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C-Net 64
Bulletin Board System
Version 12.0

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PREFACE

PREFACE

C-Net 64 version 12.0, the result of many, many hours of careful programming is, we feel, the finest BBS system available anywhere for the Commodore 64 computer. We consider this new version of the most popular C-64 BBS to be the LARGEST step in making C-Net 64 very efficient, easy to modify, (for the do-it-yourselfer), and fast! We plan, in future versions, to improve even more, but this version has been re-structured to make all these things not only possible, but simple! Both the basic portions of the program and the machine language have been carefully screened and changed for efficiency and speed.

From the minute you boot the disk, (you can now configure the system right on-line!), to the 10,000th call your system gets, we think that you'll be very pleased! We tried hard to make all Sysop functions very easy to use, with several options that were never there before. Here is a partial list of new features:

- 1> You may now "Download" (copy a file) locally with the "Coplex" protocol. right from the UD libraries.
- 2> Audible signals for many system functions, such as uploads, chat request, logon, logoff, new users, even user IDs at logon!
- 3> All machine language editor for increased speed and efficiency.
- 4> Three different (sysop selectable) screens at idle. (Waiting for call mode).
 - 1> Clock
 - 2> B.A.R. Screen, which shows all recent and total board and UD activity.
 - 3> Blocks free screen, which shows the blocks free for all drives on line.

And many more!!!

Special personal thanks to:

PROFESSOR (Ray Kelm)
My number one assistant and resident programming whiz!

--SATAN-- (Mike LaLonde)
For his work on the hi-res screen.

EP-RC SOFTWARE (Randy Epstein)

PREFACE

For doing the help menus, and for so many good ideas.

THE TREE (Eric Bratton)
For writing the 'super copy' program that our copy routine
is taken from, and for the help on the ml.

DRAGONSBANE (Jesse Verellen)
For his help in beta-testing and debugging the program.

THE HAWKE (Chris Lauria)
For loaning us the RAM expander and beta-testing.

INCONTROL (The people who make the ICT Datachief hard drive).
For their help in getting it to be compatible with 12.

ALL THOSE WHO ORDERED THE "12.0"
For waiting patiently for the program to be released! (Hey,
only a few months late)!

And ESPECIALLY To:
PEGGY AND THE KIDS (My Family)
For their patience and putting up with me when I worked on
the program all day and night.

CHARLIE TUNA (Don Gladden)

-1- INTRODUCTION

1. INTRODUCTION:

This introduction contains all warranty, program usage, and support information.

1.1 USAGE AGREEMENT:

You have the non-exclusive right to use the enclosed program. This program can only be used on a single computer at a time. You may NOT distribute copies of this program or documentation to others. You may modify or translate the program for personal use only, and only in accordance with all other parts of this agreement. Modifications and translations may be made for personal use only, unless prior WRITTEN permission has been given by Perspective Software stating otherwise.

YOU MAY NOT USE, COPY, MODIFY, OR TRANSFER THE PROGRAM, DONGLE, OR DOCUMENTATION, OR ANY COPY, EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT.

1.2 BACK-UP AND TRANSFER:

You may make one (1) copy of the program for back-up purposes. You MUST reproduce and include the copyright notice on the back-up copy. You may transfer the product to another party if the other party completes and returns a registration card to Perspective Software. If you transfer the program you must at the same time transfer the documentation and back-up copy or transfer the documentation and destroy the back-up copy. Contact Perspective Software for further transfer instructions.

1.3 COPYRIGHT:

This program and the related documentation are copyrighted. You may not copy the program and/or documentation except as for back-up purposes and to load the program into the computer as part of executing the program. All other copies of the program and its documentation are in violation of this agreement. You may NOT remove the copyright notice at any time.

1.4 LIMITED WARRANTY ON DISK:

Perspective Software warrants the disk on which the program is furnished to be free from defects in materials and workmanship under normal use for a period of 90 days from the date of delivery to you as evidenced by the return of your software registration card. To obtain a warranty service or replacement, you must deliver the disk prepaid to Perspective Software.

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THE DISK IS LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY.

1.5 PROGRAM AND MANUAL:

The program and the manual ("software") are provided "as is" without warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Should the program or manual prove defective, you (and not Perspective Software or the dealer,

-1- INTRODUCTION

distributor or representative) must assume the entire cost of all necessary servicing and repair. Further, Perspective Software does not warrant, guarantee, or make any representations regarding the use of, or the results of use of, the program in terms of quality, correctness, accuracy, reliability, currentness, or otherwise, and you rely on the program and results solely at your own risk.

Perspective Software does not warrant that the program or manual will meet your requirements, or that the program will be uninterrupted or error-free.

1.6 LIMITATIONS OF REMEDIES:

In no event will Perspective Software be liable to you for any damages in excess of your license fee paid, including, without limitations, any lost profits, business goodwill or other special, incidental or consequential damages arising out of the use or inability to use the program, or for any claim made by any other party, even if Perspective Software or the dealer had been advised of the possibility of such claims or damages. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

1.7 UPDATE AND CUSTOMER SUPPORT POLICY:

In order to be able to obtain any customer support or updates of this program, you MUST complete and return the enclosed registration card to Perspective Software. If this registration card has not been received by Perspective Software, or Perspective Software is aware of breach of any part of this agreement by you, Perspective Software is under no obligation to make available to you any customer support or updates of the program even though you have made payment of the applicable update fee.

1.8 ACKNOWLEDGEMENT:

You acknowledge that you have read this agreement, understand it, and agree to be bound by its terms and conditions by filling out and returning the enclosed registration card. You also agree that this agreement is the complete and exclusive statement of agreement between the parties and supercedes all proposals or prior agreements, verbal or written, and any other communications between the parties relating to the subject matter of this agreement.

Should you have any questions concerning this Agreement, please contact in writing Perspective Software, Customer Sales and Support, Post Office Box 87175, Canton Twp., MI 48187.

1.9 USER SUPPORT:

THANK YOU VERY MUCH for purchasing the C-Net 64 BBS version 12.0! This manual is a detailed description of the features and capabilities of the program. However, if you have any questions left unanswered, or if you discover any problem with any part of the program, please feel free to contact us at either of the following 24 hour BBS's:

FUTURE WORLD! BBS
(313)/981-6150

(2)

-1- INTRODUCTION

System Operator: Ken Pletzer
(C-Net 128 Headquarters)

LYON'S DEN
(313)/437-9486
System Operator: Don Gladden
(C-Net 64 Headquarters)

The majority of users on these BBS's are users of the C-Net Program and are willing to share their experiences and information about the program and many other topics as well.

Or, contact the voice support line at (313)/981-4113, or, if you prefer, contact in writing, Perspective Software, Customer Support, Post Office Box 87175, Canton Twp., MI 48187.

(3)

2. HARDWARE CONFIGURATION

This section will assist you in connecting the right computer equipment correctly to be used with the C-Net program.

2.1 MODEMS

There are three basic types of modems that are compatible with the Program: the 1650 modem and anything compatible (Westridge, Video 7, Total Telecommunications), the Mitey Mo and anything compatible (Hesmodem II), and the Hayes SmartModem and anything compatible (Prometheus, 1670, Lynker). 1200 baud may be used with Hayes compatible modems only. A modem is considered "Hayes compatible" only if it understands basic "AT" commands such as ATVO, ATA and ATH.

2.2 DISK DRIVES

Any disk drive that can be connected to your 64 and used normally, can also be used with C-Net. There are two terms, however, that you must be familiar with when configuring your C-Net BBS. When a reference is made to a disk drive DEVICE, it is referring to the unit as a whole. A disk drive may have one or two disk openings, each referred to as a DRIVE. A brand-new disk drive has a DEVICE number of 8. If you plan to connect more than one disk drive to the 64 for use with the program, you must insure that each disk drive has a unique DEVICE number (see disk drive instructions for information about changing the DEVICE number of a unit). A disk drive with one disk capability is said to be a DRIVE 0. With a two-disk disk drive, the individual disk slots are numbered 0 and 1 (see disk drive instructions to see which disk slot is which).

2.3 ICT DATA CHIEF/MINICHIEF DRIVES:

C-Net 64 v12 will run fine with the ICT hard drives IF you set things up right. We advise, until further updates are available, that you do not use the drive for your email disk, etc. disk, sys. disk, or for any sub-boards due to the problem with more than one file being open in chain mode. If you decide to use it for these functions, MAKE SURE that you take the drive out of chain mode before entering any function that addresses two files at once. Future versions of C-Net 64 will fully support the ICT drives with no problems, but for now we advise these precautions. You may use the Datachief in chain mode on your UD subsystem, Gfiles, User disk, or Pfiles with no problems at all. Set up your chain before booting the system but do not include partitions #1 or #120 on your chain. To make up for blocks free errors, as explained in the manual for the drive, we suggest you define your chain to have just around 65,000 blocks free, and then expand it as it fills up. See the ICT manual for further information.

2.4 CARTRIDGES

No form of "fast load" or other types of software cartridges can be successfully used with C-Net, but will only cause problems.

3. SOFTWARE CONFIGURATION:

This section covers the configuration of the program, explaining step by step the procedure you must follow before the BBS is ready to put on line.

3.1 FIRST STEP!!!:

Before you do anything else, back up the master disk (both sides) with a good copy program that will handle relative files. "Copy-all", by Jim Butterfield, included on the front side of the disk is very good for this, and will work with nearly all disk drives that will run with the Commodore 64.

3.2 PLANNING THE SYSTEM:

To get the most out of C-Net version 12, we suggest highly that you run it on at least two 1541 disk drives, or one of the many 1 meg or larger drives on the market today for the commodore 64. It is easy to set C-Net up on a system with up to 4 disk drives, and possible to use even more. If you are planning on running the system on one 1541 or compatible drive, you will find there is not much room for information that will be coming in, and get frustrated quickly having to delete messages and files to keep enough room.

By planning carefully, you will get the most out of the disk space that you have available. Remember when planning that you must consider not only blocks available, but also directory space. The 1541 drive allows up to 144 entries on it's directory, while other drives vary. Check your disk drive manual for more on this. For the purpose of clarification, "DEVICE" refers to the device number, usually 8 through 11, that your drives are set to. If you have more than one drive that is set to device #8, you may change the device number with the "DV CHANGE" program on side one of your C-Net disk before booting the system. "DRIVE" refers to the drive number if you are using a dual drive or the Xetec Lt. Kernal hard drive which uses drive numbers. The drive number will be either zero or one with a dual drive, or zero through nine on the Xetec drive. If you have single drives only, then drive numbers will always be zero.

After backing up the disk, and putting the master disk away in a safe place somewhere, format a fresh disk for each disk drive that you plan to use on the BBS and use the following information to plan out your system, and what functions you would like on each device.

- 89 1: The "system" disk will contain all menu files, system information files, and "proto" files.
- 88 2: The "etcetera" disk contains miscellaneous information files, feedback, new user information, user logs, error logs, and other information.
- 88 3: The "EMail" disk will contain all private messages sent by users, and "CW" files.
- 89 4: The "Gfile" disk will contain general files that you make available for users to read.
- 99 5: The "Pfile" disk will contain all program modules that C-Net uses, along with any that you wish to add yourself.
- 88 6: The "User" disk will contain all user data. Usually only two files, but larger in size. When planning your setup, keep in mind that this disk will require a little over one block for

each user. With a 1541, you would be limited to no more than about 600 users if the device was reserved for the user files only.

(Note that these functions can be combined in any way on any of the drives. In other words, any of the functions can be combined with any others on one device).

In addition, you will be asked later to define the device and drive that each sub-board and UD board will be on. When you decide which drives you would like to use for which functions, you will have to copy the following files FROM SIDE TWO ONLY* of the master disk to the respective disks. We suggest labeling each disk with the device and drive number of the device it will be used in, to prevent confusion when setting up.

To the "system" disk: All files with the prefix "sys.", all files with the prefix "menu", and all files with the prefix "proto".

*(NOTE: The "sys.say" file on side one of the disk is optional. It is a file that will print random "fortunes" at logon and by entering "SAY" at the main prompt if it is on the drive. Due to the size of this file, some sysops with limited disk space may choose to delete this feature).

To the "Pfiles" disk: All files with the prefix "p.". (Side two only. "p.cf" and "p.su" on side one are not needed on the pfile disk, but only on the boot disk).

3.3 BOOTING UP:

Make sure that the dongle you received with your disk is plugged into joystick port #2, make sure there are no write protect tabs on the backup disk that you just made, then insert side one into device #8, and enter:

```
LOAD":*",8,1
or:
LOAD"BT",8,1
(Then press the RETURN key)
```

The screen will turn black, then the load screen will appear for a short time while the program loads and sets up certain parameters. If this is the first time you've booted the system, it will tell you that it has not been configured yet, and take you to the configuration editor which will ask you some questions.

3.4 CONFIGURING THE BBS:

Hit any key now, and the configuration program will ask you to answer a series of questions that will configure the system to your equipment and preferences. Once this is done, you will not have to answer these again, as the information will be stored on the proper disks.

First, you will be asked to enter which device and drive you would like for each of the six different system functions. Enter these one at a time from the prompts.

Next you will be asked for a Login Identifier. A Login Identifier is a two-character prefix in all capital letters, numbers, or symbols to identify your system to users at login. An example might be "FW" for a bulletin board called "Future World."

After this you will be asked to give the modem type you are using. If your modem is not among the examples given, check your manual that came with the modem to see what it is "compatible" with. If this still does not help, contact Perspective Software for help. Efforts were made to make C-Net 64 version 12 compatible with as many modems as possible, but there is still the possibility that your modem needs a special routine to make it work correctly.

Next you will be asked to enter the number of credit points that you wish to give to new users when they log on. This can be any number that you wish, including zero.

Next you will be asked if you wish to designate a "prime time" for your system, where ALL users, (including you on a normal logon), will get only a specified amount of time. If you do not wish to use this feature, simply answer "no" at the prompt. If you do, then answer "y". First enter the amount of time you wish the users to have during this time period, then designate the hours you would like to use for prime time. The UD section will also be closed during this time period to non-designated users/access groups. (see "ACCESS FUNCTIONS" below).

Finally you will be asked to enter your own ID# information, which will be entered to account number one. You will be prompted to enter a handle, password, real first and last name, and phone number. The system will automatically set up your account and give you access level 9, which is the normal sysop access. This can be changed once you are logged on if you desire.

After answering these questions, follow the prompts to insert disks as asked, and the program will write the files necessary to run the system. When it asks you to "Insert All System Disks...", you should put the disks that you prepared and formatted earlier into the respective drives, and hit RETURN to go on line.

Now the screen will turn black again and ask you to enter the current date and time. For the day of the week, enter one of the following numbers:

- 1-Sunday
- 2-Monday
- 3-Tuesday
- 4-Wednesday
- 5-Thursday
- 6-Friday
- 7-Saturday

After this, simply type in the month, date, year, hour, minute, and AM or PM. If it is correct, hit "y" or simply a carriage return over the "y" on the screen to start things up.

3.5 BETWEEN CALLS:

After the program does some necessary setup work and clears the modem line, it will go to the "Waiting for call" mode, with the B.A.R. screen on the monitor. (This screen can be switched with two other screens. 1> The clock, and 2> The "blocks free" screen, which will show blocks free on all devices on line). To change screens, hit a "1", "2", or "3" while in "Waiting For Call" mode. Other keys active here (for a Hayes compatible modem only), are the "_" key, (to load the term program), the "\" key, (to pick up the line), the "+" key, (to turn on the modem speaker), the "-" key. (to turn off the modem speaker), and the Commodore-T key (hold down C= and press the T key) to toggle the carrier detect mode (for certain RS-232 interfaces which require reverse carrier detection).

While in "Waiting For Call" mode, the upper left hand corner of the screen will show the last users handle who was on, his logoff time, and the time of the last log restart.

3.6 THE B.A.R. SCREEN:

This screen gives you much information on what has been happening on the BBS. There are four columns and 11 rows. The four columns cover the last call, log start, current total, and system total. The rows cover how much feedback, sysop mail, user mail, posts, responses to posts, uploads, downloads, new users, calls on the log, time used, (in minutes), and time idle. (in the last call column will show the idle time between the call before and that call). This screen can also be viewed on-line by typing "BAR" at the Main: prompt, to users with access to do it. If viewed while on-line, the first column will show activity so far for this call instead of the last call. The log start column shows this data since you last restarted the log. The current total column shows what is on the BBS at this present time, and the system total column shows totals since the system was first configured.

3.7 LOGGING ON:

You are now ready to go on line and examine your new C-Net 64 v12 BBS in action! You can now logon and edit your system files, configure your subboards and UD libraries, and define your access groups. The board is set up already with some preset access groups, but you will no doubt wish to change these to your own preferences. You may logon either normally or use the "instant" logon feature. This section will cover the normal logon sequence, while the "instant" logon will be explained later.

When someone has logged on normally, either remotely or locally, the program's copyright message will be displayed, then the user will be asked to "PRESS RETURN OR A". When RETURN is pressed, the program will read the disk file "sys.start." This file may be skipped by entering "A". Next the program will instruct the user to "Enter your handle or Login ID." If the user has no account, or makes a mistake entering the information, he will be instructed to enter "NEW." If the user has made four mistakes and has not entered "NEW" he will be logged off for excessive login attempts.

If a user enters "NEW", the new user procedure will be executed, beginning with the reading of the file "sys.new user." The new login procedure consists of four parts: general information (handle, real

name, phone number, password), terminal parameters (computer type, column-width, etc.), miscellaneous questions (city & state, occupation, age, baud), and a personal statement (a chance to type a paragraph or two about himself). Once the new user login procedure is completed, this information about the user is put into new user feedback for you to view later, and he is taken into the system with access group 0 status.

Once a user has successfully logged onto the system, either remotely or locally, as either a new user or a user with a login ID and password already, the system will read the file entitled "sys.welcome", inform the user of what his/her access group is, how many more calls he can make on that particular day, (if not an infinite number), and the time he has for this call. Then it will check to see if there are any new news files to read to the user, and check for electronic mail to that user. Once all of this has been completed, the user will be placed at a prompt of "Main:"

3.8 THE STATUS WINDOW:

Once a user has logged on to the system, the status window at the top of the system screen will be filled in with many variables.

The very top line contains the full date and time, and Time Remaining on the system in minutes. (TSR:)

The next five lines contain specific information about the user logged on. First is the user's handle, then his Login ID, last call date, and number of calls today and total to the system. Next is the user's real name, his access group, his phone number, and his parameters. The parameters includes expert mode, color/graphics mode, linefeeds, lowercase, and column width.

The bottom line of the status window is occupied by the on-line functions menu

At the very bottom of the entire screen is the computer type of the user, or the reason for chat if one was requested, or the name of the file being uploaded or downloaded while a transfer is taking place. When no user is on, this line contains the version number of the program. On the line directly above this are five system variables: memory left in the 64, total calls to the system, calls since the system was booted, current number of users, and blocks free on device #8. Also, there are two buffer windows, to monitor the last 10 characters that have been either output by or input into the system.

After the program does some necessary setup work and clears the modem line, it will go to the "Waiting for call" mode, with the B.A.R. screen on the monitor. (This screen can be switched with two other screens. 1> The clock, and 2> The "blocks free" screen, which will show blocks free on all devices on line). To change screens, hit a "1", "2", or "3" while in "Waiting For Call" mode. Other keys active here (for a Hayes compatible modem only), are the "_" key, (to load the term program), the "\" key, (to pick up the line), the "+" key, (to turn on the modem speaker), the "-" key. (to turn off the modem speaker), and Commodore-T (hold down C= and press the T

key) to toggle the carrier detection mode.

3.9 LOGGING ON LOCALLY:

The light bar should now be highlighting the "Loc" area. If it is not, then move it there using the f3 and f5 keys. Then hit the f7 key to turn the check mark on and to logon the board. when you get to the "HIT RETURN OR A" prompt, enter an "I" to logon instantly, or go through the normal logon sequence. In either case, enter the password that you entered while configuring. If you use the instant logon mode, you will be asked if you wish to check for mail. Since this is the first call to the system, it's not too likely that you will have any at this time, so you might as well hit a "N" here.

3.10 EDITING SYSTEM INFO FILES:

You now should be at the "Main:" prompt, where you can do several things. This being your first call, you may wish to edit the following files to suit your own taste and coincide with your BBS plans.

sys.login : This file is what will read to a user as soon as the system answers the call and connects. Usually contains the name and hours of the BBS.

sys.start : This file is read if the user presses return at the "HIT RETURN OR "A" prompt at logon.

sys.welcome : This file is read after a logon is complete.

sys.end : This is the closing message read to a user after he logs off.

sys.new user : This message is read to all new users at logon. It may contain a disclaimer, and any other information that you wish new users to know.

sys.config : This file should contain information on your particular BBS, such as the equipment it is run on, and any other information you wish.

sys.cred : This file should contain information about the credit system and how the BBS assigns credits.

sys.lst : This is the file that will read to a user if he enters a "H" at any prompt.

sys.phonebook: This is a file with other BBS numbers that you may autodial use with the C-Term program that is built into C-Net 64 v12 IF you have a Commodore 1670 or Hayes compatible modem. To write this file, you should include three items of data for each BBS that you would like, the name of the BBS, the phone number, and the baud rate. These should be seperated by a carriage return, and can be added to at any time. Example:

FUTURE WORLD
1-313-981-6150
2400

6:00pm to 1am

LYON'S DEN
1-313-437-9486
1200

(NOTE: Make sure that the FIRST line of the file contains the first BBS name, and not a carriage return, and that there are NO extra carriage returns before, between, or after the information, or the system will not read the information in correctly.

To create or edit these files, use the "WF" option at the main prompt. (See the "MAINTENANCE" Chapter for furthur details.

3.11 BULLETIN BOARDS AND UD LIBRARIES:

After editing these files, you will want to set up your subboards and UD libraries. You can create up to 30 subboards and 30 UD libraries. To do this, and to change them at any time after, you can run the "diredit" program from the main prompt. Simply enter "R" at main, and then type in "diredit" for the p.file name. Follow the prompts to set up the boards to your preference. Here is the guideline to use when choosing access codes:
For each subboard that you wish to create, you must give it a title to describe it, device and drive numbers to tell C-Net which disk drive to write files for that subboard to, and an access code to tell C-Net which user groups can have access to it. You MUST enter subboards in numerical order, starting with one, up to the number of boards that you wish. To determine what number to enter for an access code, you must use the following chart:

Group	Code	Group	Code	Group	Code
0	1	1	2	2	4
3	8	4	16	5	32
6	64	7	128	8	256
9	512				

To come up with a number, first decide which groups get access to the subboard, then add together the codes next to those groups. For example, if you wanted subboard number 3 to be accessible by only groups 3, 4, and 5 you would look at the chart, and add together the codes next to those groups. For this example, that would be 8+16+32, which is 56. An access code allowing access to all access groups would be the sum of all codes on the chart above, which is 1023.

3.12 ACCESS GROUPS:

Now you will want to define your access groups. Again at the main prompt, enter "R" and run "access" to get you into the access group editor. You can define up to 10 access groups and what they will be able to access on the system. They are numbered from 0 (New User) to 9 (Usually a Sysop). All new users logging on will automatically be put into group 0. For each of the group numbers that you choose to use, you can select a title for it. You should choose one of the access groups to be the system operator group, for you, with highest system privileges. For each group you are using, you can select a specific amount of calls per day that group can make, as well as how many minutes per call is allowed, how many minutes at idle is allowed (how many minutes may pass without hitting any keys before the system will automatically hang up), and how many downloads can

be made per call. INFINITE settings may be specified for calls per day, minutes per call, and downloads per call by entering a 0. (Idle time cannot be set to infinite, but must be from one to nine minutes).

3.13 ACCESS FUNCTIONS:

Next come 15 "default" system functions that you may define for each access group. These functions are also individually changeable for any user if so desired. Most of these functions only require you to specify yes or no to determine whether an access group will have access to that particular function. Two of the functions require you to enter a number. (How many editor lines, and credit block ratio for uploads). The system functions are:

1: Whether that access group will have "non-weed" status, or be ignored by the auto weed program when you run it to delete old users.
(0=no 1=yes)

2: The number of credit points (0-9) that each member of an access group will receive for every block uploaded.

3: Whether this access group has access to "local mode" maintenance.
(0=no 1=yes)

(NOTE: we strongly suggest that you do not assign this feature to ANY access level, but rather give it only to certain VERY TRUSTED users, since this gives them a LOT of power on your system.

4: Whether this access group has the ability to post bulletins and respond in the public message bases. (Usually all groups except for new users, but you may let new users post and respond this way if you wish).
(0=no 1=yes)

5: Whether or not this access group can access the U/D subsystem.
(0=no 1=yes)

6: How many lines in the editor (in multiples of ten) that may be used to compose messages. (For this value, 0=10 lines, 1=20 lines, etc. up to 9=100 lines).

7: Whether or not credits are subtracted from a users account when they download. (Unlimited download capability)
(0=no 1=yes)

8: Whether or not this access group can use remote maintenance. (View feedback, write/remove a cw.file)

9: Whether or not this access group can access Electronic Mail.

10: Whether or not this access group can view the User List.

11: Whether or not this access group can read the log of recent callers and B.A.R. screen.

12: Whether or not this access group has general subboard and U/D maintenance

13: Whether or not this access group has general text and program file maintenance

14: Whether or not this access group has access to the MCI.

15: Whether or not this access group can enter the UD section during prime time. (If you choose to set up a "prime time".)

(Each of these functions are described in detail in sections to follow).

When you finish defining these functions, you will be asked questions to define more miscellaneous default functions for that particular access group. The following functions can also be individually adjusted for specific users later. (Turned on or off for any particular user).

3.14 DONE!

Now your C-Net 64 version 12 is ready to go! You might wish to post a few bulletins and news files, etc, to get the system started. We hope you like version 12, and always welcome your comments, suggestions, and remarks!

4. COMMANDS AVAILABLE AT ALL LEVELS:

There are several commands which are available to a user no matter which command level (Main, Bulletin board, E-Mail, News, General text files, U/D, Program files, etc.) he is at. Each will be explained in this section.

4.1 CHAT REQUEST/CHAT MODE:

Entering "C" will request a chat with the system operator. A short (16 character) reason for chat will be requested, and displayed on the bottom of the system screen, and sent to the log on the printer if it is on line. If the system operator's status is checkmarked, the message "Paging Sysop!" will be displayed, and five beeps will be sent to the system monitor. If there isn't a checkmark, the user will be told that you are not available, and will be asked if he would like to leave feedback instead. Either way, the word "-ON-" at the bottom right of the status window will flash to let you know the user has requested a chat with you.

4.2 FEEDBACK:

Feedback is left to the system operators by entering "F" at a command prompt. The user will be placed into the editor subsystem to write his message. Feedback along with new user information is read by the system operators by typing "VF" at the "Main:" prompt.

4.3 HELP:

Entering anything beginning with "H" will bring up the file "sys.inst" from the system disk.

4.4 SYSTEM INFORMATION:

Entering "I" will bring up the file "sys.config" from the system disk. This file should contain general information about your system--what it is running on (hardware and software) as well as anything else interesting about it.

4.5 LAST CALL DATE/TIME:

A user can change his effective last call date and time by entering "LD" at a command prompt. A user may wish to do this because the last call date is used to determine which messages on the system are new and which are old. If a user is logged off before he has a chance to see all new messages, he can use this command to move his last call date back the next time he calls.

4.6 LOGOFF:

Entering anything beginning with "O" at a command prompt will take the user to logoff. He will be asked first if he really wants to logoff, and if so, if he would like to leave feedback to the system operators first. Entering this command followed by a "W" will save the last call date, in case they did not read all the "new" information on the board. If they follow it with a "!", it will log off instantly, without prompting for feedback, etc, but just take them to the "sys.end" file.

4.7 QUIT:

Entering "Q" at any command prompt will return the user to the main command level. If "Q" is entered at the main command level, the user will be taken to logoff.

4.8 TIME/DATE:

Entering "T" at any command prompt will display the current time, the time the user logged on, and the amount of time that the user has remaining on the system this call.

4.9 BAUD CHANGE:

Entering "BC" at any command prompt will allow a 300 baud user to change his baud rate up to 490 baud.

4.10 EDITING PARAMETERS:

Entering an "E" at any command prompt will allow a user to edit their terminal parameters.

4.11 "LOCAL" MODE:

Entering "ZZ" at any prompt will allow designated users to enter "LOCAL" mode, and allow them to do local functions remotely, such as copy files, read directories, etc.

4.12 STATUS:

Entering "ST" at any prompt will allow users to get their current status on the system including access, and other information.

4.13 "SAY":

Entering "SAY" at any prompt will allow users to read a "fortune".

4.14 LOG:

Entering "LOG" at any prompt will allow designated users to read the log of recent callers and activity.

4.15 C/G-ASCII MODE:

Entering "TM" at any prompt will allow users to toggle between Commodore C/G mode and ASCII mode.

4.16 CREDIT INFORMATION:

Entering "CR" at any prompt will allow users to read the "sys.cred" file, which should contain information on the credit system that the board uses.

4.17 EXPERT MODE:

Entering "X" at any prompt will allow users to toggle "Expert mode". Aborts reading of entry files. Whatever this is set to will be saved to disk and defaulted on their next call.

4.18 BRIEF SUMMARY OF COMMANDS:

For a brief summary of commands at any command level, a user should enter a question mark ("?") which reads the appropriate menu file from the system disk.

5. THE MAIN COMMAND LEVEL:
The main command level is the first command level a user sees when he logs on. The main command level is the "central point" to the system. From here, a user may branch to any one of the other system command levels. The prompt that will appear at this level is "Main:".
- 5.1 BULLETIN BOARDS:
Entering the "B" followed by a number will take the user to that subboard. If the user does not have access to the board number he requested, or if he simply enters "B" without specifying a number, he will be taken to subboard number one. If the user has access to no subboards, he will be told that the bulletin board subsystem is empty, and returned to the main command level.
- 5.2 EDIT TERMINAL PARAMETERS:
Entering "E" will bring up the user's current terminal parameters, which includes computer type, color/graphics mode, line length, expert mode, etc., and give the user an opportunity to change as many of the parameters as he wishes.
- 5.3 GENERAL TEXT FILES:
Entering "G" will take the user to the general text file subsystem.
- 5.4 ELECTRONIC MAIL:
Entering "M" will take the user to the private electronic mail subsystem.
- 5.5 SYSTEM NEWS:
Entering "N" will take the user to the system news subsystem.
- 5.6 PROGRAM FILES:
Entering "P" will take the user to the program file subsystem.
- 5.7 UPLOADING/DOWNLOADING:
Entering "UD" followed by a number will take the user to that upload/download board. If the user does not have access to the board number he requested, or if he simply enters "UD" without specifying a number, he will be taken to u/d board number one. If the user has access to no boards, he will be told that the upload/download subsystem is empty, and returned to the main command level. No users will be allowed to enter this subsystem if "u/d" is selected on the on-line functions menu.
- 5.8 USER LIST:
Entering "UL" will take the user to the user list subsystem.
- 5.9 PASSWORD CHANGE:
Entering "PW" at the main command level will allow a user to change his password. He will be asked for his current password once, then his new password twice to confirm the change.
- 5.10 BBS NUMBER LIST:
Entering "BBS" will let a user read or add to a file called "sys.bbs". This will show BBS numbers that have been entered by other users. If a user has general maintenance access, he will be

allowed to edit and/or delete numbers from the list.

- 5.11 BAR SCREEN:
Entering "BAR" will allow a designated users to view the BAR screen, that shows between calls on the main console.
- 5.12 CREDIT EXCHANGE:
Entering "EX" will take a user to the "credit exchange", where he can trade credit points for time at the rate of 5 points/one minute.

6. **BULLETIN BOARD SUBSYSTEM:**
This is C-Net's "public message base." When a user enters the bulletin board subsystem, only the subboards that his access group can access are loaded into memory. So, if you have five subboards, but a user logs on with an access group that can only get to boards one and five, he will see only two boards, re-numbered as 1 and 2. In this manner, he has no idea that the boards he cannot access are even on the system. A user is at this subsystem when he is prompted with "Sub#" followed by the subboard number.
- 6.1 **EXPERT MODE:**
A user may enter "X" at any time to enable "expert" mode. Expert mode eliminates the reading of the subboard entry files when entering a new subboard, speeding up movement between subboards for experienced users.
- 6.2 **MOVING TO ANOTHER SUBBOARD:**
A user can change the current subboard by just entered the new subboard number at the "B" prompt. Entering "<" or ";" will take the user to the subboard just before the one he is at. Entering ">" or "=" will take the user to the subboard just after the one he is at. If a move cannot be made, the user will be told that the board number he requested does not exist. Entering "B" will display the title of the current subboard.
- 6.3 **LISTING THE SUBBOARDS:**
A user can get a list of which subboards he has access to by entering "L", or "L" followed by the board number to start listing from.
- 6.4 **SCANNING BULLETINS:**
Scanning posts means to display only the subject of the bulletins. Just entering "s" will begin scanning at the first bulletin on the subboard. "S" followed by a bulletin number can be used to start scanning at a specific bulletin. "s-" can be entered to begin scanning at the last bulletin and work backwards. A maximum of twenty bulletins can be scanned at a time, and the slash key can be used to abort a scan in progress. a scan will show the number of the bulletin, name of the bulletin, and how many responses the bulletin has.
- 6.5 **ABOUT BULLETINS:**
About bulletins means to display the subject, author, date of creation, and number of responses to a bulletin. Just entering "A" will tell a user about the next bulletin following the one that was just manipulated in any way. "A" followed by a number can be used to find out about a specific bulletin. "A-" will start at the last bulletin and work backwards.
- 6.6 **READING BULLETINS:**
To read a bulletin is to first find out about it, then read the text body of the message, followed by each response until the end of the bulletin. Just entering "R" or just pressing RETURN will read the next bulletin. "R" followed by a number can be used to read a specific bulletin. "R-" can be used to read the last bulletin and

- then begin to work backwards. While reading a bulletin, a user can hit the space bar to skip to the next response, or press "/" to skip directly to the end of the bulletin. Once at the end of a bulletin, a user has several options. He may press RETURN to continue, "P" to leave a private message to the original poster of that message, "R" to add a response to the end of that post, "O" to begin reading the post over from the beginning, "Q" or "/" to stop a "RN" or "RA" function. A question mark at this prompt will bring up a short menu of these options.
- 6.7 **NEW MESSAGES:**
To either scan, find out about, or to read only the bulletins that are new since a users last call, he should enter "SN", "AN", or "RN", respectively. To stop an "RN" in progress, press the "/" key while reading About a message.
To either scan, find out About, or to read only the messages that are new on the current subboard and all higher subboards, the user should enter "SA", "AA", or "RA", respectively. To stop an "RA," "SA" or "AA" at the subboard it is on, press the "/" key.
- 6.8 **POSTING NEW BULLETINS:**
If a user enters "P" and there is room for a new bulletin, the user will be asked for a subject of his message, asked if he would like to leave the message anonymously, then placed into the editor subsystem to write his message. The author of a bulletin appears as "Anonymous" if the user has requested, except to the subboard operator, or a user with general subboard maintenance, who will see "*" followed by the user's handle to show that the message was posted anonymously.
- 6.9 **KILLING ENTIRE BULLETINS:**
To kill a bulletin means to remove it from the subboard along with all of its responses. Entering "K" will attempt to kill all bulletins; entering "K" followed by a number will attempt to kill a specific bulletin. A normal user can kill his bulletin so long as there are no responses to it. Once responses are added, only a subboard operator can kill it.
- 6.10 **EDITING BULLETINS:**
To edit a bulletin, a user should enter "E" followed by the number of the post to edit. The bulletin will be opened, and the system will search through the bulletin for messages that the user can edit (he is the author, or is subboard operator). When and if such a message is encountered, the user will be prompted with "Keep, Delete, Read, Edit, or Abort." "D" for delete will remove the message, "E" for edit will take the user to the editor subsystem to edit the message, "K" for keep will go on to the next message, and "A" for abort will return the user to the "B" prompt.
- 6.11 **CHANGE WORK DIRECTION:**
If a user wishes to begin scans, abouts, or reads either forward or backward, he should enter "+" or "-" respectively. Forward means to go from 1 to 2 to 3, etc., and backward means to go from 6 to 5 to 4, etc.

6.12 SUBBOARD OPERATORS:

A user should enter "V" to view the subboard operator of the current board, and "M" to send a private message to him. Subboard maintenance mode is entered only by the subboard operator or a user with general subboard maintenance by entering "Z." The subboard maintenance menu has two options.

1) Edit the entry file. The entry file of a subboard is the file that is displayed upon entering the subboard. If there is already an entry file, it will be loaded into the editor.

2) Edit board detail. Another menu is brought up, allowing the user to change the title of the board, its access configuration, its current subboard operator, and whether it is open or closed.

6.13 ANONYMOUS/PASSWORD BOARDS:

While defining the subboards at configuration or using the "diredit" program, you may specify any of your subboards to be a "password" board, requiring a password to enter, or an "anonymous" board, where all bulletins and responses will show as anonymous, even to the subboard operator and sysops. To define a password board, simply start the title of the board with a "p/" (lowercase), using the "diredit" program or the "Z" command for submaintenance. The system will ask any user that has access to that board for the password upon his entering it. If he gets the password wrong, he will be asked if he wants to try again. If he guesses wrong three times in the same call, he is not allowed to guess again. This can be used either for fun, by putting hints to a password up other places in the system, or to add a measure of security for certain boards that you do not want all to access at all times. To set the password for this board, (The same password will be used for all password boards you define), enter a "PC" at the main prompt. To define an "anonymous" board, use the prefix "a/" before the name of the board.

7. ELECTRONIC MAIL SUBSYSTEM:

This is C-Net's private message base. Provided a user can access this subsystem, on logon he will be informed if he has mail waiting, and upon entering the mail sub-system he is told how many messages he has waiting. The prompt for this subsystem is "E-Mail:."

7.1 LISTING PRIVATE MESSAGES:

To obtain a list of the messages a user has waiting in the order they were received, he would enter "L" at the E-Mail prompt. He can also enter "L" followed by a number to begin listing at a specific message.

7.2 READING MESSAGES:

To read the next message or to begin reading messages, a user just needs to press return at the mail prompt. When he has read the last message he will be told "That Was The Last Message."

To read a specific message, he would simply enter its number.

To read all messages, he would enter "A".

7.3 RESPONDING TO A MESSAGE:

To respond to a message means to send a private message to a user in response to a message that was sent by him. After just having read a message, a user can enter "R" to respond to the author of that message. If the user hasn't yet read any messages, he cannot respond in this manner. To respond to a specific message from the list of messages received, a user may enter "R" followed by the number of the message to respond to.

7.4 SENDING A PRIVATE MESSAGE:

A private message can be sent to any user by entering "S". The system will request either the handle or user id number of the user who is to receive this message.

7.5 DELETING MAIL FILE:

A user may enter "D" to delete all of his mail. This option will also appear when they leave the E-Mail sub-system with the "Q" command.

7.6 VERIFYING MAIL:

A user may verify another user's mail by entering "V". The system will check to see if that other person has any messages, report the number of messages, then go through each one, and then report as to how many of those messages are from the user performing the verify function.

7.7 LEAVING THE E-MAIL SUBSYSTEM:

A user must type "Q" to leave the E-Mail subsystem. He will be returned to the "Main:" prompt.

8. SYSTEM NEWS SUBSYSTEM:

This is where all system news files and bulletins are read. When a user logs on to the system, all new news files which the user can access are read to him. When entering the news subsystem, a list of the news files that the user can access is displayed. The prompt at this subsystem is "News:".

If "NM" was entered at main instead of just "N", and the user has system maintenance access, he will enter the news file subsystem in maintenance mode, which has a prompt of "News Maint 1:". In this maintenance mode, all news files are read in, regardless of access.

8.1 LISTING NEWS FILES:

To obtain a list of news files and the dates they were created, a user would enter "L". A user can also enter "L" followed by the number of the news file to begin listing from.

8.2 READING NEWS FILES:

To read a news file, the user must enter it's file number. Also, when entering the news file subsystem, a number may be placed after the "N" or "NM" command to immediately read a news file before being placed at either the "News 1:" or "News Maint 1:" prompt.

8.3 ADD A NEWS FILE:

When in news file subsystem maintenance mode, "A" may be entered to add a news file. A title and access code must be given to the news before being placed in the editor to write the file. Determining the access code for a news file works exactly like determining the access code for a subboard (1023 means all 10 groups can access it, etc.). The option is also available to have the file force-read, that is, not abortable when it is displayed as new to users, by initiating the title of the news file with a "*" or to have the file recurring, that is, displayed every time a user logs on, no matter if he has read it yet or not, by initiating the title of the news file with a "\$". A recurring news file may not be aborted the first time that it is displayed.

8.4 KILLING A NEWS FILE:

A news file may be removed by someone in news file maintenance mode by entering "K" followed by the file number.

8.5 EDITING A NEWS FILE:

The contents, title, or access of a news file may be changed by someone in news file maintenance mode by entering e followed by the file number. After making changes to a news file, a user is given the option to update the date of the news or not. If he does update the date, it is made "new" to all users again.

9. PROGRAM FILES AND GENERAL TEXT FILES:

These two subsystems work similarly, so will be described together. There is the program files (p-files) subsystem, which is where most external programs such as on-line games and utilities are accessed, and the general text files (g-files) subsystem, which is where all text files such as stories, documentation, and listings are accessed.

"PM" instead of "P" (or "GM" instead of "G") could be entered at the main prompt to enter the respective subsystem in the maintenance mode, provided the user has access to this maintenance area.

9.1 LISTING THE FILES:

To obtain a list of accessible files in the current directory, a user may enter "L".

9.2 SELECTING AN OPTION:

To read a general text file, or to run a program file, a user simply must enter its number from the list. If the entry on the list is a subdirectory, that subdirectory will be opened. If an error occurs, the system will report trouble reading the file.

9.3 ADDING AN ENTRY:

A user in maintenance mode can add a file to the current directory by entering "A". He will be asked for a title, who to give credit for providing the file, and access code for the new file, which will then be saved to the directory. The title should appear in the directory exactly as it appears on the disk. (Without the "p." if it is a program file). Note that g-files are stored on the disk called the g-file disk, and the p-files are stored on the disk called the prg.file disk. (Both specified while configurating the system).

9.4 KILLING AN ENTRY:

A user in maintenance mode can remove a file from the directory by entering "K" followed by the number of the file. The option will be given to also scratch the file from the disk.

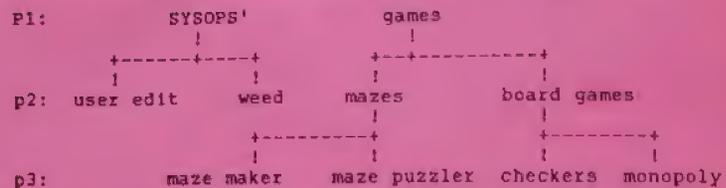
9.5 EDITING AN ENTRY:

A user in maintenance mode can change either the access, title, or source of an entry by entering "E" followed by the number of the file. Changing the title will also change the name on the disk.

9.6 SUBDIRECTORIES:

You can create another listing of files accessible from the current listing called a subdirectory. To create a new subdirectory, use the "A" command. When you are asked for a title, begin the title with "d-" and then the name of the subdirectory. Access and credit work the same. To enter that new subdirectory, enter its number. Files can now be added to this new listing. Notice the numbers following the command prompt increment by one. This number is the number of subdirectories deep you are. To return to the previous directory, enter <, and the number following the prompt will decrement. Here is a sample subdirectory map of the files in a sample p-files directory:

PROMPT (Level)



At the Main: prompt, "P1" could be entered to go immediately to the sysops' subdirectory, and still be able to choose between user edit and weed, and so on.

10. UPLOAD AND DOWNLOAD SUBSYSTEM:

This is C-Net's "file transfer base." When a user enters the upload and download (U/D) subsystem, only the subboards that his access group can access are loaded into memory. So, if you have five subboards, but a user logs on with an access group that can only get to subboards one and five, he will see only two subboards, renumbered as one and two. In this manner, the user has no idea that the subboards that he cannot access are even a part of the system. The prompt at this subsystem is "UD" followed by the subboard number.

10.1 MOVING TO ANOTHER SUBBOARD

A user can change the current subboard by just entering the new subboard number at the "U/D" prompt. Entering "<" or ";" will take the user to the subboard just before the one he is at. Entering ">" or "=" will take the user to the subboard just after the one he is at. If a move cannot be made, the user will be told that the subboard number he requested does not exist. Entering "B" will display the name of the current subboard.

A user can get a list of which subboards he has access to by entering "L".

10.2 UPLOAD AND DOWNLOAD PROTOCOLS

Both the New Punter and X-Modem protocols are available for use with C-Net. Commodore 64 and 128 users default to Punter; all others default to X-Modem. To change the active protocol, a user needs to enter "P".

10.3 SINGLE FILE UPLOAD

To upload a single file to the system, a user would enter "U". Each subboard allows a maximum of 60 files. The user is asked for information describing the file, and this information is saved along with his handle, ID number, and the current date and time. He will receive credit points at the ratio of whatever his access group or flag allows per block uploaded.

10.4 SINGLE FILE DOWNLOAD

To download a single file from the system, a user would enter "D" followed by the file number. Note that a user can only download the number of times per call that his access group is allowed, that he must have enough time left to download the file, and that he must have at least as many credit points as the number of blocks that the file is, unless his status includes unlimited downloads. (In this case, no credits are subtracted for a download).

10.5 LISTING FILES

At the UD prompt, "S" can be entered to begin scanning titles at the beginning, or "S" followed by a number to begin scanning at a specific file. "SN" can be used to display only new files, and "SA" to display all new files on every subboard (/ is used to stop). For detailed information about a file, enter "A" followed by the number of the file.

10.6 KILLING AND EDITING FILES

A system or subboard operator or the user that uploaded the file may

-10- UPLOAD AND DOWNLOAD SUBSYSTEM

enter "K" followed by the file number to delete it. He will be asked if the file should be scratched from the disk, and if he enters "N" to this prompt, and the printer is on line, the name of the file will be printed on the log, along with asterisks before and after, to show the sysop that there is a file on the disk that is not on the directory.

A system or subboard operator, or the user who uploaded the file may enter "E" followed by the file number to change information about it.

10.7 READING SEQ FILES

A user may enter "R" followed by the number of the file to display the contents of a sequential text file.

10.8 SUBBOARD OPERATORS

A user may enter "V" to view the subboard operator (SubOp) of the current subboard. Subboard maintenance can be accessed by the Subop or system operator by entering "Z". There are two options here:

1) Edit the entry file. The entry file of a subboard is the file that is displayed when entering the subboard. If there is already an entry, it will be loaded into the editor.

2) Edit board detail. This option allows the change of the title, access configuration, current subboard operator, and open/closed status.

10.9 COPYING FILES:

If a user is in local or pseudo-local mode, when he enters the UD subsystem, the "copier" protocol is loaded. If he wishes to copy a file, he simply can enter the "Dx" command, and the system will tell him the approximate copy time, and allow him to send it to any device and/or change the name of the file. If no device is specified for the destination device, it will default to one number higher than the source device.

11. SYSTEM MAINTENANCE:

These functions should be reserved for the system operators (Sysops) of the system only. Two of these commands are available to anyone with remote maintenance access, "CW" and "VF". The others either are available in local or pseudo-local only, or need a flag set for the user/access group to access them. Any of these commands can be entered from the Main: prompt, and many can be entered at any prompt. Use "??" at any prompt while in local or pseudo-local mode to view the menu of commands.

11.1 DOS SUPPORT

All DOS support and file reading/writing can be performed on any device that is on line, simply by entering the command followed by either the device number, or the system designated number of the device you wish to work with. If you do not enter a number after the command, it will default to device #8. Here is a list of all the system disks with their designated numbers:

- 1--> System disk
- 2--> Email disk
- 3--> Etcetera disk
- 4--> Gfile disk
- 5--> Pfile disk
- 6--> User disk

For example, if device #9 is your Gfile disk, and you wanted to edit a file on it, you could either enter "WF9" or "WF4" to access the drive.

For a blocks free update on the bottom of the console screen, listing enter "BF" or "BFx" at any prompt.

To send a DOS command to a disk, enter "DC" or "DCX" at any prompt. There are two parts to a disk command, the actual command, and the operand. An example might be "s" (for scratch) as the command, with a filename to scratch as the operand, or "r" (for rename) as the command, with <newname>=<oldname> as the operand. All "wild cards" on disk commands are now supported by C-Net 64. If you enter a "scratch" or "new" command, you will be asked if you are sure, to avoid accidentally erasing important files. After a disk command has been executed, the disk drive status will be displayed.

11.2 DISK DIRECTORIES:

You may enter "DR" or "DRx" at any prompt to view any directory of any device on line. You will be prompted for a pattern, use any wild cards here. For example, entering "*" would give the entire directory, while entering "p.??r*" would give all pfiles with an "r" as the fifth character in the filename.

11.3 CHANGING DEVICE NUMBERS:

"CD" at any prompt will allow you to software change any device numbers that you wish to change.

11.4 COPYING FILES:

Entering "CP" at the Main: prompt will allow you to copy files from any device to any other device on line.

11.5 GARBAGE COLLECTION

Enter "MM" at any prompt to perform a garbage collection and display free memory on the bottom left of the console screen.

11.6 RUNNING A P.FILE:

You may enter "R" to run any p.file that is on the p.file disk. You should be careful that the p.file is not one that is a subroutine in itself, but one that returns you to line #1812 when it is done running, since this can cause stack problems and out of memory errors. To run a p.file as a subroutine needs special coding in the main program.

11.7 READING SEQUENTIAL FILES

Any sequential file may be read from any drive by entering "RD" or "RDX" at any prompt. Reading is terminated when either the end of file is reached, an "up arrow" or a line of more than 80 characters is encountered.

11.8 CREATING OR EDITING SEQUENTIAL FILES

Entering "WF" or "WFx" at the Main: prompt will allow you to create a new sequential file using the editor, or use the editor to edit an existing sequential file. This command is useful for customizing menu files, or files such as sys.start, sys.welcome, or sys.end. When finished writing/editing the file, you may re-write it to a different device, or change the name of the file. This is helpful if you want to edit a file, and want to come back to it later. Just give it a temporary name, and the original file will still be on the disk, along with the new one you created.

11.9 READING FEEDBACK

Enter "VF" at the Main: prompt to view the feedback left by users or new users. Each message is displayed one at a time, beginning with a header containing the user's name, ID number, real name, phone number, and date the message was sent. After each message, you will have the option to send a private message to that user by hitting "M", go on to the next message by hitting "N" or RETURN, quitting by hitting "Q", or, if in local or pseudo-local mode change the access group of that user by hitting "A". While at the "VF:" prompt, if you are in local or pseudo-local mode, you have the option of deleting the feedback or new user feedback.

11.10 READING THE CALLER LOG

Entering "LOG" at any prompt will display the log of callers since the it was last restarted. The caller log contains the user's handle and ID number, logon and logoff times, the names and libraries of uploads and downloads, and the number of posts and responses. (if any). The time that the call log was re-started is displayed on the first line. If there were any system errors or resets, the log will contain the information on what the error was, what line number it occurred in, and if applicable, what pfile it was in. The log also will be sent to the printer if it is on line. To restart the log, enter "NL" to completely clear out the stats and erase the old file, and start a new one.

11.11 EDIT ACCESS/HANDLE/CREDITS/FLAGS:

By entering "EN" at the main prompt in local or pseudo-local mode, a user can change a user's access group, handle, credit points, or flags. If you wish to delete a user, simply change his name to an "up arrow". ("^"). All Email and cw.files will be scratched, and the account that he had will be opened up for a new user. If a users handle is changed, all email files and cw.files will be changed along with the handle. You may also edit any individual users flags with this command. See the chapter on "CONFIGURATING THE SYSTEM" for more information on how to do this.

11.12 FORCED MAIL (CW) FILES

A forced mail file is a file that is unabortably read to a user as soon as he signs on to the system. To create or remove a forced mail file for a user, enter "CW" at the Main: prompt.

There are two commands which may be placed at the very end of a forced mail file:

If the word OFF appears in all capital letters as the very last line of a forced mail file, the user will be logged off as soon as he finishes reading the file.

If the word ERASE appears in all capital letters as the very last, or next to last, line of a forced mail file, the file will be removed from the disk after the user has read it. ERASE and OFF may be used together as long as ERASE appears on the line directly above OFF.

11.13 EDITING OTHER USER DATA:

To edit other data, such as computer type, parameters, etc. for a user, enter "ED" at the Main: prompt in local or pseudo-local mode.

11.14 PASSWORD FOR PASSWORD BOARD:

"PC" will allow you to change the password for any subboards that you've set up as password boards. The initial password is set to "PASS".

11.15 B.A.R. SCREEN:

"BAR" at any prompt will allow users with permission to view the B.A.R. screen.

11.16 ADDING CREDIT POINTS:

You may add credit points to a user on line with "CA".

11.17 ENTERING PSEUDO-LOCAL MODE:

A user with his flag set to give permission may enter "ZZ" at any prompt to enter this mode. This will give him/her access to all local functions. Since this is a VERY powerful command, we again suggest that you reserve it for VERY trusted users only! He may again go back to normal mode by entering "ZZ" again. NOTE: If a user is in pseudo-local mode, and enters the UD subsystem, the copier protocol will be loaded, and he will not be able to upload or download any files in the normal way.

11.18 ERROR TRAPPING

When a BASIC error occurs while C-Net is operating, the error will be "trapped," this is, not allowed to crash the system. The error

-11- SYSTEM MAINTENANCE

number will be displayed followed by the line number that the error occurred on. If your printer is connected and on-line, the error will be logged to the printer. The error will also be logged to disk in a file "etc.error log." To read this file, you must use the "RD3" command. Simply scratch this file, using the "DC3" command, to re-start the error log.

If an error occurs during operation of C-Net other than a BASIC error, such as one that is necessary to hit run/stop and restore to break out of, it is not possible to "RUN" the program again. You must enter "GOTO 9999" to resume program operation. If the error is severe enough, this may not even work, and you will have to re-load the software.

-12- USER LIST SYSTEM

12. USER LIST SUBSYSTEM:

The user list subsystem is a program that allows a user to obtain a list or to perform a search of all the users of the system.

12.1 SPECIFYING CHARACTERISTICS:

If you are looking for users with certain characters in their handle, or with certain computers, or living in a certain area code, you can select that you want to specify characteristic of the users to list. System operators may also specify certain characters in the real first or last name, and certain access groups. Also, a combination of these characteristics may be specified. For example, a search could be performed to find all users with a handle that starts with "S", living in the 313 area code, with access group 1.

12.2 WHERE THE SEARCH BEGINS:

You must specify a user account number to start listing or searching from.

12.3 THE LISTING:

The id number, handle, last call date, area code, then computer type is printed. If the user performing the search is a system operator, the access group, phone number, and real first and last name of each user will also be printed.

12.4 QUICK LIST:

This option permits a user to do a "quick list", which will only show the handle and ID# of the user. The list can be either numerically or alphabetically arranged, and the user can enter the starting ID# or beginning character(s) of the handle to start the list from.

The search ends when either the end of the user data file has been reached, or the user hits the space bar to abort it. When the search is finished, the user is returned to the main prompt.

13. EDITOR SUBSYSTEM:

This is where all messages are written and edited. A maximum number of lines (in multiples of ten) can be set for the editor for each access group or individual user. See the maintenance section for more details on how to set this.

When a user runs out of time while in the editor subsystem, he is NOT logged off of the system until he finishes the message, or runs out of idle time.

Typing a period at the beginning of a line will take the user into "Command Mode" while in the editor subsystem. The user will then be prompted with "Command:". For example, "." followed by "C" will allow a user to change the column length of his message from his normal column length. This can come in handy for formatting text and doing some of the "tricky" word processing techniques.

To exit Command Mode, the user can either press the backspace (delete) key, or another period to put a period as the first character on the line. Typing a character that is not a command is treated the same as a backspace.

13.1 GETTING OUT OF THE EDITOR:

".S" is used to save all text that was typed to the disk. ".A" is used to abort the message and return to wherever the user came from. The only place the abort is not allowed is during a new user logon while he is leaving his personal statement. If he tries to abort this, he is immediately logged off, and his new account is not saved. Attempting to "save" from the editor when there is no text there, or hanging up on the system, is the same as aborting. ".N" may be used to start over. This will erase all text that was entered and let the user start over.

13.2 SEEING WHAT HAS BEEN ENTERED:

".R" is used to read the text. Read will print each line just as it was entered.

".L" is used to list the text. List is similar to read, except that it will print the line number before each line.

".M" is used exactly like ".R", except text is put through C-Net's message command interpreter (MCI) described below.

Not specifying a range for ".R", ".L", or ".M" will cause all of text to be printed.

13.3 MANIPULATING TEXT:

".D" is used to delete lines from text. not specifying a range will cause ".D" to delete the last line of text.

".E" is used to edit lines of text. Not specifying a range will cause ".E" to edit the last line of text. As a line is edited, the original line is printed, and the user may type the line over, and/or use the control-u key to re-type the character that is directly above the cursor. If return or backspace is hit at the beginning of an editing line, no change will be made. to abort a

range of edited lines, the period key may be hit at the first column to display "Exit" and then return.

13.4 INSERT MODE:

".I" followed by a line is used to insert text before the specified line number. If no line is specified, inserting will be performed at the beginning of text. All subsequent entered lines will be placed at the point of insertion. To exit insert mode, and begin to place lines at the bottom of text, ".X" is used.

13.5 LINE NUMBERS:

It is sometimes convenient to be prompted with the current line number before each line is entered. ".O" is used to turn line numbering on and off. when you are in insert mode, line numbers are automatically turned on, and the letter "I" will be placed before the line number.

13.6 WORD WRAP:

Word wrap is on at most all times when in the editor subsystem. A word which will not fit onto the end of a line is automatically brought to the next line to be continued. The only time the word wrap is disabled is while in edit mode.

13.7 SHAPING THE TEXT:

".J" is used to justify text. There are five ways to justify text: left, right, center, expanded, or packed. after ".J" is used, "L" can be hit to left justify text (move to the left border), "R" can be hit to right justify text (move to the right border), "C" to center text, (move to the center of the screen according to column length), "E" to expand text, (insert spaces between words to fill the line), or "P" to pack text. (Take out extra spaces between words). These commands, along with the column length command allow many different formatting techniques.

13.8 SPECIFYING A LINE RANGE:

For many editor commands, such as deleting, editing, replacing, reading, and listing, a line range can be specified. Here is how it's done:

x	line x only
,y	from beginning to line y
x,	from line x to end
x,y	from line x to line y

13.9 MESSAGE COMMAND INTERPRETER (MCI):

The MCI commands in C-Net allow you to use color in 64 color/graphics mode, create special effects like backspacing, ask questions in the middle of a message, test user input, and many other things. The character that is used to trigger the MCI is the english pound key. (The key to the right of the minus (-) key, and to the left of the clr/home key). Outside of the editor subsystem, this key may not be used. Within the editor subsystem, only users with access groups configured to use MCI may enter this key. These commands can be placed anywhere in text, including in the BASIC portion of C-Net, or any of the program files. The "#" symbol has been used here in place of the english pound sign for these

instructions. These commands are always used as #xn where x is a command letter (upper or lowercase) and n is a single digit number or lower case letter.

#An(TEXT)# -- Compare MCI variable n to "(TEXT)". This command is useful for checking for user's handles and such. See the #T command for an example.

#Bn -- Print n bells (ascii \$07) to the user.

#Cn -- Used to change the text color in color/graphics mode. For any one of the 16 commodore colors, (except black, which is not available), replace n with the character beside the color:

1 white	2 red	3 cyan	4 purple
5 green	6 blue	7 yellow	8 orange
9 brown	j pink	k grey 1	l grey 2
m lt green	n lt blue	o grey 3	

#Dn -- Used to branch a number of lines if the condition last tested by #t was not equal.

#En -- Used to branch a number of lines if the condition last tested by #t was equal.

#F1 -- Will print a FORM-FEED character (\$0c) in ASCII mode, or a CLEAR SCREEN character (\$93) in color/graphics mode.

#G1 -- Will stop printing until a character is hit. The key pressed will go into the variable "an\$". Uppercase only will be accepted here.

#Hn -- Will print n backspaces to the screen.

#In -- Will stop printing until something is input followed by carriage return, or return is hit alone. The line inputted will go into the variable an\$. Here also, uppercase only is accepted and stored in an\$.

#Jn -- Used to skip over the next n lines of text.

#Ln -- Used to turn the printer on and off. #L1 for on, #L0 to return the printer to its original state. #L1 will only turn the printer on until the next carriage return is sent. (usually the end of that line)

#Nn -- Print n number of carriage returns or "new lines".

#Pn -- Change the printing mode to one of the following:

- 0 normal printing
- 1 print each character then backspace then same character
- 2 print each character, 8 spaces, then 8 backspaces
- 3 print each character then backspace over it.
- 4 print each character, backspace over it, then same
- 5 print each character then space and back to end of the

line

#Rn -- Enable reverse mode. For Commodore color/graphics mode, prints reverse characters.

#Sn -- Used to change output speed. n is the number of 1/10 seconds between each character.

#Tn(TEXT)# -- Used to test variables to see if they are equal to "(TEXT)". Use #T1 to test an\$, or #T2 to test the access group or the user who is on-line. To check an\$ against "HELLO" you would use #T1HELLO#. (The second "#" signifies the end of the text you want to compare to). Similarly, you would use #T23# to see if a user is a member of access group 3.

#Vn -- Used to print MCI variables. n may be:

- 0 current date and time
- 1 last call date and time of the user
- 2 handle of the user
- 3 real name of the user
- 4 phone number of the user
- 5 the variable a\$
- 6 the variable b\$ (subboard number for entry files and number of callers for sys.welcome)
- 7 the variable an\$ (last #g1 or #i1)
- 8 the variable d2\$ (subboard name for entry files)
- 9 the variable d3\$ (last caller for sys.welcome)
- j
- k
- l
- m
- n
- o

JSA = LAST call

#Wn -- Used to wait n number of seconds before continuing.

#X1 -- Used to immediately end the message. (Causes it to skip over the remaining lines)

Note that the MCI commands may be placed one after another on a single line and anywhere in the middle of any text. If a branch command is encountered but not taken, the rest of the line after the branch will still be read and/or executed.

As mentioned above, the MCI commands can not only be placed in messages, but anywhere in the program if you are modifying it. For example, if you are making a routine which requires a four second pause, you can use #W4 in any output statement.

Following is a sample message containing MCI commands that will ask a user if he is interested in a board event. If he is, he will be asked questions which will be printed to the printer, otherwise the message will be aborted.

Hello #v3#w1, I mean #v2!
Are you interested in the board dinner? #g1#t1Y##e1#x1

#11I am glad that you can make it #v2.
#11How many people are you bringing? #11
#11Do you own your own car? #11
#100k, thanks again, #v2, a Sysop will be contacting
you at #v4 soon! See you there!!!

14. C-NET'S TERMINAL PROGRAM:

[NOTE: This term program may not be compatible with your modems. It was written for Commodore 1670 or Hayes compatible modems, and should also work with most modem types, but not all.]

For added convenience, the C-Net BBS is equipped with a built-in terminal program. To activate the terminal, you must be at the "Waiting For Call" screen and press the left arrow key, which is located at the upper left hand corner of the keyboard. The message "Loading C-Term" will be displayed, and soon the C-Term main menu will appear.

14.1 CONNECTING TO A REMOTE SYSTEM:

To call out with a Hayes compatible modem, enter terminal mode by pressing the number 1 from the C-Term menu, then use the modem commands to dial and connect, or, if you have entered BBS numbers into the "sys.phonebook" file on your system disk, (see the "CONFIGURATION" chapter), you can use the phonebook by entering 7 at the menu. Once you get to the phone list, you can follow that menu to dial numbers.

To call out other types of modems, you must call with a phone connected to the same line before entering C-Term. When C-Term is activated, the modem will pick up the line.

To exit the terminal mode, press the left arrow key again.

14.2 TERMINAL OPTIONS:

Option 2 from the C-Term menu can be used to change the baud rate used, whether or not to translate text into standard ASCII, to change the current active U/D protocol, and to set tone/pulse dialing on 1670/Hayes compatible modems.

14.3 UPLOADING AND DOWNLOADING:

Uploading and downloading of single files is supported by C-Term. There is an option on the C-Term menu to select the disk drive that will be used for transfers.

14.4 DOS SUPPORT:

Option 6 from the C-Term menu will allow you to perform a disk directory, send a disk command to the current U/D drive, and to read any sequential file from the U/D drive. Any disk command may be used, such as "s0:hello" to scratch the file "hello" or "n0:diskname,id" to format the disk with the name "diskname" and disk ID "id." When reading a sequential file, you are given the option to simultaneously send the file to the modem. This may be useful for uploading a prewritten message.

14.5 RESETTING THE BBS:

Option 9 from the menu will re-start C-Net to the "Waiting For Call" mode.

15. ONLINE FUNCTIONS:

This section explains the eight functions available to you while the system is running. To move the pointer through the options in the menu located at the bottom of the status window at the top of the screen, use the F3 and F5 keys to move left and right, respectively. To select or deselect an option, use the F7 key. An option is considered selected when there is a checkmark just to the left of the option abbreviation. An option is considered deselected when there is no checkmark to the left of an option abbreviation.

15.1 (Sys) SYSOP STATUS

If you select this option, you are indicating to users that you are around to chat with them. When this option is selected, and a user requests a chat, the message "Paging Sysop!" will be displayed, and five beeps will be made on your monitor if the volume is turned up. Otherwise, the user will be told that you are not available, and will be asked if he would like to leave feedback, instead.

15.2 (Acs) ACCESS CHANGE

When selected, this option allows you to change the user's access group while on-line, sometimes known as "on-line validation." Use the F3 and F5 keys to change the access group number while this option is selected. In order for a user to take full advantage of his new access group, he must either enter "ST" at the Main: prompt, or you must remove then replace the checkmark on "Acs" and leave it there until he gets the Main: prompt printed again. These are the only locations that his new access group configuration can be read in from the disk.

15.3 (Loc) LOCAL MODE:

Select this option when "Status: Waiting For Call" is displayed to enter the system's local mode subsystem. If you select this option while a user is on the system who has called through your modem, all output to the screen will no longer go to the modem, only to your screen, until this option is deselected. If you are logged on in local mode, and deselect this option, the system will reset, going back to the "Status: Waiting For Call." screen.

If you turn on the checkmark while a user is on and enter "ZZ" from the main console keyboard, the user will be put into pseudo-local mode, and have all local maintenance functions available until he (or you) enters "ZZ" again with the checkmark off.

15.4 (Tsr) TIME STILL REMAINING:

With this option selected, you can use the F3 and F5 keys to change the amount of time that the user has remaining on the system on that call before the system will automatically log him off. Time remaining is displayed at the very top of the screen following "TSR=." Also with this option selected, the F1 key may be used to instantly bring the time still remaining to zero minutes.

15.5 (Cht) CHAT MODE:

When this option is selected at any input prompt, the message "Entering Chat Mode." will be printed, and the user and yourself will enter "chat mode." In chat mode, you and the user may freely type to each other until this option is deselected, at which time the message "Exiting Chat Mode." is displayed and the user is placed