To: Distribution

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Subject: MR 9.0 Executive Mail

INTRODUCTION

    This MTB describes plans for the MR 9.0 executive mail
application of the Multics menu system (PFS item 4.5.3). The
reader should be familiar with the Multics mail facility (see the
send_mail and read_mail commands in the MPM Commands) and the
menu system (see MTB 476).

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WHAT IS EXECUTIVE MAIL

    Executive mail is a system that enables a user to send mail,
read mail, and perform several other mail-related functions. It
is based on the Multics menu system and therefore uses a menu
interface to its various functions and online documentation. A
menu interface is an environment where all options available to
the user are displayed on the terminal screen. The user chooses
from among the displayed options to accomplish specific tasks.
In the case of executive mail, the tasks that can be accomplished
via this menu interface are all very basic mail-related
functions.

WHO USES IT AND WHY

    Executive mail is intended to be used by novice and
occasional users. However, anyone who wants an easy interface to

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the Multics mail facilities can use this system. After awhile,
though, executive mail might seem too stilted and restrictive to
the frequent user.

        The motivation for the executive mail system is ease-of-use.
The product is committed to the idea that a user should not be
burdened with learning a large, complicated subsystem. Anyone
should be able simply to sit down and use this system because it
is simple, straightforward, and self-contained. If some facet of
the system is not obvious to the user (i.e., what is obvious to
one person might not be obvious to another) there are easily
accessible help files included in the package. Any resources
needed to use executive mail are automatically made available so
the user does not have to bother with them. All options
available to the user are clearly displayed. If any extra
information is required, the user is prompted for it. The user
does not need to remember anything to use this system because it
is all laid out before him.

DEFINITIONS

        The following terms are used throughout this document and
should be clearly understood:

    abbreviation
            is a short name associated with a specific user_id. An
            abbreviation can be used in place of a user_id. For
            example, the abbreviation for "PWeizenbaum.Pubs" might
            be "pm". When sending mail to this person, specify the
            abbreviation as the recipient. The abbreviation is
            expanded into the full user_id. This saves typing of
            long user_ids. All abbreviations must be defined in
            the user's abbreviation table before they can be used.

    abbreviation table
            is a file that contains a list of names (user_ids) and
            their associated abbreviations ("nicknames"). When a
            user specifies an abbreviation, executive mail looks it
            up in the table to find the associated user_id.

    bottom window
            is the area on the terminal screen below the menu.

    local printer
            is a printer that is physically attached to the user's
            terminal. Currently, only two types of local printers
            can be used via executive mail. They are: diablo 1640
            and the tn1200.

mail (message)
     consists of text and a header.   The header identifies
     the sender, date of the message, and subject of the
     message.

mail station
     is a street address, mailing address, or some string
     that identifies where a remote printout is to be sent.
     The mail station is always printed as a label ahead of
     any remote printout.

mailbox
     is a file in which a user's messages are kept. The
     user may own more than one mailbox. Some mailboxes are
     provided by executive mail. Others can be created by
     the user for his own purposes. The mailboxes provided
     by executive mail are: incoming, save, outgoing save,
     high priority, normal priority, and low priority.

mailing list
     is a file that contains a set of Person.Project names
     (user_ids).   It is used   when sending mail.   For
     example, a mailing list might contain the names of all
     managers who get a certain weekly report. When mailing
     the report, the name of the mailing list is specified
     as a recipient of the report. The name of the mailing
     list is replaced with the names that are contained in
     the file.   This saves the typing in of all the
     managers' names.

mailing list administrator
     is the person who creates the mailing list.

message number
     is a number associated   with each piece of mail
     (message). The messages are numbered in the order they
     are recieved.

option id
     is the number or letter in parentheses displayed to the
     left of an option.   Each option has an associated
     option id.

remote printer
     is any printer that is accessible to the user via
     executive mail but is not physically attached to the
     user's terminal. A remote printer might not even be
     located within the same city as the user, hence the
     need for a mail station (defined above).

EXECUTIVE MAIL FUNCTIONALITY

The following section generally outlines the tasks that can
be performed using the executive mail facility.

⊗   reading mail
         - displaying messages
             summary of messages
                selected by message numbers or search string
             video display of complete messages
                selected by message numbers
         - deleting messages
             selected by message numbers
         - retrieving inadvertantly deleted messages
             only messages that have been deleted-
                during current invocation
             selected by message numbers
         - hardcopy printout of messages
             remote or local
         - categorization (filing) of messages
         - forwarding messages
             with added comments
             without comments
         - replying to messages
             carbon copies to other users

⊗   sending mail
         - with acknowledgment when recieved by recipient
         - without acknowledgment
         - destination specified as
             name (Person.Project)
                can specify one or more
             nickname (user_id abbrev as specified in abbrev table)
                can specify one or more
             distribution list
                can specify one or more
             a mixture of names, nicknames, and distribution lists

⊗   facilities for maintenance of
         - user_id abbreviation tables
         - mailing lists

HOW TO USE EXECUTIVE MAIL

This section describes briefly how to invoke executive mail
and how to use the menu interface. A detailed description of
menu interface usage can be found in MTB 476.

How to Invoke Executive Mail

To invoke executive mail simply type the following command:

xmail

After invoking this command the initial executive mail menu is
displayed (see "Detailed Description of Executive Mail Menus"
below).   If   the   required mailboxes   (incoming, save, high
priority, etc.) do not already exist, they are created. If the
user does not have an abbreviation table, it is created.

How to Choose an Option

Specific   tasks   in executive   mail   can be   accomplished by
choosing an option or perhaps a succession of options.   To choose
a specific option simply type the option id. (Do not type a
carriage return!)   When the user chooses an option either an
action is performed or a new menu is displayed. If an action is
performed, the task the user set out to do is complete. If a new
menu is displayed, the user must choose an option from the new
menu in order to complete his task.

How to Enter Bottom Window Input

Sometimes in the process of performing some task for the
user, extra information is needed. In this case executive mail
prompts the user for the information in the bottom window (the
area below the menu). When this happens, the user should simply
type in the required information, always ending it with a
carriage return.

If the user is being prompted in the bottom window for some
information and decides that he wants to cancel whatever option
he chose to do, he can simply hit the break key instead of
answering the prompt. This stops whatever action was being taken
and moves the cursor back into the menu.   The user can then
choose another option if he wishes.

How to Get Help

When it is unclear what an option is for, there is a way to
get a description of it easily.   If there are function keys on a
terminal, the user can type F1 (function key 1) followed by the
option id.   If there are no function keys, the escape sequence
ESC h can be used instead of function key 1. (Press and release
the escape key, then press the h key, and finally press the
option id for which a description is desired. Do not press
carriage return!) The description is printed in the bottom
window.

When   it is unclear   what a prompt is   for, simply   type a
question mark ("?") and a carriage return in response to the
prompt.   A short description of what the prompt is for is
displayed and then the prompt is redisplayed.

How to Use Other Function Keys

Short descriptions of the other function keys used by
executive mail follow.   If there are no function keys on the
user's terminal, escape sequences (also shown below) can be used
instead. (See "How to Get Help" above for a discussion of escape
sequences.)

    help   F1 (ESC h)
         This key can be used to get description of any option.
         See "How to Get Help" above.

    first menu   F2 (ESC f)
         Use this key to return to the first menu.

    previous menu   F3 (ESC p)
         Use this key to return to the previous menu.

    quit   F4 (ESC a)
         Use this key to leave the menu manager.

    redisplay menu   Clear/Reset (ESC m)
         Use this key to redisplay the menu.

DETAILED DESCRIPTION OF EXECUTIVE MAIL MENUS

This section gives detailed descriptions of all executive mail menus and the options contained within them.

The Main Menu

The main menu appears as follows:

```
/---------------------------------------------------------------\
|        (1) Read Mail          (5) Display Summary of Mail      |
|        (2) Send Mail          (6) Set Mail Station             |
|        (3) Mailing Lists      (7) Display Mail Station         |
|        (4) Abbreviation Tables                                 |
|--------------------------------------------------------------- |
|                                                                |
|                                                                |
\---------------------------------------------------------------/
```

This menu is the first menu to be displayed after invoking executive mail.

THE READ MAIL OPTION

This option causes a new menu to appear on the screen. The new menu is called the mailbox selection menu (described in detail below). The mailbox selection menu provides the capability of reading any mailbox to which a user has access. After selecting the mailbox whose messages are to be examined, the user is shown another menu called the read mail menu (described in detail below). This third menu allows certain operations (listing, searching, forwarding, etc.) to be performed upon selected messages.

THE SEND MAIL OPTION

This option causes a new menu to appear on the screen. The new menu is called the send mail menu (described in detail below). Options in the send mail menu allow the user to create messages and send them to other users.

THE MAILING LISTS OPTION

This option causes a new menu to appear on the screen. The new menu is called the mailing lists menu (described in detail below). Options in the mailing list menu allow the user to perform certain operations upon mailing lists.

THE ABBREVIATION TABLES OPTION

        This option causes a new menu to appear on the screen. The
new menu is called the abbreviation tables menu (described in
detail below). Options in the abbreviation tables menu allow the
user to perform certain operations upon abbreviation tables.

THE DISPLAY SUMMARY OF MAIL OPTION

        This option causes a summary of the contents of the
mailboxes provided by executive mail to be displayed.

THE SET MAIL STATION OPTION

        This option causes the mail station to be set to a address
specified by the user. The user is prompted for the address.

THE DISPLAY MAIL STATION OPTION

        This option causes the current mail station value to be
displayed.

The Mailbox Selection Menu

        The mailbox selection menu appears as follows:

```
/                                                                    \
| (1) Read Incoming Mail         (5) Read Low Priority Mail          |
| (2) Read Saved Mail            (6) Read Other Mailbox              |
| (3) Read High Priority Mail    (7) Read Outgoing Mail              |
| (4) Read Normal Priority Mail  (8) Display Personal Mbx Names      |
|---------------------------------------------------------------------|
|                                                                    |
|                                                                    |
\                                                                    /
```

The mailbox selection menu is displayed as a result of choosing
the read mail option in the main menu. This menu assists the
user in telling executive mail which mailbox he wants to read
mail from. After choosing an option from this menu, a new menu
is displayed. The new menu is called the read mail menu. From
the read mail menu, the user can examine and perform various
operations upon the messages contained in the mailbox he has
chosen via the mailbox selection menu.

        Certain mailboxes which automatically provided for the user
by executive mail. These mailboxes act as a basic framework for
the categorization of mail. Of course, the framework provided is
not always adequate so the ability to create new mailboxes is
provided (see the "Move to Other Mailbox" option below). This
menu is a gateway to those mailboxes.

THE READ INCOMING MAIL OPTION

        Selection of this option tells executive mail that the user
wants to examine the messages contained in his incoming mailbox.
The user recieves all mail in his incoming mailbox. This mailbox
is provided by executive mail.

THE READ SAVED MAIL OPTION

        Selection of this option tells executive mail that the user
wants to examine the messages contained in his save mailbox. The
save mailbox is one of several mailboxes that can be used to
categorize mail. This mailbox is provided by executive mail.

THE READ HIGH PRIORITY MAIL OPTION

Selection of this option tells executive mail that the user wants to examine the messages contained in his high priority mailbox. The high priority mailbox is one of several mailboxes that can be used to categorize mail. This mailbox is provided by executive mail.

THE READ NORMAL PRIORITY MAIL OPTION

Selection of this option tells executive mail that the user wants to examine messages contained in his normal priority mailbox. The normal priority mailbox is one of several mailboxes that can be used to categorize mail. This mailbox is provided by executive mail.

THE READ LOW PRIORITY MAIL OPTION

Selection of this option tells executive mail that the user wants to examine messages contained in his low priority mailbox. The low priority mailbox is one of several mailboxes that can be used to categorize mail. This mailbox is provided by executive mail.

THE READ OTHER MAILBOX OPTION

Selection of this option enables the user to specify exactly which mailbox he wants to read. In other words, the user can read any mailbox to which he has access (including those provided by executive mail, those which he has created for himself and even those mailboxes belonging to other users, provided he has access to them).

THE READ OUTGOING MAIL OPTION

     Selection of this option tells executive mail that the user
wants to examine the messages contained in his outgoing mailbox.
This mailbox is used to log messages that the user sends out.
Outgoing messages are automatically logged.   This mailbox is
provided by executive mail.

THE DISPLAY PERSONAL MAILBOX NAMES OPTION

     This option displays the names of all of the mailboxes that
the user owns.   Those mailboxes include the ones automatically
provided by executive mail and the ones that the user has created
for himself.   This option is the only option in this menu that
does not lead to the read mail menu.

The Read Mail Menu

        The read mail menu appears as follows:

```
/--------------------------------------------------------------------\
|  (1) List                          (A) Move to High Priority Mailbox |
|  (2) Display Message(s)            (B) Move to Normal Pri Mailbox    |
|  (3) Display Next Message          (C) Move to Low Priority Mailbox  |
|  (4) Mark Message(s) For Deletion  (D) Move to Other Mailbox         |
|  (5) Save and Delete Message(s)    (E) Retrieve Deleted Message(s)   |
|  (6) Reply                         (F) Local Print-out of Message(s) |
|  (7) Forward Message               (G) Remote Print-out of Message(s)|
|  (8) Forward With Comments         (H) Display Personal Mbx Names    |
|  (9) Search For Text                                                 |
|  -----------------------------------------------------------------  |
|                                                                     |
\--------------------------------------------------------------------/
```

The read mail menu is displayed after having selected a mailbox
through the mailbox selection menu. This menu allows the user to
perform certain operations upon selected messages in the chosen
mailbox.

        Some options in this menu can operate on one or more
messages. The affected messages are specified by the user. The
user (when prompted) specifies a list of one or more message
numbers separated by spaces.

THE LIST OPTION

        The list option displays a list of the messages in the
mailbox that he is currently examining. The following is a
sample list:


```
Msg#  Lines   Date    Time   From                Subject
  1     (3) 10/29/80 11:07 Kyzivat.SST         Mail Station Tables
  2!    (1) 11/05/80 10:09 SKrupp.Multics      Test
  3!    (1) 11/05/80 10:09 SKrupp.Multics      Testing
  4*    (3) 12/04/80 15:46 JRDavis.Multics     Review of MTB 479
```


The current message is indicated by a "*" next to the message
number. In this case, the current message is number four.
Messages that have been marked for deletion are marked by a "!"
next to the message number. In the above list, messages two and
three have been marked for deletion. (See the description of the
message deletion option below.)

THE DISPLAY MESSAGE(S) OPTION

This option displays selected messages from the mailbox that is currently being examined. The user is prompted for the message numbers. The last message to be displayed is set to be the current message. For example, if the user specifies that messages two and three are to be displayed, message number three becomes the current message.

THE DISPLAY NEXT MESSAGE OPTION

This option displays the message after the current message.

THE MARK MESSAGE(S) FOR DELETION

This option marks selected messages for deletion. The user is prompted for the numbers of the messages to be marked. The specified messages are marked for deletion. They are deleted only when the user leaves the read mail menu. This is so they can be retrieved at any time up until the user leaves the read mail menu. If a message has been marked for deletion, no operation can be performed on it (such as printing) unless it has been retrieved.

THE SAVE AND DELETE MESSAGE(S) OPTION

This option copies selected messages from the mailbox that is currently being examined into the user's save mailbox and then marks them for deletion in the current mailbox.

THE REPLY OPTION

This option allows the user to send a reply to any message in the current mailbox. When this option is chosen, the user is prompted for the number of the message to which he wants to reply. He is also prompted for the names of any users to which copies of the reply are to be sent. The menu display is temporarily replaced by the mail editor display. The screen is divided into two portions. by the mail editor The message being replied to is placed in one portion and the reply will be written in the other. While the user is typing in the reply, he has the ability to page back and forth through the message in the other window. (See the description of the mail editor below.)

THE FORWARD MESSAGE OPTION

This option forwards a copy of a selected message to another user. The user is prompted for the number of the message to be forwarded and the name (or names) of the users to whom the message is to be forwarded.

FORWARD WITH COMMENTS

This option forwards a selected message, along with comments added by the user, to another user. Once this option is chosen, the user is prompted for the number of the message to be forwarded and the name (or names) of the user(s) to whom the message and associated comments are to be forwarded. Then the screen is divided into two portions as with the reply option.

THE SEARCH FOR TEXT OPTION

This option lists messages that contain specified text. The user is prompted for the search text. The messages in the mailbox that is being examined are searched for the exact string specified. Then a list of the messages that contain the text (in the same format as shown above for the list option) is displayed.

THE MOVE TO HIGH PRIORITY MAILBOX OPTION

This option moves selected messages from the mailbox that is currently being examined to the user's high priority mailbox. The user is prompted for the numbers of the messages to be moved. The indicated message(s) are copied into the user's high priority mailbox and then marked for deletion in the current mailbox.

THE MOVE TO NORMAL PRIORITY MAILBOX OPTION

This option moves selected messages from the mailbox that is currently being examined to the user's normal priority mailbox. The user is prompted for the numbers of the messages to be moved. The indicated message(s) are copied into the user's normal priority mailbox and are marked for deletion in the current mailbox.

THE MOVE TO LOW PRIORITY MAILBOX OPTION

This option moves selected messages from the mailbox that is currently being examined to the user's low priority mailbox. The user is prompted for the numbers of the messages to be moved.

The indicated message(s) are copied into the user's low priority
mailbox and are marked for deletion in the current mailbox.

THE MOVE TO OTHER MAILBOX OPTION

This option moves selected messages in the mailbox which is
currently being examined to another mailbox named by the user.
The mailbox named by the user may or may not exist. If it does
exist, the indicated messages are moved to that mailbox (if the
user has access to it). If the named mailbox does not exist, the
user is queried as to whether or not he wants to create a new
mailbox. If he answers yes, it is created and the indicated
messages are moved to it. If he answers no, it is not created.
The user is prompted for the numbers of the messages that are to
be moved. Then the user is prompted for the name of the mailbox
to which the messages are to be moved.   It is created if
necessary. The messages are copied into the new mailbox and are
marked for deletion in the current mailbox.

THE RETRIEVE DELETED MESSAGES OPTION

This option "unmarks" selected messages that have already
been marked for deletion. The user is prompted for the numbers
of the messages to be removed from the deletion list. When the
user leaves the read mail menu, the messages that have been
removed from the deletion list via this option are not deleted.

THE LOCAL PRINT-OUT OF MESSAGE(S) OPTION

This option prints selected messages on the local printer
that is attached to the user's terminal. The user is prompted
for the message numbers. If there is no local printer, the print
request is rejected and a message to that effect is displayed.

THE REMOTE PRINT-OUT OF MESSAGE(S) OPTION

This option prints selected message(s) at a remote printer
with the current mail station as a label at the beginning of the
output. If there is no current mail station value the user is
asked for one.   The messages will not be printed on a remote
printer unless a mail station has been specified.   The user is
prompted for the message numbers.

THE DISPLAY PERSONAL MAILBOX NAMES OPTION

This option is the same as the display personal mailbox
names option above.

The Send Mail Menu

The send mail menu appears as follows:

```
/───────────────────────────────────────────────────────────\
|  (1) Send Mail No Acknowledgment      (3) Send Mail From a File  |
|  (2) Send Mail With Acknowledgment                              |
| -------------------------------------------------------------- |
|                                                                |
|                                                                |
\───────────────────────────────────────────────────────────/
```

The send mail menu appears after the send mail option in the main
menu is selected. This menu allows the user to create new
messages and send them to other users. Sending mail is not
analogous to moving messages to another mailbox.

THE SEND MAIL NO ACKNOWLEDGMENT OPTION

This option enables the user to create a message and send it
to one or more users. The user is prompted for the names of the
primary recipients and then the names of the secondary
recipients. The message is sent to each of the primary
recipients. Then, a copy of the message, whose purpose is
analogous to that of a carbon copy, is sent to each of the
secondary recipients after the message has been completed. The
user is then prompted for the subject of the message (which must
fit on one line). The last thing the user is prompted for is the
text of the message. This can be any number of lines long. When
the text has been typed in, a period (.) should be typed on a
line by itself. This period is called the message terminator.
This is to let executive mail know that the message has been
finished. The message is then sent. Any editing of the piece of
mail should be done before the message terminator is typed. (See
the description of the mail editor below.)

THE SEND MAIL WITH ACKNOWLEDGMENT OPTION

This option causes the same things to occur as the send mail
no acknowledgment option. The only difference between this and
the previous option is that when the recipient reads the message,
an acknowledgment is automatically sent back to the user who
originally sent the message.

THE SEND MAIL FROM A FILE OPTION

     This   option causes   the same things   to happen   as the send
mail no acknowledgment option.   The   only difference here is that
instead   of   being prompted   for   the message   text, the   user is
prompted for a file name.   The   contents of that file are used as
the message text.

The Mailing Lists Menu

        The mailing lists menu appears as follows:

```
/---------------------------------------------------------------\
| (1) Update Mailing List    (5) Remote Print-out of Mailing List |
| (2) Create Mailing List    (6) Local Print-out of Mailing List  |
| (3) Delete Mailing List    (7) Display Mailing List Names        |
| (4) Display Mailing List                                         |
| ----------------------------------------------------------------|
|                                                                 |
|                                                                 |
\---------------------------------------------------------------/
```

The mailing lists menu appears after having selected the mailing
lists option in the main menu. This menu allows the user to
perform various operations on mailing lists.

THE UPDATE MAILING LIST OPTION

        This option allows the user to update a named mailing list.
If the mailing list is one of the user's private mailing lists,
there will be no question about the user's right to update it.
If the mailing list is a public mailing list, the user will not
be allowed to update it unless he is the person who originally
created it (i.e., he is the mailing list administrator). The
user is prompted for the name of the mailing list to be updated.
The list is displayed in   the bottom window.   The editor
(described below) can be used to change the mailing list.

THE CREATE MAILING LIST OPTION

        This option creates a mailing list. The user is prompted
for the name of a new mailing list (the name of an existing
mailing list will not be accepted). Then the user is prompted
for the names of the people in the mailing list.   He must type
them in, one per line. Every name must be either a user_id
(Person.Project) or an abbreviation found in the user's
abbreviation table. Each name is immediately checked for
validity. If a name is found to be invalid, the user is informed
and the name must be retyped. After having entered all of the
names, a period (.) must be typed on a line by itself. The
period is called the list terminator. This tells executive mail
that the user is finished entering names into the new mailing
list.

THE DELETE MAILING LIST OPTION

This option deletes a mailing list specified by the user. If the mailing list is one of the user's private mailing lists, there will be no question about deleting it. If the mailing list is a public mailing list, it will not be deleted unless the user is the person who originally created it (i.e., he is the mailing list administrator). The user is prompted for the name of the mailing list to be deleted.

THE DISPLAY MAILING LIST OPTION

This option displays a mailing list specified by the user. The user is prompted for the name of the mailing list to be displayed.

THE REMOTE PRINT-OUT OF MAILING LIST OPTION

This option prints a specified mailing list on a remote printer with the mail station at the beginning of the output as a header. If there is no current mail station value the user is asked for one. The mailing list will not be printed on a remote printer unless a mail station has been specified. The user is prompted for the name of a mailing list.

THE LOCAL PRINT-OUT OF MAILING LIST OPTION

This option prints a selected mailing list on the local printer attached to the user's terminal. The user is prompted for the name of the mailing list. If there is no local printer, the print request is rejected and a message to that effect is displayed.

THE DISPLAY MAILING LIST NAMES OPTION

This option displays a list of the user's personal mailing lists and all public mailing lists on the user's terminal.

The Abbreviation Tables Menu

        The abbreviation tables menu appears as follows:

```
/─────────────────────────────────────────────────────────────────\
| (1) Display Abbrev Table Entry   (4) Local Print-out of Abbrev Table |
| (2) Update Abbrev Table          (5) Remote Print-out of Abbrev Table |
| (3) Display Abbrev Table
|-----------------------------------------------------------------|
|
|
\─────────────────────────────────────────────────────────────────/
```

The abbreviation tables menu appears after having selected the
abbreviation tables option in the main menu. This menu allows
the user to perform various operations on abbreviation tables.

THE DISPLAY ABBREVIATION TABLE ENTRY OPTION

        This option displays an entry of the user's abbreviation
table. The user is prompted for the abbreviation. The
abbreviation and its corresponding user_id are printed on the
terminal screen. If no such abbreviation has been defined, a
message to that effect is printed.

THE UPDATE ABBREVIATION TABLE OPTION

        This option allows the user to update his abbreviation
table. The table is displayed in the bottom window. The editor
(described below) can be used to change the abbreviation table.
Entries in the table should be typed one per line in the form:
the abbreviation, a comma, then the user_id. For example, the
entry for a user named PWeizenbaum.Pubs (with the associated
abbreviation "pm") would look like:

        pm,PWeizenbaum.Pubs

Any entry not typed in this form will be rejected. Each entry is
immediately checked for validity. If an entry is found to be
invalid, the user is informed and the entry must be corrected or
retyped.

THE DISPLAY ABBREVIATION TABLE OPTION

        This option displays the user's abbreviation table.

THE LOCAL PRINT-OUT OF ABBREVIATION TABLE OPTION

This option prints the user's abbreviation table on the local printer. If there is no local printer, the printer request is rejected and a message to that effect is displayed.

THE REMOTE PRINT-OUT OF ABBREVIATION TABLE OPTION

This option prints the user's abbreviation table on a remote printer with the mail station at the beginning of the output as a header. If there is no current mail station value the user is asked for one. The abbreviation table will not be printed on a remote printer unless a mail station has been specified. The user is prompted for the name of a abbreviation table.

THE MAIL EDITOR

At certain points throughout the executive mail package it is necessary for the user to type in more than one line of text (when replying to a message or modifying a mail table). For these times an editor is provided. This editor (called the mail editor) enables the user to page back and forth through the text in the bottom window, move the cursor around, and perform various editing functions in addition to the normal erase and kill functions (# and @).

Usually there are only two editing functions available to the user. They are: erase character (#) and kill line (@). If the user makes a mistake while typing input in the bottom window, these are the only functions available to help him correct his mistake. This arrangement is fine if the user has to type only one line. However, at other times having only these two functions to help correct errors is inadequate. At these times, additional editing functions are provided. These functions are described in detail below.

Screen Format

The format of the screen is affected by the invocation of this editor. The top window stays the same (i.e., the current menu is still displayed). The bottom window (the only portion of the screen used by the editor) changes somewhat. The bottom three lines of the bottom window are always reserved for use by the mail editor. The first of these three lines is called the mode line. This line is the user's indication that he is in the editor. The mode line appears as follows:

*** MAIL EDITOR ***   (CURRENT MODE)

where CURRENT MODE depends on what kind of task the editor is being used for. For example, if the user chooses to update a mailing list, CURRENT MODE is replaced with "Mailing List". If the user chooses to reply to a message, CURRENT MODE is replaced with "Reply". The other two lines are used by the editor to print error and informative messages.

Usually only the bottom window is affected by the mail editor. However, when doing things such as replying to a message or forwarding a message with comments, more space is needed so the subject message can be displayed. In such cases, the whole screen is used. The top half is where the subject message is displayed. The bottom half is where the user composes his reply or comments. This enables the user to page back and forth through the subject message and compose his reply or comments at

the same time. The bottom three lines of the screen (as always)
are reserved for use by the editor as described above.

How to Invoke Mail Editor Requests

There are two keys which the user should know about when
learning to use the mail editor.   These keys are the control key
(referred to by "^") and the escape key ("ESC").   The usage of
these keys is very important because all editor requests involve
these keys.   The escape key is used as any other key would be
used.   For example, to make a request such as ESC #, type the
escape key and then type the # key. It is just the same as
typing a sequence of characters such as "abcd".   They are typed
one after the other. On the other hand, use of the control key
is analogous to use of the shift key. To invoke the request ^Y,
press the control key and, while holding it down, press the "Y"
key. It is the same as typing a sequence of characters such as
"ABCD". They are typed one after the other while holding down
the shift key.

Descriptions of Editor Requests

What follows are detailed descriptions of all the editor
requests.

#
    erases one character to left of cursor.

ESC #
    erases one word to left of cursor and any intervening
    whitespace and punctuation.

@

    erases to beginning of line from the current cursor
    postion.

^Y

    yanks back erased text (does not yank back text erased
    by #).

UP ARROW
    moves the cursor up one line.

DOWN ARROW
    moves the cursor down one line.

LEFT ARROW
    moves the cursor left one character.

RIGHT ARROW
        moves cursor right one character.

^L^F

        pages forward through lower editor window.

^L^B

        pages backwards through lower editor window.

^U^F

        pages forward through upper editor window.

^U^B

        pages backwards through upper editor window.

^L

        inserts into text the literal value of the next
        character typed.   In other words causes the next
        character typed to be inserted into text as itself.
        This is very useful for getting # and @ into text.

DEL key
        is the same as #.

^Q

        is used to quit out of the editor. This is used to get
        back to the current menu when done editing things such
        as mailing lists or abbreviation tables.   ^Q can also
        be used in place of the input terminator when sending
        mail.