Electronic Mail Survival Guide

Don Endicott
Brenda Bueche

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ADMINISTRATIVE INFORMATION

This Guide was sponsored by Office Automation (Code 9102), of the Computer Sciences and Simulation Division.

Although this publication is directed toward NOSC email users, the authors have kept a large audience in mind by focusing on general principles of email communications and etiquette.

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I. P. Lemaire, Head
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ACKNOWLEDGMENTS

The authors are indebted to Tenny Keil, manager of the NOSC Office Automation Project, and Norma Heckman, manager of the General Purpose Computer Center Training Center, which offers the NOSC electronic mail (email) classes, for their contributions of email literature, classroom notes, and assistance in developing and reviewing this document. We also acknowledge the work of Ron Broersma, Bob Hall, Brian Koerble, and Gary Gilbreath in developing and maintaining one of the best email networks in use anywhere.
**REPORT DOCUMENTATION PAGE**

**a. REPORT SECURITY CLASSIFICATION**
UNCLASSIFIED

**b. SECURITY CLASSIFICATION AUTHORITY**
NOSC

**c. DECLASSIFICATION/DOWNGRADE SCHEDULE**
Approved for public release; distribution is unlimited

**d. PERFORMING ORGANIZATION REPORT NUMBER(S)**
NOSC TD-1370

**e. NAME OF PERFORMING ORGANIZATION**
Naval Ocean Systems Center

**f. OFFICE SYMBOL (if applicable)**
NOSC

**g. NAME OF MONITORING ORGANIZATION**
Naval Ocean Systems Center

**h. ADDRESS (City, State and ZIP Code)**
San Diego, CA 92152-5000

**i. NAME OF SPONSORING ORGANIZATION**
Naval Ocean Systems Center

**j. ADDRESS (City, State and ZIP Code)**
San Diego, CA 92152-5000

**k. TITLE (Include Security Classification)**
ELECTRONIC MAIL SURVIVAL GUIDE

**l. PERSONAL AUTHOR(S)**
Don Eadon, Brenda Bueche

**m. TYPE OF REPORT**
Final

**n. TIME COVERED**
From Mar 1988 to Aug 1988

**o. DATE OF REPORT (Year-Month-Day)**
January 1989

**p. PAGE COUNT**
46

**q. SUPPLEMENTARY NOTATION**

**r. COSATI CODES**

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<th>SUB-GROUP</th>
<th>SUBJECT TERMS</th>
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<td>electronic mail, email, mailing groups, electronic mail etiquette, email etiquette</td>
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**s. ABSTRACT**
General concepts of electronic mail communications are discussed, including many advantages and some words of caution about using email compared to traditional forms of communications. The electronic mail programs available at NOSC are described. Some handy email tips and etiquette guidelines are also given so that people can improve their on-the-job effectiveness through the use of email.

**t. DISTRIBUTION/AVAILABILITY OF ABSTRACT**
UNCLASSIFIED

**u. NAME OF RESPONSIBLE PERSON**
B. Bueche

**v. TELEPHONE (Include Area Code)**
(619) 553-2265

**w. OFFICE SYMBOL**
Code 9122

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**DD FORM 1473, 84 JAN**
PREFACE

Why Did We Write This Guide?

Electronic mail, usually referred to as "email," has come into widespread use at the Naval Ocean Systems Center as well as in many government, academic, and business institutions throughout the world. It is often the preferred method of communicating with fellow employees, project sponsors, and counterparts at other facilities because of its effectiveness in facilitating the exchange of messages without the delays and hassles of "telephone tag," and because of its low cost, among other advantages. This survival guide has been written to help you become aware of these advantages and learn a few basic email skills so that you can improve your on-the-job effectiveness through its use.

How to Use This Guide

This guide was intentionally kept brief so that we could focus on the most important email techniques and so that the information it contains would not be buried in yet another exhaustive computer software manual. It is hoped that you will want to keep a copy near your terminal or PC and refer to it from time to time as your interest and proficiency develop.
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INTRODUCTION

Organization

The organization of this Guide will be described briefly.

First, there is an explanation of how to become an email user at the Naval Ocean Systems Center (NOSC) and a list of the phone numbers and locations of the three NOSC Computer Resource Centers (CRCs).

The “What is Email?” section is an introductory section intended as an overview for novice users. The email programs available at NOSC are also described here.

The next section is very important — it describes email etiquette, a code of conduct which may be new to many of you. Since most of us don't have a lot of experience with the social skills associated with email, please spend some time becoming familiar with these rules of the road. They can make a difference in effective communications and reduce the likelihood of misunderstandings or negative reactions to your messages.

A selection of handy tips can be found in the next section, “Beginner's Guide.” These are organized to address some key “issues,” such as how to answer your mail, how to distribute broadcast messages (messages sent to many people at one time), and how to cope with large volumes of incoming mail. For each issue, at least one tip is offered.

The last section of the body of the Guide presents a few advanced skills you may want to consider as you become more proficient with email and want to take greater advantage of its flexibility and powerful capabilities. A number of these features are described and we indicate where you can go for more detailed instructions and personal assistance.
Appendices A and B are brief cookbooks that demonstrate how an authorized user may enter one of the electronic mail programs and send and receive messages. NOSC's Unix-based email (msg) and PC-based email (umail) are discussed. You will probably want to refer to this section as a reference until you become familiar with the commands associated with the mailer you intend to use.

Appendix C contains a listing of all General Purpose Computer Center (GPCC) training courses pertaining to electronic mail and indicates who to contact for more information.

On the outside of the back cover, we have summarized from our own lessons learned a set of principles we refer to as “The Ten Commandments for Email Users.” Each commandment is discussed at length in the body of the survival guide. We hope you find these a helpful reminder of how to use email effectively.

Feedback

The General Purpose Computer Center is always open to suggestions for how to improve its products and services. If you would like to share any tips you have discovered through your own email experiences, please contact either of the authors and we will attempt to incorporate tips of general interest in future releases of this document. We can be reached via email to endicott or bueche. You may also call the Computer Resource Center and give them feedback. See the following section for CRC phone numbers.
HOW TO BECOME AN EMAIL USER AT NOSC

In order to become an electronic mail user, you must have a computer account and a *userid* and password. The computer you use to read your electronic mail is called your "mailhome" computer. For help in deciding which electronic mail program to use, read "What is Available at NOSC" in the next section, "What is Email?", or contact the CRC. To get an account on one of the GPCC minicomputers, contact the CRC.

The GPCC has a staff of consultants working in the CRCs Bayside, Topside, and Hawaii. The consultants will answer any questions pertaining to the GPCC, including questions on policies, computer usage, and technical details on the Unix, VMS, and MS-DOS operating systems. You are encouraged to contact the CRC if you need further assistance in using any electronic mail program. The CRC consultants may be reached at the following locations:

Bayside, Bldg. 204, 553-2247/553-2250   Electronic mail address: *crc*
Topside, Bldg. 33, Rm. 2200, 553-2268   Electronic mail address: *crc*
Hawaii, Bldg. 1181, 254-2171   Electronic mail address: *coughran*

Classes related to the use of computers at NOSC are held in the Computer Classroom, Bayside, Bldg. 173. See Appendix C for further information.
WHAT IS EMAIL?

Overview

Email is an electronic form of communication between users of computer systems. A user types a message from the PC or computer terminal keyboard into the email system, which in turn routes it to the addressees. The recipients receive their mail in their own personal "mailboxes," which are computer files on one of the host computers. Email messages can also be forwarded, replied to, or broadcast to many users at once. Specific procedures for the different email programs available at NOSC will be described later in this guide. In this section, it is our goal to convey some of the unique attributes of email which make it a powerful resource, one which should be used with care to ensure its effective use.

To send or receive an email message requires that you interact with an email program on a computer which is shared with the intended recipients or is networked to other compatible computers (such as Cod, Manta, and Marlin). Email at NOSC is also possible from personal computers connected to the Center-wide local area network known as the Generalized Communications Backbone or GCB.

The original message may be typed directly from the keyboard, as you would type using a typewriter. Typically, email messages may be typed with a text-editing program that allows you to make changes to a document easily, or they may be typed without a text editor. Email messages may also incorporate other previously created files containing text, such as a progress report or a meeting agenda. Messages are read by calling for them to be displayed on the PC or terminal screen one at a time. After a message is read, it can be retained in the mailbox for later action or reference, answered, forwarded to others, or stored as a computer file. It may also be printed for filing or distribution.

An electronic message, as shown in Fig. 1, is characterized by a line showing who sent the message, who the addressees are, the list of persons receiving copies, the subject, a date, and the text of the message. Messages are stored in your mailbox in the order they are received at your host computer, which is referred to as your "mailhome."
Figure 1. Sample email message.

Attributes

Email differs in many important ways from our more conventional methods of communicating, such as face-to-face discussions, telephone conversations, or formal correspondence. Borrowing from an excellent pamphlet on email ethics and etiquette prepared by the Rand Corporation (Ref. 1), we can list a number of attributes of email. These include:

- Speed (to generate a message, to send one, to respond to one)
- Permanence (of the resulting message, with respect to both the sender and the recipient)
- Cost of distribution (to an individual or group)
- Organization’s desire and ability to filter, channel, record, and control messages for the perceived good of the organization
- Experience (needed by an individual, with the medium, in order to know how to use it more effectively)
- Accessibility
- Security
- Accountability
We recommend the Rand report for a more detailed exploration of each of these points and will limit this discussion to an overview.

**Speed**

Email speed is nearly as fast as a telephone call if the party being called is there and available. It is estimated that the average success rate of an initial phone call is about 30 percent, resulting in the phenomenon of "telephone tag." Face-to-face discussions are often the fastest and best method unless there is travel involved, such as to another office, building, or city. Interoffice memos and regular (and guard) mail may take from one to several days. If the email parties have conditioned themselves to check for messages frequently, email communication is usually achieved within a matter of hours.

**Permanence**

Email is quite different from any of the alternative communication approaches just described in that it appears to be temporary but may actually be quite permanent and retained by many individuals or organizations. Messages can be saved to files, saved on tapes and archived, printed and filed, altered and then printed (thereby looking authentic while actually having been modified), and forwarded and reforwarded to third parties unknown to the sender. Several ground rules have been proposed to remind email users that they cannot really control where their messages may go and whether or not the messages will be retained. These rules include avoiding saying anything that would embarrass you or your organization or that you would not want to appear as a front page headline in a national newspaper.

**Cost**

It's harder to determine the cost of email than, say, the cost of a telephone call or a letter. The computer resource costs, telecommunications costs, software maintenance costs, and other costs associated with using email are difficult to attribute to a per message cost. Generally, email systems are associated with and subsidized by other computer and networking applications. At NOSC, email is provided at no direct charge to users.
Organization’s Ability to Control the Medium

Email may be distributed and forwarded and answered so casually from your keyboard that conventional organizational protocols and chain-of-command channels are often circumvented. In this sense, it has been described as a “democratic” medium in which all participants are equals. It is just as easy to send a message to our technical director as it is to one of your associates. This freedom and convenience of expression has contributed significantly to email’s popularity. Unfortunately, this freedom, when used indiscriminately, can result in supervisors and secretaries being “left out of the loop” and may also produce a flood of unscreened and possibly inappropriate messages cluttering up our mailboxes as well as the mailboxes of our project leaders, line supervisors, and senior managers.
The NOSC Office Automation (OA) Project, as part of its Center-wide mail efforts, has developed naming conventions and recommended methods for distributing mail to organizational codes and groups. To date, however, the procedures and protocols for organizational routing, including who should perform filtering, gatekeeping, or other forms of restraint, are presently left to individuals and their organizations.

**Experience**

Email is a new form of communication for which our social experiences have not fully prepared us. In the Rand report (Ref. 1), it is pointed out that people have had 50,000 years to develop speech habits and gestures, 5,000 years to refine writing techniques, and 100 years to learn how to use the telephone effectively. It is also noted that by the time we are adults, we have spent much of our lives learning the appropriate rules of behavior as well as the effective way to communicate in each of these media. Although email has the characteristics of a combination of these communication methods, it is not really equivalent to any of them. Because of its inherent informality, its easy and rapid distribution capability, and its ability to transmit potentially permanent messages, it is such a different overall form of communication that the “rules” and etiquette for its effective use are still evolving. Problems tend to arise when messages and responses are emotional or misunderstood or when we are frustrated with a barrage of insignificant or irrelevant messages.

**Accessibility**

Email can be sent at a time convenient to the sender and read at a time convenient to the recipient without the frustrations of “telephone tag” or time zones differences.

**Security Considerations**

As mentioned earlier, it is not possible for you, as the originator of an email message, to completely control or know the routing of your messages. It is also important to be aware that the GCB and the Defense
Data Network (DDN) to which we are connected are limited to unclassified message traffic. For these reasons, it is imperative that you do not use email to send any classified information, and it is advisable to refrain from sending sensitive or potentially embarrassing messages.

Accountability

When you send an email message, a record of your correspondence is kept on the computer until the recipient deletes it. If you want to be able to account for a message you send, you should also send a copy of the message to yourself so you will have proof of the correspondence for later audit purposes. Additionally, you will have a record of who received the information. This is helpful whether you are the sender or the recipient of the message. Typically, there are no such accountability features in face-to-face and phone communications.

This accountability attribute can also be a disadvantage. You will want to be very careful of what you say in your message since recipients may forward the message to anyone or save a hard copy of the message for years.
What Is Available at NOSC?

There are three principal email systems in use at NOSC. You should choose the one that best suits your needs. The first is the PC-based product, micromail (umail), for IBM PC's and other MS-DOS compatibles. Micromail was developed at NOSC under sponsorship of the Office Automation Project. PC users who would prefer to confine all their computing to their PC should consider using micromail. The second is the Unix-based msg system that resides on the GPCC VAX network. If you do most of your computing work on a GPCC Unix computer, you may wish to use msg. It is available at no cost to every NOSC employee, with the single requirement that you become an authorized GPCC user. The third is mail, which runs under Digital Equipment Corporation’s VMS operating system on a number of department and project resources, such as the Code 80 service center. A gateway between the three environments is available as long as the VMS resources are connected to the GCB and are running the Wollongong program or similar communication software. If you use a VMS computer, such as the GPCC computer Wahoo, you may be using the VMS mail program, mail.

Appendices A and B will be helpful if you have never used electronic mail and need to learn the basics, such as reading and sending messages. Refer to Appendix A, PC-User's Cookbook for Email, for detailed information on how to use the micromail program. Refer to Appendix B, Minicomputer-User's Cookbook for Email, for detailed information on the Unix mail program, msg. Although the VMS electronic mail program, mail, is available, the GPCC does not recommend it and does not provide free VMS electronic mail services. (Both msg and umail are free.) If you use VMS mail, contact your VMS system administrator for assistance.

At NOSC, the GPCC Training Center teaches courses in the mechanics of email, and some general guidelines for using it effectively are described in Appendix C. However, what is true for individual users, such as yourself, is true for the organization as a whole: we are still learning the best skills to adopt as well as the bad practices to avoid. The “Email Etiquette” section, which follows this section, is intended to suggest some rules and practices you may find helpful in getting your messages across with a minimum of bother and misunderstandings.
EMAIL ETIQUETTE

Our society has a set of rules and guidelines for each of the various ways we communicate with others. We use particular formalities when we send out memos and letters, we answer the phone and ask to speak to others on the phone in a certain way, and we have other unspoken rules during business meetings or when speaking to an individual face-to-face. Communication by computer is new to almost everybody, and there are certain aspects that can make it a frustrating experience until you get used to them. Messages sent by computer can often be misunderstood, especially because the recipient of a message does not have body language or voice inflection feedback to help interpret the intent of the sender. Like every other form of communication, a particular etiquette should be followed when using electronic mail. Because email is such a new form of communication, the rules of email etiquette are still evolving. References 1 and 2 are excellent references on the subject of email etiquette. Some guidelines or rules for using email are listed below, to help make email communication as effective and enjoyable as possible.

COMPUTER SYMBOLS

*Smiley Face Variations*

: smiley face  
:-) smiley face with nose  
;-) winking smiley face  
:( unhappy face  
:-) grinning face  
:-O surprised face  
:-{ > hairy face (mustache and beard)  
8-) smiley face with glasses  
:^) smiley face with funny nose  
P-) smiley face with a patch over one eye  
:-# smiley face with braces
1. When in doubt, it is better to be too formal than too informal. There is a lack of clear social status and role expectations in email, and people often are very informal, regardless of who they are dealing with. You should generally treat others with the same level of formality that is appropriate in other written forms of communication.

2. Read and respond to all messages as quickly as possible.

3. Keep your mailbox organized by disposing of out-of-date messages.

4. When responding to an article or message, make a brief reference to the original article or include the original message with your reply. This will help the receiver remember his or her original message.

5. Follow up or precede complicated computer messages with a face-to-face meeting or phone call to clarify obscure points.

6. Never forget that the person on the other side is human. If you are upset at something or someone, wait until you've had the chance to calm down before responding so you do not later regret your emotional response. People tend to get much more aggressive in expressing their anger over email than in person, a concept called “flaming.”

7. Be careful with humor or sarcasm. Humor is not communicated very well in writing, in the absence of voice inflections and body language, and it is easy to end up offending someone. If you must use humor, it’s usually a good idea to remind people you are being funny, by using the popular computer symbol for a smiley face: :). Other computer symbols (such as those on the preceding page) can be used to convey different sentiments or to emphasize a particular attitude. Several of these symbols are in widespread use, but others are rather obscure. Have fun with them, but make sure that they neither confuse the reader nor detract from the meaning of your message.

8. If you receive a message intended for another person, stop reading it as soon as you realize it is not meant for you. Then either send it back to the originator explaining that he or she had the wrong email address, or send it on to the correct recipient, if you know who that is.
9. When visiting coworkers, don't read mail messages on their computer screens; you wouldn't dream of reading paper mail stacked on their desks, so use the same courtesy regarding email.

10. Create single-subject messages whenever possible.

11. Use descriptive subject-line titles so that the recipient can determine the topic at a glance.

12. Write in complete sentences. You may find it quicker to write phrases rather than sentences, but your meaning could be mangled, and it may take your readers much longer to read and understand your message.

13. Don't use all upper- or lower-case letters, since this results in a text more difficult to read than one with the conventional mixture of upper- and lower-case letters.

14. Assume that any message you send is permanent. Remember, too, that messages can easily be forwarded, so be careful what you say.
BEGINNER'S GUIDE

This section describes some tips you may find helpful in your daily use of email. They have been selected to illustrate some of the issues and to correct some of the problems described in the etiquette section. First, an issue is identified and then a list of tips is suggested.

Addressing Mail

Tips

1. Distribute "information only" copies discretely and express clearly who should respond (usually those on the "To:" line) and who are simply being kept informed (usually those on the "Cc:" line).

2. Keep the list of recipients and carbon copy "Cc:" addressees to a minimum.

3. Focus on and identify the person or persons who should act on or respond to your message.

Composing the Message

Tips

1. Determine your objectives before you begin.

2. Perhaps jot down on paper your main points to ensure that they are all covered; you may wish instead to type your main points at the top of the message you are composing and then delete them.

3. Use an editor to facilitate changes or corrections.

4. Review the final version for content and tone before sending. Once it is sent, you can't retract it.
Responding to Mail

Tips

1. Limit your response to the individuals who really need an answer. Avoid initiating a message “snowball” by automatically sending your response to too many “Cc:” recipients.

2. Before answering, make sure you understand the contents and intent of the message.

3. Slow down and carefully consider the appropriate response, especially if you feel strong emotions about the contents, the writer, or the manner of its presentation. Reread your response before sending it, since it is much easier to tone down a draft than to retract statements which you have already sent. Avoid “flaming,” a term which means an inappropriate expression of emotions sent via email when you are angry.

Coping with Large Volumes of Email

Tips

1. Check your mailbox frequently and quickly dispose of messages which do not require action or further reference. Keep your “in basket” small.

2. Avoid widespread broadcasting or extensive distribution of responses or forwarded messages unless special circumstances warrant such actions. Be considerate and recognize that your broadcasts may be “junk mail” to someone else. Encourage your associates to reciprocate in kind.

3. If you don’t want to receive certain messages, tell the originator to stop sending them!
Knowing When to Print Messages

Tips

1. Refrain from printing every message, since many can be dealt with from your PC without further action required. Save a redwood and keep your file cabinets from overflowing.

2. Consider printing longer messages (more than one screenful), especially those which require your review and markup, since most of us are initially more skilled and effective using pen and paper for such activities.

3. Consider printing significant messages which constitute policy statements, document an agreement, or otherwise establish an understanding which may be of long-term value. Of course, formal written procedures, such as memoranda and official letters, should normally be used for this purpose.

Protecting Your Mail

Tips

1. Don’t share your password with anyone, since it is not otherwise possible to prevent others from reading or sending mail in your name. It is also a security violation.

2. Don’t leave your PC or terminal unattended, even for a short period, if you are connected to any mail system. This is also a security violation.

3. If you are using a PC-based mail program, make regular backups of your hard disk.
Looking Up Addresses

Tips

1. Before you can send email to another user, you need to know the recipient’s mail address. The address for NOSC users is simply their userids (the names they use to log on with). Both the hard-copy and on-line NOSC phonebooks list the userids of people with computer accounts.

2. There are several ways to find a person’s userid, including using the phonebook (pb) command. Type pb lastname at the Unix, VMS, or MS-DOS prompt. If you type only pb, you will get prompted for more information; there are options other than the last name. If you use the pb command on your PC, you must obtain a copy of the PC pb program from the CRC.

3. Many of you will never need to send email to users at other activities, but for those who do, help is available for finding their addresses if they are either on or gatewayed to the DDN. There are ways to find the userids, including using the whois command or the NIC/Query program. A document called “Introduction to the Defense Data Network” is available. You may also wish to take the Introduction to the DDN course offered by the GPCC. For more information or guidance, contact the CRC.
ADVANCED GUIDE

Saving Incoming Messages

There will be times when you will want to save a message that you have received — so that you can edit the contents and then do something with it, or put the message into a different directory or mailbox for better organization, or file it in your archives by subject or project for later reference. Whatever the reason, you may save a message into a normal system file by using msg or umail. The commands vary depending upon which mail system you are using. To save a message to a file from within msg, use the command m for move, or p, for put. (The command put keeps a copy in your mailbox.) To save a message to a file from within micromail, use the save command, v. In each case, you will be prompted to provide a filename.

Saving Outgoing Messages

You may sometimes want to save a copy of the messages that you send to others, either to refresh your memory or to have available for audit purposes. There is a file function that keeps a chronological record of all mail you originate. You can selectively retain the messages to avoid clutter. Periodically, you may wish to archive messages onto floppy disks. The name of the Unix chronological file is msgchron. There are several options to the chronological file, and you can specify what you want by making changes to the .msgrc file. You should have the following line in your .msgrc file: “CRN:n.”

If you wish to enable the chronological file so that ALL outgoing messages are saved (instead of the default of only the most recent message), change the n to y:

CRN:y
The `umail` chronological file is `chron` (unless you change the name). You can specify what you want by adding the following line in your `umailrc` file:

```
record: chron
```

If the line is already there, make sure that the pound sign (`#`) has been removed. The `chron` file will be saved in your mail directory and can be examined like any other mailbox. As each message is sent, you will be asked whether or not to save a copy of it.

### Using a Text Editor

If you use electronic mail extensively or send lengthy messages, you will probably want to use a text editor to compose your messages. Although you may compose a message in `msg` or VMS `mail` without an editor, you cannot go back and retype a line other than the current one. Thus, if you make a mistake, you must abandon the message and start over from the beginning. Unless you are a perfect typist, it may take many tries until you type the message correctly. This can be annoying and time-consuming, so most people prefer to use editors.

Text editors generally allow you easily to scroll up and down a long document; delete and insert text; move up, down, right, and left within a document; and make changes to the document. Two popular Unix editors are `vi` and `red`. VMS users may wish to use the EDT editor. Unlike `msg` and VMS `mail` users, `umail` users are required to use a text editor. Essentially any PC editor can be used. If you do not know a PC editor such as WordStar or WordPerfect, you may wish to choose the Easy Editor when you are installing micromail. The Easy Editor is free from the CRC and is very simple to use but has a limited number of cursor positioning, insertion, deletion, and other editing commands. The editor you choose will be called up each time you wish to compose a message.
Importing Files

You may often find that you want to send someone a message that includes the text of a file that you already have. Instead of retyping the text of the file when you are composing the message, you can import the file by using the file-import capabilities of the text editor. If you are using vi, for example, you would use the command :r to read in the desired file into the current message. The WordStar command is ^KR. The ^ stands for CTRL and means you should hold down the CTRL key while typing the letters. The file import command for WordPerfect is Retrieve. To use this, you will need to hold down the Shift key and then press F10. You will be prompted for the name of the file you would like to import. You will need to familiarize yourself with the file-import command for the text editor that you use. The CRC can answer your questions and demonstrate file-importing procedures for most of the popular editors.

Using Mailing Groups

If you frequently send mail to the same group of people (perhaps members of your code or a certain project), you can establish a personal mailing group containing the userids of all the people you wish to be included. Then, instead of having to type the userid of each person, you can send mail to all members of the mailing group by simply typing the name of the mailing group on the “To:” or “Cc:” line. Remember when creating mailing groups to add only those persons who should be informed of the contents of the message; avoid contributing to an email “blizzard.”

In addition to being able to create personal mailing groups, a variety of mailing lists already exist that can be accessed by all GPCC users. These mailing lists include user groups, organizational groups such as “divheads” or “90staff,” and NOSC service group addressees such as “gpcctrain.” In order to see what mailing lists exist, type mailbox -v on any GPCC Unix computer at the prompt.

One problem to be aware of when using personal mailing groups (instead of established system mailing lists) is that addressees who answer a message and include the mailing group on the “Cc:” line may not have access to the mailing group file so the userids of the people in the group
won't be known by the computer and the mail won't be sent. If you receive mail because you are in a particular mailing group you have not created, you can tell who else is in the group by looking down at the very bottom of the message (if the original message was composed with `msg`). So if you want to respond to all members of the group, you can type in all the userids separately, create your own mailing group of those names, or use your editor to cut the names and paste them on the "Cc:" line. Detailed instructions for creating mailing groups with the Unix or PC mail programs are given below.
Unix (msg)

1. Create a file with an editor such as vi or red. Give it a meaningful name, such as tuesmtg.

2. Put all the userids of the people in the mailing group in this file. Each userid can be listed on a separate line. No punctuation marks are necessary.

3. When you wish to send mail to the mailing group tuesmtg, address it to tuesmtg. Make sure to include the colon after the filename of the mailing group. The colon is not part of the filename. Rather, it is an indicator that more than one recipient is being addressed under one filename.

PC (umail)

1. Change to the directory that contains the umailrc file (probably bin). You may do this by typing cd bin at the MS-DOS prompt.

2. Edit the umailrc file with the Easy Editor or your favorite PC editor. Add the following line in the file (it doesn’t matter where, although you may want to put it below the “#alias:” line):

   alias: aliasname userid1,userid2,...

The aliasname is whatever meaningful name you want to give to this particular mailing group. If you have more userids than will fit on one line, you can continue the userids on the next line. The second and all subsequent lines must begin with a space or tab, as shown below:

   alias: tuesmtg userid1,userid2,userid3,
          userid4,userid5,...

3. To send mail to the mailing group tuesmtg, you simply need to address it to tuesmtg.

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REFERENCES


Appendix A

PC-USER'S COOKBOOK FOR EMAIL

USING MICROMAIL (PC)

General

When a user runs micromail (umail), a connection is made over the General Communications Backbone (GCB) between the PC and a Unix mail server. A program running on the minicomputer checks for new mail messages, and if it detects any, transmits them to the waiting umail program running on the PC. Then umail deposits the mail messages into a directory on the PC's hard disk. Similarly, umail transmits messages composed on the PC to the minicomputer (Fig. A-1).

Getting In and Out of umail

1. You can enter the micromail program by typing umail at the MS-DOS "C: > " prompt and pressing ENTER.
2. Micromail provides a commands menu, which makes up the top two lines of the screen, and a headers-list menu (Fig. A-2). The commands menu lists all the micromail commands. Each command can be executed by typing in lower-case the upper-case letter that appears within the command name. For example, to execute the `Send` command, type s. To execute the `eXit` command, type x. There is no need to press the ENTER key. The best way to understand the commands is to try them.

![Micromail screenshot](image)

**Figure A-2.** Micromail headers screen.

3. The headers-list menu contains headers for all messages in your mailbox. The first time you enter `umail`, you will have no messages in your mailbox. If you have any new messages, you can download them onto the PC with the `Get (g)` command.

A-2
4. Like msg, umail has a "help" command. Type F1 for help. Each command is briefly described. Some of the keypad keys have special functions in umail. The up and down arrows can be used to move the highlight from one message to another. Some of these keys are described in "help." Micromail commands that are used to affect a particular message can only be performed on the currently highlighted message.

5. You may also execute MS-DOS commands (like dir or type) while you are still in umail by typing !command and then ENTER. For example, type !dir and then press ENTER to get a directory listing.

6. To read the message currently highlighted on the headers-list menu, simply press t for Type. If you then want to read the next message without returning to the headers page, you can press n for Next. Similarly, you can type b for Back to read the previous message. If the message is too long to fit onto one screen, use the PgDn key on the keypad to read the next screenful. Likewise, you can press PgUp to read the previous screen of text.

7. To send a message using umail, type s. You will be prompted for the addressees' userids ("To:"), the subject ("Subject:"), and the userids for carbon copies ("Cc:"). The editor you chose when configuring micromail is invoked. (Easy Editor is the default.) Compose your message in the editor following the "Text:" header line. Do NOT edit the "Text:" header line. When you finish editing the message, a prompt is displayed that asks whether you would like to abort, edit, send the message now, or send later. Make your selection as appropriate.

8. You will periodically want to do some housekeeping and delete unwanted messages. To delete the currently highlighted message, simply press d.

9. To leave umail, use the Quit (q) command. Type q and this will return you to the MS-DOS "C: >" prompt.

An Introduction to Micro-Mail course is offered by the GPCC. See Appendix C for a description of the course.
Appendix B

MINICOMPUTER USER'S COOKBOOK FOR EMAIL

USING msg (UNIX)

Logging In (Unix)

Before you may use the electronic mail program msg, you must have a computer account, and a userid and password on a GPCC Unix computer. You may send mail from any GPCC Unix computer you have an account on, but you may only read mail from your “mailhome” computer.

1. Turn on your terminal or PC. PC users must make sure that the “terminal” program is installed on the PC before proceeding. You will need to have the terminal program configured for either an h19 or a vt100. The terminal program is available from the CRC, and they will properly configure it for you. If the terminal program is installed, type terminal at the DOS prompt (e.g., C> terminal) and press ENTER.

2. Press the ENTER key on your keyboard until you see the pound sign (#), which is the T-box prompt.

3. Type the letters lo and press the Space Bar. The rest of the word “location” will be displayed (location), plus a required space. Select the correct location number of the computer you want to use (generally, your “mailhome” computer) from the small GCB card on your terminal or PC. Figure B-1 is a sample GCB card. For more information, call the CRC.

4. Another pound sign will appear under the first pound sign. Type ca and press the Space Bar. The rest of the word “call” will be displayed (call), plus a required space. Again, refer to the GCB card and choose the correct call number associated with your “mailhome” computer. If you wish to call the computer Marlin, the location number is 3 and the call number is e11 (as shown in Fig. B-1), and you would type the following:

```
#LOCATION 3
#cALL e11
```
TO SIGN ON:  
(JULY 1988)

# lo xx (See LOCATION NO. for desired computer)
# call xxx (See CALL NAME for desired computer)

<table>
<thead>
<tr>
<th>HOST COMPUTER</th>
<th>OPERATING SYSTEM</th>
<th>LOCATION NO.</th>
<th>CALL NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>COD</td>
<td>Unix</td>
<td>9</td>
<td>c11</td>
</tr>
<tr>
<td>MANTA</td>
<td>Unix</td>
<td>11</td>
<td>e50</td>
</tr>
<tr>
<td>MARLIN</td>
<td>Unix</td>
<td>3</td>
<td>e11</td>
</tr>
<tr>
<td>STINGRAY</td>
<td>Unix</td>
<td>1</td>
<td>b11</td>
</tr>
<tr>
<td>WAHOO</td>
<td>VMS</td>
<td>11</td>
<td>a50</td>
</tr>
</tbody>
</table>

**TERMINAL TYPE**

**T-BOX UNIT NUMBER**

ABORTING: To terminate the job or program, press the DELETE or RUBOUT key for Unix systems, CTRL C or CTRL Y for VMS. If this fails, TERMINATE the connection to the host by pressing the BREAK key and typing “done” followed by two carriage returns. Then sign on to see if the old job is active. If so, call operations to have it aborted.

<table>
<thead>
<tr>
<th>Computer Resource Center</th>
<th>Bayside</th>
<th>Topside</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayside</td>
<td>32247</td>
<td>32268</td>
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<tr>
<td>Center</td>
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</tr>
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<td>GCB Network Control</td>
<td>32270</td>
<td></td>
<td>gcbnet</td>
</tr>
<tr>
<td>Operations</td>
<td>32252</td>
<td></td>
<td>operator</td>
</tr>
</tbody>
</table>

**Figure B-1. Sample GCB card.**

5. A message indicating that your call to the host computer has been completed will be displayed on the screen. (If you get a message such as “Unable to open session” instead of “Call completed,” repeat the above steps. If this does not work, either the computer ports are busy or the computer is down. Please call the CRC at 553-5565, and we will try to correct the problem as soon as possible.)
6. Enter your userid in lower-case letters on the “login:” line and press the ENTER key.

7. Type in your password at the “Password:” prompt and press ENTER. If you get an error message, you may have typed in your userid or password incorrectly. Try again.

8. If you have more than one account (representing a job order number) assigned to you for tracking computer usage charges, you will be prompted to type which account you wish to charge your computer session to. If you have only one account, you will not be prompted and will not need to type anything. As an example, if you have more than one account and you wish to change your computer session to account “aab,” you would type the following:

   Account: aab

9. Various information, including the last time you logged in, will be displayed on the screen. If email messages have arrived since the last time you logged in, the message “You have new mail” will be displayed. Next you will see “TERM = (vt100).” If your PC emulates a vt100, simply press the ENTER key. If it emulates another terminal type (your GCB card should have the correct terminal type written on it), then type it in and press ENTER. The most common terminal type is a vt100. If you have a PC that emulates an h19, you would type the following:

   TERM = (vt100) h19

10. You will then see the time, the number of users on the computer, and other information. On the next line, the percent sign (%) is displayed. The percent sign tells you that you are in the Unix operating system and are ready to enter the mail program msg.
Getting In and Out of msg

1. After logging in, you can enter the mail program by typing `msg` after the Unix `%` prompt and pressing the ENTER key:

   `% msg`

2. When you log into mail at the intermediate level (the default), you will see the `msg “ENTER COMMAND:”` prompt which tells you that you have successfully entered the `msg` program. All commands that you type now must be `msg` commands to be recognized.

3. There are three levels of use in the `msg` program: tutorial, intermediate, and experienced. Tutorial and intermediate levels will provide you with a menu of commands from which to choose. At the experienced level, commands are not shown on the screen. You may access the options by entering a question mark (?) or an i at the `msg` prompt. New users are installed at the intermediate level of `msg`.

4. For information on any of the options in the menu, enter a question mark, followed by the command you want to know about. For example:

   ENTER COMMAND: ? header

   The best way to understand the function of a command is to try it.

5. In order to read your mail, press the ENTER key to see the next message. If you know the number of the message you would like to read, type in that number followed by ENTER. To see a headers listing of all your messages, you should type `h a` at the “ENTER COMMAND:” prompt. Figure B-2 is a sample of message headers in `msg`. Typing `h a` will enable you to see your messages and find the message number of the message you wish to read or perform some other function on. If your message is too long to fit on one screen, you will be prompted to press ENTER to read the next screenful of text.

   B-4
6. To send a message, type s for send at the “ENTER COMMAND:” prompt and press ENTER. You are prompted by computer messages to give the userid(s) of the person(s) you would like to send the message to. You will be asked to choose an editor. Type in the name of the editor you wish to use, or press ENTER if you don’t want to use one. (The word none appears in parenthesis, which means that using no editor is the automatic choice, or default. There are ways to change the default if you plan to
always use a particular editor.) Exit the editor after you are finished composing your message. (Press the CTRL key and then d after you are finished, if you are using the none editor.) Then press ENTER when you are asked whether to send, abort, check spelling, or edit your message. You will receive an announcement that your message has been sent. Type in the userids of any additional recipients, or press ENTER if there are none.

7. You will periodically need to do some housekeeping and delete unwanted messages. You can either delete the current message or specify the number of another message you want deleted. To delete the current message, type d and then ENTER at the prompt. To delete another message, you must specify the message number also. For example, to delete message #4, type d 4 and then ENTER.

8. To leave the email program, use the quit command q at the “ENTER COMMAND:” prompt. This will return you to the Unix % prompt.

If you are interested in receiving some structured training in the use of msg, you might consider attending two courses offered by the GPCC: Introduction to NOSC Electronic Mail and More on NOSC Electronic Mail. See Appendix C for a description of the courses.

Logging Out (Unix)

1. When you are finished using the computer, you must log out before you turn off your terminal or PC. To log out, type logout at the Unix % prompt and press the ENTER key. The system will display something like this:

   % logout
   SESSION 1 CLOSED TO OE19,1
   #

2. You may also use a shortcut by typing a period and pressing the ENTER key as follows:

   %.
   SESSION 1 CLOSED TO OE19,1
   #
Appendix C

GPCC TRAINING COURSES FOR EMAIL

GENERAL

Below are short descriptions of the formal electronic mail courses offered by the GPCC Training Center. Although Introduction to VMS is not specifically an electronic mail class, it is mentioned because some time is spent teaching students about the VMS mail utility and there is no one course dedicated to VMS mail.

There is a charge against a valid account or NOSC job order for all courses except the GPCC Orientation course, which is free, and appropriate manuals or handouts for each course are distributed during the course at no additional cost. Specific course dates and costs are listed in the NOSC Computing Highlights. For any computer training questions, or information on registration procedures, course content, or course dates, you may call 553-2245 or 553-2264 or send email to gpcctrain.

INTRODUCTION TO MICROMAIL

This one-session three-hour class offers basic information on the PC electronic mail utility, micromail (umail). The course covers accessing micromail and the basics of sending and receiving mail. Students will learn how to access DOS from within micromail and how to find a person's userid using the pb (phonebook) command on the PC. The Introduction to PC's course is a prerequisite, and the GPCC Orientation course is recommended. Knowledge of a PC editor is helpful, but not a requirement.

INTRODUCTION TO NOSC ELECTRONIC MAIL

This one-session three-hour class offers basic information for the novice users of the NOSC electronic mail system. The course covers accessing msg and the basics of how to send and receive mail at the intermediate level. The GPCC Orientation course is a prerequisite. Knowledge of a Unix editor is helpful, but not a requirement.
INTRODUCTION TO VMS

This two-session six-hour course provides an introduction to the VMS operating system. It is aimed at beginners who would like a general overview of some basic features of VMS. Students will learn how to log on and off a VMS computer, how to use the DCL command-line format and special command-line features, and how to use the on-line help facility. Emphasis will be placed on understanding file and directory concepts, and students will be given hands-on time to practice creating and manipulating files and directories. This class will also cover global filename and directory characters, and students will learn additional file and directory commands. Finally, this course will briefly cover how to read and send messages using the VMS mail utility. There are no prerequisites, but the GPCC Orientation course is recommended for those with little or no computer background.

MORE ON NOSC ELECTRONIC MAIL

This one-session three-hour class is directed toward more experienced users of the electronic mail system. It covers additional capabilities of msg, including customizing electronic mail to better fit your needs, filing your mail, mailing to groups of individuals, sending files, and much more. This class is intended for people who already have at least two weeks' experience using electronic mail. It assumes you know how to sign onto the computer, call msg, and use email to send and receive messages in the intermediate level. This course will be scheduled at least two weeks after the Introduction to NOSC Electronic Mail class to allow students to sign up for both classes if they wish. The Introduction to NOSC Electronic Mail class is a prerequisite. You must also know a Unix editor or WordStar; some knowledge of Unix is helpful. For those who do not know an editor, a brief session on the RED editor is available before the class. (You must ask for it at registration time.)
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