

ON THREE®

The Magazine For Apple III Owners and Users

Volume 5

No. 1

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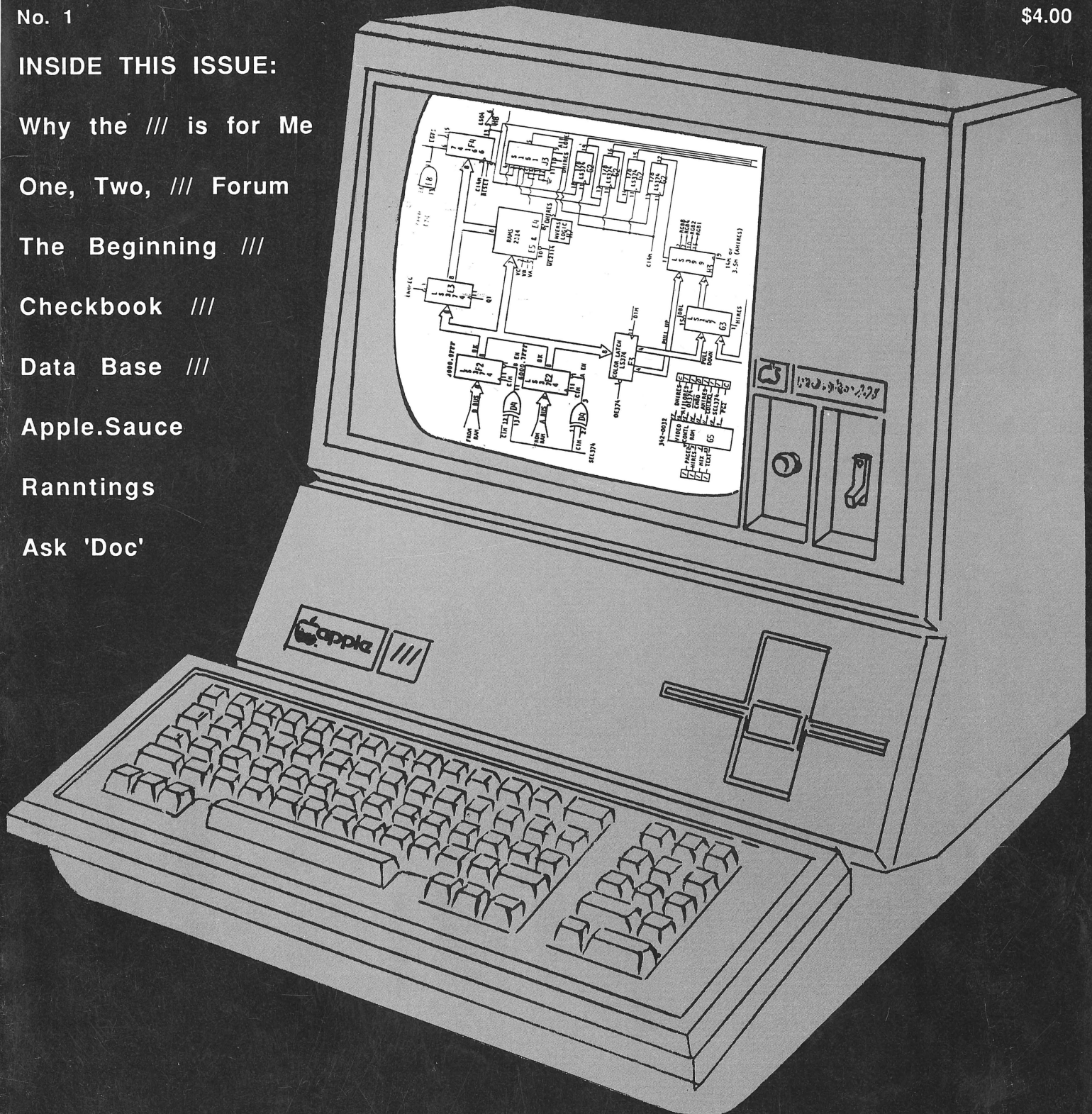
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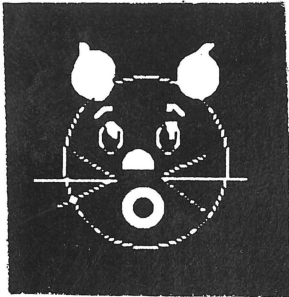
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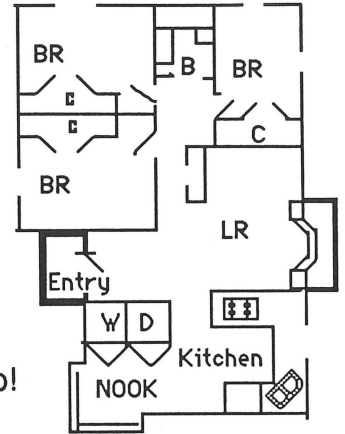
A peek inside the Apple /// computer

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Draw ON ///

Draw ON ///

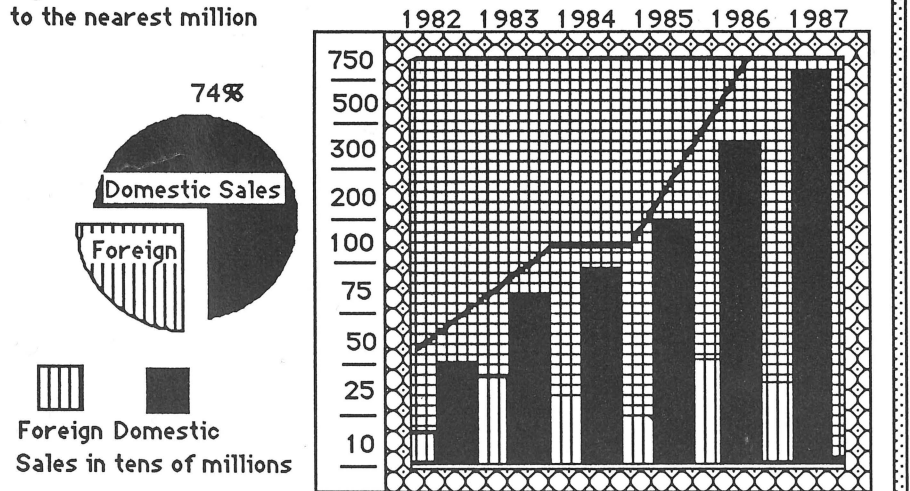
Draw ON ///

Draw ON ///



Annual Gross Revenues from Yolandas Yummy Yogurt and Yo-Yo Co.

Figures have been rounded
to the nearest million



Transform your Apple /// into a combination drafting table, easel and sketch pad with **Draw ON ///**, the powerful and versatile graphics tool designed exclusively for the Apple /// and Apple ///+ computers. **Draw ON** works in all of the Apple ///'s color and black and white modes and brings the power of MacPaint to your ///. Simple to follow menus, self help screens, rubber banding of lines, adjustable grids and a top quality, easy to understand, lay flat, tutorial manual, helps you to learn **Draw ON ///** in less than an hour. You will be able to start doing useful, productive work and beautiful graphics on your Apple /// in no time at all! **Draw ON /// requirements:** An Apple /// or ///+ computer with at least 256K of memory **Optional Equipment:** Apple //e Mouse or Joystick. **Draw ON** may be installed under Selector /// or Catalyst. **Print out** to any of the following printers: Apple DMP, C. lotoh, ProWriter, ImageWriter, and all Epson printers (MX, FX and RX). **The following printers require a Pkaso or Pkaso/U Interface Card:** Centronics, OkiData, IDS Prism and IDS Color Prism, NEC and almost all others. A Graphics Tablet version is also available for \$50 additional.

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Publisher:

Bob Consorti

Controller:

Joseph Consorti

Editor:

Paula Sheppard

Logistics:

Janet Consorti

Research/Development:

Tim Harrington

Service Manager:

Dave Christenson

Customer Service:

Lynne Miller

Design Consultant:

Cathy Consorti

Lithography

Diamond Litho

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The Magazine For Apple III Owners and Users

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ON THE COVER:

A whimsical peek into the inner sanctum of our favorite computer, the Apple ///. Getting to know your /// 'inside out' would be a good New Years resolution! This months cover is by Cathy Consorti.

StemWriter ///

\$99 plus \$7 s/h

Have you been waiting for a word processor that does it all? Enough waiting, try the latest word processor - StemWriter //. This program, available through ON THREE, can help you! It seems to be just what the doctor ordered for writers, office managers, desktop publishers, secretaries and anyone else who needs a sophisticated word processor.

Only 128K Apple // required

- *Design your very own form template
- *Make your own headlines
- *Utilize on-screen bold text and underlining
- *Make sharp, attractive footnotes
- *Adjust your column width up to 240 characters wide
- *Utilize on-screen overstrike
- *Date-stamp your documents
- *Count your words, sentences
- *Make your own labels
- *Personalize your form letters

With this latest **ON THREE** product, modes are almost discarded entirely. Forget the "insert mode" and the "delete mode" routine. You can also discard all of your possible questions about printers as StemWriter files are standardized and may be printed on any printer without alteration. Just zip into the printer control code table. For those people who haven't been satisfied with other word processors, here are some comforting words about StemWriter's capabilities:

- *Utilizes a desktop just like // E-Z Pieces, except it can store up to 8 documents in the computer's memory.
- *Gives users four levels of superscripts and subscripts to choose from. It is very easy to make a character a superscript or subscript. Right before your eyes on the screen, you'll see the difference.
- *Utilizes the four arrow keys to "see and point."
- *Predefined numerical keypad makes loading, saving and other tasks simple! If you don't like the definitions, StemWriter will allow you to change them!
- *File management, sorting/selecting segment records, formatting a volume, creating a vanilla file and other important tasks can be performed from within the StemWriter Utilities program. Save valuable time using this program.
- *Allows you to view two files simultaneously.

ARE YOU AT THE END OF YOUR ROPE TRYING TO GET SOMEONE TO SERVICE YOUR APPLE ///?

Well, worry no more! ON THREE is pleased to announce the addition of Dave Christenson to our staff, as Manager of our Technical Service Department. Dave comes to us with many years of Apple // experience. He trained at Apple, Inc. when the // was not as yet released. Dave and his staff will be able to diagnose any // and fix your problem at a reasonable cost.

Our service department is now offering in-house repairs of Apple // computer systems. The cost is \$50.00 per hour labor, with a minimum service charge of \$50.00 plus parts cost and return shipping of your system. We offer a 48 hour turnaround, (weekends and holidays excluded). All work is warrantied for 90 days. Please feel free to call for further information. As a get acquainted offer, our service department will clean your internal drive and do a complete system testing for only \$50.00 plus parts cost plus \$35.00 shipping. This is a great deal! Drive cleaning is normally \$30.00 alone.

Please call the technical support line listed below for a repair authorization number (RMA) prior to shipping your system. Any package received without an RMA number is subject to refusal. We suggest that you package your system in its original packing container (if still available), or another large box with sufficient space to add plenty of protective packing material such as foam or 'peanuts', write your RMA number on the outside of the box, include a cover letter and ship it to us via U.P.S. Blue Label (second day service). If down time is an important factor to you, check with Dave, he may be able to offer Red Label service for an even faster turnaround. RMA's take priority over any other work. Your system must be shipped to this address:

ON THREE, Inc. - Attn: Repair Dept. - 4478 Market Street - Suites 701-702 - Ventura, CA 93003



What new products are in store this year at *ON THREE*? Well, if you haven't heard by now, *ON THREE* is boldly making its way into the Apple IIGs market. But, of course, the team hasn't forgot about those faithful ///'ers who have made the company what it is today!

For Apple ///'ers, *ON THREE* has been putting together a Universal Device Driver disk, with the help of various Apple /// device drivers writers who have submitted their own specific device drivers on disk to *ON THREE*. The plan is to help all Apple ///'ers with device drivers. Some of us just don't have the talent nor the time to write our own drivers and need the help of other ///'ers. This disk is the answer to many prayers. Users who need special drivers no longer will have to hunt through the grapevine for them! *ON THREE* will be offering this disk sometime in the near future, so be looking for it!

Meanwhile, one of *ON THREE*'s authors, Dave Ottalini, has put together a listing of all known Apple /// works, known as ThreeWorks. When first hearing of this project, one may wonder what use it could possibly be. After all, it seems like it's *only* a listing. Users will be surprised at how helpful this listing really is. *ON THREE* has received numerous calls throughout the years by users hungry for more Apple /// information and programs than we can possibly put out.

To begin with, there is quite a lot of Public Domain software for the ///. Some of the programs are too specifically written for a small group of people that it would not be fair to all of *ON THREE*'s subscribers to publish such a program in the magazine. Therefore, these programs are kept in Public Domain libraries. Often though, users do not know where to find these programs nor that these programs even exist. One great example is the Public Domain program, Brain Surgeon, written by Dan Martin. It will bring back those files that you thought were dead and buried by doing a little *brain surgery*. However, not many ///'ers have heard of this program. ThreeWorks can assist in this area with its great data base which gives names, addresses and phone numbers of those involved in producing the software and hardware.

Perhaps Public Domain software is not what you are looking for. ThreeWorks can help in various other ways as well. Most ///'ers enjoy plenty of Apple /// company. Suppose you live in South Dakota and want some /// company but telecommunications seems to be your only /// connection. The closest user group that you know of is in the Denver, Colo. area. That is further than you've bargained for. With ThreeWorks you can scan through the addresses to find some ///'er closer to home. There could be an Apple /// consultant right in your home town and you don't even know it! ThreeWorks contains a full listing of Apple /// consultants, vendors, special interest groups, clubs and organizations.

I was extremely impressed with all of the information ThreeWorks contains. From device drivers to Peak and Poke information to programming tips, I was thoroughly amazed. I thought for sure this was a \$100 item but found it was being stolen for \$39.95! I can't begin to think of how many hours of Dave Ottalini's time went into these three double-sided disks! This is definitely the Apple /// *investment of a lifetime!*

IIGs encounters

ON THREE, Inc. is leaping with joy as it makes its way into the Apple IIGs market, not to leave the Apple /// behind. What is so fantastic about the whole ordeal is the fact that the big seller for *ON THREE* in the IIGs market is The Desktop Manager. Perhaps ironic is not the word to use for the company but for Apple /// users. Imagine walking into an Apple /// dealership and seeing a clerk demonstrate The Desktop Manager on the GS. The customer is thoroughly impressed with the program. Meanwhile, you are wondering whether or not you should keep your mouth shut about the Apple /// version coming out first or whether you should boast about it. More than likely, you will want them to know that the program has been around for awhile but has been running on the Apple /// when everyone thought the Apple /// market was dead. Nevertheless, Apple /// users and owners have a lot to be proud of - a mighty machine that is not dead but still growing with the times.

-///-///-///-

NEW from ON THREE -

Memory Board Insurance!

ON THREE is now issuing purchasers of the **ON THREE** 512K memory boards, an insurance policy that offers the ultimate in protection and peace of mind. Whenever you bought your 512K memory board, you will be eligible for the is valuable protection.

ON THREE has always given a full, unconditional 90 day warranty on its 512K memory upgrade, including repair, replacement, parts and technical assistance. After the original 90 day warranty has expired, **ON THREE** now offers all registered owners of **ON THREE** 512K memory upgrades an insurance policy that will cover, in the event of failure of the 512K memory upgrade, the immediate shipment of a replacement 512K memory board. This insurance also includes free parts replacement and unlimited technical assistance (pertaining to the 512K memory upgrade) for the life of the policy.

When you purchase **ON THREE's** 512K memory board insurance at the same time you buy the **ON THREE** 512K memory upgrade(s), or if you purchase the memory board insurance within the 10 day grace period allowed after you have purchased and received the board(s), the yearly premium is \$50 per year for the first 512K board, \$40 per year for the second board and \$35 per year for each additional board purchased. When you purchase insurance at the same time you purchase the upgrade, your 512K warranty is extended from three months to a full 15 months of protection.

Any original registered owner of an **ON THREE** 512K memory board is also eligible to purchase this valuable protection. When you purchase the **ON THREE** 512K memory board insurance at any time after the elapse of the 10 day grace period (as described in the preceding paragraph) the cost for a full year's protection is \$75 per year for the first board, \$65 for the second board, \$50 for the third board and \$40 per year for each additional **ON THREE** 512K memory boards insured.

To apply for this valuable protection, send your name, address, telephone number, number of boards you want insured, date(s) of purchase, where the boards were purchased from, and your check, money order or VISA, MC or AE number and expiration date to **ON THREE**. An official **ON THREE** Insurance certificate will be issued in your name and mailed to you immediately upon receipt of payment.

512K Memory Upgrade

We know that there are still 90,000+ Apple ///'s out there that have not upgraded to 512K of memory and we are committed to letting all Apple /// owners enjoy the benefits of an enhanced Apple ///.

For larger spreadsheets, data bases, word processing documents and faster program utilization, you can't lose! If you have any questions about the upgrade, feel free to call **ON THREE**.

The 512K Memory Upgrade includes:

- Complete installation and guide for use.
- Ultra-fast RAMDisk driver with demonstration programs.
- System Utilities 1.2 which permits larger driver files.
- 512K Upgrade utility which updates your programs.
- Industry leading three month warranty!
- Free technical support on the 512K upgrade during the warranty period.
- State-of-the-art 256K memory chips.
- 512K Memory Confidence Program

\$354 plus \$10 s/h

Send in your old 256K board for \$35 software credit toward your next purchase. Installation is \$50! Available by appointment only.

256K Memory Upgrade

If you don't want to upgrade your Apple /// all the way to 512K, but want more memory for your ///, order the 256K Memory Upgrade today! It's specially priced at only \$89 plus \$10 s/h. Hurry, supplies are limited. With a 256K equipped Apple ///, you will be able to use the newer programs that require a minimum of 256K. Programs like Selector ///, Catalyst, Draw ON, The Desktop Manager, Lazarus and more! The price of the 256K Memory Upgrade may never be this low again. If you decide that you want to upgrade to 512K, we even offer a generous rebate on your 256K board.

The 256K Memory Upgrade includes:

- Complete installation and guide for use. Industry leading three month warranty!
- Free technical support on the 256K upgrade during warranty period.
- Apple /// 256K memory board.
- 256K Memory Confidence Program

\$89 plus \$10 s/h
Order today!

Data Base ///

by Jeffrey Fritz

Who wins the bases battle?

Welcome back to our *battle of the bases*. In our last installment, we discussed some data base characteristics including the difference between electronic filers and data base managers. Now, we will consider some of the better known Apple /// data base programs, AppleFile by Apple Computer, Aladin by A.D.I. of America and Keystroke by Brock Software. This is by no means an exhaustive look at all the data base programs developed for the Apple /// for their are several of them. Some very popular programs, such as /// E-Z Pieces, PFS:File and Omnis 3 will not be discussed as reviews for these programs have appeared already in *ONTHREE* and other Apple publications.

Figure 1 illustrates the specifications of each data base derived from documentation and other sources. The first column lists the data base name, followed by the maximum number of files that the program can handle. Aladin stands out with 16 files. The next column is the records per file. Keystroke is way ahead with two billion (we will discuss this figure shortly). The maximum number of fields per record is next. Aladin allows 512 and leads this col-

umn. The next column, characters per field, is led by AppleFile /// with 255.

Let's look first at Keystroke by Brock Software. It is a high level data base manager with a fairly easy command structure. It is one of the better data bases written for the ///, so we will consider it more in depth than some of the others.

Keystroke

Keystroke is a fun data base to use and it is powerful. It is actually made up of two companion programs, Keystroke Data Base and Keystroke Report Generator. The data base comes with a loader disk (boot disk), program disk and work disk. The work disk is simply a blank, formatted disk. The report generator comes with a loader disk and program disk. Switching between the data base and report generator is relatively easy and quick if the programs reside on a hard disk. With floppies, the process is not hard, but expect some thumb twiddling moments as the program re-boots. Both the data base and report generator are copyprotected making it necessary to re-insert the appropriate boot disk in the internal

drive as a *key disk*. It would have been better to design Keystroke to load to a hard disk without requiring a key disk. Inserting the boot disk back into the internal drive takes the fun out of using a hard disk with the program.

Keystroke uses menus, a status line and help screens to guide the user

Personal Computing
attributed a staggering
potential of two
billion records per file
to Keystroke.

through the program. The help screens refer to the actual page number in the documentation offering more information. This is a very thoughtful touch. The report generator and the data base use similar commands which helps keep the confusion factor to a minimum.

Personal Computing magazine (March, 1985 edition) attributed a staggering potential of two billion records per file to Keystroke. This may apply more to the Lisa version. Yet, the point is that Keystroke seems limited only by computer memory and disk storage. With a floppy system, Keystroke insists on using the Apple /// internal disk drive for data storage. A high density outboard drive is becomes much less useful since the program expects to find the program disk in drive two. This limits the size of the files and forces a separate data disk to be used for each

Figure 1
Data base specifications

Database	Max Files	Recs/File	Fields/Rec	Chars/Field
Aladin	16	65,353	512	78
AppleFile ///	1	30,000	80	255
Keystroke	2	2,000,000,000	90	79

file.

Keystroke has some very helpful features. *Keystroke Sequence* macros can really speed up complex reports. The macros operate in both the data base and report generator. Each macro can contain up to 60 characters and up to 26 keystroke sequences are allowed. Macros can be combined. Entire libraries of keystroke sequences can be created and saved. For example, a macro for selecting print criteria called *S* and another macro for formatting printouts called *F*, can be combined into one macro *P* which executes the first macro and then the second. By combining macros, theoretically, a macro could be designed with a sequence of up to 3,600 characters. That should satisfy just about every requirement.

Sequences can be called either with CONTROL keys or from the Key-stroke menu. The menu takes a few more keystrokes to call up, but offers a helpful eight character descriptions of the macros. Control keys require the user to remember what letters invoke which macros, but rewards the user with instantaneous response. Just two keys can start a series of events in action.

At nearly any point in the program, a scratch pad feature can be called up by pressing OPEN APPLE S. A window, 30 characters wide by 16 lines down, is opened on the right side of the screen. The scratch pad is useful for notes and reminders, and has a built in mini-calculator. Simply enter the numbers and operations to be performed and follow the equation with an equal sign. Press RETURN and the answer appears on the next line down. Keystroke also offers the user a *Hand*. The hand can *pick up* a single line of text and *drop* it anywhere on the form. The *hand* can copy information, including formulas and results, to and from the scratch pad. The hand's contents are shown on the bottom of the scratch pad. Be aware that once you exit the program whatever remains on the scratch pad is lost.

There is a *print screen* feature which allows copies of the screen to be transferred to the printer. This is handy for snapshots of a record, selection rules, or a hard copy of a newly designed form's enhancements.

A file maintenance menu allows the user to redesign an existing form, list files, delete files, backup files, create/name new folders and change folders/drawers. Folders and drawers are Keystroke's attempts to associate the program with everyday items. File cabinets and desks have drawers, folders and files. This gets a bit confusing because the Apple /// has volumes, di-

ON THREE presents...

ASCII Chart

Ascii Conversion Table

Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr
0	00	NUL	19	13	DC3	38	26	&	57	39	9	76	4C	L	95	5F	—
1	01	SOH	20	14	DC4	39	27	'	58	3A	:	77	4D	M	96	60	`
2	02	STX	21	15	NAK	40	28	(	59	3B	;	78	4E	N	97	61	a
3	03	ETX	22	16	SYN	41	29	)	60	3C	<	79	4F	O	98	62	b
4	04	EOT	23	17	ETB	42	2A	*	61	3D	=	80	50	P	99	63	c
5	05	ENQ	24	18	CAN	43	2B	+	62	3E	>	81	51	Q	100	64	d
6	06	ACK	25	19	EM	44	2C	,	63	3F	?	82	52	R	101	65	e
7	07	BEL	26	1A	SUB	45	2D	-	64	40	@	83	53	S	102	66	f
8	08	BS	27	1B	ESC	46	2E	.	65	41	A	84	54	T	103	67	g
9	09	HT	28	1C	FS	47	2F	/	66	42	B	85	55	U	104	68	h
10	0A	LF	29	1D	GS	48	30	0	67	43	C	86	56	V	105	69	i
11	0B	VT	30	1E	RS	49	31	1	68	44	D	87	57	W	106	6A	j
12	0C	FF	31	1F	US	50	32	2	69	45	E	88	58	X	107	6B	k
13	0D	CR	32	20	SP	51	33	3	70	46	F	89	59	Y	108	6C	l
14	0E	SO	33	21	!	52	34	4	71	47	G	90	5A	Z	109	6D	m
15	0F	SI	34	22	"	53	35	5	72	48	H	91	5B	[	110	6E	n
16	10	DLE	35	23	#	54	36	6	73	49	I	92	5C	\	111	6F	o
17	11	DC1	36	24	\$	55	37	7	74	4A	J	93	5D	]	112	70	p
18	12	DC2	37	25	%	56	38	8	75	4B	K	94	5E	^	113	71	q

RETURN
for more
ESCAPE
to leave.

This Desktop Manager module lists the decimal, hexadecimal and corresponding character values of all ASCII keyboard characters. A second screen shows the decimal and the hexadecimal equivalents of keypresses which include the control key. This keypress table can be invaluable when you need to know printer commands to enable different printer modes. The ASCII Chart is a necessary tool for programmers of all skill levels.

Only \$9.95 + \$3 s/h

rectories and files. The manual helps clarify the potential confusion by saying, "If you are already familiar with the Apple III ... then drawers equal volumes, folders equal subdirectories and files equal files."

There is a file backup function built into Keystroke. Users of Backup III will recognize the format. It is possible to back up a single file, even if the file is larger than the backup medium can handle, restore files, or back up all modified files. Backed up files cannot be accessed directly Keystroke, they must be restored first.

Making the design - The first step in generating a new data base is to design the data base form. Keystroke forms can contain up to nine screens. Since each screen is 80 characters wide by 22 lines long, each form can contain up to 198 total lines. Looking at it another way, three *pages* (screens) of a form is equivalent to one 8 1/2 by 11 inch sheet of paper. Thus, nine screens can produce three pages of printed data per form. That should be enough for most data entry needs. Fields can be located anywhere on the form. Entering a colon after the field name alerts Keystroke that the entry is a field. Any text entered without a colon is considered to be title. A good use of the title feature to create a comment line. Use it to provide information to another person who may be entering data, or a reminder for yourself.

Any Keystroke form can be redesigned at any time via the file maintenance menu. *While Keystroke offers more flexibility in handling changes than many other database programs, there is a price to pay.* Anytime a form is redesigned, all enhancements must be re-entered. In this case, use print screen to create a hard copy of your enhancements first. This will save you from

having to recall all the enhancements made to the form.

Enhancements and features - Keystroke offers an enhancement menu which makes data entry easier and more accurate. From the enhancement menu, the user can set preferred responses or defaults; assign rapid search and sort fields; derive computed fields and validate/cross reference information. It is this last feature that gives Keystroke its relational ability.

The relational basis is set up when creating file or redesigning a form via the validate/cross reference feature. Using the *auto validate* feature, a new file can access data from another existing file which has a common match key. Keystroke's relational ability is not quite as flexible as some data bases which can establish relational files while in the report mode. With Keystroke, you must know ahead of time what your match field will be. If you

Keystroke forms can contain up to nine screens.

overlook the match field or change your mind later, be prepared to redesign the form to establish the cross referenced field.

The auto-validate feature can be used to make copies of existing information. This saves a lot of work if a new file has been design to contain similar information as an existing file. Keystroke will automatically copy the first occurrence of the information into the cross referenced field. This is not always desirable because the correct information might not be in the first record. To compensate, Keystroke offers a look up feature which allows the user to *leaf* through the crossed reference file until the correct information is found. It

sounds more complicated than it really is.

Keystroke allows nine special field formats; phone number, date, auto date, social security numbers, dollars and cents, digits, yes/no responses, auto-increment and repeat fields. The auto date feature will fill in the current system date on the form. *Yes/No* enters the entire word when *Y* or *N* (upper or lower case) is entered. Auto increment increases the number in the field by one each time a new record is added to the file. Repeat fields automatically enter information from the previous record. If you are working with personnel records, for example, the employee's department can be entered just once if the field is designated as a repeat field. Keystroke will take care of entering it over and over again until the user changes the department entry manually. If this isn't generous enough, it also allows the user to set preferred responses and defaults. The preferred response will appear in the appropriate field on every new form until it is changed. Both preferred responses and repeat fields can be overridden in any record simply by typing over the computer's entry in the field.

I know that it's here someplace - Searches can be made based on exact matches (capitalization is ignored), partial matches, numeric ranges, alphabetical ranges, *or* searches, and *not* searches. All search criteria are entered the same way, whether in the *Find/Update, Delete, Print, or Report* sections of the programs. This makes search criteria simple to use and the repetition helps teach the criteria more quickly. While other data bases limit the number of fields that can be searched at one time, Keystroke allows search criteria to be entered in as many fields as desired. This allows a user to pinpoint a single form out of thousands simply by entering the search criteria.

Record searches are done sequentially, record by record, field by field. Each and every field of every record is examined by the program when a search or sort is requested. With large records, Keystroke has so much work to do that searches slow down noticeably. It allows the user to assign up to four fields for rapid search. The data base program immediately looks at the rapid search fields for sorts or matches. If no rapid search field is chosen, the program will automatically assign the upper left field as a rapid search field.

Derived and computed fields permit four mathematical functions, add, subtract, multiply and divide. Computed fields can derive data from other computed fields, a nice plus for highly mathematical data base needs. The file can be searched based on computed fields, a feature missing in some other data base programs.

The joy of joysticking - One little extra of Keystroke is the use of the joystick to control program execution. The joystick feature works well. Plug the Cursor /// into either port A or B on the back of the Apple /// and the program instantly recognizes it. The joystick itself behaves like the arrow keys. Move it up and the menu selection bar moves up. Likewise for down, left and right. One button acts like the ENTER key, the other is the same as the ESCAPE key. I prefer not to let my fingers stray too far from the keyboard, but the capability is a reach away if I want it.

How to get there from here - Once the form is designed, the data entry phase is handled by *Add*, or *Find/Update*. Adding a form places the new form at the end of the file. *Find/Update* allows changes to existing forms. It can also be used to delete an old record. Simply use *Find/Update* to locate the record and delete it. Only the record that appears on the screen will be deleted. To

delete several records that match specified criteria, the user must hit *Delete* from the function menu.

The function menu? In Keystroke there are several different menus. While the menus themselves are not hard, going from one menu to another is sometimes a bother when you have to go via a middle menu somewhere. The manual offers no menu flow chart, so it takes some experimentation to get there from here.

Using the print feature - Keystroke offers a print feature from within the data base itself. For simple reports, it is not bad. Eight print selections can be saved using 13 character descriptions (labels). Pre-defined print selection can be used as is, modified or deleted. Fields can be printed with or without field names, on separate lines, or on the same line one space to the right of the previous field. The output can be a column format, a labels format, or even in the same format as the form. Pretty flexible considering the fact that the companion report generator is really designed as the primary output generator for the data base.

Column width is determined by the field length specified in the create mode. Well, almost. In the report generator, field lengths can be changed as long as they are at least as long as the field name. For example, if the field name is *WIDGETS*, the printed field cannot be less than seven characters wide unless the name is shortened. If you run out of room across the page and want to limit the field to four characters, you'll need to change the field name to *WIDS* or some other four letter word.

Keystroke makes a good attempt at being a freelance data base, but it has its moments. Fields can be printed in sorted order by entering a *S* in the print definition. Enter *S* as you will, but the

only fields actually sorted will be those designated as rapid search fields. You may recall that rapid search fields are declared when the form is designed. Since there can be only four such fields, if you change your mind later and want to sort on a non rapid search field, you'll have to redesign your form to do so. The problem is that computers are precise, exacting devices. They can be more than a bit rigid about how information is handled. As in many data base programs, with Keystroke you must know what results you are looking for before beginning to create the form. Some people insist that pencil and paper be used to rough out the data base before ever a key on the computer is touched! From a logical point of view this makes sense, but it works against the freelance creativity that computers are supposed to offer.

Keystroke sends output to a printer, disk file or the console. The program expects the printer driver to use the name *.PRINTER*. If your printer driver is not called *.PRINTER*, you'll want to change it for this program. While Keystroke will accept other names, you'll be forced to re-enter the name of the driver when printing or creating a report. In addition the print screen feature automatically assumes that *.PRINTER* is the driver name of your printer. Using print screen without a *.PRINTER* driver aboard can cause the program to hang and data to be lost - so be careful.

When printing to a disk file, I expected the data to come out as an ASCII, or *text* file. Instead the data came out as Pascal data file. I have no idea what advantage there is to this, since most other programs expect to import ASCII files. Perhaps the Pascal filer can be of help in converting the file to a standard ASCII file.

Copycats - Keystroke has the ability to transfer information between files.

This is done via the *Copy* function. All records can be transferred, selected records can be transferred, or records can be sent to an existing file. The process takes a little practice to get right, but the program displays the records on the screen as they are being transferred, so it is obvious what is or isn't being transferred.

It is possible to copy only the form omitting any data. This allows a user to create a brand new data base based on another, similar form without bringing unneeded data across. Simply copy the form, change it as desired and begin entering new data.

In addition to the copy capability, Keystroke can merge files into the data base from VisiCalc, PFS File, and QuickFile files. It can do form letters with AppleWriter /// and read and write DIF (Data Interchange Format) files. This offers flexibility in importing and exporting data to and from Keystroke. Merging AppleWriter /// form letters is done by the creation of an WPL (Word Processing Language) program that can be directly executed by Apple

The ability to merge files from Quickfile has more potential that it might seem.

Writer ///. What is actually happening is that one program (Keystroke) is writing another program in WPL language! Very slick indeed.

The ability to merge files from Quickfile has more potential that it might seem. Quickfile was Rupert Lissner's early data base for the Apple ///. Three E-Z Pieces' data base is an improved version of Quickfile. Of course, /// Easy Pieces' heir is called AppleWorks. Each program's data structure is virtually identical and can be read by

any of the three programs. Therefore a data base created by /// E-Z Pieces can be directly read into Keystroke as can a data base created by AppleWorks on an Apple II. Imagine the possibilities that exists for taking less powerful, but abundant AppleWorks data base templates and converting them directly to Keystroke!

Enter and return again - I don't know why, but certain programs make distinctions between the return and enter keys. I have problems with this. Maybe the ENTER key is so much easier to find than the RETURN key. Perhaps there is something deep down inside of me that prefers ENTER to RETURN. This happens to be one of those programs. In data entry, RETURN and TAB serve the same function, moving from field to field. ENTER means that all data is entered and its time to move on. I constantly get in trouble in the *find/update* mode and it is very frustrating.

Report Generator and other electrical devices - After understanding the data base generator, using the report generator is a snap. Most program features act the same way as in the data base. An added feature is called the *ruler* which measures the width of the report for printing.

The first step in preparing a report is to select which records to print. Keystroke's selection criteria is pretty generous. Reports can be generated with any of 10 different criteria. Once selection criteria is established it can be saved and used again during future sessions as a *pre-defined* selection. Selection criteria can be modified and saved again either under the same name or a new one. It can also be deleted altogether.

The next step is to select the fields for the reports. The fields are represented

as columns in the report generator. A short cut report is provided which allows all fields to be printed with only the first column sorted. Generally, you will want to use a custom report. Select the fields yourself and indicate which order you want them to appear on the report. The custom report allows sorting by as many as four fields. Keystroke can generate a new page each time an item in a sorted field changes.

As in the data base, a pre-defined report can be selected if one has been generated before. Changes can be made to the pre-defined reports. However, if a user adds, deletes or changes any of the column settings in a pre-defined report all formats and computed columns have to be re-entered. There it is again - the inflexibility.

Having determined the records, field selections and order, the program moves on to the formatting of the report. A chart appears with basic settings (defaults) one can use to print from. The defaults can and probably should be customized to suit the user's needs. Available are *Statistics*, *Formats*, *Column Width*, *Highlighted Range Criteria* and *Computed Column Formula*.

Since only a portion of the report can be seen on the screen, the program uses a combination of the arrow keys along with SHIFT, TAB and RETURN keys to move around the report. It takes some time to get used to but it does the job.

The statistics offered by the program are simple, but useful. The report generator can total a column, average, count, subtotal, sub-average, and sub-count. Formats include left justification, right justification, center justification, dollar formats, parenthesis around negative numbers, three different date formats and percentage.

Again, not a bad selection compared to many other data bases.

There is a *summary only* report that offers what I've always wanted but seldom been able to find in other data bases. All too often summary reports condense the information so much that they eliminate desired information. With Keystroke, all selected columns will be printed in summary form on the report.

There are other enhancements offered including condensed print and double width headers. Data, statistics or titles can be highlighted on the report. There is a printer set up option to tell the program what control codes set up your printer. Just about any printer can be accommodated through this option.

Titles, subtitles and footers can be added to reports. This is a nice extra that makes the difference between home brew looking reports and reports to submit to the executive vice president.

Aladin

Aladin is a true relational data base with a lot of horsepower. It can have 16 files open at one time and allows 65,535 records per file. Within limits of computer memory, that means a lot of facts can be on hand. Aladin claims that it can pull information from as many as 190 different files at once. Aladin has mail merge along with some other interesting features.

One would expect such a powerful program to come with an efficient, powerful report generator. However, Aladin's report generator is poorly designed and is weak in error handling. If a mistake is made when entering criteria in the report generator, it is not possible to back up and correct the mistake and one must start over.

The magic bottle - In an attempt to overcome some of Aladin's shortcomings, A.D.I. has incorporated something called the *Genie* (in the magic bottle?) into Aladin. It could be considered as Aladin's utilities program. It turns out that the Genie is really a programmers *hook* into Aladin. To use the Genie the user must have a working knowledge of Pascal.

The Pascal port - Aladin is one of those frustrating programs that is written in generalized Pascal in order to be ported to different machines. There are versions for the Apple II, II plus, IIe and MS-DOS computers. This makes for economic savings for programmers and a pain for Apple /// users. With such programs, file commands become more awkward and the power and convenience of SOS is diminished.

Power at any price - From the standpoint of sheer power, Aladin appears to be the leader of Apple /// data bases. Unfortunately, its power is one of its major disadvantages. It operates like a mainframe data base and is not especially easy to handle. Aladin requires a

Aladin claims that it can pull information from as many as 190 different files at once.

lot of work before it can really be useful. If I want to fly a jet, I need a lot of practice using the controls before I leave the ground. Plan on hours or days in order to learn the program well enough to use it.

Frankly, Aladin's rewards just aren't immediate enough for me. The program is so cryptic that its features are often hard to use. Yes, some dedicated Aladin users will dispute this. If a user dedicated his life to becoming an Aladin aficionado, the program could well

prove itself to be the closest thing to a mainframe data manager on the Apple ///. I just do not have enough hours to spend learning the fine points of Aladin. I can get other /// data bases running in less time with better results. Besides the complexity, the cost of Aladin is incredible. In its heyday, A.D.I. was asking \$795 for the program! However, you might be able to purchase Aladin these days at a considerable savings.

AppleFile ///

Now here is a data base that I would like to get to know better. AppleFile uses nicely laid out menus and is relatively easy to use. It has a lot of cute bells and whistles built into it - literally. AppleFile's special settings menu allows one to select tones, define special printer codes and reverse display video (black letters on a white/green background). Different errors are signaled by different tones. If a user does something really harmful AppleFile will play the theme from *Twilight Zone* before going off to that software zone between dark and light. If showmanship was the criteria, AppleFile /// would win hands down.

Keys to the model - There are some new concepts to understand, or maybe more accurately, old concepts with new names. A data entry form is called a *model*, a record is called a *datafile* and keywords are referred to as *keys*.

Data types are provided for in AppleFile. Fields can be required or optional. For example, in a personnel record the date of hire field can be required, but the promotion date can be made optional. The program will not allow a record to be accepted unless a required field is entered. Up to eight key fields are allowed, more generous than many other data bases. Files can also be password protected with various levels of protec-

tion. AppleFile's password protection is effective, so be careful in using it. If a person password protects a file from any modification and forgets the password, there can be serious trouble.

AppleFile has one of the most complete file managers of any Apple /// software. There isn't much that System Utilities can do that AppleFile's manager can't. There is a provision for listing devices, formatting disks, setting prefixes and dates, creating subdirectories and more. One interesting addition to

AppleFile can transfer data from one data base to another.

AppleFile's file manager is the ability to calculate the total number of records that the disk can hold based on the size of the data file.

AppleFile has some decent editing capabilities. One surprise within AppleFile is CONTROL-U, which is an undo function. It will restore the previous entry. This saves wear and tear during data entry.

Model transfers - AppleFile can transfer data from one data base to another. In fact, some changes require the user to create another data base model to accept the changes. In certain instances model names must be changed to protect the innocent and avoid computer confusion. The program forewarns which changes to the model require such tactics and offers a chance to back out.

Zapping the records - New records can be inserted, previous records reviewed, searched by key word, deleted or zapped. Delete allows the user to review the record for verification. That's a safety feature to prevent deleting the wrong record. If you are abso-

lutely sure that the record selected is the proper one, it can be zapped. Zapping is immediate. No questions are asked. The record is gone.

Unzapping the files - AppleFile has provision for repairing damaged files. This is an essential feature for data emergencies. AppleFile is unique in that damaged records which can not be transferred are not destroyed or ignored by the program. As many records as can be salvaged are transferred. The damaged records are placed in a discard file. The program then offers the opportunity to go in and manually repair the discard files so that they can be incorporated into the data base again. This means that if there is any possible way to save data from being lost or destroyed, AppleFile will help find it.

So what's disturbing about AppleFile? Frankly, I just can't seem to put my finger on it. Perhaps after all the bells and whistles and special features, the raw power of AppleFile is no greater than with other less frilly data bases which are easier to master. Maybe it's just a case where I need to know the program a bit better.

Covering the bases

So which data base wins our battle of the bases? The choice is very much one of personal preference. Only you can determine which data base best suits your individual needs. My personal

needs are best suited by two of our data base candidates, /// E-Z Pieces (which has been reviewed in the last three issues of this magazine) and Keystroke. Three E-Z Pieces offers a simple, direct and effective electronic filer. I use it to handle all kinds of information from business and personal addresses to indexes of trade magazine articles. Keystroke offers relational power and superb features coupled with ease of operation. I use it extensively for the complex maintenance schedules that we discussed in part one.

But the real winner of our *battle of the bases* is you. The great thing about the Apple /// is that it was designed as a business machine. As a result many different data bases were written for the ///. Most are well written and relatively powerful. Data base software still abounds for the /// and can be purchased through Apple /// support organizations, obtained through user groups libraries and still found on dusty shelves in Apple dealers' back rooms. Don't overlook individual Apple /// users who often have software for sale at excellent prices.

As Apple /// users we have the opportunity to a little ingenuity in selecting data base software. Ours is an orphaned computer with an extensive base of powerful business software. This can offer great rewards to the user in search of the perfect data base at a bargain basement price.

-///-///-///-

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*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.

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

Offer good through Feb. 29, 1989 *Selector /// requires an Apple /// computer with at least 256k of memory.

Checkbook ///

by Larry Snow

From checking to tax records

Ever had problems with the old checkbook, or better yet, keeping checks for receipts? Programmer Larry Snow shares an easy way to beat the old file and register system with your monies.

This ballistics program is taken from *American Rifle* magazine and has been converted to the Apple /// by Larry Snow.

This is the variable that makes it pos-

sible to read and write information to the data file (CBDATA) from top to bottom. This is a sequential data file not a Random access file so data must be READ and WRITE in this manner.

Variable Cross-Reference for Program = The Basic Cbook

A\$	= VARIOUS	140	150	650	660	660	660	660
AMT	= AMOUNT OF DEPOSIT	190	290	320	380	460	490	
AMT ()	= AMOUNT (I)	20	560	760				
BAL	= BALANCE	540	680					
BAL ()	= BALANCE (I)	10	560	740				
BALANCE	= BALANCE	290	290	320	460	460	490	820 860
C\$	= CHECK	30	490					
CCOM\$	= CHECK COMMENT	410	490					
CDAYS\$	= CHECK DATE	390	490					
CN\$	= CHECK NUMBER	370	490					
CN\$ ()	= CHECK NUMBER (I)	20	560	750				
COM\$ ()	= COMMENT	20	560	750				
CWHO\$	= CHECK PAYABLE TO	400	490					
DAYS\$ ()	= DATE	10	560	750				
DCOM\$	= DEPOSIT COMMENT	220	320					
DD\$	= ENTRY DATE	200	320					
DEP\$	= DEPOSIT	30	320					
DID\$	= DEPOSIT NUMBER	230	320					
DWHO\$	= DEPOSITED BY WHO	210	320					
E%	= ENTRY NUMBER	300	300	320	470	470	490	540 550
		670	720	820	860			
E1% ()	= ENTRY (I)	20	560	750				
F\$	= YES OR NO	780	790	790	800	800		
G\$	= YES OR NO	580	590	590	600	600		
HEAD\$ ()	= DATA FROM CBDATA	10	560	730				
I	=	550	560	560	560	560	560	560
		560	570	720	730	740	750	750
		750	750	760	770			
PLACE	= MENU GET	150	160	170	170			
Q\$	= ENTRY OK DEPOSIT	240	260	260	270	270		
QI\$	= ENTRY OK CHECK	420	430	430	440	440		
TOWHO\$ ()	= DEPOSIT MADE BY	20	560	750				

To run this program you must have a subdirectory on the disk named *CBDATA*. To do this run *primer* on a formatted disk named *three*. This is where all of your checks and deposits will be stored. Also on the same disk you should have a file called *primer*. *Primer* will set all variables to zero for setting up a new file. I use this file to keep my records relatively small. I set them up so that every quarter I replace *CBDATA* with an empty file. To do this first you must copy *CBDATA* to another disk with the name *CBDATA.0000* so that .0000 represents the month and year of the data file

Should you ever need to break out your old file (for the IRS, heaven forbid!) or such you've got it. Also a user should make a hard copy for his own to keep along with the disk or wherever he elects to store records.

Here is a listing of Cbook:

```

10 DIM Bal (50), Head$ (50), Days$ (50)
20 DIM Towho$ (50), Com$ (50), Cn$ (50), E1% (50), Amt (50)
30 C$="CHECK":DEP$="DEPOSIT"
40 TEXT:HOME:VPOS=6:PRINT USING"80c";"Check Book Main Menu"
50 PRINT USING"80c";"Copyright :Larry Snow"
60 PRINT TAB(15);"1 - A [PRINTED COPY] ONLY"
70 PRINT TAB(15);"2 - TO MAKE A DEPOSIT"
80 PRINT TAB(15);"3 - TO WRITE A CHECK"
90 PRINT TAB(15);"4 - TO WRITE A WITHDRAW"
100 PRINT TAB(15);"5 - TO MAKE A AUTO WITHHELD PAYMENT TO THE BANK"
110 PRINT TAB(15);"6 - TO END PROGRAM"
120 VPOS=17:HPOS=1
130 PRINT TAB(15);"Pick the number of the option you wish (1-6)";
140 GET a$
150 place=INSTR("123456",a$)

```

This is the fun part after you have backed up CBDATA!!!! If you don't you'll loose it, sure as the dickens!!!

1. Delete CBDATA
2. Load PRIMER
3. Run PRIMER (this sets all variables to 0)
4. Type NEW:LOAD
CBOOK:RUN

```

160 IF NOT (place) THEN PRINT CHR$(7):GOTO 120
170 PRINT place:ON place GOTO 530,180,360,360,360,890
180 HOME:INVERSE
190 INPUT"ENTER THE AMOUNT OF THE DEPOSIT.....";Amt
200 INPUT"ENTER THE DATE OF ENTRY.....";Dd$
210 INPUT"ENTER , WHOM DEPOSITED.....";Dwho$
220 INPUT"ENTER COMMENTS.....";Dcom$
230 INPUT"ENTER CHECK NO, DEPOSITED OR ENTER CASH.....";Did$
240 INPUT"ARE ALL ENTRIES CORRECT [Y OR N] ";Q$
250 NORMAL
260 IF Q$="Y" OR Q$="y" THEN 290
270 IF Q$="N" OR Q$="n" THEN 180
280 GOSUB 810
290 BALANCE=BALANCE+Amt
300 E%=E%+1
310 OPEN#7 AS EXTENSION,".D1/CBDATA"
320 WRITE#7;Dep$,Balance,Dd$,Dwho$,Dcom$,Did$,E%,Amt
330 CLOSE#7
340 GOSUB 850
350 GOTO 530
360 HOME
370 INPUT"ENTER THE CHECK NUMBER.....";Cn$
380 INPUT"ENTER THE AMOUNT OF THE CHECK.....";Amt
390 INPUT"ENTER THE DATE OF THE CHECK.....";Cdays$
400 INPUT"ENTER TO WHOM CHECK WAS MADE PAYABLE.....";Cwho$
410 INPUT"ENTER ANY COMMENTS HERE.....";Ccom$
420 INPUT"ARE ALL ENTRIES CORRECT [Y OR N] ";QI$
430 IF QI$="Y" OR QI$="y" THEN 450
440 IF QI$="N" OR QI$="n" THEN 360
450 GOSUB 810
460 Balance=Balance-Amt
470 E%=E%+1
480 OPEN#7 AS EXTENSION,".D1/CBDATA"
490 WRITE#7;C$,Balance,Cdays$,Cwho$,Ccom$,Cn$,E%,Amt
500 CLOSE#7
510 GOSUB 850
520 GOTO 530
530 OPEN#7,".D1/CBDATA"
540 READ#7;E%,Bal
550 FOR I=1 TO E%
560 READ#7;Head$(I),Bal(I),Days$(I),Towho$(I),Com$(I),Cn$(I),E1$(I),Amt(I)
570 NEXT I
580 INPUT" DO YOU WISH A PRINTED OUTPUT Y OR N ";G$
590 IF G$="Y" OR G$="y" THEN 610
600 IF G$="N" OR G$="n" THEN 660
610 OPEN#1,".PRINTER":OUTPUT#1:PRINT CHR$(27);"X"
620 PRINT"FOR YOUR BANKS INFO PHONE# (000) 000-0000 ACC #000-0-00000"
630 PRINT CHR$(27);"Y"
640 OPEN#1,".PRINTER":OUTPUT#1:PRINT#1;CHR$(27);"Q";
650 A$= DATE$
660 PRINT"THIS COPY WAS MADE ";MID$(A$,4,2);MID$(A$,6,3);MID$(A$,3,1)MID$(A$,1,2),"AT "TIMES$
670 PRINT"TOTAL NUMBER OF ENTRIES IS ";E%
680 PRINT"CURRENT BALANCE IS ";Bal
690 PRINT"
"
700 PRINT"FUNC"," BALANCE"," DATE","BY WHO","COMMENT","CHK#","ENTRY"," AMOUNT"
710 PRINT"
"
720 FOR I=1 TO E%
730 PRINT Head$(I),
740 PRINT USING"$8#.2#,6X";Bal(I);
750 PRINT Days$(I),Towho$(I),Com$(I),Cn$(I),E1$(I),
760 PRINT USING"$8#.2#";Amt(I)
770 NEXT I:PRINT CHR$(27);"N":CLOSE
780 INPUT" DO YOU WANT ANOTHER ENTRY [ Y OR N ]? ";F$
790 IF F$="Y" OR F$="y" THEN 40
800 IF F$="N" OR F$="n" THEN 890
810 OPEN#7,".D1/CBDATA"
820 READ#7;E%,Balance
830 CLOSE#7
840 RETURN
850 OPEN#7,".D1/CBDATA"
860 WRITE#7;E%,Balance
870 CLOSE#7
880 RETURN

```


Here is PRIMER (Running this program will create a subdirectory called *CBDATA* on disk located in drive 1.

```

10 REM PRIMER SUBROUTINE
20 OPEN#7,".d1/cbdata"
30 Amt&=0:Balance&=0:Bal&=0
40 Dd$="0":Dwho$="0":E1%=0
50 Dcom$="0":Did$="0":E%=0:Amt&=0:
60 WRITE#7:E1%,Bal&,Dep$,Balance&,Dd$,Dwho$,Dcom$,Did$,E%,Amount&
70 CLOSE#7
80 END

```

This is a short program that avails itself to many useful program changes to fit your needs. Please have a good time playing with it.

-///-///-///-

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New for the GS is **The Desktop Manager (TDM)**, by far the best desk accessories available on any micro-computer. TDM is a set of powerful utilities that you can use at any time and from within any application. Don't settle for accessories that only work within AppleWorks™ or a few selected programs.

Only TDM works within virtually ALL ProDOS 8 and ProDOS 16 programs. From AppleWorks to PaintWorks Plus™ TDM is always there when you need it. A single keypress suspends the current program and lets you use one of hundreds of accessories.

TDM comes complete with a Note Pad, Appointment Calendar, Calculator, Printer Manager, Envelope Labeler, Ascii Chart, Accessory Manager, Control Panel, Device Configuration, Clipboard Tools, an installation utility, the ability to save any text or graphics screen and print any text screen with a single keypress. Also built-in is a feature to pickup and paste textual information from any application to any other application! Not copy-protected. Requires 512K minimum. \$89.95

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The TDM Toolkit shows how easy it is to create TDM accessories. It's all thoroughly explained in this guide. Includes APW examples with source code and macros on disk. \$39.95

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SOFTWARE

	s/h
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Reconditioned Apple /// computers. As good as new! Complete with 90 day warranty.	
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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.

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With 0K	\$149	+ \$10
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Ranntings

by Richard and Lavona Rann

More over (big?) Blue

This past six months, we've done a lot of traveling. As we visited different parts of the country, we visited computer stores. Of course, many were Apple dealers, but many others were oriented to that other company, the one known by its big blue initials. As we went from dealer to dealer, we became aware of a few changes that have come about during the last year. Nothing earthshaking, mind you, just subtle little differences from similar visits a year earlier. We think that the differences are worth pondering, and may give an insight into the future and how the world of microcomputers is changing.

If you are at all like us and, at least occasionally, visit computer dealers to see what is new, you are likely to encounter at least one of the major computer chain stores (i.e. BusinessLand, ComputerLand, Inacomp, and MicroAge). These are more prevalent around major metropolitan areas, but are on their way to becoming ubiquitous like MacDonald's and Burger King. The very existence and at least theoretical success of these chains is an interesting change from a few years back, but that is not today's topic.

What is important is what's actually happening in the stores that purport to serve business people. We have two illustrative examples drawn from our visits. BusinessLand's corporate image positions the stores as suppliers of computers and software to business and means they have only *business machines* (meaning IBM, Compaq,

sometimes AT&T, and yes, Apple Macintoshes), and they do not discount except for quantity. BusinessLand is one of the oldest and largest national computer store chains. The company carries Apples, but ever since the first IBMs were introduced, the Apples have always taken second place to what they consider as *serious business computers*.

BusinessLand is a prosperous com-

**With so much power
at hand to choose
from, this store put
Mac SEs on
everyone's desk...**

pany and its stock is traded on the over-the-counter market. It is large enough to build its own buildings with its own custom interiors at expensive locations. BusinessLand tries to have the *look* of a serious business. It has a subdued dark red, gray, and camel decor, which has a *feeling* like an executive office. When we entered in mid-afternoon, we expected the store to be empty of customers and it was. The outside sales people were busy on the phone; only a receptionist was there to greet prospective customers. Last year, we had the experience of entering a BusinessLand, and having a salesperson meet us, only to frown and point *over there* (to a back corner) when we asked to see a Macintosh. This year things had changed. Facing us as we entered the store was a Macintosh II

with a oversize SuperMac Screen. The Macintosh displays filled the center of the store stretching across the front and down towards the back. Not only were they prominently displayed, but more models were on display now than a year ago. There was no doubt that a salesperson would want to talk to us, instead of pointing us to where we could look ourselves.

Probably the most significant point of that visit had nothing to do with the layout of the store's products. It came as we worked our way through the Compaq and IBMs towards the back. One of BusinessLand's employees was writing at a workstation setup at the back of the selling floor. She had the entire range of business computers to choose from, since she was almost alone in the store, and she chose to work on a Mac SE hooked to a Laser-Writer. Not more than 10 feet away was a PS/2 model 30 similarly equipped with a laser printer of its own, but it was sitting dark and unused.

In another store, this one a prosperous independent *local* dealer who carries roughly the same brands, the situations were nearly the same. This dealer had the full line of Apple products, not just the Macintosh as BusinessLand does. Behind the IIGs, IIEs, and Mac were a dozen or so demonstration machines from other manufacturers. With so much power at hand to choose from, this store put Mac SEs on everyone's desk using AppleTalk to connect them to a large hard disk. In the manager's office there is still an Apple /// with a

ProFile that had been in use for more than five years now. The major difference with this dealer is that it had been committed to Apple a long time.

What binds these two stores and many others that we have visited, is choice. More and more of the employees and owners of computer stores have come to value Apple computers. In the case of BusinessLand, it is a radical change that has taken place recently. In the case of many other stores, like the *local* dealer mentioned, it was not a particularly large step. In both cases it came quietly without a company directive. The important thing is, given a choice, people who have access to many machines are choosing Apples.

The truly significant point is these are

the people that are proposing systems and selling them to businesses. Part of the reason is that Apples have changed. The Mac is no longer a 128K machine with a limited keyboard and a 400K drive. The minimum configuration is 1 meg and at least one 800K drive (with the SE you get two built-in drives with an option for one of them to be a SCSI hard disk), and the purchaser chooses what keyboard he would like. The world has changed.

Important for Apple ///s? It certainly is. It shows the development of acceptance. It is what never happened for the ///. Sadly, the step from being *back in the corner* to being the main attraction never happened. Yes, the world is changing or perhaps, more importantly, technology is moving rapidly

and we are changing. The Apple /// in the manager's office still works and performs a useful task for that dealer, but in all truth, it is frozen in time. As much as Apple /// people would like it not to be so; we are not frozen. We grow and change every day, and so do our computer needs. When it is time, many of us will move on. That does not diminish anything that the /// is, or was, after all it was the first business micro ever built and is still much more powerful than the first two years of Big Blue machines and clones, and, yes, the early Macintoshes. Still, it is fixed and technology is not. The current of change is pulling us away from the Apple /// just as it is driving BusinessLand toward the Macintosh.

-///-///-///-

FOR APPLE /// OWNERS AND USERS...

ON THREE presents...

Macro Manager

Macro Manager			Keypad Definitions
Solid Apple Definitions			
[A]	[N]	[.]	[0]
[B]	[O]	[,]	[1]
[C]	[P]	[/]	[2]
[D]	[Q]	[;]	[3]
[E]	[R]	[']	[4]
[F]	[S]	[`]	[5]
[G]	[T]	[~]	[6]
[H]	[U]	[N]	[7]
[I]	[V]	[~]	[8]
[J]	[W]	[=]	[9]
[K]	[X]	[_]	[.]
[L]	[Y]		[~]
[M]	[Z]		[/]
MacroMap: Your MacroMap		*? = Help	
Escape to Activate Macros and Exit. Macro Manager written by Rob Turner V1.0			

Macro Manager allows you to define a single keypress as a series of keystrokes you can play back anytime. You can also record over 2,000 keystrokes as you type and invoke them later by pressing one key. One MacroMap™ can hold 50 defined keys, called macros.

With Macro Manager, you can create up to 200 different MacroMaps, so you need never type repetitive information again. Let Macro Manager, a Desktop Manager module, do it for you! Order today for \$44.95 plus \$3 s/h.

\$129.95 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 appointment 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

17 Sept 87 9:15:19 AM

You have 2 appointments scheduled for today.

8:30 AM 2:45 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.

SEPTEMBER 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.

Note 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 workhorse, 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	*
0.06	=
0.27975	Sum
0	CLR

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 you 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.

Disk Manager

File Commands

List Directory
Copy File
Delete File
Rename File
Lock/Unlock

Device Commands

List All Devices
Copy Volume
Format Disk
Rename Volume
Verify Volume

*? = Help

Use Arrow keys to SELECT, Press RETURN to RUN. ESCAPE to EXIT.

ON THREE presents...

Incredible buy - less than \$50!

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!

Ask 'Doc'

by Dave "Doc" Christenson

Is 65C802 for me? When the Titan ///+Ile board first came out, there was discussion regarding the replacement of the 6502B chip with a 65C02 chip (3mhz). You liked the idea and while I wrote to Sun Systems Remarketing on several occasions, they never did reply. I have noticed that you are listing the 65C802 in your inventory. What does this do for you? My main interest is to speed up "Managing Your Money" using the Ile segment of the Titan board. Could you please assist me?

Also, I have been considering the 512K enhancement. My original /// was the 256K version but I purchased a backup unit at a clearance sale which was supposed to have been a 256K but turned out to be a 128K. If I purchase the 512K memory board, can I then switch my present 256K board for the 128K board. Your previous advice seemed to indicate dire consequences for such upgrades except by an expert. What is your opinion of such a swap with the expectation that I would do the upgrades myself? - *Herbert J. Chapman, Westport, Conn.*

Doc says... We sell the W65C802 microprocessor chip. However, unless you are an assembly language programmer and write code that can take advantage of this chip's capability then it won't really help you. The W65C802 emulates the 6502 in 8 bit mode and can be a direct replacement. It does not offer any speed increase while in this mode. It will not help speedup the processing time in your "Managing Your Money" program to any appreciable degree.

The 6502 chip runs at a faster speed than the W65C802 in 8 bit mode. Running with your Titan board, it may help but because some drivers look for time delays when crossing page boundaries the 65C02 may cause your system to crash.

We sell both the 256K and 512K upgrades for the Apple ///. Most people can do the 512K upgrade by following the step-by-step instructions we provide. To do the 128K to 256K upgrade, you need a little technical expertise in soldering. If you feel confident enough, and most people have no trouble with doing this installation, then you should have no trouble. If you don't feel like tackling the job, then *ON THREE* can do the installation for you for our minimum service fee of \$50 plus return shipping and handling of your system. Please call before shipping your system so that you may receive a Repair Number (RMA#) and schedule your work to allow the fastest possible turnaround.

Where are my appointments? I am having some type of problem with the Desktop Manager. I can make appointments but they do not display. Do I have to change the configuration on the *ON THREE* driver? It is set to 00. I am using the Desktop Manager without a hard disk. I have only two standard drives and 512K of memory. - *Martin De Muro, Yonkers, NY*

Doc says... If you are not using a

hard disk then the number of open appointments are very limited. There is simply not enough room on a standard floppy disk. This can be corrected by creating another files disk and subdirectory on a blank disk with just the *Option(s)* you want to use on it. **Caution** - This disk must have the same volume name as your other desktop files disk.

With your two drive setup, you must have the file containing the *Option* you wish to use in one of your drives in order for it to show up.

Do I need to update System Utilities for Selector? I received Selector /// from you recently and installed it on my ProFile instead of on Catalyst. It is so much better than Catalyst, especially with setting up the menu operation.

There is one problem I have and need some help on. When installing Selector /// I copied the SOS driver from the Catalyst disk so that I would have the drivers for the A143 drive as.d2. For some reason, neither System Utilities nor Backup /// will read and format this drive. I used the SCP and checked the drivers and .FMTD2 and .D2 have the *Device Subtype* set as \$03 as it should be. Under Catalyst there was no problem of this kind. To install System Utilities under Selector, I had only an older version (I presume), not the one running under Catalyst, and thought maybe this could be the reason, is it possible?

Please let me know as to how I can get this problem solved. As a note of interest, when installing Selector /// I didn't lose any of my files that were on Pro-File. Installation was quick and easy. Editing and re-arranging the menu to one's desire is also simple to do. - *William Bell, East Orange, NJ*

Doc says... First of all, you need to delete the SOS.driver file that you copied from the Catalyst disk to your copy of the Selector boot disk. Recopy the SOS.driver file from your original Selector startup disk to your copy of the Selector boot disk. Using the *System Configuration Program* (SCP) option on the System Utilities disk, load the A143 drivers into the SOS.driver on the copy of the Selector boot disk and *Generate A New System*.

I suspect that somehow in the original installation the A143 drivers were corrupted. If the process mentioned above does not work, then find a disk that has another copy of the A143 drivers on it and use it. If you don't have one, *ON THREE* sells the A143 drivers for \$15 plus \$2 s/h.

Are there plans for a Graphics Manager IIGs ? I read your ad in *Nibble* magazine on the Graphics Manager. I have an Apple IIGs with an Imagewriter II printer. I plan on getting PrintShop IIGs which has been recently released.

Do you plan on coming out with a similar product which will work on the IIGs and in particular, with the new Print Shop? If I were to purchase the Graphics Manager now, how compatible with my IIGs will it be and would I get an upgrade for a reasonable fee for the IIGs?

Does your program run in its present form on the IIGs, in particular, if I have

just had the new ROM chip upgrade? Is your product available through a mail order house for a better price? - *Jack Bleier, Milwaukee, WI*

Doc says... You can load pictures (graphics files) from Print Shop Newsroom and Minipics graphics disks. You can also combine these images and vary space between them. You can expand and shrink these images, too.

There are no current plans for an Apple IIGs version, at this time. However, the current version will run in Apple IIe mode on your IIGs.

ON THREE is the only outlet for this product. We produced this product and provide technical support during the warranty period to registered owners of this product. Thank you for your inquiry.

Will TCM connect two ///s with an IBM compatible? I am interested in purchasing your Communications Manager (TCM), but I think that I am not familiar with computer communications. Besides wanting to link our two Apple ///s, our company would like to link an IBM compatible, preferably using the /// as a terminal to the PCAT. Is this possible? What is the VT52 terminal emulation, and does this make the above possible? - *Albert Zaretzka, Pasco, WA*

Doc says... VT52 is a communications protocol. VT52 emulation makes the Apple /// send and receive data as if it were a VT52 terminal. If your IBM can also emulate a VT52 then you should be able to send data back and forth. If you just want your IBM to read Apple /// data files then get Match-Point. See *ON THREE* magazine's August 1987 issue for a detailed article on the program. I hope this helps you

understand better.

What printer will work best with Draw ON ///? I ordered Draw ON /// for my Apple /// plus. You wanted to know what printer I use. At the present time I am printing on my Olivetti ET115. I am quite sure that Draw ON /// will not work with my printer.

I will probably have to get another printer and am asking your advice in this matter. I am hoping to get an inexpensive printer that will work well with Draw ON ///. Perhaps you could give me some choices. - *John Burgess, Battle Creek, MT*

Doc says... Draw ON /// will not work with Olivetti ET115. Thus, you will have to get another printer. I suggest either a Panasonic KX-P1091 or the IDS Prism 132. Both are serial printers and use the serial port on your computer. Neither require any additional interface cards to work.

You will need the DMP version of Draw ON /// to work with these printers and a serial cable. Both of these printers are available at most local computer stores and through mail order houses.

Will the Titan II +///e allow me to use MS-DOS boards by Applied Engineering?

Reference is made to the article in the September 1987 issue of *A+* magazine regarding the new board that Applied Engineering will be marketing allowing an Apple IIe or IIGS to operate in MS-DOS mode.

Because I want to go to Laser printers and scanners, I felt that I was at the end of my limit with the Apple ///.

Is there any possibility that with a combination of the new board and your Titan IIe board for the Apple /// that I will be able to use the MS-DOS? Also, any suggestions of methods to accom-

plish the same would be very appreciated.

Also, I have a friend who is using the old Apple /// PFS File. I believe that he is having problems due to interruptions of electricity and possibly some unknown hard disk profile problems that are very much limiting his use of the program. Is there anyone supporting this program today or are there any programs out there similar in nature that have the ability to contain as many items and an attachment page as the PFS does? In particular, is there any possibility that there is something in the Apple line that your IIe card could run?
- Virgil E. Bolly, Sellersburg, Ind.

Doc says... There is no possible way this card can fit in a ///, much less work in one. It is physically too large to fit in the slots. If you want to read Apple /// data files on a MS-DOS machine, I suggest Matchpoint. See ON THREE Magazine Aug. 87 for a complete review of this program.

ON THREE provides technical support for PFS file as well as most any other program written for the Apple ///. PFS file is no longer being made or sold. But don't despair. ON THREE sells a hard disk version to original owners of PFS that allows them to install the program on their hard disk and run it without having to put the original into drive #1 of their computer. Cost is \$15 + \$2 s/h. The only other program that does as much as PFS does and will work on the ///, that I know of, is Versaform. This program allows you to make your own custom forms as well as print them out.

ON THREE is committed to providing the best possible service to our customers. If our staff cannot help we will do our best to find someone to refer you to that can.

Have your friend check his hard disk to check for bad blocks. If he finds any bad blocks on his hard disk, he will have to back up his data onto floppies and reformat his hard disk. If he still shows bad blocks, his hard disk will have to be repaired. If your friend suspects problems in his computer, ON THREE service can test his system.

Do you sell Word Juggler templates? I'm hoping you can help us out. We have an Apple /// computer for which we have the Word Juggler program. Our computer started to print out a bunch of jibberish one day and was definitely not working. We sent it out to be repaired. The place we sent it to could not fix it and so we sent it to another place, and another, until one repair place suggested we send it to Portland to be repaired. We did, and when they plugged it in up in Portland, it worked. So they sent it back to us.

In the process of sending it back and forth and to Portland, we have lost our template for the keyboard that tells us which buttons to push to get it to print, change margins, etc. It has been so long since we have used it cannot remember all of the functions that each number will do.

Is it possible to obtain a new Word Juggler template or a copy of the template? We are hesitant to spend much to get this as we are not even sure the computer is functioning properly.
- Marge Boutell, Springfield, OR

Doc says... We sell the Word Juggler program for \$135 plus \$3.50 s/h. Unfortunately, the Word Juggler template is not available separately.

If you doubt that your computer is working properly, you may want to have it tested by *ON THREE*. Our service department offers complete Apple /// computer system testing and disk drive cleaning. We feature a 48 hour turnaround on most repairs. All work is warranted for 90 days. The minimum cost is \$50 plus return shipping. You may wish to call the service department and make an appointment. The number is (804)644-3514.

Does the Graphics Manager work with the Laser 128? I read your ad in *Nibble* magazine about the Graphics Manager. Will it work with the Laser 128 computer? If it does work with the Laser 128, will it work with a ProWriter? - Dr. Gordon R. Vincent, Newark, NJ

Doc says... The Graphics Manager will work on the Laser 128 computer. It will not be able to use the Epson APL interface card that comes with the Laser 128. In order to print, you must use any of the interface cards listed in our *Nibble* advertisement.

The Graphics Manager will allow you to load and print graphic files from Print Shop, NewsRoom, Minipics and other Apple II graphics disks. You can also combine and vary the space between graphics and rotate and invert the graphics. The product comes with a full 90 day warranty to registered owners. Thanks for your inquiry.

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ON THREE. The Apple /// Experts!

The Beginning ///

by Richard and Lavona Rann

Entering BASIC programs

This month we return to the topic of Business BASIC for beginners. We hope that you have had some practice with BASIC. At the very least, we hope that you have typed in a few of the interesting programs found in *ON THREE*, and that you are now building a library of useful programs. If you have, you are sharing in the fun of exploring some of the possibilities that your Apple /// provides. This month we will present a new way of entering programs into BASIC, and a few ways of making life easier in BASIC.

In the last column on basic we learned to type in a program by opening Business BASIC, entering the program directly into BASIC, and running it with the RUN command. If we made a mistake typing we back spaced using the left arrow key and typed over the mistake. The cursor in BASIC is a solid, flashing square that replaces what ever is under the cursor with what is being typed. This *replacement mode* cursor allows a line, word, or letter to be retyped using the left and right arrow key to position the cursor. If we wished to change an entire line we just typed it again starting with the line number; when we ran the program the new line would replace the earlier line with the same number. These two methods are all we need to correct BASIC programs, but it can become tedious to typing entire lines when you only have to change one letter. To help solve this problem, let's discuss other ways of writing or entering a BASIC program.

The first help is for when you are using

BASIC to enter a program. If you mess up a line, use the CONTROL X key combination to cancel the program line the cursor is on. It is like backspacing over every character in a line with two keystrokes. Just press the X key while holding down the key marked CONTROL. This CONTROL-X series of strokes displays a backslash (\), and returns the cursor to the beginning of the next screen line. Now the line you type will replace the line the cursor was on before the hitting the CONTROL-X combination. The two lines will remain

If you have tried the up and down arrows already, you know they do not work in BASIC quite the way one would expect.

on the screen, but the one followed by the CONTROL-X will not be stored in memory.

Even with the way we have mention to change a BASIC program there are times when you will want to move the cursor back up through the program to make changes. If you have tried the up and down arrows already, you know they do not work in Business BASIC quite the way one would expect. What then if there is an error several lines back? Of course you can re-enter the line (including its line number). If the line is complex, you certainly do not want to retype the entire line.

Business BASIC does provide a way to

enable the up and down arrow keys to move the cursor and to some extent edit your entries. It is not the easiest thing in the world, but you should at least be aware of the possibilities before looking at alternatives. Start by using the left arrow to move the cursor to the left side of the page and then press ESCAPE. This changes the clear block cursor to one that has a "+" in its center. Now you are in "Cursor-Move mode". The up and down arrows will allow one to select the line to be changed. Once the cursor is on the left-hand most character of the line where the changes is to be made, hit ESCAPE once more to change the cursor back to its replace mode. Now the left and right arrows can be used to position the cursor over the place that needs to be changed. Since the line you need to correct can only really be corrected by the /// getting the full line re-entered, this cursor move actually *picks up* the parts that you don't want to re-type. Any part that you done move the cursor over, or retype will be lost.

This is one the most unfriendly processes in Business BASIC. Those who have mastered it can make fixes quickly. Most people, including us, believe that it isn't worth getting used to. We will stick with re-entering lines when there are a few changes, and moving to a text editor or word processor when entering a new program or making major changes.

Warning: The cursor move mode appears simple as the changes are made on the screen, but many times the

changes are not made in memory at the same time. While the character changes on the screen it has not always changed in the program code. It is safest whenever using the cursor move mode to LIST after making each change to see if they were actually entered into the program code. This type of problem can be devastating if not caught when it happens.

Experience dictates that the best way to work ... is to proof each line while the cursor is still on it.

pens. For the most part, the cursor move mode should be used sparingly and with the greatest caution.

Experience dictates that the best way to work in BASIC, without using other programs, is to proof each line while the cursor is still on it and while making changes is relatively easy. Fortunately there is an easier and better way, to enter a program for BASIC - a text editor.

A better way

In this case the text editor can be a true text editor like the Pascal Text editor which is part of the Apple /// Pascal system or it can be a word processor like Word Juggler or AppleWriter. The only criteria Business BASIC has is that the word processor be able to store the program on disk in text format. After the program is edited it can be brought back into the Business BASIC system using the EXEC command. EXEC is short for *execute* a command we will discuss shortly.

The one difficulty with this method is the program cannot be written in the interactive Business BASIC mode. It has to be written in the editor and then

transferred to BASIC to be tested. Word processors will not read the BASIC files. There is a file type mismatch going from BASIC to the word processor, but not the other way. The solution is to write the program in the word processor then transfer it to BASIC to be tested. Later, we will demonstrate how to store an existing BASIC program to a text file for editing. For now, we will discuss ways of entering new programs.

Using a word processor to edit a BASIC program has a number of advantages. First of all it is the easiest approach for most people. Writers and users of word processing program demand they are made user friendly (at least more so than the cursor move mode of BB). Beyond that there are other advantages like complete use of the arrow keys for cursor movement, tabs to help place elements, and power to delete and change single characters, words, and even whole lines. The *Find* command is an additional benefit because it can be used to follow the logic through the codes by finding the line numbers or file names after GOTO

Using a word processor to edit a BASIC program has a number of advantages.

statements. It is the user friendliness that makes writing BASIC in a word processor easier even with the need to move it back and forth to the word processor. Remember, if you choose this method, a copy of the file must remain as a word processor file, and all changes must be made in the word processing file. The editor to BASIC is a one way street, i.e., a program change in Business BASIC cannot be brought back into the editor (without

some gymnastics).

One other feature of a word processor that might prove helpful is the spelling checker, especially one that has the ability to create dictionaries. Create a BASIC dictionary with all the reserved words so the speller will recognize all the shortened word commands. Beyond this field names can be put in dictionaries especially if the programs are large. This will help you with catching typos and spelling errors which together are one of the biggest banes of programmers.

Specifics about word and text processors

Using a word processor like Word Juggler for BASIC is simple. Only a few things have to be kept in mind. First and foremost is to keep to the exact BASIC pattern. If you are copying a program from a magazine like *ON THREE*, reproduce it exactly as it is printed with the right spaces, punctuation, and capitals. Type the line carefully as you see it starting with the line number including everything that is printed in that line. Remember that there is a RETURN after each line of code in BASIC. Second, in Word Juggler the basic program will have to be stored as text (or an ASCII file). To do this in Word Juggler, place an "*" in front of the pathname. An example is STORE *.d2/trees.

Three E-Z Pieces - The word processor section of /// E-Z Pieces works just as easily for writing BASIC programs. The major difference is the way to get ASCII (text) files onto disk. In /// E-Z Pieces there is an option under the print menu for printing ASCII files to disk. First a printer must be created as a *disk printer*. This is done through the *Other Activities* command on the Main Menu. Select *Specify Information About Your Printer(s)*, and give

the printer created a distinctive name like ASCII; then select *Print To Disk Or Other Apple*. After the text is typed in and proofed, use OPEN-APPLE P to get to the print menu. The destination prompt will come up asking where the file should be printed. The last option is *Print to Disk as ASCII file*.

AppleWriter /// will not require any special handling, if you do not imbed any control sequence commands for formatting. Just save as usual.

The PASCAL editor doesn't take any special processing either. Remember that a textfile readable by Business BASIC file is equivalent to a PASCAL asciifile. If you aren't certain what type of file PASCAL will store your output to, type
SEAT Control-C.

This translates as set environment asciifile true. Even if the file entered was initially a pascal text file, it will be stored as an asciifile which Business BASIC can read.

All of these methods work equally well for original programs as well as programs copied from other sources. It can be very handy to save small programs as text files, and later combine them into larger programs. To copy programs from *ON THREE* just type in the code as you see it, store it as a text file, and then use the EXEC command.

Using the EXEC command

The EXEC command is a process of bringing text versions of programs into BASIC to be run. The one criteria for the EXEC command is that the file be a TEXT file. If it is not the system will give a *Type Mismatch Error* message. To use the EXEC command a pathname must be given. The command then would be:

```
)EXEC /work/trees
```

The “)” is the basic prompt character that tells you a new line may be entered, *you do not type it*. EXEC is the command in basic. ‘/’ indicates to SOS that a pathname follows. In this case, *work* is the name of a diskette in drive two, and *trees* is the name of a file on that diskette. We could have said “EXEC.d2/trees” as you will remember from our prior discussion of pathnames.

Remember our settler from our first discussion of BASIC? We helped him build his cabin using a program called *Trees*. The EXEC command will query each device until it finds a root directory named *work* (or .d2 if we used the alternative), and in that directory a file named *trees*. If *trees* is a text file it will be brought into Business BASIC so that it will work just as if you had

The PASCAL editor doesn't take any special processing.

entered it. It can be saved as a BB file with the normal basic save command.

Try a few programs and see how you like it. Here is a simple print program to get started with. It can be typed into a word processor and brought into BASIC using the EXEC command. Give it a try.

```
100 Home
200 PRINT"Welcome to BASIC"
300 PRINT
400 PRINT"You made it!"
500 PRINT
600 PRINT
700PRINT"WELCOME"
800 PRINT
900 PRINT"save me now"
```

You can save this as a Business BASIC program by using the *Save* command and an appropriate pathname complete with filename.

Let's now change it and save it out as a new text file. Assuming you have it in memory from above, enter:

```
)1000 print"Back again"
```

Remember the) is always put there by BASIC, not you. Now enter:

```
)OPEN #1, .D2/BBtext
)OUTPUT #1: LIST: CLOSE #1
)
```

This little program can always be used to save whatever Business BASIC

Armed with these two lines of BASIC code, EXEC and your word/text processor, one can enter longer programs and do it more simply.

program you have in memory to disk as an editable text file for your word processor or the PASCAL editor. You can change the “.d2/BBtext” to a pathname and filename of your choice. Try it and then go back to your word/text processor and read it in.

Armed with these two lines of BASIC code, EXEC and your word/text processor, one can enter longer programs and do it more simply. We suggest trying a few and share them with us and with *ON THREE*. With the ever decreasing number of people in the /// community, it takes all of us to share what we know and learn, to help us improve. We hope that many of you send in programs that get printed for others to learn from and enjoy.

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ON THREE is...

Introducing the index that every Apple /// user needs! **ThreeWorks**

ON THREE author Dave Ottalini has put together the index of a lifetime for Apple /// users.

Three double sided disks full of bibliographies of all Apple /// computer articles, Apple /// bulletin board systems, Apple /// clubs, organizations and groups. A listing of all known device drivers, Apple /// consultants and all vendors currently supporting the Apple /// and those who have supported the /// in the past. Programming tips for BASIC users and a listing of all Business BASIC keywords are given, too. More listings are included on these disks. Purchasers must have /// E-Z Pieces for this great work!

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One, Two, /// Forum



Graphics printing

I have a problem with my computer programs and I think you could help me. The problem with my programming is that I made a few programs where you make your own graphics, but I don't know how to print them on the printer. If you could write me back and tell me about printing the graphics, I would really appreciate.

David Kaminski
Flagstaff, AZ

You did not state which computer you are programming on nor which computer language you are using. This is vital in order for ON THREE to assist you with this question. However, we will try to assist you the best way we can.

Creating your own programs can be exciting and very rewarding but it can also be a headache. If you are using an Apple ///, we suggest that you look through the back issues of this magazine. There are numerous articles which explain graphics printing in great detail. The January 1987 issue has a listing of articles appearing in back issues. Back issues can be purchased for \$5 each.

You may wish to contact a user group in your area or one of the hot line consultants listed in the back of the magazine. A computer programming class may be in order, too.

Lastly, if you need a program to suit your graphics needs, you may consider purchasing Draw ON ///, which allows you to create your own graphics and print them out.

Bar-coding?

I am a director of a library/curriculum resource center which houses thousands of pieces of instructional material and services a five-district area including over 50 schools.

We are presently using an Apple /// with a Corvus hard disk drive and PFS File to computerize our catalog.

Utilizing this same program and computer system, do you

know of a bar coding system that can be incorporated? I enjoy reading your magazine and was curious to know if you are aware of any equipment available that we may utilize.

Doris Welch,
Olathe, KS

ON THREE staff does not know of anyone using a bar code reader to use do data entry of an Apple /// computer at this time. Perhaps one of the ON THREE readers knows of such a setup and could enlighten us.

Which printer?

I am interested in getting a printer for my Apple ///. Currently, the Apple /// is only collecting dust at home. It is not being used for business and only rarely do the children use it. I do not want an expensive printer but hopefully the computer could be used more if we had a printer.

I am interested in a program for the printer, like PrintShop and perhaps some games for the children.

Arleen Mataga,
Lodi, CA

Almost any printer will work on the Apple /// computer. We recommend any of Epson's RX, FX or MX series, or Panasonic's Kx series. All of these printers are in the \$150 to \$400 price range depending on the model, so it is really up to you.

If you purchase a parallel printer, you will need a UPIC card to pit in your computer so it will print. If you purchase a serial printer, you can use the serial port from the back of your computer to print. We don't sell printers but we do sell the UPIC cards and serial interface cables that you may need.

We also sell a few Apple /// games, such as Mr. Sandman (similar to PacMan) for \$19.95 plus \$2 s/h, and Crossword Scrambler for \$9.95 plus \$3 s/h

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ONLY \$899 - you save nearly \$250!
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From the ravages of dust, dirt and static electricity which are the most common causes of computer failure, with our custom made heavy vinyl dust covers that come in two styles. One is for the Apple /// computer with monitor and is priced at just \$11.95. The second is designed for the Apple /// with monitor and profile and is priced at only \$12.95

We also have a cover for the Apple IIGS priced at \$9.95.

Please add \$2 per cover for s/h.



Why the /// is for Me

A year ago our family bought an Apple /// from an insurance company in Pennsylvania. I was 12 years old and already had a Commodore 64 home computer. I never imagined how different the Apple would be from my Commodore. When we brought the computer home to North Carolina and hooked it up, I was shocked to find out that it would only operate with a disk in the built-in drive. I was concerned that it would be too complicated for me to use, but I soon learned differently.

I started looking into the AppleWriter manuals that came with our ///. I soon was writing school reports and letters with it. I showed my father what AppleWriter could do, and he started using it in his work as a teacher and minister. Before long, my whole family had found use for it.

I started on a bigger challenge with VisiCalc. I went through the manual during the summer and soon understood its basic functions. I showed my father how he could use it for averaging grades and doing the church budget.

Next, I set out to learn the Apple Speller program, which I now use to correct my terrible spelling.

The Apple /// is very useful to me and my family, but most of all, it's a challenge that I love. That's why the ///'s for me!

**-Jason Roth,
Rocky Mount, N.C.**

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Moving?

ON THREE Magazine will reach your new destination at the same time you do, only if you notify us of your new address at least sixty days in advance. The U.S. Post Office *will not forward* bulk mail. Sorry, we can no longer provide free replacement issues of ON THREE, so if you're moving, please fill in the form below and mail it to ON THREE. You can then be assured of uninterrupted service! Thanks for your cooperation.

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De Classifieds

Want to Buy: Real Estate property management program for the Apple ///. Looking for Property Management/Real Estate Analysis by Century Software or similar program. Gary Sullivan (815) 229-6073

For Sale: Apple ///, 256K with monitor. Extra external disk drive, printer card. \$600 plus shipping. Larry B. Kamins (619) 340-4543 Days. (619) 568-6520 Evenings

For Sale: Apple Graphics Tablet Model #A2M0029, with stylus, card and manual, in original carton, new condition, used very little. Best offer. Call Coville Woodburn (603)-863-5590.

For Sale: Nearly new Apple /// computer with clock. 256K. Second disk drive, monitor ///, Epson FX80 printer, VisiCalc, Business Basic, QuickFile, AppleWriter ///, AppleSpeller, Accounts Receivable, System Utilities, blank disks, two flip-n-files, tutorial books and disks. \$1800 complete. T. Upton (805) 482-1781, 0800-2200PST.

Classified Rates: \$1 per word, \$25 minimum. Copy must arrive 60 days prior to cover date, e.g., January 1 for March issue. **Subscriber Discount:** 50 cents per word. \$12.50 minimum. Send ad copy with your payment to:

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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 and 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
Vincent 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	10-10 p.m.	Pacific	GE,PA,MU,WP,DB,SO
			M-F	7-9 p.m.		
			Sat	noon-6		
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

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
Canada	Apple ///rs Unanimous	732 Timor Court	San Jose	95127	
	Apple B.C. Computer Society				
	Apple /// SIG	P.O. Box 80569	Burbaby, BC	V5H3X9	
Colorado	The Astronic Club (Ontario)	1453 Highbush Trail	Pickering, Ont.	L1V1N6	
Connecticut	Colorado Apple /// User Group	P.O. Box 3155	Englewood	80112	
Florida	Apple /// Society of South Conn.	34 Burr School Road	Westport	06880	(203) 226-4198
Georgia	Sarasota Apple /// User Group				
	c/o Computer Center	909 S. Tamiami Trail	Nokomis	33555	(813) 484-0421
Illinois	Atlanta /// Society	385 Saddle Lake Road	Roswell	30076	(404) 992-3130
Kansas	TAU c/o Lavona Rann	1113 Wheaton Oaks Drive	Wheaton	60187	(312) 665-6319
	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				
Minnesota	Washington Apple Pi	8227 Woodmont Ave. #201	Bethesda	20814	(301) 654-8060
	Minnesota Apple Corps User Group	P.O. Box 796	Hopkins	55343	
New Jersey	North Jersey Apple /// Users Group				
No. Carolina	c/o Roger T. Richardson	P.O. Box 251	Allamuchy	07820	(201) 852-7710
	North Carolina Apple /// User Group	2609 North Duke St. #103	Durham	27704	
	Cincinnati Apple /// User Group	5242 Horizonvue Drive	Cincinnati	45239	(513) 542-7146
Ohio	Apple Dayton - Apple /// SIG	P.O. Box 1666	Fairborn	45324	(513) 879-5895
	Oregon Apple /// Users	1001 S. W. 5th Ave. #2000	Portland	97204	(503) 645-6789
Oregon	Apple /// Users Belgium/Netherlands				
Overseas	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				
Texas	Belgium/Netherlands				
	c/o J. Woreshofer	Ganzerikweerd 22			
	Le Club Apple	NI-6229 TG Maastricht	Netherlands	(043) 611704	
		43 Avenue,			
		de la Grande-Armee	Paris, France	75116	
Virginia	Apple /// User Group	P.O. Box 42	Duffy A.C.T.	2611	
	c/o Canberra Accounting Services		Australia		
	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
	Charlottesville Apple /// User Group	216 Turkey Ridge Road	Charlottesville	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.

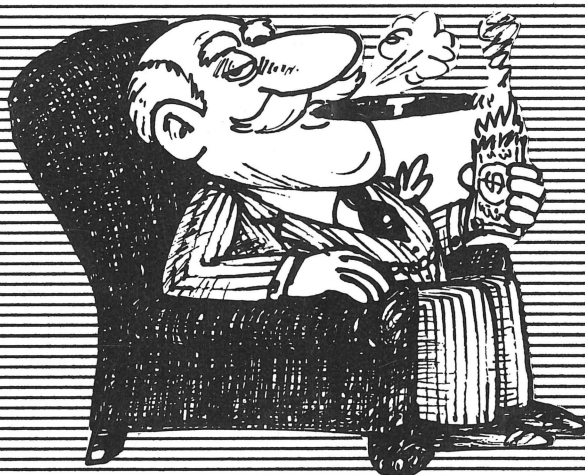
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