ask MEMBER TO BE TRAPPED/RELEASED (#/-#)? until you enter a + to terminate the process, thus allowing trapping/releasing many members at once.

Example:

TEST EXCHANGE CHOICE?++6,5

MEMBER TO BE TRAPPED/RELEASED (#/-#)?663
ROBERT COPPEDGE (BC,663)
OK TO TRAP (Y/N)?y
663 is now trapped into TEST.
MEMBER TO BE TRAPPED/RELEASED (#/-#)?+

EXCHANGE MEMBER CHOICE?++6,5

MEMBER TO BE TRAPPED/RELEASED (#/-#)?-663
ROBERT COPPEDGE (BC,663)
OK TO RELEASE (Y/N)?y
Member 663 released from TEST.
MEMBER TO BE TRAPPED/RELEASED (#/-#)?+
[Section 3.8]

TIPS ON HELPING NEW MEMBERS GET STARTED

Once an exchange has been going for a while, there will be many topics and responses entered. A new member may find the sheer amount of material overwhelming. There are several things a GATEKEEPER can do to help the new member get started.

First, the GATEKEEPER can advise the new member in whether to start with regular interactive delivery (Y) of waiting items or with batch delivery (B). See Section 3.8.1 for details.

Second, the GATEKEEPER can ask the exchange MONITOR to set a default topic marker so that newcomers will get only the most recent topics. See Section 3.8.2.

Third, the GATEKEEPER can tell the new member about using the keyword index and reviewing topics to get an overview of the material in the exchange. See Section 3.8.3.

Fourth, the GATEKEEPER can put topics of interest into the new member’s selection and move his/her markers to appropriate places to help ease the overload. See Section 3.8.4.

[Section 3.8.1]
BEGINNING WITH INTERACTIVE DELIVERY (Y) VS. BATCH DELIVERY (B)

Whether a new member should be advised to use interactive delivery (Y) or batch delivery (B) depends on several things: how many topics are waiting (and how many responses there are to those topics) and whether the new member will feel most comfortable going through the new topics interactively with the system or getting them all printed out at once and then figuring out which ones to select later with ++3,4.

For new members who are not yet comfortable with the system (or with computer systems), the interactive delivery has definite advantages, since it requires the least effort on the part of the user. However, if there are more than a few topics and responses waiting, the new member may get overloaded by all the printout very quickly. If you want to get the new member started in the easiest way, preselect a few topics for him/her, based on his/her stated interests (this may take some discussion first), move his/her markers so that no new topics will be delivered, and instruct him/her to use regular interactive delivery (Y). See Section 1.5.1 for details of interactive delivery.

For new members who would like to print out all the topic raisers entered to date (or the most recent topic raisers, if the default topic marker has been set — see Section 4.1.2) to see what is there, instruct him/her to use batch delivery (B). S/he will then have to use ++3,4 later on to select those topics of interest. See Section 1.5.2 for details on batch delivery and Section 1.14 on adding topics to one’s selection.
[3.8.2]

[Section 3.8.2]
USING THE DEFAULT TOPIC MARKER

Normally when a member enters an exchange for the first time, s/he will start delivery of waiting items with topic 1. However, if there are many topics in the exchange, the exchange MONITOR may enable the default topic marker option and set it to a recent topic. The default topic marker may be reset as often as desired (such as monthly) so that new members will always get a small number of new topics when entering the exchange.

If this option is used, it is helpful to tell the new member about ways to find out if there are old topics of interest, since those topic raisers will not be delivered. Use of the keyword index and reviewing topics are discussed in Section 3.8.3.

Instructions for setting the default topic marker are in Section 4.1.2.

[Section 3.8.3]
USING THE KEYWORD INDEX AND REVIEWING TOPICS TO GET AN OVERVIEW

If there are many topics in an exchange, the GATEKEEPER may wish to look through the keyword index or the review of topics (++1,6) to help find topics of interest to a new member. If the GATEKEEPER has had some discussion with the new member, the GATEKEEPER may be able to identify a few of the most potentially interesting topics and put them into the new member's selection (see Section 3.8.4) before s/he enters the exchange for the first time.

On the other hand, the GATEKEEPER may recommend that the new member look at the keyword index or the review of topics directly, as a way of getting an overview of the exchange.

See Section 1.5.3 for details.

[Section 3.8.4]
PRESETTING MEMBERS' SELECTIONS AND MARKERS (++3,4 ++5,5)

If the GATEKEEPER has some idea of the new member's interests, s/he can enter topics of interest in the new member's selection with ++3,4 (see Section 3.6) and/or move the new member's markers with ++5,5 (see Section 3.5).
[Section 3.9]
USE OF GROUPS WITHIN THE EXCHANGE (++7,1 ++7,2 ++7,4 ++7,5 ++7,6)

If there are subgroups within an exchange, such as a management group or a group of members with one particular common interest, it may be helpful to establish a group within the exchange. When new topics are raised, they can be sent to all members of the exchange, selected members by individual numbers, or to a specific group. If a group is likely to want to send new topics/inquiries to the members of that group only, then that group should be established for its members' convenience.

GETTING GROUP MEMBERS (++7,1)

On the initial EXCHANGE CHOICE? menu, access to groups in this exchange is choice 7. This will take you to the GROUP CHOICE? menu. On that menu, GET GROUP MEMBERS is choice 1. You may answer ahead on these questions with ++7,1.

When you enter 1 at GROUP CHOICE? (or have answered ahead with ++7,1), you will be asked GROUP (#/#-#) to which you can respond with a single group number, a series of numbers separated by commas, or a range of numbers. The system will respond by printing out the full names, nicknames, and numbers of all members of the groups specified.

DISPLAYING GROUP MEMBERS (++7,2)

On the initial EXCHANGE CHOICE? menu, access to groups in this exchange is choice 7. This will take you to the GROUP CHOICE? menu. On that menu, DISPLAY GROUP MEMBERS is choice 2. You may answer ahead on these questions with ++7,2.

When you enter 2 at GROUP CHOICE? (or have answered ahead with ++7,2), you will be asked GROUP (#/#-#) to which you can respond with a single group number, a series of numbers separated by commas, or a range of numbers. The system will respond by printing out the numbers of all members of the groups specified.

ADDING OR REMOVING GROUPS (++7,4)

On the initial EXCHANGE CHOICE? menu, access to groups in this exchange is choice 7. This will take you to the GROUP CHOICE? menu. On that menu, ADD/REMOVE GROUPS is choice 4. You may answer ahead on these questions with ++7,4. Only GATEKEEPERS and MONITORS may add or remove groups to/from the exchange.

If you are a GATEKEEPER and you enter 4 at GROUP CHOICE? (or have answered ahead with ++7,4), you will be asked GROUP (#/-#)? If you enter a group number that is new to the exchange, the system will ask OK TO ADD (Y/N)? If you enter a group number of an existing group preceded by a minus sign, the system will ask OK TO REMOVE (Y/N)? If you respond with a Y the group will be removed, but members of the group will remain members of the exchange.
ADDING OR REMOVING GROUP MEMBERS (++7,5)

On the initial EXCHANGE CHOICE? menu, access to groups in this exchange is choice 7. This will take you to the GROUP CHOICE? menu. On that menu, ADD/REMOVE GROUP MEMBERS is choice 5. You may answer ahead on these questions with ++7,5. Only GATEKEEPERS and MONITORS may add or remove members to/from groups.

If you are a GATEKEEPER and you enter 5 at GROUP CHOICE? (or have answered ahead with ++7,5), you will be asked GROUP (#)? to which you can respond with the number of an existing group for which you wish to modify membership. (Use ++7,4 to create a group.) Then the system will ask MEMBER (#/-#)?. If you enter a member number that is not in the group, the system will print that person's name, nickname and number and ask OK TO ADD (Y/N)?. If you enter the number of a person who is already a member, preceded by a minus sign, the system will print that person's name, nickname and number and ask OK TO REMOVE (Y/N)?.

REVIEWING GROUPS (++7,6)

On the initial EXCHANGE CHOICE? menu, access to groups in this exchange is choice 7. This will take you to the GROUP CHOICE? menu. On that menu, REVIEW GROUPS is choice 6. You may answer ahead on these questions with ++7,6.

When you enter 6 at GROUP CHOICE? (or have answered ahead with ++7,6), the system will print out a list of all groups in the exchange showing how many people are members of each group.
MONITOR'S GUIDE TO THE TOPICS SYSTEM
Section 4

MONITOR'S GUIDE TO THE TOPICS SYSTEM

Access level 50 (see Section 1.22) in the TOPICS system is for MONITORS. A monitor has access to all items in an exchange, even those sent privately to certain people only. A monitor may modify or delete ANY item in an exchange. All the powers that editors and gatekeepers have (see Sections 2 and 3 respectively) also accrue to the monitor.

In addition, a monitor also controls the exchange options which govern how certain features in the exchange work. The monitor may enable (or disable) any of the exchange options at any time. These are described in Section 4.1 and its associated subsections.

Usually an exchange has only one monitor, but this role may be shared among as many members as necessary. Only monitors and implementors (level 60) may give other members monitor level access (level 50).

Section 4.1

INTRODUCTION TO EXCHANGE OPTIONS (++8)

The monitor controls the following options which can be changed at any time to modify the way the system works. Modifying the exchange options (++8,5) is discussed in Section 4.2. Each exchange has its own option settings, separate from those of all other exchanges.

These exchange options include whether the exchange is public or private; whether there are limits on the length of topic raisers, on who can respond, and on the number of topics in one's selection; whether activity in the exchange is being traced for evaluation or billing purposes; whether there are limitations on the keyword index; and whether topic/tallies and response/tallies are included. The full set of options for an exchange are described below in Sections 4.1.1 through 4.1.13.

GETTING, DISPLAYING, AND REVIEWSING EXCHANGE OPTIONS (++8,1 ++8,2 ++8,6)

Anyone in an exchange can find out the settings of the exchange options at any time by using ++8,1, ++8,2, or ++8,6. The system will print out exactly the same information for each of these choices.

Section 4.1.1

EXCHANGE OPTION: PUBLIC VERSUS PRIVATE EXCHANGE

Membership in an exchange can be made public -- that is, open to anyone on EIES -- or private. If an exchange is public, anyone may join it by entering the +TOPICS command and the name or abbreviation for the exchange. When an exchange is made public, the system will ask the monitor to specify the default level of access (see Section 1.22) for all members. Of course, a gatekeeper or monitor may change any individual member's level of access later on with ++6,4 (see Section 3.4).
If an exchange is private, members may only join if they have been added to the exchange previously by a gatekeeper or monitor with ++6,4 (see Section 3.3).

EXCHANGE OPTION: DEFAULT TOPIC MARKER

Usually, newcomers to an exchange will begin with topic 1. However, if there are many topics in the exchange, the monitor may set a default topic marker to a higher numbered topic so that newcomers will get only those topic raisers from the specified number on up. This means that newcomers will get only the most recent topic raisers through delivery of waiting items. They can, of course, find out about earlier topics through the keyword index or by reviewing topics with ++1,6 (see Section 3.8.3) and then select those of interest with ++3,4 (see Section 1.14).

The monitor can set the default topic marker to either a positive or negative value. If a positive value is used, that number is assigned to all new members as the location of their topic markers. However, if a negative value is used, the location of the topic marker is computed by subtracting the negative number from the number of the highest topic composed to date and, thus represents the number of topics that will be waiting for new members. For example, if -10 is specified, new members will receive the 10 most recent topic raisers only. Note that those 10 topics will be change as more topics are added to the exchange.

If a positive value is used, the monitor should consider resetting the default topic marker to an appropriate topic number on a regular basis, such as monthly.

When the default topic marker is set to a higher-numbered topic, all topics with lower numbers will not be delivered to new members. Sometimes it is desirable to have a few particularly important low-numbered topics delivered even though the topic marker has been set beyond such topics. To make this possible, the monitor may specify a set of default topics which are delivered even though their numbers are lower than the default marker. Whenever a monitor specifies a default topic marker, the system will also ask if s/he wishes to specify a DEFAULT LIST OF TOPICS (Y/N)? If s/he responds with a Y, the system will ask for the topic numbers. The monitor should enter them one at a time, separated by commas, and ending with a +. All topics so specified will always be delivered to new members in the order specified, before any other topics are delivered.

EXCHANGE OPTION: NUMBER OF LINES PER TOPIC/INQUIRY

The inquiries or topic raisers are meant to be brief, pointed questions or statements. All topics/inquiries are delivered to members of the exchange who are given an opportunity to select only those topics of interest to receive additional background information and responses entered to date.

To prevent overload, the topic raisers can be limited to a certain number of
lines of text, generally 3-5 lines. This will encourage those raising the topic or inquiry to be brief and concise.

[Section 4.1.4]
EXCHANGE OPTION: WHO CAN RESPOND TO A TOPIC -- RECEIVERS VS. SELECTORS

All topic raisers or inquiries are delivered to all or specified members of an exchange. Anyone who has a topic delivered is considered to be a RECEIVER of that topic. After the topic is delivered, the member has the opportunity to select that topic or not. If the topic is selected, s/he will then receive all responses to it entered to date, including background material (usually in R1). If a member selects a topic, s/he is considered to be a SELECTOR of that topic.

The monitor may set the exchange option to allow all RECEIVERS of a topic to respond to it, whether or not they have selected the topic, or the opportunity to respond may be restricted to only those who have SELECTED the topic. If RECEIVERS may respond, they may not have seen background material or others' responses before they respond, which may be inappropriate. This is a policy matter for the monitor and any others administering or facilitating use of the exchange.

[Section 4.1.5]
EXCHANGE OPTION: LIMIT ON NUMBER OF TOPICS IN SELECTION

The TOPICS system is designed to help regulate overload by giving members short introductions to topics of possible interest which they can then select or not to receive additional information. In most cases, members will not select all or a majority of topics in an exchange. The number of topics in one's selection is directly related to the amount of new material one will have delivered.

Members can control their own selections by using ++3,4 and ++3,5 to add and remove topics to/from their selections at any time (see Section 1.14).

The monitor may also set an exchange option to limit the total number of topics members may put in their selections. This may be a useful way to force members to participate in only a certain number of highly interesting topics. This is a policy decision for the monitor and any administrators or facilitators of the exchange.

[Section 4.1.6]
EXCHANGE OPTION: AUTOMATIC INDIRECT EDIT ENABLED

EIES has many features for editing and formatting text items. The indirect editing commands ("dot" commands such as .text) are put into text so that it will be printed out neatly when it is received. Indirect editing commands include things like paragraphing, whether lines are skipped between paragraphs, the margin settings, etc. See ?INDIRECT EDIT on EIES for more details.
The monitor may enable an exchange option to automatically put an EIES indirect editing command on the first line of a topic or response as it is being composed. This option is useful for making the text neater and easier to read. However, if the exchange members are not familiar with the indirect editing commands or if they are apt to use their own indirect editing commands, this option may create more problems that it solves. The indirect editing commands work best if the person composing knows they are being used and formats the text accordingly to take advantage of the commands.

EXCHANGE OPTION: PEN NAMED (AND ANONYMOUS) TOPICS AND RESPONSES ENABLED

The monitor may enable an exchange option to allow members to raise topics and enter responses under pen names (or the pen name "ANONYMOUS"). See Section 1.10 for details on how one enters a topic or response under a pen name.

In some exchanges, the monitor and administrators or facilitators may wish to allow pen names to be used. In other exchanges, this may be inappropriate, and all topics and responses will be signed with their authors' real names. This is a matter of policy.

EXCHANGE OPTION: AUTHOR/SELECT TRACE

For evaluation purposes, the monitor of an exchange may wish to have available a full listing of when a member authored and selected topics and when responses were authored. If this exchange option is enabled, the monitor may use choice ++6,1 (GET MEMBERS OF EXCHANGE) to get this information on any member of the exchange (see Section 3.1). Any member may get this information about himself or herself, if the option is enabled; however, only the MONITOR can get the information about others in the exchange.

EXCHANGE OPTION: ACTIVITY TRACE

For billing and evaluation purposes, the monitor may wish to enable the activity trace for an exchange. This trace shows the dates and times when a member enters and leaves the exchange. If this option is enabled, a member may get this information about his/her own activity in the exchange with ++6,1 (GET MEMBERS OF EXCHANGE) -- see Section 3.1. However, only the MONITOR can get this information about all members of the exchange, again with ++6,1.

EXCHANGE OPTION: FIXED OR FREE KEYWORDS

There are different styles of keywording topics and maintaining the keyword index. In some exchanges, members will be encouraged to add their own keywords to topics as they are composed, either freely or from a recommended list of keys. In other exchanges, the editor of the exchange may wish to establish a fixed thesaurus of keywords. If the list of keywords is fixed,
members may only add keys from that list. In consultation with the exchange editor, the monitor may set the exchange option to fixed or free keywords.

[Section 4.1.11]
EXCHANGE OPTION: MAXIMUM NUMBER OF KEYWORDS PER TOPIC

Depending on the preferences of the exchange editor and the members of the exchange, the monitor may set a limit on the number of keywords that can be added to a new topic. This limit may even be zero, in which case members will NOT be asked for KEYS? when they compose a new topic. In that case, the editor can add keys to new topics later on with ++4,4 (see Section 2.1). On the other hand, the monitor may decide to set the limit on the number of keywords to the effective maximum of what can fit into a line of 128 characters.

[Section 4.1.12]
EXCHANGE OPTION: RELATIONAL KEYWORDS ENABLED

If desired, an exchange editor can include relational information in the keyword index by specifying which keywords are broader than, narrower than, or related to other keywords. This is particularly useful for searching the keyword index for topics of interest.

If the monitor has enabled this exchange option, the editor may use ++4,7 to add and modify the relationships between the keywords (see Section 2.3). If this option is not enabled, choice ++4,7 will not work and will not be printed out on the menu.

[Section 4.1.13]
EXCHANGE OPTION: TOPIC/TALLIES AND RESPONSE/TALLIES ENABLED

In some exchanges, the monitor or administrators and facilitators may wish to be able to use topic/tallies and/or response/tallies (see Sections 1.18 and 1.19). If this option is enabled, members will be allowed to add and remove topic/tallies and response/tallies (with ++1,8 and ++2,8), as well as respond to them (with ++1,7 and ++2,7). If this option is not enabled, these choices will not work and they will not be printed out on the menus.

[Section 4.2]
MODIFYING EXCHANGE OPTIONS (++8,4 ++8,5)

On the initial EXCHANGE CHOICE? menu, access to monitor options is choice 8. This will take you to the MONITOR OPTION CHOICE? menu. On that menu, ADD MONITOR OPTIONS is choice 4, and MODIFY MONITOR OPTIONS is choice 5. These choices are identical. You may answer ahead on these questions with either ++8,4 or ++8,5.

If you are a monitor and you enter 4 or 5 at MONITOR OPTION CHOICE? (or have answered ahead with ++8,4 or ++8,5), the system will take you through a series of questions asking you about each monitor option. Enter the appropriate
setting for each option as it is asked for by the system. Enter a carriage return to leave any option unchanged from its previous setting.
IMPLEMENTOR'S GUIDE TO THE TOPICS SYSTEM
Access level 60 (see Section 1.22) in the TOPICS system is for IMPLEMENTORS. An implementor is a system programmer who has the responsibility for keeping the system in working order and for modifying the system as it evolves in response to user needs. Since an implementor must be able to access all the parts of the system (text, database, and program code), s/he has the highest access level, which enables him or her to modify anything in the entire system, even portions of the database which cannot be accessed directly by someone with monitor access (see Section 4).

This section of the Guide to the TOPICS System provides detailed technical information for use by implementors.

In Sections 5.1-5.1.2 the modules of code which make up the system are described. In Section 5.2, the string, scalar, and vector variable assignments are listed, as well as a summary of the use of switches. Then, in Sections 5.3 through 5.3.9 the database is described in detail.

It has been assumed that readers of this section are experienced INTERACT programmers and for that reason, the material is deliberately brief, concise, and with very little explanation.
[Section 5.1]
MODULES OF CODE

The INTERACT code of the TOPICS system is divided into modules for ease of design and execution. The system is equipped with a procedure for listing these modules. This procedure is described in Section 5.1.1.

A master index of these modules is also maintained. This master index contains brief descriptions of each module and is further explained in Section 5.1.2.

[Section 5.1.1]
USE OF TOPICS/PROC/LIST TO LIST MODULES

There is a procedure called /topics/proc/list which can be used to make neat, paginated listings of these procedure modules. When invoked, /topics/proc/list will ask for the module names of those modules to be listed. Enter the name as shown in the index without the initial "/topics/proc" identifier to save you some keystrokes. If you want to list more than one module, enter the names with commas in between. The procedure transmits a control L (top of form) at the beginning of each module for neat output. All modules shown in the index can be listed using this procedure.

[Section 5.1.2]
MASTER INDEX OF ALL MODULES

The modules of code in the TOPICS system are summarized in an item called /topics/proc/index. Entering +g /topics/proc/index will yield a printout of this index. Note that each file listed therein is identified by an index system name with the initial "/topics/proc" left off to reduce unnecessary, redundant printout. This index contains a brief, one-line title roughly describing what each module is used for. The listing procedure (see Section 5.1.1) uses this index to title module listings.
USE OF VARIABLES

An attempt has been made in the coding of TOPICS to use variables in consistent, logical ways. The attempt has been reasonably successful in that in nearly all cases the use of variables corresponds to the table below. This table should facilitate reading and understanding of the code.

In order to fully understand the uses to which these variables have been put in the code, an understanding of the database structure detailed elsewhere is essential.

<table>
<thead>
<tr>
<th>variable</th>
<th>scalar</th>
<th>string</th>
<th>vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>yes/no input</td>
<td>sp input</td>
<td>author parameters</td>
</tr>
<tr>
<td>B</td>
<td>yes/no input</td>
<td>temporary</td>
<td>composed counters</td>
</tr>
<tr>
<td>C</td>
<td>review items input</td>
<td>exchange name</td>
<td>tally responses</td>
</tr>
<tr>
<td>D</td>
<td>initial entry flag</td>
<td>ind. edit string</td>
<td>exchange options</td>
</tr>
<tr>
<td>E</td>
<td>exchange #</td>
<td>temporary</td>
<td>group members</td>
</tr>
<tr>
<td>F</td>
<td>range increment</td>
<td>temporary</td>
<td>keyword index rec.</td>
</tr>
<tr>
<td>G</td>
<td>temp/group #</td>
<td>temporary</td>
<td>topics under key</td>
</tr>
<tr>
<td>H</td>
<td>temporary</td>
<td>sp title</td>
<td>menu lengths</td>
</tr>
<tr>
<td>I</td>
<td>temporary</td>
<td>nickname</td>
<td>topic member params.</td>
</tr>
<tr>
<td>J</td>
<td>temporary</td>
<td>name</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>key #</td>
<td>penname</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>sp line limit</td>
<td>sp title</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>member #</td>
<td>nickname</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>temp/dely opt.</td>
<td>name</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>?? exp. id</td>
<td>name</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>prev resp./temp</td>
<td>penname</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>break flag</td>
<td>penname</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>response #</td>
<td>response params.</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>pagination sw.</td>
<td>selection record</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>topic #</td>
<td>to #’s input</td>
<td>topic params.</td>
</tr>
<tr>
<td>U</td>
<td>user #</td>
<td>user params.</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>temporary</td>
<td>temporary</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>temp/simsp</td>
<td>temporary</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>exchange choice</td>
<td>choice label</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>2nd menu choice</td>
<td>temporary</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>tally resp./temp</td>
<td>temporary</td>
<td></td>
</tr>
</tbody>
</table>

USE OF SWITCHES

The TOPICS system uses three switches for communication of special user options to the computer. These are detailed below:

switch 6: delivery of own topics and responses -- when off, the system will not deliver your own topics and responses -- when on, your own topics and responses are automatically included in delivery of waiting items.

switch 7: pagination on entry to an exchange -- when off, the system does not issue a control L (top of form) when
entering an exchange -- when on, it does.

switch 13: pagination at the beginning of a new topic -- when off, the system does not issue a control L (top of form) at the beginning of delivery or printout of a new topic -- when on, the system does this before the delivery of responses to a new topic, at the beginning of printout of the keyword index, at the beginning of printout of a new topic with ++1,1, and at the beginning of printout of topics/responses retrieved with ++4,6.

switch 25: the trapping feature of TOPICS turns on this switch to trap users into the exchange during signon.

switch 30: the system turns this switch on and off during composition and at other times to suppress unwanted output when in the scratchpad.
[Section 5.3]
DATABASE

The database for TOPICS is complex and interrelated to provide rapid access to appropriate subsets of the material stored on disk. The TOPICS system uses the EIES/INTERACT "index" system extensively for its database. Sections 5.3.1 through 5.3.9 provide details of this usage.

Each portion of the database uses its own special "index" or index system file as detailed in those sections. The description includes the name of the index or file, its contents in detail, and the logical unit number usually used during program execution to open access to that file.

USE OF LOGICAL UNITS

TOPICS uses logical units 1 through 4 in a variety of ways, depending on the task being performed. Logical units 5 through 9 have special, permanent uses as detailed below. Logical unit 10 is not used in the current version.

logical unit 5 -- ALWAYS OPEN in update mode to /TOPICS/E#/MEMS, the index of members of the exchange

logical unit 6 -- ALWAYS OPEN in update mode to /TOPICS/E#/TOPS, the index of topics

logical unit 7 -- ALWAYS OPEN in update mode to /TOPICS/E#/M/#/AUTH, the current user’s trace index

logical unit 8 -- ALWAYS OPEN in update mode to /TOPICS/E#/M/#/SEL, the current user’s selection index

logical unit 9 -- used by SIMSP for all scratchpad work during composition and modification

[Section 5.3.1]
INDEX OF EXCHANGES

/TOPICS/EX -- index to exchanges within TOPICS -- type T4 usually using logical unit 1 -- only one such index for the entire TOPICS system containing the following records:

special record keyed (0,0) -- last exchange # used.

records keyed by e$, exchange name, containing the following exchange parameters and options:

E#(1) = exchange #
2 = lines per inquiry
3 = who can respond to a topic (0=selectors, 1=receivers)
4 = -1 indicates private, limited access, any other value indicates a public exchange with the value being the default access level assigned to public users
[5.3.1]

5 = 0 or 1 indicates an unlimited selection, 2 or more
   indicates maximum number of topics in users' selections
6 = author/select trace (0=off, 1=on)
7 = 0=fixed keyword list, 1=unlimited keywords OK
8 = maximum number of keys that can be assigned to a topic
during composition by author using ++1,4
9 = indirect edit option (0=None, 1=indirect edit line from
   record (1,1) of mems index is inserted at beginning of
each topic or response
10 = default setting for new members' markers (0 or positive
    number specifies actual marker, negative number specifies
decrement from highest used topic number to compute marker)
11 = pen/anonymous topics/responses flag (0=disabled, 1=enabled)
12 = relational keywords flag (0=disabled, 1=enabled)
13 = topic/response/tallies flag (0=disabled, 1=enabled)
14 = activity (entry and exit) trace (0=off, 1=on)

records keyed by 2 character exchange abbreviation, containing the
full exchange name, e$, as data.
records keyed by exchange # containing full exchange name.

[Section 5.3.2]
INDEX OF EXCHANGE MEMBERS

/TOPICS/E#/MEMS -- index of members of exchange # -- a type T4 index which
usually uses logical unit 5 -- one such index for each exchange with the
following records:

special record keyed (0,1) containing authorship counters for
the exchange as follows:
C#(1) = topics authored
  2 = authored topics not deleted
  3 = responses authored
  4 = authored responses not deleted
  5 = authored topics not deleted and not closed to responses
  6-10 -- unused

special record keyed (1,1) containing indirect edit line to be inserted
at beginning of each topic and response if e#(9) is set to 1.

special record keyed (2,1) containing default topics vector

records keyed (u,0), where u is a member's ID number, containing:
U#(1) = access level
  2 = 1=trapped into exchange at signon, else 0
  3 = topic marker
  4 = count of topics in selection
  5 = topics authored
  6 = responses authored
  7-8 = date/time last active
  9 = responses received
10 = constant of 0 necessary for processing vector
11-38= list of group numbers of which user is a member

[Section 5.3.3]
INDEX OF EXCHANGE GROUPS

/TOPICS/E#/GRPS -- index of groups in exchange # -- a type T4 index which usually uses logical unit 2 -- one such index for each exchange containing the following records:

records keyed (g,0), where g is the group number, containing:
G#(1) = group number, g
2 = number of members in group

/TOPICS/E#/G/# -- index of members of group # in exchange # -- a type T4 index which usually uses logical unit 1 -- one such index for each group within an exchange containing the following records:

records keyed (u,0), where u is a user ID number, containing:
X#(1) = u, user number

[Section 5.3.4]
INDIVIDUAL MEMBER INDICES

/TOPICS/E#/M/#/SEL -- selection for member # of exchange # -- a type T4 index which usually uses logical unit 8 -- one for each member of each exchange containing the following records:

records keyed (t,0), where t is a topic #, containing:
S#(1) = topic #, t
2 = response-marker within topic

/TOPICS/E#/M/#/TQ -- topic queue for member # of exchange # -- a type T4 index which usually uses logical unit 2 -- one for each member of each exchange containing topics queued but not yet delivered to that member in the following format:

records keyed (t,0), where t is a topic #, containing:
Q#(1) = topic #, t
2 = must be zero
3 = exchange # of topic (for future extensions to inter-exchange transfer of topics)

/TOPICS/E#/M/#/RQ -- response queue for member # of exchange # -- a type T4 index which usually uses logical unit 3 -- one for each member of each exchange containing responses queued but not yet delivered to that member in the following format:
records keyed \((t, r)\), where \(t\) is a topic \# and \(r\) is a response \# within that topic, containing:

\[
\begin{align*}
Q\#(1) & = \text{topic \#, } t \\
2 & = \text{response \#, } r \\
3 & = \text{exchange \# of topic (for future extensions to inter-exchange transfer of topics)}
\end{align*}
\]

/TOPICS/E#/M/#/AUTH -- author/select trace for member \# of exchange \# -- a type T0 index which usually uses logical unit 6 -- one for each member of each exchange containing a trace (in inverse date/time order -- most recent first) of all instances of authoring a topic or response and of selecting a topic, in the following format:

records containing:

\[
\begin{align*}
A\#(1) & = 0=\text{author entry, } 1=\text{select entry, } 2=\text{entry into exchange, } \\
3 & = \text{exit to EIES with ++0, } 4=\text{exit via --, } 5=\text{exit to another exchange with ++9} \\
2 & = \text{topic \#, } t \\
3 & = \text{response \#, } r, \text{ else } 0 \\
4-5 & = \text{date/time of action}
\end{align*}
\]

[Section 5.3.5]

KEYWORD INDEX INDICES

/TOPICS/E#/KEYS -- master keyword index for exchange \# -- a type T8 index which usually uses logical unit 2 -- one such index for each exchange, containing the following records:

special record keyed \((0, 0)\) containing the last used key number

records keyed with the keyword or keyphrase, \(k\$\), containing:

\[
\begin{align*}
I\#(1) & = \text{keyword/phrase number, } k \\
2 & = \text{number of topics associated with this key}
\end{align*}
\]

/TOPICS/E#/K/# -- keyword index for key \# in exchange \# -- a type T4 index which usually uses logical unit 4 -- one such index for each key in each exchange, containing the following records:

records keyed \((t, 0)\), where \(t\) is the topic number, containing:

\[
\begin{align*}
K\#(1) & = \text{topic \#, } t \\
2 & = \text{topic type (0=public, 1=semi-private, 2=private)} \\
3 & = \text{author ID number}
\end{align*}
\]

/TOPICS/E#/R/# -- index of keywords related to key \# in exchange \# -- a T8 index which usually uses logical unit 4 -- one such index for each key in each exchange, containing the following records:

records keyed \(x\$+k\$\) where \(x\$\) is a single character B, N, or R which
[5.3.5]

shows the type of relationship (broader than, narrower than, or related to) and k$ is the related keyword — each record contains the same string, x$+k$ as data.

[Section 5.3.6]
INDEX OF TOPICS

/TOPICS/E#/TOPS -- index of all currently active topics in exchange # — a type T4 index which usually uses logical unit 6 — one such index for each exchange, containing the following records:

special record (0,0) containing the last used topic #

records keyed (t,0), where t is the topic number, containing:
  T#(1) = type (0=public, 1=semi-private, 2=private)
  2 = author # (-# for pen/anonymous topic)
  3 = number of responses authored to date
  4 = number of authored responses not deleted
  5 = status of topic (0=open to responses, 1=closed)
  6 = topic tally flag (0=none, 1 if at least one question)
  7-9 = unused
  10 = must be zero
  11+ = list of individual and group addressees

[Section 5.3.7]
TOPIC MEMBER INDICES

/TOPICS/E#/T/#/MEMS -- topic members and responses index for topic # in exchange # — a type T4 index which usually uses logical unit 4 — one such index for each topic in each exchange, containing the following records:

special record keyed (0,1) containing highest used response number

records keyed (u,0), where u is a user ID number of a user who has selected the topic, containing:
  M#(1) = member’s response-marker
  2 = # of responses to topic authored by member

records keyed (r,1), where r is a response number, containing:
  R#(1) = author number (-# for pen/anonymous response)
  2 = response/tally flag (0=none, 1 if at least one question)

[Section 5.3.8]
TEXT ITEM INDICES

/TOPICS/E#/T/#/0.H -- text of header of topic # in exchange #

/TOPICS/E#/T/#/0 -- text of inquiry or topic raiser for topic # in
[5.3.8]

exchange #

/TOPICS/E#/?#/# H -- text of header of response # to topic # in exchange number

/TOPICS/E#/T/#/# -- text of response # to topic # in exchange #

[Section 5.3.9]
TOPIC/TALLY AND RESPONSE/TALLY INDICES

/TOPICS/E#/TALLY/#/0/0 -- master tally index for tally associated with topic # -- a type T4 index which usually uses logical unit 1 -- one such index for each topic for which a tally is being used, containing the following records:

record keyed (0,0) containing:
   G#(1) = author/opener of topic/tally
   2 = highest question number used to date

record keyed (1,0) containing a vector of the maxima for all questions in tally, with -1 for those questions which have been removed.

records keyed (0,#) containing the tally totals for question number #.

records keyed (1,u) containing the responses from user u.

/TOPICS/E#/TALLY/#/0/# -- TO index containing question text for question number # for topic/tally in topic #.

/TOPICS/E#/TALLY/#/#/0 -- master tally index for tally associated with response # in topic # -- a type T4 index which usually uses logical unit 1 -- one such index for each response for which a tally is being used, containing the following records:

record keyed (0,0) containing:
   G#(1) = author/opener of topic/tally
   2 = highest question number used to date

record keyed (1,0) containing a vector of the maxima for all questions in tally, with -1 for those questions which have been removed.

records keyed (0,#) containing the tally totals for question number #.

records keyed (1,u) containing the responses from user u.
[5.3.9]

/TOPICS/E#/TALLY/#/#/# -- TO index containing question text for question number # in response/tally for response # in topic #.

[Section 5.3.10]

? AND ?? EXPLANATION INDICES

/TOPICS/EXPLA/# -- text of ? explanation for input #

/TOPICS/EXPLB/# -- text of ?? explanation for input #