

Volume 13, Number 9

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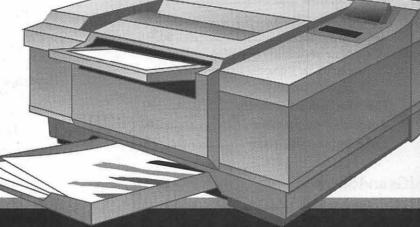
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washington pple pi

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What's happening...

A Tale of Two Clubs

This editorial has been written and rewritten countless times, and almost deleted twice. What remains is the distillation to what thoughts remain at an unspeakable hour in the morning, together with a heartfelt prayer that out of all this commotion, something useful takes place. If it is going to happen, now is the time.

The Washington Apple Pi has grown, matured, changed—pick your own verb—a lot in the years since it was formed. As this evolution has taken place, it has brought with it opportunities. Some of these have been handled well others, not so well.

One is driven to view these as neither the best nor the worst of times for WAP, but they are certainly times of change. This volunteer organization faces challenges critical to its future. How it meets those challenges will be a direct result of your response—not the officers nor the board, except as these reflect decisions made by the more than 4,500 dues-paying (and occasionally voting) people out there who have supported the club this year.

WAP has experienced an election characterized by a good deal of dissension. According to the committee established to conduct it. out of the total number of qualified voters, only 193 actually voted. Undeniably, there were problems. The first set of election documents was invalid and a second set was prepared and sent. A number of

members either didn't receive their ballots or received them too late for their votes to be counted.

A public meeting will be held at the WAP office on September 21 to consider what to do now. The Challenge Committee has been appointed to consider challenges to the results of the recent election, and it may have its hands full (as this issue went to press, three of the four challenges received were filed by successful candidates, which should tell you something about the state of affairs).

What does all this mean for the members of WAP?

Essentially, it seems to us that it is time for each of us to give some serious consideration to what it is we want out of a club like this, and to the other side of the coin: what it is that we want to put into it. Because if we end up putting little or nothing into it, it makes it hard to complain that we are not getting much out of it either.

More specifically, it seems to us (and this is perhaps easier for us to say since this is our last editorial and our last issue) that each member ought to think hard about what he or she thinks the future of WAP should be, and then take appropriate steps to see that that future comes about.

Certainly it means voting in the next election, whether that happens this year or next, but it means more than just voting. Examine the campaign statements, but go a bit behind them: a statement that reads

well may reflect the ability of its author to write good campaign statements, or it may reveal an underlying ability to actually make good things happen, rather than claim to do so. But above all—take the opportunity to involve yourself and vote.

Some may—some undoubtedly will-claim that this extended civics discussion is an intrusion into the electoral process. In a sense, we suppose, it is. It is certainly not that we espouse or endorse any particular candidates on this page. It should be clear that we don't and make no effort to do so. Our most profound wish is that the officers and directors of this club be the best and most effective people that could be found.

Their job is difficult and it is vital to the future of the club. The fact that the recently elected President of WAP (if the recent election results stand, anyway) feels compelled to step down from office sends a loud signal that all is not well, and that if we are going to do anything about it, now is the time to get things together, and for the club to resume its prominent position as one of the most respected and prestigious of its kind in the country.

Why in the world should we settle for less?

Journal help

Another thing that some may do is to offer to help with the production of the Journal. The new editor, who has our best wishes, will need to put together a new staff of helpers: Apple II Editor, Graphics Editor, Copy Editor, Calendar Editor—what have you. If you can help, call the office to let them know of your interest. The Pi will be better for it, and so will you.

'Bye...

fmp

What's new

Office News

by Nancy Pochepko

WE NEED YOU!

I have a request from Emma Ditman—she's the wonderful lady who has been re-organizing the WAP's newsletter collection.....HELP!?!? She has done quite a bit in the way of sorting through the newsletters we receive from other Users Groups and she has created a database of information relating to each issue, but she needs your help! We need some extra hands to help sort and collate the issues into binders and some help entering the information into the database. This is an ongoing task, but even if you can only give an hour or two, we could really use some extra hands.

WAP SERVICES

Are you a member of WAP sitting there thinking it would be nice if WAP offered a particular service? Well, I'd like to hear about it! I'd also like your help to get new services off the ground. If you think you have somethingto offer other members of WAP, please give me a call at 301/654-8060.

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Peachpit Press has two new books on System 7: The Little System 7 Book and The Macintosh Font Book, Second Edition. The Little System 7 Book covers virtual memory, desk accessories, the new Finder and Control Panels, TrueType, tricks for multitasking, customizing the desktop, networking, and more. It includes a chapter on "neat tricks" as well as the popular "Oh, No! Troubleshooting!". Retail \$12.95.

The Macintosh Font Book, Second Edition is the updated version of the award-winning book which now includes up-to-theminute advice on TrueType fonts and System 7. The book covers everything from font fundamentals to resolving ID conflicts. Other topics include hands-on solutions for managing a font collection, tips on printing options and working with service bureaus, and techniques for creating and enhancing typefaces. It also provides over 250 typeface samples from major vendors. Retail \$23.95

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ATLANTIS

The ATLANTIS Bulletin Board is offering half-price memberships (\$9) to WAP members through the end of 1991. To reach the board, dial 301-621-4257 from Washington. From the Baltimore area, dial 740-2400. This board is based in Columbia, MD and is run by Spectrum Research Corporation.

THE MUSIC SOCIETY

UK Network is a Hypercard 2.0 stack containing information about the background of the English music scene. Trace England's musical history from 1960 to 1990. Each entry contains detailed biographical and genealogical information, plus discography and

(Please turn to page 10)

So Long, and Thanks for All the Fish

by Eric Rall



User Groups

Apple Computer says that a User Group is "an affiliation of Apple users dedicated to enhancing the use of their Apple systems by sharing information, support and insights with each other." I've always felt a User Group had to be all that and more. It has to be fun. If somewhere along the way we lose the ability to enjoy our computers and our company, then something is seriously amiss.

Washington Apple Pi is a User Group—or at least at one time that was the idea. I joined eight years ago, because it was a User Group. Had I been interested in backbiting politics, I would have joined a political club or debating society.

Three years ago, things changed radically at Washington Apple Pi. Political groups formed and the club was nearly torn apart. The wounds from that year have never been allowed to heal.

With every war there are losers. Losers can easily become bitter and disruptive. A small group within WAP has devoted an incredible amount of energy towards diverting the attentions of the club's leadership from our basic purposes and functions. As I reflect on my year as president, I am horrified to think about how much of our time has been diverted to deal with problems and roadblocks created by a tiny group of malcontents.

Elections

The last election was hardly the smoothest-run operation of all

time. (Hindsight is always 20-20.) In retrospect I believe the problems were probably inevitable..

Just prior to the election, a special board of directors meeting was called by Tom Vier and Lee Raesly. I was home with my wife anxiously awaiting the birth of our daughter, so Manny De Vera chaired this meeting. The purpose of the meeting was to impose even more rules and requirements on the election committee and the election. Essentially, these rules and the changes, initiated by Lee and Tom, prohibited anyone from overseeing the election committee. Effective independent checks for accuracy or timeliness were ruthlessly excised.

It showed: the first ballot misspelled and truncated candidates' names; and one name was omitted altogether. The second ballot was mistakenly sent out by the election committee as bulk mail. The result: a low turnout and a lot of unhappy members.

At the August general meeting a number of leaflets were circulated by Lee Raesly, Tom Vier and Manny De Vera. These leaflets asserted that "The Future of the Pi is At Stake!"

The handouts made a number of serious allegations and were rich with innuendo. They charge a number of volunteers with a lack of impartiality, and flatly state that "The clique used the fact that the name of one candidate for Directorat-Large was left off the ballot as an excuse to invalidate the votes for President — which was not affected by the mistake."

I considered these charges so potentially divisive to the club that I moved that the board ask me to resign as President at the Board of Directors meeting later that day. The three who circulated the leaflet objected and, along with me, abstained from voting. The remaining members of the board rejected my motion.

The TCS

For the past year, I have found myself the subject of numerous attacks on the club's bulletin board. Lee Raesly, Tom Vier and Richard O'Connor have regularly weighed in with allegations and negative assertions. After the August 27 meetings, things became so unpleasant that the TCS temporarily closed down the board in which all the mud is usually slung.

Personal Interests

I do not sell computers, hard drives, T-Shirts, Zip Chips or anything else to our members. Washington Apple Pi pays me no salary. In eight years as a volunteer, I have spent thousands of dollars in gas, phone calls, postage, etc and have asked for about \$10 reimbursement. I have been a volunteer because I believed that computers and user groups should be fun.

When It Stops Being Fun

Almost all of my volunteer time for the past several months has been devoted to dealing with the political maneuvers of a few, leaving little or no time to address the real needs of

Continued from page 9

the membership. My soon to be ten-year-old son spends most of our time together asking me about the politics of WAP. I barely have time to watch my new daughter learn to reach for her toys. I've watched critical volunteers leave in frustration and anger. WAP is no longer any fun for me; rather, it has become a exasperating exercise in futility.

September 1, 1991

It is obvious that current circumstances make it impossible for me to benefit the membership of Washington Apple Pi. With this realization in mind, I announce that effective September 1, 1991, I will step down as President of Washington Apple Pi, Ltd.

Continued from page 8

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Columbia Apple Slice

by Tom Cook

At our July 11th meeting, Andy Wakshul gave a very informative demonstration of the word processing module from AppleWorks GS. AppleWorks GS, version 1.1, is a flexible and powerful program for those with the necessary hardware. It requires an Apple GS with at least 1.5 megabytes of memory and a hard disk or two 3.5-inch disk drives. This version fixes many of the problems found in the earlier version of the program. Version 1.1 also improves all aspects of the operation of AppleWorks GS, including faster launch time, greater type ahead capabilities, and better printer performance.

The AppleWorks GS word processor offers most of the features you would expect in a word processing program. It has left, right, and decimal tabs. It offers left, centered, right, and full justification. The word processor lets you establish a different format (ruler) for each paragraph and this format can be copied to other paragraphs in the document. The word processor supports multi-line headers and footers. It also has a built-in thesaurus and spelling checker. Andy demonstrated each of these features for us.

Andy reported that the word processor's greatest strength is its "WYSIWYG" display. The AppleWorks GS screen shows every font, font size, and attribute such as boldface, underlining, italic, and superscripted characters, as it will print. You can use multiple type styles and sizes in a single paragraph.

AppleWorks GS also includes a Data Base Module, a Spreadsheet Module, a Graphics Module, a Page Layout Module, and a Telecommunications Module. These may be looked at later if there is enough interest.

EdSIG

by Phil Shapiro

The July 25 EdSIG meeting was hosted by Michael Karpman at his Victorian-style home in sunny Mount Rainier, Maryland. Scheduled for the meeting was an examination of the popular Timeout Ultramacros addition to AppleWorks.

With EdSIG stalwarts Lorin Evans and Bill Wydro in attendance, Michael proceeded to show us the finer points of writing and compiling macros. As a group activity we thought up some macrosusceptible chores to perform, and pooled our minds to create appropriate sorts of macros.

After playing around with Timeout Ultramacros, we took at look at the new Apple IIGS shareware game, Columns 2.0, a nifty variation of Tetris. Whenever the adults at the meeting had problems playing the game, Michael's kids stepped forward to show us how to play the game. (These precocious gamesters had never seen the game before.) To get a copy of Columns 2.0, you can send \$10 (plus \$1 postage) to: Kendrick Mock, 2625 Kiowa Court, Walnut Creek, CA 94598.

We followed this activity with a short look at a public domain game titled Estimation Soccer, which helps first, second, and third graders develop estimation skills. This game is fun to play with other kids/adults, as long as not too much emphasis is placed on winning or losing. Unlike Columns 2.0, Estimation Soccer runs on any 128K Apple II.

Next we took a look at Stack Central and HyperBole, two interesting disk-magazines published by Resource Central. Both magazines use Roger Wagner's HyperStudio program as a frontend. The colored graphic screens from these magazines were really impressive, especially when viewed on Michael's 14 inch diagonal Magnavox RGB monitor. The content of the magazines also proved interesting, although it should be noted that HyperBole, a literary-style magazine, includes material that's not entirely suitable for young children. Resource Central's address is: P.O. Box 11250, Overland Park, KS 66207.

We ended up the meeting looking at a LogoWriter program Michael has made to help children learn the concept of exponents. This program asks for three single-digit numbers to multiply, and then creates a graphical tree showing the concept of multiplication. Even though the display was shown on the single hi-res screen, the output looked really neat.

The next EdSIG meeting will take place at the Washington Apple Pi office, at the regular time of 7:30 PM, on Thursday, August 22. If there's continued interest in telecommunications, we might set up a modem at the meeting.

For further information about EdSIG, or to get your name listed on the EdSIG phone directory, call Phil Shapiro at (202) 686-5465 (home/office).

Apple IIGS SIG

by Paul Tarantino

Our July meeting definitely set some kind of a record— not for attendance (although we had a pretty good crowd and a couple of new faces), but for the quantity of hardware on display. Ed Moser had filled half of a very large NIH conference table with a sixteentrack sound mixer, two synthesizer keyboards, a sound sampler, a tone generator, a stereo amplifier, two serious speakers and several furlongs of cable and connectors. I guess I should mention the Apple

Exploring Typefaces—7

by Frank Potter

Berthold fonts

We have been vaguely promising and/ or threatening to unveil some of the Berthold typefaces that Adobe has acquired. Here they are—or at least a bunch of them.

We are insufficiently knowledgeable about these to do much more than point them out to you as examples of typefaces that are fairly well known in Europe, but not yet on this side of the Atlantic. This deficiency (as is the case of our multiplicity of deficiencies, we hasten to add) we hope to remedy, but for now, this is it.

I can provide you with the stock numbers for these fonts by Adobe: I haven't a clue what they cost, either list or on the street.

Berthold Imago (#217)

This is considered to be a medium-width sans serif typeface. It will be interesting to compare it with Akzidenz Grotesk (Grotesque is often used as a synonym for Gothic in the Old Country, or at least so I have been semireliably informed). The two are quite similar, although Imago is considerably more blocky and less rounded, as a close examination will quickly reveal.

Akzidenz Grotesk (#96)

See above for a not very thorough discussion of this font.

Berthold Bodoni Antiqua (#224)

Yet another Bodoni font, this one with what some consider to be a faintly European flavor (perhaps flavour would be more appropriate). At least that's what I have heard and frankly it didn't make a scrap of sense to me at the time. If it comes to that, it still doesn't.

Clearly Adobe considers it sufficiently distinctive to warrant separate treatment, and who am I to argue with success?

City (#222)

Here is a considerably different typeface for you to consider. It is an example of what is known as a "Slab Serif" typeface, which generally refers to thick or "slab" serifs, often of the same or nearly the same thickness as the main stem of the letters.

City falls into a further subcategory, known as "Egyptian" type—where the serifs are square or unbracketed. Egyptian typefaces are characteristic of Victorian print—they were used for advertising copy and they are indeed difficult to ignore.

While this is a personal reaction entirely, I must say that I find this typeface peculiarly attractive and have even used it as body type where I wanted people to notice that I was using an unusual typeface. It succeeded.

Walbaum (#81, 198 (Small Caps))

Justus Erich Walbaum was, as you might have suspected, a Continental type designer. The typeface presented here is characterized by a high contrast between the vertical and horizontal strokes; all the serifs are horizontal, and the vertical strokes are slanted only slightly or not at all. This is probably not a typeface that lends itself well to printing at the low end of the printer spectrum: the light serifs are likely to be lost at print densities of 300 dpi. You wouldn't even think of trying to print them on an ImageWriter, and I would guess, without having attempted it, that an inkjet printer would not be kind to it either.

Typeface Recognition

There are a bewildering number of typefaces out there—some of which we have described, others of which we will attempt to describe in future issues of the Journal, and some of which we may never see. In general, it is unlikely that many of our readers will ever be placed into a position where they are forced to identify one of these.

If, however, you find yourself in the position of an involuntary expert (it has already happened to me, and you would be hard pressed to find anyone less expert than I), what are the things that you need to look for? To put it another way, where do you do, once you have managed to identify a selection of text as "serif" or "non-serif"?

Serif typefaces may be further broken into different categories. I have run across a book on the subject and can recommend it to any of you who care to dig more deeply into this arcane but curiously satisfying subject. Rookledge's International Type Finder, by Christopher Perfect and Gordon Rookledge, Moyer Bell Limited, 1991 will reveal a great deal. You are unlikely to find it at Crown Books, but Reiter's on K Street in Washington sold it to me, and I didn't get the last copy.

It suggests that if you are hot on the track of an elusive typeface you examine these letters in this order (the order is important, since the variations are likely to be considerable at the beginning and almost undetectable at the end):

Upper case letters: Q, &, J, G, W, A, K, C, R, M, E, P, S, T, F, B, N, O, U, X, Y, D, H, Z, L, V, I

Lower case letters:

g, a, j, y, k, t, f, r, q, w, e, b, s, c, d, p, m, u, x, o, v, h, n, i, l, z.

There. Now you know everything I do.

Berthold Bodoni Antiqua

ABCDEFGHIJKLMNO PQRSTUVWXYZabcdef ghijklmnopqrstuvwxyz1 234567890 (48)

ABCDEFabcdef-BBI Regular
ABCDEFabcdef-BBI Italic
ABCDEFabcdef-BBI Light
ABCDEFabcdef-BBI Light Italic
ABCDEFabcdef-BBI Medium
ABCDEFabcdef-BBI Medium Italic
ABCDEFabcdef-BBI Bold
ABCDEFabcdef-BBI Bold Italic

There was nothing so VERY remarkable in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT-POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before see a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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Berthold Imago

ABCDEFGHIJKLMNOP QRSTUVWXYZabcdefg hijklmnopqrstuvwxyz12 34567890 (48)

ABCDEFabcdef—Berthold Imago Book

ABCDEFabcdef—Berthold Imago Book Italic

ABCDEFabcdef—Berthold Imago Light

ABCDEFabcdef—Berthold Imago Light Italic

ABCDEFabcdef-Berthold Imago Medium ABCDabcd-Berthold Imago Medium Italic ABCDabcd-Berthold Imago Extra Bold ABCDEabf-B Imago Extra Bold Italic

There was nothing so VERY remarkable in that: nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT-POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before see a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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Akzidenz Grotesk

ABCDEFGHIJKLMNO PQRSTUVWXYZabcd efghijklmnopqrstuvwxyz 123456789(48/50)

ABCDEFabcdef—Akzidenz Grotesk Light ABCDEFabcdef—Akzidenz Grotesk Roman ABCDEFabcdef—Akzidenz Grotesk Bold ABCDEFabcde—Akzidenz Grotesk Black

There was nothing so VERY remarkable in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAIST-COAT- POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before see a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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Berthold City

ABCDEFGHIJKLMNOPQR STUVWXYZabcdefghijkl mnopqrstuvwxyz123456 7890 (48 Medium)

ABCDEFabcdef—Berthold City Light
ABCDEFabcdef—Berthold City Light Italic
ABCDEFabcdef—Berthold City Medium
ABCDEFabcdef—Berthold City Medium Italic
ABCDEFabcdef—Berthold City Bold
ABCDEFabcdef—Berthold City Bold Italic

There was nothing so VERY remarkable in that, nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this. but at the time it all seemed quite natural), but when the Rabbit actually TOOK A WATCH OUT OF ITS WAIST-COAT-POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before see a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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ABCDEFGHIJKLMN OPQRSTUVWXYZab cdefghijklmnopqrstu vwxyz123456789 (48/50)

ABCDEFabcdef—Walbaum Italic
ABCDEFabcdef—Walbaum Bold
ABCDEFabcdef—Walbaum Bold Italic
ABCDEFabcdef—WItalic OS Figures
ABCDEFabcdef—WBold OS Figures
ABCDEFabcd—WBold Italic OS Figures

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. 10/10

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How to Use System 7

by John Norstad Edited by Lou Pastura

This is the second of two articles on System 7.0. The articles are still based on (OK, plagiarized from) materials developed by John Norstad at Northwestern University. If the name (Norstad, not Northwestern) sounds familiar, it is probably because Mr. Norstad is the author of the very popular and universally respected freeware anti-virus program, Disinfectant. This information was originally developed to help users and staff members at Northwestern upgrade to System 7.0. We are grateful to Mr. Norstad for his continuing contributions to the Macintosh community.

This document briefly describes the new features of Apple's System 7.0 for the Macintosh. We assume that you have already obtained and installed System 7.0 on your Mac. See the companion document "How to Install System 7.0" (published in the August WAP Journal) for details. We also assume that you are an experienced Mac user, not a beginner. This is not a tutorial with step-by-step cookbook instructions, but a quick summary of the new features.

Mac users who are thoroughly familiar with System 6 should find enough information in this document to learn and begin using all of the significant new features of System 7.0. This document is not, however, a complete book on System 7.0, and it is not intended to be a substitute for the Apple System 7.0 reference manuals. If you want the reference manuals, you must purchase the System 7.0 Personal

Upgrade Kit from a local dealer or a mail order outlet.

The two System 7.0 disks named "Before You Install System 7.0" and "Macintosh Networking Basics" contain very good guided tours of many of System 7.0's new features. We definitely recommend that you take these tours. Several books on System 7.0 are beginning to appear in the bookstores. You may wish to get one of these books as another alternative to buying an upgrade kit.

You can also find many articles about System 7.0 in the trade press. Back issues of MacWeek, MacWorld, and MacUser are available at the WAP office. The best way to learn the material in this document is to read it while sitting at a Mac on which System 7.0 has been installed. As you read about each new feature, experiment with it to learn how it works.

The first and largest part of this document describes the parts of System 7.0 that we can all begin using today (or very soon, at any rate.) These sections are organized in approximate order from most important to least important. We have included everything we could think of which is new or different in System 7.0, even little things like new command key shortcuts.

The second and much smaller part of this document (beginning with the section titled "Publish and Subscribe") contains some not quite random musings on the parts of System 7.0 that are currently only potential, not yet reality. We won't

be able to take advantage of these new parts of System 7.0 until Mac software developers design and implement new versions of their programs. We feel that this potential is the really important part of System 7.0. We've tried to give you a feeling for what might happen in the next year or two as this potential begins to be realized.

The System Folder.

The new System Folder organization was described in some detail in the "How to Install System 7.0" document. To summarize, there are five new subfolders of the System Folder:

Control Panels: Contains your control panels.

Extensions: Contains system extensions (INITs, printer drivers, etc.) Apple Menu Items: Contains the objects which appear in the Apple menu.

Preferences: Contains miscellaneous preference files.

Startup Items: Contains objects to be opened automatically at startup.

System 7.0 is "smart" when you drag an object onto the System Folder icon. Instead of simply placing the object inside the System Folder proper, System 7.0 will attempt to determine if the object belongs in one of the subfolders or in the System file. For example, if you drag a control panel onto the System Folder icon, the system will ask if you want to place it in the new Control Panels folder.

If you do not want an object to be placed in one of the new subfolders, do not drag it on top of the System Folder icon. Instead, open the System Folder and drag the object directly into the System Folder window.

The System File.

The System file was also described in some detail in "How to Install System 7.0." To summarize, the System file is a new kind of

object called a "suitcase." Suitcases are very similar to folders in that they contain objects and can be opened to display the contained objects in a new window.

The objects contained inside your System file suitcase are your installed fonts and sounds. You can double-click on these files to open them and display the contents. You install the fonts and sounds by dragging them onto the System Folder icon, onto the System file icon, or into the System file window. You remove them by dragging them out of the System file window.

An entire suitcase can be installed at once by dragging it onto the System Folder icon, onto the System file icon, or into the System file window. You must quit all open programs before installing or removing fonts or sounds. You do not, however, have to restart your Mac after making these changes. When you double-click on a font, a window appears which displays a sample of the font. When you double-click on a sound, the sound is played.

Desk Accessories.

System 7.0 has completely eliminated the old distinction between application programs and desk accessories. They are both represented by simple icons which can be located anywhere in the file system, they can both be opened by double-clicking on the icon, and they can both be installed in the Apple menu. The old Font/DA Mover program is no longer required to install and remove desk accessories.

DAs are usually placed in the Apple Menu Items folder, but this isn't required. You can put them anywhere you please and open them by double-clicking on them. Old System 6 desk accessories are often distributed inside suitcases. To install such a DA on System 7.0, simply double-click on the suitcase icon to open it, then drag the DA

out of the suitcase window into some other window. In System 7.0, DAs do not work until you drag them outside of the suitcase.

You will notice that in System 7.0, small icons now appear in the Apple menu. System 7.0 has also eliminated the old restriction of 15 maximum DAs in the Apple menu.

Control Panels.

System 7.0 has also almost completely eliminated the old distinction between application programs and control panels. There is no longer a special Control Panel desk accessory. Instead, control panels are simply individual icons located inside the new Control Panels subfolder of the System Folder. As with applications, you open a control panel by double-clicking on its icon.

In System 7.0, you can have more than one control panel open at the same time. Many control panels contain special code which must be executed at system startup time. These control panels will only work properly if they are located in either the Control Panels folder or in the System Folder proper. Control panels which do not contain special system startup code may be located anywhere in the file system.

The standard System 7.0 configuration includes an alias to the Control Panels folder which is located in the Apple Menu Items folder. This is what makes the "Control Panels" command in the Apple menu work. When you select this command, the system simply opens the Control Panels folder. You then double-click on a control panel to open it. If you have a control panel which you use very frequently, you can create an alias to it and place the alias in any convenient location.

Some control panels which were designed for System 6 don't work properly when placed in the new Control Panels folder. Such a control panel should be placed in the System Folder proper, and an alias to it should be placed in the Control Panels folder. The current version of MacTCP is an example.

There are several new control panels in System 7.0. We will discuss each of them in later sections of this document.

Consolidation of Paradigms

In the sections above we discussed the new ways that fonts, sounds, desk accessories, and control panels are managed in System 7.0. These are examples of the "consolidation of paradigms" in System 7.0. In System 6, these objects were managed using special utility programs and/or special sets of rules and regulations. In System 7.0, they are managed in much the same way as normal applications, folders, and files—the user simply drags icons into and out of windows to install and remove them, and double-clicks to open them.

System Extensions

"System extension" is a new term which includes what used to be called "INITs" or "startup documents" as well as printer drivers, Communications Toolbox tools, and other add-on software which enhances the functionality of your Mac.

System extensions are normally located in the new Extensions subfolder of the System folder. However, as with control panels, some extensions which were designed for System 6 don't work properly when placed in the new Extensions folder. Such an extension should be placed in the System Folder proper. The Disinfectant INIT is an example.

Aliases

Aliases are one of the most useful new features of System 7.0. We described them briefly in the





"How to Install System 7.0" document. An alias is an icon which stands for or "points to" some other icon. The original icon is called the "target" of the alias.

When you open an alias, the target is opened. Aliases are very similar to the notion of "links" in the UNIX operating system, but they are much more powerful. You can create aliases to files, folders, disks, and even servers.

To create an alias, first click on the target icon to select it. Then select the "Make Alias" command from the File menu. A new icon will appear with the name of the original icon followed by the word "alias." Alias files always have their names displayed in italics so you can easily distinguish them from normal files.

Alias files are very small, usually less than a kilobyte. To locate the target of an alias, click on the alias to select it and use the "Get Info" command in the File menu. Click on the "Find Original" button in the Get Info window. The Finder will locate the target, open its window, scroll to the target icon location, and select the target icon automatically.

Aliases are often used with the new subfolders of the System folder. For example, if you have a program that you want to open automatically every time you restart your Mac, you can place the program itself in the Startup Items folder, or you can make an alias to the program and place the alias in the Startup Items folder. People usually use aliases to do this particular operation.

You will find many other uses for aliases. For example, many Mac programs have helper files which must be located in the same folder as the program itself. In the past, the only alternatives were to place the files together in your main disk window, which cluttered up the window, or place the files in a subfolder, which forced you to open the subfolder before you could run

the program, or in some cases, you could place the helper files in the System Folder, which cluttered up the System Folder. With System 7.0, you can place the files in a subfolder, create an alias to the program, and place just the alias in your main window. When you want to run the program, just double-click on the alias.

Another popular technique is to create aliases for the objects you use most often (programs, documents, file servers, folders, etc.) and place them in the Apple Menu Items folder. Then you can easily open the objects at any time by simply selecting them from the Apple menu.

Aliases continue to work properly even if you move the target file to some other location and/or rename the target file. Aliases also work over the network. They are very useful for quickly accessing file servers and objects on file servers.

For example, suppose you frequently use a certain file server and want to be able to access it quickly. Use the Chooser to log on to the server as usual. Click on the server's icon to select it. Select the "Make Alias" command to create an alias file. Move the alias file to any convenient location on your hard drive. You can even move the alias to the Apple Menu Items folder.Later, when you want to access the server, all you have to do is double-click on the alias icon.

If you create an alias to a server which you accessed via a password, the system will prompt you for the password when you open the alias. You can also create aliases to objects (files and folders) inside servers. When you open such an alias, if the server is not already mounted, the system will mount it automatically, prompting you for a password if necessary.

You can also create aliases to floppy disks and files and folders on floppy disks. When you open such an alias, if the floppy is not inserted, the system will you prompt you to insert the proper floppy by name. This is very useful for archiving large seldom-used files on floppies.

Our final example involves both aliases and the new file sharing feature of System 7.0. This example is called "carrying your hard drive with you on a floppy." Suppose your Mac is connected to an AppleTalk network and you often use other Macs on the network. You would like to be able to easily access your hard drive from the other Macs. If you enable file sharing on your Mac, you can use the Chooser on any other Mac on the network to log on to your Mac and access the contents of your hard drive. Using the Chooser in this way even works on old System 6 Macs! To make this even easier with other System 7.0 Macs, you can create an alias to your entire hard drive on your Mac, copy the alias to a floppy, and bring the floppy along with you when you travel to the other Mac. To access your hard drive from the remote System 7.0 Mac, all you have to do is insert your floppy, double-click on the alias icon, and enter your password!

Balloon Help

Balloon help is another major new feature of System 7.0. It is accessed via the new Help menu at the right side of the menu bar, under the new small icon of a question mark surrounded by a balloon.

When balloon help is on, as you pass the mouse over various objects on your screen, small balloons appear which give brief descriptions of the objects. The mouse is still "hot" and behaves in the usual fashion when you click on objects, so balloon help does not interfere with the normal operation of whatever program you happen to be using. To turn off balloon help, select the "Hide Balloons" command from the Help menu.

Balloon help also works with menu titles and individual menu commands, and with buttons and other objects inside dialogs. Even experienced Mac users sometimes find it useful. As an example, consider those millions of seldomused buttons and checkboxes in all the different system and program dialogs. Often the very short button or checkbox name isn't enough information to clearly describe what the button or checkbox does. The two or thee sentence balloon description can be a big help.

Balloon help currently works with the Finder windows and icons and with all of the standard Apple system menus and dialogs. It does not yet work with most of the non-Apple programs you will be using, but as time goes on more and more developers will be adding balloon help to their products. Eventually, virtually every program should support it.

Programs can also add their own help commands to the new Help menu. For example, the Finder adds a "Finder Shortcuts" command. When you select this command, the Finder displays a window which summarizes all of the different modifier key shortcuts. This is very useful for quick reference.

Application Menu

We assume that you are familiar with MultiFinder in System 6, which permits you to open several programs simultaneously on your Mac. In System 7.0, MultiFinder is an integral part of the system. It is always active and cannot be disabled.

The new Application menu at the far right side of the menu bar displays all of your open programs. You switch to some other program by selecting it from this menu (or, if one of the other program's windows is visible in the background, you can click on one of the windows to bring all of them to the foreground). This list of open programs was displayed in System 6 at the bottom of the Apple menu. It will take you a few days to get used to the new location.

The "Hide xxxxx" command in the Application menu (where "xxxxx" is the name of the current program) hides all of the windows for the current program. The program is still active, but its windows are invisible, and its icon is grayed out in the menu. To make the windows visible again and switch back to the program, select it from the menu. The "Hide Others" command in the Application menu makes the windows for all other programs invisible. The "Show All" command in the Application menu makes all invisible windows visible again.

If you hold down the Option key while switching to some other program, the System will make the current program's windows invisible in addition to switching to the other program. Window hiding is particularly useful if one of your program windows hides the disk and trashcan icons in the Finder.

In MultiFinder, you could switch to the "next" application by clicking on the small application icon at the right side of the menu bar. This no longer works in System 7.0. The HyperCard stack named "Before You Install System 7.0" on the disk of the same name contains a very nice guided tour of the new Application menu. You should take the tour, especially if you've never used MultiFinder before.

File Sharing

File sharing is another one of System 7.0's major new features. Basically, it permits you to transform all or part of your file system into an AppleShare file server, so that other users can access your files over the network.

The disk named "Macintosh Networking Basics" contains an excellent guided tour of file sharing. You should definitely take the tour. We will not attempt to describe all the many details of file sharing here, since the tour covers them quite nicely.

File sharing is controlled by three new control panels and a new command. The new "Sharing Setup" control panel is used to turn file sharing on and off and to give your Mac a name and a password. The password is used to protect against unauthorized access to your Mac. Be very careful to select a secure password and keep it secret, because if you turn on file sharing, anybody who knows your password can gain full access to all the files on your Mac! This password serves much the same purpose and is just as important as the similar passwords people use to protect their accounts on timesharing computer systems.

The new "Users & Groups" control panel is used to establish accounts on your Mac to control security. The new "File Sharing Monitor" control panel is used to monitor file sharing activity on your Mac. It shows which folders are being shared over the network and who is currently using them.

The new "Sharing" command in the File menu is used to make a folder available to other network users, and to assign access controls to folders. For each individual folder, you can permit different levels of access to all users, individual users, or groups of users.

Use file sharing with care. Make certain that you understand the security system. For example, it's really stupid to permit guests (any user) to have write access to your entire hard drive. In general, be very careful to limit write access to trusted individuals, and do not permit guests write access to folders which contain applications. For example, applications in folders





which have write access can become infected by viruses over the network, even if you have virus protection software installed on your Mac.

File sharing is not a complete replacement for dedicated AppleShare file servers. Dedicated servers should still be used in situations where you expect a heavy load or many simultaneous users. With file sharing, you are limited to 10 shared folders, 10 simultaneous users, and 100 defined users and groups. These limits are much higher with dedicated servers. Also, if several people are simultaneously accessing shared folders on your Mac, you will definitely notice a decrease in performance.

TrueType

Another major new feature of System 7.0 is outline fonts. Apple's new outline font technology is named "TrueType." In previous systems, fonts were stored internally as sets of bitmaps, with different sets for each of the different sizes. TrueType fonts, on the other hand, are stored internally as mathematical descriptions of the character shapes. The TrueType imaging code can scale these shapes to any desired size. [Ed.—discerning (and retentive) readers will recall Ken Knight's earlier article on TrueType in the May issue of the Journal.]

TrueType fonts have the advantage that they look good at any size, especially large sizes. In addition, when you print a document which uses TrueType fonts, the printed output is much closer in appearance to the version displayed on your screen. Unlike Postscript fonts, which only look good when printed on Postscript printers, TrueType fonts look good when printed on any kind of printer, even on ImageWriters.

The standard System 7.0 includes the following TrueType fonts: Times (regular, bold, italic,

and bold italic,) Symbol, New York, Monaco, Helvetica (regular and bold,) Geneva, Courier (regular and bold,) and Chicago. In addition, virtually all of the major font design companies have announced plans to ship TrueType versions of their popular fonts in the near future.

With TrueType fonts, you don't have to worry about using only the standard point sizes to get attractive results (usually 9, 10, 12, 14, 18, 20, and 24 points, or some subset of these sizes.) Type now looks good at any point size, even unusual sizes.

The standard System 7.0 includes a mixture of old bitmap fonts and new TrueType fonts. The System also continues to support Postscript fonts. Postscript fonts work exactly the same way in System 7.0.

You don't have to do anything special to use the new TrueType fonts. Once you have installed them, they will be available in all of your programs which have Font menus. Documents can be prepared using any mixture of the three kinds of fonts.

When you open your System File or some other font suitcase, you can easily distinguish the TrueType fonts from the bitmap fonts. Bitmap font names have a point size following the font name (e.g., "Palatino 10,") while TrueType fonts do not. In addition, the icons for the two kinds of fonts are different.

Bitmap fonts take precedence over TrueType fonts when type is displayed on the screen. For example, if you have text in New York 14, and if your installed fonts include both the TrueType New York font and the New York 14 bitmap font, then the bitmap font will be used to display the text on the screen. If you have text in New York 15, however, the TrueType font will be used, because there is no New York 15 bitmap font.

You may notice that most of the fonts in the standard System 7.0 are available both as TrueType fonts (e.g., New York) and also as bitmap fonts in various point sizes (e.g., New York 9, 10, 12, 14, 18, 20, and 24.) The bitmap versions are copies of the old System 6 fonts. They are not required. Apple included them with System 7.0 so that most documents prepared under System 6 will appear identical under System 7.0 (especially the locations of line breaks, which otherwise might change slightly if the new outline fonts were used.)

The System 7.0 Installer installs all of the TrueType fonts from the installation floppies, but it installs only some of the bitmap fonts. You will find several more bitmap fonts on the "Fonts" disk. You can easily install them by simply dragging the suitcases onto your System Folder icon.

TrueType fonts make possible some interesting new kinds of font manipulation tools in word processing and page layout programs. For example, with the scalable TrueType fonts, it is possible to implement dynamic and continuous font resizing as you drag the corner of a rectangle enclosing some text. As another example, a page layout program could offer a command to precisely adjust the height of a headline to make it exactly wide enough to fill the space between a left and right margin. We will almost certainly see these kinds of features implemented in the popular word processing and page layout programs in the near future.

To see TrueType in action, open a word processor. Set the font size to 72 points or some other large number. First select the Palatino font (an old bitmap font) and type "System 7.0." Then select the New York font (a new TrueType font) and type "System 7.0" again. The difference is dramatic—the Palatino is jagged and ugly, while the New York type is smooth.

Virtual Memory

Virtual memory (VM) is another major new feature of System 7.0. It lets you use part of your hard drive as if it were additional memory. Virtual memory has long been a standard part of timesharing operating systems, but it's a new feature on the Mac.

Virtual memory is turned on and off using the new Memory control panel. Not all Mac models support virtual memory. If your Mac does not support VM, the VM section of the Memory control panel will not appear. Some popular programs and hardware devices are not yet compatible with VM. Before trying to use it, you should check with your hardware and software vendors to make certain that their products are compatible.

In particular, disk driver software and other driver software products are often incompatible with VM. If you have Apple hard drives, you can use the new System 7.0 HD Setup program on the Disk Tools disk to upgrade your drivers to the new Apple VM-compatible versions. If you have non-Apple hard drives, check with your vendor to see if your driver is compatible.

Using virtual memory may degrade the performance of your Mac. It should not be considered a substitute for an adequate amount of real physical memory.

32-bit Addressing

32-bit addressing is a new feature of System 7.0 which permits the use of large amounts of memory (real or virtual) (roughly speaking, more than 8 to 13 megabytes.) As with virtual memory, however, some popular programs are not yet "32-bit clean," and can cause crashes or other problems if you turn on 32-bit addressing. Also, as with VM, not all Mac models support 32-bit addressing. It is turned on and off using the new Memory control panel.

Outline Views

The Finder was completely redesigned and rewritten from scratch for System 7.0, and outline views are one of its many new major features.

When you select view by name, size, kind, or date in a Finder folder window, an outline view of the folder is presented, sorted as you requested. For each subfolder within the folder, a small triangle is displayed to the left of the folder. You can click on this triangle to display the subfolder's contents indented beneath the subfolder name. Click on the triangle again to collapse the subfolder back to a single line. The triangles point to the right when a subfolder is closed, and they point down when a subfolder is open.

You can select multiple objects spanning different levels of a folder hierarchy by shift-clicking on their names, then copy and move or otherwise manipulate the selected objects as a group. You can also move a selected object or objects from one level of the folder hierarchy outline to another level in the outline.

The following shortcuts can be used with outline views:

To change the view: Click a view title in the window header.

To expand the outline of the selected folder: Command-Right Arrow.

To collapse the outline of the selected folder: Command-Left Arrow.

To expand the entire outline of the selected folder: Command-Option-Right Arrow.

To collapse the entire outline of the selected folder: Command-Option-Left Arrow.

Find and Find Again Commands

In System 6, to locate a file by name on your hard drive, you had to use the very slow and clumsy Find File desk accessory. System 7.0 has a lightning-fast searching facility built into the Finder in the File Menu (or Command-F). The joke is that the System 7.0 Finder is the first Finder that can actually "find."

To locate a file, simply type all or part of the name of the file you wish to locate and press Return. The Finder will look for the file on all your mounted disks. If it finds the file, it will open the window containing the file, scroll to the file location, and select the file automatically. To continue a search to find the next file matching the name you typed, use the "Find Again" command in the File menu (or Command-G.)

For more sophisticated searching, use the "More Choices" button in the Find dialog. Complicated search criteria can be built based on file name, size, kind, label, creation date, last modification date, version, comments field, and locked/unlocked status. If you select the "all at once" option, the Finder will locate all the files matching the criterion you specified. The matching files are displayed in an outline view, with each matching file selected.

If you want to find all files which match two different selection criteria (an "and" operation,) first do a search using the first criterion, then do a second search using the second criterion. When you do the second search, use the option in the More Choices dialog to search only "the selected items." This technique can be continued to add additional search criteria.

Color Windows and Icons

On a color monitor, you will quickly notice that System 7.0 makes much more use of color than did System 6. For example, window titles, scroll bars, and many icons are colored in delicate pastel shades. To change these window colors, or turn off window coloring completely, use the Color control panel.





Custom Icons

You can customize your file and folder icons very easily in System 7.0 by using the Get Info command in the File menu. The Get Info window displays the icon in the upper left corner. Simply click on the icon to select it, then use the usual Copy and Paste commands in the Edit menu to copy icons to and from the clipboard.

You can use any painting program to design icons. Design your icon, copy it to the clipboard, then paste it from the clipboard into the Get Info window. If the picture in the clipboard is not 32 by 32 pixels (the size of an icon,) it will be scaled to fit. If you want to revert to the original icon, select the icon in the Get Info window and use the Cut command or the Delete key. Customizing icons is a great way to waste time in System 7.0, but making them look good requires actual artistic talent.

Labels

The System 7.0 Finder lets you assign "labels" to individual icons using the new "Labels" menu and control panel. The Labels control panel is used to define the labels and associated colors, while the Labels menu is used to actually assign a label to an icon. The View menu lets you sort outline displays by label.

Customizing the Finder

The new Views control panel is used to customize the Finder. You can select the font and font size for icon names, whether you want icons to be lined up in a straight or staggered grid, and whether you want icons to be automatically "snapped" to the nearest grid point when you drag them. You can also customize the layout of the outline views.

This new control panel does not support as many options as did the old System 6 "Layout" freeware program. To reverse the setting of the "Always snap to grid" option when moving an icon, hold down the Command key while dragging the icon.

Standard File Dialogs

You will notice several differences in the standard file dialogs in System 7.0. These are the dialogs you use in programs to open files (the "get" dialog) and save files (the "put" dialog.) The standard file dialogs now contain a new "desktop" level at the top of the file hierarchy. This level displays all of your disks and any other files or folders you have moved onto the desktop (outside of any window).

The old "Drive" button, which used to cycle among your mounted disks, has been renamed the "Desktop" button. Clicking on this new button jumps back to the desktop level.

You can still cycle among your mounted disks by using the Command-Right Arrow and Command-Left Arrow key combinations. It will take you some time to get used to this new organization of the standard file dialogs, but it is more straightforward than the old method.

In System 6, in the standard get file dialog, you could type the first few characters of a file or folder name to jump to that file or folder. This did not work, however, in the standard put file dialog, since anything you typed was interpreted as the name of the new file.

This problem is fixed in System 7.0. At any given time, either the scrolling list of files and folders or the file name field is considered to be the "current" field. Typing affects only the current field. The scrolling list is outlined with a black border when it is the current field, and the blinking insertion point appears in the file name field when it is current. You can use the Tab key to change which field is current.

In the standard file dialogs, if you select an alias, the target of the alias is opened. The standard put file dialog also contains a new button which can be used to create a new folder. The are a large number of keyboard shortcuts in the new dialogs:

Up Arrow: Scroll up (backward)
through displayed list.
Down Arrow: Scroll down (forwar

Down Arrow: Scroll down (forward) through displayed list.

Command-Up Arrow: Display contents of parent folder.

Comm.-Down Arrow: Display contents of selected folder /disk.

Comm.-Left Arrow: Display contents of previous disk.

Comm.-Right Arrow: Display contents of next disk.

Comm.-Shift-Up Arrow: Display contents of desktop.

Comm.-Shift-1: Eject disk in drive 1. Comm.-Shift-2: Eject disk in drive 2. Tab: Toggle current field in new file dialog.

Return or Enter: Open (get file) or Save (put file.)

Escape or Command-Period: Cancel. Comm.-O: Open selected item. Comm.-D: Display contents of desktop.

Comm.-N: Create a new folder.
Option-Comm.-O or Option-[click
Open]: Select the target of the
selected alias item instead of
opening it.

Chooser

The System 7.0 Chooser looks very similar to the System 6 Chooser, but there are some nice enhancements. You can now use the keyboard to select the device type, zone name, and device name. Just type the first few characters of the name you wish to select.

The Chooser window contains three fields. The current active field is outlined with a bold rectangle, and it is that field which is affected by typing. The Tab key cycles through the three fields.

For example, suppose you want to open the Vogelback IC Lab Server in the Plato zone. The new quick way to do this is: Open the Chooser. Then type "a" to select "AppleShare." Then type Tab and "pl" to select the Plato zone. Then type Tab and "v" to select the "Vogelback IC Lab Server." The press the Return key to advance to the logon dialog.

You can also use the arrow keys to navigate within the three Chooser fields. You can also use Command-G and Command-R to toggle between the "Guest" and "Registered User" options in the logon dialog, and Command-W to close the Chooser window after logging on. With all of these keyboard shortcuts, it is now possible to log on to a file server without having to use the mouse.

In System 6, you used the Chooser to give a name to your Macintosh. In System 7.0, you use the new Sharing Setup control panel instead. The System 7.0 Chooser also has more room to display longer zone and device names.

Trash

The trash works differently in System 7.0. First, the trash is no longer emptied automatically when you eject a disk, shut down, restart, or open a program. The trash is now emptied only when you explicitly request that it be emptied with the "Empty Trash" command in the Special menu.

By default, the system presents an alert whenever you try to empty the trash. The alert asks you to confirm the operation. Most people find this incredibly annoying. Fortunately, you can turn off this feature. To turn it off, click on the trashcan icon to select it, select the Get Info command, and turn off the "Warn before emptying" checkbox at the bottom of the Get Info window.

You can also hold down the Option key while emptying the trash to avoid this annoying alert.

Holding down the option key while emptying the trash also permits you to trash locked files. In System 7.0, you can move the trashcan icon to any location on the screen. The Finder will now remember where you put it, and will no longer move it back to the lower right corner when you restart.

Icon Dropping

Icon dropping is another wonderful feature of the new Finder. If a program knows how to open a file, you can just drag the icon for the file on top of the icon for the program, release the mouse button, and the system will open the program and tell it to open the file. This gesture of dragging one icon on top of another one is called "dropping."

Dropping is particularly useful with text files, which can be opened by many different kinds of programs. For example, suppose you have just downloaded or FTP'd a text file to your Mac, and you want to open it using your favorite word processor or editor. In System 6, you have to first open the program, then use the Open command to bring up a standard file dialog, then use the standard file dialog to locate, select, and open the text file. In System 7.0, you can just drop the file icon on top of the program icon.

There's a new system extension named "Understudy" that can be used to make icon dropping even more useful. Understudy is available on the Plato file server, in the folder System Software:System 7.0:Goodies. You need to use ResEdit to configure it.

Keyboard Navigation

The new Finder lets you use the keyboard to quickly locate and select files in windows. If you know the name of the file you want, just type the first few characters of the file name (enough to uniquely identify the file.) The Finder will

automatically select the file, scrolling the window if necessary to bring it into view.

The Tab key can be used to select the next file in alphabetical order. Shift-Tab selects the previous file in alphabetical order. The four arrow keys can also be used to move around Finder windows. Additional keyboard shortcuts for Finder navigation are given below in the section titled "Finder Shortcuts."

Editing Icon Names

Editing icon names is done a little bit differently in System 7.0 than in System 6. If you click on an icon in System 7.0, the icon is selected, but you cannot just begin typing a new name as you did in System 6. You must first select the icon name itself for editing. You can do this by clicking on the icon name, or by selecting the icon and pressing the Return key. The icon name is outlined with a box when it is selected for editing.

The reason for this change is that the keyboard can now be used in System 7.0 to locate and select icons in windows, and this conflicts with the use of the keyboard to edit icon names.

Displaying a Folder Path

To display a list of all the folders containing a folder (the "path" to the folder), hold down the Command key and press on the folder window title. A popup menu will appear listing all the folders containing the folder. To open one of these containing folders, select it from the menu.

Cleaning Up Icons

The new Finder does a better job cleaning up icons. The "Clean Up Window" command in the Special menu will clean up all the icons in the current active window (or in the desktop if the desktop is active.) Other kinds of cleaning up are done by holding down the Shift





The answer is the "Disk Tools" disk which is part of the standard System 7.0 floppy disk set. The 800K version of this disk contains an old System 6.0.7 startup system, plus copies of HD Setup and Disk First Aid. The FDHD (1440K) version of this disk contains a stripped-down minimal System 7.0 startup system, plus copies of HD Setup and Disk First Aid. You should start up from this disk when you need to initialize an Apple hard drive or when you need to repair a damaged hard drive.

The 800K Disk Tools disk should also be used if Disinfectant or some other anti-viral program cannot repair an infected file because it is "busy." In this case, you should start up using the 800K Disk Tools disk (or some other old System 6 startup floppy with MultiFinder turned off) and run the anti-viral program again.

New Standard Features

The following features are all a standard part of System 7.0. In previous systems, these features were only available by adding special files to your System Folder or by running installer programs.

AppleTalk Data Stream Protocol

(ADSP.)
Communications Toolbox.
32-Bit QuickDraw.
Responder.
TrueType.
MacroMaker.

Several other companies have macro packages available for the Mac, and Apple recommends that you purchase one of those packages if you want macros.

Font/DA Mover

The Font/DA Mover is no longer needed to install fonts and DAs. Some people may still need it, for instance to install fonts directly into an application or document file. Also, it is still the only easy way to put fonts and DAs back inside

suitcases. If you need to do one of these tasks in System 7.0, you must use the new version 4.1 of the Font/ DA Mover. It's available on the TCS and from the Disketeria. Most Mac users do not need this program.

About This Macintosh

The old System 6 command "About the Finder" has been renamed "About This Macintosh." This command displays the total memory (real and virtual) on your Mac, the size of the largest unused block available for use by a new program, and thermometers displaying the approximate amount of memory currently used by each active program. The display window now contains a grow box so you can make the window bigger. As an extra added attraction, you can turn on balloon help and position the cursor over one of the memory usage bars. The help balloon will show you how many bytes are currently being used.

Just for Yucks

Every version of the Macintosh operating system has contained features that display funny sayings, credits listing the authors of parts of the system, or other silly stuff. These features are usually obtained by holding down the Option key while clicking somewhere or selecting a command.

Here's the stuff we've discovered in System 7.0. Try them if you get bored.

Option-About This Macintosh. Wait for the movie credits.

Command-Option-About This Macintosh. Check out the cursor. Option-click on the name of the hard disk in the Memory control panel (with VM turned on.)

Option-click on the sample text a few times in the Color control panel. Option-click on the "7.0" in the

corner in the Monitors control panel.

The help balloon for the MacsBug debugger icon.

Publish and Subscribe

Publish and subscribe is a very major new feature of System 7.0. We have left it for the end of this document not because it's unimportant, but for the simple reason that very few programs currently support it, so it's not something you have to know about or worry about yet.

Publish and subscribe is very similar to copy and paste, except that the link between the copied object and the pasted object is permanent. If you make a change to the published object in the publishing document, the change is immediately reflected in the subscribed object in the subscribing document.

As an example, suppose you use a spreadsheet program to keep track of some large collection of important information which changes over time. Every month you update the data in the spreadsheet, produce a variety of charts, and copy and paste the charts into a report you prepare with a word processing program. With publish and subscribe, you could publish the charts from the spreadsheet document and subscribe to them in the word processing document. When you change the spreadsheet data, the copies of the charts in the report are updated automatically.

When programs that support this feature appear on the market, it will make possible a new kind of "compound document" which combines pieces of other documents. Most of the major Macintosh software developers have committed themselves to supporting publish and subscribe in their products.

Publish and subscribe works over networks as well as within a single Mac. This is a powerful feature. For example, several people in an organization could cooperate in the preparation of a large document. Each individual would prepare a section of the document on his or her own Mac and publish the section. Using file sharing, the project leader would subscribe over the network to the individual sections to combine them into the final document. Changes made by the team members to their individual sections would automatically be incorporated into the master document. The individual team members don't even have to all be using the same program.

Apple events

Apple events are without a doubt the most exciting new feature in System 7.0. However, as is the case with publish and subscribe (which are in fact built on top of Apple events,) there are few programs available today which support Apple events.

Apple events are a way for programs to send each other messages and hence cooperate to get a job done. When they are widely implemented in the Mac world, it will be possible to build large custom applications which make use of many smaller programs to accomplish a complicated task which none of the individual programs could have done by themselves. Many of us hope that we will begin to see smaller, more focused programs which do a single thing well, rather than today's monster applications which try to do everything and end up doing none of them very well. This new paradigm of using small focused program "objects" and "wiring them together" with Apple events to build tailor-made personal metaapplications has the potential to radically change the way we do our computing.

This idea is not at all new. The UNIX operating system, for example, is very well known for its use of small, simple programs known as "filters." These programs are joined together using "pipes" inside of "shell scripts" to perform

quite complicated tasks. Apple events, however, go far beyond this simple model. The kinds of interapplication communication possible with Apple events are much, much more powerful and flexible than simple pipes and filters.

As an example, currently every major Macintosh word processor contains its own spelling checker. None of them are very good. With Apple events, it would be possible for a company to devote major resources to developing a really excellent spelling checker (one that understood all the world's major languages, for example, and all the specialized words and acronyms used by the various technical disciplines.) This would permit the companies which market word processing programs to concentrate on what they do best, leaving auxiliary tasks (spelling checkers, graphics, etc.) to be dealt with by other companies. In addition, the services of the spelling checker program could be used by all sorts of other programs which traditionally do not contain their own checkers (mail programs, for example). Ultimately, it's the users who would benefit the most from this approach.

For this approach to succeed, developers must cooperate in defining standards for the Apple events. To continue the spelling checking example, the companies involved must agree on a common language in which to communicate requests to check the spelling in word processing documents. Each word processing program must "speak the same language" when communicating with the spelling checker program. These standards make it possible for users to "mix and match" their favorite programs. For example, to continue the communications/file compression/ anti-viral example, the user should be able to use his favorite anti-viral utility (Disinfectant, SAM, Virex, etc.) and expect it to communicate

properly with the communications and file compression utilities. All of the anti-viral utilities must accept the same set of Apple events, which will be defined by an official anti-viral Apple event standard.

A new organization named the "Apple Event Developers Association" has been formed to oversee the development of these standards. With Apple's help, they have already defined a set of standards for the manipulation of simple text, graphics, and table objects. They have also developed an important framework for these standards called the "Apple event object model." This model, which is based on object oriented programming, should help to control the complexity of the standard suite of Apple events as it evolves.

A fully Apple event-aware program on the Mac exports all of its functionality via these Apple event "wires." Anything that a user can do directly via the program's human interface should also be something that can be done via "remote control" by sending the program an Apple event. A program which accomplishes this goal has become in a very significant sense two separate programs. The first part is the "engine" which actually does whatever job the program was designed to do. The second part is a human interface which permits the user to control the engine. The human interface part of the program is now only one way in which the engine can be driven. The other way is remote control via Apple events. It is even possible that we will see Mac programs in the future which are physically split into two separate programs in this way. The engine program would have no human interface at all, and would be driven solely through Apple events. The human interface program would communicate with the engine program via these Apple events. It would be possible to have several



different human interface programs to drive the same program.

Apple has developed a program named "Tool Server" which is used with their MPW programming environment for the Macintosh. Among many other uses, Tool Server makes it easy to use several Macs on a network to compile and link separate pieces of a large program simultaneously (a "distributed program build.") Using several Macs over the network cuts the time required to build the program to a fraction of the time it would take on a single Mac. The Macs communicate with each other using network Apple events.

The transition to this grand new model of computing on the Macintosh will certainly take a long time to develop, if it happens at all. All of the technical pieces which are required in the Macintosh operating system are available in System 7.0's Apple events, but a great deal of work remains to be done defining the necessary standards and implementing them in actual applications. This work is similar to the painstaking process of developing networking standards and protocols in the Internet community. The responsibility for doing this work has now shifted from Apple itself to the Macintosh developer community. Developers must be willing to cooperate with their competitors in the development of the standards, and they must be willing to commit themselves to supporting Apple events in their products. It will take years for this to happen on a large scale, but we should begin to see some applications of these techniques in the near future.

Scripting

Watch for new scripting products which will be appearing in the next year or two. Now that we have System 7.0, it's possible to

create object oriented system-wide scripting languages for the Mac based on Apple events. This will finally give Mac users command languages they can use to automate repetitive tasks. More importantly, these languages will form the "glue" that many users will use to build the kinds of meta-applications we discussed in the previous section. These languages are similar to traditional scripting languages on mainframes, in UNIX, and in MS-DOS, but because they are objectoriented languages which use messages rather than procedural languages which use parameter passing, they will be much more flexible and powerful.

Several companies, including Userland Software and Apple itself, are working on these kinds of scripting systems. Userland's "Userland Frontier" scripting product should be released later this year. There has also been a great deal of talk about using HyperCard as a front-end for such systems.

Conclusion

We hope that you are as excited about System 7.0 as we are, and we hope that you find these notes useful in beginning to learn and use the new system. There are not only lots of great new features in System 7.0 that we can all put to good use immediately, but also enormous potential. We ought to begin to see this potential realized over the coming months and years.



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User Group Special

Economical

Dependable

Auto-dial &

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Changing Times (and Helvetica and...)

by David Todd

in a window. You can type in the letters you wish to convert or you can choose from a range of characters. Once displayed, the characters may be converted to EPS or PICT format in any size up to 1000 points (Figure 3).

Text conversion is rather swift but can require more memory than font conversion. The minimum Multifinder partition is 500K, although extensive PICT conversion

One question that often pops up during System 7 and TrueType discussions is "What do I do about my Type 1 PostScript fonts?" Many users will remain loyal to PostScript, others will switch, and some of us will satisfy a schitzo urge and live in both worlds.

Metamorphosis ProfessionalTM 2.0 (or Meta Pro) from Altsys is a font conversion utility that offers something to each kind of user, including any avowed bitmappers with ImageWriters who choke at the idea of font scaling.

Meta Pro can convert Type 1, Type 3, TrueType or Fontographer datafiles into:

- · PICT and EPS outlines:
- TrueType for Mac or (gasp!) IBM;
- Type 1 PostScript for Mac, Windows 3.0, or NeXT®
- · Type 3 for Mac or IBM; and
- Fontographer datafiles.

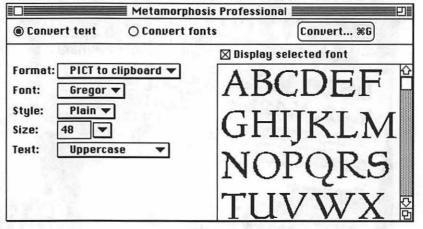


Figure 2

The Meta Pro interface is intuitive and clean (almost spartan). It never overwhelms you with more information than necessary. Its two basic features are Convert Text (Figure 1) and Convert Fonts (Figure 2).

The Convert Text mode enables the user to choose a font (one installed in the system or from a separate file) and display the text can require changing the memory allocation to 1 Meg.

The Convert Fonts mode is Meta Pro's main function. Conversion preferences are well explained in the User's Guide and are simple to set (Figure 4).

Batch file processing is possible in the background under Multifinder or System 7. A relocatable window displays a barometer to monitor the progress of each task. A circular display reveals the status of the job completed.

Performance

Conversion time for fonts can range from about 3 to 15 minutes per typeface. The complexity of the font and the Preference setting determine the conversion time. Unlike the first incarnation of Metamorphosis, Meta Pro can convert your fonts without being

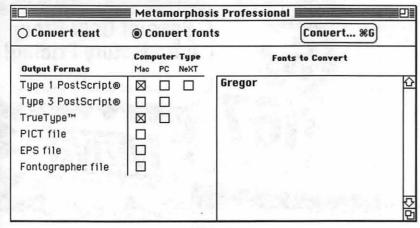


Figure 1

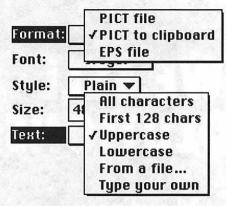


Figure 3

connected to a PostScript printer. Only in the case of a few stubborn, mostly older Type 3 fonts, will you need to have Meta Pro download the font and ask the printer for help. I've converted about 150 fonts and have used the "Read fonts from the printer" option on less than 10. Meta Pro cannot convert Type 3 fonts generated by The Art ImporterTM.

Conversion quality

When converting back and forth between TrueType and Type1, I could tell no difference in the printed output. Fonts converted from Type 3 have the potential to be radically different. Type 3 characteristics allow text to be stroked or shaded—qualities that are not allowed in Type 1 or TrueType.

When EPS files are generated from Type 1 or Type 3 fonts, the outlines are faithful to the designers point placement. However, when EPS files are generated from TrueType fonts, the outlines contain an obscene number of points.

The PICT outlines are best when generated from very large type sizes. Much better than the output from auto-tracing in Canvas or Superpaint.

Pros

Ease of use. Batch file processing. Works in background under Multi-Finder.

Meta Pro interpreted fonts that could not be directly interpreted by Fontographer.

The Convert Type feature will take advantage of ATM or TrueType screen scaling abilities even if selected font is not in the system or connected with Suitcase or Master Juggler.

Tech Support.

Cons

When a font can't be converted a generic excuse appears.

Meta Pro could not generate Fontographer datafiles for a few fonts (Type 1 & Type 3) that could be interpreted by Fontographer.

It will convert type without letting you know that the conversion may look nothing like its Type 3 original, especially true if stroked features are used.

Not compatible with the current Radius SE Display software v. 3.7.

The User's Guide has what I believe to be an unnatural emphasis on the merits of PICT outlines. One has to wonder if this is due to Apple's commitment to non-PostScript printers.

Even though Meta Pro is relatively simple to use, I can't completely recommend it for the font novice. The documentation does not go into enough detail

about why conversions from Type 3 may look different. Also, some correction and touch-up with Fontographer was occasionally necessary.

Altsys technical support is excellent. Help is available by phone (no 800 number) or from Compu-Serve or America Online. The America Online forum is the most active.

Version 2.0.1 will be shipped out in July, correcting a bug that occurs when generating the PFM file to IBM format. Altsys will include the Style Merger which can merge styles of outline fonts if they were originally created separate. A free desk accessory version of Meta Pro's text conversion mode will be available to purchasers of both new units and upgrades.

Metamorphosis Professional 2.0 Altsys Corporation 269 W. Renner Road Richardson, TX 75080 (214)-80-2060 Retail \$150; Street Price \$90 System 7-compatible

David Todd is co-founder of Lorvad Software, a company specializing in fonts and graphics. His latest project, Decorative Letters Vol. 1, is published by Heiser Software. He may be reached in the late evenings at 301-228-0237 if you want to talk fonts or Bob Dylan.

General prefer	ences: ad path directions	OK
☐ Read fon	ts from the printer	Cancel
Type 1 font pre	ferences:	
⊠ Apply hin	ts	
TrueType™ pre	ferences:	
🛮 Apply ver	tical and horizonta	l hints
⊠ Apply dia	gonal hints	
🛛 Include o	riginal bitmaps	
Dropout pre	vention:	
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Figure 4

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Panorama 1.5

by Robert Farquahr

If you are in the market for a database, there are a multitude of choices to meet your individual needs. If you need a database for a personal or business application that is easy to learn and use, and one that allows you to include graphics, perhaps Panorama is the database for you.

The entire program is contained on two 800K disks which include the program and a number of sample templates, using a total of about 1.5 Megs of storage space. The program can be run using two 800K drives, but a hard disk is recommended. I used a MacIntosh 512KE upgraded to 1 Meg of RAM, and an Ehman 62 Meg hard disk drive. The program ran smoothly and I did not experience any problems or glitches.

Panorama is billed as a program that makes creating personal and business databases easy, and it certainly achieves this goal. I have worked with FileMaker before and I found Panorama to be much easier to use. Panorama is not a relational database, and even though there are provisions that allow it to perform numerical summaries and calculations, it is not a serious number crunching program. It is, however, a good database for the small business owner or someone that wants to maintain household financial records, address books, inventory records and a multitude of other things limited only by your imagination. I used it to create an electronic address book, but I also have an extensive list of other intended uses.

As in all good databases, Panorama allows you to create your own input and output forms. You can also create invoices (complete with graphic or company logo) that can be printed and sent out for billing purposes. The program also has the ability to dial phone numbers through a modem.

Panorama has a number of customizing features I really like that make data entry faster, easier and help to minimize errors and misspellings. In addition to normal database features that allow you to specify the nature of entries in each field, Panorama includes criteria that make data entry easier: automatic capitalization and clairvoyance. Automatic capitalization will capitalize all letters in a word, only the first letter of a word, or only the first letter of the first word in a sentence, so you don't have to worry about capitalization during data entry. Clairvoyance will automatically type in a word that has been previously entered after you type in enough characters to distinguish it from others. If you don't want to use that word you just keep on typing and the proposed word is removed. All special features can be turned on or off at any time, if you so desire.

Panorama's Flash Art uses pictures created with MacPaint, MacDraw, SuperPaint, or any drawing/graphic package that can create a graphic in PICT format. You can also create a drawing using Panorama's graphic editor. I like the Flash Art feature in particular because it allows you to attach a

graphic to your data, something especially useful in inventory control.

Panorama has data analysis features which enable you to use equations, produce data summaries and generate charts and graphs. It also has advanced features that link multiple files and provide the means to write your own macros.

Panorama's documentation is thorough, clear, concise and includes a step-by-step guide for creating your first database, in this case a mailing list. In addition, there are a number of sample databases that can be used directly or serve as an inspiration for creating your own. ProVUE offers ready made templates called "Pop-Up Publishing" that are available for prices ranging from \$6 to \$40. A sample of this list includes: Time & Billing, UPS Shipper, Invoice/Billing, Mailing List Manager, 500 U.S. Cities (Flash Art), Personal Finance, Apple Price List, and Golf Statistics.

If you are interested in a high power number-crunching database then Panorama is not what you need. However, if you need a database for home or business use that contains some of the features of a spread sheet, that gives you the ability to incorporate graphics into your database and that is easy to use and change, I suggest you seriously consider buying Panorama.

Panorama 1.5 ProVUE Development Company 15180 Transistor Lane Huntington Beach, CA 92649 (714) 892-8199 Fax (714) 893-4899





101 Buttons & Scripts For HyperCard

by Gary Goldberg

I'm the kind of person who always means to do something. I've bought code compilers, sound digitizers and other devices with the single thought that I'd dive in right away and produce a masterpiece. Of course, the masterpiece never has been developed and, over time, I've begun to refer to the (now) useless items as "tools"—products that may be needed someday. I'm sure a lot of you have done the same thing, if only to rationalize the money you spent.

Thus it is rare (for me) to find a product that becomes an immediate stimulus to developing anything. One such product is 101 Buttons & Scripts For HyperCard, published by Individual Software of San Carlos, CA. That it started out as a HyperTalk programming 'tool' is (to me) amusing. The product consists of one HyperCard stack on an 800K disk and a clearly written 116-page paperback manual. It requires HyperCard version 1.2 or higher, and the manual strongly suggests you use it with a hard drive, as the stack takes about 775K of the disk, leaving no useful room for modifications or additions. The stack had to be converted to HyperCard version 2.1, and once in awhile the stack reported an error that I had to fix. Most of the stack, however, converted properly.

What It Is

101 B&S is a stack full of buttons, popups, external functions and commands designed to achieve effects within a user's own Hyper-Card scripts. Each effect type has a number of examples, all designed to be easily copied to other stacks and modified as necessary. The presentation of each is slick—there are online explanations, examples, scripting notes and suggested uses for every function.

Users purchasing this package obtain unlimited rights to use any or all of the buttons, popups and other devices in their personal works. In addition, up to 10% of the items may be used in any commercial, non-competing work without further licensing. 'Non-competing' means a set of HyperCard tools like 101 S&B. It seems ironic that they should make this statement. In 1989, prior to Version 1.1 (the review version), several shareware

authors complained that the functions and routines they had released to the public as freeware or shareware were included in 101 S&B without their knowledge or approval. The ensuing legal action prompted an article in the October, 1989 MacUser which discussed these and other abuses of shareware authors by distributors. As a result of the media and legal attention, Individual Software removed all work gathered in this way. This is the only significant change from version 1.0. (Perhaps after this they should have called the package 99 Scripts and Buttons.)

The stack contains 67 cards on two backgrounds. The first three cards are introduction and credits, leaving about 1000 ideas to browse through. The name is slightly misleading in this respect. In many places, 101 S&B uses the effects it describes to navigate around and demonstrate. On each card is a set of popup menus that list all functions in the stack and provides a direct way of moving between cards without requiring a main menu. Alongside the popups (eight of them!) there are a set of radio buttons labeled '101' (the index), "What", "How", "Script" and "Notes". On each card pressing

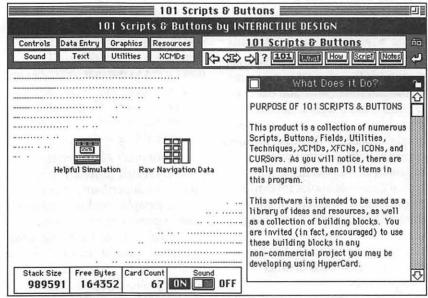


Figure 1. Card Layout. The eight buttons in the upper left corner are actually popdown menus.

these buttons uncovers scrolling fields which discuss in depth the uses and implementations of each device.

What I Found

I copied the stack to my hard drive and booted the stack icon. I'm using HyperCard V2.1 in my evaluation, so I expected some things not to work properly. When the stack opened I was presented with a window containing one button labeled "101 Scripts & Buttons". Clicking on this icon produced an error. Not a very happy way to start. I checked through the executing script and found the first command in on mouseUp used a Flash XCMD that wasn't in the program. The documentation referred to Flash as being from Apple, so I thought maybe the XCMD was removed for Hyper-Card Version 2. When I ran a fresh copy of the stack against Version 1.2.5, the stack crashed again with the same error. I can only conclude that they shouldn't have relied on an XFCN they didn't provide.

Once I removed the Flash command (it's an effect; removing it did not impede the functioning of the stack) the stack seemed to work fairly well. The first effects card looked like Figure 1 on the previous page.

I worked through the different effects card by card. The rest of the cards had the same layout. Some of the more interesting effects are listed below.

The "AboutMe" XFCN lets a stack author include an "About The ..." line under the Apple menu for the stacks they develop. The 101 S&B stack has three of these. This is a good point to mention—the 101 S&B stack uses a lot of the effects it describes. Like a doctor who follows his own advice, it inspires confidence to see the effects actually used, rather than just demonstrated.

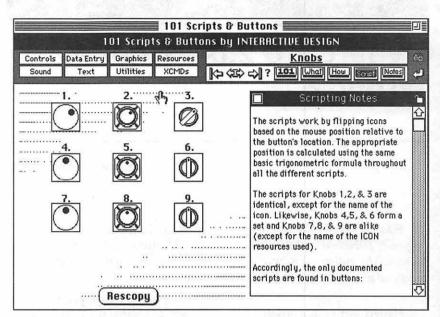


Figure 2. Some buttons.

The stack has an "Animation Recorder" which allows recording of a series of locations along which a picture can be moved to simulate animation. For simple movements it is appropriate, and can save disk space by reusing the same picture repeatedly, but the serious or semi-serious animator will quickly lose interest in favor of changing the image over time.

There are specialty buttons that look like knobs and work that way; hot areas within fields that can link to other actions (now obsolete with HyperCard V2), bar clocks with sliding bars instead of hands, some new visual effects, and a slew of XFCN's that add new capabilities to HyperCard, including zooming rectangles and menu-making utilities. The MakeMenu XFCN in particular is interesting, not because of the functionality but rather because the distributors chose to include functions which can be potentially dangerous to inexperienced stack authors. This particular XFCN creates menu resources without checking for prior use, thus allowing multiples of the same menu and using up valuable space on disk and in memory.

Some of the functions are plainly not useful with HyperCard V2.0. The ScreenSaver XFCN has a password lockout that prevents use of the machine while in HyperCard, but now that HyperCard runs in a window on larger monitors, it is simple to click outside the Hyper-Card window to defeat the password device. Further, some of the functions were never planned to be used with smaller than monitorsized windows. The GetPixel XFCN returns the pixel location of the cursor, but in locations outside the HyperCard window it returns negative numbers or errors. The "BuildGrid" effect cause an error when I selected "BuildGrid", "Grid Option" and "Done", in that order. Also, it is important when using this stack to use a copy. The manual warns you about this, but since the product is itself a stack, and changes you make to it (including using the examples) are saved immediately, you can mess up the stack fairly quickly and easily.

The Bottom Line

This is an impressive piece of work. The authors spent some effort

(Please turn to page 42)



HyperCard 2.0—What's Wrong?

by Howard Metzenberg

Editor's Note—This article was originally published in the BMUG Journal. The author submitted it to us as well to give it a wider distribution.

HyperCard 2.0 is a powerful development tool, but only a small cult within the Macintosh community seems to care. After the initial wave of enthusiasm for HyperCard 1.0, which lasted about a year after its 1987 introduction, interest waned. Version 2.0 was supposed to revive HyperCard by giving it complete control of the Mac

interface. Unfortunately, Apple added features without fixing what was really wrong with previous versions.

The fundamental problem with HyperCard is that software buyers want applications, but HyperCard creates stacks. Even if the image of the stack could be transformed by marketing magic, a stack would still be a bad prospect for developers.

HyperCard has a split personality—it is an application, a development environment, and a piece of system software. Opening HyperCard is like adding a second and even more demanding operating system to the your Macintosh. Version 2.0 is so big it cannot run concurrently with any word processor in a 2MB Macintosh under System 7.0.

HyperCard has own peculiar interface, metaphors, and features that users must learn and network managers must support. Palettes pop out when they are least expected, and the menu bar can be toggled out of existence by a misplaced elbow. Unless the developer prevents it, a new user will sooner or later end up in an unfamiliar place—called Home!

Version 2.0 should never have been designed to run multiple stacks in the same memory partition. For the developer, this is a support nightmare. One open stack can easily gobble up all memory in the application heap. Open stacks must share the limited number of slots for menu messages that HyperCard 2.0 provides—once these slots are used up, new stacks open with error messages.

Stacks perform poorly together and do not behave like stand-alone applications running under MultiFinder. Opening a stack through the Finder closes the stack that is currently running. The new stack opens at a different location on the screen, so that a window seems to jump.

Open stacks interfere with each other in ways that are unintended and even dangerous. HyperCard 2.0 gives the developer complete control of the Macintosh interface, yet a stack cannot control its own memory or resources. Operating quietly in the background, another stack can change the order in which messages are passed and resources are inherited. A stack can close another stack that was open or in use, perhaps leaving a file in an inconsistent state or closing a background process. Stacks that are in use receive system messages

Continued from page 41

to ensure that there was a 'cleanness' in the overall presentation; the stack worked in an intuitive manner and the functions were presented clearly, with lots of help, explanations, and examples. The stack scripts demonstrate the proper use of the functions and plainly there are effects in the stack that would be difficult to implement on your own.

However, I've seen a number of the effects listed on various bulletin boards and telecommunications services; some of them are probably on the Apple Pi TCS even now. I felt throughout my research that I probably could have found the code for most if not all of these effects with a concerted research effort; spending money to buy the package may be convenient but may not really be necessary. I believe that serious stack designers would in all

probability be keeping up with newly released XFCNs and would not need this resource.

The package might be interesting to new or novice stack authors though. Some of the button designs are entertaining enough to make you want to find a way to use them. After seeing this package, the best rule of thumb I can offer is — don't use an effect unless you have a need to fill and then choose the right effect, keeping in mind the overall design of your stack and how it fits together. The best stacks are designed first, before any programming takes place.

This product may help you to design a better stack. 101 Buttons & Scripts is offered by Individual Software and is available at MacWarehouse for \$39. Other dealers may also stock it.

(analogous to events) that may not have been intended for them; they may or may not pass these messages on up the hierarchy.

HyperCard 2.0 is so full of potential, yet there is very little HyperCard software under development. Does Apple understand that it has a problem? Apple Computer is often the last to know when something is wrong with one of its products, but Claris is a savvy marketing organization. What can Claris do to fix HyperCard?

First of all, Claris can turn
HyperCard into a tool for creating
stand-alone applications that have
their own signature and icons in the
Finder. A HyperCard application
should be indistinguishable from
one that is developed in an MPW
language. Users will judge for
themselves whether the choice of
development tools was appropriate
when they rate it on speed and
other criteria.

Second, they can open up its file formats and let other applications read stacks—perhaps even create their own. HyperCard is now one of many hypermedia environments on both the Macintosh and the PC. It could serve as a fast and convenient user interface or file manager for many small-scale programming projects.

Third, they can put much of HyperCard into the ROM or the System file. Imagine a high-level Toolbox manager that would allow developers to insert buttons and fields into their own application windows, expand and compress bitmaps, play sounds, or dial the phone. Macintosh applications could have sophisticated on-line help features built in.

In summary, these changes would allow HyperCard to put a little hypermedia into everything else the Macintosh does. I'm not suggesting that Apple and Claris need to change HyperCard itself. The focus of HyperCard must change—it should become strictly a development tool and not a runtime environment. Developers would no longer have to market stacks—HyperCard would become a hypermedia extension to the

Toolbox. Competing products such as Supercard would play a role analogous to the relationship of Think C to MPW C.

Claris Corporation has the marketing wits to turn HyperCard around, but does Claris care? Although Claris is a subsidiary of Apple, it does not handle Apple's development tools, most of which are marketed strictly to developers through APDA (Apple Programmers and Developers Association). HyperCard is not going to be a profit center for Claris at \$49.95. Although Claris has the broader mission of contributing to the profitability of Apple, Claris executives are likely to feel pressure to focus on their own bottom line. Let's hope that Claris understands what a contribution it can make to Apple.

Howard Metzenberg of
Petroglyph, Inc. is the developer of
Editorial Advisor, an on-line reference for writers and editors. Although
Editorial Advisor is currently a
HyperCard product, he is redeveloping it as a stand-alone application.

IS O ...

We are (which is to say WAP is) looking for a talented, generous, capable person to fill Nancy Seferian's shoes as Graphics Editor for the Journal.

We freely and readily admit that our search cannot be successfully completed—no one could fill her shoes. The work that she has done for us, and for WAP, over the past several years has been so far above and beyond what anyone might reasonably have expected as to defy the imagination. Still, the need is there, and our new Editor can sure use the help.

Essentially the job of Graphics Editor will be whatever the Editor requires. What Nancy has done for us has been to search out people doing interesting and challenging work with various graphics programs and to get them to talk a little about what they did, and how they did it.

If you think you might be interested in the job, give her [(202) 333-0126] a call and see what you think.

HyperSpeller

by Tom Witte and David Mudd

What do you do if you if you want to check the spelling in a HyperCard stack before you use or publish it? What do you do if you belatedly decide that using the word "happy" is really better than using the word "glad", and you've used those words many times somewhere in your stack? For David W. Durkee and Doug S. Clapp, the answer was to create HyperSpellerTM. This commercial product, at a shareware price, adds these needed and missing functions to HyperCard.

This utility was tested by myself (Tom Witte) using HyperCard 2.0v2 and HyperCard 2.1 with various stacks: including some I wrote, some I downloaded from various places and some stacks that came with HyperCard 2.0. (Yes, I found typos in Apple's stacks!) David Mudd (Chairman of the WAP HyperTalk Special Interest Group) tested it without problem

on stacks written with different versions of HyperCard 1.2x, including performing a find and change covering a 5,000 card stack. Detailed descriptions of dialog box functions will not be described here as they are pretty obvious to most Mac users and the manual does an excellent job.

What you get:

One 800K Floppy with two files - HyperSpeller Installer, HyperSpeller Dictionary; a TeachText application with a "Read me" file; and a small well-written 20 page manual. The dictionary contains over 100,000 words and is licensed from Microlytics.

□ Check Spelling bkgnd field "paths" card "Stacks" Suspect word: busness Replacement: busness oxtimes Suggestions: Replace Learn business む busyness Skip Done baseness **busness** Folder : basins Arlington 2 bassoons Mac HD 80MB:Apps

Figure 1

Installation:

Launch the installer program, point it to your Home stack and it installs two XCMD's - spell / find and some other supporting resources.

Put the 164K dictionary file into either the System folder or Home stack's folder and you are done.

Use XCMD: "SPELLCHECKING"



Figure 2

While the stack you wish to check is open, type "SpellCheck" into HyperCard's message box. This gets you a spell checker dialog box similar in function to the one in MicroSoft's "WORD" and other Mac Word Processor software. This dialog box (see below) comes in two sizes, small and large. Both have the same functions. The large one puts it all there but hides a larger piece of the screen. The smaller one needs multiple clicks to see or do the same but it takes up less screen space (which may be an issue if you are on a 9-inch screen, since this function opens and shows the fields while it is looking at it.) Both work fine. The learn function makes a "HyperSpeller User" file and works especially well. It not only will recognize a word you added as correct but will also recommend correct spelling for it if it finds what it believes is a typo. For the good spellers out there the process can be speeded up a bit by not checking the 'Suggestions' function.

Spellchecking begins on the first card and checks its background and card fields before going to the next card. This XCMD accepts a

start and end card parameter so one can avoid a card that contains words that you might not wish to check, such as a list of names. I tested it on many of my stacks and the stacks that came with Hyper-Card 2.0. The scope of words covered by the dictionary and its success in finding the correct spelling seemed good. It found errors and offered the correct replacement for misspellings in some stacks that I thought were error free. The speed of this process on my SE30 is quick. I assume that it would run acceptably fast on a slower machines. It appears that the HyperCard functions of moving from card to card is the timelimiting action. I tested the dictionary by placing articles like this and other text documents I had in a HyperCard field and then ran this XCMD. It proved as successful as the dictionary in WordPerfect and Correct Grammar. This function does not check words in buttons. scripts, in pictures or menus. It does check all fields including hidden fields.

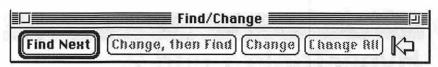


Figure 4

and/or change in the lager dialog box before you use the zoom box to select the smaller version for running through your stack. Copies of the dialog boxes are below. Note, the 'go to first card' icon. This is important this function only runs forward through the stack. This too was quick.

The manual offers a HyperTalk (the "programming language" of HyperCard) script to have this powerful 'find' function be substituted instead of the regular built-in HyperCard 'Find...' function.

Problems:

Now what is wrong with these fine products?

 They don't deal with text in Buttons, HyperTalk scripts or pictures. There is not a deinstall program.
 (So don't install on your only copy of the Home stack.)

Summary:

We believe that this package is a very good addition to HyperCard. While someday, after the full functionality of system 7 is implemented, these functions may be superseded by other applications or utilities. We still recommend them because they are here now and they work in both operating systems (6.0.x and 7.x) and in both version of HyperCard (1.x & 2.x). That they are inexpensive is an added plus.

Product: HyperSpeller, version 1.0 (not copy protected) by Foundation Publishing, Inc.

Functions: Spell Checking and correction of words in a HyperCard field; Find/Change text in a Hyper-Card field

Cost: List \$49.95 /Street price \$29.00 (MacConnection)

Does it Work: Yes

Value for Dollar: Good

Tested With: HyperCard 2.0, 2.0v2, 2.1 and 1.2.5

Environment: - Mac SE/30-8/80, System 7.0 (Tom); Mac IIci-5/173, System 6.0.5 and 7.0 (Dave)

Summary: HyperSpeller is a small niche product that performs its functions —spelling checking and find/replace—skillfully and quickly. If you make stacks which contain many and or large text fields it can be a real savior.

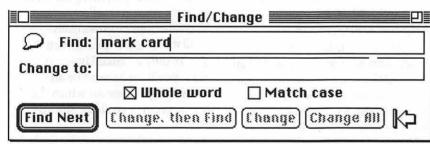


Figure 3

Use XCMD - Find/Change

While in the stack you wish to find or change a word or phrase, type "FindChange" into
HyperCard's message box. This gets you a find/change dialog box again similar in function to the one in Microsoft's "Word" and other Mac Word Processor software. Again there's the choice of two-size dialog boxes, but in this case you need to type in the text you want to find

- They don't let you select or deselect which fields to check. It would be nice to not check a field that contains peoples names. (Conversations with publisher indicate this will be available in the fall of '91.)
- In opening every field they trigger opencard commands, in one of my stacks. This did not stop the spell checking but required aborts on my part.



HyperTools 1 and 2

by John O'Reilly

HyperTools 1 and 2 are a good example of software created because it could be done, not because it needed to be. The products are two sets of external routines (16 functions in each set) for use in programming (or "scripting") in HyperCard. Mostly the products are shortcuts that, for example, enable the user to manipulate groups of objects (either text fields or buttons) simultaneously or provide dialog boxes allowing the user to hide or show fields without having to enter HyperTalk commands.

HyperCard is a flexible environment for developing simple applications. It handles text fields, graphics, sounds, and simple animation, while also supporting more advanced features in its programming mode. It also supports external commands, written in Pascal or C. The advantage of turning to an advanced language such as these is that it speeds up processing of instructions.

HyperTools are meant to let the user take advantage of some of this

speed. Many of these features the HyperTools are things the user can achieve in HyperCard, but only with more labor. For example, one feature lets you format the numbers in a text field (standard monetary format, or fixed number of decimal places). Another provides an airbrush which is different from the spray can on the HyperCard tool palette.

Some of the features are utilities that allow the user to test memory and speed. Others permit the grouping of objects, so that they may be resized or moved at once. One tool lets you specify where HyperCard's palettes pop up.

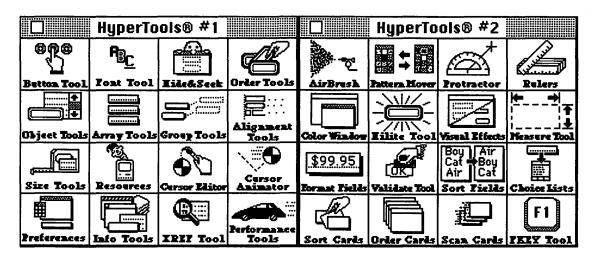
A major drawback to this product is that each set is \$99, and does not seem to be available at the discount mail order houses.

The tools install themselves nicely into your tools menu. When you call them, a 4x4 palette appears on the screen. You then click on the tool you wish to use. Problem is, it's hard to remember which tools do what.

The impression one gets from the manual is that the idea was to put these tools in the arsenal of the intermediate user, who wants to design stacks without delving into HyperTalk. However, it is apparent in even a quick read of the manuals (which lack examples to accompany their rapid explanations) that a basic understanding of HyperTalk is crucial.

It is not surprising, then, that the one feature a HyperTalk expert was able to get from the sum of these utilities was a utility that sorts fields by lines according to chunks (words or specific characters). The instructions for this feature are hidden at the back of one manual. after a disclaimer that warns away all but the bravest of souls. The syntax is limited, and the feature works only with fields, as opposed to variables, so it is not lightningfast. There are better products around, and at significantly lower prices.

I cannot see why these two collections would be of much use for HyperCard fans. If you're a serious developer, there are other collections of eternal commands and functions commercially available at lower prices. And if you're only a casual HyperCard user, you'll find this to be an advanced package for which the learning curve could be strenuous.



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SEPTEMBER

2 Monday 7:00 PM	PI-SIGcall
4 Wednesday 7:30 PM 7:30 PM	dPub SIGPEPCO Mac Programmersoffice
5 Thursday 7:00 PM 7:30 PM	Columbia Slice
9 Monday 7:00 PM	Tutorial (Intro to Mac, I)office
11 Wednesda 7:30 PM 7:00 PM 7:15 PM	Board of Directors Mtngoffice Telecomm SIGoffice Mac Databases SIGISS, Inc (Fairfax)
12 Thursday 8:00 PM	StockSIGoffice
9:00 AM 9:30 AM	Annapolis Slice
16 Monday 7:00 PM	Tutorial (Intro to Mac, II)office
7:30 PM 7:30 PM 7:30 PM 7:30 PM	y Excel SIGoffice Fed SIGcall HyperTALK SIGArlington
19 Thursday 7:30 PM	AV SIGoffice
23 Monday	
7:00 PM	Tutorial (Intro to Mac, III)office Writers' Deadline—November Issue
	Ad Space Deadline—November Issue
24 Tuesday 7:00 PM	Tutorial (Intro to MS Word) office
25 Wednesda 7:00 PM	
26 Thursday 7:30 PM	Ed SIGcall office
28 Saturday 8:00 AM 9:00 AM	AppleWorks SIGbefore WAP Mtng. WAP General Mtngcall office
30 Monday 7:00 PM 7:00 PM	Apple IIGS SIG Bethesda (call) Tutorial (Using System 7) office
	Editorial Deadline—November Issue
	Ad Copy Deadline—November Issue

The September meeting topic will be HyperStudio 3 (the new one from Roger Wagner). The demonstration will be conducted by people from the HyperStudio Network, who will have stacks and giveaways for those in attendance.

The Macintosh program may have been set, but we have no clue what it is.

WAP General Meetings

Monthly General Meetings are generally held on the 4th Saturday. We are still looking for a semi-permanent "home" for the General Meetings. Requirements are: two meeting rooms, one holding approx. 50 people and the other approx. 250 people. Anyone with suggestions please contact Nancy Pochepko at the WAP office (301-654-8060 in Bethesda).

Come as early as 8:30 AM to join, buy public domain disks, schmooze. Attend the Q&A sessions to get your questions answered and hear the latest rumors. Listen to the main meeting topic at 9:30.

Meeting Notices

Annapolis Slice —2nd Saturday; Severna Park Library on McKinsey Road (off Rt. 2) Severna Park, MD, 9:00 AM.

Apple IIGS SIG —normally the Monday after the regular WAP meeting; alternates between Dolley Madison Library in McLean and (NEW) NIH (Building 31, C Wing, 6th Floor, Conference Room 9) in Bethesda at 7:00 PM. Call Gary Hayman, (301) 345-3230, for information.

Apple III SIG — Meets informally quarterly; please call SIG chair for details

AppleWorks SIG —just prior to the regular WAP meeting at 8:00 AM.

AV SIG (arts and video)—3rd Thursday; WAP office, 7:30 PM. May be subject to change; call Nancy Seferian (202) 333-0126, to confirm.

Columbia Slice—1st Thursday; at Mt. Hebron High School. Meetings are usually at the Howard County Board of Education Building, Route 108, Columbia, MD, 7:00 PM..

dPub SIG (desktop publishing) —1st Wednesday; PEPCO Auditorium at 1900 Pennsylvania Ave., N.W., 7:30 PM

Ed SIG (Educational programs) —4th Thursday; WAP office, 7:30 PM.

September
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29	30					

Meeting Notices

Excel SIG—3rd Wednesday; WAP office, 7:30 PM.

Fed SIG (Federal)—3rd Wednesday; alternates between Falcon Training Center, 1745 Jefferson Davis Hwy., Suite 502, Crystal City, and Apple Fed. Sys. Office, 1892 Preston White Dr., Reston, VA, 7:30 PM. Call Jim Manley, (703) 490-1034, to confirm location.

Frederick Slice—2nd Saturday; at the library at 110 East Patrick Street, Frederick, MD, 10:00 AM.

GameSIG-1st Thursday; WAP office, 7:30 PM.

HyperCard SIG—currently dormant.

HyperTALK SIG—3rd Wednesday; at the Fairlington Community Center, 3300 South Stafford Street, Arlington, VA at 7:30 PM.

Mac Programmers—1st Wednesday; WAP office, 7:30 PM.

Macintosh Databases SIG—Second Wednesday each month of 1991, 7:15 PM start (until about 9:30 or 10:15 PM); at the demonstration room of Innovative Systems Solutions, Inc., Suite 300, 3702 Pender Drive, Fairfax, Virginia; just around the corner from the interchange of U.S. Route 50 and U.S. Interstate 66; absolutely free parking.

PI-SIG (Programmer's Interface)—1st Monday, 7:00 PM (except for Monday holidays). Call Ted Meyer (703) 893-6845, for date, time and location.

StockSIG—2nd Thursday; WAP office, 8:00 PM.

Telecomm SIG—2nd Wednesday, WAP office, 7:00 PM.

Notice: Anyone having information on changes to the WAP calendar is requested to call the Calendar Editor, Andy Shaw, at home (301) 595-2539, in Beltsville, MD, or Nancy Pochepko at the WAP office, (301) 654-8060, in Bethesda, MD. E-mail can be left at: Andy Shaw, Twilight Clone BBS in Silver Spring, MD.

OCTOBER

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3 Thursday 7:00 PM 7:30 PM	Columbia Slice
7 Monday 7:00 PM	PI-SIGcall
9 Wednesday 7:30 PM 7:00 PM 7:15 PM	Board of Directors Mtng office Telecomm SIG office Mac Databases SIG
10 Thursday 8:00 PM	StockSIGoffice
12 Saturday 9:00 AM 9:30 AM	Annapolis Slice Severna Park Frederick Slice Frederick
7:30 PM 7:30 PM 7:30 PM 7:30 PM	Excel SIG
17 Thursday 7:30 PM	
24 Thursday	Writers' Deadline—December Issue
7:30 PM	Ad Space Deadline—December Issue Ed SIGcall office
26 Saturday 8:00 AM 9:00 AM	AppleWorks SIGbefore WAP Mtng. WAP General Mtngcall office
28 Monday 7:00 PM	Apple IIGS SIGBethesda (call)

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Ginny & Michael Spevak

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Bill Baldridge

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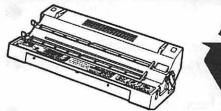
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KanjiMaster

by Robert Farquahr

KanjiMaster, by HyperGlot Software Company, is an outstanding tool for learning to read and write Kanji, the Japanese version of Chinese ideograms. The program is based on HyperCard 2.0 (included) and requires a hard disk drive and system 6.0.5 or higher. I used a MacIntosh 512KE upgraded to 1 Meg of RAM, and an Ehman 62 Meg hard disk drive. The program ran smoothly and I did not experience any difficulties or bugs whatsoever.

The program uses over 325 individual Kanji characters and "hundreds" of compound words (those that contain Kanji characters combined with Hiragana, a native Japanese writing system), combined with high quality digitized sound recorded by a native Japanese speaker. The program offers the following features:

- A Browse Mode which shows you the character, provides its English meaning, shows how it is spelled using Hiragana, shows how the character is written (the number of strokes and in the proper sequence) and enables you to listen to how a character is pronounced as many times as you wish.
- A Pronunciation Drill that displays a character, pauses to allow you to practice your pronunciation, then provides the proper pronunciation. The pause can be lengthened or shortened according to your individual needs and skill level.
- An English Meaning Drill that presents a character along with a selection of possible English meanings. You have to click on the

proper meaning within an alloted time which can be changed, and at the end of the drill you are presented with a list of characters that you missed that can be saved or printed.

- A Japanese Drill that is just like the English Meaning Drill above except it presents a character and you have to selects its proper spelling using Hiragana. Of course in order to use this drill you must first know Hiragana. HyperGlot also has a program for learning Hiragana and Katagana called Easy Kana (see my review in the March 1991 edition of the Washington Apple Pi Journal).
- A Dictation Drill that allows you to hear how the Kanji is pronounced, provides the proper stroke order for writing it, and gives you practice writing it on paper (by using a dot matrix printer).



 Stroke Order Practice which shows you the proper stroke order when you click on the outline of the character.

I enjoyed using this program and, like Easy Kana, I found that it was well written, the instructions were clear, and I had no problem finding my way through the maze of hypercard decks. My only complaint and suggestion relates to the fact that there aren't add-on modules that would allow you to add more characters. This program is an excellent starting point for beginners, or to brush up from time to time on what you've forgotten. However, since the average Japanese high school student can recognize roughly 10,000 characters when he/ she graduates, the ability to add more characters to the program would certainly expand its usefulness.

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Partners LTD

by Ira W. Cotton, D.B.A.

Partners LTDTM a limited partnership agreement template, is a package of word processing and spreadsheet templates for preparing an offering of limited partnership (LP) units to investors. As such, it addresses a much more restricted audience than, say, a software package to analyze LP offerings. If effective, however, such a package could do much to encourage more LP offerings from a wider range of promoters who are currently dissuaded by the high cost of preparing the needed documentation for an LP offering.

I should immediately qualify this review by stating that I have never prepared an LP offering myself, though I have examined many and am a limited partner in several. In addition, I have a graduate degree in business administration, so I may be reasonably competent to review this package.

What's Included

Partners LTD is offered both for the IBM PC and Macintosh environments. The package I reviewed for the Mac included a spiral-bound 8 ¹/2 x 11" manual (covering both Mac and PC installation and use) with a single 800K diskette containing one text file and three folders. The text file contains the introduction to the manual, and is not otherwise needed. The three folders are labeled:

- · Partners LTD Financials
- MacWrite Documents
- · MS Word Documents

The MacWrite and MS Word folders contain the same five document templates (in their respective formats):

- · Offering Circular
- · Restated Partnership Agreement
- · Subscription Application
- · Purchaser Rep's Questionnaire
- · Buy/Sell Agreement

The Financials folder contains a descriptive text file (also from the manual) and nine spreadsheet templates in SYLK format:

- · Income Statement
- · Balance Sheet
- · Capitalization Plan
- · Source & Use of Funds
- · Use of Proceeds
- · Cash Flow Projection
- · Budget
- · Budget Minimum/Maximum
- · Break-Even Analysis

With Excel installed on your system, double-clicking on any of the spreadsheet files opens it directly.

How To Use The Templates

The first statement in the manual is the following warning (in bold 18 point type):

Notice: Do Not Use This Document AS-IS. Read it thoroughly and make all appropriate changes to fit *your* requirements. We insist that you have this agreement approved by a qualified attorney at law. JIAN accepts no liability for the effectiveness of this agreement for your purposes.

Later in the introduction comes an additional caution:

All legal matters in conjunction with sales of shares offered and opinions regarding the legal aspects of a completed offering must be made by an Attorney familiar with such matters. The developer and publisher make NO claim that this template is complete, therefore the developer and publisher insist that the user of PartnersLTD seek legal advice and obtain an opinion from an Attorney prior to offering partnerships for sale.

This template in and of itself is incomplete. The developers and JIAN DO NOT consider PartnersLTD a Limited Partnership Agreement until it is in its completed form AND APPROVED BY A QUALIFIED ATTORNEY. It is intended only to assist those in preparing a Limited Partnership Agreement.

Examining the templates makes these warnings abundantly clear. There is no way the templates could be issued as provided, without substantial completion and customization by the organizer (typically the general partner). The Offering Circular, for example, is quite generic and doesn't even state what business the partnership will be engaged in. It does, however contain much useful boilerplate from which to customize.

The spreadsheet templates are similar. They contain *pro forma* financial statements for a hypothetical LP. All the numbers in all the spreadsheets must be replaced with your own numbers. However, the spreadsheet cells are nicely named so that the relationships among variables is clear from the formulas in each computed cell.

Thus, using this set of templates to prepare an LP offering requires a lot of work! All the document templates and all the spreadsheet templates must be completed and customized with data appropriate to the nature of the specific business undertaking. Then the package

must be reviewed by an attorney who may suggest other changes.

What's The Value Of Partners LTD

Although it's a lot of work to complete all these templates, it would be much more work to try to develop an offering circular without them! The text files are already in automated form, and clearly indicate where specific information is required or where sections could be added (as, for example, to list all the risk factors pertaining to a specific type of business). The spreadsheet templates are also already automated, with relationships among variables clearly evident. Sure, you could develop all this material by cutting and pasting from samples of prior offerings, but it would probably cost far more than the \$149 list price of this

package, and you might well leave out something important.

The danger of this package is that you might be tempted to go it alone without the services of a qualified attorney experienced with LP offerings. Don't do that!

There are several ways this set of templates might be used safely and effectively. First of all, if your attorney isn't already automated with such templates (though few aren't), this could get him or her started. For you (the prospective promoter), these templates provide a means to significantly cut legal bills by preparing much of the needed documentation in draft form for the attorney. By using your attorney to review and correct, rather than draft, you should avoid many billable hours.

I would recommend that anyone planning use of these templates begin by discussing them with your attorney. That way, your attorney will know what to expect, and can additionally flag any special areas of concern for your state and/ or your type of business.

Without actually going through the process of using these templates to prepare an offering circular, I can't evaluate their full utility and shortcomings. They certainly seem useful and reasonably complete. If you do use the package, please submit an update to this review. And, oh yes, if the deal you are organizing is a good one, send me a copy of the offering!

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SuperLab

by Phil Shapiro

Much to the relief of laboratory rats, microcomputers have become the new favored playthings of experimental psychologists. Computers can help with all sorts of activities in the lab, serving in different capacities according to the software being used.

For instance, computers can be set up to present a cognitive task for subjects to do. ("Subjects" being the common psycho-babble for human beings, laboratory rats, or other fiendish creatures capable of being scrutinized in a lab.) The computer patiently records the subject's responses, saving these responses to disk as a data file. This data file can then be interpreted statistically.

This is all well and good. But who creates such software for use in the psychology lab? Does a full-time programmer need to be hired for each and every new experiment? No. Not really. It's possible to use "toolkit software" to help create the experiments you'd like to run.

For the past three years,
Washington Apple Pi member
Hisham Abboud has been creating
such a toolkit program for the
Macintosh series of computers. His
SuperLab software can be customized to perform a whole host of
different experimental psychology
experiments. The output of these
experiments is saved to disk in a
plain text file, which can then be
analyzed using Macintosh statistical
software, or transferred over into
MS/DOS statistical software (using
Apple File Exchange.)

SuperLab operates through standard Mac dialog boxes. The

main window in SuperLab is the Experiment Editor. Using this editor, you can set up any number of trials. The trials can have visual stimuli, auditory stimuli, or both. Visual stimuli can be created from any PICT file, scaled to any size on the screen. Auditory stimuli can be created using the popular MacRecorder peripheral.

The visual stimuli ("graphics," in layman's terms), can be either black-and-white or color. Color graphics can be displayed using the Mac's 16 million color shades.

Most interesting about SuperLab is that you can attach "codes" to various data you collect. So as the data is being collected it's already being labeled into certain categories. This features greatly simplifies post-processing of the data.

As an example of coding data, the program can keep track of whether the subject answers a particular question correctly, (code C), or erroneously, (code E). The program can also keep track if the subject answers the question erroneously at first, and then correctly when given a second chance. This last code could be labeled "self-correcting" (code SC).

As with any toolkit, the value of the toolkit is in the ease of creating suitable applications. In the case of SuperLab, the program has undergone considerable beta testing at the Laboratory of Neurosciences, and Laboratory of Clinical Sciences, at the National Institutes of Heath. The program is currently being used by the Cognitive Science Labora-

tory, at The Catholic University of America. And the University of Cincinnati is using SuperLab to train students in psychological experiment design.

All in all, SuperLab is a program that seems to have a lot of promise. The program could see good use in conducting memory tests, spatial reasoning tests, and other tests of cognitive functions. Aside from being used in theoretical research, SuperLab could be conceivably put to use in therapeutic work. Perhaps the program could be used to help create an accurate diagnosis of the elusive early stages of Alzheimer's disease.

As an interesting aside, Hisham Abboud, SuperLab's author, received an undergraduate degree in electrical engineering from Catholic University. SuperLab is one of several products being developed by Cedrus Corporation, the company he recently formed.

For further information about SuperLab, you can contact Cedrus Corp. at 11160 Veirs Mill Rd., Bldg. L-15, #221, Wheaton, MD 20902. Phone: (301) 589-1828. SuperLab's regular price is \$475. The educational discount price (available to WAP members too) is \$395.

A free demo version of SuperLab is available upon reqest. The demo version does everything the full version does, except it doesn't allow you to save your experimental data to disk. (You can create, run, and save experiments with the demo.) SuperLab requires a Mac Plus or better, with at least one megabyte of memory.

The author is chairperson of EdSIG, the educator's special interest group of WAP. He can be reached at (202) 244-2223.

Review and Preview: WriteNow

by Jon Slobins

When I recently wrote a review of DeltaPoint's new word-processing program, "Taste," I made some comparisons between it and my word-processing program of choice, T/Maker's "WriteNow." Lou Pastura, the Macintosh editor for the WAP Journal, then requested that I write this review of WriteNow. And I discovered a curious thing: as a reviewer in MacUser once remarked, WriteNow is so unpretentious that you don't realize how good it is unless you consciously think about it.

And that's exactly what a great program should do—work so well that you never give it a second thought. WriteNow, to my knowledge, is the fastest and most user-friendly word-processing program currently on the market. It has won MacUser's "Best New Word Processor" Editors' Choice award twice, as well as numerous other editors' and readers' awards from other magazines.

WriteNow, according to T/ Maker's "T/Maker Company Highlights," was originally developed in cooperation with Steven Jobs and NeXT, Inc., although the December 17, 1990 issue of the Computer Reseller News says that WriteNow also has roots in the original MacWrite project at Apple. Certainly WriteNow is as easy to use as the original MacWrite was.

WriteNow 2.2, the current version, was released in October 1988. Despite the fact that the

current version has been on the market for almost three years, WriteNow contains all the capabilities that are considered standard for a good word-processing package today. Its capabilities include: mail merge; a 135,000-word spelling checker (still one of the largest built-in spelling checkers); direct import/export capability for MacWrite, text, text with line breaks, and RTF (for Microsoft Word and Write); multiple column capability (with a four column maximum); multiple headers and footers; character, word, and paragraph count; and automatic page- and footnote-numbering. WriteNow also runs on a Macintosh network under TOPS or AppleShare.

Furthermore, WriteNow files can be directly imported by current (and, in some cases, past) versions of Aldus PageMaker; QuarkXPress; Ready, Set, Go; Microsoft Word; Microsoft Write; MacWrite; Correct Grammar; and Grammatik Mac. WriteNow 2.2 also contains a special desk accessory version of WordMaster Thesaurus, but it does not seem to run under System 7.

On the other hand, WriteNow itself runs perfectly under System 7. And run it does! Whether reformatting, word counting, changing fonts, or cutting-and-pasting, WriteNow's smooth and rapid performance puts other word-processing programs to shame. But as I said above, you get so used to it that you usually don't take notice of its fabulous performance.

One time I did notice WriteNow's great performance was when I used Microsoft Word at a job, and just about went crazy while editing a huge file. Any time I had to revert to a previously-saved version, I lost my position because the text cursor was saved back to the top of the file. Now maybe Word allows you to customize that "feature," but I didn't have time to hunt through cubicles to find the Word manual. So I had to either scroll and wait for Word to recalculate and display a new section of the document, or use "Find..." and again wait for Word to recalculate and display the new section of the document.

WriteNow doesn't put you through that agony—it saves the text cursor position, so when you reopen the file, you are right where you left off. And if by chance you want to go to the top of the file, you just move the vertical scroll bar's box to the top of the screen. Unlike word-processing programs like Word and Taste that are slowed down by their admittedly extensive capabilities, WriteNow rapidly displays whatever area of your document that you want to view. There's no sitting around while the program recalculates the entire document before displaying the desired section.

And if disk space is at a premium, WriteNow is the smallest word-processing program around. If your hard disk crashes (or you don't have one), you can run WriteNow from a single 800K floppy. And its minimum document size is 2K, as compared (for example) to Taste, which has a minimum document size of about 5K.

Does WriteNow have any weaknesses? A few (minor ones, in my opinion). For example, unlike Taste, WriteNow does not allow for flexible multiple columns. The columns you set up are all of equal width. A related problem is that the





program insists that you worry about the Page Wrap Factor, which causes problems with columns if the factor is a smaller number of points than your font size. And WriteNow only allows graphics to be placed on a separate line and centered, leftjustified, or right-justified.

But, hey! WriteNow has never pretended to be a combination word-processing, graphics and page-layout package. It has simply positioned itself as the best low-cost word-processing program available. Even with the above limitations, it places and prints both paint and draw graphics within its documents without any problems.

Since last year, WriteNow has been offered in two package deals, each bundling it with other programs. In September 1990, the

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WriteNow SmartBundle was introduced. The SmartBundle consists of WriteNow 2.2, Silicon Beach's "SuperPaint 2.0" paint/ draw program, Ashton-Tate's "Full Impact 1.1" spreadsheet program, and Software Discoveries' "RecordHolderPlus" database management program. In October 1990, WriteNow also became available packaged with Reference Software's "Grammatik Mac 2.0" grammar-checker.

Back to the Future

What's next for WriteNow? The sales staff at T/Maker was kind enough to send me a copy of a recent press release that gives a little information on the upcoming System 7.0-friendly version of WriteNow.

The next version of WriteNow is planned for release around Fall 1991, and will contain full 32-bit, TrueType, and virtual memory support. It will also contain Balloon Help, System 7 stationery format, and support core Apple Events.

The press release quotes T/
Maker chairman and executive vicepresident Royal P. Farros as saying,
"Because of WriteNow's ease-of-use
and minimal memory requirements, it will be the absolute best
word processor to use on the new,
high-volume Macintoshes running
System 7." I read this to mean that
you should not look for too many
additional capabilities in the next
release of WriteNow, since those
would expand WriteNow's size and
probably compromise its userfriendliness.

The Bottom Line

What I said in my review of DeltaPoint's Taste stands: if you are just beginning to acquire Macintosh software and you need simple graphics creation and page-layout abilities as well as word-processing, Taste is probably a very good investment.

But if you need a wordprocessing program is simply to create letters, term papers, or articles/books which other people or programs will format; if you are limited in disk space; or if you just want a straightforward, inexpensive, but relatively powerful wordprocessing program, WriteNow is for you.

Purchase Information

System Requirements: System 4.2 or later (but thesaurus may not run under 7.0)

Minimum Hardware Requirements: one 800K disk drive and a Mac 512KE or higher

Availability: Various mail-order firms and computer sales stores

T/Maker Company 1390 Villa Street Mountain View, CA 94041-9908 Telephone: (415) 962-0195

Jon Slobins jumped to it when the WAP Journal's Macintosh editor said he wanted a review of WriteNow RightNow!

Byts and Pyces

by Gary Hayman

This is a regular monthly column which includes Apple II information of the hints, techniques, suggestions, helps, information, news, etc. genre. Information which may not, in itself, warrant a separate article in the Journal but would, nevertheless, be of interest to Apple II readers. You are asked to submit your hints, ideas and suggestions to me for monthly organization and publishing. You may do it via the TCS or direct mail to me at 8255 Canning Terrace, Greenbelt, Maryland 20770. Telephone calls to (301) 345-3230. Please note that this column is often submitted for publication 45 to 75 days prior to its appearance in print.

Disk Care

Extracted from an article in a recent PACE newsletter:

DISK ERROR—that computer screen message strikes terror into the hearts of computer users everywhere.

The bottom line is that a disk error costs you time and money. Even if you have backed up your disk as recommended, it will take you some time to replace the lost data.

Lost data is not inevitable. By following a few simple rules, your computer diskette scan provide years of trouble-free service. The first step in taking care of your disks is to understand how they work.

"Diskettes store information magnetically, in tracks on the disk surface that are similar to grooves on a record," says Mark Welland,

vice president of North American sales and marketing for Verbatim, one of the world's top computer storage media manufacturers. "For your computer disk drive to find the right track and either record or playback information, the disk drive heads must remain in constant contact with the surface of the disk. Even the slightest separation between the drive heads and diskette surface can result in lost data."

To prevent that from happening, Welland says, the diskette must be protected from three things: damage to the diskette's shape, contamination of the diskette surface, and magnetic influence. Although 5-l/4-inch disks are flexible, their shape and integrity must be protected to ensure that the disk drive heads make smooth and continuous contact. Welland gives us the following rules that will protect against the common causes of disk damage.

Don't use paper clips or rubber bands to hold groups of disks together. Bending or crimping the edges of the 5-1/4-inch diskette's jacket can keep the disk from turning freely.

Don't put books or other heavy objects on top of disks. Crushing the protective casing of either 5-1/4-inch or 3-1/2-inch diskettes may prevent proper functioning.

Never force the diskette into your disk drive. If not aligned properly, the disk can bend or break.

Never write on the 5-14/inch diskette's label with a ball point pen or try to erase previous

Keep your disk comfortable. Extremes of heat or cold (below 50 degrees or above 125 degrees Fahrenheit) can warp or distort the disk. Don't leave disks in a hot car, and don't store them in direct sun

"Spills and finger prints are primary causes of diskette contamination," Welland says. "Even minute particles, like cigarette ash, can change the contact between the drive heads and disk surface."

light.

"To avoid contamination," he continues, "make sure you always keep your disks in a protective sleeve when they are not in a disk drive. Return them to a storage container when not in use, and store them in an upright position."

Smoking, eating or drinking in the immediate vicinity of diskettes is risky business. To avoid contamination, finish drinks before working with disks and be careful not to touch the recording surface of 5-1/ 4-inch disks.

Welland suggest buying Tefloncoated diskettes, which provide premium protection from contamination for your data.

Because data is stored magnetically, placing diskettes too near a magnetic field can alter or erase information. Common sources of harmful magnetic fields include fluorescent lights, electrical appliances, and magnetic memo holders. Airport metal detectors will not affect diskettes. To avoid accidental erasure of diskettes, store them in their protective containers, at least a foot from all electrical appliances and computer components.

Advanced technology

The Kiplinger Washington Newsletter says that Cellular and radio computers will spread nationwide in the '90s, allowing



sales people, engineers and others to tap into data at any time.

Daffynitions

Excerpts from Mad Magazine

- BIT: A word used to describe computers, as in "Our son's computer cost quite a bit."
- BOOT: What your friends give you because you spend too much time bragging about your computer skills.
- BUG: What your eyes do after you stare at the tiny green screen for more than 15 minutes. Also, what computer magazines do to you after they get your name on their mailing list.
- CHIPS: The fattening, nonnutrition food computer users eat to avoid having to leave the keyboards for their meals.
- COPY: What you have to do during school tests because you spend too much time at the computer and not enough time studying.
- CURSOR: What you turn into when you can't get your computer to perform, as in " You \$#\$&@ computer!"
- DISK: What goes out in your back after bending over a computer keyboard for seven hours at a clip.
- DUMP: The place all your former hobbies wind up soon after you install your computer.
- ERROR: What you made the first time you walked into a computer showroom to "just look."
- EXPANSION UNIT: The new room you have to build on to your home to house your computer and its peripherals.
- FILE: What your secretary can now do to her nails six and a half hours a day, now that the computer does her day's work in 30 minutes.
- FLOPPY: The condition of constant computer user's stomach due

- to lack of exercise and a steady diet of junk food. See "CHIPS"
- HARDWARE: Tools, such as lawnmowers, rakes and other heavy equipment that you haven't laid a finger on since getting your computer.
- IBM: The kind of missile your family members and friends would like to drop on your computer so you'll pay attention to them again.
- MENU: What you'll never see again after buying a computer because you'll be too poor to eat in a restaurant.
- MONITOR: Often thought to be associated with computers, this word actually refers to those obnoxious kids who always want to see your hall pass at school.
- PROGRAMS: Those things you used to look at on your television before you hooked your computer to it.
- RAM: What you do to the side of your computer when it's not working properly.
- RETURN: What lots of people do with their computers after only a week and a half.
- TERMINAL: A place where you can find buses, trains and really good deals on hot computers.
- WINDOW: What you heave the computer out of after you accidentally erase a program that took you three days to set
- QUIT: I'm stopping now but many thanks to SWACKS in Florida for bringing the above to our attention.

Disk Salvage

This gem comes from a letter to the editor of Byte magazine. In the case of a bad solution spill (coffee, pop etc.) onto a 3.5" disk, here is a way of salvaging the disk if the data is important to you. Remove the shutter assembly, then pry open the

plastic case at the shutter cavity on the side opposite the write protect side. Remove the floppy media, wash it under running water using a mild detergent. Dry carefully with a lint-free soft cloth, then replace the media into a similarly opened clean shell (from a discarded floppy) and re-assemble. No harm done if the shutter cannot be salvaged. [GH: if any of you have ever done this (or do it) please let me know. I do know, however, that twice a month, LEE RAESLY dips his hard drives in a solution of Woolite and cool water and lets them air dry while spinning. Although I have never tried this technique to clean my hard drives, we all know that Lee is an innovator in the computer industry.]

I bought a hard drive—now what?

The following was written by an unknown author and originally appeared in a publication of AAUG.

You now have a hard drive for your Apple IIgs. Congratulations! Following the instructions given by friend or dealer or user group, you now have your drive formatted and all ready to put formation on it. Sit back and relax while I offer a quick refresher course on the inner workings of ProDOS and how it relates to hard disk management.

GS/OS is still considered to be part of the ProDOS family. When a disk is formatted, either from a utility program like Copy II Plus, or from the Finder in GS/OS, the same information is being placed on the disk no matter what program is doing the formatting. Let me explain how that information is put there in the first Place. One of the first things done to a disk when formatting is to place tracks on the disk for the blocks of information to reside. Think of a bullseye and you have an idea how the tracks are laid out. On a 5.25" disk, we have 35 tracks starting from the outside edge, working its way towards the

H

center. The tracks never meet, they separate from one another. The 3.5" media has 80 tracks. Mass storage media such as hard drives have even more. On these tracks are placed the blocks where the information is stored. Looking at a disk, you will never actually SEE the tracks, or blocks, but they are there. Block 0, the first block on the disk, is where the formatting program places the information enabling the disk to begin the "Boot" process. It is given the ingenious name of BOOT LOADER. Block 1 was used for the old Apple III's operating system. Apple decided to keep this idea, but you can forget about ever needing block 1. Blocks 2-5 will contain the ROOT directory files. This is what you see when you catalog a disk. Each of these blocks will hold information about 13 possible files. One file name placed in block 2 will be for the Volume (or disk) name. This leaves room for 51 files in the main or Root, directory. ProDOS allows something called subdirectories (folders). This helps to get around the 51 file limitation. There is no limit to the number of files placed in a folder. ProDOS gets around this by using pointers in the DIR files (the folders). These pointers record where on the disk the files you saved are stored.

There are two types of format: a hard format and a soft format (or low-level and high-level, respectively). Utility programs like Copy II Plus will do a soft format. They clear the root directory, while ignoring the other data on the disk. A hard format will rewrite all the tracks and blocks on the disk. There are hard drive utility programs that will also check the efficiency of how the blocks are laid out on the disk.

Hard drives will have one method of laying out the block interleave that is more efficient than others. I'm afraid it's all trial and error for what is best for your drive. The interleave is the space between consecutive blocks. GS/OS has

made great strides in allowing a 2:1 interleave for the APPLEDISK 3.5 disk drive. Some hard drives may prefer 1:1, or 5:1 or anything in between.

One of the first things a new hard drive owner should do is try to plan the most efficient way to use these folders. One suggestion for GS/OS users would be to copy the contents of the latest SYSTEM DiSK as they are on the disk. I would then create folders for GAMES, DTP (for desk top publishing programs), WP (for word processors), APPLEWORKS, AWGS, BUSI-NESS, UTILITIES. Of course, you are free to add or delete any from this list. Do not get carried away with using folders. It may slow down your hard drive.

Try to avoid placing copy protected software on the hard drive. it MAY prove to be harmful, rather than efficient. The reason for planning ahead is due to how ProDOS places the information on the disk. Many people make the mistake of placing anything and everything on their hard disks. The problems begin as you delete any of these files.

When you first place the programs on the disk, ProDOS will store them on consecutive blocks. As changes are made to these files, blocks may be freed for storage. As your drive fills up, ProDOS will have to store information wherever it finds empty blocks. This will slow your hard drive. This process is called fragmentation. it is possible to have one program scattered all over a 40 megabyte hard disk. The longer it takes for ProDOS to find the file, the longer it will take to launch the program.

You may feel that you have escaped the need for disks after buying a hard drive. You will still need them. ALWAYS back up important information. One rule regarding back-ups is to make three copies. Why three? If something goes wrong with the first copy, you

will more than likely use the second copy to run the program. If that fails, you will still have one workable copy left. After two tries, you will probably decide to check your computer before trying that program again.

There are utility programs available that will prove to be invaluable to the efficient use of your hard drive. I would recommend PROSEL 16 for GS owners, and PROSEL for IIe, IIc+ owners. This program is a program selector (that's how it got its name), and a valuable collection of utility programs. PROSEL contains utilities to de-fragmentize your hard drive and to fix your root directory among many other useful things.

Using newsroom clip art with PublishIt

WILLIAM AINSLIE, an ATOCF member shares the following hints concerning Newsroom Clip Art and Publish.It:

"Were you as frustrated as I was when you got your PublishIt 3 and discovered that it wasn't as easy to use the Newsroom Clip Art as it made it sound in the manual? In fact, The PublishIt 3 manual fails to explain that to use a 'Newsroom Photo' it has to have been saved after cropping the "entire' area available for making photos. Something that, while using the Newsroom for years, I had neverever done. Therefore, I have loads of Newsroom Photos saved on data disks that Publish-it 3 can't use. I have recently found an effective and practical solution to the problem.

"You need to use the 'Clip Art Convert' program found on side 2 of the "Print Shop Lovers' Utility Set' published by Big Red Computer Club. Once booted you press "L" and select #3 Load Clip Art. Highlight your choice on the clip art directory and press Return. Once the Clip Art frame is on the screen you press 'R' (to reverse the image) П

then push the space bar and select #1 Save as a Hi-Res Picture. NOTE: You shouldn't change the size of the cropping box or even bother to move it at all. Put a DOS 3.3 data disk in the proper drive, type in the file name and save. [GH: only persons who own a 5-1/4" drive can

"What you'll get is a DOS 3.3 file which contains the 'whole' clip art frame. A file which can be read, loaded and utilized by Publish-It 3 or the same way you would use the Publish-It 3 Clip Art. Each file takes up 33 sectors on the data disk so there is room to save 16 clip art frames per side" on a 5-1/4" floppy. Even with the disk swapping I had to do on my APPLE IIe it only took me about 45 minutes to fill one disk, both front and back sides. Now, after a few evening sessions converting files, I can once again use the wonderful artwork that is on the 'Newsroom Clip Art Disks' in my Publish-it 3 documents. We can only hope that Springboard will publish more of the same high quality graphics in the near future."

Transwarp in IIE's and problem

MIKE UNGERMAN, a former WAP member, wrote an interesting piece that appeared In SWACKS (Florida) newsletter. Mike has always shared valuable information with club members. This is what he wrote:

For some time now I've been having all kinds of problems with my BBS system's He running in an accelerated mode, whether it be with Zip Chips or the Transwarp.

I've replaced the power supply with the AE heavy-duty power supply. I've done all the usual things with cards and memory chips, but still had crashes running Proline with its extensive hard drive access processing message traffic.

MORGAN DAVIS has been a big help in troubleshooting, and although I've been at my wit's end many times, I've stuck with it. Well, last week AE's tech support just sort of let on that they were aware of problems with two chips on the Apple IIe's motherboard that were power sensitive. Apparently, with a lot of power hungry cards (which I DO have), the performance of these chips could cause system hang up/ crashes. They didn't offer any additional comment, except to offer to send me the replacement free of charge since I had purchased several AE items directly from them.

Last night I replaced the chips and apparently the system is running as it should always have (I say apparently, as 24 hours is not a good basis for a conclusion...).

The chips and their replacements are:

Original Chip - Replacement Chip

SN74F109 or SN74AS109 --> SN74S109

SN74LS245 -> SN74LS245 (same designation but different manufacturer.)

Anyone with a Transwarp and a lot of cards/memory in his/her system may want to contact AE tech support for the replacement chips; especially Proline Sysops running Ile's. I would think that the Zip chip would consume much less power than the Transwarp card, but it couldn't hurt, especially if you are running a Ramfactor or Ramworks

AppleWorks Word Processing Hints

Helping our understanding of AppleWorks 3.0 to be just a bit clearer, SUSAN RANCER of TAC writes:

"Working with Underline, Boldface and 'Sticky Space' features—One of the major functions of a word processor is to allow the user to 'Dress up' a document. This is done with such special features as underlining and boldfacing.

"First, let us contrast the use of underlining and boldfacing with a typewriter. To underline with a typewriter, you backspace over your letters and type your underline under the designated letters. Boldfacing can't be done per se on a typewriter, unless you strike over the exact same letters you typed.

"With the word processor in AppleWorks, underlining and boldfacing are accomplished in similar fashions. There are two ways of accomplishing this: one is to select UB and UE (Underline Begin and Underline End) and BB and BE (Boldface Begin and Boldface End) from the Printer Option menu. As the commands suggest, you must place a designation both before the letters you want underlined or boldfaced, and at the end of designated letters. Since there are so many steps to get to this using the printer options, AppleWorks has a method by which you can use keyboard commands. These keyboard commands are CON-TROL-L for underline and CON-TROL-B for boldface.

"When using the OA-O (Printer Option) command to underline or boldface, you have to access the command OA-O, key in code letters (UB or BB), Press <Return>, ESCape out of the options, cursor to the end of segment of text you are working with, access printer options again, key in code letters (UE or BE), Press <Return> and ESCape back out of the options. This is a very roundabout way to accomplish tasks that are done quite frequently with a word processor. Use of the keyboard commands makes your use of printer options for underlining and boldfacing more efficient. The trick is to remember to do it twice at the beginning and at the end.

"All of the special printing effects are indicated by upside down "v" s (^-the caret), the character above the 6 key. To tell what they signify, move the cursor so it is on

HARRY BACAS was discussing with DON HANSON, on the TCS, how he uses his ProTerm telecommunications program in various ways. Let's listen in on a part of it...[slightly edited].

Don, I regularly do two things similar to what you are describing. At least I think it is similar. I have an IBM clone upstairs on one phone line running a telecom program called Mirror. I have an Apple in the basement on a second phone line running ProTerm. I exchange files between the two systems by putting one of them in Unattended mode, so it will answer the phone, and then phoning from the other system. In either case, there is a set of commands the calling computer can issue to direct the host to do things like log to a directory (set a prefix) and display a list of the files in the directory and upload or download a file (using Xmodem protocol) to or from that directory.

A second use of unattended ProTerm is when a friend across town wants to get a file from me. I go into Unattended [mode] and he phones me, then issues the ProTerm commands required to get the file. These commands are in Chapter 10 of my ProTerm manual, which may not be the latest version. They include ?=help, S=send, R=receive, L=log, D=dir, C=chat, V=view and H=hangup. While he is online, I can talk to him by issuing the C=chat command. If he wants to talk, he issues the C=chat command, which rings a bell on my computer, then I type the C command and thereafter whatever we type appears on both computer screens. To end chat, I press Ctrl-C.

I should add that when you go into Unattended, you have to set several parameters, like what volumes or directories the caller can access. But I assume you already know this.

this symbol and read the indication line in the lower right hand corner of your screen. This will tell you if it is an underline begin or underline end, and same for boldface. If anyone has any trouble with underline and boldface, it is due to the fact that the correct Pair does not appear. By careful checking, any printing problem can be solved when it is evident that there are 2 underline begins. In this case, a whole paragraph might be underlined because the underline and boldface features are automatically disengaged when a carriage return is encountered.

"I know you have been wondering: What is a 'sticky space?' Let's go back to the typewriter comparison. Let's say you have a group of words and symbols that naturally belong together but are separated by spaces, such as February 25, 1990. If any part of this date appears near the end of the line, word wrap is only reading the spaces and not logical entities. So you might end up with "February" on one line and "25, 1990" on the next line. In order to keep this logical grouping together, you can place a "sticky space" instead of a regular space and the printer will read this as a signal to keep this entry together as one long word. This is accomplished by accessing OA-SPACEBAR instead of just the space bar. Your entry will look like this "February^25"^1989" and will be kept together on line.

"May you have happy hours using underlining, boldfacing and sticky spaces to improve the appearance of your documents!"

Apple IIGS ROM Versions

I found this interesting question and answer combination reported by RENE EGAN in a column titled Tech Tidbits published by SNAFUG (Las Vegas) in their Desert Dialogue newsletter. — QUESTION: What are the differences between the various ROM versions on the Apple IIgs? How do I tell which one I have?

— ANSWER: There have been three different versions of the Apple IIgs ROMs. The first ROM was available for only a short time. This ROM was replaced by the version 2 (also known as revision 1) ROM to correct minor problems and provide support for future system software enhancements. This upgrade is available free of charge to all Apple IIgs owners who have the original ROM.

The version 2 ROM continued to be used until the introduction of the Apple IIgs with 1MB of RAM. At that time, it was replaced with the version 3 ROM. This ROM (actually, two ROMs) added support for the new 1 MB logic board and improved slot support. There is no way to upgrade from an older version ROM to the version 3 ROMs. All software which works with the version 2 ROM should work with the version 3 ROMs. The reverse also holds true. The few exceptions that have been reported are related to copy protection schemes. The publishers of affected products, such as PrintShop GS, have upgraded versions of their software available to correct the problems.

The easiest way to tell which version ROM a given Apple IIgs contains, is to watch the screen when the computer is powered on. The origInal ROM displays nothing at the bottom of the screen at startup. The newer ROMs (version 2/revision 1 and version 3) display "ROM Version 01 or "ROM Version 3" on the bottom line of the screen. These messages appear when the power is turned on, but before the computer actually starts booting.

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A new GS

Ever vigilant DALE SMITH, tracking what is said on the major communication boards furnished this one. It is a RUMOR, that by the time you read this may be validated, squashed, or just pie in the sky. Here it is...

—You're right! It's a new GS! It will have 2 meg RAM, built in Superdrive, a 640 x 400 graphics mode, and an optional 40 meg internal! No speed improvements and no word about advertising.

Ok, so its not quite Sunday but I couldn't wait anymore. It supposed to be called the "GS Plus". Look for major software problems with the new graphics resolution (new monitor perhaps?). And System 6.0.... As stated earlier this is only rumor but I trust my source completely. I won't tell his name but he's very well known. God I hope this is true....

Dale adds that this is just the key point in the news/rumors thread on AOL. Other points made in the thread concerned the fact that most of this can be available to current GS owners without buying a whole new system, and the NEW CPU qualifies as a NO NEW CPU (couldn't afford to make Sculley look... [fill in the blank]);-))))

The DIPS of an ImageWriter II

DAVE RANDALL was asking some questions about his ImageWriter II printer. RICH SANDERS was quick to help with the following advice:

Dave, have you tried to put your ImageWriter II into its self test mode? You can do this by holding down the Form Feed button while you turn it on. The ImageWriter II will start its self test. It will tell you what your dip switch settings are. Mine are:

DIPSW1(00000100) DIPSW2(1100), '1=ON, 0=OFF' The settings for DIPSW1 deal with Language, form length, perforation skip CPI, etc. The DIPSW2 is important the first two switches being ON mean 9600 baud, This should match what is set in your control panel. The third switch being OFF deals with hardware handshake (XON/XOFF), the fourth is for an option card being either enabled=1 or disabled=0.

The self test also tells you your ROMREV number, how much ram you have on your ImageWriter II, (I have zero), and lastly some info about your Appletalk board. Since I don't have one mine prints "AT=OFF".

These are just some additional tid bits I thought might look at before you take your ImageWriter II to the shop for repair.

Computers and caffeine

Sage advice contributed by NIGEL BRODER:

"When I spilled coffee on my IIe keyboard, I quickly dissembled the computer, popped all the key caps off and used electrical contact cleaner to remove the sticky mess. I don't know about using water, but I do know that at first mine did not work either. So I took it apart again and thoroughly dried it with a blow dryer again and viola! It worked. I would guess that even a minuscule droplet of any fluid could cause a short. I would suggest you try drying it again and let it air out before re-installation. Worth a try since it is a lot easier to do on a GS than it is to take a He apart to remove the keyboard module. BTW, some of my keys felt sticky at first, even after the cleaning, but now they are all fine. No more coffee around the computer for me!"

TOM VIER adds, "At ABC we have hundreds of monitors and they got a high pressure spraying with Fantastic followed by solvent

followed by air. Then they sat for three days, fixed if needed, and then put back in service."

Zip Chip warning:

"Attention all Zip Chip GS owner's," advises KIM BRENNAN, "If you have a Zip Chip that is NOT of revision 1.02 or later, you should SERIOUSLY consider sending back to Zip to get it updated (there is no charge for this, BTW).

"Why? If you haven't been experiencing troubles? I thought I wasn't experiencing troubles either...just the normal run of the mill crashes that may occur on a fully loaded GS.

"But, I was. CV Tech says that they can NOT guarantee the integrity of your hard disk data when using a RamFAST in any GS equipped with a V1.0 or V1.01 Zip Chip GS.

"I've been using my GS as a BBS. The BBS is operating 24 hours a day. Every now and then the GS would crash into 40 column mode. A simple reset would restore things, but it kept on happening.

"Since removing the ZipChip (in preparation for returning it for the upgrade) my GS hasn't crashed once (in 3 days of continuous operation). While this is hardly conclusive proof, it is substantial evidence. In two weeks of operation the BBS had never gone three days without a hardware crash."

OUCH! That's HOT! CALL 911

JONATHAN KERN yells, "Help! What does 'Fatal System Error 0911' mean? My IIgs had been working perfectly until I tried to load a game from a disk my four-year-old son told me (correctly, I discovered) was damaged. I got the message about the fatal system error then—and have been getting it repeatedly all afternoon. Most

(Please turn to page 92)

View from the Cat House

by Kim Brennan

The last two months have been very busy in my personal life. So busy in fact that I missed the deadline for submitting my column to the Journal. Ah, well. But, the extra time allowed me to get some new equipment as well as solve some old problems. It has also seen the demise of one of my cherished companions, the brown cat. But, a new page in my life has begun as I have started up my own BBS (called The Cathouse, what else?) and the main feature of the BBS (at least in my mind) is my concentration on GS screen fonts in the file area.

Actually, my BBS can serve as a complement to the WAP's own TCS. The TCS does not have the room (at least currently) to keep all the GS fonts available in the file area. My system does as it doesn't have the overhead of 5 separate conferences and all the message traffic involved. The Cathouse BBS is a free system available 24 hours a day at 3/12/24/9600 bps (V.32) and the number is (301) 840-8567. Validation of new users occurs daily. The BBS is also a networked BBS, getting some of the feeds that Conference 5 of the TCS gets.

Setting up the BBS meant getting another computer, at least that was true if I wanted to make the BBS a full 24 hour operation BBS. So I did. Coincidentally at this time, my father was seeking to go to an MS-DOS based computer, and I cheerfully notified him that I would be interested in his GS. This GS was an upgraded //e, equipped with a Transwarp GS (6.25Mhz) a DMA SCSI card, 4m of Ram and a 40Meg

hard drive. For the BBS use I also put the Syquest removable cartridge hard drive on the system. And to better support the Syquest I ordered a RamFAST SCSI card. Actually, this RamFAST was the second RamFAST I had ordered.

One of the things keeping me busy this last month was my moving out of Virginia and back into Maryland. This meant backing up my 150Meg Wren hard drive, and disassembling the computer system. Just about the time that this occurred, I started getting very peculiar errors on the hard drive, namely, that various partitions were full (even though they weren't). Since my GS had been running in near continuous operation since the winter, and because on several days in Virginia during the spring the air conditioning was not functioning, my computer had gotten quite hot under the collar (or rather under the system saver). So, my deduction led me to believe that the OKS MultiCache (my SCSI card) had caused the errors. Since OKS is no longer in business, getting the card repaired would mean doing it through a third party. Randy Trout, a former OKS employee, was willing to look at the card, but, correctly, couldn't promise anything. With these thoughts in my head, I bought a RamFAST immediately upon my move to Maryland.

Because some of the vital information (vital to operations, not my data) had been corrupted it was necessary for me to reformat the hard drive with the RamFAST once I had installed the RamFAST.



However, I still experienced occasional crashes. A reboot attempt without turning off the GS resulted in the message "RamFAST SCSI ram error code \$0D" being displayed. One of those cryptic error codes that I find so annoying these days. After trying many different things, I finally resolved to call CVTechnologies to get an explanation. The solution, as it turned out, for me was easy.

The SCSI cable bus consists of many different signals, not just the data lines that move your information from the computer to the hard disk and back. One of these lines is called Termination Power. This signal supplies power to a collection of resistors that is called the SCSI bus terminator. Every SCSI bus should have two of these terminators, one at each end. In the case of the RamFAST SCSI card there is a terminator built into the card itself. The purpose of the terminators is the reduce noise on the data lines and so retain the integrity of your data. Terminator power can be supplied by any device in the SCSI bus, usually one (or more) of the hard drives and in fact should be supplied by every device. A problem will arise if no termination power is supplied at all. Usually this is demonstrated by a failure of the computer to find the hard drive.

The RamFAST board is designed so that either it or a hard drive will supply termination power. This is determined by the 11



setting of one of the dip switches on the RamFAST board. If your hard drive isn't being recognized by the RamFAST change the position of this switch (with the power off) and try again. Most likely the drive is not supplying termination power.

In my case, this signal line had been cut on the internal SCSI cable of my hard drive, necessitating a minor surgery job on my part to reconnect it. After the reconnection my hard drive worked like a charm. In some rare cases (mine being one of them it seems) the RamFAST may not be able to properly supply termination power. Fortunately the cure was easy for me to implement once I knew what to do.

I did have a few other strange crashes on my system that seemed not to be related to the hard drive. To cure them I did something very simple. I reinstalled system 5.04. Everything works beautifully now.

While all this was going on I noticed something of minor mystery to me. I started noticing that whenever the computer was busy and the watch appeared that the hands on the watch moved. This was prior to my reinstallation of GS/ OS. After the reinstallation the hands of the watch didn't move. Talking with various people, I was told that there was an init called Aniwatch that caused the hands to move. I can verify that this init does just that. The only problem is, I'm positive that this was the first time I ever saw Aniwatch, so I have no idea how it may have appeared on my system to begin with.

In setting up all the font files for my BBS I had a chance to encounter one of the minor bugs in the current (v5.04) system. The Font Manager, one of the many toolsets of the GS, does not properly handle font files that are larger than 64K. There may be nothing wrong with the font file itself. This is certainly the case with some of the larger point sizes of fonts that I have recently received. BlackChancery

96point (a lovely font, by the way) is too large for the Font Manager. So I, currently, have to use only the 72 point version. Actually, I'm not really using 96 point or 72 point fonts, but rather the printer is. For highest printed quality the Independence printer driver for the HP Laserjet prints 96 point at 1/4 scale (24 point). The same thing happens on an ImageWriter when you choose to print in best quality mode, except that the ImageWriter driver only scales down fonts by 1/2. The ImageWriter LQ driver scales by 1/3 in best quality mode. Harmonie usually does 1/4 scaling, but I've heard that if you select Laserjet best (75dpi) and 300dpi it actually prints at 1 to 3.5 scaling. I've not checked that out for myself.

As I complete this column Kansasfest has just finished. Unlike previous Kansasfests this one had no non-disclosure agreements between the attendees and Apple Computer. Kansasfest, if you didn't know, is a Apple II developers convention. In previous years Apple has demonstrated new products for the Apple II first at Kansasfest but insisted on the non-disclosure agreements, which hindered us ordinary folk from learning what the future held. This year, the wrappers were off.

While none of the software or hardware Apple talked about at Kansasfest were officially released many of them no doubt will be. GS System 6.0 will be most impressive, according to the reports. Including major speed increases and many new features, such as a completely new Finder. GS System 6.0 will most likely be very much like Mac System 7.0, an exciting prospect indeed.

Hardware demonstrated or talked about included a new Superdrive controller for the GS, including a HFS (Hierarchical File System, i.e. the Mac file system) File System Translator (FST). This would allow GS users to format and

use their hard disks as one large volume instead of breaking it up into 32 Meg partitions. Also a new ProDOS 8 version (2.0) was talked about, which would allow for more than 2 devices per slot (a current limitation of ProDOS 8). The Superdrive controller would allow for the high density disks used on Mac systems (1.44Meg) but would, apparently also allow for a 1.6Meg format that Applied Engineering created [The word that has reached my ears is that the Superdrive format will be 1.44 and 800k ONLY—ed]. This will be extremely nice for floppy disk users, not to mention backups of large hard disks.

None of this was officially announced, of course, but the talk was that it most likely would be officially announced in September (the month Apple usually announces new products). Elsewhere I had heard that System 6.0 would probably not be released until 1992.

It is beginning to sound like the Apple IIGS world is getting exciting again.

A Requiem for a Friend

by Ray Settle

There comes a time in every zealot's crusade when one must bow the inevitable and face reality; the Apple II is finished as a mainstream computer. The disappearance of Apple II software from the shelves of practically every retail outlet, the shrinking sources for hardware enhancements, and the anemic state of advertising in the few faltering Apple II magazines all toll the death knell. In the past, we could retort to those who predicted the death of the Apple II that there was still strong third party support for the machine; we have no retort any longer.

Many who have staked their careers and fortunes on supporting the Apple II are now scrambling to establishing footholds in other computer domains. Applied Engineering, once the champion Apple II enhancer, now charges Apple II customers for phone support while providing such support free for Amiga and Mac customers. Some software vendors have disappeared altogether. Magazine subscription rates to all Apple II magazines have soared, leaving one to wonder if a subscription term will be completed before the magazine itself disappears.

Apple has assured its Apple II users that it will support the machine as long as there is demand, but it then presents pricing and selection for the Apple II that all but guarantee that no one in his right mind would buy one. HyperCard GS is now available, but that product is a non-starter. Very few GS owners (70% of which are

schools which probably won't undertake massive enhancement of memory) have the required 2 Meg of RAM to run it. Very few Apple IIGS memory cards even offer that capacity. The Apple IIGS suffered from low birth weight, premature delivery, and subsequent parental neglect. The damage has been done and appears to be irreversible. Most GSes can function only as super IIes due to their underweight RAM. There can be no doubt any longer that Apple is killing the Apple II; no with a knife in the back but with neglect and starvation.

For many, the Apple II is all the computer they will ever need and will compute along quite contentedly with Appleworks until either they or their machines die. No other program in the short, happy history of computing has had a more devoted user base nor a wider range of enhancements than Appleworks. Enhanced, it can literally do any thing any other package on any other computer can do plus a few things no other computer package can do. The Apple IIGS is the premier Appleworks engine and as such has a long life ahead of it with or without continued support from Apple Computer, Inc. Apple II users can take heart in the longevity of the Apple III, despite its limited initial base and software support. Just think how long the Apple II will persist with its much larger installed base and software bank. Thank God for user groups like WAP; soon they will be the only source of software and support for the Apple II. Apple II people, if you want to feel totally

abandoned, let your WAP membership lapse.

How does one feel while sitting in front of a \$5,000.00 investment that is gradually becoming obsolete? Bitter? Yes. Incredulous? Yes. Betrayed? Yes. Vengeful? Maybe. The Apple II user may move over to the Mac out of necessity and a recognition that the alternatives are even more unattractive, but probably won't wear the six-color apple as defiantly or as enthusiastically.

Moving to the Mac: the agony and the ecstasy

I have had a Mac for over two years but really hadn't done much with it until I got tired of getting beaten over the head with Apple non-support of my GS. Reluctantly and after about six months of agonizing, I switched the 60 Meg drive from the GS to the Mac and the 20 Meg from the Mac to the GS. As I pressed RETURN to format the 60, I said goodbye to a lot of old friends who, even though I still had them on disk, I knew I would seldom if ever use again. I was now ready to transfer my accumulated GS Finder knowledge to the much superior Mac Finder.

What is this mess of a System Folder? Everything just gets dumped into this one folder helterskelter? Why, it looks worse than the middle drawer of my desk. Hey, this is the Mac; it's supposed to be...better? What a mess! At least with the GS, everything had its proper folder and everything was neat. I know now that System 7 has borrowed heavily from the GS Finder and even puts things in their proper folders automatically, but I have grown to distrust computer system that do things automatically with no manual overrides. Why is it that a file dragged onto the desktop is no longer in its folder along with its related stuff? Can't the Mac remember where the file came from? Maybe aliasing in System 7 will accomplish that.

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Why does the system have to boot up completely before I can get to the control panel? What happens if the system disk won't boot? Repair time? Why can't I do a keyboard restart? Even the IBM allows that. What's this Font/DA Mover? Can't I just drag the fonts over to the font folder? Where IS the font folder? Why can't I just pull down one dialog box to change the font, size and style in one motion? Where are the fonts larger than 24 points? I know I installed some up to 72 points. I have to keep a list on

What! no stereo???

look.

paper somewhere so I'll know

which large font sizes I installed

since I can't just open the folder and

Open-Apple-er-Command-Q doesn't shut down the finder? But Open-Apple—er—Command-Q really shuts down these applications; no questions, no warnings, just quit unless I haven't saved recently. Where's the CONTROL key? An Apple II person cannot feel secure without a CONTROL key. Whoever put such a small SHIFT key on the right side of the keyboard should be shot. I know the PC keyboard has the same layout, but that doesn't make it any better. Did you know that an UP-AR-ROW-RETURN command will erase a whole line of text when you only wanted to capitalize? This RESET key doesn't appear to do anything. Why is it here? There's no ESC! How can I escape? And what happened to the apple on the COMMAND key? I want my Apple

Let's look at the Control Panel. Hey, this looks familiar. I can change the desktop pattern; that's nice. RAM Cache? That's handy. Everything else looks the same. What else is under the Apple Menu? Find File should help especially with a system that encourages sloppy file storage. My Apple II experience has taught my to organize my files and

subdirectories. Many Mac users would do well to have such experience. Key Caps is real helpful. Scrapbook could very useful in copying from one program to another and on different days too. The Chooser seems to be an unnecessary option; there should some other more intuitive ways to select a printer. Isn't the Mac smart enough to figure out which printers are available?

Wow! I can open an application simply by clicking on a file saved with it. I think the GS was supposed to have that capability, too, but the only part I ever saw was the error message saying it couldn't open the file because the Finder couldn't find the application sitting right there on the desktop.

Everything on the Mac is GUI—no command line options here. Copying files from deep subdirectories is a real pain. Glen Bredon, how about a ProSel for the Mac? Sometimes it's more handy to type a pathname than clutter up the desktop with numerous open folders. I could do a lot more with my files a lot more easily on my Apple II than I can on the Mac. Even the copy program offers fewer options for file manipulation. Why can't I put my files in the order I want? Look at these long file names. If the file names can be so long, how come the icons are so close together that the filenames run into each other. Maybe it's good that there is no command line option; think about typing in one of those windy Mac file names, to say nothing of a pathname made up of several similar megasyllablic snallygasters. [Watch the spellchecker choke on that one.] One good thing about MS/DOS is it forces one to be creative in eight characters or less. ProDOS' fifteen character filenames seem about right; the Mac's are just too long and too liberal. Wait, can I have a filename with all blanks spaces? I'll have to try that. Yep! it worked. Can't hide it though; it's a

little like the invisible man in a steam bath. But I could have multiple files with differing numbers of all blank spaces; that would really mess up a spy's mind! Wait, this is the Mac; it's supposed to be fun!

We Apple II people have really missed the boat! We should have devoted on energies to programming the Mac. Look at the software prices! Coming from a computer where no piece of software costs over \$200.00 and 97% come in under \$100.00, Mac software prices cause severe cases of stickershock. These prices indicate one of three possibilities: the Mac is incredibly difficult to program and armies of programmers must devote many man-years to develop even a simple DA (Does easy to use mean difficult to program?); or Mac users are incredibly wealthy and lavish money on Mac programmers out of some natural altruism; or it's just that this is the Mac, and it's supposed to be expensive.

Actually, the Mac and I have come to an accommodation. We work well together but do not share quite the same excitement and pride that I did with the Apple II. Somehow the things that amazed me about the Apple II seem expected and ordinary on the Mac. After all, this is the Mac; it's supposed to be...great. The GS sits beside me now with a blank screen and a forlorn look, much like a retired thoroughbred. I cannot determine if it is giving a sigh of relief or sigh of disappointment. Its fate is better than my PC-compatible, whose dismembered parts are stowed under my desk. Still I cannot walk past my Apple II without feeling a twinge of guilt and hearing a small voice: "Tsk, tsk, tsk..."

Ray Settle is a computer-using teacher at Chesapeake High School in Baltimore County, a Beagle Buddy, ProSel Associate, and former president of the Annapolis Apple Slice.

II

by Leon H. Raesly

[Ed.—the original title of this piece was "The Care and Feeding of Hard Drives and Disks, otherwise known as CAFOHDAD, Part 1"). It was shortened in the interest of leaving room on the page for the article itself. Apologies to the author for stifling his creativity.]

This will probably be a 2- to 4part series. I think it is important to understand some things about disks in general, and hard drives in particular.

We may as well tackle the hard part first. You need to understand that a hard drive is not a Mass Storage Device. It is a Fast Retrieval Device! It should not be used for permanent storage at all, but simply as a temporary place to keep your programs and files for fast retrieval. All storage should be done on 3.5 or 5.25 disks—with duplicates, of course!

I guess we had better spend some time on this concept, or later operations won't make sense. Most people believe that hard drives are for storage, but that is just propaganda to make the sale. It is as if someone was trying to sell you a bus with the seats removed as a truck to carry goods. Sure, it will carry them, but it is still a bus with the seats removed. Put the seats back in, and the purpose of the vehicle becomes obvious.

There are many ways for hard drives to mess up. First, the media can be damaged, or lose its magnetic "charge," power supplies fail, electronic components fail, etc. That's just the mechanical side, what I call the "A" side, or "hard"

failures. The even more important side is the "B" side, or "Soft" side, the file structure as imposed by the Disk Operating System. Here many things can, and do, happen. The File Allocation Table (FAT, as it is called on the IBM, or the Directory Tracks under ProDOS). In addition, the Bit Map can be trashed. Subdirectories can be munged (messed up), as can the files themselves. On a hard drive, the tracks and sectors are laid down at the time of the low-level formatting. High-level formatting simply adds the Directory tracks and some bit map data.

You have probably seen it on 5.25 or 3.5 disks before: Track 0 data lost, munged, who knows what? But when the Directory tracks are gone in ProDOS, the disk is Kaput, no matter what its size! When you are working with a 143K floppy, you might fuss a bit, but so what? However, when it is a 32 MEG volume (or even 80 M or 100 M, that is another story!

Now manufacturers have dreamed up this concept of "Make a Backup," and implied if you lose your data without a backup, it is your fault! Not so. You have been using the hard drive as a mass storage device, NOT what it really is, a fast retrieval device. Look, it is obvious to anyone (at least I think so) that the "A" side (mechanical) is bound to fail some time. It HAS to. It is a mechanical device. And when manufacturers quote MTBF's (Mean Time Between Failures), it is ONLY the "A" side that they are referring to. But think of that for a minute. The very name acknowledges that the hard drive will fail. Mean time BETWEEN FAILURES. However, you have lost all your data. If you have been using the hard drive as an Mass Storage Device, you're in trouble.

So definitely make backups not for security of the data, all data should be stored elsewhere for security, the backup is to enable FAST RESTORATION of the data and programs.

Now there is not much anyone can do about "A" side failures. You purchased your equipment, and it will fail when it does. And it will. It is mechanical. Your hope (and mine) is that the failure will be many years down the road—even if you have already had the equipment for several years! If you have been keeping your storage of data on floppy disks (with duplicates) as you should, it is nice to have the fast retrieval, but no fun to do without the hard drive while it is repaired (or replaced).

Before we get to the "B" side failures, let's talk a little about the organization of a hard drive.

Assume, for the moment, that you have a 40 MEG hard drive. Since ProDOS can only see 32 M (and the same for the ProDOS FST under GS/OS), you want to have one 32 MEG drive, and one 10 MEG drive after you've formatted the disk. This is a much better arrangement than two 21 MEG drives (or two 20 MEG drives). Which volume you make larger depends on your use of the Fast Retrieval Device.

Since programs will only Boot from Drive 1, if you plan to have a lot of programs, utilities, Etc., but little retained data, then drive 1 should be your 32 MEG volume. However, if, like in my case, you would have only a few programs, but lots of data, then drive 2 should be your 32 MEG volume.

"B" side (or Soft failures), happen about 10 times as often as "A" side (or Hard) failures. There is much you can do to lessen the impact of these "Soft" failures, and to make it easier to recover from them, without having to do a backup/restore. I am not going to get into what, or how, you can cause this damage. I suspect Cosmic Rays, or something like that. Or maybe the Disk Operating Systems are not as foolproof as we are told, but in any case, these things happen, and there are ways to make things simpler to recover. I will be talking alleviation of symptoms here, not fool- proof cures.

There are two fairly prevalent things I have seen happen as a result of these munged drives. The first is that a series of files at the end of the volume directory are eaten, and thus these files lost. So the first thing I do is place a "throwaway" subdirectory first on the volume. Most of the recovery programs I will speak of next month can locate directories and files not at the Volume level. Thus, a Subdirectory "T" at the volume level could not be recovered, but all the directories and files under "T" can often be. Thus, losing the subdirectory /T, still allows most file recovery programs to get the next level of subdirectories and files.

The next thing I do on my hard drive is a series of files I call my "Zs." Their purpose is to provide extra protection to the subdirectories. These files would be on the level of /T subdirectory, but would be files, not subdirectories. I use 12 of them as a one-block text file, with an innocuous text statement such as "This is a blank text

file" repeated often enough to file one block. And one block only.

Again, this is to add extra protection to the directory information, and thus enable various disk and file recovery programs to have a higher probability of successfully recovering the desired subdirectories and files.

Have you asked yourself how I know so much about these recovery programs, and protection of files? It's because I don't listen to my own advice! I have had to recover from "Soft" failures with almost every brand of hard drive you can name, and far too often!

Next time I'll talk about the Recovery programs I use, and the concept of a "Boot Disk" as a further protection.

Take care now! Lee...



(II)

11

Conference 5

by Dave Harvey

Not long ago, an additional conference was added to the WAP TCS (TeleCommunications System). This new conference is unlike the other conferences in one main respect; messages posted on this conference are posted by users throughout the world not just by local TCS users. Before I go into the details of this conference, I think some background info on how this all started is in order.

In 1987, the Northern Virginia Apple Users Group (Novapple), purchased a BBS package called Proline and set up a new BBS called pro-novapple (703-671-0416). They had previously been using UBBS software for their BBS, but support for this product was drying up so it was about time for a change. By the way, this same UBBS software forms the basis of the present day TCS bulletin board software. One of the major reasons for going with this particular software package was Novapple members could now do more than just talk to themselves. With its gateway system, ProLine systems exchange mail with other hosts, such as UNIX computers running UUCP software. This opened up an entire world of information sources, giving our members the ability to access the Internet, a host of networks (UUCP, Usenet, ARPANET, BITNET, MILNET, and others) used by universities, government, the military, and scientists. These networks provide the foundation for the exchange of online discussions (called newsgroups) on an amazingly diverse range of subjects;

thousands of groups in all. Internet distributes articles on a "pass it on" basis; for instance, when I post an article (message) on the info-apple topic, it will be sent from site to site before arriving at the final collector who will send it out to all who subscribe to the info-apple newsgroup.

ProLine can even reach out to commercial information services such as AppleLink, CompuServe and MCI Mail to exchange electronic mail. Not only could Novapple members participate in discussions with other users worldwide but also computer programs could be exchanged as well, since some newsgroups consist of only programs (comp.binaries-.mac and comp.binaries.apple2 are two examples). After reading some of the discussions on the various newsgroups it became obvious that many of the users didn't frequent other online services such as Compuserve or GEnie, due to being overseas (Europe or Australia for example) or other reasons such as financial (users at universities or scientific institutions don't pay for access to the various networks but would have to pay for access to the commercial services). Much information found on the newsgroups, therefore, can't be obtained from other sources and therefore makes it particularly valuable.

There are certain terms that crop up on newsgroup discussions. Here are some terms used by Internet users:

Article: A Internet message.

Newsgroup: A topic under which articles appear. This can be thought of as the separator in our distribution channel, or as the topic name. They come in two flavors:

- (1) Unmoderated- anyone can "post" an article to this newsgroup, and it will go everywhere that the newsgroup goes. Info-apple is one example
- (2) Moderated- only one person on the network can post articles to this newsgroup; anyone wishing to submit an article to this newsgroup has to Email the article to the "moderator" so that he can pass on the suitability of the article to that newsgroup. This mechanism is used to keep high volume newsgroups on topic, and to keep nonsense articles out. Mac-digest is one example.

Since that early beginning in 1987, Novapple has expanded the newsgroups they subscribe to and now subscribe to about 20 newsgroups. Exchanging mail with other Proline sites involves many megabytes of information being passed between the sites. During a typical week, about 3MB of data are exchanged. Since these data exchanges are long distance, phone charges are not insignificant.

Early last year, Washington Apple Pi became interested in the Proline software because of this networking feature and they bought the ProLine software last summer and set up a stand alone system called pro-applepi. There were, however, a few limitations of the software that had be be overcome. One was that the software is limited to about 200 users and the unmodified software will not support multiple phone lines. What finally was decided on was to somehow marry the TCS software with the Proline software by use of the Corvus network. Primarily due to the programming efforts of Jon Thomason, Paul Schlosser and

H

others on the TCS crew, the two software packages were modified so they could talk to each other. As set up at present, both systems share the same hard disk, where the Proline system writes messages for the various newsgroups to that hard disk and the WAP TCS software reads those messages that are posted on pro-applepi. Each newsgroup has been assigned a bulletin board number. This integration did involve some compromises, primarily in two areas:

- (1). Each user on a ProLine system has a directory area in which to store files. This file area is used to store personal files as well as script files that can be executed by the system in much the same way as communications macros are used. Since such a directory area would would take up lots of space on a hard disk for 2000 plus users, there's not enough space to properly implement this feature.
- (2). Each ProLine member has a mail box in which to manage letters. Personal mail can be received from users off site as well as sending mail to individual users at other sites. Binary files, such as programs and AppleWorks documents can be mailed to users of the local system, or to distant ProLine systems through the network. This again was an impossible implementation due to the large number of WAP TCS users. Instead, a generic mail account was set up for all TCS users called 'unknown.user' so that when a TCS user posts a message to a newsgroup, it says it's from unknown.user@pro-applepi. Normally the username of the poster would be in the From: line of the message.

Here's an example of a message that was posted on a distant Proline site:

CS-ID: #10365.b1/msgs@proapplepi, 581 chars

Date: 4 Apr 91 03:49:52 GMT

From: edwatkeys@probeagle.cts.com (ED Watkeys)

> Subject: uucompress question Newsgroups: comp.sys.apple2

Is there a copy of uucompress and the other one (uuexpand? uudecompress?) for ProDOS 8 machines?

From this example you can determine that the message was posted by a user on the pro-beagle BBS and that it's a message from the comp.sys.apple2 or info-apple newsgroup. If it had been a message posted by a WAP TCS user then the From: line would have been, From: unknown.user@pro-applepi.

So much for background. Users signing on to the WAP TCS conference 5 can then read network messages and post comments to a particular message the user has just read or can post a new message. When posting such a message, the main difference in the posting here over posting on conferences 1-4 is that the message is addressed to the collection point for that newsgroup and later is sent out over the intersystem mail network; the poster can't see what he/she has posted right away. The collection point varies depending upon what newsgroup is involved. Some are only a short distance away; others several thousand miles away. A few days pass before that message arrives back at pro-applepi included with all the other messages for that particular newsgroup. Because of special nature of networking, here's some hints or suggestions that I got from Zachariah Cameron at York University that should be followed as much as possible when posting messages to conference 5.

(1) Keep your messages short. E-mail users are often bombarded with messages from lots of different groups, and they are more likely to become irritated with long messages than just about anything else. Short, pithy, substantive messages go a long way toward creating good will, as well as reducing the amount of disk and memory space you'll use. Remember also that when you send or receive a network message, you are costing every system along the way time, resources, and money. When you send a message you cost Washington Apple Pi money.

- (2) DO try to respond to other people's messages; DON'T BE A "LURKER." When you join a group, you have an ethical responsibility to that group; you are, in effect, making a promise to participate, to give back to the group as much as you get out of it. If somebody takes the time to share his thoughts with you, it's rude to ignore his gesture. Keep in mind that the only compensation the writer is likely to get for his efforts is your response. This doesn't mean that you should respond to every message you read, but you should consider how discouraged you would feel if no one thought something you wrote was worth talking about.
- (3) Stick to one subject. Messages on the computer screen don't lend themselves to careful reading or exhaustive interpretations. Most "electronic audiences" are only reading to get the main gist of your message, and introducing several unrelated topics just confuses your reader. If you have different topics to discuss, you're more likely to get a "fair" reading if you put each topic in a separate message.
- (4) Use clear subject headings. Many "e-readers" decide what they want to read by the subject line in the message header and become quite irksome when the message doesn't meet their expectations. Some conventions here include using the same subject heading with an "Re:" in front of it when responding to someone else's posting. E.g., to respond to a message with on "Mail Manners," you would type on your subject line "Re: Mail

Manners." If you're departing from an old subject but the new subject is still related, consider using the header "[new subject] was [old subject]." Finally, try to keep your subject lines less than 10 characters

- (5) Read ALL your mail before responding to a message. Often you'll find that someone has already said what you were planning to say, and it's very irritating (not to mention a waste of valuable resources) to have to read several messages with the same content. An additional advantage of reading all your mail before you respond is that you will often find that your emotions will have a chance "chill out" or that you'll discover that you misinterpreted the message in your original reading.
- (6) Offer a brief context for messages to which you respond. "Ereaders" usually don't read their mail everyday and/or forget messages that they have read, so quoting a small excerpt from the message to which you're responding helps refresh their memories. There's nothing so frustrating as reading a message like, "Yes, I agree," when you don't know what the author's agreeing to.
- (7) Be sure to sign your messages. In many cases, your name will not appear in the message header (particularly in the case of the WAP TCS where you'll be listed as "unknown.user"), and, in any case, few mail programs allow the reader to scroll backwards so she can read the header; thus, putting your name at the end of your message makes it easier for the reader to identify you. Usually, your name is enough of a signature.
- (8) Always remember that you're communicating with at least one other human being. Research shows that new users often seem to forget that they aren't talking to a computer and are more likely to engage in emotionally revealing behaviors than they are in face-to-

face communication (see Sara Kiesler et al, "Affect in Computer-Mediated Communication.' **Human-Computer Interaction 1** [1985]: 77-105). Don't say or reveal something you're likely to regret later; e-mail has a way of spreading much farther than you may have intended and is much more permanent than oral discourse.

- (9) Avoid redistributing others' messages without the authors' consent and/or quoting or citing materials (including private e-mail messages and software) without acknowledging the authors. Although the legal ownership of electronic texts is still problematic, most authors continue to feel that you are STEALING their property when you use their ideas without giving them credit. Therefore, always assume that electronic mail (whether publicly or privately distributed), electronic texts, and software are copyrighted and require some form of bibliographic referencing.
- 10) Bear in mind that humor and irony don't work well in e-mail messages and are misinterpreted more often than not. This doesn't mean you shouldn't be humorous, but you should make it clear that you aren't being serious. Experienced users use a smiley face tipped on its side -(:->) — when they wish to indicate that they are being humorous or ironic. Other conventions you may see where writers wish to convey emphasis include: _underlining_, s p a c i n g, UPPER-CASE, and a*s*t*e*r*i*s*k*s.

Listed below are the newsgroups presently available on conference 5 with the official newsgroup names in parentheses.

Boards Available

1>..Info-Apple (comp.sys.apple2)

2>..Apple II Binaries

(comp.binaries.apple2)

3>..Apple Tech (pro.appletech) 4>..Info-Works (pro.infoworks)

5>..UltraMacros (pro.umacros)

6>..Beagle Net (pro.beagle)

- 7>..Apple User Group Net (pro.aug)
- 8>..Important Announcements (news.announce.important)
- 9>..New User

(news.announce.newuser)

10>...ProLine News (pro.line)

11>..Talk is Cheap (pro.tic)

12>..Science Fiction (pro.sftalk)

13>...Apple // Productivity (pro.a2prod)

14>..Apple // Source code (comp.sources.apple2)

15>..Info-Mac

(comp.sys.mac.misc)

16>..MacTech (pro.mactech)

17>...Mac Digest

(comp.sys.mac.digest)

18>..Mac Binaries (comp.binaries.mac)

As noted previously, a large expense of running a Proline system is the long distance phone charges each month. We are attempting to find a local UNIX site that would allow us to connect to them and get some newsgroups that way. In order to do this, however, certain scripts must be run on the UNIX site to prepare the data for pickup by the Proline site. UNIX sites in other cities have allowed this but others have not. It all depends on the particular site and how accommodating the system administrator is willing to be.

If you run into difficulties accessing and working with conference 5, questions about conference 5 can be posted on the Net Questions board of conference 1 and someone will surely be able to help you. Happy networking!

Dave Harvey has been a member of Washington Apple Pi since 1981 and is currently a WAP Director. He is also President of the Northern Virginia Apple Users Group, an Apple II user group located in Falls Church, Virginia.

Uncle DOS

by Steve Weyrich

On July 11th, I had the privilege of talking by phone with Tom Weishaar, the director of a Midwest-based organization called Resource Central. The organization promotes the Apple II through the distribution of ideas, information, and products highlighting the computer.

Resource Central publishes A2-Central, a monthly newsletter that is both on the cutting-edge and entertaining as it provides information about Apple and the Apple II. A2-Central has been published monthly since January 1985 (when it started out with the name Open-Apple). With the September 1989 issue Tom transferred the editorial responsibilities to Dennis Doms, who still handles it. A2-Central is also published monthly as text files on a 3.5 inch ProDOS disk, with the extra bonus of public-domain and shareware software, as much as will fit.

In early 1988 Tom added to his responsibilities by agreeing to take over as manager of the Apple II sections of the online information service "GEnie," which is operated by General Electric. Both the A2 Roundtables and GEnie as a whole have benefitted from this association; the 10,000th person to sign up for GEnie was an Apple II user, and the number of users continues to grow.

Tom Weishaar (pronounced "wise-ar") has the qualifications not only to direct the publishing of Apple II-specific products, but also to teach and write about using and programming that computer. In the January 1985 premiere issue of Open-Apple he listed his qualifications: He received his masters degree in journalism from the University of Kansas in 1975. His computer training began while he was in college, and continued during his postgraduate years while he worked at Commodity News Services, an electronic news source for commodity traders. At CNS Weishaar started and managed four weekly newsletters, and later helped direct the editorial department in a change from typewriters and teletype SWines to computers and terminals. His involvement with the Apple II began in 1980. He wrote two Apple II programs, Frame-Up and ProntoDOS, both published by Beagle Bros. (ProntoDOS was chosen as one of the best new programs of 1983 in Softalk's annual reader poll in April 1984).

In 1981 he left CNS to devote full time to his Apple II activities, including programming in his areas of expertise, Applesoft Basic and 6502 assembly language. In addition to programming, Weishaar wrote the monthly column DOStalk (in an early Apple II magazine, Softalk) from April 1983 through the final issue of Softalk in August 1984. During that period he also wrote other articles for Softalk, and was one of the "Softalk Sages" who answered reader's questions in the If-Then-Maybe column. He has also written the books, Your Best Interest: A Money Book For The Computer Age, The DOSTalk Scrapbook, and ProDOS Inside And Out (1984).

Weishaar has been involved in the Apple II kingdom almost from the beginning, and he is motivated to help those who have an investment in that flavor of Apple to accomplish as much as they can with it. In the Fall 1990 A2-Central catalogue he wrote, "The significant thing about the Apple II has always been the community of people that has sprung up around the SWine, teaching other people how to use it, designing hard and software for it, exposing its inner flesh to the light of day, and using it to manage businesses, run church groups, educate children, and turn out prosperous and happy human beings."

SW: Tell me about the changes that have occurred at A2-Central over the past few years.

TW: I wrote the Open-Apple/ A2-Central newsletter up through July 1989 or so. At that point, Dennis Doms took over the editorship of it. I then took a sixmonth period recovering from burn-out, answering the phone and opening the mail. Since then, somehow I got promoted to publisher, and my role has been more managing the company, working on marketing, and working (infinitely, it seems) on information systems.

SW: You've had to spend quite a bit of time, then, working on the networked computer system for operating Resource Central?

TW: What we've been trying to set up for years, frankly, is an internal business computer system. We want something that handles both subscriptions and product sales. Off-the-shelf packages that are out there in the world will do either one or the other, but there aren't any that will do both. If you look around, you cannot find any companies but us (that I know of, anyhow) that both try to sell you subscriptions and other products on

the same order form. That's because nobody else does that; we know, we've looked around. There are a few that will try to sell you stuff on a different order form, and the way they handle it internally is to have two different systems. We'd like to have one integrated system. We'd also like to put a lot of advanced stuff in it, like the ability to send a letter you just wrote on your computer to somebody either by mail, by fax, or by electronic mail, simply by picking an item from a menu. So far we've done a lot of dreaming and programming, but we have nearly nothing to show for it at this moment. Last fall, when the new Macintoshes came out, we bought one of the Macintosh IIsi's. After playing with it, I felt that after six long years, the promises that Steve Jobs had made back in 1984 had finally been fulfilled. We had been beating our heads against the walls for years, trying to come up with a programmable database that could handle the kinds of numbers and records that we needed, which was in the fifty to six thousand range. No one had ever managed to write anything that ran on a II or a IIGS that would handle that number of records. It was also critical that we have multi-user capabilities where we can have several people entering orders into the same database at the same time. So, last fall after years of resisting, we decided to do the system on Macintosh. We picked out a language called FoxBase, an advanced DBase clone. It has the same command structure but is quite a bit faster and has extra commands. So one of my jobs here is to write all of that software, but it's real hard to do with all of the other things I have to do as well. We do have part of the system up; all of our publications, except for the first two, A2-Central and A2-Central On Disk, are currently being tracked on the new system, and the mailers are being printed on the new system, and reports are being run on the new

system. We call it "Ernie", because we hope someday he'll help us earn some money. The records for our older publications, as well as all of our products sales and everything else we do is kept on an older Apple CP/M SWine. At the rate we're going it is going to be 12–36 months before we have Ernie doing all of the things we want him to do.

SW: What led to the formation of Open-Apple?

TW: It was basic capitalism, and I was hungry. I had worked for the Commodity News Service, and the four weekly newsletters I helped start eventually closed down. It cost the company about fifty thousand dollars, but it was the best fifty thousand dollar education I ever got on how to run newsletters. When Softalk went under I felt that the reason was more due to management problems than to market problems. I thought there was still a market, though I was reluctant to do it, having a clear idea of how much work having a monthly deadline is. But the alternatives I had at the time were limited; I had written several books, and none of them were doing very well, and I had written software that I expected would sell for ten years and it sold for ten months. So I decided to start Open-Apple just to have a nice job. I thought if we ever got up to a thousand subscribers it would just be wonderful. We were [there] in six months, and weren't making any money, and I said, gee if we just had four thousand subscribers, this would be a gold mine. At the end of the second year or so we had that four thousand. Then it was, if we just had ten thousand... We actually touched ten thousand once, and have been slowly drifting down. A2-Central itself has about seven thousand, and we've never found the gold mine. But I've had a job now for seven years, and there's nine other people here who all have jobs, so I guess it's a good thing, all in all.

SW: And you have real people you have to pay now, instead of the fictitious ones. [Namely, Uncle DOS, Matthew Monitor, Dr. Basic, and Sally Tally, to name a few.]

TW: (Chuckling) Yeah, right! That was the beauty at the beginning; all the help was imaginary. I didn't get much work out of them, though.

SW: Where did "Uncle DOS", "Matthew Monitor", and "Dr. Basic" come from?

TW: Oh, I don't know. When I was growing up, my dad ran a small farm equipment dealership. I don't know why, but all of the people who worked for him and a lot of his customers called him "Uncle Joe" (his name was Ioe). I think it was because he had a nephew who worked there at the store as well. So, all the way back to the first freelance article I wrote for Softalk, I needed a character like "Ready Kilowatt" to help me explain this stuff. The character I came up with was "Uncle DOS", and he's been around ever since; I just can't shake the guy.

SW: Matthew Monitor and Dr. Basic just went their own way, then.

TW: That's right, but Uncle DOS has stuck around.

SW: My first exposure to your writing was when you took over the DOSTalk column in Softalk from Bert Kersey. How did your association with Softalk begin?

TW: Bert was the Beagle
Brother [who founded the company], and I was at that time writing software for him. He mentioned to me that he didn't have time to do the column anymore, and so I said, "Well, when you quit, tell them that I'd be interested in doing it." I had already sent them an article, freelance, on how ProntoDOS and other fast disk operating systems work. They liked the article and Bert recommended me, and so Margot Tommervick (who was the editor)



called me up and said they'd like to have me, and I jumped at it.

SW: You had monthly deadlines then, too.

TW: That's right. Not quite as big a one, just to write the column. But I suppose that made me realize what I was getting into. It was one of the things that made me reluctant to do the newsletter in the beginning, knowing that the monthly deadline was going to be a killer.

SW: ProntoDOS was published by Beagle Bros. Did it have any advantages over its major competitors David-DOS and Diversi-DOS?

TW: It did, and they all had advantages over ProntoDOS as well. Frankly, most of the intellectual effort that went into ProntoDOS was doing it while changing as little about 3.3 as possible. Beagle Bros had published a number of patches to DOS 3.3; if you remember DOS Boss, it was one of Bert Kersey's programs that went in and did all kinds of strange things to make your catalogs come out backwards and inside out and that kind of thing. So, I had to write ProntoDOS in such a way that it didn't break DOS Boss and it didn't break any of the patches he'd ever published. This meant that I had to do what I did without changing much of anything.

SW: Most of the DOS 3.3 enhancers made their space by eliminating the INIT command, didn't they? [INIT was a built-in formatting command in DOS 3.3.]

TW: Yes, most of them did, but I didn't do that. But the project was fun, and ProntoDOS would work with a lot of things that patched DOS that the others wouldn't. Diversi-DOS, in particular, went in and had whole big chunks that were re-written.

SW: What was Frame-Up?

TW: You've heard of Hyper-Card? Well, I should have patented Frame-Up, and then I could sue the vendors of HyperCard. Frame-Up

was a very early HyperCard; it put cards up on the screen that could be hi-res graphics or text screens. Instead of buttons on the screen, you had buttons on the keyboard. You could press the forward arrow and the backward arrow and it would go through a sequence of cards. It was designed for doing presentations, primarily. The key problem back when I wrote it was that it was difficult to do a presentation with an Apple II under DOS 3.3 because it took a hi-resolution graphic ten seconds to change from one to the next one, which is an eternity. So I started over from the beginning to make it as fast as I could, and got it so they could change in three seconds. To do it, I wrote my own operating system, organized the disk my own way, and so Frame-Up is totally incompatible with anything. And after I wrote it I realized you could do the same thing without changing everything else, and that's what ProntoDOS was. As soon as ProntoDOS came out, Frame-Up was obsolete, because you could do in Applesoft with a twenty line program what Frame-Up did, and with ProntoDOS it would do it almost as fast as Frame-Up would; Frame-Up was still a smidgen faster, but not enough to give up the compatibility.

SW: One of the speed-up methods I recall reading about in Softalk had to do with changing the way in which the disk was formatted, so the sector skewing (interleave) was altered. Was that also how ProntoDOS worked?

TW: Not exactly. I didn't change how the disks were skewed. The original layout was that there would be a sector you wanted to read, and then it would skip one, and then came the next sector, and so on. The problem was that Apple's DOS was just slow enough that it wasn't ready to read the next one until another just after the next sector had passed, and so it had to

wait until another entire revolution of the disk had passed. So by just speeding up the internals a little bit, you could get the next sector right away. By the time it got through the other processing, it turned out to be about three times faster. So, [with this method] you didn't have to change how the disks were formatted. We all did the same thing.

SW: Does the Apple II world feel different today from how it did back in the early 1980's?

TW: Well, I bought an Apple II in May 1980, and three months later Apple released the Apple III. My boss laughed at me, and told me I was stupid for buying an obsolete computer....hey, it's the same as it is now! It was a new computer for three months, and since then I've had an obsolete computer! The other interesting thing is I remember distinctly getting that computer and playing with it for a year, and saying, it's too bad that I didn't buy this a year or two ago. If I'd bought it earlier, why I could be a Bert Kersey! But I'm too late! All the good software has already been written; everything that can be done, all the people that can do it are already in place, and there's no chance of ever doing anything with personal computers, because it's all cut and dried already." Of course, as events have shown, those thoughts were pretty ludicrous. People even now look at the Apple II and say that it's all been done, there is nothing new here to do, and I don't think that's true at all. The interesting things that are going on in the Apple II right now are on the IIGS, and they have to do with multimedia. To me, multimedia is presenting information with several different media, at least one of which is text. Other people define multimedia as moving pictures and sound; well, I can do that in a movie, so that's not really multimedia. But when you start talking about high quantities of text, mixed

II

with animations, videos, and sound, that is what multimedia is.

SW: And that's where Hyper-Card and HyperStudio come in.

TW: HyperCard and HyperStudio happen to be the two best packages on the market today. Now, IBM and Apple won't agree with that. But, hey! I publish multimedia publications! We're one of the largest publisher in the world of multimedia! We would love to put these things on IBM's and Macintoshes. But guess what? There isn't anything in terms of software that comes close to what HyperStudio, in particular will do. There is HyperCard on the Mac, which we are using on a Macintosh version of Hyperbole. But the truth is, it pales compared to the GS version of Hyperbole, both figuratively and literally, because Macintosh HyperCard doesn't support color.

SW: I can't quite picture how something like Hyperbole works.

TW: It's like reading a magazine, with large quantities of text. but music of the author's choice is playing in the background. There are buttons on the page that force you to go through the text in nonlinear ways. This is such a new medium that we, as editors and publishers, don't think we have it figured out yet. All the first movies were plays, and all the first television shows were old movies. We're in the same place. I wrote a piece for Hyperbole, but it turns out it really wasn't a multimedia piece, it was just a short story. But Greg Roach, who is the editor of Hyperbole, has really put a lot of thought into how to use this medium in ways that you can't use other ones. The best thing that I've seen in this vein is a novel that Greg is writing, that he is serializing on Hyperbole. We call it "Roland" for short (sorry, I can't remember the whole title right now). On "Roland" you get a screen that has things that are not exactly graphics and not exactly icons. It's

like a medieval church door, and it's got several different scenes on it. You press on one of the scenes, and a story comes up. You have several characters all telling the same story, but you get the story from everybody's perspective, depending on which scene you press on. You get music that is unique to that character. There is no "right" character to start with, and everyone who reads it is going to start with a different character, and you have to read them all to get the big picture of what's going on. Once you are into one character, there are other buttons where you can get the different parts of his or her story. So, it's non-linear, and it's multimedia in the sense of having the medium of text, the medium of sound, and the medium of graphics.

SW: And I would guess that in another sense, it could simply never be presented in printed form quite the same way.

TW: That's right. And it could never be presented on video tape, either. That is what makes it unique. It is a totally new art form or communications form.

SW: I had read on GEnie about Script-Central, how it begins with a picture of the Resource Central building, and yyyyyou can "enter" the building, look around, enter doors, and so on.

TW: Yes, Bo [Steve 'Bo' Monroe, the editor | did a terrific job on the art with Script-Central. It starts showing the building with animated cars going by. The expertise of "Hangtime" [Bruce Caplin] is sound effects, music, and so on, and so the cars have horns that honk. It then zooms in on the building and on the door, and you have to knock on the door with the mouse, and the door opens and you go inside. There's an information desk, with a bell to ring, and an elevator door with buttons, and a door to a hallway. In that hallway are rooms that have all of the standard features, stuff that will

appear every month. You use the elevator to go to the features, the things that will change from month to month.

SW: Looks like I'm going to have to get the sample set and just take them to the computer store and beg them to get HyperCard IIGS setup just so I can see all of this!

TW: It's really a lot of fun.

SW: One of the things you seem to do well is to find good people who can carry out parts of your operation, so you don't have to do it all yourself.

TW: We have some really good people who are working with us. I can trust them to make the right decisions; I don't have time to do it all. We've been very lucky to attract the right people, and we are always looking for more; it would be nice to have unlimited funds to hire as many people as we would like, and to pay them twice as much as they ever dreamed of making with us.

SW: Do you feel that the association with GEnie and the A2 Roundtables there has been a good one?

TW: I think that for us it has been critical, and it goes both ways. GEnie has benefitted immensely from having us run the Apple II areas there, and we've benefitted immensely from our association with GEnie. I have a couple of speeches I have to give during the upcoming A2 Central Conference, and we also have meetings of all of our GEnie staff and all of our editors. I've decided that the position statement I will present, as a company, is that Resource Central is the center of the Apple II Universe. I don't think that would be possible without GEnie. What we want to do is to be a center of gravity, where every who is interested in the Apple II can come to eventually if they need help.

SW: You have a way of explaining things in ways that are very Ш



understandable for someone who knows nothing about it. You used that talent when you wrote all of the help files for the A2 Roundtable on GEnie.

TW: The first thing I did was spend six weeks trying to figure that system out. It was a total puzzle to me. I didn't have those help files when I started; I had the typical documentation, which is long lists of commands and what they all do. But there was no indication of which ten are the ones you actually use, and which fifty you can ignore. So you have to learn and use all sixty of them before you figure out which ones you should have ignored to begin with. We often get the question, "Should I buy GEnie's manual for \$10?", and we say no, spend five dollars to download the help files and you'll be far ahead.

SW: Would you like to comment on the letter sent out to Apple II developers by Robert Barnes, and the recent resurgence of rumors about a new IIGS?

TW: I think that what has happened at Apple in the past two years (regarding the Apple II) is that the people who are interested in that computer have been able to consolidate into an Apple II Business Unit. That is something that has not been there for years. One thing that we at A2-Central editorialized about for months was that there should be someone at Apple whose full-time job was worrying about the Apple II. That is the way it is now. Ralph Russo runs that unit and has four real good people working for him; Jane Lee (a marketing person); Tim Swihart, John Centoro, and Rob Barnes. Rob is the "Evangelist", and I think that we are going to see some new things from this group in the next few months, starting with our conference next week.

SW: Apple is heavily involved in your conference, isn't that right?

TW: Yes; there's going to be fifteen or so people from Cupertino coming out. The first morning of the conference we start with Roger Wagner's keynote [speech]. The rest of the morning Apple wanted two sessions, one right after the other, and they wanted to talk about what's new with the Apple II. We're expecting them to talk about, um, Something New [emphasis mine]. We'll give you a full report once we know what happened. [It may be] both in terms of new hardware, and more particularly in terms of new approaches to marketing and new sales channels. I think that we we're going to see some way to buy Apple II's besides going to a computer dealer who's selling Macintosh's and IBM's.

SW: It seems like it should be possible to sell the Apple II as an appliance, with a book that says "here's where to go if you need help."

TW: My own feeling is that I have a very difficult time when someone who does not currently own a computer comes to me and says, "What should I buy?" It's very difficult for me to recommend an Apple II at this time. On the other hand I think that people who already have Apple II's, who have already invested thousands of hours in learning how to use them, need to think twice before they switch to an IBM or a Mac. It should be based on what is it that they need to do, and is an IBM or a Mac the only way to do it? In our case, in terms of trying to develop a business information system, turned out we couldn't do it on Apple II's. But if what you want to do is write educational software, two-thirds of the computers in schools are Apple II's, and the Apple IIGS is the best multimedia SWine on the market. It's easier to write interesting educational software using a multimedia type of platform like HyperCard IIGS or HyperStudio. The Apple II has a niche in the 90's,

and that's a surprise to a lot of people. And I'm sure that we're going to be here showing people how to take advantage of it.

SW: I've found that if I'm asked what computer a person should purchase, if IBM compatibility is not necessary, an Apple II with AppleWorks will do 90% of what most people need to do.

TW: Well, sometimes people will consider that, but all their friends have IBM's or Mac's and it makes it hard for them to choose an Apple II. But from a purely technical standpoint, you're absolutely right. The best computer going for your basic word processing, spreadsheeting, and database management up to ten thousand records is AppleWorks. You can tell me about Macinoshes; we've got an office full of Macintoshes! We desktop publish using Quark Express, which is the hottest thing going. You know what we write with when we are actually writing the newsletter? We write with AppleWorks! You give people a choice, and they go with what makes the most sense for them, and AppleWorks is it an awful lot of the time. I think you're far better off with an Apple II and all that AppleWorks can do, than a "more powerful" computer and "more powerful" software. My wife at work has an IBM and uses Word Perfect, which is the standard that down there has to use. (This is after using AppleWorks for several years). She says, yeah I can use it, but Word Perfect is like driving a truck after using AppleWorks. It's slow, and clunky.

SW: Apple Computers has been hiring some of the best independent Apple II programmers over the past few years, including Tim Swihart [former A2 sysop], Dave Lyons [author of the Davex ProDOS 8 command shell and DICED icon editor], and Andy Nicholas [author of ShrinkIt and GS ShrinkIt]. If John Sculley called you today and

TW: (chuckling) Well, the way vou've phrased it I don't have to say whether I'd take the job, just what I'd do if I took the job. Well, I've felt for a number of years that Apple should have an Apple II laptop, a computer that weighs less than the [GS/OS] Toolbox Reference Volume 3. In a sense, if they were to start development on this now, it would come on the market too late. but that is still a computer I would like to see. A small, book-sized computer that did what your IIc does, has a double hi-resolution screen (which is well within what you can do with an LCD screen), and AppleWorks built-in to it. Beyond that, I don't know that I would do a lot different from what Ralph Russo is doing. I think that those people who are running the Apple II Business Unit have a real clear idea on where they're going. They're doing the kinds of research

they need to do. I think that there's no way they are going to please everybody, or that they're even going to please most people. One of the things I've noticed over the years is that many people have had very vociferous ideas on what Apple should do with the Apple II, but a lot of them have contradicted one another, and many have asked for things that are financially or technically impossible. But I think they [Apple's Business Unit] are going in the right direction, and that is the niche I've already discussed. That niche is particularly multimedia in education. It's a lot easier to develop educational software today using HyperStudio than it was five years ago using Applesoft. You can develop the same type of program I've seen on the Apple IIe's at my son's school during open house using HyperStudio in a weekend. There should be thousands of new educational programs, and hundreds of really good ones. I mean, it's so easy.

SW: Do you think Apple is really giving the new Business Unit

the freedom to do what they want to do? People were upset with Ralph Russo last year because he seemed to say that things were coming, and then in October nothing special for the Apple II happened.

TW: Well, within limits they are being allowed to do what they want. Certainly they don't have a blank check, and in large corporations there is a lot of politics. I think part of what happened to them last year is that in a political way they didn't get everything they wanted (not that I have any inside information). I guess I wasn't as disappointed as other people were dealing with what Ralph Russo said. What I heard him say, and the reality that actually happened, weren't in my mind as discrepant as they were to other people. Others heard other things and expected other things. I personally wasn't that disappointed with the way things played out. HyperCard IIGS is really very impressive and an important thing. In a sense it is that and HyperStudio that give the Apple II a niche in the 90s.

ISO...

The Journal needs someone to serve as Editor for the Apple II portion of the monthly publication.

To be able to leap tall buildings in a single bound is not a necessary job qualification, although to be sure it would be useful. More powerful than a speeding locomotive would be nice, too.

Rick Zeman can tell you more about the job requirements (and, no doubt, its frustrations) if you give him a call at (301) 604–0939. We are certain that he would be happy to do so—but just in case we're wrong, don't mention this notice. Just kind of let it be known that you had heard, someplace, that he was looking for help and wait for him to respond.

We could use the help, and you will enjoy the experience. We promise.

Would Heidi lie?

New Announcements from Apple

As this issue of the Journal went to press, we received several press releases from Apple that may be of more than passing interest to the community.

APDA Eliminates Subscription Fees and Introduces New APDA Tools Catalog

BOSTON, Massachusetts-August 6, 1991—Apple Computer, Inc.'s Developer Group today announced easier access to Apple and third-party development tools through APDA, Apple's source for developer tools. Beginning immediately, development customers are no longer required to pay an annual subscription fee to purchase products through APDA, making it easier than ever before to obtain essential development tools and self-help resources. Also announced was the introduction of a new, easier-to-use product catalog, the APDA Tools Catalog.

Directly serving over 25,000 customers, APDA offers convenient worldwide access to over 300 development tools and resources, including pre-release versions of software and documentation, for anyone interested in development on Apple platforms. "We want to make it as easy as possible for developers to get the tools they need to create innovative, successful products," said Kirk Loevner, Director of the Apple Developer Group. "By eliminating the subscription fee, developers can now gain access to those tools at no additional cost. In addition, the new APDA Tools Catalog helps developers find the products best suited to their needs."

Annual Subscription Fee Eliminated

Development customers no longer need to pay an annual subscription fee*, which ranged from \$20 to \$35 depending on location, to purchase products through APDA. To purchase prerelease products through APDA, customers are required to sign an APDA Terms and Conditions form found in the APDA Tools Catalog. which is then kept on file and covers all future pre-release product purchases. APDA is notifying all current customers of the fee elimination and how it affects them, depending on their subscription date. In addition, licensing of APDA products is available through Apple Software Licensing. "Purchasing development products should be as easy as calling a toll-free number and placing an order—and now it is," said Wendy Tajima, APDA marketing manager.

APDA Tools Catalog Makes its Debut

The new APDA Tools Catalog was introduced today, replacing its APDAlog predecessor. Responding to customer feedback, APDA redesigned the catalog's format making it easier to use and navigate. It features over 300 Apple and third-party development products including technical resources, training products, languages and environments, debuggers, programming libraries, networking and communications tools, reference books, and more.

The 144-page APDA Tools Catalog contains four-color product photographs, screen shots, and detailed product descriptions to help developers select the products best suited to their needs. Product descriptions include system requirements, licensing notes where applicable, and related product listings. Both alphabetical and subject indexes assist in finding products quickly and easily. Customers will receive a complete catalog sourcebook twice a year; quarterly updates between sourcebooks will highlight both new and key products.

Current APDA customers will automatically receive the APDA Tools Catalog this month. New customers may request a complimentary copy by contacting APDA.

For More Information

Contact APDA for ordering information or to request a free APDA Tools Catalog. In the U.S., call (800) 282-2732; in Canada, call (800) 637-0029; International customers, call (408) 562-3910. For information regarding licensing APDA products, call Apple Software Licensing at (408) 974-4667. * The subscription fee elimination applies to customers purchasing directly through APDA in Cupertino, California. Terms and conditions may vary for international developers purchasing through local APDA distribution channels.

(For additional press releases, please turn to page 91)

Classified Advertisements

Classified advertisements can be placed by mailing copy to the business office of Washington Apple Pi. Ltd., 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814. Be sure to include your WAP membership number and indicate area codes with your phone numbers. Ads must be received by the 1st of each month for inclusion in the following month's issue. Any ads postmarked after that time will be included at the discretion of the Editor. Cost is \$2.00/line (40 characters per line), maximum 12 lines. Members of Washington Apple Pi.,Ltd., may place ads up to 3 lines at no charge. The editor reserves the right to refuse any ads deemed inappropriate.

VOLUNTEERS NEEDED

Your Users' Group needs you!! Washington Apple Pi needs volunteers to coordinate and/or help with the following tasks:

Tutorial Coordinator
Apple II Tutorial Coordinator
Apple II Disk Librarian
Hotline Volunteers
Apple II Disk Annotators
Hotline Volunteers
Apple II Disk Duplicators
Graphic Artists

If you are interested in lending us a hand, please call Nancy at 301/654-8060.

FOR RENT

Washington Apple Pi has a small office (approx. 10 x 20) in their suite which they are considering sub-leasing. If you would like to see the space, stop by the office and ask for Nancy. For more information concerning the sub-lease, contact Dave Ottalini at (301) 681-6136.

VIDEO PRODUCTION SERVICE

Network quality video production is now affordable to both large and small businesses, thanks to special "wholesale pricing" of Award winning company: International Television Productions, Inc. Full production and editing services, special effects, animation, all you need is available, and cost effective. Call Guy Durant at I.T.P. District Sales Office: 202/575-0414 ext. 123.

FOR SALE

Apple ImageWriter II printer with Kensington Printer Muffler. \$200. Call Linda 202/363-0892.

FOR SALE

Apple IIGS, HyperStudio and Computer Eyes for sale as well as other software. Call John Walker at 703/765-2968.

FOR SALE

Megagraphics 19" B&W monitor for SE/30, \$700. HP 7475A 6 pen plotter, \$600. Both w/ original documents and packing. Call 703/644-2697.

Adobe Typefaces w/ registration cards. 50% off mail-order prices. Call Steve at 301/990-1540.

OR SALE

Apple IIGS - 1.25 Meg, RGB Color Monitor 3-1/2" & 5-1/4" drives, ImageWriter II printer, much software - \$950. Call 301/992-7498

FOR SALE

ImageWriter II, very good condition \$250 or best offer. Call David 301/656-1027.

FOR SALE

Apple IIe, 512K, 20 Meg hard drive, printer, lots extras. Arthur 202/342-6236. \$800/ best offer.

FOR SALE

Macintosh Plus, 2-1/2 meg memory, 40 meg external hard disk, external 800k drive, SystemSaver fan, carrying case. \$850. Call 703/425-2358.

FOR SALE

IIGS, Apple Mono/Sony RGB CRTs, 3.5/ 5.25, RAM Bd (1.5 Meg), AppleWorks GS 1.1, Misc. Software. Call Chuck 703/560-7514 or 703/308-1123.

NEW MAC SOFTWARE COMPANY

Mac enthusiasts needed to invest in a new CD-ROM software positioned to take advantage of a major and soon to be released Macintosh System 7 feature. For introduction packet, please send: Your name and Address to:

CDI Box 5037 Springfield, VA 22150

THE MAGIC FILE CABINET

Transforms your AppleWorks DB into a "push button" access to reams of written notes, comments, documents, etc.

Overcomes AW/DB limitations; transforms your current DBs into a "main frame-like" environment. Needs AppleWorks 3.0 and UltraMacros 3.1. \$15 plus \$2 s/h. MD only - add tax \$.75. Satisfaction guaranteed. Specify 3.5 or 5.25. GARY HAYMAN, 8255 Canning Terrace, Greenbelt, MD 20770. 301/345-3230.

INSIDE MAC SPECIAL

New stock, all six volumes + X-Ref, \$150 (Sugg Retail \$174.75). Vol VI only (System 7) \$32 (\$39.95). J.B. Graphics in Centreville, Virginia, 703/631-6078

THE APPLE TECHNICAL LIBRARY

All titles of the Addison-Wesley Apple Library are available at 20% off from J.B. Graphics in Centreville, Virginia. 703/631-6078.

WANTED

Looking for the complete software package that was distributed with the MacScan flatbed scanner by new Image Technologies. Call Robin at FC Business Systems 703/385-2758.

OFFICE HELP NEEDED

AA with Mac experience needed for Sept, Oct & Nov. Call Emily at 301/657-4646.

HELP WANTED

Customer Support
Entry level position, 30-40 hrs/week.
Provide tech support for a Mac software
product. Requires a person with excellent
human relations skills and experience using
Mac applications. Must have communications knowledge (if you don't know what a
modem does, save your stamp). Send
resume to Digit Software, P.O. Box 1425,
Silver Spring, MD 20915 (Fax 301-5932201).

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Overcomes AW/DB limitations; transforms your current DBs into a "main framelike" environment. Needs AppleWorks 3.0.and UltraMacros 3.1. \$15 plus \$2s/h. MD only-add tax \$.75. Satisfaction guar. Specify 3.5/5.25. GARY HAYMAN, 8255 Canning Terrace, Greenbelt, MD 20770; (301) 345-3230.

NEW SIG

There is a new SIG in town: Traffic Safety. Call Earl Shoop at (301) 434-4991. Remember to set a good example in traffic [honest - no editorializing here, and you certainly don't want to follow the editor's example].

On the learning curve...

Tutorials — September

by Keith Malkin

Training Classes

It's back-to-school time, so why not take one of our essential courses on the art of Macintosh computing? We are featuring our usual three-part Macintosh tutorial this month, along with other excellent sessions. Unless otherwise indicated, all class sessions are three hours and will be held at the Bethesda WAP office.

We have no computers for you to use at the office, so bring your own computer, or you'll have to look over someone else's shoulder. You will not need one for the System 7 seminar.

Occasionally, the WAP class schedule changes after the Journal goes to press, so please call Bob Morris at (301) 963-3129(h) with questions on the WAP class schedule, instructors, and the like. For general information, call the WAP office. Please call the office at least one business day before the class date to confirm that your class will be held as scheduled. We regret any inconvenience that may arise.

Payment for Courses

The fees for each session are \$15 for members, \$20 for non-members. Please register in advance for classes by sending in the registration form in this or any recent issue of the Journal or by phoning your registration into the office with a credit card. If you need to cancel your spot, please do so two business days before the class, or we cannot refund your money.

Volunteers and Instructors

We must have your support and creativity to make the Education & Training Program a success. Please write to me at 9505 Draycott Court, Burke, VA 22015-3253, saying:

- · The courses you would like to take
- · The subjects you want covered
- · Convenient times for you
- · The most convenient area for you
- · What you would like to teach.

We have reached an important stage in the Education and Training program, and we cannot expand our program without instructors or teachers. We need Apple II-series instructors and leaders who can approach Macintosh subjects like:

- An Introduction to Desktop and Electronic Publishing
- Small Business Management with the Macintosh
- Electronic Imaging and Image Processing
- Designing Fonts and Typography on the Macintosh
- An Introduction to Computer Graphics; Painting and Drawing with Your Macintosh
- · A Writer's Guide to the Macintosh
- Macintosh Networking and Connectivity
- Desktop Video and Multimedia with the Macintosh
- · Project Management on the Mac
- · Computer Gaming, Macintosh Style
- A Survey of Macintosh Education Software for Parents and Teachers

If you have the expertise in any area, your fellow users need you! Teaching is fun, rewarding, and you get paid for it! Please call Bob or me with ideas on teaching.

Members have asked for classes on the following:

- · Claris FileMaker Pro
- Claris MacWrite II (a "Pro" version is forthcoming)
- · Claris Hypercard 2.x
- · Microsoft Works
- · Timeworks Publish It Easy!
- · Quark XPress 3.x
- Macintosh Programming, including Pascal and C.
- · Aldus Freehand 3.x
- · Aldus Pagemaker 4.x
- Aldus Persuasion
- Adobe Illustrator
- · Adobe Photoshop
- Adobe Postscript, Postscript Level 2, and Postscript programming
- File Transfer and Translation (How to transfer files between Macs, Macs and PCs, Macs and other platforms)

If you are knowledgeable in any of these areas, or if you have any subject or software package you would like to teach, please call Bob. (Instructors are compensated for their time, effort, and expense.)

We need to publicize and promote the low-cost training we provide. If you are a graphic designer, commercial artist, illustrator, desktop publisher, editor, ad copywriter, or just an enthusiastic WAP member, please give us a hand with publicity. (This could be a wonderful opportunity for self-promotion, if you are a freelancer or entrepreneur.) We do not need a heavy time commitment. Call me at (703) 503-5369, (9AM—6PM) or (703) 503-8591.

Macintosh Tutorials

Introduction to Macintosh,
Part I (Course # M10991). This
class is designed for the beginner.
You should go through the Guided
Tour disk that came with your
computer before you come to class.
You'll learn the components of your
Mac, both hardware and software.
You'll discover how the System,
Finder, Icons, and the Active

Window, work. You'll also investigate the Control Panel.

Materials required: Your Mac, external drive, startup disk, and an unformatted disk.

September 9, 7:00—10:00 PM.

Introduction to Macintosh, Part II (Course # M20991). This class is designed for the beginner. Go through the Guided Tour disk that came with your computer before class. You'll learn the components of your Mac. You'll learn the finer points of the Menu Bar, error messages, abut the Clipboard and the Scrapbook, peripherals and how they are connected to your Mac, and about keyboard shortcuts.

Materials required: Your Mac, external drive, startup disk, and an unformatted disk.

September 16, 7:00—10:00 PM

Introduction to Macintosh, Part III (Course # M30991). This class is designed for the beginner. You should go through the Guided Tour disk that came with your computer before you come to this class. You'll learn which version of the System software you should be using; you'll learn how to update your system files; about the Set

Startup command; how to use the Font/DA Mover; learn about MultiFinder; and finally, you'll learn about the various RAM configurations possible with each Macintosh.

Materials required: Your Mac. external drive or hard drive, startup disk, and an unformatted disk.

September 23, 7:00—10:00 PM.

Introduction to Microsoft Word (Course # MW10991). A basic introduction to the powerful word processor. Topics will include how and when to use Word, its environment, features, menus and commands, window icons, keyboard shortcuts, formatting exercises, different views, and the purpose of style sheets.

Materials required: Your Mac, external drive or hard drive, startup disk, and a copy of Microsoft Word

Course Date: Tuesday, September 24, 1991, 7:00 PM-10:00 PM.

Introduction to WordPerfect for the Macintosh (Course #WP10991). A basic introduction to the new, much improved WordPerfect 2.x for the Macintosh. Topics will include menus, window icons, styles, macros and the macro editor, Tables of Authorities, line numbering, line spacing, merge,

search and replace, aligning text, setting tabs, setting margins, creating columns, borders and border styles, using the built-in drawing and graphics package, importing and exporting text and graphics, and/or any other WordPerfect features students may be interested in.

Materials required: Your Macintosh, external drive or hard drive, startup disk, and a copy of WordPerfect for the Macintosh 2.x.

Course Date: Wednesday, September 25, 1991, 7:00 PM-10:00 PM.

Seminars

Using System 7.0 (Course # OS20991). A discussion of the new Mac system, including how to install and use its features. Topics will include checking for compatibility, System 7 "friendly" applications, memory management and virtual memory, multitasking, inter-application communication and how to "publish and subscribe, "TrueType, font/DA management, sound resources, and other new features of System 7.

September 30, 7:00—10:00PM.

Washington Apple Pi
Tutorial Registration Form

Washington Apple Pi 7910 Woodmont Avenue, Suite 910 Bethesda, Maryland 20814

		301-654-8060
Name	Basic Information	Course Numbers
Address		Please fill in the course number of the class you wish
end the grounded Abri	AL STREET	to take
City/State/Zip	No. 1	Class # 1
Phone (day)	(Eve) ————	Class # 2
Member O Number	Non-Member O	Class # 3
	x Class Fee \$ = Total Fees \$	Class # 4
Check/Money Order O) HOP	Class # 5
Card Expiration	Signature	Class # 6
WAP Form #CL006 (mod. 7-90)	Mail registration and payment to the above address	



Macintosh Disk Library

Revised Series; New Disks

We revised another two disk series this month; 1.XX – Anti-Virus Utilites and 16.XX – System Utilities. In addition, there is a new version of ResEdit in disk series 14.XX. These descriptions are also included in the new catalog published this month.

There are 22 new disks this month; five Anti-Virus Utilites series (Mac Disks #1.01D through #1.05D), 16 System Utilities series (Disks #16.01C through #16.16C) and Mac Disk 14.21B, ResEdit 2.1.1. Descriptions of the revised and new files are included below.

Anti-Virus Utilities series

The Anti-Virus Utilies Disk series now contains Mac Disks #1.01D through #1.05D. The first two disks are self-booting and include Virus Detective and Disinfectant respectively as primary Anti-Virus utilities. Disk #1.03D includes all of the best Anti-Virus Utilies currently maintained by their authors including Virus Detective and Disinfectant. Disk #1.04D primarily contains documentation on Viruses; most are HyperCard stacks. Disk #1.05 inludes older Anti-Virus Utilities.

ResEdit 2.1.1

Mac Disk #14.21B includes ResEdit 2.1.1, the latest version of the popular programmer utility from Apple. This one has some substantial improvements in the user interface, and it has added templates for a number of the System 7.0 resources.

System Utilities series

The System Utilies Disk series now includes Mac Disks #16.01C through #16.16C. The first eleven disks include files previously issued. The last five disks, #16.12C and #16.16C, include new and revised files; descriptions of these newer files are included below.

All of the older System Utilities files are arranged in (mostly) alphabetical order on disks at the beginning of the series. All new files or replacements for earlier versions are on disks at the end of the series and are also arranged mostly alphabetically. In some cases where there are a larger number of files, revised files are included separately on disks in the middle of the series and new files are placed on disks at the end of the series. Due to space limitations in the Journal, we have included descriptions for only the disks that contain revised and new files. See the new catalog for descriptions of the old files.

Most new files and many older ones are System 7.0 compatible. However, none have been tested by the Disketeria crew, so use caution. Since most newer files have been downloaded from telecommunications services such as GEnie, most have been well tested by others.

Mac Disk Catalog

We finally completed the Mac Disketeria Catalog. The catalogs are now available at the office, at the monthly meetings and by mail order. Price is \$3.00; add \$1.50 to cover postage and handling if you order by mail. The catalog covers all Macintosh disks issued through July 1991 and includes only disk descriptions. Due to lack of space, the alphabetical lists of programs and files were dropped from the catalog. We expect to add a disk to the library that includes a tab or comma delimited text file which lists all files in the Mac Disketeria. If all goes well, we will have this disk in time for the August meeting. You may then import the file into the database of your choice for viewing and further manipulation.

About Shareware Requests

Please honor authors' requests for shareware fees if you decide to add shareware programs to your software library. Shareware is an important distribution channel for low-cost software and it is important to encourage authors to use this channel by paying them for their efforts.

Disk #1.01D—AV 1: Anti-Virus Utilities

This disk is self starting and includes the System Folder files. Its is designed for users who want a "canned solution" for their Anti-Virus start-up disk. It should be locked when you receive it; keep it locked to prevent the spread of a virus to this disk. Use the Desk Accessory Virus Detective as your primary means of detection.

ReadMeFirst.txt: By Dave Weikert. This text file describes the results of running Interferon and Virex on disks with the WAP INIT file installed.

Once Upon A Virus-txt: By Mel Hoffman. A useful compendium of what to do to reduce the likelihood of a virus attack and a synopsis of what to do if you encounter one.

Vaccine[™]1.0.1: By Don Brown, CE Software Systems. Intercepts any

suspicious attempts to modify applications and systems files and requests operator confirmation of each change. This is a cdev type file, so copy it into your system folder and access it through the Control Panel (under the Apple menu). Setup instructions are provided when you select Vaccine from within the Control Panel. The space in front of the file name places it at the head of the list of cdevs so that its associated INIT resource is loaded before any other at boot time.

VirusBlocadeTM II 1.0 Demo f: VirusBlocadeTM II 1.0 Demo: By Jeffrey S. Shulman. This INIT/cdev permits you to foil attempts by viruses to write to your disks. It works in conjunction with Virus Detective (even if Virus Detective is closed) to check out disks when they are inserted This demo version is fully functional except the configuration changes cannot be saved. Shareware — \$30 for fully functional version.

VirusDetective 4.0.4 f: VirusDetective® By Jeffrey S. Shulman. This Desk Accessory scans a disk, folder or file to detect a virus. It includes the capability to search for operator entered strings and to write a log file to disk. This version has extended capabilities over version previous versions and permits you to easily check out an entire floppy disk library. The DA is installed in the System file and is available under the menu; a copy is also included in this folder. VD 4.0.4 Doc (MW)-IW is the terse but comprehensive MacWrite format documentation on the theory and use of Virus Detective. The text files Virus-DetectiveTM Searches or Alternate Search Strings are discussed in the Read Me text file. Shareware — \$35 for license, \$40 for license and disk with other demo programs.

system 6.0.7 f: Includes Apple System Software version 6.0.7 with System and Finder (only) to provide a self starting disk. The System file has been stripped of all possible fonts and DAs and the DA Virus Detective has been installed for your convenience in using this as your primary test disk.

Disk #1.02D—AV 2: Anti-Virus Utilities

This disk is self starting and includes the System Folder files. Its is designed for users who want a "canned solution" for their Anti-Virus start-up disk. It should be locked when you receive it; keep it locked to prevent the spread of a virus to this disk. Use Disinfectant as the primary means of detection and removal.

ReadMeFirst.txt: By Dave Weikert. This text file describes the results of running Interferon and Virex on disks with the WAP INIT file installed.

Disinfectant 2.5.1: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 29, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace) and Frankie. Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

ResTag 1.0d f: ResTag 1.0d: By Raymond G. Maraza. Examines the System file and list resources and types and evaluates them as possible viruses. This program is for more advanced users. ResTag.docs is the text format documentation.

system 6.0.5 f: Includes Apple System Software version 6.0.5 with System and Finder with Con–trol Panel and SCSIProbe to provide a self starting disk. The System file has been stripped of all possible fonts and DAs to permit using this

as your primary virus detection, eradication and prevention disk. We could not install System Software 6.0.7 because there was not enough disk space to install Disinfectant even after 6.0.7 was stripped of all possible fonts and DAs.

Disk #1.03D—AV 3: Anti-Virus Utilities

This disk contains the most popular and effective Anti-Virus applications but does not include a System Folder. Its is designed for users who want to "roll their own" Anti-Virus start-up disks. Two files on this disk are Compactor Pro self extracting archives to save space (the file name suffix is .sea). Place each file on a separate disk and double click to expand them.

ReadMeFirst.txt: By Dave Weikert. This text file describes the results of running Interferon and Virex on disks with the WAP INIT file installed.

Disinfectant 2.5.1.sea: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 29, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace) and Frankie. Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

Eradicat'Em 1.2 f: Eradicat'Em 1.2: By Dave Platt. The sole purpose of this INIT program is to monitor and remove the WDEF virus; it does this quite effectively. It scans all inserted disks for WDEF in the invisible Desktop file after it is installed in the System folder and your Mac is rebooted. Eradicat'Em 1.2 release notes are in TeachText



format. Requires Mac 512KE or later.

GateKeeper f (v 1.2.1.1): GateKeeper and GateKeeper Aid: By Chris Johnson. These INITs and associated Control Panel Device (cdev) are placed in your system folder (Systems earlier than 7.0) and are then accessible via the Control Panel after booting. For System 7.0 and later installation, see the documentation. GateKeeper monitors the types of action that viruses take and limits the system response to prevent infection. GateKeeper creates a log file for later analysis and diagnosis of virus attacks. GateKeeper Aid looks for WDEF, CDEF and MDEF viruses and their variants and eradicates them. GateKeeper Introduction and GateKeeper Aid Introduction, in MacWrite format, describe the use of the programs. For Mac 512KE and System 4.1 or later. Send a postcard.

HyperVirus 1.3 f: HyperVirus 1.3: By Joe and Hubert Savelberg. Searches HyperTalk scripts for the HyperVirus (Musidenn) virus. Also includes the ability to enter any search string to find any future HyperTalk script virus.

PostScript Vaccine 1.0.3 f:
Postscript Vaccine 1.0.3: By Jon D.
Clauson. Modifies the Apple Laser
Prep file to install a vaccine against
Postscript Trojan horses that
modify the printer's server password. For Systems 6.0 and later and
LaserWriter drivers 5.2, 6.0 and
6.0.1. Shareware – donation to
American Cancer Society.

VirusDetective 4.0.4 f.sea: By Jeffrey S. Shulman. This Desk Accessory scans a disk, folder or file to detect a virus. It includes the capability to search for operator entered strings and to write a log file to disk. This version has extended capabilities over version previous versions and permits you to easily check out an entire floppy disk library. VD 4.0.4 Doc (MW)-IW is the terse but comprehensive

MacWrite format documentation on the theory and use of Virus Detective. The text files VirusDetective™ Searches or Alternate Search Strings are discussed in the Read Me text file. Shareware — \$35 for license, \$40 for license and disk with other demo programs.

Disk #1.04D—AV 4: Anti-Virus Utilities

This disk includes information about Mac viruses; the information is primarily in the form of HyperCard stacks.

ReadMeFirst.txt: By Dave Weikert. This text file describes the results of running Interferon 1.3, Virus Detective 2.0, Virus RX 1.4a1 and some other virus detection programs on disks that have the WAP INIT file installed.

Anti-Viral Doc 3.2: By Joe McMahon. An excellent HyperCard stack that describes the prevention, detection and eradication of viruses. This one is relatively current (9/90) and includes useful instructions for making your own virus fighting kit.

Detect WDEF Virus: A
MacPaint document that shows
how to detect the presence of
WDEF virus by examining any
window using View by Name, Date,
etc.

Intro to Viruses 2.0: By Robert I. Wright. Another very good HyperCard stack that describes the prevention, detection and eradication of viruses. The content is good but some of the descriptions are somewhat dated in terms of what virus strains they prevent, detect or eradicate.

Security Patrol.sea: By Steve Seaquist. An Anti-Virus application and source code from Washington Apple Pi's own ace programmer. Source code is provided for two different compilers, TML Pascal I (.pas suffix) and TML Pascal II (.p suffix). This material was the basis for Steve's February 1989 MacTutor article. This has been compacted with Compactor Pro; move it to a separate disk and double click to restore it.

Virus Encyclopedia: By Henry C. Schmitt. This HyperCard stack is an excellent tutorial on the different types of viruses, what they do and most of the Anti-Virus Utilities useful to combat them. Virus encyclopedia covers virus prevention, detection and removal and repair of viral infected applications and other files. This stack covers the "Peace", "Scores", "nVIR", "Dukakis" and "INIT 29" viruses. It is also an excellent stack in its own right.

ViruSTAK: By Joe Zobkin. This is another tutorial on the spread and control of viruses. It is very good but it does not have the quality or quantity of information of Virus Encyclopedia. ViruSTAK covers the Scores and nVIR viruses and six of the anti-virus utilities.

This disk includes information about Mac viruses; the information is primarily in the form of Hyper-Card stacks.

Disk #1.05D—AV 5: Anti-Virus Utilities

Many of the programs on this disk are no longer maintained by the authors; others are specialized for only one or two types of virus or a particular function. Caution in their use is advised.

ReadMeFirst.txt: By Dave Weikert. This text file describes the results of running Interferon 1.3, Virus Detective 2.0, Virus RX 1.4a1 and some other virus detection programs on disks that have the WAP INIT file installed.

AGAR f: AGAR: By Bill Krimmel. This very small program just sits on your disk waiting to be infected. Check it from time to time to see if it has been modified by a virus. AGAR Picture is a MacPaint document of the program listing. See the AGAR Doc for Bill's offer to

disassemble any virus and report on it's action and removal techniques.

AntiPan 1.1: By Michael Hamel. This application finds and removes the nVIR and Hpat viruses from infected disks. It also installs an nVIR immunity feature to the System file (unless the target disk is locked) without asking first. This would not be our preferred antivirus utility since we don't like programs that mess with the System file or modify other files without asking.

AntiViral f: By Chris Kludewicz. Monitors the size of applications and alerts you when applications change size between one run of Anti-Viral and the next. AntiViral 1.0 Doc (MW 4.5) is in MacWrite format. Shareware – \$10.

Ferret 1.1 f: Ferret 1.1: By Larry Nedry. Scans a selected drive for files infected with the "Scores" virus and permits you to repair the infected file or skip over it. See the brief Ferret 1.1 docs for how to do it.

Interferon (v3.10) f: Interferon: By Robert J. Woodhead.
Scans all on line or selected volumes for files with any of a number of known and generic virus characteristics. An eradicate option performs a similar scan but attempts to delete infected files. The Interferon (READ ME) documentation is necessary to understand the results of the scan. Shareware — free, but contributions to the Vision Fund are solicited.

KillScores f: KillScores: By anon. Scans a selected drive for any files infected with the "Scores" virus, automatically removes "Scores" and then repairs the infected program.

nVIR Assassin 1.0 f: Assassin: By Pete Gontier. Scans volumes for the nVIR virus and destroys it. nVIR Assassin docs (TEXT) describes what Assassin does and nVIR description tells you about the technical characteristics of the nVIR virus. Be forewarned, nVIR Assassin does not ask before destroying what it believes to be an infecting resource.

nVIR Vaccination: By Anon. Examines one selected file at a time for the nVIR virus and eradicates it.

QuickScores! DA f:
QuickScores! DA: By Anthony M.
Tuorto. This DA provides a fast and efficient way to check the current operating system file for the SCORES virus. QuickScores examines only the system file for the virus because SCORES always attacks the system file first, after invading any disk. QuickScores!
Docs is the documentation.

Repair 1.5: By Steve Brecher. Repairs files infected with the nVIR virus. You first must determine if the file is infected by using a virus detection utility such as Virus Rx.

RezSearch 1.0b f: RezSearch
1.0b: By Wade Blomgren. Examines
all files in an HFS volume or
subdirectory, searching for resources of a specified type. Use it to
look for files which contain resource
types known to harbor "virus" code,
such as the "nVIR" resource.
RezSearch Doc is in Mac-Write
format.

RWatcher 1.0 f: RWatcher: By John Norstad. This is a virus detection INIT for protection against Scores and nVIR. RWatcher was written for non-MPW programmers needing limited virus protection but not willing to use Vaccine because Vaccine complains whenever an attempt is made to create a CODE resource. User Doc describes the program and its operation. Notes describes the results of testing RWatcher against Scores and two different strains of nVIR. RLIS Template, RWatcher.a, and ShowInit.a are a ResEdit template and source code provided for the programmer.

Sniffer 1.0b1 f: Sniffer: Scans selected drives or folders for any INIT files and creates a text file of

what it has found. Sniffer Docs describes what Sniffer does and how to interpret the text file.

<u>VCheck 1.2 f:</u> VCheck 1.2: By Albert Lunde. Detects viruses by checking for changes in the contents of the active System Folder, the Boot Blocks and all applications on connected volumes. readme describes the program and its change history.

Virus Rx 1.6: By Apple Computer, Inc. Scans select—ed drives or folders for any damaged applications, INIT, cdev and RDEV files, invisible files, altered System files and altered applications. Creates a text file that includes an analysis of what it has found. The TeachText document Release Notes describes what Virus Rx does and provides some useful guidance for reducing your risk of exposure to any virus.

Disk #14.21B—P/H 21: ResEdit 2.1.1

ResEdit 2.1.1 f.sea: Apple Computer. The latest version of the resource editor produced by Apple Computer now includes resource templates fro System 7.0. With ResEdit you can make changes to icons, dialog boxes, fonts, menus and other resources. It is a very powerful tool, so powerful that unless you know what you are doing, you can cause edited programs to not operate properly. Only modify a copy of any application or file. For instructions on the use of ResEdit see the HMG™ ResEdit Primer on another disk in this series and ResEdit™ Reference, by Apple Computer (\$12.95) distributed by Addison-Wesley Publishing Company, Inc. (APDA #M0015LL/ C). Release Note is in text format. Also included are an Examples folder for uses with MPW 3.2 and an Extensions folder with two additional editors that may be added to ResEdit. Requires System 6.0.2 or later.



ResMaster DA f (v1.0):
ResMaster DA: By Mike Calbaum.
Allows the user to move, remove, rename, renumber, display as a hex dump and change the attributes of the resources in a file. Copy and paste resources to and from the clipboard, create new resource files, display some types of resources, play beep type 'SND' resources and remember and repeat the last resource move the user performed. Shareware – \$10.

Resourceror f: Resourceror. By Michael Ogawa. A plug in menu command for SuperPaint which when invoked permits you to create several types of Mac bit-image resources. Resources may be placed in the clipboard or saved directly to a file. READ ME and READ ME (MacWrite) are in TeachText and MacWrite format respectively. Not Tested

Disk #16.12C—SU 12: System Utilities

ADB Reset f: ADB Reset and ADB Reset FKEY: By Duane Kanz. Resets your keyboard and mouse to their pre-startup state. ADB Reset Instructions is in text format. Shareware – a postcard of your home town.

AppDisk 1.2 f: AppDisk 1.2: By Mark Adams. A RAM disk that lets you use part of your ram as a fast disk drive, without restarting your Mac. It is System 7.0 dependent. It has the ability to save its contents to provide some protection against loss of data due to system crashes. AppDisk 1.2 Read ME! is in text format. Shareware – \$15.

BitFont 1.0 f: BitFont 1.0: By Peter DiCamillo. Creates a bitmapped font from any font that can be drawn on your Mac including Adobe outline fonts using Adobe Type Manager and Apple TrueType outline fonts. bitfont.doc is in TeachText format.

<u>Dark Side of the Mac 2.3 f:</u> Dark Side of the Mac 2.3: By Tom Dowdy. A screen saver for Macintosh computers that run MultiFinder. Runs in the background and has an expandable set of "blackouts" or "Faders" to select from. Requires MultiFinder and 128K ROMs.

DART[™] 1.4: By Apple Computer, Inc. A disk archiving and retrieval utility. Copy floppy disk to floppy disk with one or two disk drives or copy from floppy to archive format on your hard disk and vice versa.

DDExpand™ 3.7 f:

DDExpand™ 3.7: By Lloyd Chambers & Terry Morse, Salient Software, Inc. DiskDoubler is a commercial file compression program available for the Macintosh. DDExpand, which is provided free of charge to individuals, is an expand-only version of DiskDoubler. The About DDExpand.old in TeachText format is from an older version; for some reason, a newer version was not included with the download.

Desktop Checker 1.0ß1: By Tom Santos, Salient Software, Inc.
Counts the number of resources in the desktop file. Why? The Mac Finder cannot store more than 2727 resources in the desktop file. Exceeding this number may cause system crashes and possible file corruption. If you are approaching the limit, install the Desktop Manager, an INIT that eliminates the 2727 resource limit. System 6.0.X and earlier. About Desktop Checker is in text format.

DiskCopy 4.2 f: DiskCopy 4.2: By Steve Christensen, Apple Computer, Inc. Duplicate 3.5" floppy disks from a single master disk. It performs checksums of the master disk to assure a reliable duplication. Copies 800K Apple and 720K and 1440K MFM disk formats. Requires a double sided disk drive. MountImage 1.1b3 permits you to view and use disk images just as if they were disks. Apple DiskCopy documentation is in MacWrite format and Disk Image Directions is in text format.

DiskStatus 1.0: By Eric Bloodworth. Presents a selectable size status window of the capacity of each of the hard and floppy mounted disks. Free; \$10 license fee if you want upgrades.

Disk #16.13C—SU 13: System Utilities

<u>Dlx Extra Translators f:</u> By Aladdin Systems, Inc. Translators for Stuffit Deluxe and Stuffit Classic include AppleLink Package Translator, btoa/atob Translator, DD Translator, MacBinary Translator, TAR Translator, Text Translator and UUCode Translator. <u>Translator Documentation f</u> includes descriptions of five of the seven translators.

Extractor 1.20: By Bill Goodman. Extracts files from archives created by Compact Pro and Stuffit 1.5.1. Just double click the archive file or open the archive from within Extractor.

FastFix f: FastFix: By ALSoft, Inc. Designed to repair a specific type of damage to directory entries of files optimized with Norton Utilities Speed Disk. FastFix Documentation is in TeachText format.

FastLabel 3.0 f: FastLabel 3.0: By Henry Carstens. Permits you to print a variety of labels quickly and easily. Includes standard templates for mailing, disks, VCR, and other label formats for LaserWriter, ImageWriter and DeskWriter printers. You may also create your own templates and save them for later use. This program is worth at least five times the shareware price. FastFix Documentation is in text format. Shareware – \$10.

FinderToFront 1.0 f: ~FinderToFront 1.0: By Michael Peirce. If placed in the System 7 Startup folder and named so as to be the last application run, makes the Finder the front most application after startup.

FinderToFront.ReadMe is in text format.

HellFolderFix f: HellFolderFix: By John Jeppson. Removes "Folders from Hell." These are folders which appears to be empty but cannot be trashed; you can put them in the trash, but get an error when you try to empty the trash. The problem persists although you have rebooted and no applications are running which could possibly be using the folder. Read Me is in text format.

LHarc 0.41 f: LHarc 0.41: By Kazuaki Ishizaki. An archiving utility compatible with archives created with MS-DOS LHarc v1.13, UNIX LHarc, and LHarc for various other machines. Does not extract from self-extracting archives created under MS-DOS or from archives containing subdirectories. Readme.txt and Read Me are the text and Word format documentation respectively; lhard.doc in text format appears to need conversion to low ASCII.

New Creator f: New Creator: By Dominic Mazzoni. Do you keep getting the dialog "The file ... could not be opened/printed (the application is busy or missing)"? Change the creator of these files so they can be opened from the Finder. Requires a Mac Plus or higher and System 4.1 and up. Documentation is in MacWrite format. Shareware — \$10 or what you think it is worth.

Disk #16.14C—SU 14: System Utilities

FileMover 1.0 f: FileMover 1.0: By John Sarapata. Automates complicated file transfers. Builds and runs script files that perform all file copying normally be done by hand. Runs in the background. FileMover.MW, FileMover.word and Read Me (FileMover) are in MacWrite, Word and text formats respectively. Shareware – \$25.

MacProfiler 1.1 f: MacProfiler 1.1: By Technology Works. A

personal version of Technology Works' GraceLAN Network Management software. It gives you a quick and easy view of the complete software and hardware configuration of any Macintosh. Mac Profiler Read Me is in text format.

MacSnoop 1.5.5 Demo f:
MacSnoop 1.5.5 Demo: By Art A.
Schumer, Evergreen Software, Inc.
A multi-window file and volume
editor. This program is aimed at the
more sophisticated Mac user who
understands disk and file formats.
MacSnoop™ {Write} is in
MacWrite format. Shareware − \$25.

PostScript Utilities f:
DiskRestore, kill test page, Laser
Doctor, letter paper tray, plain
paper tray, print total pages and
restore test page. These text files of
PostScript instructions may be
downloaded to your PostScript
printer with SendPS 2.0 in this
series. Some of the files have
descriptive comments.

Set Clock 2.2: By Jim Leitch. Synchronize your Mac to within one second with a 10 second call to Toronto Canada or Chesapeake Virginia.

Signature Sucker: By James K. Miles. Collects and lists the Creator signatures for all the applications and other files you have on your disk. James has agreed to act as the collection and distribution point for information on Creator signatures as discussed in the program notes.

Disk #16.15C—SU 15: System Utilities

QCat 2.0b6 f: QCat 2.0b6: By Richard De Luca. A utility for cataloguing hard or floppy disks. Creates a "TEXT" file that can be imported into any database program that supports it. Has a full set of options including selection of field and record separators for use with databases. SyQuest®cartridges and network volumes are NOT supported. Disk Cataloger and File

Catalog are supporting HyperCard stacks. QCat 2.0b6 Dox and QCat 2.0b6 Dox.txt are in MacWrite and text formats respectively. Shareware -\$10.

Ouick Format! 7.0 f: Ouick Format! 7.0. By Michael Conrad. Like Fast Formatter, permits you to initialize disks at the quickly and control how the disk is initialized by permitting you to select the volume name and disk size once at the beginning instead of once for each disk. Demo version has erase, rename volume, set volume name (other), verify disks and external drive capabilities disabled. System 7.0 compatible. Quick Format! Notes is in TeachText format. Demoware - \$12 for password, \$15 for disk.

Save A Tree 1.5 f: Save A Tree 1.5: By Michael S. Engber. A text file printing utility designed to conserve paper by printing on 1 page what would normally use 2 or 4 pages. About SaveATree.txt is in text format.

sndConverter 1.2 f: sndConverter 1.2: By Joe Zobkiw. Converts or extracts 'snd' resources to a format that may be used with System 7.0 and higher. Includes two sound files; Razz SysBark (to be converted) and Triangle (7.0 compatible). sndConverter 1.2 Read Me! is in text format.

SoundMover Package 1.71 f: By Riccardo Ettore. A package of four sound programs for different versions of the Mac and System Software. SoundMover 1.71 moves sounds into and out of the System file and automatically converts between several different (and incompatible) sound formats. IBeep2 lets you pick an alternative to the standard sound of the Macintosh beep and works with Mac Plus and SE users running System 4.1 and later. SndControl is a much improved IBeep2 that requires System 6.0.4 or higher. StartupSndInit plays compatible sounds placed in the System Folder.



SMP Disk Manual and Sound Mover 1.71 Docs are in text format. Shareware – \$25.

Disk #16.16C—SU 16: System Utilities

Styler 2.00 f: Styler 2.00: By Peter S. Bryant. Prints out styler sheets of all of the fonts that you currently have active and installed in your system. Styler 2.00 Users Manual is in MacWrite format. Shareware – \$10.

Suntar 1.0 f: Suntar 1.0: By Sauro Speranza. Allows any Mac with a Superdrive to exchange files with a SPARCstation, or any UNIX workstation having a 720 or 1440 Kbytes, 3.5 inch, MFM floppy disk drive, suntar.doc is in text format. Swatch 1.2 f: Swatch 1.2: By Joe Holt. A multi-colored display helps programmers track down heap bugs. It's also claimed to be lots of fun to watch by normal people. Swatch Read Me is in text format.

System Picker 1.0b7: By Kevin Aitken. Automatically searches all mounted hard drives to list all System folders and then lets you select one of the Systems from the list to boot from. Perfect for switching between System 6.0.X and 7.0.

SystemSwitcher 1.1: By Keisuke Hara. Permits you to easily search for and switch to systems on any mounted disks. Perfect for switching between System 6.0.X and 7.0.

the TypeBook 2.2 f: the TypeBook 2.2: By Jim Lewis. Create and maintain a typeface reference

book (extremely popular in the Graphics and Typesetting industries). Helps people select typefaces by demonstrating the various artistic attributes of each face on a printed page. the TypeBook-READ ME is in text format. Now fully compatible with System 7.0 and TrueType.

Type Spec 1.0 f: Type Spec 1.0: By Big Rock Software. Another utility to create and maintain a typeface reference book. TypeSpec 1.0 Readme is in text format. Shareware – \$10.

UnStuffIt Deluxe™ Installer
2.0 By Raymond Lau and Aladdin
Systems, Inc. Decompress (unstuff)
archive files created with StuffIt
Classic and StuffIt Deluxe programs. Easy to install, just double
click and follow the directions.

<u>UUTool 1.2.3 f:</u> UUTool 1.2.3: By Bernie Wieser. Translates binary files into text for transmission over some electronic medium (i.e. electronic mail) and vice versa. Compatible with many UNIX implementations, with extra coding to support the two file fork MacintoshTM architecture.

UUTool.UserManual.txt is in text format.

VM-Eject 2.0: By PB Computing. Modifies System 7.0 to permit use of Virtual Memory with removable cartridges. Be very careful not to eject the cartridge while using Virtual Memory.

XferIt 1.4b1 f: XferIt 1.4b1: By Steven Falkenburg. XferIt is a Macintosh-based FTP client. It can be used to send and receive files from various network hosts which support the TCP/IP File Transfer Protocol. XferIt requires Apple's MacTCP and a Macintosh connected to a TCP/IP network to run. If you need this, you know what it is; if you don't know what this is, you don't need it. XferIt Docs.mw and XferIt Docs.text are in MacWrite and text formats respectively. Shareware - \$10 single copies, \$45 per zone and \$175 internet.

Apple Announcements...

(Continued from page 80)

Apple Improves
Performance, Paper
Capacity, and Adds New
TrueType Fonts to Personal
LaserWriter LS

Product Description: The Personal LaserWriter LS, Apple's most affordable laser printer for the Apple Macintosh personal computer, will now ship with new printer software that improves the performance of the printer by up to 2 times. This speed enhancement, along with the capability to print in the background, maximizes productivity for all users. In addition to double the performance, the new Personal LaserWriter LS also provides approximately 30 percent more paper capacity. (70 sheet capacity instead of 50 sheet capacity). For customers with more demanding paper usage, an optional 250 sheet paper tray is available as before. Four additional TrueType fonts will also ship with the printer. These are Chicago, Geneva, Monaco, and New York. The new fonts are TrueType versions of the original Macintosh screen fonts. Having TrueType versions of these fonts ensures that users will get smooth text at any size. These join the current set of TrueType fonts which includes Times, Courier, Helvetica and Symbol. The fonts are automatically installed in the user's system during the normal printer installation procedure.

Significance: Taken together, these enhancements give Macintosh users more performance and flexibility in the same compact, easy to use printer design for the same price. The improvements are fully compatible with System 7, and virtually all software applications. Existing owners of the Personal

LaserWriter LS can upgrade to all of these features, except the expanded paper tray simply by obtaining the new Personal LaserWriter LS Installation Disk Set.

Pricing, Availability and Distribution: Enhanced models of the Personal LaserWriter LS will be available in late August through all authorized Apple resellers. The U.S. suggested price is unchanged at \$1,299. Pricing, availability, and distribution may vary outside the U.S.

Upgrade: The new printer driver and TrueType fonts (new installation disks) will be available for existing users by late August through authorized Apple resellers, Apple user groups and online services. Apple will make the software available at no charge to these organizations. These organizations may charge customers a nominal handling fee. Contact: Kate Paisley Apple Public Relations 408-974-5453

Apple Adds Background Printing and New TrueType Fonts to StyleWriter Printer

Product Description: The StyleWriter printer, Apple's most convenient laser-quality printer for the Apple Macintosh personal computer, will now ship with new software that provides background printing capability. This feature gives users the ability to continue working while a document is being printed. In addition, the StyleWriter will also include four new TrueType fonts: Chicago, Geneva, Monaco, and New York. The new fonts are TrueType versions of the original Macintosh screen fonts. Having TrueType versions of these fonts ensures that users will get smooth text at any size. These join the current set of TrueType fonts which includes Times, Courier, Helvetica and Symbol. The fonts are automatically installed in the user's system during the normal printer installation procedure.

Significance: Taken together, these enhancements offer Macintosh users more productivity and flexibility in the same compact, easy to use printer design for the same price. The improvements are fully compatible with System 7 and virtually all software applications. Existing owners of the StyleWriter printer can upgrade to these features simply by obtaining the new StyleWriter Installation Disk Set.

Pricing, Availability and Distribution: The new software will be available, inside the StyleWriter box, in late August through all authorized Apple resellers. The U.S. suggested retail price is unchanged at \$599. Pricing, availability, and distribution may vary outside the U.S.

Upgrade: The new printer software and TrueType fonts (new installation disks) will be available for existing users by late August through authorized Apple resellers, Apple user groups and online services. Apple will make the software available at no charge to these organizations. These organizations may charge customers a nominal handling fee.



3WDP-01 3WDP-02

3WDP-03

3WDP-04 3WDP-05

3WDP-06



(Disk library continued from page 94)

3UTL-11 3UTL-12 3UTL-13 3UTL-14 3UTL-15 3UTL-16 3UTL-17 3UTL-18 3UTL-20 3UTL-21 3UTL-22 3UTL-23 3UTL-23 3UTL-24 3UTL-25 3UTL-25 3UTL-26 3UTL-27 3UTL-28 3UTL-28 3UTL-29 3UTL-30 3UTL-31 3UTL-32 3UTL-32	The Retriever Power Print III (1A) Disk Window III (1A) Source/Data Window (1) Powercat and Basic XRF (18 Basic Extension (1A) Power Keys DM Plus (1A) RAM+3/Two-n-Fro III /128k Basic GTO Custom Font Manual Custom Font Fonts - Disk 01 Disk III Backup by Bloom Gucspar by Bloom ASCIIDIF by Bloom ASCIIDIF by Bloom MLM Utilities by Bloom MLM Utilities by Bloom MLM Utilities by Bloom MLM Utilities by Bloom AppleWriter to 3 EZP Pascal Menu Maker Catalyst Release Reformatter III
III WORD P	ROCESSING

AppleWriter Footnote III

Script III

Ink Well Manual

Ink Well Program

AppleWriter2.0 Demo

APPLE II DISKS

APPLE SYSTEM DISKS 2APS-01 System Disk - Utilities V. 3.1

COMMUNICATIONS 2COM-01 TCS Instructions 1.05 2COM-02 Applenet V. 1.3

EDUCATION 2EDU-01 Newton's Apple/Cocaine/Teeth

TECH NO	TES
2TEN-01	IIGS-GSOS-About-Index
2TEN-02	IIc-IIe-IMWR — etc.
2TEN-03	FTNS-STDS-Tidbits

UTILITIES 2UTL-01 New Member Disk 2.01 2UTL-02 DB Master V.5 (Shareware)

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(continued from page 64)

recently it appeared when I tried to boot up the computer, which really panicked me—but I was able to get it going finally by using Apple-Control-Reset. I REALLY need the machine this weekend, since I promised to print fifty stories from my daughter's fifth grade class (which are being typed by others, and won't be ready for another day), so any advice will be much appreciated. Is it coincidence that the message appeared when it did?"

RICK ZEMAN answered,
"Basically, it means that you need to
get a fan for your GS. 0911 is a
synch error which is caused by
excessive heat. With this weather,
[GH: 100 degrees in Washington]
it's no surprise that that's happening. I have a Kensington System
Saver and I've never has that error
occur."

KIM BRENNAN added, "Fatal System Error \$0911 is a problem with the ADB (Apple Desktop Bus) synchronization. It is almost ALWAYS caused by your GS getting too hot. If you don't have a fan on your GS it is high time to get one. If you are not running air conditioning in your house, you are more tolerant of heat than your GS is. Leave your GS off for a while and then only use it briefly to do your printing. This will help you get around the \$0911 error until you get a fan or air conditioning."

The author is currently Chairman of both the AppleWorks and Apple IIGS Special Interests Groups. He is published frequently in the Journal of the Washington Apple Pi. He is also a Beagle Buddy and a Seven Hills Partner for the WAP. Professionally, he is a Certified Hypnotherapist in private practice in McLean, Virginia and does part-time Apple II family computer application programs consulting and teaching.

APPLE II DISKS			AP	PLE IIGS DISKS
APPLE SYSTEM DISKS THESE ARE ALL 5.25" DISKS	GAMES	O A D (100(107)		THESE ARE ALL 3.5" DISKS
APSD-01 System Disk - Utilities V.	GAME-01 GAME-02	Games A and B (102/107) Games C and D (111/128)	IIGS SYSTE	M DISKS (2 DISK SET \$6)
APPLEWORKS	GAME-03	Games E and F (162/164)	GSAS-01	System Disk V. 5.0.4
APWK-01 Desk, Printer and Money Helpers	GAME-04	Keyboard and Paddle Games (72/74) Pinball and Arcade Games (142/157)	GSAS-02	System Tools V. 5.0.4
APWK-02 Food, Lists, etc. (815/816) APWK-03 Reserved for Tax Templates	GAME-05 GAME-06	Text Adv /Mystery House (SIERRA)	IIGS COMM	IUNICATIONS
	GAME-07	Educational Games G and H (508/509)	GSCM-01E	FreeTerm GS (2003)
COMMUNICATIONS	GAME-08	Sports and Utilities / Games (143/160) Adventures /Game Room (811/812)	GSCM-02A	SnowTerm
COMM-01 TCS Instructions 1.05 A & B - Disk 1 COMM-02 TCS Instructions 1.05 C & D - Disk 2	GAME-09 GAME-10	Haunted House (176/810)	IIGS DEMO	\$ (15 DISK SET \$45)
COMM-03*WAPABBS.1 Documentation (121)	GAME-11	Mostly Games /Wizard Worker I	GSDM-01	Cartooners Demo
COMM-04 WAPABBS.1 (135/136) COMM-05 DI COMM - Shareware (503)	LOGO		GSDM-02 GSDM-03	Deluxe Paint II Demo Music Studio Demo
COMM-06 Kermit 3.78 - Kermit File Transfer	LOGO-01	Logo Tool Kit and \DocS (145/146)	GSDM-04	Beagle Write Demo
COMM-07 Comm Term and Telecom (808/817)	LOGO-02	Sample Disk and Dallas Apple Logo	GSDM-05	Calendar Crafter Demo
COMM-08 MicroModem II (SW) - Hayes Term	MISCELL	NEOUS	GSDM-06 GSDM-07	G.A.T.E. Demo Crystl Q, Drgn Wrs,Pyrmd
CP/M	MISC-01	SS (Coin Collect) and Misc. (95/115)	GSDM-08	Diversi-T, Nexs, Prosell6, Salvtn
CP/M-01** Master Catalog (401)	MISC-02 MISC-03	Miscellaneous (119/120) Miscellaneous and Recipe Files	GSDM-09 GSDM-10	Shanghai & extra tiles sets Medley 2.0 Demo
CP/M-02 Utilities I and IĪ (402/404) CP/M-03 Communications (403/409)	MISC-03	Glaq and No Name Yet (129/175)	GSDM-10	Battle Chess Demo
CP/M-04 ZCPR2 Install and Utilities (406/408)	MISC-05	Special Databases /Jim's Data Base Misc and Applesoft /AppleWriter IIe)	GSDM-12	Task Force Demo
CP/M-05 ZCPR2 Docs /Essential Utils (407/410) CP/M-06 Text Editor and Spreadsht (411/412)	MISC-06 MISC-07	Astronomy Short Programs (506)	GSDM-13 GSDM-14	Genesys, Proterm 2.2, TIC Space Harrier Demo
CP/M-07 MDM740 (SSC//7710, & A-CAT)	MISC-08	Griffith and Weise Astronomy (507)	GSDM-15	HCGS, MastrTrcks Jr, SysEx MIDI
CP/M-08 Kermit Source and Running Codes	MISC-09	Aviation - General (Disk 1 of 2) (514) Aviation - Navigation (Disk 2 of 2) (515)		ACC. (8 DISK SET \$30)
CP/M-09** Kermit Documentation (417) CP/M-10 Utilities (419)	MISC-10 MISC-11	Gardner's Assistant (518)	GSDA-01	Desk Accessories I (2020)
CP/M-11 Small C. Compiler (420)	MISC-12	Music and Sights / Sounds (71/126)	GSDA-02	Desk Accessories 2
FAMON ADVENTURES	MISC-13 MISC-14	Merry Christmas and Happy Holidays Graphics and Cat Graphix (108/171)	GSDA-03 GSDA-04	Desk Accessories 3 Desk Accessories 4
EAMN-01 Utilities II and III (220/221)	MISC-15	Print Shop Graphics (172)	GSDA-04	Desk Accessories 5
EAMN-02* Dungeon Designer and City /Clouds	MISC-16	Color Graphics for Fun/Science / Engi. Plots / Graphs and Charts / Graphs	GSDA-06	Desk Accessories 6
EAMN-03 Beginners Cave (Master) & Alt EAMN-04* Lair of Minotaur and Cave of the Mind	MISC-17 MISC-18	Business/Math Stat and SS (70/90)	GSDA-07 GSDA-08	Desk Accessories 7 Desk Accessories 8
EAMN-05* Zyphur Riverventure and Castle/Doom	MISC-19	SS (Investment) and SS (Business)	GSDA-09	Desk Accessories 9
EAMN-06* Death Star and Devil's Tomb	MISC-20	Business A and B (104/113) Investments A and B (153/154)	GSDA-10	Desk Accessories 10
EAMN-07* Caves of Treasure Is. and Furioso EAMN-08* Magic Kingdom and Tomb of Molinair	MISC-21 MISC-22	Spreadsheet A and Miscellaneous	IIGS FONT	\$ (10 DISK SET \$30)
EAMN-09* Lost Island and Abductor's Quarters	MISC-23**	Riley's Personal Instrumentation (173)	GSFT-01	Fonts A-1
EAMN-10* Quest and Undergr City (194/195) EAMN-11* Merlin's and Hogarth Castle (196/197)	PASCAL		GSFT-02 GSFT-03	Fonts A-2 Fonts B-1
EAMN-12* Deathtrap and Black Death (198/199)	PASC-01	AttachBios for Pascal 1.1 and Utilities	GSFT-04	Fonts B-2
EAMN-13* Temple of Ngurct Black Mountain	PASC-02 PASC-03	Crypto / Graphics and Bios / Printers Misc and Read/Write DOS / Printers	GSFT-05 GSFT-06	Fonts C-1
EAMN-14* Nuclear Nightmare /Feast of Carroll EAMN-15* Master's Dungeon /Crystal Mountain	PASC-04	Catalogger and Hires Printing / Lisp	GSFT-07A	Fonts C-2 Fonts D-1
EAMN-16* Lost Adventure and Manxome Foe	PASC-05	Puffin / Holiday Music -CPM-Pascal 3D Education /Drill /Hackers Stuff	GSFT-08	Fonts E/F-1
EAMN-17* The Guantlet and Caverns of Langst EAMN-18* Future Quest and House of Secrets	PASC-06 PASC-07	Stocks / Weightwatch/Guerilla Guide	GSFT-09A GSFT-10	Fonts G-1 Fonts H-1
EAMN-19* Sewers/ Chi /Slave Pits of Kzorland	PASC-08	Pascal / To & From DOS /(133/314)		
EAMN-20* Lifequest and Swordquest (215/216)	PILOT			S(21 DISK SET \$63)
EAMN-21* Priests of Xim! and Heroes Castle EAMN-22* Temple of the Undead and Quest	PILT-01**	Pilot Language (167)	GSGM-01	Mean 18 Golf Courses 1 (2007) Mean 18 Golf Courses 2 (2018)
EAMN-23* Caves/Mondamen & Orb of Polaris	UTILITIES		GSGM-03	Bouncing Bluster Boot Disk
EAMN-24* Death's Gate /Escape From Orc's Lair	UTIL-01	New Member's Disk - 2.01 A/ B (821)	GSGM-04 GSGM-05	Bouncing Bluster Data and Docs Bouncing Bluster Consn Set
EDUCATION	UTIL-02	New Member's Disk - 2.01 C/D (822)	GSGM-06	Games 1
EDUC-01 Education and Personal Education	UTIL-03	Utilities A and B (100/101) Utilities C and D (112/118)	GSGM-07	Games 2
EDUC-02 Personal Education 2 and Education 3 EDUC-03 Math / Science and Education 4	UTIL-04 UTIL-05	Utilities E and F (124/132)	GSGM-08 GSGM-09	Games 3 Games 4
EDUC-04 Advanced Math and Vectors / Motion	UTIL-06	Utilities G and H (138/43)	GSGM-10	Games 5
EDUC-05 Albert Camus Int and Elementary Math	UTIL-07 UTIL-08	Utilities I and J (44/77) Mach. Lang. Utilities and One-Key	GSGM-11 GSGM-12	
EDUC-06 French Vocab/ Tutorial (46/123) EDUC-07 Boot for L'Hote and L'Hote (48/49)	UTIL-09	DOS	GSGM-13	
EDUC-08 Tic-Tac-Toe in French /L'Hote Quiz	UTIL-10	Beginners Choice /Intermediate Utils. Diversi Copy and Diversi DOS (45/	GSGM-14	Games 9
EDUC-09 French Poetry Tut and Appollinaire EDUC-10 Rafel Boot Disk and Rafel (55/56)	UTIL-11 UTIL-12	130)		Games 10 Games 11
EDUC-11 Tic-Tac-Toe in Spanish /Rafel Quiz	UTIL-13	Additions to ProDOS and Zap Utility	GSGM-17	Mean 18 Golf Courses 3
EDUC-12 Matute and Lo Fatal (58/59)	UTIL-14 UTIL-15	Utilities A (ProDOS) and File Cabinet Imageworks (174/807)		Games 12
EDUC-13 Reading Fun (Shareware) (505) EDUC-14 Language Arts Treasures	UTIL-15	DOS 3.3 System Master and Tutorial	GSGM-19	Games 13 Games 14
EDUC-15 Floppy Book 1	UTIL-17	Visi-Trend / Visi-Plot and Calculink AppleSoft Tutor and Picture Packer	GSGM-21	Columns GS v.2.0
EDUC-16 Computration Game /AW Temp	UTIL-18 UTIL-19	AppleWriter Utilities (168)	GSGM-22	Lode Runner GS
EDUC-17 Algebra Tutorial and Bagels Disk EDUC-18 Newton's Apple (Cocaine)	UTIL-20	AppleSoft Programs and Love's Follies		HICS(20 DISK SET \$60)
EDUC-19 Newton's Apple (Teeth)	UTIL-21	"Old" New Member's Disk (134) JoyReader (Shareware) (819)	GSGX-01	Demo Disk A (2002)
EDUC-20 WAP Stack and Tutorial Demo	UTIL-22 UTIL-23	Large Type JoyReader (SW) (823)	GSGX-02 GSGX-03	Slide Show I (2004) Slide Show 2 (2016)
FORTH			GSGX-04	Slide Show 3 (2017)
FRTH-01 Assembler/Disassmbler /Screen Editor FRTH-02 Go Forth Tutorial and Fig/Forth 78			GSGX-05 GSGX-06	Nucleus Demo –ROM 3 GIF Graphics 1
FRTH-03 Forth and Floating Point Arithmetic			300A 00	and distribution of the second

FOR YOUR REFERENCE - THE N	IUMBERS SHOWN IN PARENTHESES () AFTER THE [DISK NAMES ARE THE OLD DISK NUMBERS
GSGX-07 Pics and Utilities 1	IIGS TUTOR TECH	3INF-02 New Member's Disk- Side 1A
GSGX-08 Pics and Utilities 2 GSGX-09A Pics and Utilities 3	GSTT-01A WAP Stack (2019) IIGS UTILITIES (9 DISK SET \$27) GSUT-01A Utilities 1 (2001) GSUT-02 JumpStart Program Sel V. 3	3INF-03 Best of MAUG Side One 3INF-04 Best of The Source (1A)
GSGX-10 Pics and Utilities 4 GSGX-11 Modulae	IIGS UTILITIES (9 DISK SET \$27)	3INF-05 Best of TAU (1A)
GSGV 12 Paula Abdul domo	GSUT-01A Utilities 1 (2001) GSUT-02 JumpStart Program Sel V. 3	3INF-07 Best of III's Company - 01(1A)
GSGX-13A Picts and Utilities 5 GSGX-14 Slide Show 4 GSGX-15 Slide Show 5	GSU 1-03A Utilities 2 (2020)	3INF-08 Best of III's Company - 02(1A) 3INF-09 The Best of Bloom (1A)
GSGX-14 Slide Show 4 GSGX-15 Slide Show 5	GSLIT-05 Utilities 4	3INF-10 Impert's Corner by Bloom (1)
GSGX-16 Nucleus Demo –ROM 1 GSGX-17 PSGS Graphics 1 - Color	GSUT-06AZZ Copy - v 2.21 Disk copier	3INF-11 Phase III Conference Plus! (1) 3INF-12 Best of Ottalini - Disk 01 (1)
GSGX-18 PSGS Graphics 2 - Mono	GSUT-07 Utilities 5 GSUT-08BUtilityWorks GS GSUT-09 Utilities 6 GSUT-10 Utilities 7	3INF-13 Best of Ottalini - Disk 02 (1)
GSGX19 PSGS Graphics 3 - Mono GSGX-20 Marilyn Monroe Slide Show	GSUT-09 Utilities 6 GSUT-10 Utilities 7	3INF-14 Best of Ottalini - Disk 03 (1) 3INF-15 Best of Ottalini - Disk 04 (1)
GSGX-21 Pics and Utilities 6	GSUT-11 Utility Works Launcher 2.2.2	3INF-16 Best of Pair BBS (1) 3INF-17 Reviews by Bloom (1)
IIGS HYPERSTUDIO (21 DISK SET \$63)		3INF-18 III Cheers (Boot and Program)
GSHS-01 HyperStudio System - Demo GSHS-02 HS.Demo - Demo Version	APPLE III DISKS	3INF-19 III Cheers (Issues 1 and 2)
GSHS-03 HS Sounds - Demo Version	THESE ARE ALL 5.25 DISKS	III MISCELLANEOUS
GSHS-04 More Stacks - Demo Version GSHS-05 More Stacks 2 - Demo Versio		3MSC-01 File Cabinet / Sort Directory (1046) 3MSC-02 Contributions - Disk 01 (1A)
GSHS-06 Video Demo - Demo Version GSHS-07 Com Stack - Demo Version	3ACT-02 Easy System and Accounts Rec.	
GSHS-08 MUG 087 - Demo Version	3ACT-03 Easy System and A/Cn. Ledger	3MSC-05 Le Grayhaven Cookbook Plus! (1A)
GSHS-09 USA - Demo Version GSHS-10 Hs Art 2 - Demo Version	III 3EZP & AW TEMPLATES 3AWZ-01 AW - EZP Bus Templates	3MSC-06 Double Boot 3MSC-07 Apple III Demo Disk 01
GSHS-11 Misc. HS Stacks 1	3AWZ-02 Checkbook Plus by Lomartire	3MSC-08 Apple III Demo Disk 02
GSHS-12 Misc. HS Stacks 2 GSHS-13 Arizona Stack Disk 1	3AWZ-02 Accounting/Finance Templates	3MSC-10 Apple III+ Keypoard Demo
GSHS-14 Arizona Stack Disk 2 GSHS-15 Photography Stack 1	III BUSINESS BASIC	
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GSHS-17 1906 SF Quake & Fire - 1 GSHS-18 1906 SF Quake & Fire - 2	3BSB-03 Pohlman Disk 03 (1019)	3MSC-14 Italian Tutor 3MSC-15 Contributions - Disk 04 (1)
GSHS-19 Misc. HS Stacks 3	3BSB-04 Poliman Disk 04 (1020) 3BSB-05 Pohlman Disk 05 (1021)	3MSC-15 Bowling Grid/Grade
GSHS-20 Misc. HS Stacks 4 GSHS-21 Misc. HS Stacks 5	3BSB-06 PPT Demo / BASIC Helps	3MSC-16 Floppy Book by Shapiro (1) 3MSC-17 Music, Music, Music (1)
IIGS ICONS (8 DISK SET \$24)	3BSB-01 Pohlman Disk 01 (1017) 3BSB-02 Pohlman Disk 02 (1018) 3BSB-03 Pohlman Disk 03 (1019) 3BSB-04 Pohlman Disk 04 (1020) 3BSB-05 Pohlman Disk 05 (1021) 3BSB-06 PPT Demo / BASIC Helps 3BSB-07 BASIC 1.23 & Utilites / 3BSB-08 Best of OnThree	III DASCAL
GSIC-01A Finder Icons 1 (2022)	III GAMES	3PCL-01 Pascal 1.2
GSIC-02A Finder Icons 2 (2027)	3GAM-01 Games 01 (1001)	3PCL-02 Pascal 2.0 Compiler/TookKit 3PCL-03 Pascal ToolKit #2/#3
GSIC-04A Finder Icons 4	3GAM-02 Games for Rids (1007)	3PCL-04 Pascal Pronto Debug/SANE
GSIC-03A Finder Icons 3 GSIC-04A Finder Icons 4 GSIC-05A Finder Icons 5 GSIC-06A Finder Icons 6 GSIC-07A Finder Icons 7	3GAM-01 Games 01 (1001) 3GAM-02 Games for Kids (1007) 3GAM-03 Cap'n' Magneto 3GAM-04 Games-Disk 02 3GAM-05 Star Trek	3PCL-05 Pascal SANE #2/#3 3PCL-06 Pascal SOS I/O/ExerSOS (1)
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IIGS MUSIC (12 DISK SET \$36)	3GRX-01 Sketchpad and Slideshow	3PCL-09 Chaos Programs in Pascal.
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GSMU-02 SoundSmith Songs 1 GSMU-03 SoundSmith Songs 2	3GRX-04 Fig Factory - Color (1071)	3REP-01 Apple 3 Diagnostics - Disk 01 3REP-02 Apple 3 Diag - Block Edit
GSMU-04 SoundSmith Songs 3	3GRX-05 Raster Graphics Tool Kit (1072) 3GRX-06 3-D Modeling Tool Kit (1073)	3RFP-0 Repairing your Apple III (1A)
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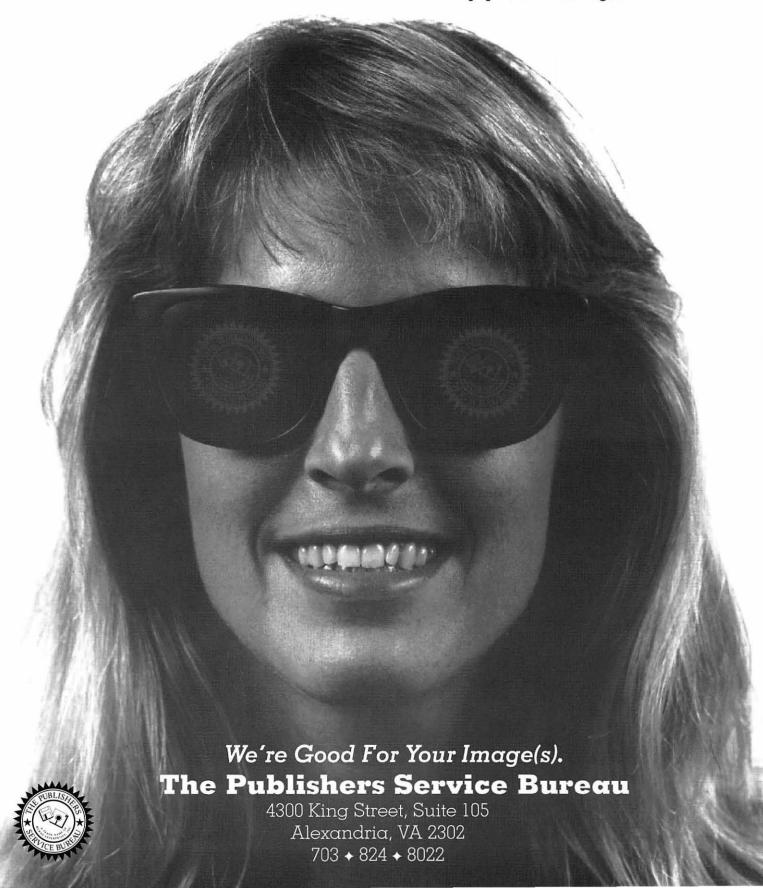
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