ON THREE®

The Magazine For Apple /// Owners and Users

Volume 5, No. 4

April 1988
$4.00

In This Issue:

Ask 'Doc'

Apple.Sauce

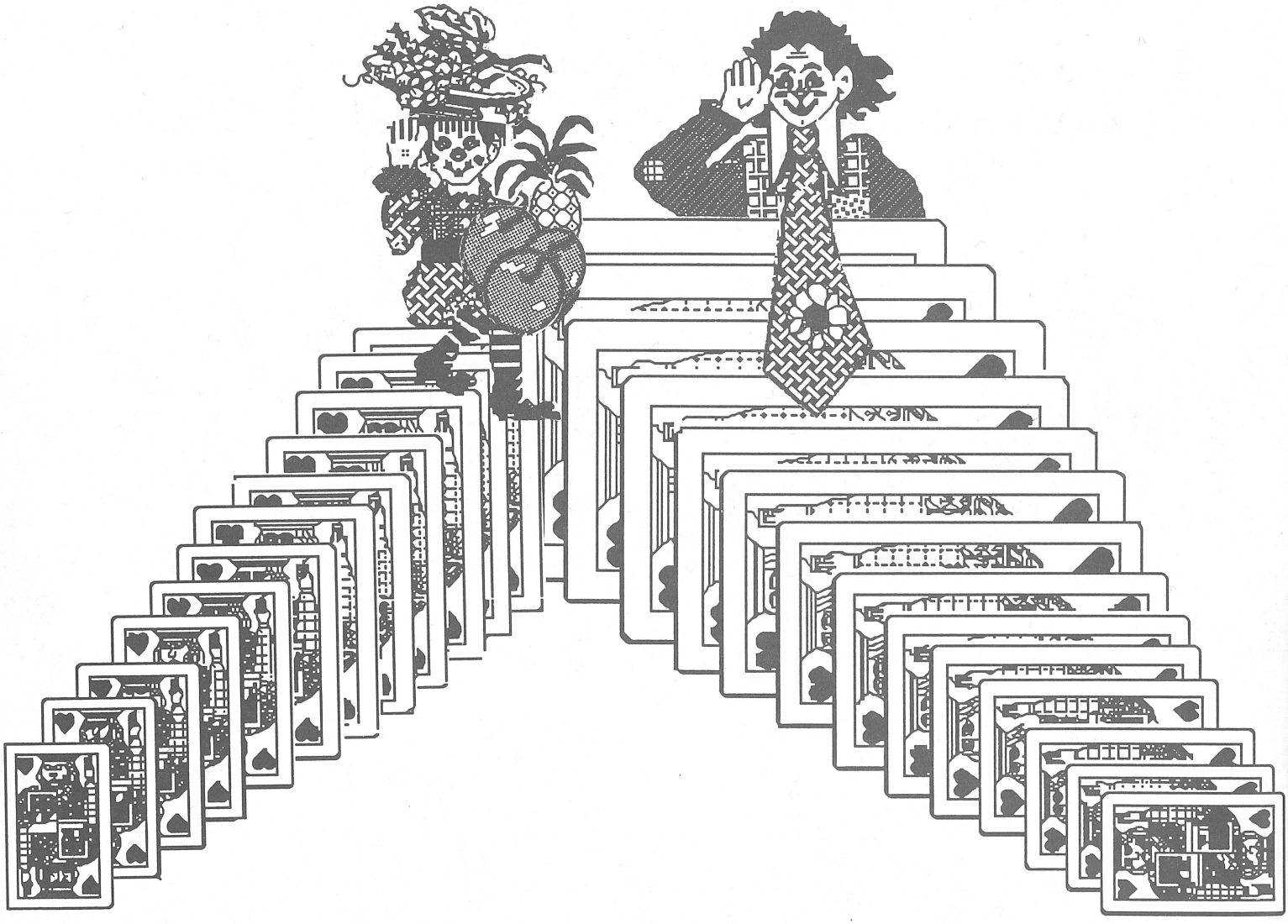
Ranntings

The Beginning ///

Program Hang-up Problems

Automatic Telephone Dialing

SPRING IS BUSTIN' OUT ALL OVER



Get The FRUIT MACHINE Game

ABSOLUTELY FREE

When You Purchase The CARD MACHINE Game for only $19.95!

By Dr. Mel Astrahan

The Card Machine game is a realistic simulation of the authentic blackjack game played by high rollers throughout the world. Using beautiful full color playing cards created by Draw ON ///, you can have almost as much fun as you would if you were on a trip to Las Vegas, but at a fraction of the cost! Control the action with a mouse, joystick or the keyboard. But here is the best part! Buy the Card Machine at only $19.95 (plus $2 s/h) and we will give you The Fruit Machine game absolutely FREE! The Fruit Machine was patterned after the Las Vegas slot machines and has exciting sound effects and lovely full color graphics. And it's absolutely FREE when you buy The Card Machine. That's right! For under $20 you can own the two most popular games ever created for the Apple ///. Hurry and order now! This is a limited offer that expires April 30, 1988.

Publisher:
Bob Consorti

Controller:
Joseph Consorti

Editor:
Olaf Wolff

Logistics:
Janet Schanz

Customer Service Coordinator:
Lynne Miller

Design Consultant:
Cathy Consorti

Lithography:
Diamond Litho

*ON THREE—The Reference Source for the Apple ///*is published monthly by *ON THREE*, 4478 Market Street, Suite 701-702, Ventura, CA 93003 (P.O. Box 3825, Ventura, CA 93006). ISSN# 0889-6429 For a copy of author guidelines, send a stamped, self-addressed envelope to the above address. Current page rate is $12.50 per printed page. Return postage must accompany all submitted manuscripts, diskettes and drawings if they are to be returned. All manuscripts longer than 500 words or program listings longer than one-half page must be accompanied by a diskette to be considered. No responsibility can be assumed for unsolicited materials. All letters received by *ON THREE* unless specifically marked to the contrary will be considered as unconditionally assigned for publication and are subject to *ON THREE's* right to edit and comment editorially. Your full address will be published *only* when specifically requested.

Subscription information:
U.S.: $40 for 12 issues. First Class service, $12 *additional*.
Foreign subscription information:
Canada, Mexico, APO, FPO: $20 *additional*, $60 total.
S. America, Europe: $44 *additional*, $84 total.
Pac. Islands, Asia, Australia, Mid-East: $44 *additional*, $84 total.

Back issues:
Available for $5 each. Please indicate issues desired.
Postage for *ON THREE* products:
U.S.: listed on enclosed product price sheet.
Canada and Mexico: double listed U.S. price.
Outside North America: four times the listed U.S. price.

All funds *must* be remitted in U.S. dollars drawn on a U.S. bank or funds in your native currency at the current exchange rate drawn on a bank in your country. Group purchases must have one common mailing address. Please contact *ON THREE* at the above address for information on current volume pricing and terms.

ON THREE is a registered trademark of *ON THREE*, Inc. Apple, Apple II, Apple IIGS, Apple ///, Apple /// plus, Applesoft, Apple Business Basic, Disk][, Disk ///, UniDisk, Lisa, LisaDraw, Macintosh, MacPaint, MacWrite and ProFile are registered trademarks of Apple Computer, Inc. Micro-Sci and Gameport /// are registered trademarks of Standum Controls, Inc. Selector /// is a registered trademark of Sabre Software, Inc. *ON THREE* O'Clock ONTIME, Lazarus ///, Draw ON ///, The Desktop Manager, Disk Manager, The Communications Manager, Super Accessories, ON-BOARD, GS Memory Test and the TDM Toolkit are registered trademarks of *ON THREE*, Inc.

Opinions expressed in this magazine are those of individual authors and staff and not necessarily those of *ON THREE*.

The entire contents of this publication are copyrighted © 1988 by ON THREE with all rights reserved.

ON THREE®
The Magazine For Apple III Owners and Users

/// /// /// /// **Table of Contents** /// /// /// ///

Volume 5, No. 4 **April 1988**

FEATURES

The Beginning /// 5
by Richard and Lavona Rann
The Communications series continues. In this months installment the Ranns tell us how to get on-line with the Apple ///.

Program Hang-up Problems 9
by Rutherford B. Thompson, Jr.
In this article Mr. Thompson discusses program hang-ups with special reference to Catalyst.

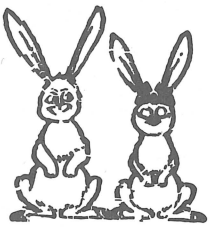
Automatic Telephone Dialing 18
by Rutherford B. Thompson, Jr.
In this article Mr. Thompson gives instructions for turning your phone into a "Smart-Telephone".

DEPARTMENTS

Apple.Sauce *by Olaf Wolff* 3
User Group Listings 4
Call Three: Hot Line 12
Ranntings *by Richard and Lavona Rann* 13
ON THREE Price List 16
Ask 'Doc' *by David Christenson* 24
DeClassifieds 26

ON THE COVER:

"Happy Springtime" from everyone at **ON THREE!** We hope you have many beautiful days filled with sunshine, flowers and carefree Apple ///ing!" This months cover by Cathy Consorti



ON THREE O'Clock Sale!

Reg. $49.95 Now Only $29.95 Save $20

Selector /// Version 1.00

Sabre Software, Inc. 9:59:45 AM 29 Feb 88

Main Menu

Word Processing

*AppleWriter /// *StemWriter ///

*AppleSpeller /// *Script ///

*/// E-Z Pieces

Commands: Escape for prior menu

Did you know that your Apple /// has provisions for a built-in clock and calendar? When the Apple /// was first released the supplier of Apple Computer's micro chips could not supply the chip for a working clock and thus the Apple clock was never released. However, soon after that ON THREE developed a working clock for the Apple /// that plugs in where the never released Apple clock was supposed to go. The ON THREE O'Clock is extremely easy to use and install and does not require a precious slot. With a clock installed, whenever you save or modify any type of file, the current time and date will be added to the directory listing so that you can always tell at a glance which file you worked on, and when. But that's not all! Business Basic has two reserve variables, DATE$ and TIME$, which return respectively the current date and time to your BASIC program. These reserved variables can then be used whenever you want to print the date and/or time in a BASIC program. Completely compatible with SOS.

$29.95 plus $3 s/h

In the above example you can see how the **ON THREE O'Clock**, (shown here running under ***Selector*** ///), displays the hour, minutes, seconds, day, month and year.

Path:/p/service /// E-Z pieces Files Escape: Add Files

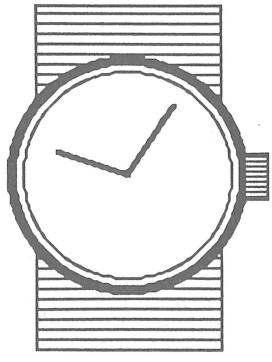
Main Menu

Add Files

/// E-Z Pieces Files

Subdirectory: /p/service has 360K available

Name	Type of file	Size	Date	Time
Inventory Gizmo's	Word Processor	5K	2/29/88	4:04 pm
Parts Gizmo's	Word Processor	7K	3/04/88	11:30 am
Correspondence	Data Base	3K	3/10/88	8:45 am
Suppliers	Data Base	7K	3/11/88	4:57 pm
P.O.'s Pending	Data Base	2K	3/12/88	9:30 am
Ship Gizmo Parts	Word Processor	26K	3/21/88	2:45 pm



Use Right Arrow to choose files, Left Arrow to undo. 350K available

This example demonstrates how you can date and time stamp your files while running under /// **E-Z Pieces.**

Apple.Sauce

by Olaf Wolff

You're not alone!

Ever wonder how your little computer screen feels about looking at your face, sometimes for hours at a stretch? You know, those special faces you make when you're thinking. The blank dumbfounded stares, the intense I-just-had-a-great-idea-and-I'm-on-a-roll look, or that look when your eyes glaze over and your 7500 miles away, daydreaming about things not even remotely related to computers.

Do you ever worry that the little sucker will up and poop out at any second and go blank screen, right in the middle of something important, just to spite you?

Are there times when it's difficult to remember your spouse's first name? Do your kids have trouble recognizing you? And do you find yourself rationalizing the situation, by telling yourself, things will improve as soon as this project is done, but then a new "important" project always pops up?

Do you ever find yourself locked up in a room with your Apple for no reason at all, just because you wanted too, and because it's still more interesting than the rest of your life?

The time has come!

If you answered yes to any of these questions, your not alone, there is help. Your suffering from "Personification du jour." This topic isn't new. Publications such as "Psychology Today" and "Time' covered the subject years ago, just after the advent of the first personal computer wave. Of course, I believe they referred to it differently back then.

What the experts discovered were legions of people immersing themselves in their computers. Even seemingly "normal", unnerd-like people, were not immune to the tempting taste of power and the promise of secrets that a PC held.

The early symptoms are always the same. There's a sharp decrease in the need for trite social interaction and an increase in the need of a comfortable chair.

This relatively new affliction, is now spreading with renewed vigor and with an increasing appetite for our young. The new outbreak began with teenagers using dad's computer, pressuring him into believing it was the only way they could do their homework competitively with their peers.

Now there's a whole new generation of kids, using their own PC's to desktop publish neighborhood newspapers, local magazines and detailed financial statements. Kids are sitting in their rooms, refusing to come out and they're getting fat to complicate things further.

We at ***ON THREE*** feel that it's time this problem gets more than mere national press attention, we feel it's time for action. Write us and let us know how you feel. Help save us all from "Personification du jour."

Chip Shortage

On a more sobering note. You may notice the prices on our memory upgrade ads have been removed and replaced with "Call for Quote." There's a good reason that. For the past six months, a widespread memory chip shortage has besieged the computer industry. There are several explanations, depending on who you ask.

The key cause exacerbating the situation though, are the

quotas on Japanese chip imports, set by the U.S. government. The resulting chip deficit has driven up the cost of the limited amount of American made memory chips available. Prices on these chips have tripled in the past six months.

One can only venture a guess which well greased lobbyist group promoted these quotas, or exactly what they're motives were. But as you can deduce, for manufactures and their customers, the bottom line remains gruesome. On the other hand, an elite group of American chip makers are reaping record profits.

It appears to have become a standard business practice, that when we can't, or simply won't compete fairly, we slap quotas on the competition. This practice nearly always benefits the few and not the many.

Be advised then, if you are entertaining plans to upgrade your system, waiting will cost you money. The immediate memory chip fortune looks bleak. version

-///-

Apple /// User Groups

State or Country	Name of Group	Address	City	Zip	Phone
California	Sacramento Apple /// User Group	1433 Elsdon Circle	Carmichael	95608	(916)482-6660
	Orange County Apple /// User Group	22501 Eloise Avenue	El Toro	92630	
	LA-So. Bay Apple /// User Group	P.O. Box 432	Redondo Beach	90277	(213)316-7738
	Apple /// Users of Northern Calif.	220 Redwood Highway #184	Mill Valley	94941	
	International AppleCore Apple /// SIG	908 George St.	Santa Clara	95054	(408)727-7652
	Apple ///'rs Unanimous	732 Timor Court	San Jose	95127	
Canada	Apple B.C. Computer Society				
	Apple /// SIG	P.O. Box 80569	Burbaby, BC	V5H3X9	
	The Astronic Club (Ontario)	1453 Highbush Trail	Pickering, Ont.	L1V1N6	
Colorado	Colorado Apple /// User Group	P.O. Box 3155	Englewood	80112	
Connecticut	Apple /// Society of South Conn.	34 Burr School Road	Westport	06880	(203) 226-4198
Florida	Sarasota Apple /// User Group				
	c/o Computer Center	909 S. Tamiami Trail	Nokomis	33555	(813) 484-0421
Georgia	Atlanta /// Society	385 Saddle Lake Road	Roswell	30076	(404) 992-3130
Illinois	TAU c/o Lavona Rann	1113 Wheaton Oaks Drive	Wheaton	60187	(312) 665-6319
Kansas	Kansas City Apple Users Group	5533 Granada	Roeland Park	66205	(913) 262-3355
Maine	So. Maine Apple Users Group	Casco St.	Freeport	04033	(207) 865-4761 Exten. 2249
Maryland	Apple /// SIG Chairman				
	Washington Apple Pi	8227 Woodmont Ave. #201	Bethesda	20814	(301) 654-8060
Minnesota	Minnesota Apple Corps User Group	P.O. Box 796	Hopkins	55343	
New Jersey	North Jersey Apple /// Users Group				
	c/o Roger T. Richardson	P.O. Box 251	Allamuchy	07820	(201) 852-7710
No. Carolina	North Carolina Apple /// User Group	2609 North Duke St. #103	Durham	27704	
Ohio	Cincinnati Apple /// User Group	5242 Horizonvue Drive	Cincinnati	45239	(513) 542-7146
	Apple Dayton - Apple /// SIG	P.O. Box 1666	Fairborn	45324	(513) 879-5895
Oregon	Oregon Apple /// Users	1001 S. W. 5th Ave.#2000	Portland	97204	(503) 645-6789
Overseas	Apple /// Users Belgium/Netherlands				
	c/o R. Van der Straeten,				
	Vestinglaan 492580	Sint-katel Ijne-Waver	Belgium	(015) 205328	
	Apple User Group Europe e.V.	Box 11 01 69 D-4200			
		Oberhausen 11	W. Germany	0049-6195-73917	
	Apple /// User Group				
	Belgium/Netherlands	Ganzerikweerd 22			
	c/o J. Woreshofer	NI-6229 TG Maastrict	Netherlands	(043) 611704	
	Le Club Apple	43 Avenue,			
		de la Grande-Armee	Paris, France	75116	
	Apple /// User Group	P.O. Box 42	Duffy A.C.T.	2611	
	c/o Canberra Accounting Services		Australia		
Texas	Apple Corps of Dallas				
	Apple /// SIG	P.O. Box 5537	Richardson	75080	
	River City Apple Corps /// SIG	P.O. Box 13349	Austin	78711	(512) 454-9962
	Houston Area Apple Users Group				(713) 480-5690
	(Apple /// Division)	P.O. Box 610150	Houston	77063	or 974-5153
Virginia	Charlotteville Apple /// User Group	216 Turkey Ridge Road	Charlotteville	22901	(804) 642-5655
	Greater Tidewater				(804) 642-5655
	Apple /// User Group	Route 2, Box 216	Hayes	23072	898-3500#2671
	Apple THREE Group International				
	c/o Joseph Dobrowolski	P.O. Box 913	Langley, AFB	23665	(804) 865-7520

If you wish to meet other Apple /// owners and users and exchange ideas, contact one of the user groups listed above.

The Beginning ///

by Richard and Lavona Rann

Getting on-line with your ///

Over the past couple months we covered general topics related to using your Apple /// to communicate with other computers over the phone lines. This month we are going to get very specific and cover the details of setting up your /// and getting on-line for contact with other ///'rs

We will explain the process by using examples for Access /// which was the first communications program written for the Apple ///, and is quite widely used. We will show you how to set up Access /// and will take you through a session on CompuServe.

Next month we will cover the differences in using The Communications Manager (TCM), which is the only Apple /// communications program still being sold and supported by the original provider. TCM is a lot more user friendly than Access ///, and has some features that Access /// does not have. We will also take you to the /// 's Company Bulletin Board system and tell you what is different about GEnie.

ACCESS ///

Access /// is one of the very first Apple /// programs. It is typical of early /// programing, in that it is not particularly user-friendly, and the manual is not particularly easy to use; still, it is a useful program that has been proven over an extended period of use. It does the basic communications tasks effectively, even though not as easily as some later programs.

In its most basic sense, Access /// converts your Apple /// into a terminal for whatever computer you call. It allows you to transmit and receive ASCII code (text) and some control messages that may be require by the computers you may call. It converts the messages sent by your use of the Apple /// keyboard so they send the control messages that correspond to an industry standard terminal, in this case the VT100 and the VT52 which are DEC terminal standards that have been widely supported. Of course, your /// cannot do all the things that a really terminal could do, but it can do what you need for most communications.

To use Access /// the first time, you have to go thru a few extra steps. You will have to make a "boot disk" containing either Business Basic or PASCAL because the program is not able to run without one or the other of these systems available. You can use Systems Utilities to create the disk. We will only explain BASIC as the PASCAL manuals do a good job of explaining how to make a PASCAL boot ("run tine") disk.

To create a Business Basic — Access /// — Boot disk: Boot System Utilities and copy the SOS.INTERP, SOS.KERNEL, and SOS.DRIVER from your Business Basic boot disk onto a newly formatted, blank disk. When that is done, copy the access.inv and the hello file from your Access /// disk onto the new disk.

No matter whether you use PASCAL or Business Basic as your system environment, you will have to have two special things in your SOS.DRIVER file for Access /// to work. The first is an RS232 driver and the second is the A3S3FONT. Both of these are on the Access /// disk and may be installed with System Utilities.

Some versions of the Access /// disk do not have a hello file on them. In that case, you may start the program after booting the disk by entering: "run Access ///". Remember to make a backup copy of your disk after you have it working.

When Access /// starts, it comes up with a four-option menu:

Terminal Mode
Transmit a file
Help
Quit

Selection is made using by using the up and down arrow keys to move the inverse highlighted area up and down until you have highlighted the selection you want, and then hitting the return key. When we select Terminal Mode and hit Return, a totally blank screen will come up. This doesn't look like much but is the most used aspect of Access ///. This is the mode

in which all communicating is done. Here, after we have ensured that the defaults are set up for the right communications options, we will signal the modem to initiate the phone call to the other computer.

Setting Defaults/Options

Now is the time that all those definitions of communications protocols should come in handy. To setup Access /// for the particular protocols used by the computer we will be dialing, we have to go to the Set-Up Menu. This is done through the Open-Apple S key combination. Holding the open-apple down while pushing the "S" brings the "SET-UP MODE" screen onto your screen. If you aren't following along on your computer, you can see a copy in exhibit 1

Selected settings are highlighted by an inverse block. To change settings use the up and down arrow to select the line and use the left and right arrow to move the highlight between the options.

The most commonly used group of settings are those used for CompuServe as it works on most communications environments that are generally accessible from a ///. They are listed later under the heading CompuServe.

The speed option depends on what type of modem you have and what prices you are willing to pay as much as anything else. When you first set yours up, we suggest you use 300 baud. It is easy to change later.

As indicated on the screen, the "Control S" key combination will save your setup information on the Access /// diskette so it will be set up that way next time you start Access ///.

There is one more field that you may want to change the default for on the Set-up menu. The program comes set up with a default to save anything you want to keep to the diskette that contains Access ///. That disk already has a lot on it, so it is normally better to give it a pathname for another drive (a hard disk if you have one). If you write anything to that file name and don't delete or rename the file, the next time you start Access ///, it will ask you if you want to write over the file or change the name.

How do you write to it? Just keep in mind the term is "recording" and we'll show you an example later on. You will have to come back to the Set-up screen to do the other options (it will be good practice), but lets go see what else is available.

Lets go back to the beginning menu by selecting "Exit terminal mode" from the set-up screen. Now, select the "Help" option which brings up the "Status" screen. This screen gives the function of all the Open Apple commands which is good because they are hard to remember. It also gives the status of the recording file and the control character filter (on or off). The Filter takes out the control characters that communications systems use for formatting and error checking so the screen only has letters, numbers, and punctuation.

COMPUSERVE

Now let's get down to getting set-up for and on to CompuServe. We are assuming that you have your CompuServe account number, password, and an appropriate telephone number. If not, you will have to buy a CompuServe starter kit from a mail order house or a software store. Any version will do as you won't be using their disks anyway.

The first thing we have to do is make certain all the defaults we didn't do before are set up correctly for CompuServe. Bring up the Set-up menu by entering Terminal mode and then entering Control-S. Use the arrow key to highlight these options:

VT 52 mode
No LF after CR
7 bits per character
Enable XON / XOFF
Normal Video
Full Duplex
Normal keypad
Normal cursor keys
Wraparound
Standard Character Set
Parity: none.

We set the speed setting before. Now, do a Control-S to save the settings to disk so that you don't have to redo them each time you start Access ///. You will only have to come back to this screen if you want to change a setting for a different computer, or to change your recording file name or transmission speed. After the file is saved to disk, you may highlight the "Resume terminal operation" line to start your first on-line session.

GETTING ON-LINE

If you have a Hayes modem or Hayes compatible (which most modems are these days) the command to your modem to get it to "listen for commands" is: "+++." They must be entered on a line by themselves and at least a few seconds after your last prior keyboard entry. Try it. If your modem is correctly hooked up and the driver file is correct, the modem will signal its ready by replaying "OK." If it doesn't, check the connections, the driver file, and the book that came

with the modem to see if it needs different commands.

Assuming that you got that nice "OK" from your modem,type "DT" (for Dial Touch tone or if you have the pulse service from your local phone company, use "DP" for Dial Pulse) and the phone number. The alphabetic commands to the modem should always be capitalized. If all is well, you will be able to hear the phone being dialed and soon there will be a tone that represents the other computer.

CompuServe requires that a "Control - C" be sent after the connect tones. This alerts the CompuServe system that someone is trying to connect rather than just someone dialing a wrong number. When the "Control-C" is received, CompuServe's computer will ask for your "Account Number." Type in the number and hit "Return."Once CompuServe has found that account in its files, it will ask you for a "Password." When the computer receives the password it compares it to the one that is in its file and then logs you on. (There may be minor variations on this from time to time for new people, look at the instructions that come in the starter kit from CompuServe).

You are now successfully on-line. You will note that the screen shows everything you type except your password. That is the way things are supposed to be. Your screen holds a maximum 24 lines and it scrolls so that you can see the most recent lines. If you want to keep things around for looking at again later, you will have to use a recording file.

Remember, we assigned a pathname for a recording file when we were in the set-up menu. Now all you have to do to start recording everything that shows on the screen is to enter Control-R. It will cause a copy of everything that comes on the screen to be written to a text file on the pathname you gave until you toggle recording off with another Control-R, or quit Access ///. As a new user, it would probably be a good idea for you to record everything for your first couple sessions so you can review them and learn from them.As you get more sophisticated in your on-line usage, you will probably toggle recording on and off to save things for reading at your leisure instead of using expensive minutes to read things on-line.

I'M ON-LINE, WHAT NOW?

When CompuServe accepts the password it sends a "hello" screen with a list of files and information about what is new on CompuServe, special events, or important happenings. That screen leads directly to the Main TOP Menu or a GO TO command can be given to bring up any specific file.

We'll leave it to the very good instructions of CompuServe to let you research most of the goodies but we would like you to come visit us on the Apple /// section and let us know you made it. Here is how you do that: Type in: Go Apple 3 and then hit return. You will be taken to the Apple 2 and 3 forum where all the /// folks gather to help each other and to be sociable.

You will be asked for your name. It will be shown on every message you send and the rules require real names.Then, you will want to do a one-time set-up on the forum so that you don't have to look at all the messages about Apple II's (unless you want to). Enter a 7 (as always, followed by a return), and you will get a USER OPTIONS MENU.

Item 5 (Subtopics) when selected gives you a list of the sub-topics available and allows you to toggle them on or off by selecting the numbers one at a time. You will definitely want both section 7 and section 8. when the sections you want have * before their names, hit
enter an extra time and you will be back at the options menu.

If you are going to record the entire session, you can save money by selecting item 1 and setting it to not stop after messages. We use Never since we read everything from recording files and compose our answers when we are not paying by the minute.

After selecting options, you do an extra "return" which gives you a message asking if you want the changes to be permanent. For now, say Yes.When back at the FUNCTIONS MENU, select 1 to leave us a message. You will be prompted for To: enter "all." After you enter return, you will be prompted for Subject: and you should enter "New Here." After that return, you will be given a blank line to type a short message on. Remember that you must hit the return key to end each line. When you're message is done, make certain you are at the start of a new line and enter the 3 characters /EX followed by another return.

You will then get a LEAVE ACTIONS menu. Select option 2 so that the message will automatically format for screen sizes as set by others. You have now sent your first message and should have responses within a day!

If you want to see what type of conversation has been going on, select option

2 from the FUNCTIONS MENU and then Forward from the next menu. If you only want to see a few of the messages, select a number about 100 less than the highest number when it asks you what number to start with. After it has read all the messages and stored them on your recording file, type the work "off." The CompuServe computer will officially "log you off" and show you how much time you used.

If you call back the next day, and go Apple 3, you will probably have at least one message addressed to you and you will have started to make lots of new friends. Don't forget to watch for next month's article. There is more to learn and a better product for most of us. ///

SET UP MODE

Set ANSI mode	Set VT52 mode
Do not send LF after CR	Send LF after CR
7 bits per character	8 bits per character
Enable XON / XOFF	Disable XON / XOFF
Normal video	Inverse video
Full duplex	Half duplex
Normal keypad	Applications keypad mode
Normal Cursor keys	Application cursor key mode
No wraparound	Wraparound
Standard character set	Graphics character set

Speed: 110 300 1200 2400 4800 9600

Parity: None ODD Even Mark Space

Set Answer Back

Set tab stops

Change recording file name

Resume terminal operations

Exit terminal mode

Ctrl-S to save settings.

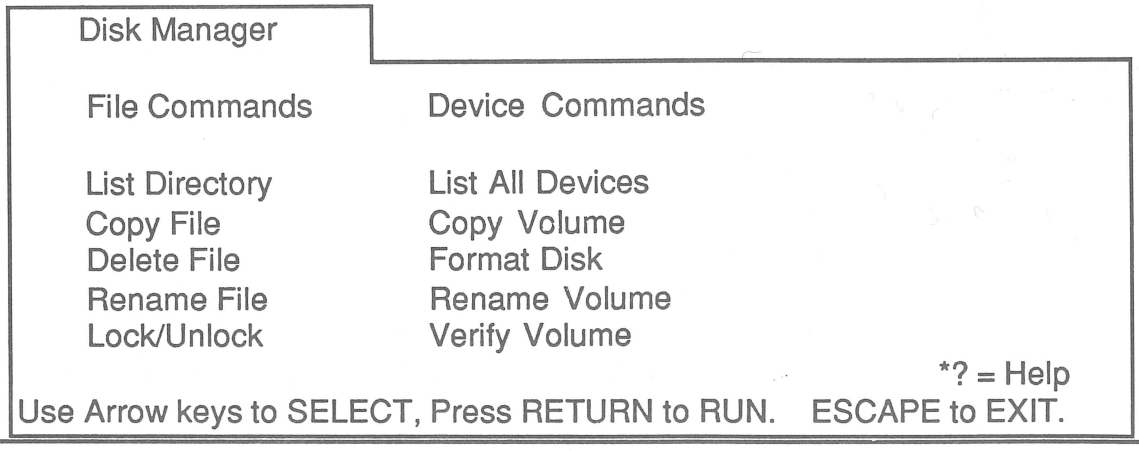
Exhibit 1

ON THREE presents...

$44.95 plus $3 s/h

Disk Manager

This Desktop Manager module features the most frequently used applications of Apple's System Utilities and makes them available to your from within any program. Copy, delete, rename, lock/ unlock and list all of the files on your disk without leaving the program you're using. Copy, format, rename and verify *volume* commands are available as well, so you will never again lose data because you exited a program to format a disk.



Program Hang-up Problems

(Special reference to Catalyst)

by R. B. Thompson, Jr.

It is exasperating when you have worked many hours on a computer project and suddenly find that for some reason you have lost your program, or seem to be unable to make the computer respond to any of your keyboard commands. You probably can turn off the computer and reboot, but that would loose a lot of work that you have not yet saved to disk. What can be done to save the situation? The suggestions I give here are the result of my own frustrations and solutions that I have found through reading the various manuals and through trial and error. I have a Profile hard disk and the Catalyst hard disk boot for the Apple ///; hence the special reference to Catalyst. However, some solutions given here have no bearing on either Catalyst or on Profile. I have not tried to cover problems which are related to the electronics of the computer as these are covered by others far more qualified than I.

When one uses the Catalyst program by Quark the simultaneous pressing of the <Open-Apple>, <Closed-Apple> and the <ESCAPE> key, <OA> <CA> <ESCAPE>, will get the operator back to the Catalyst menu. On rare occasions, this will not work! This may have been caused by this escape sequence being inadvertently disabled by one of the programs which has been used, and not necessarily the last one used.

On page 4-3 of the Catalyst manual there are the following two paragraphs.

"There are several special things that can be done using a system which has Catalyst installed. The first thing is that the programmer can disable the use of the double Apple ESCAPE sequence even if it isn't disabled by Catalyst.

"This is done by opening '.CATALYST'. As long as .CATALYST is open, the double Apple Escape sequence is disabled."

If you are using Business Basic and you do actually want to disable the "double Apple ESCAPE" sequence then use the following commands either in a program or directly:

OPEN#n,".CATALYST"

Where n is a whole number from 1 through 10. The double quote marks are not required in direct commands, but are required in programs.

(1) In using a program written in Pascal and exiting by the manner recommended by the menu you will sometimes get to the point where the following is shown on your screen:

Pascal users may press $ to go to the command line.

However, when you simultaneously press <OA> <CA> <ESCAPE>, you do not return to the Catalyst menu as you had expected. In this case press <$>, upper case <4>.

Now you should see (or maybe this is what you saw originally):

Command: E(dit, R(un, F(ile, C(omp, L(ink, X(ecute, A(ssem,? [A3/1.1]

Now press <Q>, upper case or lower case. At this point the following should appear:

Do you wish to exit the Pascal system? (Y/N)

Press <Y>, upper case or lower case, and you should now be back at the Catalyst menu.

To guard against this problem, make sure that all the exit points of the programs you write end with the closing of all files. In Business Basic the statement CLOSE written into the program, without designating the file number, accomplishes this.

(2) If you have been operating a program written in Basic language, and you find yourself with the closed parenthesis, ")", followed by a light rectangle, cursor, you have left the program and are now in a position to operate directly with the Business Basic language. If you wish to return to the program you were using, try typing CONT then pressing <RETURN> to get back to the program where you left off. If this doesn't work, type RUN then press <RETURN> to start the program over. If the program has been erased, this will not work, and you must reload the program.

If you have Catalyst and cannot return with the <OA> <CA> <ES-

CAPE) command, type CLOSE followed by pressing the <RETURN> key; then try the <OA> <CA> <ESCAPE> command. Typing BYE followed by pressing the <RETURN> key will also return you to the Catalyst menu. If this does not work, press <CONTROL> <7> on number pad; type CLOSE followed by pressing the <RETURN> key; then type BYE and press <RETURN>. If this does not work, press <CONTROL> <7> on the number pad, then <CONTROL> <9> on number pad, then type BYE and press <RETURN>. Note: the use of the operation <CONTROL> <7> in the later case is to counteract the effect of its use in the previous sentence. <CONTROL> <7> suspends output to the screen from the program. <CONTROL> <9> stops the output to the screen, but programs are not halted. Sometimes these keys may be pressed inadvertently by the operator thus causing the computer to do things that the operator did not expect!

If you are in the midst of a program and the screen goes blank and stays there for a several seconds, try pressing <CONTROL> <5> on the number pad. This command toggles the output to the screen, ie makes the screen blank or returns the screen to operation. Read Apple /// Standard Device Drivers manual pp 57-59 on Control-5, -6, -7, -8, and -9.

(3) If you are in the midst of a program and the program suddenly ceases functioning, it may be that a peripheral device has been called by the program, but the device has not been turned on. If the program has called up .PRINTER, and the .PRINTER does not respond, then the program will hang until the .PRINTER responds. Turn on the printer. Some, but not all, other devices may give the same indication, if they are not powered when called for.

There have been times when I have returned to the Catalyst menu but could not get away. I had apparently aborted a program, in the midst of an operation that had already called up the printer. When I got back to the Catalyst menu I could go no further until I had turned on the printer. The printer typed whatever was in the buffer and I was then able to proceed.

(4) WHEN ALL ELSE FAILS, REBOOT!!!! You will loose every thing in the computer memory (including .RAM), but not that which is stored on the floppy disks or the hard disk. When rebooting, make sure that the boot disk is in the built in drive, .D1, and centered. See the next section. This is one reason why it is a good idea to frequently store work in progress on a floppy disk. Then when a power failure occurs or you MUST reboot, your losses are minimized.

(5) It is a good idea to get into the habit of double clamping your disks when you insert them in a drive. This simply means that after you insert the disk and close the drive door, open the door and close it again. This insures that the disk is properly centered
The disk drive can sometimes write information to a disk even when that disk is not properly centered. Your chances of retrieving such information is essentially nil, since you are most unlikely to get the disk off center exactly the same way twice!

This particular problem happened to me when I purchased Profile, Backup /// and Catalyst. The salesman demonstrated how to load the system with my programs and how to use Backup ///. He also demonstrated how easy this was and how "cool" he was by the casual manner in which he inserted the disks. When I got home, I could not use Business Basic. I reformatted the hard disk and restored using Backup ///, to no avail. Finally I noted in the double clamping recommendation on page 19 of Backup /// User's Manual.

Of course I had to reload the hard disk with out benefit of Backup ///. The salesman refused believe either the problem or the solution! However, on the doors of my disk drives I now have labels bearing the words "Double Clamp".

(6) In conclusion, remember the computer is a well trained idiot with a phenomenal memory. It will do exactly what you tell it to do in the language it knows. It cannot interpret a misspelling or a word you think is synonymous with the correct command. You must learn the language of the computer — it won't learn yours!

-///-

Who needs

Selector ///?

You do, if you want a state-of-the-art program switcher that will make *instantly* available to you, *with out rebooting*, a wide range of applications programs that are stored on your hard disk or high capacity floppy (such as UniDisk). Programs such as those listed to the right* and more! When you start up your system just boot Selector /// and that's it for the day! No more frustration looking through stacks of floppies or searching through sub-directories! And best of all Selector /// is now on sale so you will not only save time and aggravation, you can save some cool cash too!

SELECTOR /// WON'T COST YOU AN ARM AND A LEG! IT'S ON SALE! SAVE $20 off our regular low price of $99

Now only $79 plus $7 s/h

Access ///
Access 3270
Advanced VisaCalc
Apple II Emulation
AppleFile ///
Apple Speller ///
Apple /// Pascal
AppleWriter ///
Backup ///
BPI
Business Basic
Business Graphics
Cobol
Draw On ///
Communications Manager
Desktop Manager
EasyTerm
Graphics Manager
Graph'n'Calc
Haba Merge
Keystroke Data Base*
Keystroke Report Generator*
Lazarus ///
Macro Manager
Multiplan
Nexus
PFS: File*
PFS: Report*
Quick File ///
Script ///
Senior Analyst ///
/// E-Z Pieces
VisaCalc ///

*Indicates boot disk required in internal drive

*If one of your programs does not appear on this list, it will, more than likely, work under Selector ///. The Selector /// utility will not work with the copy-protected Word Juggler program. Additionally, the Selector allows the copy-protected programs shown to the right (followed by astericks) to be placed on your hard disk, but requires that the 'key' or boot disk for those programs be placed in the built-in drive before starting that particular program. Selector /// is not copy-protected.

Offer good through April 30, 1988. * Selector requires an Apple /// with a minimum of 256K.

Call Three: Hotline

The Call Three Hotline is a service whereby Apple /// users can contact fellow Apple ///er's who have expertise in a particular subject(s) pertaining to the Apple ///. These individuals are not compensated for their efforts so we owe them all a resounding "three cheers" for their generosity. If you have questions, feel free to call the consultants listed below, but please observe the calling times listed. It would also be a good idea to check the time zone so as not to inadvertently wake someone. No other restrictions apply to this service.

If you are willing to help your fellow Apple ///er's, write ON THREE giving the necessary information an we will be happy to add your name to our Hotline.

Name	Area	Telephone	Days	Hours	Zone	Subjects
Coville Woodburn	NH	(603) 863-5590	M,Tu,Th,F	7-8 p.m.	Eastern	BB,CT,GE,MI,QU,WP
Ken Johnson	MA	(413) 536-7502	Su-Sa	6-9 p.m.	Eastern	BB,PA,MD,WP,MI
Don Loosli	MI	(313) 626-3848	M-F	9-5 p.m.	Eastern	GE,WP,SS,DB
Harry T. Hanson	NJ	(201) 467-0712	M-F	6-9 p.m.	Eastern	GE,PA,BB,CT
Edward Gooding, Sr.	VA	(804) 747-8751	Su-Sa	6-9 p.m.	Eastern	CO,SS,PR,MD,CT
Jeff Fritz	WV	(606) 353-9493	M-Sa	8-11 p.m.	Eastern	BB,DB,GE,MI,SS,TC,EP
Al Johnston	FL	(904) 739-1600	M-F	9 -6 p.m.	Eastern	GE
Paul Sanchez	FL	(305) 266-5965	Su-Sa	10-4 p.m.	Eastern	SS<PR,CT
R.B. Thompson	NC	(919) 787-1703	Su-Sa	10-10 p.m.	Eastern	BB,DB,GE,SS,WP
David Galliher	TX	(214) 462-0346	Su-Sa	5-9 p.m.	Central	Corvus
J.Donald Glenn	NE	(402) 291-9177	Su-Th	7-10 p.m.	Central	GE
Scott Weddel	NE	(402) 572-7543	Su-Sa	4-10 p.m.	Central	GE, TC
Jim Ferencak	IL	(312) 599-7505	M-F	10 -5 p.m.	Central	GE,EP,DB
Paul Thomas	MS	(601) 494-4476	Su-Sa	6-10 p.m.	Central	GE,AC,BB,CP,DB,FI,MI,PA,PR,SO,SS,TC, EP,WP
Earl T. Brelje	MN	(612) 455-6405	M-F	4-9 p.m.	Central	CT,DB,WP,GE,Quick File, Omnis 3
Ron Maupin	TX	(512) 280-0144	Su-Sa	8 a.m.-10pm	Central	AL,CO,CT,EP,MD,PA,QU,SS,TC,WP
Rodney Hendricks	TX	(214) 581-0524	Su-Sa	6-9 p.m.	Central	DB,EP,GE,MD,QU,SO,SS,TC,WP
Terri Wiles	CO	(303) 850-7472	Su-Sa	10-6 p.m.	Mtn	PA
William Prince	OR	(503) 254-6465	M-F	9-4 p.m.	Pacific	GR,TC,Corvus
Karl La Rue	WA	(509) 582-6459	F-Su	6-10 p.m.	Pacific	MD,GE,EP,WP,TC,SS,CP
Pat Holwagner	CA	(415) 433-2323	M-F	10-6 p.m.	Pacific	GE,SS,WP,CT,DBSU,AE,EP
Viincent F. Latona	CA	(818) 703-0330	M-F	9-5 p.m.	Pacific	GE,WP,BB,SS,AE
Dennis R. Cohen	CA	(818) 956-8559	Su M-F Sat	10-10 p.m. 7-9 p.m. noon-6	Pacific	GE,PA,MU,WP,DB,SO
Kelly C. McGrew	WA	(206)943-8533	Su-M,Th-Sa	7-9 p.m.	Pacific	DB,GR,SS,PR,MD,CT
Larry E. Kalland	AK	(907) 272-4968	Su-Sa	12n-11pm	Alaska	AC,CT,GE,SS,EP,WP
H. Van der Straeten	Belgium	(015) 205328	Su-Sa	7-10 p.m.	Europe	BB,CT,DB,GE,PA,PR,SS
Robert C. Sudduth	Germany	(0531) 35851	Su-Wed	6-9 p.m.	Europe	AL, GE, PA, SO (German or English)
Arnaud Trache	France	21 03 04 21	Sa-Su	10-7 p.m.	Europe	AC,BB,DB,AE,FI,GR,MD,PR,SS,TC,EP,OT
J. Woretshofer	Netherlands	043-611704	Su-SA	9-12 a.m	Europe	CT,FO,GE,PA,QU,SO,WP,AE,EP
Salvador Garcia	Spain	(91) 234-5068	Su-Sa	7-10 p.m.	Europe	BB,GE,PA,MD,CT

Abbreviation Table

Subject	Code	Subject	Code	Subject	Code	Subject	Code
Accounting	AC	Agriculture	AG	Assembly Lang.	AL	Business Basic	BB
Catalyst	CT	Cobol	CO	CP/M	CP	Data base	DB
Education	ED	Emulation	AE	Financial	FI	Fortran	FO
General	GE	Graphics	GR	Micro-Sci	MI	Modems	MD
Modula-2	MU	Pascal	PA	ProFile	PR	Quark	QU
SOS	SO	Spreadsheets	SS	Telcom	TC	/// E-Z Pieces	EP
Word Proc.	WP	On Three Prod	OT				

ON THREE'S HELPLINE:

ON THREE offers technical assistance from 9 A.M. to 5 P.M. Pacific time if you live in an area without a hot liner or user group. There is no charge for this service *if* the product has been purchased from ON THREE within the last 90 days. Technical assistance under all other circumstances is $5 for the first three minutes and $1 per minute thereafter. Support may be obtained on the service line *only.* Tel. (805) 644-3514

Ranntings

by Richard and Lavona Rann

Closing the loop

CLOSING THE LOOP

Have you ever considered the impact of your Apple /// on your life? We aren't talking about the dollar impact that would be noticeable in a cost/benefit analysis. We are talking about the psychological impact of your Apple in your life.

Sitting at an Apple and writing this column is an important part of our lives. Each month we write these brief strings of words and assemble them into a few paragraphs that follow one another in, what we hope is a meaningful way. We are used to seeing letters and punctuation fill the screen one letter at a time as we type them. It is reassuring to know that they are posted the instant we type.

The process is one that should be familiar to each of us. Even though very few of us would understand all the details of the scientific and engineering reality of how the letters are converted from our imaginations to our screens, we are all familiar with the real-time experience of hitting a letter on the keyboard and seeing our action converted to a character by the computer. In these actions our Apple ///s have become our partners in experience.

The immediacy, or nearness to immediacy, is important. The result on the screen appears to come directly from our mental and physical actions. It is proof that we have acted. In an instant from our action, we have confirmation that we have acted, and for the most part, confirmation that we have acted correctly. As a psychologist views it, we are rewarded for our actions as the characters are formed in front of us. The technical phrase is: "Positive Feedback."

As we are rewarded for each keystroke something larger is building. Each Apple user can see spreadsheets, articles, letters, or in this case, a column taking shape on our screens, not long after they first appear in our minds.

It is not uncommon for the spouse of a home computer user to feel abandoned when the spouse appears to be engrossed in the computer. It is also quite common for us to turn to our computers and...

We and our Apple ///s have, in some sense, become an entity that works effectively. When we complete a task, we know that the /// has done nothing that we did not require of it. We have had total control of the creative process, and yet there is an awareness that makes us feel that the /// was a significant factor in the effort.

The computer has a certain amount of independence in that it has a habit of not always giving the response that we had expected. This independent quality is important in our reaction to the way it conducts itself in response to our actions. It is what separates the computer from many forms of feedback. The quality of feedback is much more intense if it is not totally predictable. Even though the computer is technically predictable, actual usage leaves the impression that it is independent.

The perceived independence of the computer's response raises our perception of it to a higher level, one that involves our reasoning centers. Consequently, it engages us more completely. It is impossible to think of an adult mind that would be engaged for hours striking a metal pan with a spoon, and yet, it is not difficult to think about those same hours spent engrossed in activities at a computer. The difference is in the quality of the feedback and the tight, closed circle of action and response formed between us and our computers.

Of course, this condition exists in every aspect of computing. It is built in to the process of interactive computing It is a large part of what makes personal computing "personal". It makes little difference if the software you are using is a programing lan-

guage, spreadsheet, word processor or a game. They all follow the pattern of action - feedback/response - action.

They all return to their human partner a reasonable, immediate response to each action. In every time frame, every action, there is a reaffirmation of the bond between the person using the computer and the computer. It is not uncommon for the spouse of a home computer user to feel abandoned when the spouse appears to be engrossed in the computer. It is also quite common for us to turn to our computers and "throw ourselves into work" when things are not going well in some part of our lives. This is actually quite understandable.

Our computers can be relied upon to be good, undemanding companions. Assuming that there is not competition for their use, which is normally true for personal computers, they are always available when we need some feedback. We rarely have to be concerned with their problems and we rightfully have a feeling of accomplishment from the many useful hours we have spent with them.

Over the past few years, we have seen that there is a definite emotional/psychological bonding that takes place between a person and his/her Apple ///. We have seen the same bonding between people and their Macintosh's, but strangely enough, it is rare in owners of MS DOS machines. Somewhere, the personal attachment is severed. We think it may be that the commands are less friendly and/or logical and take away from the natural interface of human and machine found in our Apples.

Is it any wonder that many of us find it difficult to think of our ///'s as obsolete, or less than perfect machines? Our personal image and self-worth are closely tied to the machines into which we have invested so much of ourselves. We know that we have accomplished many things with the help of our ///'s and find it hard to think of working a different way.

The /// is a trusty friend that has been through a lot with us and consciously or unconsciously, we don't want to walk away from it in it's declining years. For that reason alone, many of us may keep our ///'s long after we have purchased their replacements. Of course, it can't hurt that the prices have come down so far. It seems like a sacrilege to many of us who paid full price for our ///'s and the software, to consider the current resale prices.

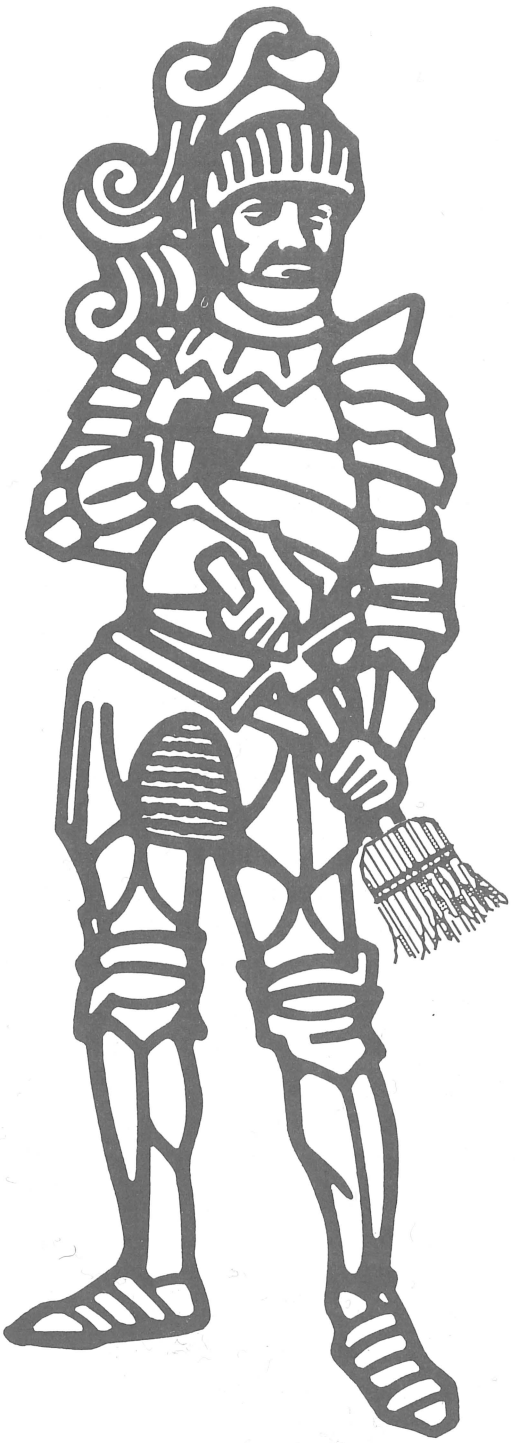
Each of us will probably all go through the process of developing a bond with a more advanced computer, but like a first love, the /// will always have a soft spot in our hearts.

It might help to understand our collective reactions to our ///'s if we consider this phenomena of feedback and reliable response. When we sit in front of the Apple /// we are closing the Feedback Circle.

In a process that is completely separate from the task we are attempting to accomplish, we are opening ourself to a form of communication with our ///s. We invest part of ourselves in our ///s, and in return we receive feedback.

///

BE ON GUARD AGAINST DUST



Protect your Apple /// from two of the most common causes for computer failure; dust and dirt! Our custom made heavy duty vinyl covers come in two sizes. Apple /// with monitor $11.95 Apple /// with monitor and ProFile at $12.95. Add $2 s/h

TrackBall /// - A Low Cost Alternative To The Mouse

One of the other things that people want for their Apple ///'s is a low cost alternative to the Apple Mouse. The TrackBall /// fits the bill!

If you're using Draw ON /// or other graphics packages for your Apple /// you may be holding off on ordering a mouse because of the price. If so, wait no longer, TrackBall /// is here.

The TrackBall /// is compatible with most major graphics applications on the ///. It comes with a replacement **.MOUSE** driver that you can add to Draw ON and other popular programs.

The TrackBall is like an inverted mouse. Instead of pushing and pulling the mouse around your desk (if you have the room), the TrackBall unit remains stationary while you roll the little ball back and forth.

TrackBall /// comes with two buttons, instead of the single one on an Apple mouse. The second button can be used to adjust the sensitivity of the TrackBall on the fly. No need to change drivers, just press the second button and the sensitivity of the TrackBall changes according to your wishes.

The TrackBall /// comes complete with the trackball, interface card, the driver disk and full documentation on installing the interface card and using the trackball. Best yet, it's priced at only $89.95 plus $6 for shipping and handling.

Order the TrackBall /// today!

* The TrackBall does not generate interrupts so it will not work as cursor keys in The Desktop Manager, nor will it work with The Graphics Manager.

Great 1200 & 2400 Baud Modems For The Apple ///

When we went searching for low cost yet powerful products for the Apple ///, the SmartLink modems we found were perfect. Completely Hayes compatible, we're offering these great modems at great prices!

The SmartLink modems are compatible with all communications packages on the ///. Our own Communications Manager, Access ///, Terminus and others all work just fine with the SmartLink.

They feature full auto-answer, auto-dial and a rugged aluminum case with power cord.

The SmartLink 1200 and 2400 Baud modems come complete with modem and instruction guide. The SmartLink 1200 costs $159.95 and the SmartLink 2400 is only $259.95. Please add $10 for shipping and handling.

Special Offer!!!

Order any SmartLink modem and get a Communications Manager for $10 off our regular low price! Order the SmartLink 1200 with the Communications Manager for only $199.90 plus $12 for shipping and handling. If you want faster telecommunicating, order the SmartLink 2400 with the Communications Manager for only $299.90 plus $12 for shipping and handling.

Order one of our fine SmartLink modems and get started in the wonderful world of telecommunications today!

ON THREE - Your Apple /// Experts

Looking For An Even Better Hard Disk Drive? Try the New Sider 20

One of the advantages of a hard disk is that you can store virtually ALL of your programs and data files on it, greatly reducing the time it takes to do things. If you have a Titan ///+IIe board you probably bought it for the same reason. There are programs on the //e that make it easier for you to do your work. If you want a hard disk for your Apple ///, the choice has been very limited if you want it to work in the Titan ///+IIe emulation mode.

The new Sider 20 from ON THREE expands your options. The new Sider 20 now works perfectly in the Titan ///+IIe (and regular Apple II) emulation mode. This means that you can store your files on the hard disk in the regular Apple /// mode, then switch to the Apple II emulation mode and access those same files with all of your Apple II and //e programs.

The new Sider 20 comes complete with documentation, interface card, Apple /// driver disk and all necessary cabling. The new Sider 20 even supports Apple II DOS, Pascal and CP/M partitions through it's powerful installation utility. The new Apple /// Sider 20 drivers automatically recognizes these partitions and allows you full access to the two SOS partitions in Apple /// mode.

The new Sider 20 is a great great hard drive. The best part is the price. For only $949 plus $35 for shipping and handling you'll get this great 20 MegaByte hard drive with everything you'll need to get up and running on your Apple /// - even if you're using it as an Apple II!

Special BONUS OFFER. Order today and get a free Selector /// program switching utility for the Sider 20. If you have a hard disk you can't be without Selector, if you have a /// you can't be without this powerful hard disk. Remember, Siders are *much* faster than the old ProFile!

Products Available For The Apple /// Computer

New products are being added all the time, so be sure to check this listing every month!

Books, Training Manuals and Magazines

Backup /// Users Guide and Disk Make back-up of your data files on ProFile and restore files to the hard disk **$49.95+$3**

McGraw Hill Guide to the Apple /// This book is an absolute must for all new Apple /// users. 276 pages.. **$29.95+$3**

ON THREE Magazine one year subscription (12 issues): $40 in US mailed bulk; $52 in US Mailed First Class; $60 to APO, FPO, Canada & Mexico; $84 Air Mailed to Europe, South America, Asia, Pacific Islands and Australia

ON THREE Magazine Back Issues From Jan. 1983 to present. Includes US postage. Ask for foreign mail rates... **Each $5**

Resource Guide for the Apple /// Computer Copy of the original Lists what's available for the Apple ///..... **$15+$3**

Service Reference Manual and *Complete* Apple /// Schematics 459 pages in a sturdy, lay flat binder.....**$99+$5**

SOS Device Drivers Writer's Guide Invaluable tool for beginning or advanced programmers or SOS writer.... **$29.95+$3**

SOS Reference Manual and ExerSOS Disk A complete guide to SOS. Two volumes. An excellent value..... **$59+$3**

Standard Device Drivers Manual One of the manuals originally packed with every ///. We have only a few.... **$39.95+$3**

System Software, SOS, Utilities and Emulation Originally packed with every /// sold. Very limited supply **$129+$5**

System Utilities Training Introduction How to: get programs up & running/format/copy/delete/rename files **$34.95+$3**

Will Someone Please Tell Me What An Apple /// Can Do? Lots of useful info. 95 page software guide..... **$3+$2**

Games

Card Machine Realistic simulation of authentic Las Vegas style blackjack game Full color cards Requires 256K...**$19.95+$2**

Crossword Scrambler Graphics displays and musical interludes make this educational program fun for all!.....**$9.95+$2**

Fruit Machine Patterned after Las Vegas slot machines with exciting sound effects and beautiful color graphics!.... **$11.95+$2**

Mr. Sandman Modeled after "P--- Man!" Fast paced and fun for all. Stand-alone and Desktop Manager versions..... **$19.95+$2**

GAME COMBO SPECIAL! You'll save $21.85 if you buy all four games listed above at the same time!....**$39.95+$7**

Hardware

Clock: ON THREE O'Clock and Calendar Easy to install. Displays-date and time. No slot required..... **$49.95+$3**

Computer: 512K Apple /// and Monitor Reconditioned. Full 90 warranty by ON THREE Complete.....**$899+$50**

Computer: 256K Apple /// and Monitor Reconditioned. Fully guaranteed by ON THREE Complete..... **$549+$50**

Data Transfer Switches Use two peripherals with your Apple ///. Specify Serial or parallel..... **$39.95+$5**

CPS Compatible Disk Drives: 800K $249...400K $145...5 1/4 inch 140K $139...Use either 5 1/4 or 3 1/2 disks.. **s/h$6**

Sider 20 All New Hard Disk Drive Complete with interface card, documentation, cabling and driver disk.....**$949+$35**

UniDisk 3.5 800K Drive by Apple Compatible only with ON THREE'S driver. Complete instructions..... **$499+$10**

Universal CPS Interface/Driver Includes the CPS interface card and ON THREE driver..... **$149+$5**

Memory Upgrade 512K by ON THREE includes board, chips, disks, extractor tool, complete instructions.**Call for Quote****

Memory Upgrade 256K by Apple, Inc. Complete with board, chips, instructions and confidence disk.....**Call for Quote****

Memory Spare 128K Boards This is inexpensive insurance in case your board goes bad..... **$25+$10**

Microprocessor Chip (65C802) 16 bit offers increased noise immunity-higher reliabilty-reduced power requirement. **$90+$3**

Modem SmartLink 1200 BAUD With Comunication Manager you can talk to CompuServe & other services**$159.95+$10**

Modem SmartLink 2400 BAUD Both models have rugged aluminum cases and are fully Hayes compatible..**$259.95+$10**

Mouse Apple IIe Mouse for the /// You *need* a mouse to fully enjoy Draw ON & other Apple /// programs..... **$160+$5**

Parallel Cable 36 pin Centronics male to 36 pin Centronics female adds 6 feet to standard printer cables.....**$29.95+$3**

Printer-Used Paper Tiger IDS 440 Impact-Dot Matrix. Fast simple operation. Built-in automatic diagnostics aid trouble shooting. Modular construction. Four selectable character densities. Like new condition. Comes with full 90 day warranty.... **$249.00+$15**

Serial Cable Ideal switch box applications, male connectors both ends, all lines wired.....**$19.95+$2**

TrackBall /// Low cost alternative to a Mouse. Compatible with most graphics applications for the ////. Complete.**$89.95+$6**

UPIC Card and Cable. Universal Parallel Interface Card.....$99+$5

***Due to circumstances beyond our control, the price of micro-chips has skyrocketed. Prices are increasing daily with no end in sight. If you have been considering upgrading your Apple ///, we suggest you do it now, before micro-chip prices go even higher. Please contact us for current pricing on our 512K and 256K memory boards.*

Miscellaneous

ON THREE Magazine Binder Attractive easy to use binder holds twelve issues of your favorite magazine..... **$14.95+$3**

Dust Cover Heavy duty vinyl protection for Apple /// with monitor **$11.95.** Apple /// with ProFile and monitor..**$12.95+$2**

I Love My Apple /// Sweat Shirt by Haines, warm cotton-blend Small or large only Blue yellow gray white **$18.95+$3**

I Love My Apple /// T-Shirt by Haines, finest quality blue tan white yellow Sm-Med-Lg-XLg 100% cotton.. **$11.95+$3**

Insurance for 256K and 512K Memory Boards Covers immediate replacement in case of failure. Prices listed are per year and at time of purchase only. $50 for the first board: $40 for two boards: $35 for three boards: $30 each additional board. Any *original* purchaser of an ON THREE 512K memory board can also purchase insurance after elapse of 10 day grace period at the following rates: $75 per year for the first board $65 for second board: $50 for third board and $40 for every additional board.

Software

AppleFile /// Merge/redesign files Up to 30,000 records per ProFile hard disk Store arrange review & print reports.....**$99+$7**
Apple /// Pascal Version 1.1 Develop and execute programs quickly and efficiently. Based on UCSD Pascal.....**$99+$7**
Apple /// Pascal Update Debugger Version 1.2 Includes file selection! Does not include manuals.....**$49.95+$7**
BPI General Accounting Receivable/Payable/Dbl Entry Prints checks/reports Req. ProFile/512K (Stand-alone 256K).**$99+$7**

The Desktop Manager

Acclaimed as the most sophisticated program ever developed for the Apple ///, this *expandable* productivity utility allows you to use accessories like those on the MacIntosh™. You can use these accessories while you're in another program such as /// E-Z Pieces or VisaCalc and a single keystroke will freeze the program you're in and display the TDM menu with it's built-in Note Pad, Appointment Calender, Calculator, Pickup/Paste, Self help screens Much more! Works with Selector, Catalyst and **all** Apple /// programs Req. 256K External or large capacity floppy disk drive recommended Uses about 32K memory.....**$129+$6**

The Desktop Manager Accessories

ASCII Chart Lists all values of ASCII keyboard characters. A necessary tool for programmers of all levels.....**$9.95+$3**
The Communications Manager Lets /// *talk* to other computers/services like Dow Jones, CompuServe etc.... **$49.95+$3**
The Disk Manager Replace System Utilities! List, rename and copy files to printer. Takes no extra memory.....**$44.95+$3**
The Graphics Manager Best graphics printing program ever! Includes stand-alone/DTM accessory versions..... **$39.95+$3**
The Macro Manager Thousands of keystrokes may be assigned to a single key! Eliminates repetitive typing... **$44.95+$3**
Super Disk #1. Most popular add-on accessories! Printer Setup-TypeWriter-Labler-Menu Manager-much more!.....**$39.95+$3**
Super Disk #2 File View let you view another file within a file-Change Font-Show Time-File Print-much more!.. **$24.95+$3**
Programmers Toolkit Write modules for DTM. Design and move folders, use error and line input routines..... **$19.95+$2**

Disk of the Month The best programs from ON THREE magazine on disk. $14.95+$2 Two or more DOM's.....**$12.50+$4**
Draw ON /// Superbly powerful and versatile graphics tool for the Apple /// with Mac-like utilities! Specify printer.. **$179+$5**
Fortran 77 Compiler Original unreleased version in attractive 3 ring binder. A must for engineers.Requires Pascal **$99+$5**
Lazarus /// File Restoration Disk.If you accidentally erase a file Lazarus can restore it.Don't wait till you need it!.. **$49.95+$2**
Mail List Manager Store 960 entries on one floppy disk, combine any # of disks to create huge mailing lists..... **$99+$7**
PFS Hard Disk Version Runs under Catalyst or Selector without using originals. Specify Catalyst or Selector.....**$15+$3**
Quick File /// Manage med size data bases File by alphabet/number/time/date Search/display/calculate numeric values.. **$50+$7**
RAM Diagnostic Disk by ON THREE and Apple Computer Please specify 128K or 256K or 512K..... **$15+$2**
Selector /// Switching utility. Programs stored on hard/hi cap.disk instantly available without rebooting Req. 256K..... **$99+$7**
StemWriter /// Sensational new word processor from Australia lets you view to files at once! State-of-the-art features.. **$99+$7**
StemSpeller /// Spelling Checker compatible with /// **E-Z Pieces**-StemWriter-ASCII files & Pascal Text Files.. **$69.95+$5**
System Software-SOS-Utilities and Emulation Originally packed with every Apple /// Very limited supply..**$129+$5**
Three Works Bibliography Everything ever writen or made for the Apple /// on 3 disks includes public domain **$39.95+$3**
/// **E-Z Pieces** All time best selling fully integrated word processor-data base and spreadsheet. Orig. $245 Now....**$135+$3.50**
UncopyProtect Driver Make back ups of VisaCalc-Advanced VisaCalc-AppleWriter. For legitimate purposes.....**$29.95+$3**
Universal CPS Driver Disk and complete instructions for installing CPS interface card.....**$50+$3**
Update AppleWriter Version 4.0 Send in your original disks for verification. We'll return them with your update.. **$15+$2**
Update Business Basic Version 1.23 Free if Version 1.1 was purchased from ON THREE **Return postage is appreciated**
Update Draw ON /// Printer Send us your three Draw ON /// disks and specify printer and interface you want..... **$15+$2**
Update The Graphics Manager /// (Desktop Manager Module) Specify the color or black and white version.....**$15+ $2**
Update PFS File and PFS Report Catalyst or Selector Version. Runs on your hard disk w/o using originals..... **$15+$2**
VisaCalc /// Write complex programs w/o learning program language Solve any problem put in row & column format.. **$99+$5**

Apple IIGS Products Available From ON THREE

4 MegaByte Ram Card 0K...$149+$10
The Desktop Manager Main Accessories...$89.95+$6
The Communications Manager...$49.95+$3
Super Accessories Disk #1...$39.95+$3
The Disk Manager...$39.95+$3
IIGS Memory Test...$19.95+$3
TDM Toolkit...$39.95+$3
Dust Covers...$9.95+$2

TO ORDER: JUST GIVE US A CALL! IT'S TOLL FREE!

U.S.A. (800) 443-8877 California only (800) 331-1418
Or write: ON THREE, Inc. P.O. Box 3825 Ventura, CA 93003 U.S.A.
.For Technical Support and Customer Service Dial 805-644-3514

ON THREE accepts VISA, Master Card, American Express, Money Orders, company or personal checks. C.O.D.'s to approved businesses only; the fee is $3. Sorry, no C.O.D.'s to individuals. We no longer accept any purchase orders from any source whatsoever. Add 3% sur-charge to American Express. CA residents add 6% sales tax. Shipping charges listed are within the U.S.A.. Overseas customers may pay by international money order, a check drawn on a U.S. Bank or any of the credit cards listed above. Please check with us for foreign shipping rates and mode of transport. Items returned without a prior authorizaton (RMA#) will be returned to sender. Returned items with an RMA# clearly writen on the outside of the box should be shipped to: ON THREE 4478 Market St. Suites 701 Ventura, CA 93003. Returned items subject to a 15% restocking fee. There is a $10 charge for checks returned because of insufficient funds. **No software returns will be accepted.** Prices subject to change without notice.

Catalog with complete product descriptions available upon request.

Automatic Telephone Dialing

by R. B. Thompson Jr.

Program Description

The Apple /// is intended primarily to act as a stand alone computer, but it can be used as a terminal to communicate with another computer. Modems are designed, primarily, to act as the link between a terminal and a computer, usually by way of a telephone line. Since modems are capable of dialing telephone numbers and since the computer can be programmed to tell the modem what to do, then the two can be combined to make a rather smart telephone.

Edward Gooding in the September and October issues of On Three reviewed two communications programs, Communications Manager (On Three) and Xmodem /// (Pair Software). I have not modernized; I still use the Access /// (Apple). All of these programs make use of the computer as a terminal for other computers. The program written here is not intended to displace any of these, but to use the computer to access the telephone. The program will access one type of computer, that the others will not, viz the computer that gets its inputs from the number tones generated by a modem (or by touch dialing telephones), and transmits its output by voice. Merrill Lynch has such a computer so that their customers can get information about their individual accounts.

I certainly would not recommend that anyone buy an Apple /// and a modem just to do automatic telephone dialing. If, however, you subscribe to this magazine, you almost certainly already have an Apple ///; now, if you also have a modem, then you can use this program to operate your telephone. The speaker on the modem will provide an audible output, but you must use your telephone to talk back when that becomes desirable. If your computer also has a clock that tells time (e. g. On Three O'Clock), this program can be used to time your telephone calls (or your boiled eggs for breakfast). Note, all computers have clocks to keep the various operations of the computer synchronized, but these don't tell time. Finally, you can make a record automatically of time, date, and phone number along with a note concerning your phone calls.

In the accompanying program, the Hayes Smartmodem commands are used (see pages 22-25). If your modem is compatible with this, modification of the commands should not be required. If command modifications are necessary, note the remarks section and the places where PRINT#1 is specified in the program: lines 2212, 2216, 2242, 2250, 2270, 2278, 6100, 6140, 6590, and 6700. The program assumes a phone which is "dialed" by the standard tones rather than pulses. If your phone is rotary dialed (pulses), then change "DT" to "DP" in lines 2216 and 6140. DO NOT make this change in lines 2250 and 2270. The Merrill Lynch computer does not understand pulses. Even though it can be accessed by pulse dialing, for input, it must receive the tones generated by the modem. If you do not use the Hayes Smartmodem 1200, then you will want to change line 1270 accordingly.

The selections given in this program are by way of example how you may wish to set up your personal automatic dialing system. The numerous remarks cause the program to occupy an excessive amount of disk storage space and to operate more slowly than necessary. Once you understand how the program operates, eliminate the remarks that are unnecessary for your purposes.

Title Screen — lines 800 - 980. The title appears on the screen for about 2 seconds before being replaced by the menu. Obviously, this section is not essential for the operation of the program. Just my little ego trip.

Menu and Selections — lines 1000 - 1620. I have found this layout of the menu quite satisfactory for my use. The menu is the first place where the individual must alter the program to suit his own needs. Line 1000 assumes this program is located on the hard disk ".PROFILE" under the subdirectory "COMMUNICATE". If this does not agree with your situation, you must change the variable PREFIX$ to agree with your set up. You should next change the menu section, lines 1100 - 1250, to contain the

phones you wish.

Several varieties of possible entries are given as examples to aid one in devising his own entries. When a selection is made (line 1285) this is accepted as the integer ANS%. If you enter the number as a negative number, line 1290 will convert it to a positive one. If you enter a decimal number, it will be converted to an integer by dropping all figures to the right of the decimal. If the option has not yet been programmed, then you will be returned to the menu. All other errors will be caught by the ERROR TRAP, lines 8000 et seq., and dealt with accordingly. The string N$ is used as a memory jog when automatically redialing, and is displayed there.

Option Operations — lines 2000 - 5270. This is the other area where one must modify the program to suit his individual needs. The examples given here are not intended to be used as they are, but rather are to be used as guides, and are intended to show the different ways one might modify the program. Large sections of the program are reserved for additional options. You will note that when you multiply the option number by 100 then add 2000 you have the beginning of the desired subroutine. Thus for option 22 start looking at line 4200 (22*100+2000). This permits one to find readily the subroutine in the program that specifically deals with a particular phone call option.

#0. This gives the computer operator a way out. It sends the computer to line 2000. If you are using Business Basic version 1.23Ax, BYE will end the program and, if you are also using Catalyst as a program switcher, you will be taken back to the Catalyst menu. If you are using an older version of Business Basic, make the corrections as given in the remarks.

#1. John Q. Public. (lines 2100 et seq.) Mr. Public is imaginary, of course, but this shows how you can enter some data about a person as a memory jog when you call him.

#2. ML, CMA-DATA. (lines 2200 et seq) This connects the caller with the real Merrill Lynch computer via a toll free 800 number. The computer uses the tones generated by the modem for dialing a number as the input, and responds vocally. To access your account information, you must first give your account number. I have found that the Merrill Lynch computer gets impatient when I try to put in all the required numbers before pressing <RETURN>. Thus, it is more reliable to have your account number in the program as ACCT$, which is then called up when "R" is entered for account number in line 2227. One could use other characters to call up any of several different account numbers. Note that either the upper case "R" or the lowercase "r" will give the account number.

An alternative method would be to press the number buttons on your telephone, but then you would not have a display of those numbers. Naturally, I have not given a real account number in the program; you will get nowhere by trying this number. Once you have given a legitimate account number, you are then asked to enter 1 for your cash balance, 2 for your credit authorization limit, or 3 for information on the checks that have cleared.

The Merrill Lynch computer will reject all other options, except 4 which simply gives a recitation of the options available. The number 0 will hang up the telephone, actually the modem, and give you the option of either returning to the menu or making a record of the call. See line 2280. Since the timer was not available on this option, the record of this call will give the start time as the dial time and the stop time as the hang-up time.

#13. Naval Observ. Time. (lines 3300 et seq) This is a real 900 number that connects the caller with the voice output clock operated by the United States Naval Observatory. This call will cost the caller about 50 cents. I dialed this number once through my telephone but did not properly hang up at the end. I got a tremendous bill for that call. However, since I had explained the problem to an AT&T operator as soon as I (my wife actually) discovered that the phone was off the hook, AT&T very kindly reduced the charges to 50 cents! By making the call through this program, the modem will hang up when you are finished. In case of a power failure, the modem automatically hangs up.

#14. ACCESS ///. (lines 3400 et seq) This assumes you are using Access // / as your program to operate the Apple /// as a terminal, and that this program is installed on a hard disk called .PROFILE under the subdirectory called APPLCOM. These assumptions being true, the Basic program ACCESS3 will be run when you select #14. For other situations, make the appropriate corrections. If you have gotten this far, you surely know what I mean.

#20. On Three. (lines 4000 et seq) This is an easy means of getting in touch with On Three. The example shows how one may use the program to select from two or more numbers to call the same organization.

#28. Redial last number. (lines 4800 et seq) Have you ever called a number

and found it busy? Who hasn't? Knowing that it is a business phone, you are sure that it will be free at any moment. So you immediately redial, and guess what? It is still busy! So you repeat the process until your finger is sore and you are out of patience. This section may not improve your patience, but it will be easier on the fingers for redialing the last number dialed. Also, as with the other sections, you have a display of the number which you are dialing, and a notation to jog your memory. Take the time to check in the phone book to be sure it is, in fact, the number you wish!

#29. Manual Input. (lines 4900 et seq) This gives you the option of manually entering a phone number. The advantage over using the phone directly is that you get a display of the number that you are dialing, you can display some notes as a memory jog, you have a timer that you can use to time your call, and finally you may store automatically a record of the call (lines 5500 - 5670). If you should accidently enter an character that your modem cannot handle, then when the subroutine branches to line 7000 these characters are detected and you are notified of such a character.

#30. READ PHONE CALL RECORD. (lines 5000 - 5270) This allows you to review the records that you have made of past phone calls when the program branched to lines 5500 through 5670. All of the options on this program will allow you to make a record of phone calls. Line 5030 gives you the option of printing the information on the computer screen or on your printer. The <RETURN> key (or any key except <P>) will put the information on the screen. If you use the printer, then line 5070 inserts instructions for the printer. The instructions are for the Epson MX printer; you should modify them to suit your individual printer. Since the input to the record was already formatted with tabs, it will not be necessary to space the information when it is printed. Once you have seen the information, you are given the option of deleting the file or not as you wish (lines 5200 -5250).

Making Records of Phone Calls — lines 5500 - 5670. If you select the option of making a record (see lines 2284, 6530 and 6540), you will go to the subroutine starting with line 5500. The error trap (line 5520) creates the file "PHONE.RECORD", if one does not exist. Note this will be placed in the directory specified by the current PREFIX$, viz.

".PROFILE/COMMUNICATE". See line 1000. Line 5550 allows you to enter a note of your choosing into the record. Elapsed time is converted into a string (ET$) then time of starting dialing (TM$), time of last starting the timer (TM1$), time of last stopping the timer (TM2$), ET$, time of hanging up the modem (TM3$), date (DT$), phone number (PHONE$) are saved to the file along with the note you made. The information is displayed on the screen for a moment, and you are returned to the menu. As discussed above, you may read the records by selecting option #30 from the main menu.

Operating the Phone — lines 6000 - 6320. Note the commands given to the modem following PRINT#1. The modem accepts only string commands not numbers. For this reason all of the phone numbers were recorded as strings. Lines 6100 and 6120 insure that the modem has hung up and a dial tone is obtained. Lines 6210 through 6270 print information at the bottom of the screen, including how to hang up, and how to start the timer. Lines 6280 - 6320 respond to these commands, with line 6320 operating, if an improper command is given.

Operating the Timer — lines 6330 - 6830. The start time for the timer is TM1$ which is given in line 6340. Subroutine 6730 - 6770 converts the TM1$ string into numbers and ultimately into the seconds since midnight. Note TSH& is thirty-six hundred (3600) and SXY& is sixty (60), see line 1040. Variables process faster than do numbers. Line 6360 provides a means of accepting keyboard commands. TM2$ is the current time until the space bar is pressed, then it becomes the stopped time. Subroutine 6790 - 6830 converts the TM2$ string into numbers and calculates the elapsed time in seconds then converts it to the integer numbers of hours, minutes, and seconds. Line 6800 takes into account that the midnight is 00:00:00 and not 24:00:00. Lines 6390 - 6480 changes the format of the window at the bottom of the screen to put in the time values. Note the timer will continue even after the modem has hung up. This permits one to continue timing the call even if he is using the hand set of the telephone rather than the modem. When the command is given for the modem to hang up in lines 6490 to line 6590 there is a 1 second time delay built in to allow one time to pick up the hand set of the telephone.

Feed-back from the speaker on the modem to the hand set can cause an echo or a reverberation in the telephone or even a SQUEAL. After you have hung up, line 6610 presents you with a new set of instructions. If you have not stopped the timer, it will continue to run until you press <SPACE BAR> (stop), press <ES-

CAPE> (go to main menu), press <R> (redial), or press <S> (store call information).

Error Trap — Lines 8000 - 8100. If an error occurs in the program the program will immediately branch to the error trap. If you have removed line 8025, then all errors except two will return you to the menu. The two exceptions are <CONTROL><C> (error #255) and device .RS232 not being on line (error 30 or 37). These errors and line 8025 will abort the program with a notice of the error. Line 8025 is inserted to catch your programming errors and should be removed once the program is bug free.

```
16:06                {/PROFILE/COMMUNICATE/DIAL}                10/29/87

   This operates Hayes Smartmodem 1200 from Apple /// for touch-dialing.

   Enter the number corresponding to your selection -|20

 0 - Quit!  Do NOT dial!                  15 -
 1 - John Q. Public                       16 -
 2 - ML, CMA-DATA                         17 -
 3 -                                      18 -
 4 -                                      19 -
 5 -                                      20 - On Three
 6 -                                      21 -
 7 -                                      22 -
 8 -                                      23 - Business Basic v1.23Ax
 9 -                                      24 -
10 -                                      25 -
11 -                                      26 -
12 -                                      27 -
13 - Naval Obsv. Time (toll)              28 - Redial last number
14 - ACCESS /// (terminal)                29 - Manual Input
                        30 - READ PHONE CALL RECORD
```

FIGURE 1. LAYOUT FOR MENU, Option #20 was selected.

```
This is a call to ON THREE in Ventura, CALIFORNIA!

 For credit card order, no toll, - - - - - - press 1
 For technical service, toll call + charges, press 2 -|1

Master Card number: 1234 5678 9012, exp date: 9/88

  Free call; credit card orders ONLY.

The number to be dialed is 1 800 443 8877

To cancel this call, press <ESCAPE>; else, TURN ON MODEM, & PRESS any key.

* * * * *  Dialing 1 800 443 8877  * * * * *



 --  To Hang-up, press <ESCAPE>.  To REDIAL the SAME number, press <R>. --
    To START Timer, press <RETURN>.  To STOP Timer, press <SPACE BAR>.
Date = 10/29/87              Present
   Start Time = 16:07:12.     Time = 16:09:00.     Elapsed Time = 00:01:48.
```

FIGURE 2. Screen after selecting option #20, credit card purchase & clock running.

```
MODEM has HUNG-UP.  Press <ESCAPE> to QUIT; <R> to REDIAL; <S> to STORE RECORD
      To START Timer, press <RETURN>.  To STOP Timer, press <SPACE BAR>.
Date = 10/29/87              Present
   Start Time = 16:07:12.     Time = 16:10:18.     Elapsed Time = 00:03:06.
```

FIGURE 2A. Timing box after modem has hung-up.

```
NOTE -|On Three - ordered Communications Manager $52.95
 Dialed = 16:06:30    Timer 1 = 16:07:12    Timer 2 = 16:10:18
 Diff =  00:03:06    H Up = 16:09:00    Date = 10/29/87  Ph# 1 800 443 8877
```

FIGURE 2B. BOX CONTAINING PHONE RECORD AFTER ENTERING THE NOTE

```
 Output of phone record to C(onsole) or P(rinter)?  C or P? -|.CONSOLE

#   Dialed T  Start T   Stop T    Elapsed   Hang-up   H-up Date  Phone #

1   09:33:46  09:33:55  09:36:16  00:02:21  09:36:13  10/29/87  832-6533
^^^ Olde - news - no market report yet
2   09:37:11  09:37:17  09:38:38  00:01:21  09:38:14  10/29/87  787-7590
^^^ St Timothy's Church - asked Ann to put results of Every Member Canvas in Su
nday's bulletin.  Will get latest results myself on Friday pm
3   09:43:30  09:43:35  09:44:31  00:00:56  09:44:28  10/29/87  555-1234
^^^ Mary Public - told her Kathryn unable to take piano lesson today.
4   10:43:44  10:43:51  10:45:00  00:01:09  10:44:57  10/29/87  832-6533
^^^ Olde Stock report Dow Jones opening rpt up 35.48 -> 1882.3  36 Mil shrs
5   16:06:30  16:07:12  16:10:18  00:03:06  16:09:00  10/29/87  1 800 443 8877
^^^ On Three - ordered Communications Manager $52.95

             5 records in the file PHONE.RECORD.

Do you wish to delete the file /PROFILE/COMMUNICATE/PHONE.RECORD?  Y or N?  |n
```

FIGURE 3. Phone record as it appears on the console

Program Listing:

```
 800   TEXT:INVERSE:HOME:WINDOW 10,6 TO 70,19:NORMAL:HOME:VPOS=4
 810   PRINT TAB(11);"****************************************"
 820   PRINT TAB(11);"**                                    **"
 830   PRINT TAB(11);"**     AUTOMATIC TELEPHONE DIALING    **"
 840   PRINT TAB(11);"**                                    **"
 850   PRINT TAB(11);"**                                    **"
 860   PRINT TAB(11);"**                                    **"
 870   PRINT TAB(11);"**                                    **"
 880   PRINT TAB(11);"**                                    **"
 890   PRINT TAB(11);"****************************************"
 950   PRINT CHR$(7);:FOR X=1 TO 600:NEXT:PRINT CHR$(7);
 960   REM - For faster operation and reduced disk storage requirements,
 970   REM         eliminate the REMarks.  They are present only as an aid
 980   REM           to understanding the program operation. ---------
 1000   ORIGPREF$= PREFIX$:PREFIX$="/PROFILE/COMMUNICATE":PROGPREFIX$= PREFIX$
 1010   REM -  Replace above with your choice of PREFIX$.
 1020   REM         PROGPREFIX$ is used only on Business Basic version 1.23Ax;
 1030   REM            this version is available from ON THREE.  ---------
 1040   TSH&=3600:SXY&=60:TM2$="":SEC&=0:HR&=0:MN&=0:TM2&=0:HR2&=0:MN2&=0:SC2&=0:
TM1&=0:TM1$="":HR1&=0:MN1&=0:SC1&=0:TM0$="":TM3$=""
 1050   TEXT:HOME:DT$=RIGHT$(DATE$,5)+"/"+LEFT$(DATE$,2):REM form is MM/DD/YY
 1060   REM ---  Following shows menu, date, and time on the screen ---
 1070   WINDOW 1,8 TO 80,24:NORMAL:HOME:VPOS=2:HPOS=1
 1100   PRINT" 0 - Quit!  Do NOT dial!";
 1115   PRINT TAB(43);"16 - "
```

Program Listing Continued:

```
 1120   PRINT" 2 - ML, CMA-DATA";
 1125   PRINT TAB(43);"17 - "
 1130   PRINT" 3 - ";
 1135   PRINT TAB(43);"18 - "
 1140   PRINT" 4 - ";
 1145   PRINT TAB(43);"19 - "
 1150   PRINT" 5 - ";
 1155   PRINT TAB(43);"20 - On Three"
 1160   PRINT" 6 - ";
 1165   PRINT TAB(43);"21 - "
 1170   PRINT" 7 - ";
 1175   PRINT TAB(43);"22 - "
 1180   PRINT" 8 - ";
 1185   PRINT TAB(43);"23 - Business Basic v1.23Ax"
 1190   PRINT" 9 - ";
 1195   PRINT TAB(43);"24 - "
 1200   PRINT"10 - ";
 1205   PRINT TAB(43);"25 - "
 1210   PRINT"11 - ";
 1215   PRINT TAB(43);"26 - "
 1220   PRINT"12 - ";
 1225   PRINT TAB(43);"27 - "
 1230   PRINT"13 - Naval Obsv. Time (toll)";
 1235   PRINT TAB(43);"28 - Redial last number"
 1240   PRINT"14 - ACCESS /// (terminal)";
 1245   PRINT TAB(43);"29 - Manual Input"
 1250   PRINT TAB(27);"30 - READ PHONE CALL RECORD"
 1255   WINDOW 1,1 TO 80,6:INVERSE:HOME
 1260   PRINT" ";LEFT$(TIME$,5); TAB(23);"{"; PROGPREFIX$;"DIAL}" TAB(68);
DT$
 1270   PRINT:PRINT TAB(5);"This operates Hayes Smartmodem 1200 from Apple
 /// for touch-dialing."
 1280   ON ERR GOTO 8010
 1285   PRINT CHR$(7):INPUT"    Enter the number corresponding to your sel
ection -|";ANS%
 1290   ANS%=ABS(ANS%):TEXT:HOME:ATH=0:X= FRE
 1300   IF ANS%=0 THEN 2000:REM - quit -
 1310   IF ANS%=1 THEN N$="John Q. Public":GOTO 2100
 1320   IF ANS%=2 THEN N$="CMA-DATA, computer":GOTO 2200
 1330   REM - RESERVED FOR ->IF ANS%=3 THEN 2300:REM
 1340   REM - RESERVED FOR ->IF ANS%=4 THEN 2400:REM
 1350   REM - RESERVED FOR ->IF ANS%=5 THEN 2500:REM
 1360   REM - RESERVED FOR ->IF ANS%=6 THEN 2600:REM
 1370   REM - RESERVED FOR ->IF ANS%=7 THEN 2700:REM
 1380   REM - RESERVED FOR ->IF ANS%=8 THEN 2800:REM
 1390   REM - RESERVED FOR ->IF ANS%=9 THEN 2900:REM
 1400   REM - RESERVED FOR ->IF ANS%=10 THEN 3000:REM
 1410   REM - RESERVED FOR ->IF ANS%=11 THEN 3100:REM
 1420   REM - RESERVED FOR ->IF ANS%=12 THEN 3200:REM
 1430   IF ANS%=13 THEN N$="Naval Obs. Time":GOTO 3300
 1440   IF ANS%=14 THEN 3400:REM Access ///
 1450   REM - RESERVED FOR ->IF ANS%=15 THEN 3500:REM
 1460   REM - RESERVED FOR ->IF ANS%=16 THEN 3600:REM
 1470   REM - RESERVED FOR ->IF ANS%=17 THEN 3700:REM
 1480   REM - RESERVED FOR ->IF ANS%=18 THEN 3800:REM
 1490   REM - RESERVED FOR ->IF ANS%=19 THEN 3900:REM
 1500   IF ANS%=20 THEN N$="ON THREE":GOTO 4000
 1510   REM - RESERVED FOR ->IF ANS%=21 THEN 4100:REM
 1520   REM - RESERVED FOR ->IF ANS%=22 THEN 4200:REM
 1530   IF ANS%=23 THEN CLOSE:RUN"/PROFILE/HELLO":REM BusnBasic on .PROFILE
```

```
1540   REM - RESERVED FOR ->IF ANS%=24 THEN 4400:REM
1550   REM - RESERVED FOR ->IF ANS%=25 THEN 4500:REM
1560   REM - RESERVED FOR ->IF ANS%=26 THEN 4600:REM
1570   REM - RESERVED FOR ->IF ANS%=27 THEN 4700:REM
1580   IF ANS%=28 THEN 4800:REM redial
1590   IF ANS%=29 THEN 4900:REM manual
1600   IF ANS%=30 THEN 5000:REM read phone call record
1610   GOTO 1040
1620   REM - if ANS% is not found restart menu ----------
2000   CLOSE:BYE
2010   REM -  This will take you to Catalyst Menu, if you are using
2011   REM        Basic Version 1.23Ax.  BYE in older versions causes
2012   REM         SYNTAX ERROR message.
2020   REM -  The following may be substituted for those who use Catalyst.
2021   REM        otherwise substitute the appropriate instruction,
2022   REM          or simply use the command, END or STOP.
2030   REM | 2000  CLOSE                                              |
2040   REM | 2010  TEXT:PRINT"Press both Apple Keys and <ESCAPE> key"  |
2050   REM | 2020  END                                                |
2100   PRINT:PRINT" John Q. Public, 1234 Elm St., Raleigh, NC 27612"
2110   PRINT"    wife = Mary.  Children = John, Jr. & Sue Ann"
2120   PRINT"      bridge, tennis, chess, piano lessons"
2130   REM The above sample information will appear on the screen.
2140   PHONE$="555-1234"
2150   REM  - String containing the phone number for John Q. Public
2160   GOTO 6000
2170   REM -  confirms the number and dials the number --
2200   PRINT:PRINT"Merrill Lynch Data 8:30 am to midnight Mon - Fri.  Audi
o response computer."
2202   REM - A message to remind the caller of the computer being called -
2204   REM - This illustrates the use of program to respond to an audio
2206   REM      output computer which uses telephone tones for input.
2208   PHONE$="1-800/262-3282":PRINT:PRINT TAB(20);"Phone #";:INVERSE:PRIN
T PHONE$;:NORMAL:PRINT
2210   PRINT:PRINT"To cancel this call, press <ESCAPE>; else, TURN ON MODE
M, & PRESS any key.";CHR$(7):GET AN$:IF ASC(AN$)=27 THEN 1040
2212   OPEN#1,".RS232":PRINT#1"AT Z":FOR X=1 TO 500:NEXT
2214   REM ------- Reset modem and pause ----------
2216   PRINT#1"AT C0 DT";PHONE$;";"
2218   REM - "AT" gets modem's attention ----------
2220   REM - "C0" turns off modem's transmitter ----------
2222   REM - "DT" dials PHONE$ by tones, substitute "DP" for pulses --
2224   REM -  ";" returns control to your terminal -------
2226   PRINT:PRINT"Phone Number: ";:INVERSE:PRINT PHONE$:NORMAL:TM0$=TIME$
2228   PRINT:PRINT"Date is ";DT$;".   Call Time is ";TM0$;"."
2230   PRINT:PRINT"------  To HANG-UP, ENTER the letter H. -------"
2232   TM1$=TM0$:GOSUB 6730:REM -- Convert TM1$ to seconds -------
2234   INPUT"WHEN REQUESTED, ENTER Account Number or R. -|";ACCT$
2236   IF ASC(ACCT$)=82 OR ASC(ACCT$)=114 THEN ACCT$="123 45678"
2238   REM  substitutes R's accnt nbr for the character R or r -
2240   REM    Of course many additional account numbers may be added. --
2242  IF ASC(ACCT$)=72 OR ASC(ACCT$)=104 THEN PRINT#1"ATH":CLOSE:GOTO 1040
2244   REM  Hang up on account "H" and go back to menu, ie ABORT!
2246   IF RIGHT$(ACCT$,1)<>"#" THEN ACCT$=ACCT$+"#"
2248   REM - ML computer uses the tone of # button to signal end of input.
2250   PRINT#1"AT DT";ACCT$;";"
2252   REM ------ Must send tones, ";" returns control to terminal --
2254   PRINT:PRINT"CODES:  0 = QUIT.  1 = CMA balance.  2 = Authorization
limit.  3 = Check info."
2256   REM  -  A reminder of the various codes used by ML -------
2258   PRINT;"  Date is ";DT$;".  Time of dialing was ";TM0$;".   It is n
ow "; TIME$;"."
2260   INPUT"When requested, ENTER number.  (# button unnecessary) -|";
CODE$
2262   IF CODE$="0" THEN 2278
2264   REM - Hang up, reset modem, & make record of call or go to menu -
2266   IF RIGHT$(CODE$,1)<>"#" THEN CODE$=CODE$+"#"
2268   REM ------ "#" is requested ----------
2270   PRINT#1"AT DT";CODE$;";"
2272   REM - must send tones and ";" returns control to terminal ---
2274   GOTO 2254
2276   REM --------- Ready for next input. ----------
2278   PRINT#1"ATZ":TM2$= TIME$:TM3$=TM2$:DT$=RIGHT$(DATE$,5)+"/"+LEFT$
(DATE$,2):CLOSE:PRINT;CHR$(7):
2280   PRINT"If you wish to make a record of this call PRESS <R>, ELSE an
y key."
2282   GET AN$:IF AN$<>"R" AND AN$<>"r" THEN 1040
2284   GOSUB 6790:GOTO 5500
2286   REM - Above section did NOT use dial & timer routine, 6000 et seq;
2288   REM   HOWEVER, the dial and hang-up times were used for timing. -
2300   REM - RESERVED FOR ANS%=3 -------
2400   REM - RESERVED FOR ANS%=4 -------
2500   REM - RESERVED FOR ANS%=5 -------
2600   REM - RESERVED FOR ANS%=6 -------
2700   REM - RESERVED FOR ANS%=7 -------
2800   REM - RESERVED FOR ANS%=8 -------
2900   REM - RESERVED FOR ANS%=9 -------
3000   REM - RESERVED FOR ANS%=10 -------
3100   REM - RESERVED FOR ANS%=11 -------
3200   REM - RESERVED FOR ANS%=12 -------
3300   PRINT"This is a toll call to Naval Observatory Time Recording."
3310   PRINT:PRINT"      about $0.50 for 3 minute call."
3320   PHONE$="1-900/410-8463"
3330   GOTO 6000
3400   REM - following assumes Basic language program ACCESS3 is on
3410   REM       Profile hard disk under sub-directory titled APPLCOM ---
3420   PREFIX$=".PROFILE":PROGPREFIX$= PREFIX$
3430   CLOSE:RUN"APPLCOM/ACCESS3"
3500   REM - RESERVED FOR ANS%=15 --------
3600   REM - RESERVED FOR ANS%=16 --------
3700   REM - RESERVED FOR ANS%=17 -------
3800   REM - RESERVED FOR ANS%=18 -------
3900   REM - RESERVED FOR ANS%=19 -------
4000   PRINT"This is a call to ON THREE in Ventura, CALIFORNIA!"
4010   PRINT:PRINT" For credit card order, no toll, - - - - - - press 1"
4020   PRINT" For technical service, toll call + charges, press 2 -|";:GET A
4030   PRINT A:PRINT:PRINT"Master Card number: 1234 5678 9012, exp date: 9/88
4040   IF A=1 THEN PRINT:PRINT"  Free call; credit card orders ONLY.":PHONE$=
"1 800 443 8877"
4050   IF A=2 THEN PRINT:PRINT"   TOLL CALL - Technical Service & Other.":PRI
NT"      Tech Serv charges = $5 first 3 minutes + $1/additional minute.":PHONE
$="1 805 644 3514"
4060   IF A<>1 AND A<>2 THEN PRINT CHR$(7):GOTO 4010
4070   GOTO 6000
4100   REM - RESERVED FOR ANS%=21 -------
4200   REM - RESERVED FOR ANS%=22 -------
4300   REM - RESERVED FOR ANS%=23 -------
4400   REM - RESERVED FOR ANS%=24 -------
4500   REM - RESERVED FOR ANS%=25 -------
4600   REM - RESERVED FOR ANS%=26 -------
4700   REM - RESERVED FOR ANS$=27 -------
4800   INVERSE:PRINT"   This is a REPEAT dialing of the last number dial
ed.   ";:NORMAL:PRINT
4810   PRINT:PRINT N$
4820   REM --  This prints the note made in the manual dialing --
4830   GOTO 6010
4900   PRINT:PRINT"      This is manual Touch Tone Dialing.":PRINT
4905   PRINT:PRINT"The following can be dialed: 1 2 3 4 5 6 7 8 9 0 * #"
4910   PRINT:PRINT"The following can be entered but will be ignored: ( ) / -
and spaces."
4915   PRINT:PRINT"If a comma is entered it will cause a 2 second delay in d
ialing where entered."
4920   PRINT:PRINT"A semicolon terminates the dialing - the program automati
cally enters one."
4925   PRINT:PRINT"All other characters will cause an error!!!";CHR$(7)
4930   PRINT CHR$(7):INPUT"ENTER number to be dialed --|";PHONE$
4935   Y=LEN(PHONE$):GOSUB 7000:Y=LEN(PHONE$)
4940   PRINT:PRINT"The number of characters to be dialed are: ";Y
4945   X= FRE:PRINT;CHR$(7)
4950   PRINT"To correct Number, press <N>.    To return to Menu, press <M>.
4955   PRINT"   Else, TURN ON MODEM.   THEN press any other key.";:GET AN$:
PRINT AN$
4960   IF ASC(AN$)=3 THEN TEXT:GOTO 8050:REM - Abort on <CONTROL> C ---
4965   IF AN$="M" OR AN$="m" THEN TEXT:HOME:GOTO 1040
4970   IF AN$="N" OR AN$="n" THEN TEXT:HOME:GOTO 4900
4975   WINDOW 1,1 TO 80,14:HOME:TEXT:VPOS=2
4980   INPUT"NOTES: ";N$
4985   GOTO 6080
5000   REM - The following reads the records stored in PHONE.RECORD --
5010   TEXT:HOME:PRINT" Output of phone record to C(onsole) or P(rinte
r)?  C or P? -|";
5020   GET OUT$
5030   IF OUT$="P" OR OUT$="p" THEN OUT$=".PRINTER":ELSE OUT$=".CONSOLE"
5040   PRINT OUT$:PRINT
5050   IF OUT$=".PRINTER" THEN PRINT CHR$(7);"TURN ON PRINTER!  Then PRE
SS any key.":GET A$:PRINT
5060   OPEN#2 AS OUTPUT,OUT$:OPEN#3 AS INPUT,"PHONE.RECORD"
5070   IF OUT$=".PRINTER" THEN PRINT#2;CHR$(27);"Q";CHR$(80);:REM Instruc
ts Epson Printer that maximum page width is 80.  Modify as necessary. ---
5080   PRINT#2:PRINT#2"PHONE RECORD as of ";DT$;"  "; TIME$:PRINT#2
5090   PRINT#2"#   Dialed T"; TAB(15);"Start T"; TAB(25);"Stop T"; TAB(35);
"Elapsed"; TAB(45);"Hang-up"; TAB(55);"H-up Date"; TAB(66);"Phone #"
5100   PRINT#2
5110   ON EOF#3 GOTO 5180
5120   FOR X=1 TO 500
5130     INPUT#3;RECORD$
5140     INPUT#3;NOTE$
5150     PRINT#2;X; TAB(5);RECORD$:PRINT#2"^^^ ";NOTE$
5160     IF OUT$=".CONSOLE" AND X/10=INT(X/10) THEN:INVERSE:PRINT"PRESS any
key to continue.";CHR$(7);:GET A$:NORMAL:PRINT:PRINT
5170     NEXT
5180   PRINT#2:PRINT#2; TAB(15);X-1;" records in the file PHONE.RECORD.":
PRINT#2" "
5190   CLOSE:PRINT CHR$(7)
5200   PRINT"Do you wish to delete the file "; PREFIX$;"PHONE.RECORD?  Y o
r N?  |";:GET AN$:PRINT AN$
5210   IF AN$<>"Y" AND AN$<>"y" THEN PRINT CHR$(7):TEXT:HOME:GOTO 1040
5220   REM - ONLY pressing <Y> will delete record; rest returns to menu. -
5230   DELETE"PHONE.RECORD"
5240   PRINT:PRINT PREFIX$;"PHONE.RECORD has been deleted.";CHR$(7)
5250   FOR X=1 TO 500:NEXT:GOTO 1040
5260   IF ERR=30 THEN PRINT PREFIX$;"PHONE.RECORD does not exist! ";CHR$(7):
ELSE GOTO 8000
5270   CLOSE:FOR X=1 TO 500:NEXT:GOTO 1040
5500   REM - The following makes a record of the latest phone call ---
5510   WINDOW 1,20 TO 80,24:HOME
5520   ON ERR GOTO 5650
5530   OPEN#2 AS EXTENSION,"PHONE.RECORD"
5540   ON ERR GOTO 8000
5550   INPUT"NOTE -|";NOTE$
5560   HR$=CONV$(HR&):IF LEN(HR$)<2 THEN HR$="0"+HR$
5570   MN$=CONV$(MN&):IF LEN(MN$)<2 THEN MN$="0"+MN$
5580   SC$=CONV$(SC&):IF LEN(SC$)<2 THEN SC$="0"+SC$
5590   ET$=HR$+":"+MN$+":"+SC$
5600   PRINT#2;TM0$; TAB(11);TM1$; TAB(21);TM2$; TAB(31);ET$; TAB(41);TM3$;
TAB(51);DT$; TAB(61);PHONE$
5610   PRINT#2;NOTE$:CLOSE
5620   PRINT" Dialed = ";TM0$;"   Timer 1 = ";TM1$;"   Timer 2 = ";TM2$
5630   PRINT" Diff =  ";ET$;"   H Up = ";TM3$;"   Date = ";DT$;"  Ph# ";
PHONE$;
5640   FOR X=1 TO 2000:NEXT:PRINT CHR$(7):GOTO 1040
5650   IF ERR=30 THEN 5660:ELSE GOTO 8000
5660   CREATE"PHONE.RECORD", TEXT
5670   GOTO 5530
6000   REM ---------  to confirm the number to be dialed --
6010   Y=LEN(PHONE$):REM - calculates the number of characters in number -
```

```
 6020   IF Y=0 THEN PRINT:INVERSE:PRINT"  NO NUMBERS WILL BE DIALED; THE PHONE
 WILL ONLY BE OFF THE HOOK!!!   ";:NORMAL:PRINT
 6030   PRINT:PRINT"The number to be dialed is ";:INVERSE:PRINT PHONE$;:NORMAL
 6040   PRINT:PRINT:PRINT"To cancel this call, press <ESCAPE>; else, TURN ON M
ODEM, & PRESS any key.";CHR$(7):GET ANS$
 6050   IF ASC(ANS$)=27 THEN 1040
 6060   REM ------------------------
 6070   REM --------  to dial the telephone  --------
 6080   ON ERR GOTO 8010
 6090   REM  - to cover the event that .RS232 is not configured -
 6100   OPEN#1,".RS232":PRINT#1"AT H0"
 6110   PRINT:PRINT"* * * * *  Dialing ";:INVERSE:PRINT PHONE$;:NORMAL:
PRINT"  * * * * *"
 6120   FOR X=1 TO 350:NEXT
 6130   REM  -  "AT H0" command followed by 1 sec delay insures dial tone
 6140   PRINT#1"AT M2 C0 DT";PHONE$;";"
 6150   REM  -  "M2" = speaker always ON  ----------
 6160   REM  -  "C0" = NO carrier  ----------
 6170   REM  -  "DT" = tone dial, substitute "DP" for pulse dial -
 6180   REM  -  ";"  = returns control to terminal.  --------
 6190   ATH=1:TM0$= TIME$:TM1$="":TM2$="":TM3$=""
 6200   REM  Phone is OFF hook. TM0$=time of dialing.  Others nul. -
 6210   WINDOW 1,21 TO 80,24:INVERSE:HOME
 6220   GOING=0
 6230   REM ---------- Timer is NOT running ----------
 6240   VPOS=1:HPOS=1:PRINT"  --  To Hang-up, press <ESCAPE>.  To REDIAL the S
AME number, press <R>. --";
 6250   VPOS=2:HPOS=1:PRINT TAB(7);"To START Timer, press <RETURN>.  To STOP
Timer, press <SPACE BAR>.";
 6260   DT$=RIGHT$(DATE$,5)+"/"+LEFT$(DATE$,2)
 6270   VPOS=3:HPOS=2:PRINT CHR$(7);"Date = ";DT$; TAB(79);
 6280   GET ANS$
 6290   IF ASC(ANS$)=27 THEN 6590:REM ------ Hang-up --------
 6300   IF ASC(ANS$)=13 THEN 6340:REM ------ Start Timer ------
 6310   IF ASC(ANS$)=82 OR ASC(ANS$)=114 THEN 6690:REM  Redial same number
 6320   GOTO 6220
 6330   REM ------------------- Timer Operation  --
 6340   TM1$= TIME$:GOING=1
 6350   GOSUB 6730
 6360   ON KBD GOTO 6490
 6370   TM2$= TIME$
 6380   GOSUB 6790
 6390   DT$=RIGHT$(DATE$,5)+"/"+LEFT$(DATE$,2)
 6400   IF SC&=0 THEN PRINT CHR$(7);:REM - tone every minute ------
 6410   VPOS=3:HPOS=2:PRINT"Date = ";DT$; TAB(30);"Present"; TAB(79);
 6420   VPOS=4:HPOS=1:PRINT TAB(5);"Start Time = ";TM1$;".    Time = ";TM2$;
".    Elapsed Time = ";
 6430   PRINT USING 6460;HR&,MN&,SC&;:PRINT"."; TAB(79);
 6440   REM ------ Note positions of commas & semicolons. --------
 6450   REM   After PRINT & PRINT USING statements ";" prevents LINE FEED. -
 6460   IMAGE ZZ,":",ZZ,":",ZZ
 6470   REM ------  Z's give leading 0 for numbers, note commas ------
 6480   GOTO 6370
 6490   IF ATH=1 AND KBD=27 THEN 6590:REM - if phone off hook, Hang up. -
 6500   IF KBD=13 AND GOING=0 THEN 6340:REM ---- Start Timer --------
 6510   IF KBD=32 THEN 6570:REM ---------- Stop Timer ------
 6520   IF ATH=0 AND KBD=27 THEN 6670:REM - If phone on hook, Quit. ----
 6530   IF ATH=0 AND KBD=83 THEN 5500:REM - Store data on call ------
 6540   IF ATH=0 AND KBD=115 THEN 5500:REM - Store data on call ------
 6550   IF KBD=82 OR KBD=114 THEN GOTO 6690
 6560   IF GOING=1 THEN 6360:ELSE 6650
 6570   TM2$= TIME$:DT$=RIGHT$(DATE$,5)+"/"+LEFT$(DATE$,2):GOSUB 6790
 6580   VPOS=3:HPOS=2:PRINT"Date = ";DT$; TAB(31);"STOP"; TAB(79);:GOING=0:
GOTO 6650
 6590   FOR X=1 TO 400:NEXT:PRINT#1"AT H0":REM  1 sec time delay, THEN hang up
 6600   TM3$= TIME$:DT$=RIGHT$(DATE$,5)+"/"+LEFT$(DATE$,2):REM date & time
 6610   VPOS=1:HPOS=1:PRINT"MODEM has HUNG-UP.  Press <ESCAPE> to QUIT; <R> to
REDIAL; <S> to STORE RECORD";
 6620   CLOSE
 6630   ATH=0:REM ---------- Phone is ON HOOK --------
 6640   IF GOING=1 THEN 6360
 6650   ON KBD GOTO 6490
 6660   GOTO 6650
 6670   VPOS=1:HPOS=1:PRINT CHR$(7);"---------- QUIT!  --  RESTART!  -------
--------";
 6680   FOR X=1 TO 200:NEXT:GOTO 1040
 6690   REM ---------- Hang up and redial last number  ------
 6700   IF ATH=1 THEN FOR X=1 TO 350:NEXT:PRINT#1"AT H0"
 6710   CLOSE:TEXT:HOME:ATH=0:GOTO 4800
 6720   REM - Following subroutine converts start time into integer seconds
 6730   HR1&=CONV&(LEFT$(TM1$,2))
 6740   MN1&=CONV&(MID$(TM1$,4,2))
 6750   SC1&=CONV&(MID$(TM1$,7,2)):REM - rounds to integer portion, only -
 6760   TM1&=HR1&*TSH&+MN1&*SXY&+SC1&
 6770   RETURN
 6780   REM - Following converts stop time & calculates elapsed time. --
 6790   HR2&=CONV&(LEFT$(TM2$,2))
 6800   IF HR2&<HR1& THEN HR2&=HR2&+24
 6810   MN2&=CONV&(MID$(TM2$,4,2)):SC2&=CONV&(MID$(TM2$,7,2)):TM2&=HR2&*TSH&+
MN2&*SXY&+SC2&
 6820   SEC&=TM2&-TM1&:HR&=SEC& DIV TSH&:MN&=(SEC&-(HR&*TSH&)) DIV SXY&:SC&=
SEC&-(MN&*SXY&)-(HR&*TSH&)
 6830   RETURN
 7000   REM -------- Testing for numbers acceptable to modem ------
 7010   IF Y=0 THEN RETURN
 7020   FOR X=1 TO Y
 7030     Z=ASC(MID$(PHONE$,X,1))
 7040     IF Z>47 AND Z<58 THEN 7180
 7050     REM ---------- numbers are acceptable ----------
 7060     IF Z=32 OR Z=35 OR Z=40 OR Z=41 OR Z=42 OR Z=45 OR Z=47 THEN 7180
 7070     REM - following are acceptable  space  #  (  )  *  -  /
 7080     REM          # and * sound a tone, others are ignored  ------
 7090     IF Z=44 THEN PRINT"A comma inserts a 2 second delay":GOTO 7180
 7100     REM - modem pauses in dialing, when it encounters a comma --
 7110     IF Z=59 THEN PHONE$=LEFT$(PHONE$,X-1):PRINT"Program automatically
enters semicolon at end, balance were deleted!":GOTO 7190
 7120     REM - This deletes a semicolon and all characters following -
 7130     PRINT CHR$(7):PRINT"You have entered one or more unacceptable char
acters!!!"
 7140     PRINT"The first one is #";X;" and is ASCII #";Z;".":PRINT CHR$(7)
 7150     PRINT"YOU MUST ENTER AN ACCEPTABLE SERIES OF CHARACTERS!"
 7160     POP:GOTO 4900
 7170     REM - string unacceptable; return to manual dial --------
 7180     NEXT
 7190   PRINT"The number to be dialed is -|";:INVERSE:PRINT PHONE$;:NORMAL:
PRINT
 7200   RETURN
 8000   REM ---------  ERROR TRAP ----------
 8010   IF ERR=30 OR ERR=37 THEN PRINT:PRINT TAB(20)"- .RS232 not found -":
GOTO 8060
 8020   REM - If .RS232 is not configured, the program aborts with message
 8025   PRINT"Program Error #"; ERR;" in line "; ERRLIN:GOTO 8060
 8030   IF ERR<>255 THEN 1060
 8040   REM - Abort with the <CONTROL> C command, all others return to menu.
 8050   TEXT:HOME:PRINT:PRINT"   *** BREAK  -  <CONTROL>C  ***":PRINT
 8060   PRINT:PRINT"    PREFIX$ = ";PREFIX$:PRINT"PROGPREFIX$ = ";PROGPREFIX$
 8070   PRINT:PRINT"  The original PREFIX$ was ";ORIGPREF$;".":CLOSE
 8080   PRINT:PRINT TAB(20);"The time is "; TIME$:PRINT CHR$(7):END
 8090   REM --- To trap programming errors, insert the following line:
  --->  8025   PRINT"Program Error #";ERR;" in line ";ERRLIN:GOTO 8060  <---
 8100   REM ---------  Remove line 8025 after debugging  ------
```


Modems for the Apple ///

Smart Link modems are compatible with Hayes and all communications packages for the Apple /// including Communications Manager, Access ///, Terminus etc. Both feature full auto-answer/auto dial. Both are stand-alones and plug into the RS232 port of the Apple ///. Complete with rugged aluminum case, power cord and instructions.

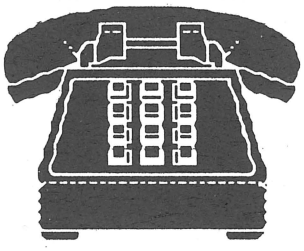
* 0-300 bps and 1200 bps, asynchronous.
* Bell 103 and 212A compatible.
* Auto-Dial and Auto-Answer.
* Call progress monitoring, dial tone, busy, ring back, etc.
* Extended Hayes "AT" command set.
* Auto monitor with software volume control.
* 60 character command buffer.
* Full or half duplex operation.
* Automatic speed/parity detection.
* Analog and digital loopback testing.

1200 Baud Modem $159.95 plus $10 s/h

Model No. SmartLink 2400E External Modem:

* Flexible comm. protocal and speed: Bell 103, Bell 212A
* Auto-Dial and Auto-Answer
* Auto change of protocol & speed when answering.
* Synchronous or asynchronous operation.
* Fully Hayes compatible.
* Programmable response to DTR status.
* Command recognition in lower case.
* Synchronous half-duplex operation.

2400 Baud Modem $259.95 plus $10 s/h



Ask 'Doc'

by Dave Christenson

Critics corner! I have been using Access /// and Titan's ram disk for some time. The combination eases the burden on the Disk /// when downloading 140k of messages.

Looking forward to having TCM's advanced features, I realized the day after mailing my order that my ram disk would be rendered useless without access to a utility program. The only solution I see is to buy another $100.00 worth of software. You should mention this in the advertising. A version like Access ///, to run under Pascal would have been preferred. When I've saved enough, I plan to buy Selector to alleviate this problem.

Will Selector work with only two 140k drives? Being able to switch between Apple Writer, Pascal and TCM without losing the ram disk is highly desirable.

I am very disappointed with the binder you sent. For $10.00 I expected more than an ordinary three ring binder with crude stickers. I thought it would at least have "*ON THREE*" embossed on it. I hoped it would be similar to the binders some libraries use to hold multiple issues.

Be aware that a disk can be pinched between a binder ring and cover. An edge of my TCM diskette was pinched in shipment. After straightening the edge, the disk booted properly.

I can't afford to call long distance BBS's. Coverage of /// specific boards in the magazine could be interesting and provide material to print.

After reading the February article about StemWriter, I've become quite enthused and am looking forward to the next article. - **Scott Weddel, Omaha, NE.**

Scott... *Thanks for your letter. Let me take your comments one at a time.*
1) Selector will not work with two 140k drives. It will work on an 800k drive and also on an A143 microsci drive. It is necessary to rename the drivers to .PROFILE in order for Selector to work.
2) Without the switching capability it would be necessary to reboot in order to use what you saved in ram disk. This would cause anything stored there to be lost.
3) Sorry that you're disappointed with our binders. We have sold a large number of them and I'm not aware of any problems with them.
4) We have published a list of all known active BBS's periodically. Soon we will be publishing it again. Look for it in the next two months.

* * *

Two for three!... I have the following questions regarding the Apple ///:
1) It has been suggested to me that some Apple II cards will work in the Apple ///'s expansion slots, but no one seems to know which ones. A suggestion seems to be to "try them." First, they not physically fit; second, if they don't work, will trying them ruin them or the computer? Finally, what about drivers??? I'm particularly interested in using a Hayes Micromodem II - if this does work, can you supply a suitable driver - and will it work The Communications Manager?
2) Going back to #1, your introduction of the Sider 20 has me fascinated, as I have available to me, a one year old Sider 10 with Apple II interface card. Can i use this drive with the ///? Also, you mention an upgrade kit in the flyer - will your driver work with the Sider 10? And what is the interface card chip set for, and why Apple II documentation?
3) Last but not least, I'm wondering if the Communications Manager supports an autodial phone list and automatic log-on sequences? Thank you for any help you are able to offer.
- **C.S. Egel, La Grange Park, IL.**

C.S... *Lets take those questions in order.*

1) Apple II interface cards will fit , in most cases, in your Apple ///.
2) Inserting them and powering on your computer will not damage either the card or the computer.
3) Every card has a different function.
4) Some, but not all Apple II cards are supported and will work fine in an Apple ///. As for drivers, I do not know of any unusual interface cards that require special drivers.
5) The Communications Manager will work with your Hayes modem without any modification.
6) Regarding your Sider 10, we still sell software that will allow it to work with the Apple ///. The upgrade you saw in the flyer is for the Sider 20, it will not work on the Sider 10.
7) Communications Manager does not support an auto dial phone list or log-on procedures (see R.B Thompson Jr. article on Automatic Telephone Dialing in this issue).

* * *

Info please! I wish to purchase some of your products, however I need more information. Could you be so kind as to send me some more detailed information of Draw On / //? I wish to use a wand or something to trace maps onto the computer. I need to use it like a digitizer. Can I do that with your product? Can this be done and what else would I need to use the program that way? What does you ad mean when it talks about tablet? Send me some more information on the rest of your products, i.e. Disk Manager. - **A.J. Pope, Alpine, TX.**

A.J. ... *Draw On /// is a program that allows you to create graphics and save them to disk and to print them. Draw On uses a joy stick, mouse or the arrow keys on your computer. There is also a version that uses the Apple graphics tablet. If you want to trace maps you will need the graphics tablet and the version of Draw On that works on it.*

There are no wands available that work on an Apple ///.

Draw On /// will work with many printers. Just ask for the correct version when ordering. There are drivers on the boot disk that will allow it to work with your particular configuration. I have sent out to you our latest catalog, which should answer any other questions you may have.

* * *

Yes we do! I know that you do not answer letters or have time to attend to customer's personal problems but, I have three items which may be easy for you to assist with. 1) How can I load graphs created with Apple /// Business Graphics into Draw On /// and/or into Graphics Manager? 2) Business Graphics will not load under Selector with Desktop as well as RAM driver installed on my 512k machine - can this be remedied? 3) The Quark drive's QC.Manager program runs perfectly under Selector but, as soon as Desktop is also installed, it gives System failure 01 when you try to load it - even though the SOS.Interp of that program is only 34 blocks. It hangs the system. Removing the Ram Driver does not remedy the problem. Once again thanks so much, I truely appreciate all your help. - **Theo Streicher, Johannesburg,R.S.A.**

Theo... *Troubleshooting long distance, is at best difficult. When attempting it in a letter, it takes a long time. I will however do my best to give you all the possible solutions to your question:*
1) Apple /// Business Graphics has a save graphics function. Save your graphics as fotofiles to a disk and then, after you have booted Draw On or Graphics Mgr., simply type in the name of the file when asked which file you wish to load. You should be able to use the file with either program.
2) Appendix P in your DTM manual refers to potential problems when using the RamDisk driver. It is sometimes necessary to adjust the page byte in the DCB of the RamDisk. A full explanation of this procedure can be found in the 512k users guide on page 19.
3) Quarks QC. Manager can also conflict when DTM is installed. It sounds to me though, like the installation of your DTM was not followed correctly. It is absolutely necessary that you use the DTM installation diskette and not system utilities to install the DTM driver on your boot diskette. If you used system utilities to add the DTM driver then you will experience the problems you are having. Remove DTM using the DTM installation diskette and reinstall it using the install option. Your problem should go away.
4) I cannot stress strongly enough the importance of reading the manuals and user guides that come with our products. We have tried to anticipate all the problems that may come up. Please feel free to contact us if you are still experiencing problems

-///-

De - Classifieds

FOR SALE: APPLE ///, 256K with monitor, printer card and lots of software. Best offer takes it. Barry Rose (408) 327-1356 evenings.

FOR SALE: 256K Apple /// with monitor, profile, complete BPI 5 module package plus other programs Asking $1000 plus shipping. (416) 839-7779

FOR SALE: APPLE ///+, 256k with B&W monitor, 5 Mb Profile, modem eliminator cable, Back Up /// $900.00 plus $35.00 shipping. Charles Clemmer, (703) 886-1463 days, (703) 886-2515 evenings.

FOR SALE: APPLE /// w/monitor, 5mg hard disc, AppleWriter, GreatPlains accounting software, loaded (215) 250-9797.

* * *

FOR SALE: Apple /// 256k, with monitor, 2nd Disk Drive, Profile, Titan Card, Printer Card and Cable, Software (/// EZ Pieces, AppleWriter, Keystroke, etc). $900.00 plus shipping. Bill Gould (714) 946-0155.

Classified Rates: $1 per word, $25 minimum. **Subscriber Discount:** 50 cents per word, $12.50 minimum. Your ad copy should arrive 45 days prior to cover date, e.g. April 15 for the June issue.

ON THREE Presents... The Communications Manager

The Communications Manager is a powerful tool that allows your Apple /// to communicate or *talk* to other computers or services such as CompuServe™.

If you are familiar with other telecommunication programs such as Access /// or Terminus, you should be pleasantly surprised. VT-52 terminal emulation makes the program as powerful as any other Apple /// communications package. You can record incoming text to a printer or disk file for later viewing and transmit standard ASCII and Pascal Textfiles automatically. **The Communications Manager** has almost every feature of those popular programs plus an important extra.

This extra is error free transmission of files via the popular **XModem** and **Binary II** file transfer protocols. This means that you will be able to transfer programs and data - all types of files - between your Apple /// and virtually any other computer system.

The Communications Manager has all of the easy to use features of other **ON THREE** products, and it's the most powerful communications package available for your Apple ///. It's the ***only*** communications package available today for your Apple /// that completely supports the powerful **Xmodem *and* Binary II** protocols.

Included with this package is a version of **The Communications Manager** which runs as a stand-alone program and a version that can be installed as an accessory under **The Desktop Manager.**

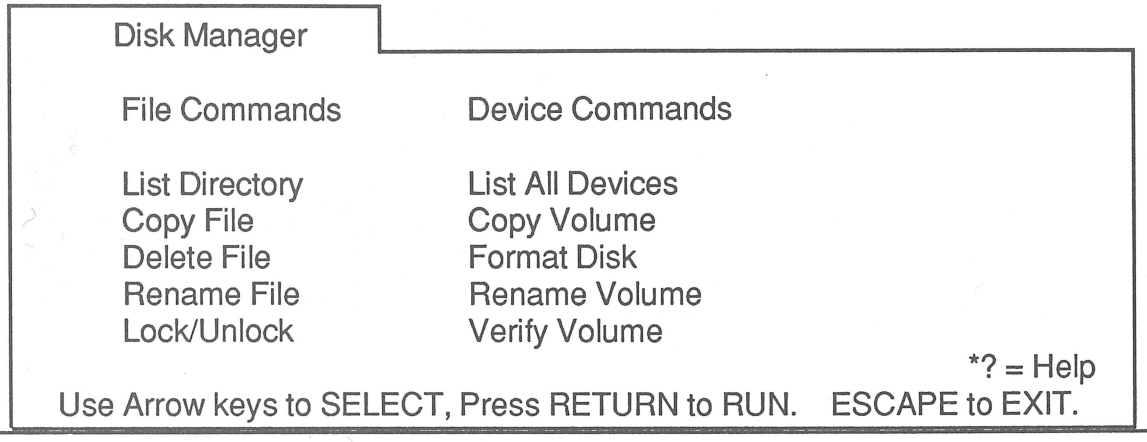
If you have The Desktop Manager, you get the best of both worlds. You can be inside /// E-Z Pieces or VisiCalc and send a spreadsheet or data base file directly! The hundreds of Apple // AppleWorks templates available on bulletin board systems like CompuServe and others can now be yours! Thousands of pictures and other graphics images on CompuServe and other systems can be downloaded to your Apple /// with ease - with **The Communications Manager.** All this for ***only*** $49.95 plus $3 shipping and handling. Order your copy today!

ON THREE presents...

Disk Manager

$44.95 plus $3 s/h

This Desktop Manager module features the most frequently used applications of Apple's System Utilities and makes them available to your from within any program. Copy, delete, rename, lock/ unlock and list all of the files on your disk without leaving the program you're using. Copy, format, rename and verify *volume* commands are available as well, so you will never again lose data because you exited a program to format a disk.



NEW LOW PRICE!

Graphics Manager™ is now available for $39.95 plus $3 s/h.

If you've been holding out for a lower price on the Graphics Manager for the ///, here it is! Take advantage now. The complete graphics utility for the Apple /// interfaces to **Draw ON** ///™ and all graphic programs and allows printing enlarged or reduced portions of the graphics screen, normal or inverted, single or double density with four rotation values.

For the first time you can load directly any DOS 3.3 or ProDos Hires or double Hires graphic files (including "Print Shop") and of course SOS fotofiles or other binary graphic images.

Comes complete with full documentation and diskette containing standalone SOS interpreter and ***ON THREE***'s Desktop Manager module. All popular printers, serial and parallel interfaces supported and limited color graphics capability is included.

ORDER TOLL FREE!

U.S.A. (800) 443-8877 California only (800) 331-1418
Or write: ON THREE, Inc. P.O. Box 3825 Ventura, CA 93003 U.S.A.

ON THREE accepts VISA, Master Card, American Express, Money Orders, company or personal checks. C.O.D.'s to approved businesses only; the fee is $3. Sorry, no C.O.D.'s to individuals. We no longer accept any purchase orders from any source whatsoever. Add 3% sur-charge to American Express. CA residents add 6% sales tax. Shipping charges listed are within the U.S.A. Overseas customers may pay by international money order, a check drawn on a U.S. Bank or any of the credit cards listed above. Please check with us for foreign shipping rates and mode of transport. Items returned without a prior authorizaton (RMA#) will be returned to sender. Returned items with an RMA# clearly writen on the outside of the box should be shipped to: ON THREE 4478 Market St. Suites 701 Ventura, CA 93003. Returned items subject to a 15% restocking fee. There is a $10 charge for checks returned because of insufficient funds. Because software is copyable **no software returns will be accepted.** Prices subject to change without notice.

For Technical Support and Customer Service Dial 805-644-3514

ORDER FORM

QUANTITY	DESCRIPTION	EACH	TOTAL	SHIPPING

	INDIVIDUAL TOTALS	
	SALES TAX	
	GRAND TOTAL	

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ ST ____ ZIP _____

PHONE _____

ACCT. NO _____ EXP. DATE _____

☐ Check ☐ Visa ☐ Master Card

☐ C.O.D. ☐ American Express

Amount Enclosed _____

Special - LOOK - Only $79.95 plus $6 s/h

The Desktop Manager

This is the most complete and sophisticated desk accessory program ever written! Finally you can unclutter your desk the Desktop Manager way. The Desktop Manager places all of the desk accessory utilities you need -- appointment calendar, notepad and calculator -- within every program you own, so you can use them as if they were a part of your original programs. While you are using your program, you cannot see the Desktop Manager. However, by pressing only two keys the Desktop Manager menu appears, ready for your use from within *any* application!

While word processing, have you ever needed to multiply two numbers? Or have you suddenly remembered while in the middle of a spreadsheet the name of that stock your broker suggested, but have no pen or paper nearby to jot it down? Perhaps you've forgotten your spouse's birthday again, although you did write the date on a piece of paper you keep in your desk. Why not increase your productivity while you clear your work area of that old-fashioned calculator, pens and paper scraps, and unnoticeable apppointment calendar? With the help of*ON THREE's* Desktop Manager, you can do all this and more.

From within any program, two keypresses override and freeze your current application and display a window containing the Desktop Manager's main menu. Now you have the power of all of the Desktop Manager's options at your command. Simply select one of the following standard Desktop Manager features:

Appointment Calendar - Set multiple appointments daily through December 31, 1999. As your appointment is due, a reminder appears on your screen regardless of what application you're using. The daily and weekly appointments are shown at a glance and, as with all Desktop Manager options, help screens are only two keystrokes away.

Appointment Calendar

25 Nov 87 7:52:14 AM

You have 2 appointments scheduled for today.

8:13 AM 1:04 PM

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25 *	26	27	28
29	30					

Open Apple ? Key For Help. NOVEMBER 1987

Note Pad

Alabama.....
Alaska.....
Arizona.....
Arkansas.....
California.....
Colorado.....
Connecticut.....
Delaware.....

HELP MENU

General Commands:

*A => Add Another Note
*B => Backs Up to Previous Note
*N => Moves to the Next Note
*S => Shows Note Selection Menu (Help Provided in Menu)
*R => Allow Renaming Active Note
*F => Find Text Within Note
*M => Moves the Note Pad Window (Pressing Escape Will Restore Window Contents)

ESCAPE TO EXIT.

Pad - This handy tool has multiple pages per note, word wrap, automatic repagination, pick up and paste, and many other features usually found only in a word processing program. On-line help screens (a standard Desktop Manager feature) make using the Note Pad effortless as well as convenient.

Calculator - A powerful electronic work-horse, the Calculator has full 16-digit accuracy and advanced functions such as SIN, COS, TAN, LOG's, x to a power, square root pi, memory and base conversions in addition to the basic add, subtract, multiply and divide functions. Also, you can invoke a simulated scrolling paper tape for printing later or pasting into another document.

Calculator

0

```
[Hlp][Prt][Tap][CE ][CLR]
[Sin][Cos][Tan][Pi ][ e ]
[Log][Ln ][x^y][Sqt][Bin]
[ D ][ E ][ F ][Deg][Dec]
[ A ][ B ][ C ][Rad][Hex]
[ 7 ][ 8 ][ 9 ][ / ][M+ ]
[ 4 ][ 5 ][ 6 ][ * ][M- ]
[ 1 ][ 2 ][ 3 ][ - ][RM ]
[ 0 ][+/-][ . ][ + ][ = ]
```

```
                25   Sqt
                 5
                 5   *
                 5   +
             79.95   -
             32.01   /
             65.02   -
                 2   Sin
 0.0348994967025     Deg
  .0348994967025     *
               587   +
               100   -
              0.09   +
183.88168537718894   =
367.76337075437788   Sum
                 0   CLR
             55.95   /
                12   *
```

/// E-Z Pieces & StemWriter Spelling Checker Available Today!

When we asked people what new software that they would like to see for their Apple /// some time ago, the overwhelming favorite was a spelling checker for the popular /// E-Z Pieces. Well, **it's ready!**

StemSpeller /// is now available from the folks down under. Compatible with standard ASCII files, Pascal Text files, StemWriter files and most importantly /// **E-Z Pieces** files, this fast and easy to use spelling checker will knock your socks off with its speed and versatility.

It comes complete with a 60,000+ word main dictionary and the ability to create auxiliary dictionaries of words that you commonly use.

StemSpeller is 100% assembly language for speed and comes as a standard interpreter that can be run by itself or loaded and run under Selector and Catalyst.

As with all ON THREE products, it **isn't** copy-protected and comes with our full product support and limited warranty.

StemSpeller /// is available today for only $69.95 plus $5 for shipping and handling. Since over **one thousand** people asked us for this product we expect to have a hard time keeping them on the shelf. Be the first on your block (or city) to be able to spell check your /// E-Z Pieces files. Order StemSpeller /// today!

If you requested the /// E-Z Pieces Spelling Checker, we're counting on your order today!

- Δ Compatible with /// E-Z Pieces Word Processing files, StemWriter files, regular ASCII files and Pascal Text files.
- Δ 60,000+ word main dictionary with auxilliary dictionaries available.

$5 ON THREE MAGAZINE $5

ON THREE subscribers may deduct $5 off their next software purchase of $25 or more. Limit one coupon per subscriber per month. This offer is valid only on mail orders and can not be used in conjunction with any other discounted sale items. A copy of this page showing your address label and this coupon must accompany your order. This is our way of saying "Thanks for subscribing to ON THREE!" Coupon expires April 30, 1988.

$5 ON THREE MAGAZINE $5

BULK RATE
U.S. POSTAGE
PAID
Permit No. 90
Ventura, CA