BATTERIES ™ INCLUDED

HomePak

BY RUSS WETMORE

FOR
ATARI™

HomePak™

Atari™ Edition

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HOMEPAK USER'S MANUAL

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    MAC/65™ (SuperCart version)
    BUG/65™ (Disk version)
    OSS Inc., 1221 B Kentwood Avenue, San Jose, CA 95129
    The Next Step™
    Sierra On-Line, Sierra On-Line Building, Coarsegold, CA 93614
    Atari™ Macro-Assembler
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THANKS

    Special thanks go to Ron Luks for his untiring support,
    and to Joe Miller for all his technical help."

CHAPTER 1

INTRODUCTION

CONGRATULATIONS!

Congratulations! You have bought three excellent programs – a word processor, database manager and a telecommunications program – for less than the price you would expect to pay for any *one* of them from anyone else! But you're not buying just run-of-the-mill software with **HomePak;** you've got yourself three of the *best* programs of their type on the market. These
aren't programs which have compromised power and quality for a low price; you're going to find features and functions in this package which are equal to or better than even the most expensive programs you can buy for your computer. And **HomePak** is written by a well-known, and respected professional programmer – Russ Wetmore.

There's no need to bend your ear with a lot of hyperbole. You'll find out quickly enough exactly how good and how powerful **HomePak** is. What's more, you'll find that the **HomePak** programs are easier to use than most others which offer similar capabilities – with on screen help menus and friendly prompt messages. **HomePak** finally gives a real meaning to the over-worked term 'user friendly'.

HOMETEXT

In **HomePak** you'll discover **HomeText,** is a word processor with all the features you need to do your personal, school and even business writing. It even allows you to 'preview' your text, seeing in graphic form how it will look on paper before you print it! **HomeText** can use information you stored with **HomeFind** and insert it into letters like the mail merge feature found in more expensive programs. You can use **HomeText** to edit files and 'chats' saved online with **HomeTerm.**

2 HOMEFIND

You also get **HomeFind**; a powerful 'natural language' database which stores and retrieves data in a manner similar to the way you think, without the complexity of rigid field structures and records. This deceptively simple method of dealing with information is more flexible and easier to use than many databases found on professional and business computer systems.

HOMETERM

The third program, **HomeTerm**: a simple but full featured telecommunications program which allows you to sign onto bulletin boards and databases, load and send files, chat and record conversations easily. It works with any **Atari** modem or other brand which connects through the 850 interface (such as the **Hayes Smartmodem™**) and certain other modems such as the **MPP 1000-C™**. **HomeTerm** brings you the exciting world of telecommunications without the difficulties of wading through arcane and obscure technical manuals.

In all you get three 'integrated' programs at a low price, on a copyable diskette, so you don't have to worry about damaging your master copy every time you load a program. Each program has been thoroughly tested and debugged to make sure it runs smoothly and properly. We're sure you'll find **HomePak** the best deal in a software package you've bought for your computer!

CHAPTER 2

GETTING STARTED

PREPARING BLANK DISKS WITH ATARI DOSII

Keep text files on their own disk.

Format two disks.
The first for 'HomeText/HomeTerm Files'.
The Second for 'HomePak Programs'

WARNING: you cannot use a HomeFind data disk to store any other files or programs.

Before you begin work with **HomePak**, you need to prepare some disks. You will need blank disks for your data files and your text files. You will also need to make a backup copy of the master disk we provide so that you can work with the **HomePak** programs without worrying about damaging your original disk.

HomeText and **HomeTerm** can both use any disk you use for files and to store your programs on, but HomeFind needs a new, blank disk to keep your data properly. For your own organization, it's best to keep text files on their own disk, so you need to format a new disk for your **HomeText** files. You can use the same disk when you are using **HomeTerm** as long as you have enough space for any files you download from another computer.

The first thing to do is to make sure your computer is properly hooked up and all cables are attached. Place a disk with **Atari DOS II** (Disk Operating System) in the drive. Turn on your drive, then your monitor or television set and – when the red 'Busy' light on the disk drive goes out – turn on your computer. When DOS is loaded and the menu screen appears, remove your disk and put in a **new** disk. Choose menu selection 'I' to format the disk. This completely erases anything previously on the disk and prepares it to receive new data. When the process is complete, use the 'H' option to write DOS files to the disk.

Format two disks (you don't need the DOS files on the second disk) and label the first disk '**Home-Text/HomeTerm** Files' and the second '**HomePak** Programs'. **HomeFind** will format its own disks from within the program itself, so you only need to have a blank disk ready when you start it. **WARNING:** you cannot use a **HomeFind** data disk to store any other files or programs.

While you still have DOS loaded, place the original **HomePak** disk in the drive and choose menu selection 'J' to duplicate the disk. Follow the or files to boot properly and you won't be able to get one working alone. screen instructions, using the original as the 'source' and the disk you labelled '**HomePak** Programs' as the 'destination'. The computer will prompt you for each stage as the copy is being made. Once you have the copy, place your original in a safe place and only use it to make backup copies when required. Don't cover the write/protect notch on your backup copy with a sticker; you may want to change the screen colors to suite your own pleasure and save those changes to the disk as the new start-up colors.

POWERING UP

Make sure you have no cartridges installed.

HomePak already contains DOS, so you don't need to write DOS to the disk for your own copy. **Home-Pak** is an autoboot disk, which means it loads the menu program and starts itself without needing any special commands from you.

While you can copy individual files from the original disk, it is not recommended that you do so. Each program needs several other programs or files to boot properly and you won't be able to get one working alone. **HomePak** was written as an 'auto boot' disk which performs several functions *before* loading a single program. Keep all of the programs together on the one disk and you won't have any problems.

The process of formatting and duplicating disks is further explained in the Atari Disk Operating System manual. If you need more information, refer back to it.

When you're ready to start working with **HomePak** , turn off your computer and disk drive. You should now turn on your system in the following order:

1. Television or monitor
2. Printer and modem
3. 850 interface (if you are using one)
4. Disk drive number one (make sure your **HomePak** disk is in the drive after it is turned on.)
5. Other disk drives
6. **Atari** computer (make sure you have no cartridges like BASIC installed)

If you're using an XL series computer, it isn't necessary to hold down the OPTION key during loading, as with some programs. **HomePak** knows to disable BASIC. For the 400, 800 and 1200 machines, you must make sure you don't have the BASIC cartridge in the slot when booting.

You will need a modem attached to your system in order to use **HomeTerm** properly. You need a printer to produce 'hard' copy with any of the other programs, although you don't need one to use them to create and store files or information.

HomePak works with the **Atari** direct connect 835 and 1030 modems and a direct connect serial-to-

parallel printer interface such as the 'Ape Face'™. The **HomePak** main menu screen will appear shortly after you turn on your computer. Make sure your sound is turned up a bit on the tv or monitor so you can hear the sound prompts.

THE MENU SCREEN

The main menu screen is how you get from one part of **HomePak** to another. If you press the **SELECT** key, you will see the colored bar move from one program name to the next. The bar changes color for each program and gives you a little sound prompt.

Using **SELECT**, position the bar over the program you want to use and press the **START** key. The chosen program will load. You will be prompted when you need to change your program disk for your data disk. You are now ready to begin using **HomePak**!

Fig.1 Main Menu Screen

CHAPTER 3

HOMETEXT

THE WORD PROCESSOR

Word processing is easily the most popular use for home computers (after entertainment). Until you've tried it, you're probably not aware of how easy writing can be with a computer. You can make changes and corrections, move blocks of text around quickly, change and replace characters, words or phrases, search for references and words in your text, delete unwanted material – all with a few simple keystrokes. Plus you get to save your text to disk as a permanent record, and come back to it any time. Once you begin to use **HomeText** for your writing, you'll wonder how you ever got along without it!

Hometext has several advanced features as well as the 'standard' functions mentioned above; for one, it allows you to take key information out of your **HomeFind** data and include it in the letters or text you write; very similar to the powerful 'mail merge' feature found in expensive business software. It also allows you to print in bold, enhanced or underlined text.

You'll need a printer to print out anything you write.

To use **HomeText** properly, you'll need a printer, connected either to your 850 interface or via a serial-to-parallel interface such as the Ape-Face™. You don't need to have the printer on when you're just writing the letters, memos, reports or whatever to save them to disk, but you will need it hooked up properly in order to print out anything you write.

Load **HomeText** from the main menu by selecting the program and pressing the **START** key. When the copyright screen appears, press any key to get to the writing screen.

BASIC WRITING FEATURES

Press any key once the program has loaded. At first there's nothing on the writing screen; you have an empty screen waiting for you. Take a look at the bottom status lines on the screen; you'll see you're in 'Replacing' mode and you have about 8350 bytes left in the buffer. In order to see what you can do with **HomeText,** type in the two paragraphs we've shown in the sample screen.

Just type in the paragraphs; the words will 'wrap' around the screen as you see below, in the

Fig. 2: Sample Text Screen

proper places. When you get to the end of a paragraph (not a sentence), press the **RETURN** key. Use the **DELETE/BACK S** to correct any mistakes. You'll need to have some sample text to try the various features described below. Before you do anything else to the text once you've typed it in, press **SELECT** and save the file on a blank, formatted disk under the name '**SAMPLE.TXT**'.

All of this text won't fit on the screen at once; you'll see the top scroll up and out of sight as you add text to the bottom. The status lines at the bottom of the screen will be explained in more detail further on in the text, but not to keep you in the dark, they are:

| : | A | : B | : C | : |
| : D | : E | | : F | : |

A: current filename of text
B: Key CLICK status

C: Amount of memory left in the buffer
D: REPLACE or INSERT mode

MOVING AROUND THE TEXT

E: current output device (P: for printer or disk filename)
F: current HomeFind merge filename (selected from Functions menu)

HomeText sees your document in two ways; as the whole buffer and as separate screens. You can move from the top to the bottom of the buffer by pressing **CTRL T** or **CTRL B** respectively; watch the screen display change when you try this. You can also move about the screen; to the top left with **CTRL Q**, the middle left with **CTRL A** and the bottom with **CTRL Z**. To move backwards in the buffer by a full screen, use **CTRL W**, and forwards by a full screen by **CTRL X**.

Finally, you can move to the beginning and end of the current line with **CTRL S** and **CTRL D**.

Atari cursor controls functions;

You should be familiar with the Atari cursor control functions; **CTRL** plus an arrow key. These work here to move the cursor up or down a line and forward or backward a single space. **DELETE/BACK S** erases the character left of the cursor and **CTRL DELETE** erases the character right of the cursor. **SHIFT DELETE** erases the entire line. **CTRL INSERT** adds blank spaces to the right of the cursor, but **SHIFT INSERT** *doesn't* work here.

OTHER FEATURES

The "J" character

There are several features about this mode you will discover; the first is that the 'buffer space left' figure decreases with each character you type in. Then, you'll see the "J" character used to signify that you pressed **RETURN**. Where the word breaks are, you'll see a small dot which tells you the text continues on the next line. Finally, note the small colored marks on the bar just above the first status line; these are graphic representations of the 'tab stops'; described a bit further on.

These key combinations are described in the quick reference guide to **HomeText**. Practice moving about the screen and the buffer until you're familiar with these commands. Try adding more text and see how it affects the buffer size and your movement through it.

'Replace' mode.

"Atari key" toggles insert and replace modes;

If you type on top of a character, your new letters write over the old – that's because we're in 'replace' mode. Try typing over a line of text to see how this works. If you want to insert a character, word or even a larger body of material into something you've already typed, press the **Atari key**; this toggles insert and replace modes; the screen border changes color

to let you know which mode you're in as well as the message on the status line. When your buffer is almost full, you won't be able to use insert to add more characters than you have memory; you'll be put into replace mode automatically.

Press the **Atari key** and go into insert mode. Move the cursor to the top of the buffer then use the **CTRL** and down arrow to move to the beginning of the first paragraph and press the space bar five times; this indents the text properly. Move to the beginning of the next paragraphs (use the **CTRL** and down arrow keys) and do the same. You'll see the words wrap around the screen to fit properly. Try placing the cursor in the middle of the text and typing a few words; watch how the words wrap around on the screen as the existing text is pushed to the right to make way for your new text.

Press the **Atari key** to go back to replace mode. You can stay in whichever mode suits you best, toggling to the other when you need to. The change in border color will help remind you what mode you're in.

The TAB Key

The **TAB** key moves the cursor to the next tab stop – initially set to every five columns. If you want to add a tab stop to the bar below the text, move the cursor to the correct position and press **SHIFT-TAB**; another mark will be highlighted on the indicator bar. To remove a tab, move the cursor over the location and press **CTRL-TAB**. You'll see the mark disappear. **TAB** doesn't force an indentation; it only moves the cursor. To indent the text, use the insert mode and add spaces to the front of a paragraph.

BLOCK MANIPULATION COMMANDS

Move text.
Copying text.

The next step to learn is manipulating text 'blocks'. A block is any large chunk of text you want to move, delete or copy. Press **START** to see the block menu appear. It will appear in the middle of your text, but don't worry; it hasn't harmed anything.

Choose **Move text**. At the prompt, move the cursor (using **CTRL** and the arrow keys) to the beginning of a paragraph you typed. Press **RETURN**. Then move the cursor to the end of the same paragraph and press **RETURN**. This defines the block to move. Now move the cursor to the top of the buffer (**CTRL T**) and press **RETURN**. The block (paragraph) you defined will be moved to the new location immediately, erasing it from its old location and inserting it into the new.

Copying text works exactly the same as moving text, except that it duplicates the block and leaves the original in place, so you have the block appearing twice in your text. Press **START** again and choose Copy; place the cursor at the beginning of the first paragraph and press **RETURN**, then at the end and press **RETURN**. Move the cursor down one line and press **RETURN**. The block is copied to the new location; you'll see both blocks on the screen now, one below the other. NOTE: Move and Copy text only work with blocks of text less than one screen in length.

To **delete** a block, press **START**, and define the paragraph you just copied by moving the cursor and pressing **RETURN** at the beginning and end of the paragraph as you did with Move and Copy. When you press **RETURN** again, the section you defined will disappear. Make sure you really want to erase it before you go ahead!

In case you chose the wrong feature, don't move the cursor at all; press **RETURN** twice; the computer will ignore the request and say "Never mind!"; you can't move, copy or delete a block inside itself. If you want to leave without making any choices at all, press the **ESC** key.
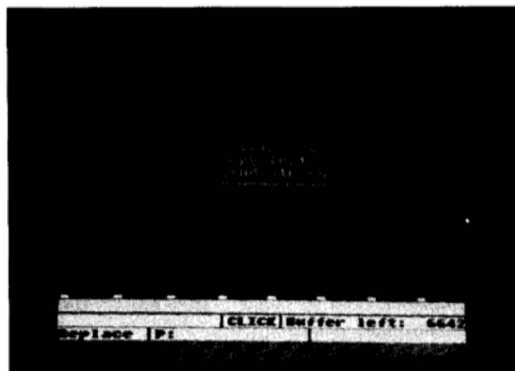

Fig. 3: Block Manipulation Window

"**NOTE:**" Move and Copy text only work with blocks of text less than one screen in length. Delete a block.

SEARCH AND REPLACE

Whatever you search for should be typed exactly as it appears in the text.

To find a particular word or phrase, or even collection of letters in a text, press **START** and choose Find string. Type in the phrase *business software* and press **RETURN**. Whatever you search for should be typed exactly as it appears in the text, using the correct upper and lower case characters. The computer begins to search from the current cursor location, so if you want to search for a string in the entire buffer, move the cursor to the beginning of the text buffer first (**CTRL T**).

HomeText will stop at the first occurence of the string it finds in the text and ask you if you wish to replace it. Type **Y** for yes, and when it asks you to type in the word or phrase to replace the word, type *computer programs*. HomeText will ask you if you want to replace every one of these words it finds in the text. Type **N** for no (right now, there's only one).

You will be asked if you want HomeText to continue searching for more occurences of the word. If you say no, the search will end and the cursor will be on the first character of the word you searched for. Take a look at the last paragraph now; you'll see that *computer programs* has replaced *business software*.

HomeText will tell you if it didn't find the string in the text, and it will move the cursor to the bottom of the text buffer when finished searching or replacing. Use **CTRL T** to get back to the top.

QUICK TIPS

A popular trick used in word processing is to use a short form of a frequently typed word or phrase in your text – such as *wp* for word processing – and then replace every occurence when you're all done typing; it can save you a lot of typing! Here's another small tip for advanced users; if you keep the **START** key pressed down, the window doesn't appear; you can press **M**, **D**, **C** or **F** to choose your function, then answer the prompts. It will save you a keystroke or two.

LOADING AND SAVING FILES

Press the SELECT key.

When you press the **SELECT** key, you'll see this menu appear. Numbers one to four will bring you a directory of what's on the disk in that drive and how much space is left for files. To save the file (store it on your disk or other selected output device), press **S** and answer with the file name **MORE.TXT**. If you have already loaded a file, you'll be asked if you want to save it with the same name again. The current filename will appear in the status line once you load or save a file.

To load a file from your disk, press **L** and type in the file name (you can use the wildcard

You don't need to type in D: since this is the default.

character '*****' here). To load the file you saved earlier, press **L** and type **SAMPLE.TXT**.

In case you still have text in the buffer, you will be asked if it's okay to overwrite it when you try to load a new file. Anything which is overwritten is erased for good, so be careful. You don't need to type in **D:** or **D1:** before a file name, since this is the default.
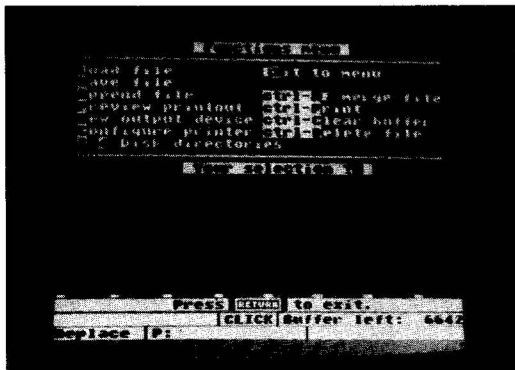
Fig. 4: **HomeText** Functions Menu Screen

APPEND, NEW OUTPUT

Append allows you to attach another file to the end of the current buffer, if there is room available for both files in the buffer. You can string files together for printing which are larger than the buffer space by using the 'include file' feature, described further along. Press **A** and answer **SAMPLE.TXT**. When you return to the text window, you'll see the file you saved was duplicated; the second copy was appended to the end of the first.

New output device allows you to choose your final output destination; you can rename the file and print it to disk (device **D:**) or the printer (**P:**). Don't use a disk filename for output if you have **HomeFind** merge files in your text; it will cause the file to be written and erased until **HomeText** encounters the HF End-of-File (EOF) token.

Configure printer allows you to change the default printer control commands (you can save these and several other changes to disk in the configuration file by pressing **CTRL-W** described later). **HomeText** supports only three printer control codes you can change; bold, extended and underlined print. You enter the codes (up to five decimal values, each separated by a space) to turn the print commands on and off separately. These command values are found in your printer manuals. The screen tells you what the last or default values for each control commands are.

If your printer supports other features, such as italics, you can tell **HomeText** the control codes for this instead of either the bold or underlining features described here. Another way to do this is by using the 'special character' command, described below.

PRINT PREVIEW

One of the most impressive and useful features of **HomeText** is the print preview function. This graphically illustrates what your page will look like when it's printed, using dotted lines to replicate each line of text, highlighting any special printer features (extended and boldface words or characters are shown in blue, underlined words have a green line beneath them; normal words or characters are printed in black).

Print preview works with line lengths of up to 158 characters and page lengths of up to 88 lines (how you alter these is described in the next section).

Print preview needs 5400 bytes remaining in the buffer to preview a file in memory.

There is one small drawback; print preview needs a lot of memory to work – there must be about 5400 bytes remaining in the buffer space in order to preview a single file in memory. This means you can only preview files of two pages in length at most, when the file is in memory. Try a preview of the file you have in the buffer; see how each word and paragraph is graphically represented on the screen. Press **RETURN** to continue or (at any time during the preview), **SELECT** to quit. You will be told if your file is too large to preview.

To preview a long text file.

If you want to preview a long text file, first save it to disk, then clear the buffer and enter on a blank screen press **OPTION D** and then type the name of the file you wish to preview. Then, go to preview and files of any length can be previewed on the screen.

BUFFER COMMANDS

To clear the buffer, use **CTRL C**; you'll be asked to confirm it first. This completely erases everything you had there – all text – so make sure you have saved any important material first, because you can't get it back once you've cleared it.

Make sure you have saved important material first.

To delete a file on the disk, press **CTRL D** and give the file name. A deleted file cannot be restored, so make sure it's the file you want to delete first. To prevent important files from being accidentally deleted, use the 'lock' command in **Atari DOS** to lock a file.

THE PRINTER COMMANDS

To print a file, press **CTRL P**. Make sure your printer and interface (if you have one) are both on or else you'll get an error message. Print the file **SAMPLE.TXT** now and see how it looks. Save this copy to compare with a later printout of the same file we'll do, after we've made some changes to it.

To format your file for your printer – set the margins, define special text features (extended, bold-face or underlining), centering, justification and other features – you press **OPTION** and the window will appear. Formatting establishes how the output will look when it gets printed. Printer commands are inserted into your text at the location you want them to take effect. Press **OPTION** to see the menu which looks like this:
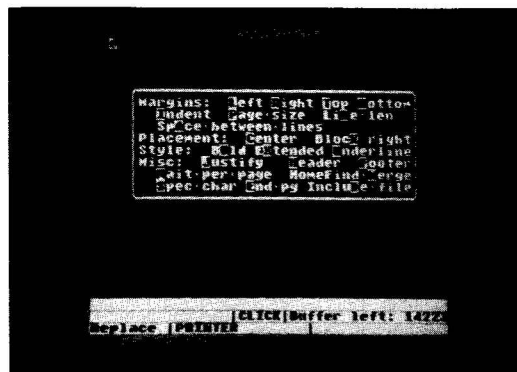
Fig. 5: The Printer Format Window

Make sure your cursor is in the right location before changing or adding a feature.

There are several things to watch out for when using this menu. First, make sure your cursor is in the right location before changing or adding a feature. The feature will appear on the screen, in inverse characters, where the cursor was positioned. The feature will be followed by a right-facing arrow key and in some cases be followed by a value. **HomeText** has several default values which will be used if you don't make any changes. In some cases, such as print features, you have to turn the feature on first, then off where you want to return to normal text. In such a case, the inverse name

will be preceded by a left-facing arrow to tell you that this is where the command ends.

A QUICK EXAMPLE

Load the file **SAMPLE.TXT** and place the cursor at the beginning of the first line - 'All about word processing'. Press **OPTION** and choose **C** for center text. Return to the functions menu by pressing **SELECT** and preview the text; you'll see the top line is now centered on the screen. Return to the text screen.

Move to the beginning of the second paragraph, press **OPTION** and then **L** for left margin. Choose 25 and press **RETURN**. Keep the cursor at the same place and press **OPTTION** and then **L** for left margin. Choose 25 and press **RETURN**. Keep the cursor at the same place and press **OPTION** and **S** for spacing; choose 2 and press **RETURN**. Now go to the functions menu again and preview the text; you'll see that the second and any following paragraphs are double spaced, with a much more indented left margin. Practice using the printer commands and previewing their effects before you use them in your printed document. Before continuing on, re-load **SAMPLE.TXT** so you can try other features in an un-changed document.

Quick Tips

You can delete a print format command by placing the cursor on the first character and pressing **CTRL-DELETE**. One useful hint is to create one common, handy print format with margins, headers and footers, page dimensions and other necessary commands together. Save it as a file so you can call it up any time and have your printer commands and page dimensions already entered when you begin typing.

For advanced users, if you keep the **OPTION** key pressed down, the window doesn't appear; you can press the desired letter to choose your function. This means, of course, that you need to memorize the proper commands in order to use this method.

PAGE DIMENSION COMMANDS

Commands which affect the dimensions of the printed page - **margins, page length, spacing, line length** - should all be placed at the top of the buffer, before you write any text. These include margins, line length, page size, line spacing and indentation of paragraphs. If some of these commands appear later in a file, they can cause your printing to come out rather awkwardly. Use the print preview feature to see what the effect of a command is when placed in the middle of the text before you start to print your file.

Use the print preview feature to see the effect of a command.

While you can vary these dimensions in almost any location in your text, it's a better practice to use standard dimensions throughout your document, rather than having the text appear in different forms in the same document.

Margins can be changed anywhere in the text, but...

To make your format commands easy to read, you can place a carriage return (press **RETURN**) between commands. Most of these commands are simple to use and obvious as to their functions.

Margins are the distance in characters from the left and topmost edges of the paper at which the text starts (left margin) and ends (right margin, counted from the left side), as well as the number of lines from the top of the page that printing will begin at and end at (bottom margin). The initial defaults are: left margin 5 spaces, right margin 70 spaces, top margin 6 lines, bottom margin 61 lines (the normal page length is 66 lines from top to bottom and 80 characters wide).

Margins can be changed anywhere in the text, but there are some constraints; the left margin should be entered first, before the right margin. The value for the left margin **must** be lower than that of the right, so you won't have an overlap. Make sure you leave enough spaces between margins to print your longest word. To print a continuous output file with no top or bottom margins - say a draft copy for editing - set top and bottom margins both to zero.

You can use the margins to offset a section of text to emphasize it, a method used when quoting other material. Try this with the second paragraph. Make your left margin 10 spaces, your right 60 at the beginning of the paragraph you want to offset. Don't forget to return the margins to normal at the end of the offset section.

Page size and line length depend on your printer and the type of paper you're using.

Page size and **line length** depend on your printer and the type of paper you're using. **HomeText** defaults are set for the standard page size; 8 1/2″ by 11″ – 66 lines long and 80 characters (spaces) wide (tractor feed paper has an extra 1/2″ on each side for the paper feed, but don't count it; it's ignored by the printer!). Don't set your page size or line length greater than your actual paper size, or you may end up printing on the roller or platen of your printer! You normally won't change your page size in the middle of a document.

PRINTOUT APPEARANCE COMMANDS

Line spacing can be changed at any time.

Line spacing is the horizontal distance between lines on a page, counted in number of lines. Lines which follow each other with no space between them have a spacing of 1. The space can be set to almost any length, up to 231 lines, but there's not much point in setting it greater than your page length. The default is one space. Line spacing can be changed at any time, say to double space one paragraph for emphasis. Make your second paragraph double spaced; don't forget to return to single spacing at the end of the paragraph or you'll find the rest of the document appears double spaced. Look at the effect with print preview.

Indentation is the number of characters **HomeText** will begin a paragraph in from the left margin (not from the left side of the page). The default is zero, so the paragraphs don't begin inset from the margin unless you change it. If you want to indent your paragraphs, enter an appropriate number; five is pretty standard. Indentation can be changed at any time; often text which is offset by changing the margins has no indentation.

Turn justification on and off where you want it.

Justification is a method of evenly spacing text in a paragraph so that it lines up evenly along both margins. To do this, extra spaces are added between words to make each line the same length. You must turn justification on and off where you want it; if you turn it on at the beginning of the buffer, before any text, and don't turn it off, your entire buffer will appear justified. You can turn justification on or off anywhere (it takes place on the next line after the command). If your text isn't justified, (called 'rag right') it will line up along the left margin only.

Center only works on one line at a time.

Center allows you to place the current line (it must be placed at the beginning of the line) in the center of your page, evenly spaced between the left and right margins. Center only works if your line is less than a page line long (fewer characters than the right margin size minus the left margin size). Center only works on one line at a time, it doesn't center paragraphs.

Block right only works on one line at a time.

Block right aligns the right end of the current line with the rightmost margin. Like center, it only works on one line at a time, and only if the line is shorter than your page line length. Block right is often used to place your address and date at the right edge of the top of a letter, and the closing at the right edge of the bottom.

TYPEFACES AND PRINTER CONTROLS

Don't forget to turn off a typeface command or the rest of your text will use it!
In print preview; extended and boldface words or characters are shown in blue, underlined words have a green line beneath them.

Bold, extended and **underline** are all type commands. Each must be turned on at the place where you want to begin the special type, and off again where you want to end it. Place the cursor at these locations and call up the print command window, answering the screen prompt with **on (Y)** at the beginning and again, but with **off (N)** at the end of the text.

Extended type takes up twice as much space (in width) as normal type on a page. You won't see the typefaces on the screen, only the inverse characters for the commands to turn them on and off. Don't forget to turn off a typeface command or the rest of your text will use it!

You can see what text you have in the special typeface in print preview; extended and bold-face words or characters are shown in blue, underlined words have a green line beneath them; normal words or characters are printed in black.

Special characters allow you to send printer function codes to your printer to get features not supported by **HomeText** (italics, super- and subscript, etc.). These characters are not counted towards justification, so you don't have to worry about

throwing your line off. You type in the decimal value of the character you want to send to the printer (ie, **ESC A** is 27, followed by 65). Decimal values greater than 255 can't be sent to the printer.

Remember when sending special characters, that most features such as italics must be turned off as well as on, so place your special characters to turn on the feature at the beginning of the text where you want it to take effect. Then move to the end of the text where you want the effect to stop and enter the special characters to turn the feature off.

End of page.

End of page is a method of forcing the printer to end the page at the place where you place the command. **HomeText** will print any footer (see below) on the bottom of the page, then go on to start a new page. If you will be pasting pictures or graphics into your text, end of page is a good method to reserve a large blank space for them. Try placing an end of page command after the second paragraph in your text and preview it; see how the third and later paragraphs appear on the next page.

Wait per page.

Wait per page isn't an appearance command; it tells the computer to halt printing until told to resume when you press a key. This allows you to insert separate pages one at a time when printing on a sheet-fed or letter-quality printer. It must be the first command on a line and should be at the top of your buffer. If your printer is a tractor-feed, dot matrix printer, you won't need to wait; each page is fed directly into the printer automatically.

HEADERS AND FOOTERS

Quick Tips

You can include in your text one or more lines at the top and bottom of every page; chapter headings, page number, name or whatever, up to 255 characters in each (including carriage returns and formatting commands). The text at the top of the page is called a **header**, at the bottom it's a **footer**. A typical header might be:

Chapter 1: Word processing   Page @   by Bob Smith

This will automatically print out at the top of every page, and the page number will be incremented to show the right number. For emphasis, you could make the words "Chapter 1" boldface and center the phrase "Page @". You can see headers and footers in the print preview.

Headers and footer commands must start at the beginning of a line.

Header and footer commands must start at the beginning of a line. They may contain their own formatting commands after the opening command (such as centering, block right, etc.).

They must be closed (off) with another header or footer command and the off command must be followed by a carriage return. Headers and footers can have carriage returns in them as well, so they can be more than one line long.

You can have **HomeText** automatically count and number your pages by placing an "@" sign in the header or footer.

INCLUDING FILES

The include command can also be used to preview files of any length.

Make sure the file to be included is on the proper disk.

Include allows you to link several files together for printing which would be too large (if combined) to fit together in the buffer. As mentioned earlier, the include command can also be used to preview files of any length. You can also create special 'batch files' which have only your format files and a series of include commands for smaller files – say chapters – to print long documents.

When **HomeText** encounters the include command, it then brings the file named immediately after the command (the name must be a valid filename and device such as **D1:TEXT.LTR**) and prints it right after the last line (not footer line) in the current text. Make sure when you print your file, that the file to be included is on the proper disk before you begin.

If you want the included file to start on a new page, place an end of page command on the line before the include file command. Include file commands must be the first thing on a line. If you want to include more than one file, place the include commands one after another in the first file to be printed. You cannot 'nest' include commands like **FOR-NEXT** statements in **BASIC**.

To test this out, move to the bottom of the buffer (**CTRL-B**) and press **OPTION**, inserting a new page command at the end. Then press **OPTION** again and insert an Include command, for **D:SAMPLE.TXT**. Make sure your printer is hooked up and go to the functions menu for printing the document. Watch how **HomeText** first prints the buffer, then goes to the disk to call up the next file and prints it. You'll also see the effects of all of your other format and printer commands in the printed file; the line spacing and margins.

MERGING FILES FROM HOMEFIND

You can call up data from any **merge file** you have created in **HomeFind** by first entering the name of the **HomeFind** file from the functions menu (**CTRL H**), and then inserting the merge token in the text where you want the data to be printed. Up to 80 characters (**HomeFind's** maximum record length) can be merged into your text at a time. The merge token must be the only thing on a line, followed by a carriage return; it can't be placed in the middle of a line or within the text body.

You will have to create the proper HomeFind file in order to use this command.

Quick Tips

The merge command will bring into your text the first record associated with that query (explained more fully in the **HomeFind** chapter). Of course, you will have to create the proper HomeFind merge file first in order to use this command.

When you use the **HomeFind** merge token, **HomeText** prints the first record into the body of your text. If there is more than one record in the file (say your file was titled 'address' and contained everyone's address from the entire disk), then **HomeText** will print the next record, with the same text; this is how you can print the same letter to several people in your database (mailing list). Simply type the merge command where you want to print the address, instead of typing the entire address out each time. **HomeText** will translate the down arrow characters into carriage return/line feeds where it encounters them. This merge feature can easily save you a lot of time in typing, especially where letters are involved.

More than one merge file record can be called upon in a body of text, but each must be available on the proper disk at print time, in the proper order to be included in your text. Each time **HomeText** encounters the **HF** merge token in the text, it includes the next record in the same file. So if you have address and phone number and two tokens in a letter, the first will be replaced by the address and the second by the phone number.

If you created a merge file called 'Bob', it will contain all of your data, such as address, phone number, shoe size, job, make of car (provided, of course, you have entered all of this into **HomeFind**). When you include the merge token in a letter to Bob, the program will print out several letters with each record, one right after another, in place of the **HomeFind** merge token. So the first letter will be okay if the first record is Bob's address, but the next will have the phone number instead of an address, the next a shoe size and so on. You end up with many letters, but only one printed correctly.

To avoid this problem, create proper merge files; only have in them the information you need to have printed out in that letter. If you create a 'generic' type file with too much information in it, you may find it easier to 'include' a file on a separate page which does nothing but cause **HomeText** to print the remainder of the records on the page without reprinting the text. This include file could be nothing more than a series of merge tokens to represent the remaining data in the file. So if your merge file has the address, phone number, job and work address in it, but you only want the address, include a file with three merge tokens on a blank page. This is faster and easier than printing four letters, one for each record!

To create a label list.

If you want to create a label list, make your page length six, and your set top and bottom margins accordingly. Use a letter which only has an **HF** merge token as its entry.

CONFIGURATION FILES AND DEFAULTS

The **HomePak** disk contains a number of special files with a -**SET** extension, called *configuration files*; one for each of the three programs on the disk. These are records of the current screen color, brightness and text brightness, margins, key click sound and other features specific to each program in **HomePak**. For **HomeText**, this also includes tab settings, shift-lock and the three basic printer control codes.

You can change these features to suit your own use (see the quick reference guide in each program for what can be changed) and save these changes back onto disk by pressing **CTRL W** in the functions menu. When you load the **HomePak** program, the new settings will be loaded automatically.

Certain settings in **HomeText** have default values which can be changed when you type the proper commands in your text. These are always the same when you begin to use **HomeText** each time. The defaults used are:

Left margin...5
Right margin...70
Top margin..6
Bottom margin..61
Page length...66
Line length..80
Line spacing..1
Justify...OFF
Indent..OFF
Wait at end of page...OFF
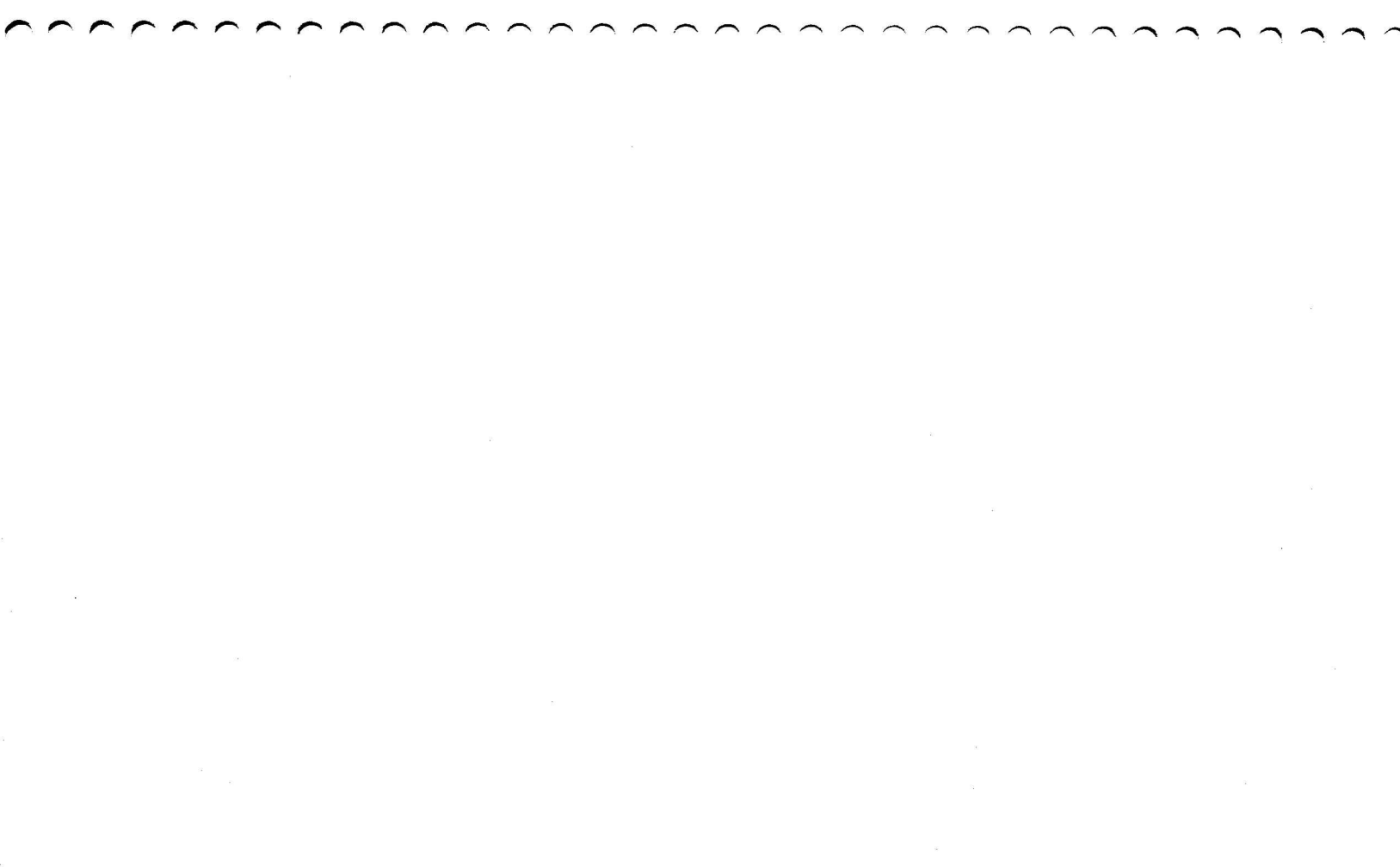
ATARI HOMETEXT
Quick Reference Guide

CURSOR CONTROL KEYS

CTRL Q
  cursor to top left of screen
CTRL A
  cursor to middle left of screen
CTRL Z
  cursor to bottom left of screen
CTRL W
  cursor backwards one screen
CTRL X
  cursor forward one screen
CTRL S
  cursor to begining of current line
CTRL D
  to end of current line
CTRL T
  cursor to top (beginning) of buffer
CTRL B
  cursor to bottom (end) of buffer

OTHER KEYS

TAB
  cursor to next tab setting
SHIFT TAB
  set tab at current column where cursor is
CTRL TAB
  remove tab at current column where cursor is
CTRL arrow
  moves cursor one space in director of arrow
CTRL DELETE
  delete one character to right of cursor
SHIFT DELETE
  delete current line
CTRL INSERT
  insert character at cursor
  ATARI KEY
  toggle between insert and replace modes

SCREEN CONTROL KEYS

To change screen color:
SHIFT CTRL = (down)
SHIFT CTRL = (up)
To change screen brightness:
SHIFT CTRL « (down)
SHIFT CTRL » (up)
To change text brightness:
SHIFT CTRL I
To toggle the key click sound:
SHIFT CTRL TAB
To change the left hand margin:
SHIFT CTRL M (toggles between 0 and 2)
(this takes effect at the first **RETURN** typed)
To save these changes on your program disk:
CRTL W (make sure your **data disk** isn't in the drive!)
This will make your changes the new startup defaults.

EDITING KEYS

To delete the previous character:
DELETE/BACK S
To delete the previous line:
SHIFT DELETE/BACK S

CONSOLE KEYS

To select the printer command window:
OPTION
To enter the Functions menu:
SELECT
To select the text block window:
START

IN THE FUNCTIONS MENU:

To load a file into the buffer:
L
To save the buffer as a file:
S
To append a file to the end of the buffer:
A
To specify a new output device (**P**: or filespec)
N
To specify printer configuration:
C
To get a disk directory:
1 to 4
To exist to the main menu:
X
To specify a **HomeFind** merge file:
CTRL H
To print the buffer:
CTRL P
To clear the buffer
CTRL C
To delete a file on disk:
CTRL D

Chapter 4

HOMEFIND
THE INFORMATION MANAGER

A means to add order to the data you have collected.

You hear a lot about database managers these days, but what is a database? It is simply any organized collection of 'data' – that is, information, facts, details, notes, names and addresses and the like. A database manager is a means to add some sort of order to the data you have collected – for example, a name and address book is a simple method of organizing or managing that data.

Of course, computer database managers offer a lot more than storing your data; they offer flexible ways to retrieve, to sort and select the information. For businesses which deal with many clients, large inventories or staff, the database manager must be powerful, complex and very flexible. This usually means difficult to learn and expensive as well.

Database managers generally depend on a rigid framework of entry lines called 'fields', which, once you have established their size, usually remain fixed and cannot be changed. So if you decide you only need ten characters for a person's business title but you find later you have to enter 'Assistant Vice-president for Exemplary Sales Division', then you're out of luck. You have to shorten the title down to fit the field; something like 'Ast VP ESD' which doesn't help or tell you a lot. Many database managers aren't very flexible when it comes to this type of thing.

Most of us don't think of data anyway; we don't organize information into little fields in our heads. When you think of Bob Smith, you don't mentally look up a box called 'title'; you think "What's Bob Smith's title?". You don't perform a conscious 'sort and extract' routine when you think "Who's Bob Smith?", so why should you have to learn to fit your thinking into the vertebrate structure of a database manager?

Well, you don't; **HomeFind** is a 'natural language' information manager; you type in information the way it occurs to you; "Bob Smith's title's Assistant VP Exemplary Sales Division" and that's it. The next time you want to know about Bob Smith, you ask 'Who's Bob Smith?' and the computer will answer with all of the information you've typed in so far. Or if you ask "What's Bob Smith's title?", it will answer with "Assistant VP Exemplary Sales Division", just the way you typed it in.

All you have to learn is the simple style used when entering or retrieving information; you don't need to fuss about separate disks for separate data, about field lengths and extract parameters or the like. The process is simple, easy and remarkably uncomplicated for what you can do with it.

There are some tricks you will learn as you work with it, especially how to properly organize your information *before* you start to enter it, so you can retrieve it in the best manner.

Load the **HomeFind** program from the main menu by pressing **SELECT** to move the colored bar to **HomeFind** and press **START**. Follow the explanations which follow for creating a data disk and using the program.

CREATING A DATA DISK

Here is the screen you see once you have loaded the **HomeFind** program:
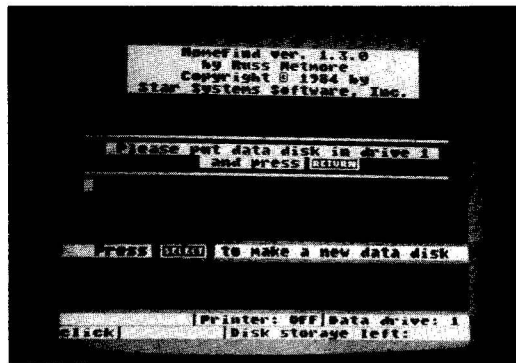
Fig. 6: **HomeFind**'s Initial Screen

Since you're just starting with this program, you'll need to make a new data disk. Remove the program disk and put a blank disk in the drive. If you're using more than one drive, you'll be able to change the drive number a bit further along. For now, just press **SELECT**.

The screen changes to the **Function** menu screen, and the prompt asks you to choose what you want to do. This is an abbreviated form of the screen, with only a few commands available. Later, when you are entering or retrieving data, you can press **SELECT** to see the full feature screen.

Make a new data disk by pressing M

You make a new data disk by pressing **M** – a process which formats the disk in the drive noted at the bottom of the screen as the 'data drive', erasing any material on the disk. You can change the data drive if you have more than one drive by pressing **D** (do so now, and place your blank disk in the chosen drive) or you can exit to the main **HomePak** menu by pressing **X**. You can also return to the previous screen which asks for an already prepared data disk by pressing **RETURN** by itself.
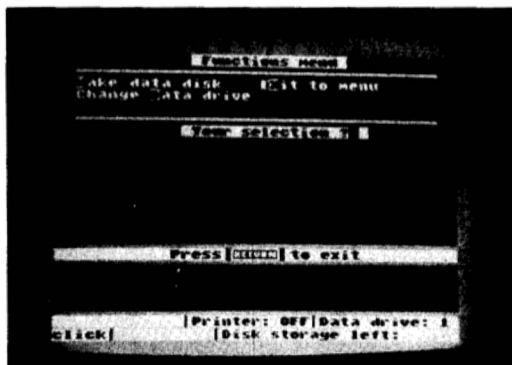
Fig. 7: The First Function Menu Screen

We will make a new data disk, so press **M**. You will next be asked to name your data disk – choose a name 12 or fewer characters long (including spaces, numbers and punctuation) and press **RETURN**. Use the **DELETE/BACK SPACE** key to correct any mistakes you make, or the **SHIFT-DELETE/BACK S** combination to delete the entire line. You have a final chance to escape without making a disk by answering **N** to the last question on the screen once you enter the name.

HomeFind will format and prepare the disk, saying "Done!" when it's finished. Press any key to continue. You'll be back at the function menu screen again.

Press **RETURN** to exit and we will be entering data on your new disk.

Keep your data disk in the drive and press **RETURN**. You will find yourself in the main **HomeFind** screen once the program checks your disk. Take a look at the bottom of the screen; now you'll see the name of your data disk in the left corner and the number of bytes left on the disk in the lower right; 91746 when you start with a new disk, or about 3700 words.

Before you type anything in, check the quick reference chart to see how you can change many of the parameters of the program. The **OPTION** key toggles the printer on and off. **SHIFTCTRL-TAB** combination toggles the key click. **SELECT** returns you to the Functions Menu screen. Other keys and key combinations will let you change the screen colors, brightness and the left margin.

You can save these changes as a configuration file on your backup program disk by pressing **CTRL W** from the function menu screen (not when you're in the data entry screen) and make them your own startup defaults. The original default configuration file will be erased when you do this. **CTRL W** is one of several commands not mentioned on the function menu screen (see the quick reference for these commands). Make sure your **program** disk is in drive one, **NOT** your data disk, when you save a configuration file!

CTRL   W is one of several commands not mentioned on the function menu screen.

Make sure your program disk in in drive one, NOT your data disk, when you save a configuration file!

Okay, let's try a few simple examples of entering information. Type this in exactly as you see it here:

Mike's birthday's April 18, 1958

Now press **RETURN**. You'll see what you typed appear in the lower middle section of the screen. The top of the screen will tell you "Mike's news to me! New subject? Y/N". The computer has just told you it has never heard of Mike and wants to know if Mike is a new subject. Answer with **Y** for yes. Then the computer will say "birthday's news to me! New tag Y/N?". Again, the computer wants to know if 'birthday' is a new tag to use in identifying 'Mike'. Answer **Y**. The computer will now save the information to the disk and tell you "Thanks!".

Every time you enter a new subject or a new tag, **HomeFind** will ask you if it's new. You answer **Y** for yes and the new item will be added to the information on disk. If you answer **N** or any other character, the entire entry will be ignored.

INFORMATION ENTRY SYNTAX

**Subject's tag's object
Notice the apostrophes – they
are very important:**

The rules are few and simple:

**Your entry *must* have all three
parts.**

What you have done is enter your first 'subject', 'tag' and 'object'. The process of entry is always done in this simple three part form:

subject's tag's object

Notice the apostrophes (the " ' " characters) – they are very important: they are the markers which tells the computer where each portion of the subject and tag in an entry statement ends. The computer 'parses' (analyses the grammar of) each line to break it up into these parts so it can store them on the disk and retrieve them properly later. You can type in up to 80 characters for each part and the computer will treat it all as one segment until it reaches the " 's " break. This means that "Account #12345's", "follow up date for contract signing's", "Mike's" and "serial number's" are all individual, legal entries.

HomeFind creates three indices; one index for each of subject, object and tag. You can ask for information in any one of them. The rules are few and simple:

1. Subjects and tags can't have apostrophes in their names, but
   need an " 's " added to the end.
2. Objects can't have apostrophes in them, even " 's ".
3. A tag cannot be the same as a previously chosen subject and vice versa.
4. An object can, but should not be, the same as a previously chosen subject or tag.
5. Each part cannot be longer than 80 characters and the entire line cannot be longer than 144 characters.
6. An entry must have all three parts.

Your entry *must* have all three parts to be correct. If you are missing any part, the computer will ask for the object. You can press **RETURN** to quit and the computer will say "Never mind!", which means it has ignored what you typed in. If the entry has a subject and tag which you have already entered, the computer will respond as if you were asking it for information. If you type "Mike's birthday" by itself, the computer will tell you "April 18, 1958".

If you type in some information which is already entered, the computer comes back with "That's no news to me!". If you type an entry which has the same subject and tag but a different object – say "Mike's birthday's June 5, 1950", the computer will respond with a message like "Mike's birthday was April 18, 1958. Add or change? A/C". You can do either or press **RETURN** to quit that entry

and the computer will say "Never mind!". But if either the subject or the tag are different, the computer will accept the entry. It will save the new entry *as well as* the old if you choose to add the change.

CHANGES AND CORRECTIONS

While typing, you can use the **DELETE/BACK S** key to correct your entry, or erase the entire line with the **SHIFT-DELETE/BACK S** combination. But what if you make a mistake in the information? Say you type "Cindy's sign's Virgo" but you later find out she's really a Pisces. Then you want to change it.

The first method is to type the same line again, this time with the new, correct information: "Cindy's sign's Pisces". The computer will tell you that her sign was Virgo and ask if you want to add or change the entry. This method only works if there is one object for a particular subject/tag combination. If you choose to add rather than change, then the next time you enter Cindy's sign, the computer will assume you're merely adding to the growing list. This way, you can make something like Bob's dog's mean, nasty, vicious or whatever, all together.

For changing an entry use the word 'isn't'.

The best method for changing an entry (and the only one which works when there is more than one subject/tag combination) is to use the word 'isn't', so "Cindy's sign isn't Virgo". The computer tells you the original entry and asks if you wish to replace it. You answer **Y** and the computer asks what Cindy's new sign is. Enter the new object and press **RETURN**. The computer will tell you "Thanks!" when finished. If you answer **N**, the computer deletes the entry completely, returning with "Forgot it!" when done. Any other key than **Y** or **N** cancels the request to change completely.

Continue entering the information you wish to store on the disk. For the examples below, type in the following:

Robert's birthday's March 23, 1953
Mike's favorite color's blue
Mike's car's Honda
Mike's phone's 929-9909 (home)
Mike's phone's 596-1405 (office)
Robert's car's Chevrolet
Susan's favourite color's yellow
Robert's phone's 233-3331 (home)
Robert's favorite color's blue

A little experimentation will show you that the computer will accept "mike" equally well as "MIKE" or "Mike". The program stores the information in the form you enter it, with upper and lower case intact, but it replies to your request in the case you ask in. So if you have entered "Mike's dog's Rover" and ask "what's mike's dog?", you get "Rover's mike's dog".

Your screen will now look something like this;
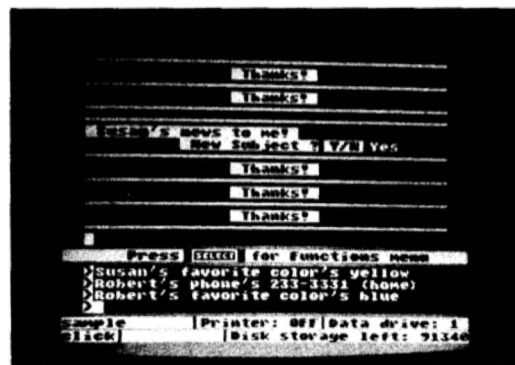
Fig. 8: HomeFind's Main Screen

As you enter information, watch the 'disk storage left' line to see how much space you've got left on the disk.

Entering a lot of similar data can be a bit of a chore. What if you wanted to enter a long list of friends' telephone numbers? Can you imagine typing Bob's phone's 255-4491, Judy's phone's 633-9090, Ian's phone's 444-2321' for a hundred friends? That's when the apostrophe comes into its own.

You can use an apostrophe as a 'ditto' (repeat) mark when entering repeated subjects or tags. You must have one blank space before and after the single apostrophe in order for **HomeFind** to

recognize it. In the phone list, you could type the first entry "Bob's phone's 255-4491" and then type all the others as "Judy's ' 633-9090, Ian's ' 444-2321" etc., using the apostrophe to signify the tag 'phone'.

MULTIPLE LINE ENTRIES

Sometimes you want to break an entry up – particularly objects – into several lines rather than one long one. To do this, you insert a **CTRL-Down Arrow** in the entry where you want the line to break. For example: "Mary's address's 20 Main St. [ ] Apt. 301 [ ] Dorado, Calif 90180". When you ask "What's Mary's address?", you get:

Mary's address's
  20 Main St.   Dorado
  Apt. 301   Calif 90180

COMMENTS

Sometimes it's useful to be able to comment your entries with additional information that you don't need to reference in your requests for information. In the examples "Mike's phone's 929-9909 (home) and Mike's phone's 565-1405 (office)", you might like to keep the information about home and office out of the main entry so you don't have to remember exactly how you entered it when asking for information later.

To comment an entry, you use the vertical bar ('| ') character, like this: "Mike's phone's 929-9909|home" and "Mike's phone's 565-1405|office". Any characters after (and any spaces before) the "| " character are treated as a comment. Comments are ignored when **HomeFind** searches for information for a request.

MAKING INFORMA-TION REQUESTS

Once you have enough information entered, you will want to retrieve it; after all, that's what a database is really for. So let's try a simple request. Type "who's mike?". You should get this:

Mike's phone's 929-9909 (home)
Mike's phone's 596-1405 (office)
Mike's favorite color's blue
Mike's car's Honda
Mike's birthday's April 18, 1958
          That's all!

QUICK TIPS

If you type in "what's Mike" or even just "mike", you'll get the same response. You can ask for simple requests on any single subject, tag or object and get everything related to that request. You can also use the pronouns 'when' and 'where' interchangeably with 'what' and 'who'. Punctuation in your requests is optional but helps keep the process friendly when you use them; "who's mike" works as well as "who's mike?" but the latter is easier to use.

You must type in the request exactly as you entered it,

Try other simple, single item requests like "what's phone?" and "favorite color" to see what happens. You **must** type in the request exactly as you entered it; you must use "favorite color", not simply "color" or "596-1405 (office)" not merely "596-1405" or you will get the message "News to me!". This is why you should use comments to add information like office or home for phone numbers; you won't have to worry about the exact way you entered them later.

"News to me!".

If you ask about something you *haven't* entered yet, you'll get a polite response "News to me!". If you have objects which are the same as a subject or tag, you won't be able to retrieve information about them with a simple request; you'll get the information for the tag or subject reference instead. For example, if you type "Dave's friend's Jim" and "Jim's friend's Paul", if you request only "Jim", all you'll get is Jim's friend's Paul". You'll have to use combined requests, described below.

GETTING SPECIFIC: COMBINED REQUESTS

You can be more specific with your requests. You can ask, for example "What's Robert's favorite color?" or "What's Mike's car?" and get the answer. Now if you ask something that you haven't entered previously, such as "what's Robert's house?", you'll be told the new item is "News to me!" and be asked if it's new (in this case, a new tag). Then the computer will say "Tell me, what's Robert's house?" and you can answer with the correct object. If you now say "What's Mike's house?" the computer will say back "News to me! Tell me, what's Mike's house?" and wait for your answer. Hitting **RETURN** alone cancels the entry.

ANALOGOUS REQUESTS

So far, you haven't been shown any real magic; just simple clean requests. Now you'll learn some neat tricks. Type in the following:
Robert's nickname's Bob
Robert's hobby's fossil collecting
Acct. #1552's outstanding credit's $145
Acct. #1552's credit limit's $500

Acct. #1552's name's Lisa Harris

So now you can ask "what's Bob's hobby?", since Bob has been cross-referenced with Robert. By the same token, you can ask "What's Lisa Harris's outstanding credit?" and "what's Lisa Harris's credit limit?".

HomeFind can only deal with a request if the object is unique.

There's a hitch to this. **HomeFind** can only deal properly with an analagous request if the object associated with the request ('Bob' or Lisa Harris in these examples) is unique and not used elsewhere on your data disk. So if you type:

Bill's nickname's Bud

Bill's hobby's music

John's nickname's Bud

John's hobby's boating

and you ask "What's Bud's hobby?", **HomeFind** would respond with one reference, the last one typed, but wouldn't be able to distinguish between Bill and John or know which one you were referring to here.

You must also make sure you order your information in a way that makes an analogous query meaningful, as well as asking a relevant question. If you type:

Susan's bike's red

Susan's cat's Tibby

Susan's nickname's Sue

then when you ask "what's Sue's bike?", you get "Sue's bike's red", which is fine, but if you ask "what's Tibby's bike", you get "Tibby's bike's red", which is silly! Analogous requests require you to think out the request clearly before you ask, so that you don't get an answer which has no meaning. The **OBJECT** you use in an analogous request should have some meaningful relationship to the **TAG**.

PRINTING YOUR REQUESTS

The OPTION key toggle.

HomeFind doesn't provide a report printout like many other programs; most home users don't need a fancy print out of their data. Instead, we offer a simple, easy method of printing: the **OPTION** key toggle. Press it once and the **"Printer: OFF"** line at the bottom of the screen becomes **"Printer: ON"**. Press it again and it goes to **OFF**. Make sure your printer is turned on in order to print.

When the printer is on, it echoes everything *relevant* which appears on the screen to the printer; your new entries, your requests, plus everything you list when in the functions menu

THE FUNCTIONS MENU

To change the disk, you must select N for new data disk.

section, below. You won't get prompts or error messages cluttering up your printout.

You can press the **SELECT** key any time and immediately be transferred to the functions menu screen. You will see that once you begin to enter data, several new options become added to the few we saw before, which are described above.

When you use **HomeFind,** you can only have one disk in one drive active at a time. In order to change the disk, you must select **N** for new data disk. If you simply insert a new data disk without using this feature, you will damage it and destroy the data on it **PERMANENTLY** when HomeFind writes something to the disk. **Never insert a new data disk without first using the new disk feature.** You will be prompted to insert the disk. **HomeFind** maintains certain information about the current disk in memory which is cleared out when you use this function.

Fig. 9: The Function Menu Screen

Make sure you put your new disk in the proper drive if you have more than one. If you choose the wrong drive number, you won't be able to enter or request any information until you change it to the correct drive. Use the **N** function even after you make a new data disk, before you write to it, or request any in formation from the disk (including listing all subjects and tags.

Always backup your data disks.

Since **HomeFind** uses a special disk format for its *data*, you can't copy it with your regular **DOS** copy or duplicate feature (or write anything to the disk). That's why we have provided a simple routine to make backup copies of your data disks. You should **always** backup your data disks after each session with HomeFind when you have made additions, deletions or changes. Choose **B** and follow the screen prompts to insert the proper disks in the drive as necessary. Backup formats the disk first, so anything on it is erased.

It's often useful to see the list of all subjects and tags you have on a disk, especially when you're adding or changing a lot of data. The **S** and **T** choices will print the list on the screen for you. In order to get a printed copy, press the **OPTION** key before you make the choice, and again after to turn the printer off.

HomeFind deletes objects automatically, but not subjects and tags. When you delete an entry, the program doesn't run through every connection and make sure something wasn't filed under that heading. This would simply take too long to do efficiently, but it can leave 'dangling headings' on the disk which take up space but aren't used as references. To correct this, we have a special feature called **compress** which you should do regularly to your data disks.

Choose K to reorganize your data disks.

Choose **K** to compress to reorganize your data disks. It cleans up the disk, reclaiming lost space, removing deleted entries and making sure all of the links are correct. The screen will show that it's working, with a dot printed for each step along the way. Depending on how much information you have stored on your disk, the process can take between one and 15 minutes to complete. Don't remove your data disk while its being compressed or you will damage it permanently. Always press 'N' for new disk after a compression, to read the new directory properly.

Run the compress function to ensure space is properly used.

You should run the compress function periodically to ensure you don't have any dangling headings on your disk and the space is properly used. This is especially important when you have made a lot of deletions or changes to your data. Make sure you backup your disk before you compress it, just in case.

Remove your data disk and place the backup program disk in the drive BEFORE you write the new file.

Make a new disk, change **D**ata drive and **EX**it to the main menu were all discussed earlier. Remember that when you make a new data disk, the blank is formatted first, erasing any material on it. If you make a new data disk after you've been working with another, make sure you choose **N** for use new data disk **before** you attempt to read or write from the disk or you may cause an error.

While it's not on the menu, **CTRL W** writes a new startup configuration file to your **program**

MERGE FILES

disk. Make sure you remove your data disk and place the backup program disk in the drive **BEFORE** you write the new file; if you write it to your data disk, you will damage the data permanently!

A special feature of **HomeFind** is the merge files; it creates a special file on a regular **Atari** diskette which can be read into your document from **HomeText**. Press **CTRL C** in the Functions menu; the program will ask you for a search request; answer with a valid query: Subject, Tag or Subject's Tag. The search response is saved in memory; only as many objects as can be stored in memory can be saved as a file. Then give a disk filename. **HomeFind** will write to disk all of the Objects associated with your query.

Later, when using **HomeText**, you can insert 'merge tokens' into the text in order to call up the objects saved in this file. This is explained in more detail in the chapter on **HomeText**. If you want to create a mailing list, then use 'address' as your search request; the entire range of addresses on your disk (Bob's address, Sue's address, Mike's address, etc.) will be saved in the file. Records are printed into your **HomeText** documents in the order in which they are saved.

You can use other database managers to create valid merge files, as long as certain rules are followed: the entire record (not file) is no more than 80 characters long, multi-line entries are separated by ASCII character 29 (the down arrow) and each record is separated by one and only one carriage return.

ATARI HOMEFIND
Quick Reference Guide

SCREEN CONTROL KEYS

To change screen color:
SHIFT CTRL = (down)
SHIFT CTRL − (up)
To change screen brightness:
SHIFT CTRL (down)
SHIFT CTRL (up)

To change text brightness:
SHIFT CTRL I

To toggle the key click sound:
SHIFT CTRL TAB To change the left
hand margin:
SHIFT CTRL M (toggles between 0
and 2)
(this takes effect at the first RETURN
typed)

To save these changes on your program
disk:
CTRL W (make sure your **data disk**
isn't in the drive!) This will make your
changes the new startup defaults.

EDITING KEYS

To delete the previous character:
DELETE/BACK S

To delete the previous line:
SHIFT-DELETE/BACK S

CONSOLE KEYS

To toggle the printer on and off:

OPTION
To enter the Functions menu:
SELECT
To create a merge file for HomeText
use:
CTRL C
INFORMATION SYNTAX
To enter information:
Subject's Tag's Object
Example: David's bicycle's red
To retrieve information:
Allowable pronouns: Who's, what's
where's, when's
Single Item query:
pronoun + subject, or
pronoun + tag, or
pronoun + object, or
simply enter the single word

Multiple item query:
pronoun + subject's tag, or
pronoun + tag's object, or
subject's tag (no pronoun), or
tag's object (no pronoun)
Analogous query based on object:
pronoun + object + tag, or
object + tag (no pronoun)
In the Functions Menu
To create a new data disk:
M
To change the drive number:
D
To copy the data disk:
B
To change to a new data disk:
N
To list all subjects:
S
To list all tags:
T
To compress the data disk:
K
To exit to the main screen:
X

CHAPTER 5

HOMETERM
THE TELECOMMUNI-
CATIONS PROGRAM

**Computer-to-computer
communications**

Telecommunication means computer-to-computer communication over the telephone line. You link your computer with one or more others so that you can send and receive programs or 'electronic mail', transmit or read information, chat with other users, store files, do electronic shopping or banking, read on-line magazines or even an encyclopedia; all those things you do locally, except over a distance with a computer and a modem.

Modems (for modulator/demodulator) are the devices which link computers, translating the electronic signals from your computer into an audible tone which is then transmitted along the phone lines. The tones are translated back into recognizeable signals by the modem at the other end. If you have ever lifted your telephone receiver while transmitting or receiving a file, you will have heard the sound of the modems 'talking'. This isn't a recommended practice however – it almost always causes your data to become scrambled or garbled when you pick up the receiver to listen.

Modems are serial devices – meaning they transmit data sequentially, one bit at a time, turning the eight bits of a character into a stream of bits which follow one another. Your computer re-assembles the bit stream back into eight bit characters when it receives the data from the modem.

Modems such as the **Atari 1030** and **835** plug either directly into the serial port on your **Atari** or disk drive or into the 850 interface which has the necessary serial ports, called the **RS-232 outlets** (RS-232 use a 'standard' for pin connections, so you can use almost any modem with the proper cable for your **Atari**). The 850 plugs into the serial port itself. You must turn on your modem first, then 850 (if you are using one), then disk drive, before you turn on your computer. **HomeTerm** can tell which type of modem you are using.

HomeTerm works with the **MPP-1000C®** modem as well – a modem which plugs directly into the joystick ports. To set up your **HomeTerm** program for the **MPP** modem, read the last section in this chapter.

None of the features described work properly without a modem or interface attached.

BASIC TECHNICALITIES

The first thing you'll need to use this program is a phone number of a local bulletin board system, users group, on-line network such a **CompuServe** or a friend who has a modem hooked up to his or her computer. This will allow you to test the features of **HomeTerm** and see what telecommunication is all about. None of the features described below work properly without a modem or interface attached, so make sure they're all on properly before trying **HomeTerm**.

Telecommunications isn't difficult or very complex, but it does require that you understand a few technical terms and how it works in order to use it properly. You will probably have to try the program out several times to get the hang of it.

The first thing you need to know is the speed of communication; both computers have to talk to each other at the same speed. This is measured in *baud*. Most home computers transmit at 300 baud, which translates to roughly thirty characters per second or three hundred words per minute. Many newer modems can switch to 1200 baud – four times as fast. People used to use 110 baud – a very slow speed – before faster modems became cheaper to buy. Many popular modems – the so-called 'smart modems' – can work at several speeds and can tell what speed the other computer is working at and adjust to it. Check your modem manual for details. You should try to make sure you know what speed the other computer is transmitting at before you call it up.

Baud

Duplex

The next item is *duplex*; modems are capable of transmitting data in both directions at the same time; in **full-duplex** state (sometimes called **echo-plex**), they do just that, just like two people talking at the same time on a telephone. Your screen shows you what the other system echoes back to you. Full duplex is the faster mode. In **half-duplex**, you transmit only one way at a time (say, to the other computer), then the other way (back to your computer), like a CB radio. Your screen shows what you type, without an echo to your screen. When you're in half-duplex and the other system is in full, you get a doubling of characters, so if you type "HEL-LO", you end up with "HHEELLLLOO".

Which duplex do you need? It depends on what the other person is also set at! There are no set rules for duplex; you will have to try one or the other if you have any troubles communicating. The duplication on the screen of any characters you type is one good indication that you need to switch duplex. Often switching your duplex will cure any problems. Some modems have a switch to set the duplex mechanically; make sure the switch setting conforms to the mode you need. Experimentation will show you what's necessary.

'ASCII'
ATASCII
Vidtex
XModem
HomeTerm supports all four.

Which method you should use
will depend on the computer at
the other end of the line.

There are several choices involved in communications and transmitting (*uploading* or receiving, capturing or *downloading*) files. The first step is to establish what type of computer you are communicating with. Most computers converse with each other in 'ASCII' code – straight characters; numbers, letters, punctuation, without control or escape codes or inverse characters. When two **Ataris** talk to each other, they can send the codes, inverse characters and special symbols in **ATASCII**. CompuServe has special cursor control features it supports, using a systems called **Vidtex**. **HomeTerm** supports all three methods. You should consult your **Atari** manuals for a full explanation of **ASCII** and **ATASCII** and the difference between them.

Many bulletin board systems – particularly those using a **CP/M** computer or **CompuServe** (for file transfers only) – use a file transfer protocol method designed and developed by Ward Christensen, called the *Xmodem* protocol. **HomeTerm** also supports **Xmodem**. Which method you should use – **ASCII, Atari, Vidtex** or **Xmodem** – will depend on the computer at the other end of the line. You will usually be able to talk or chat, read mail and information without knowing which to use since you will be doing so in **ASCII**, but it is important to use the right method when moving files. You may have to experiment a bit first to get it right.

HomeTerm reserves a section of memory called a *buffer* for use when transferring files. When you send a file, as much of it as can be stored in the buffer is loaded in , then transmitted to the other computer. When the buffer is empty, it fills up again and continues doing this until the entire file is sent. When you receive a file it works in reverse; as much of the file as possible is stored in the buffer before being saved to disk, then once the buffer is empty again, it starts to fill up. During the times the disk is being used, the computer doesn't transmit. It sends a signal to the other computer, telling it to wait until the operation is finished, and when done, sends another signal to start up again. The buffer is discussed in more detail later.

There are two other areas which are important but not usually critical to home use. One is *parity*; when you transmit in **ASCII**, a *start bit* is added to the front of the character – a zero – to tell the host system to expect an **ASCII** character. After the letter is sent, a parity bit follows. This is either a one or zero to make the sum of the bits in the character sent – including the parity bit – come out either odd or even. Older systems used to use parity checking to ensure the transmission was correct. **HomeTerm** ignores parity, since it isn't used much on modern systems anymore.

The final item is *stop bits*. After each character has been sent, one or two bits follow as a 'flag' to tell the receiving system that the entire character has been sent and the next bit

received will be the start bit of the following character. **HomeTerm** uses one stop bit, since most systems nowadays support just one rather than two stop bits. You can't change either the no-parity or one stop bit protocol, but you won't often find systems which need or use anything else.

USING HOMETERM; THE SCREENS

After you load **HomeTerm** from the main menu, remove the program disk and place it in a safe location. You should place a formatted disk in one of your drives to store programs you wish to retrieve from another (or *host* computer, or a disk with files you wish to send to another computer. Your first screen is the 'interactive mode' screen; this is the screen you see when calling another system, when transferring files, when chatting online. There are three screens in **HomeTerm**; the others are the Functions menu screen and the Files menu.

The bottom two lines tell you the status of your link to the other computer. You can see current size of your memory buffer (7072 bytes), the baud rate (300), the duplex (full) and the translation mode (ASCII). The status lines will also tell you what file activity you're performing and the name of the file. Finally, the center box shows a timer you can set in the functions menu screen to keep track of how long you've been online (especially useful on systems which charge for their services!).
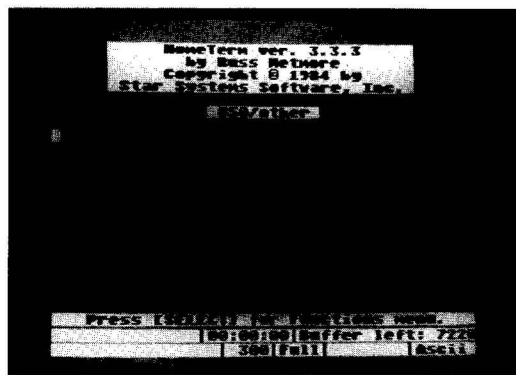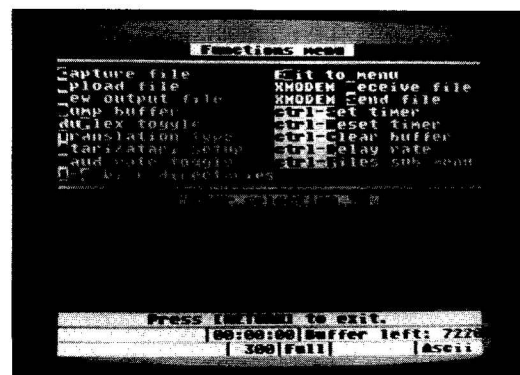

Fig. 10: Interactive **HomeTerm** Screen

Fig. 11: **HomeTerm** Function Menu Screen

43 Going to the functions menu won't disconnect you from the other computer.

Not every feature of HomeTerm is listed on the screen.

FIRST STEPS BEFORE PLACING A CALL

The B key toggles between 300 and 1200 baud.

Press **SELECT** to go to the Functions menu screen. When you're online with another computer, going to the functions menu **won't** disconnect you from the other computer. However, if you're talking to someone, it's only good manners to tell them you're leaving for a moment, since you can't talk to them from the functions screen.

There are actually two different function menu screens; one for a regular modem, another for the **Atari** 835 or 1030 modems. These **Atari** direct connect modems only support 300 baud. You do not need and cannot use the cartridges which come with these or other modems (Telelink or any other software)!

Not every feature of **HomeTerm** is listed on the screen; only the most commonly used are shown, so you may have to refer to the quick reference card for such things as changing the screen colors. Let's look at the features shown on the screen, one at a time, while we go through the process of 'signing on' to a bulletin board, or calling another computer.

If you are using a modem through the 850 interface which supports more than one baud rate, you need to make sure that you are calling at the right speed (the 835 and 1030 modems word at 300 baud only). The **B** key toggles between 300 and 1200 baud. Try it and see it change on the status line at the bottom of the screen. If your modem can transmit at 1200 baud and you know the computer at the other end can as well, then use 1200. Otherwise, 300 baud is the most common speed used. You can't change your baud rate once you have connected to another computer.

You should start in **ASCII** mode when placing a call; you can change translation modes later when transferring files. One of the reasons for using **ASCII** to dial is that your modem will accept commands in **ASCII**, but may not take them in **ATASCII** (**Atari**) mode. If you can't get the modem to respond, try pressing **SHIFT-CAPS/LOWR** to set the output to uppercase, then re-entering your commands. Pressing **CAPS/LOWR** alone releases the shift lock.

You select a duplex mode with P.

You select a duplex mode with **P**. Start out with full duplex; if you have problems, you can change once you're connected. If you're in half duplex mode and you get "doubled" keystrokes on your screen, switch to full duplex. Now you're ready to make a call. Press **RETURN** to switch to the interactive screen.

PLACING OR RECEIVING A CALL

In the interactive screen, you type the commands to dial a number. If you're using an old style 'acoustic coupler' modem, or one which doesn't have 'autodial' capability, you can still use **HomeTerm**, but you'll have to manually dial the number. Your modem documentation will tell you how to dial and what you need to enter. The **Hayes** and other 'smart modems' use a command like this: (refer to your modem manual for details)

ATD555-1234 «RETURN»

This says "attention modem (AT – tells it a command is coming), touch-tone dial (**D**; if you were using a rotary phone, you use **PD** for pulse dial) the number which follows (555-1234)". When the modem on the other end of the line answers, you may see a message on your screen, tellling you that you are connected (such as 'carrier detected' or 'connected' (or you may have to type something to get the other computer to recognize you (**RCP/M** systems require a **RETURN**, **CompuServe** needs a **CTRL C**). When you're calling a friend, you may see nothing at all and may be able to type without needing to send other signals.

If you have a modem which can answer calls (an 'auto-answer' modem), then set it to do so (this means setting the proper switch in the **Hayes** or giving the modem the proper command in others). In the functions menu for the 835 and 1030 modems, you will see the **A** command which will allow you to manually answer the phone. Press **CTRL A** when the phone rings in order to answer it and go online.

THE INTERACTIVE, OR CHAT MODE

Now that you've made connection, whatever you type is automatically transmitted to the other computer, as well as to your screen. When you're online with a bulletin board or electronic database, you should end each entry with a **RETURN**. When you're talking back and forth with

a friend, you should end each line or sentence with something like **GA** for 'go ahead' and three periods (...) for 'more to come', so that they know you're finished and can respond. Wait until you see their end-of-message sign **GA** before you begin typing your own reply. Another way to signify who's talking (especially when saving the conversation to a disk file for later reading) is for one of you to use the **TAB** key before starting your line.

There are several things you can do while in the interactive mode; change screen colors, text and screen brightness, adjust screen margins and more. These are explained in the quick reference guide. Some features won't be as obvious as others; **word wrap** for one. When your text comes to the end of the screen, it breaks at the last word and continues on the line below, so the words aren't broken in the middle. This isn't always necessary or wanted – say when capturing a file. To turn off word wrap, use the **SHIFT CTRL W** toggle. The screen will tell you what you've done. Word wrap is convenient when reading files formatted or 80 column displays.

Word wrap.

If you're not the best typist in the world, you sometimes make mistakes in your input and get the wrong response. **HomeTerm** has an edit window, toggled by **SHIFT CTRL E**. When it's on, you see a line cut across the bottom of the screen. Everything you type appears in this window, but isn't sent to the other computer or the modem until you press **RETURN**. The edit buffer can hold up to 120 characters; some systems won't accept that much text at a time without a carriage return – experiment to see what it can take.

If you're not the best typist in the world.

When you press **RETURN** everything from the beginning to the end is sent, minus any trailing blanks, no matter where you placed the cursor when you pressed **RETURN**. You can use the **CTRL** key, the arrow keys, and the **TAB** key or the **DELETE/BACK S** key to edit the window before you send anything. The **CTRL CLEAR** keys will clear the screen once **RETURN** is pressed. The editing feature is particularly useful in **CompuServe's CB** section.

Sometimes when you're talking online or reading messages or getting information, you see material you want to save for later. To open the buffer to begin saving what's appearing on the screen, press the **OPTION** key. The status line on the bottom tells you that capturing is one (and the screen border turns red). Press **OPTION** again turns the capture buffer off. You can start and stop saving data into the buffer any number of times before saving, as long as there's room in the buffer for it. When you want to save the buffer to a disk file, press **SELECT** for the function menu and the **D** to dump. **HomeTerm** will ask for a filename then. You can choose to dump the buffer to the printer (**device P:**) or the screen (**device E**), using **CTRL 1** to pause and

To save for later press the OPTION key.
To save to disk, press SELECT and the D.

restart the output. The screen device can be used to review the buffer's **Capture** and **Upload** a file is the normal way to receive (capture, or download) and send (upload) a file, respectively. You will be asked for the filename; if you're using more than one drive, specify the drive number, for example: **D2:TEST.TXT**. You can also ignore uppercase in the filename, so 2: test is treated like **D2:TEST** by **HomeTerm**, without problems. The program assumes you mean **D1:** if you don't specify a drive. If the file you intend to send isn't on disk, you'll get an error message. Press any key to continue. You can get a disk directory by pressing the numbers one to four.

When you are talking with a CP/M RCP/M or Christensen (Xmodem) use Receive and Send.

When you are talking with a **CP/M** or **RCP/M** system, or any system which uses the Christensen (**Xmodem**) protocol (such as **CompuServe** for file transfers; often listed on the system's opening screens), you use **Receive** and **Send** files, rather than **Capture** and **Upload**. In both cases, you can simply press **RETURN** when asked for a filename and cancel the operation before it gets started. To begin sending or receiving a file, press **SELECT** to return to the interactive mode and the press **START** to initiate the process. Sometimes you have to type the command for the host system to send the file but press **START** before you press **RETURN**, otherwise you miss the first few bytes that are sent. **S** and **R** automatically set the correct duplex and translation modes for correct transfer; you don't need to set them manually.

Using the Christensen Xmodem protocols.

Using the Christensen Xmodem protocols, which breaks a file into 'records' for transmission, the receiver waits 10 seconds for the first byte of a record being sent or one second between each character in a record. If nothing is received in this time period, the system aborts the procedure *after* retrying ten (10) times. The sender has only one time-out; when nothing has been received in acknowledgement for one minute.

Sometimes during a transfer of a file, you need to quit. To do this, press any console key (**START, SELECT** or **OPTION**). This usually works, but it assumes the other system can recognize the cancel signal – no problem if you're talking to another **HomeTerm** user. Some systems which use the **Xmodem** protocol **can't** recognize the cancel, so you have to wait it out until the remote 'times-out' or the transfer is complete.

Before you send a file, you have to make sure you have the translation mode (**T** and **A**) set properly. In **ASCII** and **Vidtex** modes, there are several special key combinations to give you special characters or commands (see the reference card). Once you begin to send or receive a file, you will see your data presented on the screen as it moves between computer and modem. Once a file has been sent, you can clear the buffer in preparation for more transfers (**CTRL-C**). You cannot send or receive more with an intact buffer.

In **Vidtex** mode, true cursor control is implemented, but you must go into the **CompuServe** **DEFALT** program and choose the terminal type of 'VIDTEX' with a 38 or 40 character by 21 line screen in order to use it properly. **Vidtex** has clear screen and cursor position features not used in other systems. This is described in more detail, along with the **DEFALT** program use, in your **CompuServe** manual.

If you want to print a file rather than save it to disk, give it a file name of **P:** for output, so the copy goes directly to the printer. The carriage return/linefeed (**CR/LF**) combination is always sent to the modem or the device, automatically at the end of a line (**EOL character**).

DISK FEATURES
HomeTerm mini-DOS

You've already seen that the numbers 1 – 4 produce a directory of that drive, if connected. There are more disk related features available in **HomeTerm** – there is a **mini-DOS** function which allows you to perform the most important **DOS** features without leaving **HomeTerm** or going off-line!

Press **CTRL F** for the files sub-menu. It has several functions to allow you to manage your disks and files properly; copy, delete, rename, lock and unlock (wildcards are allowed) files, get a disk directory and format a disk. These features are all explained in your **Atari DOS** manual; consult that manual for more information. For other **DOS** features, such as copy an entire disk, you'll have to disconnect, leave **HomeTerm** and boot up **DOS**.

Copy uses the capture buffer to copy files. You will be asked if the program can use the entire buffer; if you answer **N**, the program will use only the available free memory, which means more disk swaps with one drive (the routine needs at least 1024 bytes of buffer space to operate). You can also copy a file to the printer (**device P:**) or any other device (**E:**, **S:** or **C:**) you wish. You can use a wildcard in copy, but only the **first** filename which matches will be copied.

Make sure you don't have your program or data disk in the drive when you format the disk.

With **rename**, you can specify any valid drive for the first name, but the new name cannot have a drive specification (the file is assumed to be on the same disk). Wildcards are allowed.

One precaution: make sure you don't have your program or data disk in the drive when you press **F** to format the disk! If you choose a selection but change your mind, press **RETURN** instead of answering with a filename and the command will be cancelled.
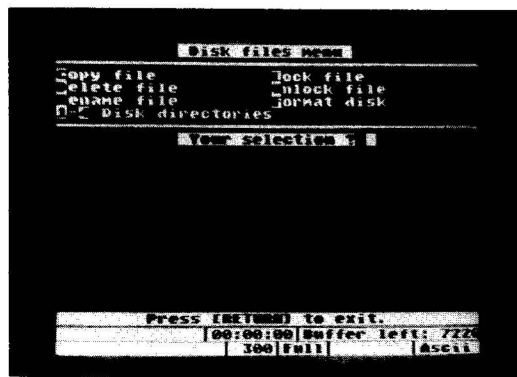
Fig. 12: Disk Files Function Menu

SPECIAL FEATURES

You have noticed several other commands on the functions menu so far we haven't discussed. The first is the **timer**; set with **CTRL S**. The timer is a 24 hour real time clock. You can enter the current time and it will keep the clock running on the status line of the screen. You can reset the time to 00:00:00 by pressing **CTRL R**. This is useful to keep track of the time you've spent online when using a system with either a time limit or a fee for useage. You must turn the timer on to get it working after you've set it; press the **Atari** key to toggle the timer on or off (in either screen).

The buffer.

When you capture data using the **OPTION** key, or send or receive a file using a function menu choice, you use the buffer. There is only one buffer and in order to use it for other purposes, you must clear it; press **CTRL C**. You can also simply load or receive a file but change your mind and clear the buffer without either saving it or sending it. The buffer is usually cleared automatically after a file transfer.

To add delays.

Sometimes you need to add delays between characters when transmitting a file, so that the other computer has enough time to fetch and display each character. **CTRL D** sets the delay in

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increments of 50 milliseconds. Just type in the number you need to add to each line. Usually between 10 and 50 delay increments are sufficient; delays greater than fifty are seldom necessary.

MACRO COMMANDS

To 'automate' your dialing and logging sequence.

Macros are simple keystrokes which allow you to transmit several commands or a long string of characters (up to 70 characters total) without having to type the entire line in each time. You can best use them to 'automate' your dialing and log-on sequence to such systems as **Compu-Serve**, where a long keying process is involved. You can have up to ten macros at a time and store them to disk, along with several other parameters, in a special configuration file.

Macros are transmitted in the interactive mode by pressing **SHIFT-CTRL** and the number of the macro – zero through nine (0 – 9). To abort a macro, press any key while in operation (you can tell a macro is still working because the screen itself changes to green). To get a list of your active macros, press **SHIFT-CTRL**

Macros are defined in the function menu by pressing **CTRL M**. You will be shown the current list and asked which one you wish to change. If you have entered data for that macro already, you will get an edit window which allows you to change a few characters if necessary, without having to change the entire line. Control characters appear in inverse **ASCII**.

To write a macro, you simply type in the characters and commands you want to send, ending the sequence with a **RETURN**. A carriage return and line feed (**CR/LF**) is sent at the end of each macro unless the last character is **ESC**.

Special characters used in macros.

There are several special characters used in macros. These are:
1. **CTRL C** Toggles the capture buffer open and closed
2. **CTRL M** Sends the end-of-line character.
3. **CTRL P** Pauses for two seconds before continuing
4. **CTRL U** "Use" the macro whose number follows immediately. This is like the **GOTO** command in **BASIC**; it allows you to combine several macros together. Using **CTRL U**, you can link several macros together into a 'giant' macro with many more commands than one alone would permit; almost 700 characters can be combined in one mega-macro this way.

5. **CTRL W** Wait for the next character you specify to appear from the host. If the character hasn't appeared in 30 seconds, the macro is aborted.
6. **CTRL ESC** n) Makes the next character 'verbatim'; necessary to transmit control codes rather than interpreting them as a command.

Here's an example of a macro used to call up and log on to **CompuServe**. The '⌃' character means 'CTRL' and the square brackets —[ ]— aren't typed in–they're only shown here to differentiate between control codes and other characters.

ATD555-1234[⌃P] [⌃M] [⌃W] T [⌃P] [ESC] [⌃C] [⌃W]: 77770,111 [⌃M] [⌃W] : FREE-DEMO

This macro breaks down as follows:

1. ATD555-1234[⌃P] [⌃M] Call the number 555-1234 and pause for two seconds to allow the modem to catch up to the input stream.
2. [⌃W] T [⌃P] Wait for the 'T' in the **'CONNECT'** prompt from the modem then pause again while the sign on message is being displayed.
3. [ESC] [⌃C] Send a **CONTROL C** so that **CompuServe** can acknowledge the call. The ESC tells **HomeTerm** that the **CONTROL C** is to be transmitted to **CompuServe,** not taken as a command.
4. [⌃W]: 77770,111 waits for the final ':' in the **CompuServe 'USER ID:'** prompt, then sends the users ID code, followed by the end-of-line character.
5. [⌃W]: FREE-DEMO waits for the final ':' character in **CompuServe's 'PASSWORD:'** prompt, then sends the password.

CONFIGURATION

You can save your screen color and brightness choices to disk, along with your current list of macros, the current baud rate, key click, duplex mode and translation type as a configuration file, while in the function menu. This is done by pressing **CTRL W**. The default configuration file which comes with the program is called **HOMETERM.SET**. To save your own default file under that name (replacing the one on the program disk), press **CTRL W**. The default configuration file is always the one which boots up with the initial program load.

To save a differently named configuration file, press **CTRL N**. You will be asked to give the filename. You can store as many as you want, as long as you given them each different names and you have enough disk space.

To load a different configuration than the default once you're in **HomeTerm**, press **CTRL L**. You will be asked for the name of the file to load. Using different configuration files, you can save several different sets of macros for use with different online systems.

The configuration file commands are not shown on the function menu screen. They only work in the function menu, not in the online or interactive screen mode.

SIGNING OFF

Once you've signed on to a system, you'll want to explore it, test what it has to offer, download (capture) files or programs, read and leave messages or electronic mail (often called **Email**) – whatever the system allows (most bulletin boards and databases have menus for you to choose from). When you're finished, you'll have to sign off. Usually the system has a menu choice for quitting; sometimes it's a single word like **BYE** or **QUIT**. Check with the system functions menu before you continue, so you know ahead of time how to leave properly.

THE 835/1030 FUNC-TIONS MENU

If your modem is still hooked up, you will need to disconnect it (sometimes manually) or place it 'on the hook' so that your phone line is clear again and the modem doesn't answer when someone calls! The **Hayes Smartmodem** uses **ATH** as the 'hang up' command. Check your modem manual for details.

There are some changes for the **Atari** 835 and 1030 modems which reflect the different capabilities of these devices. Since they are only 300 baud modems, you no longer have a baud rate selector. In addition to the other features, you have **H** for hang up phone – this disconnects your system from the line.

You have **CTRL A** for answer phone. This isn't an 'auto-answer' mode like smart modem – there is no simple way to detect a ring automatically with these modems. Instead, it picks up the phone and puts the modem into answer mode (**Atari** modems are usually in originate mode). To do this let the phone ring at least once, then press **CTRL-A** to answer it.

M is to make a phone call. It pulse dials a number (rather than touch tone dialing) which you type in when asked – up to 15 digits, including punctuation. Pressing **SELECT** during the dialling process interrupts it and returns you to the Functions menu. If you make a connection,

USING THE MPP MODEM

you enter terminal mode right away. Other than these features, everything else works the same.

Owners of this modem (which connects through the joystick port) can also use **HomeTerm**. First you must obtain the **R: Handler** disk from your **MPP** dealer. This is a program which emulates the **RS-232** handler in the 850 interface and allows you to use the **MPP** modem with a variety of other software. This method, by the way, works with any custom **R: Handler** which loads below memory location 9920 ($26CO).

Next, copy the **AUTORUN.SYS, HOMEMENU.OBJ, HOMETERM.OBJ** and **HOMETERM.SET** programs onto a formatted disk with **DOS** files on it. Rename the **AUTORUN.SYS** program **RUN.SYS** (any name will do; this is temporary so that we don't have two files of the same name on the disk or overwrite one). Copy the **R: Handler** (probably also called **AUTORUN.SYS**) onto this disk as well. Choose **DOS C** or copy command to append two files together. After **C** type: **RUN.SYS,AUTORUN.SYS,/A.** This will append the **RUN.SYS** program to the end of **R: Handler** as the combined file with the name **AUTORUN.SYS.** Erase the file **RUN.SYS** from the disk.

The reason we put **HomeTerm** on a separate disk now is that we don't have enough space left on the **HomePak** disk for the new **AUTORUN.SYS** with the other files. The program will load and work properly, but remember that you cannot load **HomeText** or **HomeFind** from this menu screen, even if the choices are still there.

ATARI HOMETERM QUICK REFERENCE GUIDE

In the interactive screen mode:

To change the screen color:
SHIFT   CTRL   : up
SHIFT   CTRL   : down

To change screen brightness:
SHIFT   CTRL   ◄: down
SHIFT   CTRL   ►: up

To change text brightness:
SHIFT   CTRL   I

To toggle the key click:
SHIFT   CTRL   TAB

To toggle the Edit window:
SHIFT   CTRL   E

To toggle the left margin shift:
SHIFT   CTRL   M
(either 0 or 2 spaces)

To toggle the word-wrap feature:
SHIFT   CTRL   W

To toggle the real time clock on/off:
Atari key (set and reset the clock in the function menu screen)

MACROS:
To initiate (transmit) a macro:
SHIFT   CTRL   0 through 9

To see the list of macros:
SHIFT   CTRL   **Atari key**

CONSOLE KEYS:
To toggle capture buffer on/off:
OPTION (if no other file transfer mode has been selected)

To go to the function menu:
SELECT

To begin a file transfer operation:
START

SPECIAL KEYS:
To lock the keyboard in uppercase only:
SHIFT   CAPS/LOWR

To release the shift lock:
CAPS/LOWR

To tab every eight spaces:
TAB

To ring the bell on the host computer:
CTRL   G (ASCII and Vidtex modes only)
CTRL   L (ASCII and Vidtex modes only)

To send a left curly brace ( ):
CTRL   ; (ASCII and Vidtex modes only)

To send a right curly brace ( ):
CTRL   ◄ (ASCII and Vidtex modes only)

To send a reverse apostrophe:
CTRL   , (ASCII and Vidtex modes only)

IN THE FUNCTION MENU:
To toggle computer and modem for Atari to Atari mode:
A

To toggle between 300 and 1200 baud:
B

To prepare to receive an Atari or ASCII file:
C

To dump present buffer to device and filename:
D

To change the current filename:
N

To toggle between half and full duplex:
P

To prepare to receive an Xmodem file:
R

To prepare to receive an Xmodem file:
R

To prepare to send an Xmodem file:
S

To select file transfer translation mode:
T

To prepare to send an Atari or ASCII file:
U

To exit to the Home Pak menu:
X

To clear the buffer:
CTRL-C

To set the output file delay rate:
CTRL-D (each increment is 50 ms)

To select the disk file menu:
CTRL-F

To load a configuration file:
CTRL-L

To change or edit macros:
CTRL-M

To write a configuration file:
CTRL-N (you give the filename;
screen parameters and macros saved)

To reset the timer clock to all zeroes:
CTRL-R

To set the timer clock:
CTRL-S (you must enter all three time fields)

To write the default configuration file:
CTRL-W (writes D1:HOMETERM.SET)

835/1030 modems only:

To hang up the phone (disconnect)
H

To answer an incoming phone call (listen for the ring first)
CTRL   A

To make an outgoing phone call
M

IN THE DISK FILES FUNCTION MENU:
To copy a single file:
C

To delete a file from disk:
D

To lock a file:
L

To rename a file:
R

To unlock a file:
U

MACRO COMMANDS:
To invoke (transmit) a macro:
SHIFT   CTRL   0 through 9 (in interactive screen
mode)
To list macros:
SHIFT   CTRL   (interactive mode)
To edit or change macros:
CTRL-M (function menu mode)

Commands or characters within macros:

To toggle buffer open/closed:
CTRL   C
To send a carriage-return (Return) character:
CTRL-M
To pause two seconds:
CTRL   P
To use another macro:
CTRL   U   0 through 9
To wait for the next character before proceeding:
CTRL   W   character
To make the next character verbatim:
ESC

USING HOMETERM ON COMPUSERVE

HOW TO USE THE ATARI SPECIAL INTEREST GROUP (SIG)

SIG*ATARI – the ATARI Special Interest Group

IMPORTANT – Its perfectly all right to tell others your **USER ID** number but **NEVER** tell anyone else your private password.

To access SIG*ATARI. GO PCS-132.

Enter a question mark "?" or the word "HELP" and the system will display a list of valid commands.

With HOMETERM, the entire universe of ATARI BBS systems and commercial data services are just a few keystrokes away. Perhaps the largest and most widely known of these is SIG*ATARI – the ATARI Special Interest Group located on the CompuServe Information Service, (CIS). SIG*ATARI is more than a simple BBS (Bulletin Board System). Among its many features are its powerful and versatile user forum. This features a sophisticated message transfer system and an online, real-time conferencing facility that permits over 100 users to converse simultaneously or in private with others all across the nation. As well there are 9 databases with over almost 1,000 public domain files available for downloading at no extra charge. (This represents over a megabyte worth of free programs). Membership in SIG*ATARI is available to anyone with a CompuServe ID, with no additional charges beyond the normal connect rates.

To access the SIG just sign on to CompuServe by following the log-on directions provided with your CIS starter kit. (These are available at most major computer retailers.) After dialing in, CompuServe will prompt you to enter your USER ID:. This ID, commonly referred to as a PPN, is a 2-part number that looks like 77777,7777. Next enter the password provided with your starter kit. Don't worry if you can't see the password as you type it in. This is done for security reasons so anyone looking over your shoulder can't access your account. IMPORTANT – Its perfectly all right to tell others your USER ID number, also known as a PPN. In fact, they need to know this number to send you any EMAIL (Electronic Mail) or other messages on the system. Think of this number as just like your street address for postal mail. NEVER, NEVER tell anyone else your private password. This is just like the key to your house. Never give it to strangers!

Once online with CompuServe, you will be "positioned" at the "TOP" page of the VIDEO-TEXT service. CIS is structured into a "paged" format where each "page" is denoted with a 2 or 3 letter abbreviation and a number. You may navigate around the system by stepping thru the menu selections until you arrive at the page with the information or service you desire, or you may go directly to any page as long as you know the page number. To access SIG*ATARI, you may start on page CIS-1 and step thru the various submenus until you get to page PCS-132 or you may save time and money by jumping there directly with the command: GO PCS-132 from any other page in the system.

The first time you access SIG*ATARI, you will be greeted by the NEW MEMBER MENU. By selecting the appropriate menu choice, you can read a brief description about the purposes and features of the SIG, list out a LONG file of SIG instructions, (it's a good idea to open the capture buffer on HomeTerm and then save this text to disk or printer), enter as a non-member,

To see a list of the available section names, type the command: SN.

or sign up for SIG membership. There are no additional fees for membership, but only members may use all the features of the sig. To join, you must enter your FULL, REAL NAME when prompted. Use of pseudonyms (handles) or first names only is not permitted. The rest of the signup process is automatic and takes just a few seconds. You need only go thru this signup process once. On future visits, members pass directly into the message section of the sig.

Before we examine the different features of the SIG program, a discussion of the two operating modes available is in order. SIG*ATARI can be accessed in "command mode" or "menu mode". In MENU mode, the user may select a function by number from an abbreviated menu of choices or type in the actual command itself. In COMMAND mode, the system simply uses the single word prompt "FUNCTION:" and expects the user to type in the proper command. In either mode, you must terminate your input with the ◄RETURN► key. New users generally use MENU mode while they learn the system commands, then change to COMMAND mode to save time and connect dollars after a few weeks of practice. Don't be afraid to experiment and abandon MENUs for the more efficient COMMAND mode. If you can't remember the proper command or the exact command format when prompted, simply enter a question mark "?" or the word "HELP" and the system will display a list of valid commands. In many instances, you may obtain additional help on a SPECIFIC command by typing: ? xxx, where "xxx" is the command in question. A system as powerful and complex as the SIG program on CompuServe, by its very nature, accepts a large number of system commands in a variety of different command formats. To complicate this situation, CIS is constantly expanding and refining these commands. As a result, system documentation is often outdated faster than it can be printed. In some cases, the commands have just been renamed and the system will accept both the old and new names. Often, old commands are no longer documented online, but are still valid. As new commands are added, the online help is updated as soon as possible, but as this is not under the control of the sysops, the updates are 'irregular'. In other words, if the system doesn't respond exactly as you would expect, it may not be your fault! The information and programs available in SIG*ATARI may be accessed by individual section topics. To see a list of the available section names, type the command: SB. Additional information for each section # is available by typing: X# (where #=0 to 7). While accessing the message sections of SIG*ATARI, you may scan the message headers or read the full text of the message. When scanning, the header will display the name of the SENDER, the RECIPIENT, the SUBJECT of the message headers in forward

For a detailed description of all the scanning command variations, type: ? S

To view the online instructions for reading messages, type: ? R

or reverse chronological order, by specific subject threads, and even scan and mark individual messages for later reading. You may choose a "Quick Scan" option which shows the subject information only. For a detailed description of all the scanning command variations, type: ? S (for scanning) or ? QS (quick scanning) at the FUNCTION: prompt. There are similar command variations for reading messages. You may elect to read messages in forward or reverse order, by subject threads, by WRITER, by ADDRESSEE, only specifically marked messages, or only NEW messages written since your last visit. To view the online instructions for reading messages, type: ? R (at the FUNCTION: prompt). After reading a message, you may immediately elect to (RE)ply to the writer, and the system will automatically address the reply for you. When reading a message thread, you may choose to RE-READ (RE) a message or even back up a step and READ the PREVIOUS message (RP).

As you might expect, to see a list of all valid reply options, type a "?" when prompted for a response. To initiate a new message to another member or sysop, use the "L" command. You will be prompted for a SUBJECT (23 chars. max) and an ADDRESSEE. If you wish the system to automatically notify the other party of a waiting message when they next enter SIG*ATARI, you must include their PPN when prompted for a name. The only exception to this is a message to the head sysop. He will be flagged to any message that includes his PPN -or- the name "SYSOP". You cannot send a private message to another sig member, but you may send a private message to the primary sysop if you address it TO: "*SYSOP". (With the * but without the " ").

When reading or scanning messages in SIG*ATARI, you may limit yourself to a specific section by typing the command: SS# (where #=0-7), BEFORE reading or scanning. To access all available sections, use the command: SSALL

You may enter the SIG*ATARI (CO)Inferencing channels by typing: CO (or CB).

From the FUNCTION: or MAIN SIG MENU level, you may enter the SIG*ATARI (CO)nferencing channels by typing: CO (or CB). The system will display a short text prepared by the sysop which may include a schedule of upcoming conferences or other timely information then display your NAME or HANDLE as it will be seen by others and indicate which of the 31 channels are in use. Unlike the CHAT feature of most private BBS's, the CO channels can accommodate dozens of simultaneous users. COnferencing is surprisingly simple once you get the hang of it, as long as you keep a few simple rules in mind.

1 – You may "converse" in lines up to 80 characters long simply by typing your words in from the keyboard, but NOTHING is transmitted to others UNTIL YOU HIT THE ◄RETURN► KEY.

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Downloading database or data libraries

Since others will be "talking" while you are composing your words, it's HIGHLY recommended that you use the EDIT WINDOW feature of HOMETERM while in CO.

2 – The system will consider every line you type as "conversation" EXCEPT FOR LINES THAT BEGIN WITH A SLASH (/) IN COLUMN ONE. A SLASH IN COLUMN ONE DENOTES A COMMAND TO THE SYSTEM. For example, to see a list of valid CO commands, type: /HELP while in CO. To exit CO and return to the SIG, type: /EXIT (or CTRL-C). For a more complete discussion of the CO commands, we suggest you read the helpfiles in the TELECOMMUNICA-TIONS data library.

The final (and most popular) feature of SIG*ATARI are the downloading databases (also called XA's or data libraries). Like the message sections, the databases are divided by subject, roughly corresponding to message sections. For example, at the time of this writing, Section 2 was named TELECOMMUNICATIONS. Thus, any questions to the SYSOP about HOMETERM would be left in Section 2 of the message area, and any programs and helpfiles relating to terminal software, BBS's, etc., would be found in XA-2 (soon to be called DL-2). To enter this database, type: XA2 (or DL2) at the FUNCTION: or MAIN SIG MENU prompt. The databases include text files and program listings in many forms. Due to limitations in the CompuServe network, and peculiarities of your ATARI, some of the programs are stored online in formats that require you to DOWNLOAD them with special terminal programs or with specific procedures.

HOMETERM will allow you to DOWNLOAD or retrieve MOST of these files using the XMODEM or CAPTURE BUFFER protocols. And for those programs that require a special CompuServe protocol, we offer a public domain terminal program online (that you may DOWNLOAD with HOMETERM) named TSCOPE. But more about this in a moment.

As previously noted, this section of SIG*ATARI is being revised as this text was being written. Among the features of the database that are expected to remain, are the powerful searching and browsing commands. When a text-file or program is submitted to the databases, the UPLOADER is required to supply a short description of the file and a few meaningful keywords. Other members accessing the database may then view these with the (S)can and (BRO)wse commands. To see a directory of just filenames, use the (S)can command. The (BRO)wse command displays each file's description and KEYWORDS and gives you the option of reading

the file, downloading it, or continuing to the next entry. The (S)can and (BRO)wse commands support additional parameters or "switches" which permit the more experienced users to search the database files in many ways. For example, to (S)can for all files with the extender .DOC, you could enter the command: S * .DOC.

Another variation of the BROwse command used in conjunction with the /KEYWORD "switch" might be used to display the descriptions of only those files denoted with the keyword "XMO-DEM" like: BRO *.*/KEY:XMODEM. A complete discussion of all the possible variations and uses of these commands is beyond the scope of this text. Once again, we recommend you read the online documentation for any specific database command, by typing: ? xxx (where xxx= command) or "?" ALL (for help on all commands).

The chief reason for maintaining a program database is to support file transfers. When a program is sent from the host computer (CompuServe) to your ATARI, the process is named DOWNLOADING. When you send a file from your ATARI to the host computer (CompuServe), the process is called UPLOADING. There are many different methods for UPLOADING and DOWNLOADING, but they can be broken down into two basic types of transfer methods, "SMART" and "DUMB" transfers. In both methods, one computer sends a stream of data to the other computer. When this is done via modems over local or long distance phone lines, line "noise" or other factors might affect this data stream, possibly dropping
or changing the value of a single data byte. Depending on
the nature of the file being transferred, such a "glitch" may
be insignificant, or a major problem. In a DUMB transfer, the sending computer simply transmits the data stream and expects the receiving computer to take the responsibility (and possible risk of inaccurate data) for displaying and or storing the incoming characters. This method is usually used for sending text files and is probably 95-99.9% safe.

The (U)pload and (C)apture functions of HOMETERM perform such a DUMB transfer and should be used for sending and receiving files from SIG*ATARI whenever possible. We'll discuss the exact procedure to do this in a moment. Sometimes, especially when transferring a BINARY FILE where 1 garbled character may prevent a program from running correctly, you MUST insure that every data byte is received accurately. In such cases, the sending computer will transmit a file in pieces or "blocks". The sending system uses an algorithm to calculate a verifying code for a specific block of data. The sending system transmits that block of data and the receiving computer will use the same algorithm or formula to calculate the verifying code.

When transferring a BINARY FILE you MUST insure that every data byte is received accurately.

If the codes match, the block is assumed to have been transmitted accurately, and the sender then repeats this process with the next block of data. If the codes do NOT match, the sender will attempt to resend the same block. As you might guess, this second process with all the verification checks takes considerably longer to complete a file transfer, sometimes increasing the transfer time by a factor of 2-4 times longer. Compounding the problem is the fact that there are many different algorithms or protocols used to verify accuracy. Obviously, both ends must be using the same protocol if this process is to work.

The XMODEM protocol is one of the most commonly used protocols in the microcomputer world. It features a verifying algorithm that offers a reasonable compromise between accuracy and speed. The protocol was created by Ward Christensen for use on another computer system but was modified to run on the ATARI a few years ago and is widely used by many ATARI terminal programs, including HOMETERM. It was recently implemented by CompuServe for use in SIG*ATARI, but a problem cropped up.

When XMODEM was first implemented in a public domain terminal program for the ATARI named AMODEM, the XMODEM specifications were slightly modified to accomodate some unique properties of the ATARI. This "modified" version of XMODEM was incorporated into most of the other ATARI terminal programs and is now used by tens of thousands of ATARIs. As long as both computers use this same "modified" XMODEM, there's no problems. When CompuServe implemented its general version of XMODEM, it naturally followed the original specification, not the modified Atari version.

Russ Wetmore therefore faced a difficult choice when writing HOMETERM; should HOMETERM use the original XMODEM specs and be 100% compatible with CompuServe, or use the "modified" version to be compatible with the tens of thousands of other ATARI's? Fortunately, he made a wise decision and did what seemed impossible. Your version of HOMETERM was written to be 100% compatible with all those ATARIs using the "modified" XMODEM protocol, and hence all the ATARI BBS's, and **ALSO** he included enough of the original XMODEM specs to enable HOMETERM to work with CompuServes version of XMODEM.

Using HOMETERM, you will be able to DOWNLOAD the vast majority of SIG*ATARI's programs (85+%) directly, and for those few others that require a special protocol, SIG*ATARI has made available online a free terminal program that you can DOWNLOAD with HOMETERM at no additional charge. This program is named TSCOPE.XMO and is available with complete documentation from the TELECOMMUNICATIONS database.

HOMETERM was written to be 100% compatible with all those ATARIs using the "modified" XMODEM protocol, and ALSO work with CompuServe version of XMODEM.

To DOWNLOAD a file FROM SIG*ATARI to your computer, you must use the Scan or BROwse commands to find the EXACT FILENAME. FIRST – note the 3 letter extension. If the extender is .BIN, the file should **not** be DOWNLOADED with HOMETERM. Use TSCOPE for these files. If the extender is .XMO, use HOMETERM and choose "R" for XMODEM-RECEIVE on HOMETERMs function menu. For any other extender, select "C" for CAPTURE on the HOMETERM menu. When you select "R" or "C" on the HOMETERM menu, you will be prompted for a filename. This is the name you wish to save the file under on your ATARI disk. It does not have to be the same name used on CompuServe. Once HOMETERM is set up, you must tell CompuServe to send you the file. Use the DOW command with the exact filename as: DOW TSCOPE.XMO or DOW SIG-CO.DOC and press ◄RETURN►. CompuServe will then display 4 choices of transfer protocols:

1 – A Protocol
2 – B Protocol
3 – XMODEM Protocol
4 – DC2/DC4 Protocol

HOMETERM only supports selection 3 & 4. Use XMODEM only if the filename uses the extender .XMO. Use DC2/DC4 when using the "C"apture feature of HOMETERM. Currently, A Protocol is used for TSCOPE only, and B Protocol is not

supported by any ATARI terminal program, including HOMETERM. If you select XMODEM, you will be asked for a 7 or 8 bit transfer. Select 8 bit for .XMO files. CompuServe will then tell you that XMODEM has started and you should hit your ATARI's ◄START► key and sit back. When you select DC2/DC4 (which is CompuServe's fancy name for DUMB transfers), the file will begin to scroll IMMEDIATELY, so be ready to press your ◄START► or ◄OPTION► key instantly. In fact, most people hit ◄START► to open the capture buffer BEFORE hitting ◄RETURN► to start CompuServe.

If you are sending a file from your ATARI to CompuServe, the process is almost identical. If your file is all text, or a LISTed BASIC pgm, or source code, use "U"pload with HOMETERM. If your program is a binary file or TOKENIZED BASIC (SAVE'd not LISTed), you should use XMODEM-SEND on HOMETERM. CompuServe only accepts 6 letter filenames and a 3 letter extender. To prepare CompuServe to accept your UPLOAD, use the command: UPL filename.ext

*** IMPORTANT ***

WHEN YOU CHOOSE A FILENAME FOR COMPUSERVE, THE EXTENDER IS VERY IMPOR-
TANT!! IF YOU ARE USING XMODEM TO TRANSMIT THE FILE WITH HOMETERM, YOU
MUST USE THE EXTENDER ".XMO". YOU SHOULD ALWAYS SELECT 8-BIT TRANSFERS
WITH XMODEM. NEVER USE ".BIN" WITH XMODEM. USE HOMETERM'S "U"PLOAD FEA-
TURE FOR ALL TEXT FILES.

When sending files with the "U"pload feature of HOMETERM, choose DC2/DC4 as the proto-
col. You don't require to be prompted for each line. Also, **never** send a file to CIS via the
"U"pload feature if it contains inverse video or special ATASCII characters. Sometimes when
CompuServe is very busy, HOMETERM's "U"pload stream will overwhelm the system and send
data faster than CIS can accept it. The system literally "chokes". We suggest you set a delay
speed of around 500 ms. when using "U"pload to send text to SIG*ATARI.

That then is a brief outline on how to use the largest Atari oriented "BBS" in North America,
SIG*ATARI on CompuServe. This is a service run by enthusiasts **for** enthusiasts. From begin-
ners to old-hands, the SIG is open to all. All it requires is an interest in things Atari. See you
there!

Ron Luks
Sysop SIG*Atari
October, 1984