CARINA II

If you want to run someone else's BBS, you have many choices, but if you want to run your own BBS, you want:

Carina II

Explore the power of a bulletin board that, until now, would require at least a 16-bit computer to run. Carina II offers to 8-bit Atari owners a bulletin board system that can be expanded, modified, and personalized to your own taste. Its modular design offers enormous power and expandability. The Modem Operating Environment offers on-line programming and on-line SpartaDOS! It's feature-packed and fun to use!

Requirements: Atari Xl/Xe computer, at least 500k of storage capacity (combination of disk drives and/or ramdisk), a modem, and SpartaDos 2.3 or greater.

Recommended: 192k ramdisk or greater
R-Time 8 cartridge

Index

Introduction

Congratulations! You've purchased the most powerful, flexible, and easily modifiable bulletin board system for your Atari computer!

Please take the time to read this manual! You will save yourself a lot of time by following through this manual step-by-step. Despite its enormous size, the Carina II bulletin board system is very easy to set up IF you know what to do! I hope this manual will serve its purpose as a manual and not just as a means of keeping the disks flat during mailing (although that's part of its purpose too). I've spent many many hours writing this manual so please take the 30 minutes or so it is going to take to read it. If you are having trouble getting something to work, and you have read the manual (thoroughly), give me a call on the support-line listed in the back of this manual. Please try to avoid leaving me a message on the support BBS. It is very difficult to determine what you are doing wrong by reading a message. Calling the voice line is the best and quickest way to get the answers.

SEND IN THAT REGISTRATION CARD!!! Make sure you are satisfied with the program first, but when (noticed I said when, not if) you decide to keep it, send in the card! Carina I owners who sent in their card got an extra $10 off Carina II JUST for sending in the card. That was on top of the savings they got just for owning Carina I. Sending in your registration card will help us keep you informed about new products available for your Carina II BBS. It will also keep us informed about where Carina II's are located. If you want, we will also put you on our Carina II BBS listing to help you get more callers!

Before you get started, make sure you make at least two backups of your Carina II BBS disks. The disks are written on both sides, so don't forget to copy the back sides. If you do not like writing to the back sides of disks, or your system cannot do it, then copy each side onto a separate disk -- leaving you with four disks per backup copy. These disks are unprotected for your convenience; however, there are unique serial numbers encoded into each Carina II BBS product. These serial numbers can be traced back to the original owner. This serial number can be displayed on-line. Needless to say (but I'll say it anyway), this type of protection against software piracy is very effective when it comes to bulletin boards because it is very easy to get caught. For your sake and mine, please don't pirate this program. Carina Software Systems is one of the few companies still supporting the 8-bit Atari. Please don't drive us out of the market too.

System Requirements

To run this program, you must have all of the following: an XL or an XE computer, at least 500k of storage capacity (including ramdisk and drives), SpartaDos version 2.3 or greater, and a Hayes-compatible modem with an interface or an XM301/1030 modem with the XM301-Hayes emulator or a Supra modem with the Supra-Hayes emulator, or an SX-212 modem with the SX-Hayes emulator. If you are using an SX212 modem without an interface, you will need to use the SX212 Hayes emulator located on disk number 2 side 1 of your Carina II master disks. The XM301/1030 and Supra Hayes emulators are sold separately.

The following hardware is HIGHLY recommended: a 192k ramdisk or greater, and an R-Time 8 cartridge.

The following hardware would be nice to have: an MIO interface and a hard drive.

Carina II consists of 19 modules (not including the game). That's a lot of modules. To give you an idea of how big this system is, Carina I consisted of 5 modules (and it was considered big at the time). Even with the 192k ramdisk, it is still going to be a tight fit. Needless to say, the more modules you have in your ramdisk, the faster your system is going to be. If you have a hard drive, then you may not need the ramdisk. A hard drive will be only a little slower than a ramdisk, however, this will make your hard drive work for a living.

The R-Time 8 cartridge is a clock. It comes in real handy because Carina II uses the Z-Handler supplied on your SpartaDos disk. The Z-Handler is much more accurate when you use the R-Time 8 cartridge. It also allows you to skip entering the time and date upon boot-up. Carina II uses the Z-Handler extensively, and if you happen to enter in the time or date wrong, you can actually mess up your system. The R-Time 8 cartridge allows you to be a little more relaxed. It knows what it's doing; SysOps, on the other hand, can be a little absent-minded at times.

If you have a hard drive, you are going to be very happy. This BBS was made for you. No other BBS for the Atari 8-bit gives you close to the amount of power that this one does. This is a VERY expandable program, and if you have room to expand, then you are going to be a very happy SysOp.

Structure of Carina II

Carina II, like Carina I, implements what is known as modular design. This means that the BBS consists of multiple programs (modules). Together, these modules make up the Bulletin Board SYSTEM -- putting the System back into BBS so to speak. Carina II also utilizes a resource called MOE (the Modem Operating Environment). MOE is an operating system overlay that effectively turns your modem into a keyboard/display screen. It allows someone calling in to access your computer system as if it were their computer system. What does this mean? If you listed Carina II's BASIC code to your printer, you would see a semi-normal BASIC program. You will find that there aren't any modem commands (or very little). This is because MOE takes care of redirecting everything through the modem. This means that if you decide you want to add or change something in Carina II, you don't have to be concerned about the modem either. All you have to think about is BASIC, nothing else. This, along with modular design, makes Carina II the easiest BBS to modify and the most expandable BBS as well.

Sections in Carina II

Carina II uses what is known as Special Interest Groups (or SIGs) -- with Carina II they are called Sections. A section is like a little bulletin board within a big bulletin board. You can have up to 26 different sections on-line at once. Each section has its own message base, file-transfer area, database, vote-poll, games area, and bulletins. You can even assign it one or more SysOps. A SysOp within a SIG is called a SigOp (rather appropriate don't you think?). You can assign a user one of four different access levels within a section: no access, read-only access (for the message base), read/write access (for the message base), or SigOp access. If a user has no access to a section, then the section will not be displayed when he tries to display the available sections to the screen. The section will be totally hidden from that user. A user with read-only access will be able to do everything that a user with full access can do except write a message to that section's message base. This is very convenient when using a message base as a role-playing game. This way, only users who are participating in the game can exchange messages, but everyone can watch. A user with SigOp access has special commands that will allow him to do maintenance within the section such as update the bulletins, create a vote-poll, validate uploaded files, compact the file area, edit a user's status (within that section only), etc....

Getting Started

Because Carina II will only work with SpartaDos, it takes advantages of some of SpartaDos's features. One such feature is the subdirectory (or folder -- I'll refer to a subdirectory as a folder because it's easier to say). Carina II needs 4 main folders in order to operate. These folders are named MODULE, SYSMOD, SYSTXT, and SYSTEM. The MODULE folder will contain all of your BBS programs used by normal users. The SYSMOD folder contains all SysOp programs. These modules are in a separate folder so that if you don't have enough room in your ramdisk to fit all of your modules, you can place your SysOp modules on a disk drive. It will be slower for SysOps, but normal users won't notice any difference in speed. The SYSTXT folder contains all of the system text files. This includes such text files as the help database, system menus, and regular BBS text files (like the login/logoff screens).

These folders should contain the following files:

The MODULE folder should contain:

WINDOW.BIN	(machine language routines to load/save user stats.)
TRANSFER.BIN	(machine language routines to do file transfers)
BOOTBBS	(loads pointers into SECTIONS.DAT and programs modem)
WAITCALL	(waits for a call and activates MOE)
GATEWAY	(logs users on and off of the BBS)
USERCOM	(miscellaneous user commands)
MAILCOM	(user commands related to mail transfers)
FILECOM	(user commands related to file transfers)
MAILTRAN	(module where actual mail transfers take place)
FILETRAN	(module where descriptions/directories are displayed)
FILERECV	(module where upload descriptions are entered)
XY_TRAN	(X-Modem/Y-Modem upload/download module)
CM_TRAN	(C-Modem upload/download module)

The SYSMOD folder should contain:

SYSCOM	(Extended SysOp commands)
USEREDIT	(edits user's status)
FILEVAL	(validate uploaded files)
MAKEVOTE	(make a vote-poll)
COMPACT	(compact file area)
EDIT	(edit bulletins (or other text files while in E-Mail))
COPY	(used to copy files when doing a local upload)
TERM	(terminal program)

The SYSTEM folder should not contain anything until after you have created some sections. Any files created within this folder are temporary files -- all except a file called SECTIONS.DAT. As the name implies, this file contains information about the sections that you will have created. If the SYSTEM folder is to be located in your ramdisk, you will need to copy this file back to a disk drive after you have created your sections. I will remind you about this again later; also, since this folder is for temporary files, you should leave some room for file-expansion on the drive in which this folder is placed (about 30 single-density sectors).

The SYSTXT folder should contain:

MAIN.HLP
A.HLP
B.HLP
C.HLP
D.HLP
E.HLP
CA.HLP through CW.HLP
(these files all make up the help database. These files are all part of the HELP command within the BBS).

CARINA.TXT	(text file displayed while waiting for a call)
NEWUSER.TXT	(displayed to new users)
ACCOUNT.TXT	(shown to new users right before new account number)
NOTIME.TXT	(shown to users with no time left who try to log on)
BLACKLST.TXT	(displayed to users who have been blacklisted)
MEMOINFO.TXT	(additional user-information SysOp wants to know)
CHAT.TXT	(message displayed after user types CHAT)
STATUS.TXT	(text file displayed when user types STATUS)
SYSMENU.TXT	(SysOp's main menu in SysCom module)
BULLETIN.TXT	(main bulletins and bulletins for Electronic Mail. This file you will need to create yourself)

Files with .ATA extenders are for ATASCII (Atari 8-bit) callers. Files with .ASC extenders are for normal ASCII users. Files with .V52 extenders are for ST-VT52 callers.

MENU.ATA	(main menu)
INTRO.ATA	(intro screen)
LOGIN.ATA	(displayed after successful logon)
LOGOFF.ATA	(displayed directly before logoff)
MENU.ASC	
INTRO.ASC	
LOGIN.ASC	
LOGOFF.ASC	
LOGIN.V52	
LOGOFF.V52	

The following files are help menus used within the BBS. They are not a part of the help database:

MSGREAD.HLP	(message read parameter help)
MESGSRCH.HLP	(message search field help)
MESSAGES.HLP	(help for prompt displayed after a message)
MSGEDIT.HLP	(message editor help)
FILEREAD.HLP	(file browse parameter help)
FILESRCH.HLP	(file search field help)
FILEDIR.HLP	(help for prompt displayed after a directory page)
FILES.HLP	(help for prompt displayed after a file description)
EDIT.HLP	(text editor help)
USEREDIT.HLP	(user editor help)
FILENAME.HLP	(filename help - for filenames of upload files)

Different Device Handlers for Your Modem

You will need to select the proper modem device handler that needs to be used with your modem. If are using a Hayes-compatible modem and an interface, the handler that will be used will be determined by the interface you are using. Carina II supports all of the following interfaces: 850 interface, P:R: Connection, Multi I/O, and the ATR8000 interface. The 850 uses a file called RS232.COM located on your SpartaDos master disk. If you will be using a P:R: connection, you will need to use the PRC.SYS file located on your P:R: connection's disk. The ATR8000 uses a handler called AT_RS232.COM. The MIO needs no modem device handler (it is built into the MIO).

If you are using either a Supra 300 (MPP 1000C/E), an XM301/1030 modem, or an SX-212 modem (without an interface), then you will need to use one of these handlers: MPPRS232.COM (Supra 300 modems), XMRS232.COM (for XM301/1030 modems), or SXRS232.COM (for SX-212 modems). If you are using a Supra 1200 baud modem, you will have to use an interface. There is no modem handler that will make this modem work without an interface. If you are going to use a 1030 modem, you will also need a ring detector. Ring detectors are normally made by 1030 owners since they cannot be FCC approved. You can acquire a text file that will show you how to make such a ring detector on our Support BBS. The phone number is located in the back of this manual. Whichever handler you end up using, make sure that it is

called RS232.COM so that you will be able to follow this manual when referring to the RS232 handler.

If you plan on using an MIO without using the MIO's RS232 port (i.e. you plan on using an additional interface with your modem or you are using a modem that does not require an interface (like an SX212 modem)) then you will need to turn off the port assignment within your MIO's configuration menu (i.e. set port assignment to "none").

Modem Dip-Switch Configurations

Your modem should be configured to the following settings:

- o Your DTR line should be allowed to be controlled by software. It should not be always set to active (high).
- o Your modem should respond in English. It should not send back numeric responses.
- o Modem responses (result codes) should be sent.
- o Your modem should echo commands in command mode.
- o Your modem should not auto-answer. Since Carina II makes your modem answer the phone, your modem should not answer the phone automatically.
- o Your modem's carrier detect line can be either on or off. It shouldn't matter.
- o Your modem should be configured for a single-line phone jack.
- o Your modem should recognize modem commands.
- o Sending +++ to your modem should not hang up your modem.

After you set your modem's configuration, you will need to turn your modem off and back on again before your changes will take effect.

If you have a modem that has 'internal dipswitches' (meaning that your modem has a set of AT commands that will configure your modem and a battery that will retain this configuration), you'll need to boot up your favorite terminal program to set your internal dip switches. Boot your terminal program, make sure you are in ASCII mode, go into terminal mode and type:

AT&F	- This will restore your modem's factory settings
AT&D2	- Makes modem hang up and go into command mode when DTR line is 'pulled'
AT\D0	- CTS and DSR always on (notice "\" not "/")
AT&W	- Writes this configuration to your modem's memory

Notice: You should enter these commands in this order!

If you have a Avatex 1200 modem (not the Avatex HC) or a Supra 1200 which is the exact same modem, all of your dipswitches located on the back of your modem should be in the up position.

Setting Up Carina II

IF YOU DO NOT HAVE A HARD DRIVE, SKIP TO STEP B

STEP A:

SETTING UP CARINA II ON YOUR HARD DRIVE:

Make sure your hard drive is equipped to work with SpartaDos. Also make sure that you have SpartaDos written to your hard drive. If you want to reformat your hard drive, consult your SpartaDos manual on how to do this. Make sure that SpartaDos is on your hard drive when you have finished. SpartaDos should now be bootable. Copy the file ZHAND.COM from your SpartaDos master disk onto drive 1 of your hard drive. Copy MOE.COM from your Carina II master disk number 2 side 2 onto drive 1 of your hard drive. If you are using a modem interface other than an MIO, copy the interface's corresponding R: modem device handler (as determined previously) to drive 1 of your hard drive. Copy USRVAL_0.DAT from your Carina II master disk number 2 side 2 onto drive 1 of your hard drive. Aside from DOS, you should now have at least 4 files on your hard drive (3 if you are using the MIO).

GO TO STEP C

STEP B:

SETTING UP CARINA II ON YOUR FLOPPY DRIVE:

There are two different types of disks that you will need to make, boot disks and data disks. You will need to make as many data disks as you will have floppy drives on-line. For example, if you will be running the BBS off of 4 floppy drives, you are going to need 4 data disks. The number of boot disks will depend on whether or not you will be using a ramdisk and, if you will, how big it will be. If you will not be using a ramdisk, you will only need one boot disk. If you

will be using a ramdisk, you will need to make additional boot disks that will contain any files that will need to be copied to your ramdisk. The number of these additional disks will depend on the number of files you will be copying. Format as many new disks for data disks that you will require and label them according to which drive each disk should be placed (e.g. if you have 4 drives, format 4 new disks and label them 1 through 4). You will not need to write DOS to any of these disks. The only disk that will need DOS is your first boot disk.

To construct your first boot disk, format another new disk and make sure SpartaDos is written to it. SpartaDos should now be bootable. Copy the file ZHAND.COM from your SpartaDos master disk onto this new disk. Copy MOE.COM from your Carina II master disk number 2 side 2 onto this new disk also. If you are using a modem interface other than an MIO, copy the interface's corresponding R: modem device handler (as determined previously) to this new disk as well. Aside from DOS, you should now have at least 3 files on your first boot disk (at least 2 if you are using the MIO).

On your data disk for drive one, place the file USRVAL_0.DAT on it. This file is supplied on your Carina II master disk number 2 side 2.

You should now have 1 boot disk and as many data disks as you have disk drives. Only data disk number 1 should have anything on it -- the file USRVAL_0.DAT.

STEP C:

IF YOU ARE GOING TO USE A RAMDISK, SKIP TO STEP D

RUNNING CARINA II WITHOUT USING A RAMDISK:

If you do not have a ramdisk, Carina II will run much slower. If you are using a hard drive, this decrease in speed is easy to live with, but if you are going to run the BBS modules off of floppies, have fun! In either case (whether using a hard drive or using floppies) setting up the system without a ramdisk is basically the same. If you are using floppy drives, make sure you have all of your data disks in all of the drives you plan to put on-line. You need to create the four main folders (MODULE, SYSMOD, SYSTXT, and SYSTEM) on one (or more) of your drives and copy all of the files in corresponding folders on your Carina II master disks into each of these new folders. Note: The SYSTEM folder is not on your Carina II master disks. This folder is empty when your system is first put up. Simply create this folder, copying nothing to it. You can place these folders on any drives you want (that will remain online during the bulletin board's operation). If you are using a hard drive, try to keep these folders grouped together on the same drive (although it is not necessary). Notice that side 1 and side 2 of disk 1 of your Carina II master disks both have MODULE folders. This is because all of the files that belong in the MODULE folder would not all fit on one side of the disk. Copy all files within both of these folders into the one MODULE folder that you create on one of your data disks (partitions). If you do not have enough room anywhere to put all of these modules in one MODULE folder, then you are out of luck. You'll need to either get at least one drive that can hold all of them in this folder or send the program back (nah, get the drive).

GO TO STEP J:

STEP D:

USING A RAMDISK WITH CARINA II:

Here is a list of suggested folders that should be placed within your ramdisk according to ramdisk size:

o 64k ramdisk (standard 130xe):

SYSTEM>

o 192k ramdisk (Rambo XL, 256k MIO w/printer buffer, etc...):

SYSTEM>
MODULE>
SYSMOD>

o 256k ramdisk (modified 130xe, 256k MIO w/o printer buffer, etc...):

SYSTEM>
MODULE>
SYSMOD>
(Password files and miscellaneous data files can go here too if you want to risk losing them due to a power failure. There is a facility that makes Carina II backup any files to a disk drive as frequent as every hour; however, this means you will also have to leave room on a disk drive for these files)

o 512k ramdisk or greater (modified 130xe, 1-meg MIO, etc...):

SYSTEM>
MODULE>
SYSMOD>
SYSTXT>
(password file/miscellaneous data files as with 256k ramdisk)

When using a ramdisk, these folders will have to be created upon initialization in your ramdisk and the appropriate files will have to be copied into them.

IF YOU ARE USING A RAMDISK WITHIN YOUR MULTI I/O, SKIP TO STEP F

STEP E:

USING A RAMDISK BUILT INTO YOUR COMPUTER:

If you are using a computer ramdisk, you will need to use the RD.COM file supplied on your SpartaDos disk. Initializing a ramdisk is performed by typing RD D7: (initializes drive 7 as a ramdisk) at the D1: prompt. This will also format the ramdisk. You will be doing this within your initialize batch file.

GO TO STEP G

STEP F:

USING A RAMDISK WITH YOUR MIO:

To use your MIO ramdisk, you may partition your ramdisk any way you'd like. I would suggest you dedicate one partition of your ramdisk to as many of the four main Carina II folders as you can. If you have any extra free memory left, you can use it as you see fit. Consult your MIO manual as to how to initialize your MIO ramdisk.

STEP G:

You will next be creating an initialize batch file. This batch file will create your ramdisk (if you are not using an MIO), create folders in that ramdisk, and copy the appropriate files into those folders. A batch file is simply a text file. When you execute a batch file, SpartaDos redirects all input that would normally come from the keyboard to a disk file. This is used to type out a series of commands that are executed on a regular basis. To execute a batch file that has already been created, simply type a minus sign followed by the batch file name. For example, at the D1: prompt you would type -INIT to execute the batch file called INIT.BAT located on drive one (refer to your SpartaDos manual for more information about batch files).

IF YOU ARE NOT USING A HARD DRIVE, SKIP TO STEP I

STEP H:

USING A RAMDISK WITH A HARD DRIVE:

You now need to create the four main folders (MODULE, SYSMOD, SYSTXT, and SYSTEM) on your hard drive and copy the files in corresponding folders on your master disk into each of these new folders. Note: The SYSTEM folder is not on your Carina II master disks. This folder is empty when your system is first put up. Simply create this folder, copying nothing to it. You can place these folders on any drives you want; however, it would be better if you could place all of these folders on the same drive for consistency's sake. It would also be a good idea to create these folders on drive one (but it's not necessary). Notice that side 1 and side 2 of disk 1 of your Carina II master disks both have MODULE folders. This is because all of the files that belong in the MODULE folder would not all fit on one side of the disk. Copy all files within both of these folders into the one MODULE folder that you create on one of your hard drive partitions.

Assume that you have created the four main Carina II folders on drive one, and you would like to place them on your ramdisk on drive seven. You will need to create an initialize-batch file that will create these folders on your ramdisk and copy all of the files within these folders to the folders on your ramdisk. To do this, go to SpartaDos, and at the D1: prompt type:

COPY E: D1:INIT.BAT

The screen will then be cleared. Assuming the before-mentioned setup (your folders are on drive 1 and your ramdisk is drive 7) type the following (PLEASE MAKE NOTE OF THE COMMENTS IN PARENTHESES! DO NOT TYPE THESE COMMENTS WHEN MAKING THIS BATCH FILE, AND ONLY TYPE THE ENTRY CORRESPONDING TO THE COMMENT IF THE CONDITION SPECIFIED BY THE COMMENT IS MET!):

RD D7: (only if you are using a ramdisk built into your computer)
CREDIR D7:MODULE
CREDIR D7:SYSMOD
CREDIR D7:SYSTXT
CREDIR D7:SYSTEM
COPY D1:MODULE> D7:MODULE>
COPY D1:SYSMOD> D7:SYSMOD>
COPY D1:SYSTXT> D7:SYSTXT>
COPY D1:SYSTEM> D7:SYSTEM>
CTRL-3

The CTRL-3 means -- while holding down the Control key, press 3. Do not actually type the characters CTRL-3. If your ramdisk is a drive other than drive 7, simply replace all the 7's with the drive number that your ramdisk resides. If you have a ramdisk BIGGER THAN 256k, you should have no trouble fitting all of these folders into your ramdisk. If you do have a 256k ramdisk, then you will need to omit the CREDIR D7:SYSTXT line and the COPY D1:SYSTXT> D7:SYSTXT> line. You will not have enough room for your system text files in your ramdisk. If you have an even smaller ramdisk, you will need to omit any other CREDIR and COPY commands that are not listed in the suggested ramdisk set-up section. Any room left over in a large ramdisk may be used for any other files you'd like to place on it. Don't worry about what you are going to place there until after you have set up your Carina II completely.

If you plan on putting your password file into ramdisk too, then add the following lines right after the last CREDIR command in your batch file:

COPY *.FLE D7:
COPY *.DAT D7:

This will copy your password file, index file, and all system data files into your ramdisk. We will be discussing what these files are later on.

If you would feel more comfortable using a text editor to create this batch file as opposed to using the screen editor (E:), by all means, use a text editor.

Now that you have created your initialize batch file, you are ready to test it out. Make sure that BASIC is installed, turn off your computer, wait a few seconds and turn it back on. You should get a READY prompt. Type DOS and you should get the D1: prompt. Now type "-INIT". Your batch file should then be run, your folders in your ramdisk should be created, and all files belonging in those folders should be copied to it. You should then be left at the D1: prompt. Now check your ramdisk and see if everything that is supposed to be there is actually there by doing a directory of your ramdisk (DIR D7: (assuming drive 7 is your ramdisk drive)). If all of your folders are there, then you should check to see if all of the files that are supposed to be in those folders are there as well. To do this, type "DIR D7:FOLDER-NAME>". For example, to see all of the files within the MODULE folder on your ramdisk you would type "DIR D7:MODULE>" (assuming again that drive 7 is your ramdisk). Remember, nothing should be in your SYSTEM folder at this point.

If you appear to have done something wrong, first make sure that your initialize batch file is set up for the proper system. If it appears to be ok, make sure that your boot-disks all have the proper folders on them and make sure that the folders contain the correct files. If after a COPY command is displayed by your batch file, no filenames are immediately displayed, then SpartaDos could not either find the files or it could not find the proper folders on your boot-disks. Go back to the beginning and check to make sure you followed directions correctly.

GO TO STEP J

STEP I:

USING A RAMDISK WITH FLOPPY DRIVES:

If you are using a ramdisk (hopefully you are), and disk space is at a premium, you will want to make some more boot disks. These boot disks will allow you to load as many modules as you can into your ramdisk without having to leave the disk in the drive. You will be copying as many modules as you can from your boot disks to your ramdisk, and then you can take the boot disk out and put in a data disk. The data disk will contain such things as message bases, download files, etc....

On the same disk that you have SpartaDos your Z-handler, MOE, and your RD.COM file (if you are using it), create a folder called MODULE by typing CREDIR MODULE at the D1: prompt (refer to your SpartaDos manual for more information about this or any other SpartaDos command). Place as many user modules as you can into this folder. Hopefully you can fit all of them into this folder. If you have only a single-density drive, you aren't going to be able to fit them all in it. If this is the case, you are going to need to format another disk, create another MODULE folder, and place the remaining user modules into that folder.

Depending on how big your ramdisk is, do the exact same thing with any other folders that you can fit on your ramdisk (SYSMOD, SYSTXT, SYSTEM, etc...) -- as you have previously determined by looking at the suggested setups for different ramdisks. Note: The SYSTEM folder is not on your Carina II master disks. This folder is empty when your system is first put up. Simply create this folder, copying nothing to it.

What you will eventually be doing is creating a batch file that will copy all of your modules from your disk MODULE folder into your ram MODULE folder by doing (for example) a COPY D1:MODULE> D7:MODULE> (assuming drive 1 is your disk drive and drive 7 is your ramdisk). If you had to make two module folders on two separate disks, then you will need to swap disks and do the copy again; then all of your user modules will be placed in the MODULE folder on your ramdisk.

Assume that you have created the four main Carina II folders on drive one, and you would like to place them on your ramdisk on drive seven. You will need to create some initialize-batch files that will create these folders on your ramdisk and copy all of the files within these folders to the folders on your ramdisk. You will need as many initialize batch files as you have boot disks. For example, if you have 5 boot disks, you will need 5 initialize batch files -- one for each boot disk. We must first create the initialize batch file for boot disk number one (the one with DOS, MOE, etc... on it. To do this, go to SpartaDos, and at the D1: prompt type:

COPY E: D1:INIT.BAT

The screen will then be cleared. Assuming the before-mentioned setup (your folders are on drive 1 and your ramdisk is drive 7) type the following (PLEASE MAKE NOTE OF THE COMMENTS IN PARENTHESES! DO NOT TYPE THESE COMMENTS WHEN MAKING THIS BATCH FILE, AND ONLY TYPE THE ENTRY CORRESPONDING TO THE COMMENT IF THE CONDITION SPECIFIED BY THE COMMENT IS MET!):

```
RD D7:                                  (only if you are using a ramdisk built into your computer)
CREDIR D7:MODULE
CREDIR D7:SYSMOD
CREDIR D7:SYSTXT
CREDIR D7:SYSTEM
COPY D1:MODULE> D7:MODULE>
;INSERT NEXT BOOT DISK AND TYPE -INIT
CTRL-3
```

The CTRL-3 means -- while holding down the Control key, press 3. Do not actually type the characters CTRL-3. If your ramdisk is a drive other than drive 7, simply replace all the 7's with the drive number that your ramdisk resides.

The above batch file is for a boot disk that was able to only fit the MODULE folder on it (or part of the MODULE folder). If you were able to fit any other folders on this disk, then add the corresponding COPY commands to the batch file that will copy the files within those folders to your ramdisk.

Your second boot disk will contain any other folders that would not fit on the first boot disk (assuming that your ramdisk is large enough to hold any more folders). You will now need to create an initialize batch file for this boot disk as well. Unless this is your last boot disk, your next INIT.BAT file should consist only of copy commands. It should copy the contents of all folders on this next boot disk into your ramdisk.

Let's take the example of a someone who is trying to run Carina II on floppy drives and a 192k ramdisk (built into their computer), and a single-density drive as drive one. The boot disk directories would look something like this:

DISK 1:

X32D.DOS
MOE.COM
ZHAND.COM
RS232.COM
MODULE <DIR>
INIT.BAT

the module folder would contain:

WINDOW.BIN
TRANSFER.BIN
BOOTBBS
WAITCALL
GATEWAY
USERCOM
MAILCOM

DISK 2:

MODULE <DIR>
INIT.BAT

this module folder would contain:

FILECOM
MAILTRAN
FILETRAN
FILERECV
XY_TRAN
CM_TRAN

DISK 3:

SYSMOD <DIR>
SYSTEM <DIR>
INIT.BAT

the sysmod folder would contain:

SYSCOM
USEREDIT
FILEVAL
MAKEVOTE
COMPACT
EDIT
COPY
TERM

the system folder would contain nothing at this point, but will contain the file SECTIONS.DAT by the time you are finished.

Your initialize batch file for disk 1 would contain the following information:

```
RD D7:
CREDIR D7:MODULE
CREDIR D7:SYSMOD
CREDIR D7:SYSTEM
COPY D1:MODULE> D7:MODULE>
;INSERT BOOT DISK 2 AND TYPE -INIT
```

Your initialize batch file for disk 2 would contain the following information:

```
COPY D1:MODULE> D7:MODULE>
;INSERT BOOT DISK 3 AND TYPE -INIT
```

Your initialize batch file for disk 3 would contain the following information:

```
COPY D1:SYSMOD> D7:SYSMOD>
COPY D1:SYSTEM> D7:SYSTEM>
;INSERT BOOT DISK 1 AND TYPE -CARINA
```

This may seem confusing, but it is really very simple. All you are doing is creating a ramdisk, creating folders in that ramdisk, and copying the appropriate files into those folders. If you notice the last comment, it says to insert boot disk 1 and type -Carina. You will be creating another batch file called CARINA.BAT next.

STEP J:

SETTING UP YOUR RUN-CARINA II BATCH FILE:

A batch file is simply a text file. When you execute a batch file, SpartaDos redirects all input that would normally come from the keyboard to a disk file. This is used to type out a series of commands that are executed on a regular basis. To execute a batch file that has already been created, simply type a minus sign followed by the batch file name. For example, at the D1: prompt you would type -CARINA to execute the batch file called CARINA.BAT located on drive one (refer to your SpartaDos manual for more information on batch files).

We now need to make your Run-Carina II batch file. To do this, make sure the boot disk with DOS, MOE, etc... is in drive one (if you are not using a hard drive), go to SpartaDos, and at the D1: prompt type:

COPY E: D1:CARINA.BAT

The screen will then be cleared. Type the following (PLEASE MAKE NOTE OF THE COMMENTS IN PARENTHESES! DO NOT TYPE THESE COMMENTS IN PARENTHESES, BUT PAY SPECIAL ATTENTION TO THEM!):

```
ZHAND
RS232                              (only if you are NOT using the MIO as a modem interface)
MOE
DATE                               (only if you are NOT using an R-Time 8 cartridge)
TIME                               (only if you are NOT using an R-Time 8 cartridge)
CAR
REM  - INSERT DATA DISK AND TYPE:  (only if you are NOT using a hard drive)
REM  - RUN "D7:MODULE>BOOTBBS"     (only if you are NOT using a hard drive)
PAUSE                              (only if you are NOT using a hard drive)
RUN "D7:MODULE>BOOTBBS"            (only if you are using a hard drive)
CTRL-3
```

The CTRL-3 means -- while holding down the Control key, press 3. Do not actually type the characters CTRL-3. Only type in a line that is conditional upon your having certain equipment only if that condition is met. For instance, if you do have a ramdisk, but it is built into your MIO, and you are using your MIO as a modem interface, you have a hard drive, you do not have an R-Time 8 cartridge, and say your ramdisk was drive 8 not drive 7, then your batch file would look like this:

```
ZHAND
MOE
DATE
TIME
CAR
RUN "D8:MODULE>BOOTBBS"
CTRL-3
```

Also keep in mind that your RS232 handler might be called something else (AT_RS232, MPPRS232, XMRS232, SXRS232, etc...).

If you would feel more comfortable using a text editor to create this batch file as opposed to using the screen editor (E:), by all means, use a text editor.

You should now be ready to get the program running to the point where you can configure and initialize it. Let's find out! Turn off your computer, wait a few seconds, and turn it back on again (make sure that BASIC is installed and your first Carina II boot-disk is installed (if you are not using a hard drive)). After the computer has booted, you should be in BASIC at the READY prompt. Type DOS and hit RETURN.

IF YOU ARE NOT USING A RAMDISK, SKIP TO STEP L

STEP K:

If you are using a ramdisk, type -INIT at the D1: prompt to initialize your ramdisk and copy all of the proper files into it. If you are using an MIO, once this has been done, you will not need to do this again unless your MIO looses power.

STEP L:

Now type -CARINA at the D1: prompt and after a few seconds your Carina II BBS should start running. If you are not using the R-Time 8 cartridge, you should now get the prompts to enter the date and time. It is ALWAYS VERY IMPORTANT that you enter the date and time correctly! Don't forget to specify AM or PM too! Consult your SpartaDos manual for how to enter the date/time.

If there appears to be a problem, make sure you have created your CARINA.BAT file correctly. Make sure that the correct files are on your BOOT disk. Make sure that all of the files are in the correct place. Go back to the beginning and check to make sure that you followed directions correctly.

Configuring your Carina II

Your batch file should have now run your BOOTBBS module. It should then say "Can't find config file" and then show you the configuration menu. This menu will display the following options:

```
 1- [A] SYSTEM folder drive
 1- [B] SYStem TeXT folder drive
 1- [C] PASSWORD/INDEX/DAT drive
 1- [D] MODULE folder drive
 1- [E] SYSop MODules folder drive
 3- [F] Modem Baud Rate
 N- [G] ATASCII only configuration
 N- [H] Printer support
 N- [I] Chat bell on boot-up
 N- [J] Keep a list of callers
 0- [K] Backup after this many hours
    [L] AT command  - ATS10=255

    Select or RETURN:
```

To change an item of your configuration, select the letter of the corresponding item that you wish to change. Pressing RETURN will save any changes that you make to a file called CONFIG.DAT onto drive 1.

Items A,B,D,E are the drive numbers in which your four main folders are located: A=SYSTEM, B=SYSTXT, D=MODULE, E=SYSMOD. Item C is the drive that you want your password file to be created. It will create itself automatically. The password file (PASSWORD.FLE) is also accompanied by an index file (INDEX.FLE). These two files should always stay together. If you ever decide to backup your password file, you also need to backup this index file as well. The index file is an alphabetical listing of all users on your BBS. Carina II uses this file to find a user's account VERY quickly. Item C tells the BBS where these two files should be created along with where all files ending with .DAT extenders will be located (except for your CONFIG.DAT and your TERMCONF.DAT files -- these are both configuration files and they both have to reside on drive 1). Since your USRVAL_0.DAT file is on drive one, the easiest thing to do would be to place your password and index files on drive one as well. If you don't think you will have enough room on that drive, don't forget to move your USRVAL_0.DAT to the drive on which your password and index file will be created (remember, all files with .DAT extenders (except for the two exceptions previously mentioned) must reside on the same drive as your password and index files). More will be explained about these .DAT files as we go on. Change items A,B,D,E to the drive numbers where the corresponding folders are located. Change item C to the drive number where you would like your password file to reside.

Item F tells Carina II what your modem's highest baud rate is. It is especially important if you have a 2400 baud modem to set this value to 2400 baud. Most 2400 baud modems will not connect properly at 1200 or 2400 baud if they are not configured at 2400 baud. This setting can be toggled between 300, 1200, or 2400 baud. Set this item to the appropriate value.

Item G can be used to lock out anyone who is not calling on an 8-bit Atari. Keep in mind that this will also lock out ST-Callers (who are not using an 8-bit terminal emulator). This used to be a very popular thing to do a while ago, but this configuration is rarely used now (with the emergence of the ST).

If you have a printer and you would like to use it on your BBS, turning item H on will allow you to print certain things to your printer (like a list of people who have called your board and/or messages that a SysOp selectively wants to print out). You must have this option on for these features to work (and your printer MUST be on whenever these functions are carried out (unless you are using a printer buffer of some kind)).

Turning item I on will make Carina II turn the chat bell on whenever you boot up your BBS. Whenever the CHAT command is executed by a user, the boarder around your screen will rotate in luminance once per second. Setting the chat bell on will also make Carina II sound a bell (through your TV speaker) directly after the CHAT command has been executed. The user will only be allowed to access this command once per call.

Turning item J on will make Carina II keep a list of callers. If you have your printer support on, it will put this list to your printer. If your printer support is off, then this list will be saved to your disk under the filename of CALLLIST.DAT. This file grows VERY quickly. If you have limited storage capacity, and you are not using a printer, I would suggest you not turn this option on. You really need a lot of space in order to use this function, or you need to erase this file quite frequently. There is a function built into the BBS that will show you this file and allow you to view it (you can access this function while the BBS is waiting for a call). After you view the file, it will ask you if you want to restart it. You will need to access this function often (at least once a day) and restart this list after you view it if you are only running the BBS off of regular disk drives. If you have a hard drive, don't even worry about it.

Carina II has a facility that will allow you to run a batch file (as frequently as every hour and as infrequently as every 255 hours) to backup any files that you may have in your ramdisk that change frequently. If you are just now setting up your Carina II BBS, don't concern yourself with this option until you have successfully set up the program. Refer to the section on "Creating a Backup Batch File" for more information about this function. When you do feel that you want to use the batch file facility, option K will allow you to configure the frequency of the backup. Setting this value to zero will turn this feature off.

The AT command (option L) is a definable command that the BBS will send to your modem. This command defaults to ATS10=255. This AT command tells the modem to stay off-hook whenever someone hangs up. This will keep the line busy while the board is resetting. If you are using an AVATEX 1200 or AVATEX 1200 HC (and possibly some other modems as well), this AT command will not work with your modem. The AVATEX 1200 does not support this S register and, althought the AVATEX 1200 HC is supposed to support it, it does not work with this modem either. It does work

with the AVATEX 2400, however. If your modem does not send a carrier when it picks up the phone, or possibly anything else out of the ordinary, try turning this AT command off by selecting this option and hitting RETURN when it asks you for the new AT command. You will need to do this if you have an Avatex 1200 HC.

You can have up to a 10-character AT command. If your modem supports it, you can also stack AT commands (refer to your modem's manual for more information about AT commands). If you decide to later change this AT command field, you will need to reRUN the BOOTBBS module (since that is the module that sends this AT command to the modem); however, when placed at the configuration menu automatically (when first setting up the BBS), the BOOTBBS module will be run automatically.

Continuing to Set Up Your Carina II BBS

After you have set your BBS's configuration, press RETURN to save it to disk. BOOTBBS will then again be run. If at any time you feel that you may have made a serious mistake in configuring your BBS, simply go to DOS and ERASE the file CONFIG.DAT from drive one and reRUN BOOTBBS in your MODULE folder.

Next, the BBS should display the statement "No sections created" and it should then begin asking you a few questions.

Creating the Electronic Mail Section

Sections are referred to by the BBS as the letters A through Z (which gives you up to 26 sections). Users, however, refer to a section by a SysOp definable key-word. Section A is reserved by the BBS for "Electronic Mail" section -- a special section devoted to private mail and private files (E-Mail and F-Mail). When a user is in the electronic mail section, any messages that the user posts can be read only by the person receiving the message. Likewise, in electronic mail, they can upload a file to a specific user and only that user receiving the file will be able to download it. Electronic mail is a section that MUST be created.

You will now be asked a series of questions regarding your electronic mail section. The first question will be "Create Message Area?" Answer "Yes". It will then ask you for a drive in which you would like to store the folder that this E-Mail message area will be kept. To help you make your decision, you can create a message base containing anywhere from 25 to 255 messages. Each message will take up approximately 600 bytes of storage (about 5 single-density sectors per message). Make sure you have enough room on the drive in which you plan to create this message base. After entering this drive number, you will then be asked, "Create File Area?" If you are very tight on space, you can leave out this feature (this feature is F-Mail); however it is not recommended. If you answer "Yes", it will again ask you for a drive number. A folder will eventually be created on this drive that will contain your F-Mail file area.

You will then be asked to enter a section name. This name can be anything so long as it is less than 25 characters in length. An appropriate name would be "Electronic Mail"; however, you can call it anything you'd like ("Private Mail" could be another). You will then be asked to enter a key-word for this section. A key-word can be up to 10 characters in length. Key-words are used by users to identify a section. An appropriate key-word for this section would be "Private" or "Email", etc.... For example, if a user wanted to switch to the electronic mail section, the user would type "Go Private" (if you selected private as a key-word) and Carina II would then switch to electronic mail.

After entering a key-word and hitting RETURN, the appropriate message and file folders will then be created. You will then be asked how many messages you would like your message base to hold. With the figure of approximately 5 sectors per message in mind, select a reasonable value. The bigger, the better, but if you are limited on space, you will have to be conservative. "Creating Message Directory" and "Creating Message Text Area" will then be displayed.

Next, "Creating File Area" will be displayed (if you decided to create this area). You will be asked if you would like to create a mandatory key-word field. Don't worry about what this means, just answer "No". The file area in electronic mail does not use key-words.

Carina II should then run BOOTBBS and then display the message, "Setting up Message/File Pointers", display the name of your electronic mail section, and then say "Programming Modem". You should notice your modem lights flashing around a bit (if your modem has lights) and eventually your Carina II's waiting-for-call screen should be displayed and at the bottom of the screen it should say, "Status: Waiting for Call".

Logging Onto Your Carina II

Pressing the L key will log you on locally to your BBS. It will ask you to press RETURN. When you do, an introduction screen should be displayed followed by the prompt, "Name or Account #:". Since you don't, as of yet, have an account number, enter your name. You will then be asked for your phone number, password you would like to use, and a bunch of questions regarding your terminal settings. They're all very straight-forward questions; however, if there is a question that you don't understand, hitting RETURN at the prompt will configure that setting to the most likely configuration. More about these settings will be discussed later.

The BBS will display a header and ask if you would like to change it. The header will be displayed just before every command prompt (unless the user decides to turn it off). It is really just a cosmetic feature. Just answer "No" at this prompt. Let's get to the good stuff.

The BBS should then check for your mail (of which, of course, you have none), check for any files waiting (of which, of course, you have none), and then, under normal circumstances, would place you in the next section that you have access to (but, of course, there is no next section and you have no access). Do you see a pattern developing? Yes, that's right, you need to do some more work. If you are not able to get this far, make sure your USRVAL_0.DAT file is on the correct drive (the same drive that your password file is going to be created).

Preparing to do Some More Work

The first thing you are going to have to do is get yourself some access so you can do some 'more work'. You will then be creating some more sections (i.e. Special Interest Groups) for your users to access. You should create at least one section that all users should have access to (even new users), although you don't have to. Name this section something along the lines of "General Discussion" or something similar. How you will be doing this will be discussed a little later. First we need to give your account the ability to do this.

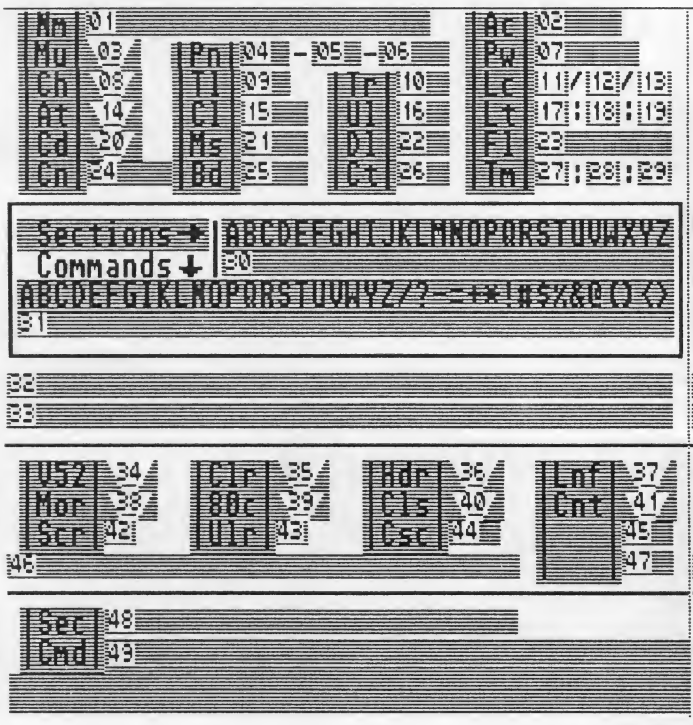
Using the Status Window

One of Carina II's nicer features is the status window. This window can be toggled between three positions. The first position is the non-existent position, the second is the 5-line position (which appropriately displays 5 lines of the current user's status), and the third position is the full-page position. These three positions can be toggled by pressing the OPTION key.

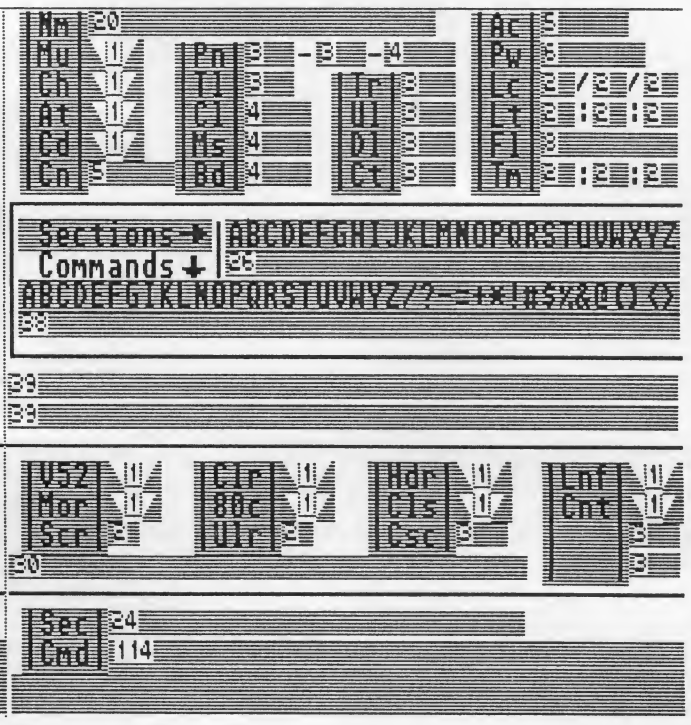
The full-page position is a particularly useful position. When the full-page of a user's status is displayed, a cursor is displayed also. You can move this cursor around by holding down the CONTROL key and using your arrow keys to move the cursor. Using the up and down arrows will move the cursor between different items of the user's status. Using the left and right arrows will move you around within one particular item. The RETURN key also works the same as a down-arrow. One of the good things about this window is that you can modify the user's status even while they are on-line. What is even better about it is that they won't even know you are doing it!

When the full-user status window is displayed, you should see something similar to this:

Window by Position



Window by Field Length



The first version of the full-page status window informs you of the position number of each individual field. Eventually, you will be shown how to access each individual field of this window. When referencing an item in a window, the item is referred to by its position number (1 through 49).

The second version of the full-page status window shows the length of each individual field. It will be important to know this if you ever decide to modify your Carina II or make your own programs for it.

As of now, you don't need to concern yourself with the position or the length of each field; however, you should concern yourself with the meaning of each field. Here are the definitions of what each field means:

|Nm| = User's name
|Ac| = User's account number
|Mu| = Multi-User flag (on when modem I/O redirection is active)
|Pn| = User's phone number
|Pw| = User's password
|Ch| = Chat bell on or off
|Tl| = User's time limit on the BBS
|Tr| = User's time remaining (decreases every minute)
|Lc| = User's last call (date)
|At| = On when user is in ATASCII mode
|Cl| = Number of times this user has called
|Ul| = Total number of files this user has uploaded
|Lt| = User's last call (time)
|Cd| = Carrier detect
|Ms| = Total number of messages this user has posted
|Dl| = Total number of files this user has downloaded
|Fl| = Current file being accessed (or last file accessed)
|Cn| = Caller number
|Bd| = Baud rate the user is currently logged on at
|Ct| = Total number of calls your BBS has had today
|Tm| = Time this user logged on

Sections ABCDEFGHIJKLMNOPQRSTUVWXYZ

Sections this user has access to and determines what the user is able to do within each section.

Commands ABCDEFGIKLNOPQRSTUVWYZ/?-=+*!#$%&@()<>

Which commands this user has access to. If you don't want a user to access a certain command, you can turn it off for this user.

The next item (32) is the current header.

The next item (33) is the memo area. You can use this field for anything you'd like. It is the address field by default (the prompt for this field is stored in the MEMOINFO.DAT file. Change it if you would like this field to mean something else).

|V52| = VT-52 mode on or off (for VT-52 terminals (e.g. ST users))
|Clr| = VT-52 Color mode -- off for users with monochrome monitors
|Hdr| = Header on/off -- Header won't be displayed if turned off
|Lnf| = Line Feeds on/off (ASCII mode only) -- Not used in ATASCII
|Mor| = More prompt (page breaks) on/off
|80c| = 80 Columns toggle
|Cls| = Clear screens on/off
|Cnt| = Continuous read/browse -- Automatic next-message/file
|Scr| = Screen size -- Number of lines per page
|Ulr| = Upload ratio
|Csc| = ASCII clear screen code

Items 45 and 47 are not currently used.

Item 46 is a user-definable macro. It will allow the user to make the "$" key print any 30-character (or less) string at the Command prompt.

|Sec| = Section name (that the user is currently in)
|Cmd| = Commands that the user has executed at the Command prompt

Giving yourself full SysOp access requires that you modify four fields: Tl, Tr, Sections, and Commands. Move the cursor to the Tl field by using your cursor control keys and type the number 255. This will give you 255 minutes on-line

(the maximum amount). This is over four hours. That should be plenty of time. Move over to the Tr field and type 255 again (this is how many minutes you have left on-line today).

Next, move down to the Sections field. Each position within the sections field (there are 26 of them (A-Z)) can take on one of 4 different values: no access to this section (space), read-only access (lower case o), full-access (ctrl-T), and SysOp access (capital S). You can change this value by hitting the SPACE bar. Each time you press the SPACE bar over the same section, it will rotate between these four settings. When you hit the SPACE bar, you will immediately move on to the next section. If you want to go back and hit a space over that section again, use your left arrow key. Also, if a user is on-line (including yourself), and you change the access level in a section that the user is currently in, the user will need to exit that section and reenter it before the new access level will take effect.

To give yourself SysOp access within each section, keep hitting SPACE over each section until an "S" appears under each section's letter. Even if you only intend to create a few sections, (say A through E), it will not hurt to tag the other sections with "S" as well. That way, if you decide to create another section later, you will automatically be given SysOp access to it.

You will notice that your electronic mail section (section A) has an inverse tag. When a section tag is inversed, it means that when a user is doing a Read ALL (all meaning all sections) or a Browse ALL, to omit this section. Electronic mail should always be inversed so that when a user does a Read All New (or Read All anything), it will not go back and check that user's electronic mail again. Electronic mail has already been checked. To untag a section (i.e. to make it inverse), press the TAB key while the cursor is over the section you would like to untag. Your sections field should now have all "S"'s and the first "S" should be inverse.

Now move on to the commands field. This field works something like the sections field except there is only one level of access associated with a command. You either have access to a command or you don't. Pressing the SPACE bar over a command will toggle it between on (a ctrl-T) or off (a space). Give yourself access to every command. Each command is represented by one of the characters in the command list. Any command having a macro key that is a special character (e.g. percent sign, number sign, etc...) is represented in this command field as that special character. For instance, if you wanted to turn off the Status command, you would untag the percent sign. All commands having a macro key that is a control character is represented in this command field as the letter of the control-letter macro. For example, untagging "R" would disable a user from being able to read messages (because ctrl-R is the macro for Read).

Keep in mind that not all of these characters represent commands in use. Some of them are extra to be used for future implementation or for your own implementation of commands. The following characters are not used:

A N Y / - $ ( )

The following are SysOp/SigOp commands:

E I W Z & @

To make sure that your access gets saved, log off of your BBS by typing "Logoff" (or ctrl-L) and pressing RETURN. The BBS will then ask you if you are sure and then ask you if you want to save your password. Obviously answer yes to both prompts. Your password file should now be created on the drive on which you specified it to be created. Press "L" again to log on locally. When you get to the "Name or Account #" prompt, you can enter either your name or your account number (now that you have one). Carina II will find your account faster if you enter your account number, but if you enter your name, it will still find it very quickly. Carina II will then ask you for your password. Hopefully you will have rememberd it. Enter it in and you should be on your way. Incidentally, you could have entered your account number directly after your name or account number by either typing:

1/PASSWORD (assuming your account number is 1)

or

Name/Password

However, it will not mask out your password with underline characters when you enter it like this.

At the Command prompt, you should now have full access to all of the SysOp/SigOp commands. There are six different SysOp commands you can now access. They are:

Edit	(Ctrl-E)	= Edit bulletin file (or any text file when in electronic mail)
U-Edit	(Ctrl-I)	= Edit a user's status within the section (allows editing of all status items when in electronic mail)
Compact	(Ctrl-W)	= Compact a file area (physically remove all files that have been tagged to be deleted)
Ext-Sys	(Ctrl-Z)	= Extended SysOp commands. You should only give access to system SysOps, not SigOps. A user can go into BASIC, DOS, and do a lot of other things you wouldn't want a SigOp to do.
Make-Vote	(&)	= Make a voting poll within a section (you can make up to 26 polls within one section)
Validate	(@)	= Validate any files uploaded to the section in which the SigOp is currently located (files in electronic mail are automatically validated)

Creating Additional Sections

Before we start to make more sections, let me first explain how a section is created on your drives. As many as four folders are created when you create a section. These folders are named MODSEC_?, DATSEC_?, MSGSEC_?, and FLESEC_? where the "?" is replaced by the section's reference letter. For example, the next section that you create will be your second section (electronic mail was your first). This section's reference letter is "B", so the MSGSEC_? folder (for example) would be called MSGSEC_B. Carina II will create it under this name. Incidentally, MODSEC_B would be short for MODule folder for SECtion B, DATSEC_B would be DATa folder for SECtion B, MSGSEC_B would be MeSsaGe folder for SECtion B, and FLESEC_B would stand for FiLE folder for SECtion B. The MODSEC folder is where any on-line games would reside (and any menus for entering those games (if you need any)). The DATSEC folder is where the Section's bulletin's file, vote polls, and databases are located. The MSGSEC folder is where your message base would be located, and your FLESEC folder would be where your download files, descriptions, and upload files would be located. Each section is divided like this so that you can take advantage of your computer hardware. For instance, if you have a very large ramdisk, you may find your system will run more efficiently if you put your games in your ramdisk. With each section broken down in this manner, you can do it. You may also decide that you want all of your message bases on one drive, and all of your download files on another.

With all of this in mind, we are now going to make some new sections. To do this, you need to access the command Ext-Sys by typing Ctrl-Z followed by a RETURN (or you can type out the command or just simply type "Z" followed by a RETURN). Now you should be shown the menu for the extended SysOp commands. The command you want to access is the "Create/Edit a section" command. Press "S" to access this command. It will then display the one section that you have created, section A (electronic mail). Don't concern yourself with all of the things displayed at the prompt, these will be explained later, just press "C" for "Create New Section".

We are now going to make your "General Discussion" section. It would be wise to create a section somewhere along the lines of this theme; however, you can call it anything you'd like. There is no requirement for calling it "General Discussion". Actually, there is no NEED to create it at all, but I would recommend it. The first question you will be asked is, "Create SubProgram Area?". As mentioned before, this is for any games that you may plan to put on-line. Answering "Yes" to this prompt will make Carina II create your MODSEC folder for this section. If you don't plan on putting any games in this section, you can answer "No" at this prompt. If you later change your mind, you can always create the MODSEC_? folder manually and edit your section's configuration to recognize the existence of this folder. On the same note, you can also answer "Yes" at this prompt and then go back and make it not recognize this folder's existence -- this way the folder will be created already, and if you later decide to use it, you can make it recognize its existence again; however, having this folder on your system will take up unused space (but not much).

If you answered "Yes" at this prompt, you will then be asked for a drive number on which the MODSEC folder should be created. Again, if you have a big ramdisk, this may be a good folder to place on it; however, keep in mind that you will have to create an identical folder manually on a physical drive placing your games in it after you are done. You will then have to have your initialize batch file create the MODSEC directory in your ramdisk and copy its contents from a disk into the ramdisk. This way, every time you boot your BBS, the MODSEC folder will be created in your ramdisk and all the games belonging in that folder will be copied to it. If you are unsure of how this is done, I would recommend placing this folder on a physical disk to avoid confusion.

The prompt "Creating Database Area, Drive to Create Folder:" will be displayed. This is a folder that MUST be created. It does not take up much room and it contains data for many section-related functions (as mentioned before). Select a drive number for this folder (DATSEC) to be created.

Next you will be asked, "Create Message Area?". You do not need to create a message base for each section. You could devote a section totally to download files (for instance); however, for your "General Discussion" section, you will definitely want a message base. Answer "Yes" at this prompt and again enter a drive number for the drive on which you would like the MSGSEC folder to be created.

Finally, you will then be asked, "Create File Area?" For your "General Discussion" section, you will most likely not want to create a file area. It would be better to dedicate a section to a computer type (for example, make an Atari 8-bit section, and an Atari ST section) and place file areas there. This way, different files for different computers won't be combined within the same file area; however, if you do decide to create a file area, you will again be asked for the drive on which you would like this folder (FLESEC) to be created.

Now that Carina II knows how you want your section to be set up, it is ready to ask for the section's name. You can enter up to a 24-character section name. Inverse, lower-case, and even special characters are allowed in this field. An example section name might be "General Discussion". Next you will be asked for the section's key-word. The key-word is what users will type when they want to identify a section. An example key-word to go along with the sample section name might be "General". If a user wanted to enter into our General Discussion section, he would type "Go General" (for example). This is what this key-word will be used for. A key-word can be up to 10 characters in length.

Carina II will now create the MODSEC folder (if you specified it to be created) and your DATSEC folder. After it has done this, it will then ask you the maximum number of messages that your message base will hold (if you specified that this section will have a message base). Keep in mind that each message takes up about 600 bytes (about 5 sectors) of storage space. Create this message base with your system's storage capacity in mind. When you press return, it will then say, "Creating Message Directory" followed by "Creating Message Text Area". It will also, of course, create the MSGSEC folder where these two files will reside. It will take a few minutes to initialize a large message base.

If you created a file area within this sig, next will be displayed, "Creating File Area". This is where the FLESEC folder and a few other folders within the FLESEC folder are created. You will then be asked, "Assign a Mandatory Key-Word

Field?" First, an explanation is in order. When a file is uploaded, key-words can be entered that will help a person searching for a file find the file he is looking for in the download area. For instance, if someone was looking for a game in your download area, he could Browse for the Key-Word of "Game". The problem with this is that when someone is uploading a file, the user might not enter this as a key-word. The file would definitely be a game, but Carina II would not recognize it as one. A clearer example might be someone who is searching for telecommunications programs. The uploader might enter just "communications" as a key-word. Here the user is on the right track, but it will still not be a match when someone does a search by key-word. To avoid this confusion, mandatory key-words can be set that will create some sort of standard. You can have anywhere from zero to ten mandatory key-word fields. Keep in mind that there are a maximum of 10 key-words per download file, so 10 mandatory key-words would inhibit any real descriptive key-words from being entered by the uploader. You should keep your mandatory key-word fields to around two per section.

Your key-word fields will probably be different for each section. For instance, if you created a mandatory key-word field in an Atari 8-bit section, you might have a key-word field that described the language of the file that is being uploaded (e.g. BASIC, Object, etc...); however, if you were creating a mandatory key-word field in an Atari ST section, your key-words would probably be something resembling TOS, PRG, ST_BASIC, etc.... The other thing that you should remember is that key-words mean key-WORDS not key-SENTENCES. An underline character should be used to represent a SPACE character if necessary.

If you assign a mandatory key-word field, you will be asked, "Enter list of mandatory key-words and press RETURN when done." This means, press RETURN on a blank line when done. You can enter as many mandatory key-words as you can (before the computer runs out of memory of course). After you have created your first key-word field, you will be asked, "Create another level of key-words?" Keep answering "Yes" until you feel you have entered enough levels to describe most any file. The two most common levels used when describing a file are languages and filetypes (an example of a filetype would be a utility, communications program, application, etc...). When you are finished, you will be sent back to the Ext-Sys module's main command prompt.

You've just created a new section. Continue creating as many more sections that you feel you will need (e.g. Atari 8-bit, Atari ST, etc...). Once you have created all of the sections that you want, DON'T FORGET -- If your SYSTEM folder is in a ramdisk, copy the SECTIONS.DAT file from your SYSTEM folder located on your ramdisk back down to your SYSTEM folder located on your physical disk! If you are using a floppy, this will be on one of your boot disks. If you are using a hard drive, it will be on one of your hard-drive partitions. If you forget to do this, you will have to recreate all of these sections again. Luckily if you do forget, it will not ask you for all of the same questions again. Once it updates your SECTIONS.DAT file again, and then it tries to proceed with creating your section folders, it will find that they are already created and exit back to the Ext-Sys module's main command prompt.

Setting Up Databases

Databases are text files (or groups of text files). You may find, at some point, that you want to place, say, an article of some sort on-line for your users to see. You could, of course, simply place this file in your download area and have them download it ASCII, but that's not really a professional way of doing things. A database area has been included for just such a purpose. The help database is a good example of how a database can be set up; however, this is a special database (because it resides in the SYSTXT folder). Normal databases are placed in the DATSEC folder for the section that the database will reside. Databases have two different parts: database menus and database files. Database menus are simply text files that display selections for different database files (up to 26 per menu). Database menus can also display selections for other database menus. You can have up to 7 levels of database menus. The last selection (the 7th one) MUST be a database file.

Each database menu or database file is a separate file within the DATSEC folder and MUST have distinct names. If you plan on having only one file within your database, this database file must be called MAIN (with an optional extender of your choice (e.g. MAIN.TXT)). If you plan on having more than one database file within your database, then again you still call this file MAIN (with an optional extender of your choice); however, you will have to do something special to this file to let Carina II know that this IS a database menu and not a database file. How this is done will be discussed shortly. All other database files (or other database menus) that stem from that menu have the filename of the menu selection letter (i.e. if your menu has 5 selections (A through E), then your database files/menus stemming from that menu should have the names A, B, C, D, and E). Again these files (and, in fact, all files within a database) can have an optional extender of your choice. Let's assume that the file "C" was another database menu that had 5 more selections. Then the database files/menus stemming from that menu would be called CA, CB, CC, CD, and CE. If CD was a menu that had five more selections, these files would be called CDA, CDB, CDC, CDD, and CDE, etc....

As mentioned earlier, there is something special that you must do to database menus. Two special characters must be placed at the beginning of each database menu. The first character is a Control-A (Ctrl-A) character. This means, while holding down the CTRL key, press "A". The second character must be the last menu selection available for this menu. For instance, if there are five different choices for this menu (A through E), then this next character should be the letter "E" (a CAPITAL E). Following these two characters should be the text for your database menu. This procedure can be performed all within a text editor. Follow the example of the help database if there is something that you are confused on. Disect it if need be.

Setting Up Games

The games area of the BBS works exactly like the databases; however, instead of database menus you have game menus (which work exactly like the database menus (i.e. the first character within the menu is a Ctrl-A and the next character is the last menu-selection letter)), and instead of database files you have games. Also, where databases reside in the DATSEC folder, games reside in the MODSEC folder.

Here is an example: You may want to have a menu that will categorize your games by type (e.g. adventure games, word games, etc...). You can, however, have just one game in a section with no menus. To do this, just name the game MAIN.BAS and place it within the MODSEC folder of the section that you want the game to reside. One game is included on your Carina II disk number 2 side 2 called HANGMAN.BAS. Say you wanted to place this game in your "General Discussion" section (which, for example, is recognized by Carina II as section "B"), then you would copy the HANGMAN.BAS into your MODSEC_B folder and rename it to MAIN.BAS. You must also copy the files WORDS and WORDS.INX into your MODSEC_B folder. These two files are data files that the HANGMAN game needs to operate. Your MODSEC_B folder should now contain the following three files: MAIN.BAS, WORDS, and WORDS.INX (where MAIN.BAS is your HANGMAN.BAS game renamed). Carina II automatically can tell whether a file is a database file or a game. You could put games in your database area and databases in your games area and that would indeed work. Like I said, the routines are exactly the same (it's the exact same routine). Why you would want to do this, I don't know but you can't say it's not a flexible program!

Using Carina II

Now it's time to read your help database. You can do this by typing "Help" at the command prompt. You should be shown the help database (assuming you set up your SYSTXT folder correctly). You may decide you want a printout of this help database (if you have a printer). A program called MAKEMAN, located on disk 2 side 2 of your Carina II master disks, will take all of these help files and merge them into one "manual". This manual can then be printed to your printer (by typing "COPY D1:MANUAL.DOC P:" at the D1: prompt of SpartaDos). To run this program, make sure your BBS is loaded, you have a disk with about 410 single-density sectors available in any drive (other than the drive on which your SYSTXT folder resides), and RUN the MAKEMAN program. It will ask you on which drive you want to store the manual; enter the drive number of the drive that has the 410 or so sectors required to store this file. You'll then be placed in your extended SysOp commands program when the program has finished creating the manual.

Please read the user's manual (or the help file). The user commands will not be described in THIS manual. You will need to read the user's manual for information about BBS commands (other than SysOp commands). The SysOp commands will be discussed in THIS manual.

Things You Can Do at the Wait-for-Call Screen

While your BBS is waiting for a call, you can press any of the following keys to do the following things:

B = Exit to BASIC
C = Send a carrier (i.e. make the BBS think the phone just rang)
D = Exit to DOS
K = Run backup batch file
L = Log on your BBS locally
T = Run the Carina II terminal program
U = Display user log (i.e. list users in the order that they logged on)

This command will only work if your user log is configured to be created, AND it is not being sent to the printer.

SigOps, SysOps, and SysOp Commands

When a user has SigOp access to a section (i.e. an "S" appears under the letter corresponding to a section in the full-page status window), the user is 'tagged' as a SigOp for this section (and this section only). When a user is a SigOp, he has the ability to do a few more things than a normal user; however, simply tagging a user as a SigOp does not give that user access to the SysOp commands. You would have to give the user access to the SysOp commands as well (i.e. Validate, Edit, Make-Vote, etc...). This way you can let certain SigOps only do certain things. For instance, you probably would not want any SigOp to be able to go into your extended SysOp commands (i.e. Ext-Sys). This would give your SigOps too much power; however, you would probably want them to be able to edit the bulletin's file for their section, validate uploaded files, etc.... Carina II will allow you to do this by tagging only the commands (in the full-page status window) that you want your SigOps to access.

So what does giving them SigOp access do? When you give a user SigOp access, a few things happen: the macros for all of SysOp commands become active (although the commands themselves do not. In other words, if the SigOp pressed Ctrl-Z, Ext-Sys would be printed, but it would not let thim access the command unless he had that command tagged on). When this user posts a message, "SysOp:" will be displayed next to his name (so people will know that this user is the

SysOp of this Sig (i.e. SigOp). He will also be able to delete messages (in the message base), delete files (in the file area) (he will also be able to revive (undelete) the messages or files). He can also print any messages to your printer (if you have one). And finally, a SigOp can also write form letters.

At the "Command [?]=Menu:" prompt, the following commands not listed in the menu can be accessed by SigOps:

[K] = Kill this message/file
[!] = Revive this message/file
[P] = Print this message/file description to printer

When a file is deleted, it is not physically deleted, it is simply tagged for deletion. To physically delete the file, the file area must be compacted (via the Compact command). Running the Compact comand will delete all files tagged for deletion.

The print command will not work unless your printer is on AND your configuration for printer support is on.

Print Macros

Print macros are used to print items within the status window to the screen. They should not be confused with input macros (the ctrl-key macros that type out commands for you). There are 49 items in the status window that can be displayed using print macros. Print macros can be used within bulletin files, messages posted by SigOps (form letters), and even within BASIC PRINT statements. Take the Status command as an example. The only thing this command does is print out a text file (STATUS.TXT). This text file uses the print macros to display items of importance about a user's account.

To print out an item in the status window, you type the percent sign (%) followed by the item number you wish to print. The items range from 1 to 49 (one being their name, two their account number, etc.... Refer to the picture of the full-page status display on a previous page for reference numbers to different items). Each number must be two digits, so if you wanted to display item number 1, you would need to type "%01". Typing "%1" would not work.

To demonstrate the use of print macros, try posting a message (you don't need to save the message, you can abort it when you are finished). Of course, for these print macros to work, you must be a SysOp of the section you are posting a message in. Try typing the following:

Hello there %01, what's new? Your account number is %02!

Now exit to the Cmd: prompt and preview the message. You should see "Hello there" followed by your name (because you are the current user logged on). When someone else calls, they will see their name in place of the "%01".

Notice that it displays the entire 20 characters of this field no matter how long their name is. To avoid this, an exclamation point can be placed right after the percent sign. For example, typing:

Hello there %!01, what's new?

would dispose of the extra spaces after the name.

If you actually want to print a percent sign to the screen, you will need to type the percent sign twice. Non SigOp users who cannot use these print macros will not need to do this, but SigOps will. For example, to display "15%" to the screen, you must type "15%%" in its place so MOE will not attempt to look for an item number following the percent sign.

These macros are pretty nice to have around. A SysOp can now write very personal messages without having to be 'personal'. You can write one message that is personalized for everyone (whatever that means). You might also decide you want to display some of a user's status directly after a user logs on. You can do this by placing some of these macros in the LOGIN.ATA/ASC/V52 files.

The Edit Command

Each section has its own bulletin file. The SigOp uses the Edit command (Ctrl-E) to create or make changes to the bulletins for their section. This editor works exactly like the message/file description editor. The SysOp can also use the print macros here. Refer to the help file for more information on the message/description editor.

If you are in electronic mail when you access the edit command, you can load ANY text file, not just the bulletin file. Of course, you will have to be a SysOp of electronic mail in order to do this (and this is not a section that needs a SigOp, so only you should have SysOp access in electronic mail). After typing "Edit" in electronic mail, you will be asked for a filename. To enter your main bulletin's file, type "D?:SYSTXT>BULLETIN.TXT" replacing the "?" with the drive number on which your SYSTXT folder resides. Remember, if your SYSTXT folder is on your ramdisk, you'll need to back this file up if you update the main bulletin's file! You can do this by either going to DOS and copying it back down to a disk, or when you save your updated file, you will be shown the current filename of the file and then you will be asked if you want to use this filename. You can answer "No" and specify a new filename (perhaps simply changing the drive number) and save it. If you do answer "No" at this prompt, you will be placed back at the "Cmd:" prompt where you can then save the file again under the original filename (if you want to – you can type "A" to abort if you don't). Note that this can be done ONLY when you are in the electronic mail section!

The User Editor

The user editor (U-Edit) has two different modes. If you are in the electronic mail section, the editor will allow you to edit all of the items within the user's status. If you are in any other section, the user editor will only allow you to change that user's section status. If you are not in the electronic mail section, you will also not be able to delete, blacklist, read or write validation files, etc... (these features will be discussed later).

The reason for creating these limitations is so that you can assign SigOps that will have the ability to validate people for a certain section without having the ability to "damage" your system in any way. Consequently, the SigOp of a section (other than electronic mail) will be shown a lot of commands when displaying a menu that he cannot access.

SigOp's User Editor

Just like messages and file descriptions, you have total random access to users' accounts when in the user editor (i.e. +5, -5, 10, etc... will work at the "Command [?]=Menu:" prompt as well). You can also simply type a user's name at this prompt and it will search for that user (you must spell his name exactly (case is unimportant however)). The SigOp has the ability to modify two of the user's status items: [E]dit SIG Access, and [R]eset high message/file pointers (for this SIG only). When editing a user's access, the SigOp can assign one of three different values: no access, read-only access, and read/write access. The SigOp cannot assign a user SigOp access (for obvious reasons). Changing a user's access is done by pressing SPACE at the "SPACE or RETURN:" prompt (displayed when editing SIG access). An inverse character means that the section will be untagged (i.e. will not be scanned when the user does a "Read All", "Browse All", etc...).

Resetting message/file pointers will reset the "high message read" and/or "high file browsed" pointers to zero (for this section). I haven't really figured out why you would want to reset JUST ONE user's pointers (there is a feature that will allow you to reset EVERYONE's pointers via the Ext-Sys command), but it seems to me that there must be a reason floating around somewhere.

SysOp's User Editor

The SysOp's user editor becomes active when accessing the U-Edit command from electronic mail. The SysOp's user editor does everything the SigOp's user editor does and much more. You will be shown all items of the user's status (except for high message/file pointers for other sections (can't fit them all on the screen)). Notice that all CHANGEABLE items of the user's status are labeled A through Z. Before you can change one of these items, you must press "E" for edit (followed by a RETURN). It will then ask you for the item to be changed. Enter the item's corresponding label to edit that item. When resetting a user's high message/file pointers (via the [R]eset command) you are also asked if you want to reset this user's messages/files waiting counter. This is displayed when a user logs on to your BBS right before searching for new E-mail/F-mail.

Within electronic mail, you also have the ability to [K]ill users (delete them from the password file), [B]lacklist them (immediately kick them off of the BBS if they try to log in with their account again), or [!]Revive them (undelete or unblacklist a user).

You also have the ability to read/write validation files. A validation file contains 4 items of access: Section access (item K), command access (item L), time limit (item C), and upload/download ratio (item W). The file USRVAL_0.DAT is a validation file. You can have up to 10 validation files (USRVAL_0.DAT is validation file 0 -- the data file specifying access given to new users, so you have 9 extra files that you can make for your own use). A validation file is a totally unnecessary feature. What it does is allow you to assign a user's status and save it to one of these files (using the [W]rite validation file command). If you decide you want to give another user the same status, you don't have to manually change these 4 items again. Simply read in the validation file (using the [V]alidate command). You must, of course, remember what each validation file contains as far as access is concerned. Remember, if you rewrite over validation file zero, users will be given this new access as soon as they log on! Be careful about what you write to this file (USRVAL_0.DAT). Other validation files will, obviously, be called USRVAL_1.DAT through USRVAL_9.DAT and will be written to the same drive that your password/index files reside.

The Compact Command

This command will physically delete all files tagged for deletion in the file area. This command will work in all sections (including electronic mail) and should probably be executed in electronic mail frequently (every week or so). The electronic file-mail area can hold a maximum of 127 files at once. As soon as someone downloads a file, it is automatically tagged for deletion. Things will start to clutter up if the area is not compacted. All other sections can hold up to 3302 files. The total number of files you can have on-line at once is 82677 (this is more files than an Atari 8-bit can handle. On a "maxed out" system, you would have just enough room to hold the overhead for each file. You couldn't even store any data). A 134-meg hard drive system can hold (for all practical purposes) about 10,000 files.

Extended SysOp Commands

The extended SysOp commands module is something that you will probably not want to give your SigOps access too. Giving a user access to this command is effectively giving him access to do anything (or almost anything) to your system. Only you (and perhaps friends that you can REALLY trust) should have access to this command.

Create/ Edit Configuration

This command is used to change your BBS's system configuration. Refer to the section "Configuring your Carina II" on previous pages.

Create/ Edit Sections

This command is used to create additional sections and/or reconfigure existing sections (e.g. their physical location, name, or key-word). When this command is executed, there will be displayed a list of existing sections, their respective key-words, and the drive numbers on which the folders within that section reside. "G" stands for Games (i.e. MODSEC), "D" for Databases (DATSEC), "M" for Message Area (MSGSEC), and "F" for File Area (FLESEC). If a drive number listed equals zero, then that folder does not exist (or at least Carina II acts as if it doesn't exist). After this is displayed, you will then be shown a list of options that you can perform. Pressing K, G, D, M, F, or N will allow you to change a section's Keyword, Game folder drive, Database folder drive, Message Area folder drive, File Area folder drive, or Section Name respectively. Pressing "R" will allow you to remove the last section in the section's list. You cannot remove a section in the middle of the list; however, you could rename the section you wanted to get rid of to the name of the section at the end of the list and then copy all of the proper files within the last section's folders to that section's folders and then remove the last section. On that same note, there is another use for this function. There is no function that will restart a message base. If you wanted to do this, you would have to create another section (with only a message base), copy the message base files within this new section into the section's message base folder that you would like to restart, and then remove the last section and delete all of that section's corresponding folders and files within those folders. It's a slight inconvenience but you probably won't have to do this often (if ever). When you save any changes, remember, this will be written to the SECTIONS.DAT file. If this file is located in your ramdisk, DON'T FORGET TO COPY IT BACK DOWN TO A DISK!

Refer to the section "Creating Additional Sections" on previous pages for information on the [C]reate New Section command.

Global Mask

Performing a global mask will change an item within EVERYONE's account. Because this is performed on everyone's account, this function can be rather slow in some cases (especially when masking out commands/sections). The first two things you can mask out are messages/files waiting. This is the counter that tells the user how many E-Mail messages/F-Mail files he has waiting. Executing this function will reset the counter to zero.

Clearing the high message read/file browsed is again a matter of resetting a pointer to zero. You would want to do this if you ever restart a message base or file area (but not the password file). You can perform this operation on the current section's pointers or on all sections' pointers. These pointers are used for the NEW parameter of Read/Browse.

When masking commands and/or sections, you can either give access or take it away. With masking commands, the commands that you tag will be the ones that the user will either get access to (when giving access) or be denied access to (when taking away access). When masking sections this works a little differently. If you are giving users access, then you can select between the different access levels that you wish to grant users. When taking away access, you must take away all of their access to that section. The section that you specify to have their access taken away will be changed to a SPACE (no access); therefore, when taking away access, you have only two choices (either you bump their access down to "no access" or you don't). You can't, say, bump everyone down to read-only access; however, you could bump everyone down to "no access" and then bump everyone up to read-only access.

Upload a File Locally

This feature allows you to place a file in a download area yourself. You can think of it as doing a normal upload, but instead of doing a file transfer, Carina II simply copies the file from a drive into the upload area. When you execute this command, Carina II will proceed just like a normal upload; however, when it comes time to do the file transfer, you will be placed in a copy program. Simply type the source file's filename (e.g. D1:FILENAME.EXT or D1:FOLDER>FILENAME.EXT, etc...). You can also do a directory from this prompt by placing an asterisk "*" before the filespec. For example, typing *D2:FOLDER> would do a directory of all files within the FOLDER subdirectory on drive 2. Once you've done this, locally uploaded the file, remember, the file has now been uploaded, but it has not been validated (unless you uploaded it in electronic mail). You must now place the file on-line via the validate command.

Run/ BASIC/ SpartaDos Commands

To make a short story even shorter, the run command will run a BASIC program, the BASIC command will exit into BASIC, and the SpartaDos command will exit you into SpartaDos. If you want to get back into Carina II (and the SYSCOM module is no longer in memory), simply type RUN "D?:SYSMOD>SYSCOM" where the "?" is replaced by the drive number on which the SYSMOD folder resides. You can also make it so that these commands can be executed only after a user types in a definable password (for extra safety). Place any password you'd like in a file called BASICPW.DAT and place the file on drive 1. You can do this with a text editor.

While in SpartaDos you can execute any INTERNAL command you'd like (except batch files while on-line remotely). Only limited external commands will work because most of them load in over top of MOE.

Remember, you can enter into BASIC or SpartaDos remotely. You can program on-line, copy files on-line, etc....

Validating Uploaded Files

After a file has been uploaded to your BBS, you will need to validate it before it will be listed in the download directory. This is done so that you can screen out any uploaded files that you do not want on-line. You'll need to do this for every section that has a file area (except electronic mail – F-Mail is automatically validated).

When using the Validate command, uploaded files are assigned temporary file numbers so you can skip around to different upload files (just like you can messages). When a file is validated, it is assigned a permanent file number. Uploaded files will be listed one at a time in the order that they were uploaded. At the "Command [?]=Menu:" prompt, there are three distinct commands that you should know about: "V" will validate the file (place it on-line for all who have access to this section's file area to see), "K" will kill this file (delete it), and "N" will allow you to type in a new description, filename, etc... before validating it.

Make Vote-Poll Command

You have the ability to make up to 26 voting polls within each section (Poll_A through Poll_Z) by using the Make-Vote command. Each poll can have up to 26 responses (A through Z). When executing this command, you will be asked if you want to delete the previous polls. If you don't have any previous polls, then it really doesn't matter how you respond (can't delete what isn't there). You will then be placed at a "Cmd:" prompt. This should look familiar. This is the text editor command prompt. You'll need to type "C" to continue. Enter your vote-poll question, exit the editor, and [S]ave it. You'll then be asked to enter up to 26 responses to this question. Enter as many as you want (preferably two or more) and press RETURN on a blank line when finished. You'll then be asked if these responses are correct. After answering "Yes" (hopefully), you'll be asked if the entire poll is correct (after displaying it to you for a second look). After answering "Yes" to this prompt, it will tell you, "Writing out poll" followed by the poll's letter (A through Z). You can continue entering more polls via the Make-Vote command until you feel you have enough.

Creating a Backup Batch File

A batch file can be made to backup your ramdisk to a disk drive or hard disk anywhere from every hour to every 255 hours. This file does not necessarily have to copy files however. It can be used to do just about anything. You could use it to rotate your intro screens every hour, for example. You could have 5 different INTRO.ATA files (named INTRO_1.ATA through INTRO_4.ATA and the INTRO.ATA file (the one used by the BBS) for example), and you could make a batch file that would rename these files once every hour. Here's an example of a backup batch file that would do this:

```
RENAME SYSTXT>INTRO.ATA TEMP.ATA
RENAME SYSTXT>INTRO_1.ATA INTRO.ATA
RENAME SYSTXT>INTRO_2.ATA INTRO_1.ATA
RENAME SYSTXT>INTRO_3.ATA INTRO_2.ATA
RENAME SYSTXT>INTRO_4.ATA INTRO_3.ATA
RENAME SYSTXT>TEMP.ATA INTRO_4.ATA
CAR
RUN "D7:MODULE>WAITCALL"                    - Your drive number may be different
```

This file (or any backup batch file) would have to be called BACKUP.BAT and would have to reside on drive one of your data disks. The backup batch file must end with CAR followed by a RUN "D7:MODULE>WAITCALL" (your drive number may be different). Although you will most likely want to use this batch file to backup your ramdisk (if you have one), you can use this batch file to do just about anything (anything that batch files can do that is).

Miscellaneous Points/ Features

o If you would like to kick someone off of your BBS, bring up the full-page status window, move your cursor over to the |Cd| field and press the SPACE bar.

o Pressing the SELECT key (and holding it down until a block has been transferred) will abort a file transfer (since C-Modem blocks are so big, you may find that you will be holding down this key for a LONG time).

o In order for a file to be validated, you need enough space for the file to be duplicated in the download area before it is deleted. For example, if a 5000-byte file was waiting to be validated, you would need another 5000 bytes free on that drive so the file can be duplicated in the download area. The first file will then be deleted and you will have 5000 bytes free again, but that space is necessary for the duplication to take place.

o We've discovered that you can actually create two different BBSs with your Carina II. You could divide your board in half (allowing each BBS to have 12 sections) and allow users to have two accounts -- one that would log them onto one board, and another to log them on to the other. You could create two GENERAL sections (having the exact same name, key-word, etc..) and give users logging onto the first BBS access to the first GENERAL section and users logging onto the second BBS access to the second GENERAL section. This way, you can have two totally separate BBSs where the only common area would be electronic mail. You could set up a board based around role-playing for example, and another board for, say, your local computer club. You would have to create a section specifically for new users so they could request which board they are trying to get access to (and you should, of course, explain that there are two different boards being run here and that the user would need to request one (if not both) of them). This has been tried and it does seem to work rather well.

o There are some text files included on disk number 2 side 2 of your Carina II master disks that together make up a SigOp's help database. If you have the room, you may want to create a section specifically for SigOps and place these text files in the DATSEC folder for that section. These files are MAIN.HLP and A.HLP through J.HLP (11 files total). These files should not be confused with your user's help database located in your SYSTXT folder.

o If you ever forget to backup your INDEX.FLE file along with your PASSWORD.FLE file, run the MAKEINDX program. This will recreate your INDEX.FLE file. Users not being able to log on with their name is an indication that your INDEX.FLE file may have a problem. Running the MAKEINDX program should correct this problem.

Modifying Your Carina II

MOE (the Modem Operating Environment) has a command built into it that will disable MOE. This command is "XEDIT" and can be entered at any prompt; however, it will only work when typed with the computer's keyboard (it will have no effect if someone on-line types it). You will want to use this command anytime you want to modify the BBS. There are also other reasons you would want to use it (any time you would want to use your cursor control keys for example). It's a very handy command. Anytime you want to turn MOE back on, just run one of the command modules (e.g. MAILCOM, USERCOM, FILECOM, SYSCOM). This will turn all of the necessary features back on and place you at the "COMMAND:" prompt where you can continue using the BBS.

If you plan on making your own programs for Carina II (which I encourage you to do if you know how), then you will need to use an error-trapping routine included on your Carina II disk 2 side 2 called ERRTRAP.BAS. This file (if used properly) will trap your program so that an error occurring will not throw the user into BASIC. It also tells the program what to do if the user's time has expired. Two variables should be used within your program: ERRGO and BREAK. ERRGO is used to replace all occurrences of TRAP commands that you may be using in your program. Anywhere you would normally put a TRAP statement, replace it with an ERRGO= statement. For example, if you had a TRAP 1000 statement in your program, replace it with an ERRGO=1000. There should only be two TRAP statements in your program -- the two in the ERRTRAP.BAS file. The BREAK variable is used to tell your program what line number to go to if someone were to hit the CTRL-C key. For simplicity's sake, you can disregard this variable and turn off the ability of a user to hit CTRL-C by using the statement POKE 1636,0. All of Carina II's modules use this routine so you may want to use a module as an example if you are having trouble understanding this routine.

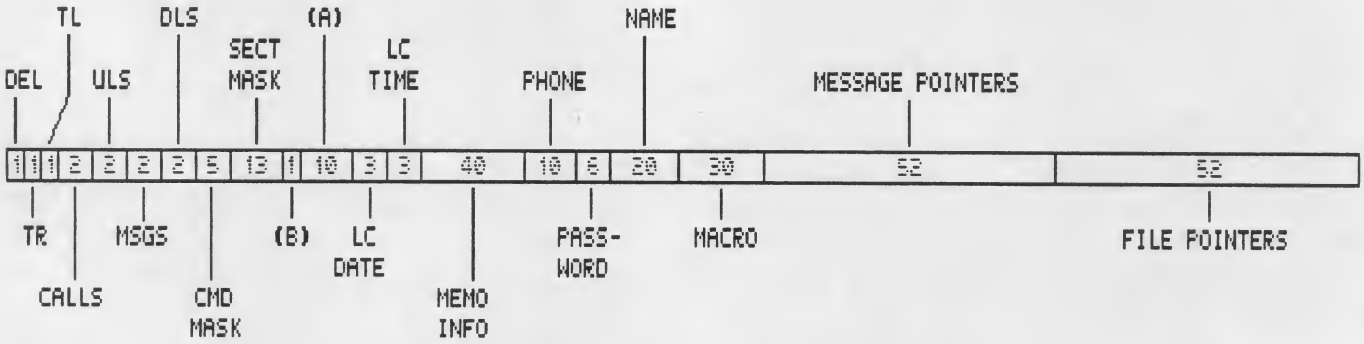
If you are planning to modify your GATEWAY, XY_TRAN, or CM_TRAN modules, keep in mind that these modules load binary files into upper memory. These files are not recognized by BASIC's FRE(0) command. BASIC will think that this memory is still available. You should subtract about 900 bytes from the value given by the FRE(0) command when modifying any of these three modules. Your program will start to do strange, random things if you start to program into this area of used memory.

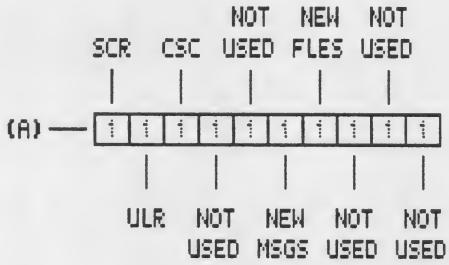
If you plan on modifying any of Carina II's data files, you should take note of where items within these data files reside. The following shows how the more important data files are set up:

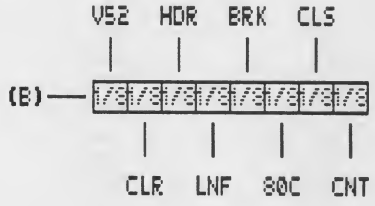
Password File Record Set-Up

When Carina II's password file is created, it starts out at a length of 256 bytes (for the first account) and grows by multiples of 256 as each account is added (i.e. 256 bytes are reserved for each user's account within the password file). The following displays how each account within the password file is laid out. The DEL item (the first byte) determines whether the account is active. If this value equals 0, then the account is deleted, 1 means it is in use, and 2 means this user is black-listed (still in use). All other items refer to items within a user's configuration/status (e.g. items within the status window).

Take note of the "NOT USED" bytes within this file. You can use these extra bytes to implement your own features; however, take note that they may be used at a later date to implement other features with future revisions of Carina II.



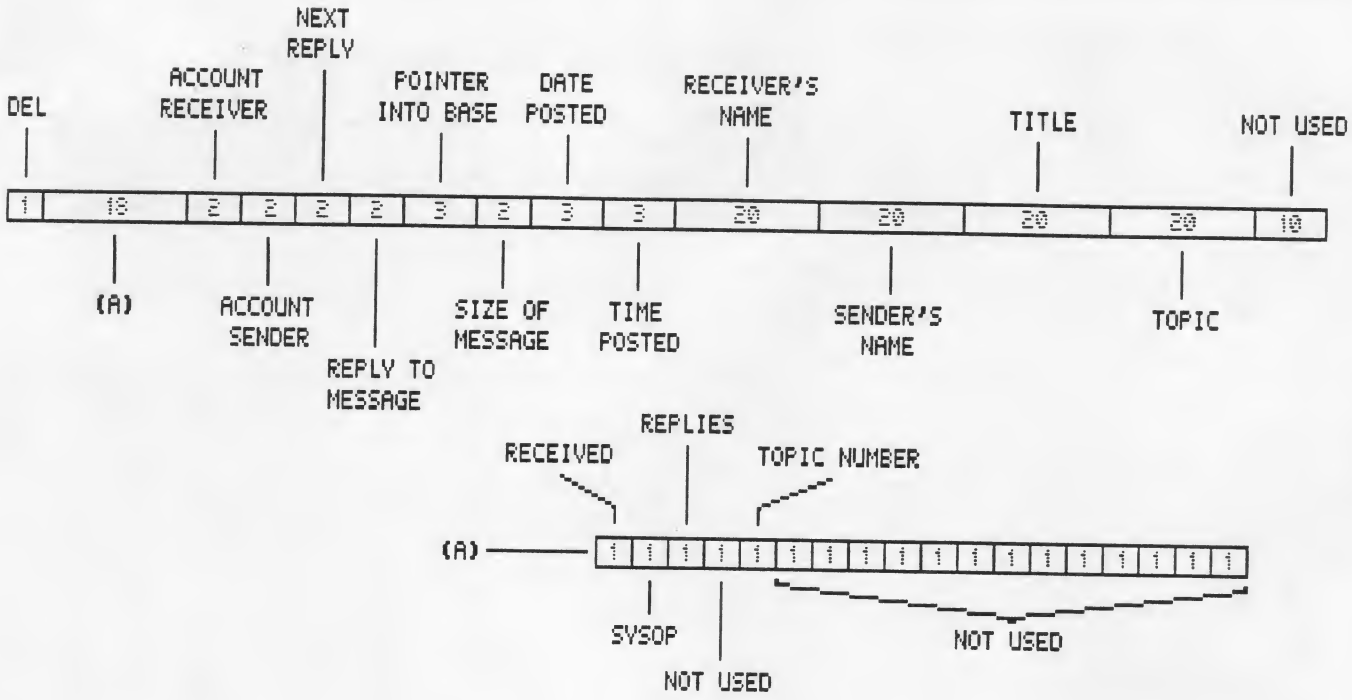




Carina II's Message Bases

The DIR file located in the MSGSEC folder contains all of the important information about messages within a section. The BSE file contains the TEXT for the message and that is all. Each entry within the message base DIR file corresponds to one message. Each entry is 100 bytes long; however, this file also has 10 bytes allocated at the beginning of the file which contain information about the message base (namely, how many messages it can store); therefore, your message bases's DIR file should be a multiple of 100 plus 10 in length.

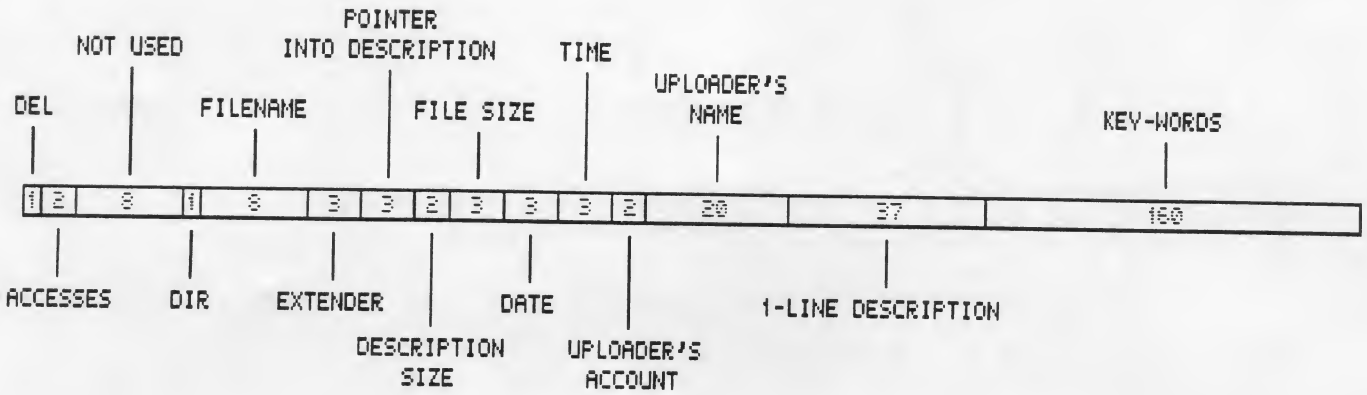
Take note of the "NOT USED" bytes within this file. You can use these bytes to implement your own features; however, they may be used at a later date to implement other features with future revisions of Carina II.



Carina II's Download Directory

The INF file located in the FLESEC folder contains all of the important information about file descriptions within a section. The DSC file contains the TEXT for the description and that is all. Each entry within the file area's INF file corresponds to one download file. Each entry is 256 bytes long; therefore the INF file should be a multiple of 256 in length.

Take note of the "NOT USED" bytes within this file. You can use these bytes to implement your own features; however, they may be used at a later date to implement other features with future revisions of Carina II.



Modem Operating Environment Version II

The Modem Operating Environment (MOE for short) is a patch into the operating systems of the Atari computer. It takes control of these operating systems and incorporates the modem handler so that it thinks your modem is another keyboard. MOE is the program that allows your Carina II to run on-line BASIC, on-line DOS, etc.... It also does quite a few other things. It supplies support routines for Carina II (like binary load routines, block memory move routines, etc...), translates ATASCII graphics and cursor controls into VT-52 graphics (for ST users), converts text into 40 OR 80 columns, word-wraps text, performs centering and justifying of text, allows editing of a user's status while on-line, allows printing of items within the user's status area through print macros, etc.... In other words, it does a lot! MOE is the heart of Carina II. It's what makes Carina II so easy to modify and expand. Without MOE, Carina II could not exist. Here is an example of how MOE can greatly simplify a BASIC program to be used over the modem.

To print a directory of drive 1 to the screen and the modem without MOE, you would need to do something like the following:

```
10 DIM A$(40)
20 CLOSE #2:TRAP 40:OPEN #1,6,0,"D1:*.*"
30 CLOSE #2:INPUT #1,A$:GOSUB 100:GOTO 30
40 CLOSE #1:END
100 OPEN #2,13,0,"R:":XIO 40,#2,0,0,"R:"
110 PRINT A$:PRINT #2;A$:RETURN
```

To do the same thing with MOE you would only need to do this:

```
10 DIM A$(40)
20 TRAP 40:OPEN #1,6,0,"D1:*.*"
30 INPUT #1,A$:PRINT A$:GOTO 30
40 CLOSE #1:END
```

Memory Locations for Carina II and MOE

From here on, the rest of this manual will be dealing mainly with technical information that will help you understand the inner workings of Carina II. If you are planning to modify your Carina II BBS, or if you are planning to make your own modules, it would be a good idea to familiarize yourself with some of the material that will follow.

The following is a list of the "page 6" memory locations that Carina II and MOE use extensively:

1536 CMD	- Location used to tell a module what to do after it has been run
1537 CHATBELL	- Set to 1 if a user accesses the chat command and is reset after the user logs off
1538 PLANLEN	- Length of remaining command line (used for command stacking)
1539 LENGTH_INPUT	- Length of a user's input at the command prompt
1540 MARKER	- Used to tell how many files have been marked for batch download
1541 PRIVATE_DRIVE	- Drive on which electronic mail's message base resides
1542 WRITE_SECTION	- Set to 1 when a user has read/write access to a section (0 otherwise)
1543 READ_ALL	- Current section number that the user is in when doing a read/browse all
1544 SIGOP	- Set to 1 if this user is a SysOp of this section (0 otherwise)
1545 SECTION	- Section number that the user is currently in (0-25)
1546 CS_MOD	- Drive number of the MODSEC folder of the current section
1547 CS_DAT	- Drive number of the DATSEC folder of the current section
1548 CS_MSG	- Drive number of the MSGSEC folder of the current section
1549 CS_FLE	- Drive number of the FLESEC folder of the current section
1550 INTERRUPT_CMD	- Used when doing a download from the directory/browse command
1551 INTERRUPT_PARAM	- File number of the file being download from directory/browse
1552 SYSTEM	- Drive number of the SYSTEM folder
1553 SYSTXT	- Drive number of the SYSTXT folder
1554 PW_INDX	- Drive number of the password/index file and data files (.DAT)
1555 MODULE	- Drive number of the MODULE folder
1556 SYSMOD	- Drive number of the SYSMOD folder
1557 MODEM_BAUD	- Baud rate to program modem at (0=300, 1=1200, 2=2400)
1558 ATASCII_ONLY	- Set to 1 if ATASCII only configuration is active (0 otherwise)
1559 PRINTER_SUPPORT	- Set to 1 if printer support is active
1560 CHAT_BELL	- Set to 1 if your chat bell is to be turned on upon bootup
1561 BACKUP	- Backup after this many hours (0 means never backup)

1562 MAX - Maximum number of messages possible in this section's message base
1563 LAST - Last message pointer (relative to beginning of file)
1564 COUNT_HIGH - High byte of counter (counts number of times a message base has wrapped)
1565 COUNT_LOW - Low byte of counter
1566 LASTFILE_HIGH - High byte of last file counter
1567 LASTFILE_LOW - Low byte of last file counter
1568 not used at this time
1569 not used at this time
1570 NEW_DAY - Used by the backup facility
1571 NEW_HOUR - Used by the backup facility
1572 USER_ON - Set to 1 when a user successfully logs on
1573 not used at this time
1574 not used at this time
1575 NEW_FILES - Number of F-Mail files waiting
1576 not used at this time
1577 not used at this time
1578 CALLLIST - Set to 1 if a call list is to be made by Carina II
1579 AT_SIZE - Size of the following AT modem command
1580 - 1589 - AT modem command characters
1590 not used at this time
1591 not used at this time
1592 - 1597 - Zero page emulation variables (used by MOE)
1598 not used at this time
1599 not used at this time
1600 MOE_OUT - Setting to 0 disables screen output through MOE (1 enables)
1601 ECHOMODE - Setting to 0 disables screen output through modem (1 enables)
1602 HOSTMODE - Setting to 0 disables keyboard input through modem (1 enables)
1603 MOE_IN - Setting to 0 disables keyboard input through MOE (1 enables)
1604 DUPLEX - Used by the terminal mode
1605 PRT_WRAP - Setting to 1 makes text output word wrap
1606 KEY_WRAP - Setting to 1 makes keyboard input word wrap
1607 PMACROS - Setting to 1 enables print macros (%01-%49)
1608 COUNTFLAG - Setting to 1 enables the countdown timer (item 10 in status window)
1609 COLOR_STAT - Setting to 0 turns off border color I/O status
1610 TOGGLE - Status window position (0=not visible, 1=5-line, 2=full-page)
1611 HEADSET - Setting to 1 disables OPTION from toggling the status window
1612 ALERT_TOG - Setting to 1 enables border luminance rotation (as with chat)
1613 P_MASK - Enables input masking (like when entering your password)
1614 TERM_START - Setting to 0 disables the START key from entering into chat mode
1615 MACRO_FLAG - Setting to 1 enables macros
1616 TRAN_MON - Monitor switching from ASCII to ATASCII upon hitting RETURN (when set to 1)
1617 MACRO_TERM - Enable macros while in chat mode
1618 PRINT_MASK - Setting to 1 enables masking of inverse characters being sent to printer
1619 BAUD_2400 - Set to 1 if user is logged on at 2400 baud
1620 ALL_CAPS - Setting to 1 will force keyboard input into upper case
1621 USE_TIMER - Setting to 1 enables an error to occur when the timer runs out
1622 PRT_SYS - Setting to 0 disables printing to the screen
1623 KEY_TYPE - Equals 1 if last key-press was from the local keyboard
1624 ALL_BREAK - Setting to 1 makes RETURN or SPACE abort printing (2 makes all keys abort)
1625 RESET_VAL - Timeout value used to determine when to reset the BBS due to inactivity
1626 MOEAX1 - Auxilliary variable 1
1627 MOEAX2 - Auxilliary variable 2
1628 TEXT_FORMAT - Setting to 1 enables Ctrl-C (centering) and Ctrl-R (justify) for screen output
1629 PRINTER - Setting to 1 redirects all output from screen to printer
1630 NO_CARRIER - Setting to 1 enables hangup when NO CARRIER is received by modem
1631 RESET_PRINT - Reset BBS due to buffer overflow while also printing (along with inputting)
1632 M_IOCB - Modem IOCB times 16
1633 D_IOCB - Disk IOCB times 16
1634 HOT_CHR - Input character that aborted printing (only used when ALL_BREAK is non-zero)
1635 BUFF_L - Length of keyboard INPUT buffer (0-127)
1636 C_BREAK - Error returned when printing is aborted
1637 CW_POINT - Pointer into |CMD| area of window (increments after a command executes)
1638 COL_HEAD - Color of status window (default = blue)
1639 MACRO_LEN - Maximum length of all key-macros
1640 not used at this time

1641 not used at this time
1642 MASK_CHR - ASCII value of the character used to mask input (used with P_MASK)
1643 MORE_LINE - Current line number of page that is compared to page break value
1644 CMD_VAL - Value stored in CMD when Carina II attempts to reset (warm start)
1645 not used at this time
1646 not used at this time
1647 not used at this time
1648 TERM_TEXT - Points to address where text displayed when entering chat mode is located
1649
1650 EXIT_TEXT - Points to address where text displayed when exiting chat mode is located
1651
1652 MACRO_KEY - Points to table of characters to be redefined as macros
1653
1654 MACRO_TAB - Points to macros that characters will be redefined to
1655
1656 FP_TAB - Points to table where items within the window are by type/length, and position
1657
1658 MASK_DAT - Points to translation table used by COMMASK routine
1659

The following are read-only tables:

1660 not used at this time
1661 not used at this time
1662 not used at this time
1663 not used at this time
1664 MARKER_ADR - Points to area of memory where message/file markers are kept
1665
1666 STAT_RAM - Points to area of memory where the status window is kept
1667
1668 MAC_KEY - Points to table where Carina II's default macro keys are kept
1669
1670 MAC_TAB - Points to table where Carina II's default macros are kept
1671
1672 POINTER_DAT - Points to area of memory where high message/file pointers are kept
1673
1674 BULLETIN_DAT - Points to area of memory where bulletin's last update dates are kept
1675
1676 not used at this time

USR Calls Through MOE

1677 CLEARBUFF - Clear MOE's modem input buffer (used to clear buffer after a user logs off)
1680 MOPEN - Open modem and switch to concurrent I/O
1683 MCLOSE - Close modem
1686 not used at this time
1689 BUFFERLOAD - Block load routine. Loads data from a disk file into a block of memory
1692 RSTAT - Read an item from the status window
1695 WSTAT - Write an item into the status window
1698 TERMINAL - Terminal/chat mode routine
1701 SPAPOINT - SpartaDos point routine (can point past a 32k file up to 8 megs)
1704 BUFFERSAVE - Block save routine. Saves data from a block of memory to a disk file
1707 WORDPROC - Word processor routine (used for editors)
1710 FINDLINE - Used by the message editor to find out where line numbers should be placed
1713 BELL - That annoying-sounding chat bell routine.
1716 CP - Command parser (used to recognize commands at the command prompt)
1719 CPWORD - Used to compare names and other items as when posting a message to a user
1722 MOVEFORW - Move a block of memory to a lower address (if they overlap)
1725 MOVEBACK - Move a block of memory to a higher address (if they overlap)
1728 INSET - Determine whether an account number is present in a list of accounts
1731 TIME - Converts date/time in standard form into a six-byte value (yy,mm,dd,hh,mm,ss)
1734 DISPLIST - Display a list of key-words to the screen (used by file area)
1738 COMMASK - Determine if the user has access to the command he just tried to execute

Here are examples of how to use some of these USR calls:

X=USR(1677) - Clears MOE's input buffer

X=USR(1680) - Open modem and activate concurrent I/O

X=USR(1683) - Close modem

X=USR(1689,IOCB,ADR(BUFFER$),LEN(BUFFER$))

This routine will load data from a disk file into a memory. Here, IOCB defines the channel that the load routine should use when doing the load. This number can range from 1 to 7. The second parameter is the address where the data is to be loaded. In this example, a string called BUFFER$ will be used to store the data. The last parameter is the number of bytes that are to be loaded. When the load has completed, X will equal the number of bytes that were actually loaded. If X is less than the number of bytes that were specified to be loaded (e.g. LEN(BUFFER$)), then an End Of File was encountered during the load.

Here's an example of how this routine can be used to display a text file:

```
100 OPEN #1,4,0,"D:TEXTFILE"
200 DIM BUFFER$(1000):BUFFER$(1000)=" "
300 X=USR(1689,1,ADR(BUFFER$),LEN(BUFFER$))
400 IF X=0 THEN 700
500 PRINT BUFFER$(1,X);
600 IF X=LEN(BUFFER$) THEN 300
700 CLOSE #1
```

This will display a text file at comparable speed to machine language print-file routines (because most of the actual work IS being done in machine language). Note: the buffer size does not have to be 1000. If more memory is available, this number can be larger.

X=USR(1704,IOCB,ADR(BUFFER$),LEN(BUFFER$))

This routine will save data from an area of memory into a disk file. Here, IOCB defines the channel that the save routine should use when doing the save. This number can range from 1 to 7. The second parameter is the address where the data is to be saved from. In this example, a string called BUFFER$ is used to hold the data. The last parameter is the number of bytes that are to be saved. When the save has completed, X will equal the number of bytes that were actually saved.

X=USR(1701,IOCB,INT(POS/65536),POS-INT(POS/65536)*65536)

This routine is a POINT routine that will allow pointing past a 32k file. Here, IOCB defines the channel that the point routine should use when doing the point. POS is the position within the file that is to be pointed to. POS can range from 0 to 8,388,607 (as opposed to just 0 to 32,767 with BASIC).

X=USR(1692,ITEM,ADR(ITEM$))

This routine will copy an item from the status window into an area of memory (usually a string variable). This routine is used in two different ways (depending on the item you are accessing). All items in the window are treated as text EXCEPT for single-binary fields (like Cd, At, 80c, Lnf, etc... -- any item that has two settings (on or off). The Commands field and the Sections field are exceptions (because they contain multiple items) These two fields are still treated as text (i.e. strings). In this example, ITEM is the item number of the item that you wish to copy. The second parameter is the address to which you would like to copy this item. Refer to the status window displaying item numbers of particular items previously displayed in this manual. Here is an example of how to use this routine:

```
100 DIM NAME$(20):NAME$(20)=" "
200 X=USR(1692,1,ADR(NAME$))
300 PRINT NAME$
```

If an item is a binary item, then this routine works a little differently. For example:

```
100 X=USR(1692,40,0)
```

```
200 IF X THEN PRINT "CLEAR SCREENS ARE ON"
```

In this example, 40 is the item number for the clear screen setting. The second parameter (zero) is a dummy value. It is not used, but some kind of number must be there (any number). You could reduce this program to the following:

```
100 IF USR(1692,40,0) THEN PRINT "CLEAR SCREENS ARE ON"
```

```
X=USR(1695,ITEM,ADR(ITEM$))
```

This routine will copy an item from an area of memory (usually a string variable) into the status window. This routine is used in two different ways (depending on the item you are accessing). All items in the window are treated as text EXCEPT for single-binary fields (like Cd, At, 80c, Lnf, etc... -- any item that has two settings (on or off). The Commands field and the Sections field are exceptions (because they contain multiple items) These two fields are still treated as text (i.e. strings). In this example, ITEM is the item number of the item that you wish to copy. The second parameter is the address from which you would like to copy this item. Refer to the status window displaying item numbers of particular items previously displayed in this manual. Here is an example of how to use this routine:

```
100 DIM NAME$(20):NAME$="JOHN DOE            "
200 X=USR(1695,1,ADR(NAME$))
```

If an item is a binary item, then this routine works a little differently. For example:

```
100 X=USR(1692,40,1)
```

In this example, 40 is the item number for the clear screen setting. The second parameter, 1, sets clear screens to true (i.e. ON). A zero in this parameter would turn clear screens off.

```
X=USR(1698)          - Enters into chat mode

X=USR(1713)          - Makes a real annoying sound
```

The other USR routines are geared more toward performing a specific function -- they are not recommended for general programming use within Carina II. You may decide that you want to use a BASIC routine within Carina II that uses these USR routines (like the quick routine that searches for a user by his/her name), and that's fine. Take note of what these USR routines do, but don't concern yourself with how they do it.

VT-52 Graphics

VT-52 graphics is an extension to the ASCII character set much like special Atari graphics characters within ATASCII are an extension to ASCII; however, VT-52 graphics are, in a way, much more complex. Within Carina II, inverse, cursor-control keys, and color are supported with VT-52 graphics when in ASCII mode. MOE automatically translates ATASCII inverse into VT-52 inverse, so whenever you want to display inverse within, say, a VT-52 text file, you should ALWAYS use ATASCII inverse to represent VT-52 inverse. Never use the VT-52 equivalent escape characters to represent inverse. The only time you should use escape characters is when changing character color. Cursor controls and inverse characters within ATASCII are automatically translated.

You can change either the foreground color of a character or the background color of a character when changing colors with VT-52 graphics. This is done by a combination of three characters within a text file (or even within BASIC PRINT statements. The first character is the escape character. This character can be displayed by hitting the ESC key twice when in BASIC. Some text editors will not allow you to have this character within a text file (like Atari Writer or even Carina II's editor), so if you want to change VT-52 colors within a text file, you will need to use a text editor that will allow you to use this character. The second character will either be a lower-case "b" or a lower case "c". A lower-case "b" will change the character color (foreground color) and a lower-case "c" will change the background color. The next character will represent one of four colors that you want to change. These colors are represented by the ASCII values zero through three (i.e. Ctrl-comma, Ctrl-A, Ctrl-B, and Ctrl-C respectively). Here's how each value translates as far as color:

```
Ctrl-comma  ASC(0)      - default background color (usually black)
Ctrl-A      ASC(1)      - red
Ctrl-B      ASC(2)      - green
Ctrl-C      ASC(3)      - default foreground color (usually white)
```

Here is how you would change the background color of a character to red: Within a BASIC PRINT statement, or within a text file, press the keys ESC ESC c Ctrl-A. Three characters should be displayed: the escape symbol, a lower case "c", and a Ctrl-A. Anything else that is printed after this escape sequence will now have a background color of red. To change it back to normal type ESC ESC c Ctrl-comma. These escape sequences are used frequently within the BASIC code of Carina II. List out these modules to the screen to see some examples of how these are used.

Whenever MOE is active, these escape codes will always be masked out on your screen (the SysOp's screen). Whether they are masked out on the user's screen depends on whether or not his VT-52 option is on and his VT-52 color option is on. In order for these VT-52 codes to be sent, VT-52 mode must be on AND color mode must be on; otherwise, only VT-52 inverse and cursor controls will be sent.

Trouble Shooting

PROBLEM	POSSIBLE SOLUTION
o Your modem picks up the phone on an incoming call but does not send a carrier.	o Turn the AT command off in your comfiguration and reRUN BOOTBBS.
o Everything works fine when logging on locally, but the BBS does not seem to be communicating with the modem properly.	o Check your modem's dip switches. Make sure they are set properly. Make sure you are using the proper modem device handler.
o Callers receive a lot of garbage while on-line.	o Check your baud-rate configuration. Make sure it is set to your modem's highest possible baud rate.
o Your BBS crashes or resets every time you log on.	o Make sure all of the system folders are on the proper drives. Make sure your configuration specifies the proper drive numbers for those folders. Make sure your USRVAL_0.DAT file is on the proper drive. Make sure the drive that your password file resides has enough free space for the password file to expand.
o The system clock at the top of the screen loses time rapidly.	o When you are not using an R-Time 8 cartridge, the Z-Handler loses time rapidly. Unfortunately, this is normal.
o You've created sections but they do not appear when logging on.	o You may not have copied the SECTIONS.DAT file from your ramdisk back down to a disk drive before you rebooted. Load the SECTIONS.DAT file into a text editor and see if all of your sections are listed. Recreate the sections if they are not. You may not have access to them. Look at the full-page status window and check.
o The BBS locates users when referenced by account numbers but not by names.	o You may have backed up your password file without backing up your index file. Run the MAKEINDX program.

Credits

Carina BBS version II (c) 1988 Carina Software Systems

MOE version II (c) 1988 Carina Software Systems

C-Modem (c) 1988 Carina Software Systems

Carina II, MOE II, and C-Modem were developed and written by Jerry Horanoff.
The HANGMAN game was written by Larry Anderson
The MAKEINDX program was written by Albert Yarusso
The SigOps database was written by Larry Mahalik

Special thanks to all Carina owners who offered the numerous suggestions. Many of Carina II's features are results of these suggestions.

Very special thanks go out to Bob Trotman, Bill Brown, Albert Yarusso, and Larry Mahalik for beta-testing Carina II, offering suggestions, and putting up with the routine problems associated with beta-testing.

Getting Help

If you need assistance, feel free to call me at 407-747-9195 (voice) anytime after 6:00pm EST. Please do not call the Support BBS for help. It is very difficult to help you with a problem without talking to you directly. It's much cheaper for you to call the voice line and it will save both of us a lot of time. MAKE SURE you have read through the manual completely before calling!!!

Please avoid sending letters regarding questions. I'm afraid that I do not have time to sit down and write letters; however, if you write out a letter in a "fill in the blank" or "check the appropriate box" form, I will be happy to do so and send it back (self-addressed stamped envelopes would be nice also -- or at least self addressed envelopes).

If you would like to keep posted on events happening in the Carina world, call 407-747-9196 (data). Modules and other assorted modifications will be made available for you to download for free!

MAKE SURE YOU SEND IN YOUR REGISTRATION CARD!!!

Send your registration card or letters (in the above-mentioned form) to:

Carina Software Systems
322 Natchez Court
Jupiter, FL 33477

Additional disks are/will be available for Carina II. Now available: RoboWar II. Price: $15.00 + $2.00 shipping and handling. This is a multi-user on-line game consisting of 5 modules. Call 407-747-9196 for a demonstration!

Name: _____

Address: _____

_____

BBS Name: _____

BBS Phone Number: _____

Would you like this number to be placed on our BBS listing? _____

Voice Phone Number: _____

Modem Type/Brand: _____

Interface (if any): _____

Computer Model: _____

Disk Drives used: _____

_____

Ramdisk type/size: _____

Are you using an R-Time 8 Cartridge? _____

Are you using an MIO? _____