

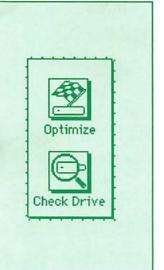
Volume 12, Number 12

December 1990





Typography Old-timers and times



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**Norton Utilities** review

Wings across the GS

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and all the regular condiments...



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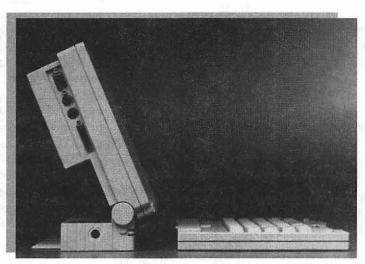
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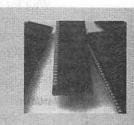
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# washington Apple pi

This issue of the Washington Apple Pi Journal was created on a Macintosh IIfx and printed on a LaserWriter IINTX

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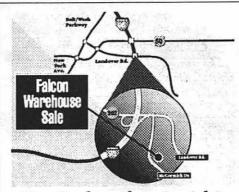
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#### What's new

### **Office News**

by Nancy Pochepko

#### Special members a.k.a. Volunteers

I must sound like a broken record, but if I don't tell you, how will you know.... We have been getting help from some very special members of WAP, but we need YOUR help. You could volunteer to be a mentor in our new Mentor/Protege Program, or you could work on publicizing WAP, or you could help the office staff with mailings, or you could volunteer on the hotline, or, or, or...

#### Radio talk show

Washington Apple Pi has an interesting member, to whom I have been listening for a couple of years. David Lawrence is presently the 10:00 a.m. - 1:00 p.m. DJ on WMAL 630 AM (some of you may recognize the name, he was the morning DJ on Q107). You may want to tune in on Saturdays, when the discussion in centered on computers.

# General meeting location Questionnaire

If you have not done so already, please complete the General Meeting Location Questionnaire found in the last few pages of this issue. It is very important that you tell us how you feel about the General Meeting and what aspects are important to you.

#### Special offer on PostScript fonts

We received a flyer from FontBank, Inc. announcing a User Group Special. They are offering 250 Postscript display typefaces for \$157 (normally \$295). There are three complete sample fonts available on America Online, Compuserve and GEnie. Or send them a blank disk or \$5 and they will send you the samples. There is a brochure in the office showing each of the typefaces. They say it is a "Limited Time Offer" but do not give any indication of how long the offer is good, however, a representative of Font-Bank told me that it would probably

be good at least for the next month or two.

If you are interested, you can order by phone at 1-708-328-7370 (They accept Visa, Mastercard and prepaid orders, but cannot take purchase orders or send CODs at the special price). When ordering be sure to specify the "User Group Special" or they will charge you the full price. They can be contacted at FontBank, Inc., 2620 Central Street, Evanston, Illinois, 60201, Fax: 708-328-7491, Phone: 708-328-7491, AOL: FontBank, GEnie: FontBank, CIS: 75300,632.

#### Special rebate on ProTERM

We also received a notice from InSync Software describing the release of version 2.2 of the Apple II Telecom Program, ProTERM, and they are offering a special \$15 rebate to Apple User Group members. The offer applies to ProTERM v2.2 sold by any retail ProTERM dealer between 10/15/90 and 12/31/90. To get your rebate, send the following items to the address below: 1) Your serialized ProTERM Warranty Card, 2) A copy of your ProTERM sales invoice dated between 10/15/90 and 12/31/90; and 3) Some identification which shows proof of membership in any user group recognized by Apple Inc., or the National Apple-Works User Group (e.g., a photocopy of your user group membership card or the mailing label from a recent newsletter showing your name and the name of the "Apple-icable" user group). WAP qualifies, it need scarcely be said. Send your rebate request to: InSync Software, 3035 E Topaz Circle, Phoenix, AZ, 85028, Phone: 602-992-5515.

Also check the classified ads section for the notice from Frank Koczot concerning good pricing on ProTERM.

#### Que Corporation books

Thanks to Que Corporation, we have recently added their Macintosh and Apple II books to our library.

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# Your membership in the Pi

The good news from the office is that WAP members are renewing in record numbers. The bad news is that we are not gathering new members at anything like the rate that people are buying Apple computers and finding out about the things that can be done with them.

We need your help in turning this situation around. There are surely a lot of people in this area who use new computers in their offices and in their homes. The new Macintosh machines alone have to be introducing computing power to people who are beginning to find out about the excitement and—dare we say it?—fun of asking complex machines to do things that they only used to dream of.

What better introduction can you and we give them than to tell them of the existence of a large and friendly group of people, all of whom have had to deal, in one way or another, with the mysteries of computing and who have improved their lives in the process? ... You have improved your life recently, haven't you?

It is a little unsettling to hear some of the stories told by recent members of the Pi? People have found out about us through the oddest avenues—"a friend of a friend of an old rival told me about you"that sort of thing. Dealers in the area, many of whom used to regard WAP as a rival or worse (we used to have an active group buy program that caused some to regard us with hostility), have recognized that we are in fact friends and even allies. The Journal provides much information to Apple users, and the Hotline offers the kind of support that

dealers can only dream about.

We hope soon to develop a new brochure to tell people about WAP and its benefits and as soon as we have, we will try to get some of these into your hands, so that you can spread what is after all a Very Good Word about WAP, and how it enriches the lives of its members. We do not—yet—claim that it can relieve the heartbreak of psoriasis, but it can sure take your mind off it, we should think.

Which brings us, inevitably, to another and related point, perhaps a little difficult to focus on in the holiday season, but important nonetheless. An organization like this stands or falls on the work done by volunteers. We have been fortunate indeed to have had outstanding support from a great number of highly talented and busy volunteers. We continue to depend heavily upon that support.

Those who have acted in this capacity have found that the rewards of their efforts have been great. Sharing experiences can be inspirational for everyone involved, and it is usually a lot of fun as well.

If you have some spare time on your hands, or want to break out of a rut that has gradually and imperceptibly grown up around you, consider volunteering some of your time to that activities of the club...call Nancy Pochepko at the WAP office and let her know of your interest. She will take you up on your offer—guaranteed!—and we are willing to bet that you will be happy you did.

At least give it a try...

And, while we are at it, have a terrific holiday season, a cool Yule,

and all that kind of thing. But don't eat too much (this advice we always give at this time of year, and we always ignore our own advice.

Except, of course, this year.).

And, since we are talking about the holiday season and appropriate activities therein, may we suggest, for the computer user who has, or ought to have everything, you consider giving a one-year membership in the Pi? Perhaps you have an offspring who has sprung off, or a parent who is gingerly testing the waters of computing and could use a gentler method of learning than the Total Immersion, or Terror, approach.

When you come down to it, using computers ought to be fun, and for most of us, it still is. Sharing that fun is what the Pi is all about. And (with a tip of the hat to Leslie Charteris) "If it is not fun," as the Actress said to the Bishop, "you're doing it wrong."

fmp

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# Support (a) Washington Apple Pi (b) Your local dealer (c) All of the above.

An ad appeared in the last Journal which confused a lot of people. It suggested that WAP is conducting a group-buy program, in competition with local dealers. We are not.

Washington Apple Pi is *not* in the business of competing with local dealers for computer equipment or peripherals or any of that stuff. Our business is to support our members and to help them enjoy and do useful things with their computers. Period.

Nothing more and certainly nothing less.

We don't sell equipment for a number of reasons, including the fact that we cannot possibly provide the kind of direct support that is already available from knowledgeable computer dealers, whose success stands or falls on the support that they can provide. Frankly, we see our dealers not as competition, but as allies, and we believe that our members will do the same.

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How often, in these difficult days, do you find yourself in a win-win situation?

#### Columbia Apple Slice

by Tim Childers

Our October 4th meeting featured Mac musical entertainment by Ellen Baniszewski and an Apple II demo of Bannermania. The meeting was lightly attended with around ten members each for Macintosh and Apple II.

Ellen does musical entertainment and performs for such things as children's parties with her synthesizer. Since getting her Mac she has learned a great deal about MIDI and now uses her Mac and MIDI software. Delux Recorder v1.0 from Electronic Arts, in her performances. For our meeting she dressed as a dinosaur and encouraged kids to attend the meeting. We had about 8 adults and 4 kids in the audience and she invited them up to help her with the performance/demo. She explained how MIDI works in general and demonstrated some of the things that you can do with MIDI software both to create and store a piece of music and also ways to use it during a performance. She used it to quantize recorded notes to clean up a piece you are creating by recording your own improvising. She showed. how MIDI software can manipulate the speed of playback, the octave, the duration of notes, the MIDI channel, the sound patches for your synthesizer, etc, etc, etc.

Ellen said she like her software despite the reports in the reviews of bugs with it and says she has experienced none of the bombs reported. She likes the fact that it is very Mac like in that there are at least 3 ways to do everything and that it is very flexible in the ways it can be customized. She has collected lots of patches, sound clips, and whole songs from a few music bulletin boards and the program has worked fine with them even though many of them were created by IBM MIDI packages. She also used a package called MidiEx MAX to transfer sounds and patches to her Roland D20 synthesizer. MIDI files have a

format available which is much like ASCII in that it doesn't matter much what computer program created it. She felt that Delux Recorder absolutely required a hard disk in that even though it could theoretically fit on a floppy you tend to collect and use so many MIDI files that you can't really use most MIDI software on a floppy. I can attest to that! In closing she extended an invitation to anyone interested MIDI to contact her and she would like to set up a local MIDI SIG to meet perhaps every 3 months. Call her at (301)730-4891 if you would be interested

The Apple II program was a demo of 'Banner Mania' by Andy Wakshul. This is a program that allows you to print long banners using your Apple II. Color printouts require an ImageWriter II obviously. It comes with 25 sample banners. Andy felt it was a very flexible program and very simple to use. It is menu bar driven and doesn't support a mouse. It comes with a variety of backgrounds and you can customize the lettering. You can even overlay banners 2 or 3 times for special effects. It allows you to simulate perspective on the lettering, either up or down. It can produce almost 75 colors by using the 3 layer overprinting. It provides very nice printouts. With certain fonts the letters look as if they were printed on a LaserWriter they are so sharp! The program requires at least 128K of memory.

Next month the Apple II topic will be Education. The Mac program will be FileMaker. We are trying to arrange a something in December with Apple HQ in Columbia to see the new Macs but they are very busy until the 15 October announcement. As always, if there are any changes we will post them on the Columbia Slice Board of the TCS or you may call me at (301)997–9317 evenings. Don't forget, elections are in November and we need you to be an officer or volunteer!

#### EdSIG

by Phil Shapiro

In celebration of computer learning month, the education special interest group hosted a computer lab open house at two area schools: one in Montgomery County, and one in Northern Virginia. Parents, teachers, and kids were invited to stop by and have a hands-on experience with some of the educational software being used in schools today.

At Sligo Middle School, in Montgomery County, teacher Sue Racoosin graciously opened up her computer lab with 20 Apple II's, and over 100 titles of educational programs.

The success of the event can be gauged by the enthusiasm of one of the young kids who attended: young Saam Fouladgar arrived at 10 am and stayed right until 1 pm, spending an average of about a half an hour on each of six different disks. When asked to clean up at the end of the event, he appeared visibly disappointed at having his computer time cut short.

A total of about 20 other people showed up for the event, ranging from folks who had never used a computer before, to a seasoned computer coordinator from another county school. While the kids amused themselves on the computers, parents and teachers were able to swap notes on desirable and undesirable educational software.

The event went off so well that there's already talk of planning a similar open house for the spring. Thanks are owed to Carol Hyatt and Bill Wydro for helping to coordinate the event.

Foreign correspondent Lorin Evans travelled to the far reaches of Woodbridge, Virginia, and filed the following report on the Northern Virginia open house:

"In a repeat performance of this past summer's event, computer whiz teacher Grace Gallager opened up her computer lab of 4 IIGS's, and two dozen IIe's. Each computer was pre-loaded with a different type of program, and clearly labelled accordingly. Folks were invited to try a sample from the smorgasbord of programs available.

Most popular was Super Story Tree, a new creativity program by Scholastic. Teachers were interested in how regular high resolution graphic screens could be easily loaded into the program. Younger kids just loved Stone Soup, made by the William K. Bradford publishing company, which uses object oriented graphics and storytelling to allow children to assemble their own picture screens with graphics and text. Several of the kids created screen stories about themselves, and had their handiwork printed out by computer assistant Lorin Evans.

Middle level kids went big for two other programs: World GeoGraph by MECC, and Goldrush, by Sierra Online.

Several teachers from the Woodbine school (a school which works with kids with special needs) were excited about a program by Demo Software, a little heard of software company. An impromptu task force of investigators was appointed to find out more about this program.

This open house was a good chance for families, teachers, and other nice people to fathom the depths of wonderful educational software for the Apple II. A fun time was had by all.

#### IIGS SIG

#### by Paul Tarantino

It was a near thing, but Bob Gurskey came to the rescue. We almost attempted to do a demo of the AppleWorks GS Graphics Module at our October meeting without a couple of essential pieces of hardware, namely a keyboard and a mouse. Bob's quick reaction saved our Guest Star David Wood's presentation from setting a new indoor record for dullness.

Thanks again, Bob!

Anyway...this was the second in a series of close examinations of the nooks and crannies of AppleWorks GS by David, who braved the highways and byways between the eastern Shore and McLean to share his hard-learned tricks, traps and Handy AWGS hints with an eager audience. The Graphics Module of AWGS is a unique combination of . paint program and draw program, a powerful way to get images and information onto the screen of a GS. David dazzled us uninformed (and some who have been playing with this program for quite a while) members with its versatility. AWGS lets the user paint on screen, and then treat the painting as an "object" to be manipulated, moved, stacked among other objects, shadowed, duplicated, shuffled or whatever.

David showed us how the Graphics module's "acid eraser" erases through a stack of drawn/ painted objects to the background, and how to use the "none" color to produce an object with a transparent background. Objects can be dragged with the mouse or more carefully positioned, one pixel at a time, with the cursor keys plus the Apple (command) key. Objects can be grouped together to be treated as a single object either temporarily (group) or permanently (collapse). Collapsing many objects into a single object can't be undone, but eats up less desktop and storage memory than grouping those objects. The

lasso can be used to break up a single object into separate pieces (new objects), which can then be manipulated individually, like pieces of a jigsaw puzzle made from a print.

Output can be saved as a "Draw" file, with individual object identities retained, or in Apple Preferred paint format, as a "painting" with individual object identities lost, but requiring less storage space on disk. Commands like Apple-X (cut to clipboard) and Apple-V (copy from clipboard to screen at clicked position) are common across most of the AWGS modules, which means that much of what you learn in one of the six modules will help in using the other five.

So far, the two AWGS modules we have seen have proven to be powerful and capable programs just by themselves. It is a bit boggling to realize that (1) there are still four more modules we haven't examined, and (2) they all work together as an integrated whole! For the GS user with enough RAM and storage space to use it effectively, AWGS is a real powerhouse!

In the disk-copying that followed David's formal presentation (Cosmocade, SoundSmith songs and an assortment of utilities were very popular), Gary held us to his previously announced dictum that head-of-the-line privileges would go to those who had remembered to format and verify their blank disks before coming to the meeting (ZZCopy works MUCH faster that way!), so our Handy Hint for this month is to plan ahead and do likewise!

Our second Handy Hint is a reminder to check the TCS, the office, or someone In The Know (like Gary or me) regarding November and December meeting times/ places/agendas. The major holidays do Strange Things to our meeting schedules. Remember, forewarned is forearmed! Which implies, I think, that as octopus is twice as well off. (Thank you, Walt Kelly).

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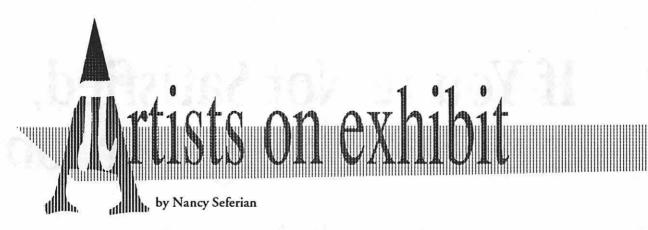
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This column will look at the art and artists of Washington Apple Pi and the techniques and tools used to create the art.

Artist Info: Marianne Giguere is a fine arts graduate of Dunbarton College. Her art has been exhibited internationally from Switzerland to Sacramento, California, and locally in the Baltimore Museum, Strathmore Hall Arts Center and the Cosmos Club.

Art: Clovelly (below); Cornfield (right); and Thomas Clyde (opposite) Tools: Kurta/ADB Tablet, Mac SE, Illustrator '88, Freehand, Silkscreen

Procedures: "As an artist I have been involved in the printmaking process, particularly that of silkscreen printing, for more than twenty years. Many of my prints have included photographic images. Computer graphics seemed to be a natural

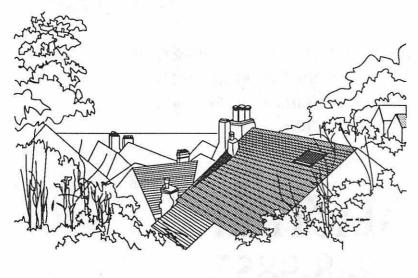


Cornfield

step: images can be manipulated and revised in much the same manner as a photograph can be altered in the darkroom. At the same time, the opportunities for experimentation are so great that the computer has become both a sketching and a creative tool for me.

"Clovelly is a town in England which I visited. I took a series of photographs there. Using the photos from Clovelly I traced general outlines into *Illustrator* '88 with the digitizing tablet. Then I redrew my tracing in *Illustrator* because the tracing only provides an outline. In redrawing it, I use screens to indicate the colors I want to use. For example, a ten percent screen might equal the color pink.

"Next, I print a copy of the drawing and make any changes I think I might want. When satisfied, I print a final copy, which I will use as a sketch. Then using only the line drawing without any screens, I determine the proportions I want to use for the silkscreen print. I use the



Clovelly

proportion wheel to help scale the image on the computer to fit that size.

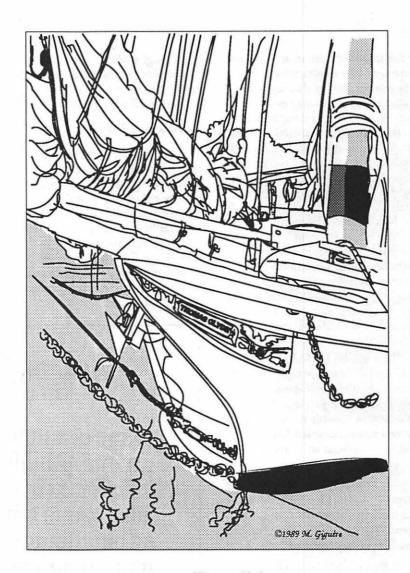
"The next step in the process is to print a copy of the line drawing on acetate. I transfer that to my silkscreen by means of a photographic process. A light sensitive stencil material is used. It is exposed to light and then processed through a developer and wash. Next it's applied to the screen. When it dries, it's a stencil on the screen and can be used for printing.

"The colors are then added through traditional silkscreen techniques for cut film, glue, and photographic stencils. Each color to be printed requires its own stencil. I refer back to the original print and use those screens which I identified as being different colors, and I cut those silkscreen stencils according to the color I had planned. Printing the silkscreen is the final step.

"The drawings you see here are the sketches. But they are also in themselves finished drawings which I often print on exhibit quality paper and show as framed pieces in exhibits.

"When my medium is acrylic instead of silkscreen, I may copy the drawing by eye or increase the size to canvas proportions by tiling. The tiling process allows oversized pages, or pictures in this case, to be printed in sections, or tiles, on more than one page. To make a complete enlarged picture, the tiles must be assembled by fitting the sections together and gluing them in place.

"Clovelly, Cornfield, and Thomas Clyde were all traced using the freehand and the straight line tools,



Thomas Clyde

and certain areas were then filled with screens.

"Cornfield is a farm between Rockville and Gaithersburg I passed by every daywhen I went to work. I plan to do a series on the seasons in that field. The one here was done in the fall." To submit art by mail, send it to Nancy Seferian 1425 Foxhall Road, NW Washington, DC 20007. To submit art by modem to the TCS, dial (301) 986-8085. At the Main Menu select (F) for File Transfer Area. Then choose area 24 for Journal Submissions, and upload.

# Typographic Pioneers

by Jim Donnelly

In the annals of human achievement, there are many reputations that appear to be untarnishable—many people who may or may not have been the very best at what they did, but who could nevertheless unquestionably be counted on to deliver the goods. I'm thinking of people like Aristotle, Helen Hayes, Beethoven, Sugar Ray Robinson, Shakespeare, Sarah Vaughan, Einstein, Jonas Salk and Jack Benny. The world of printing type has a couple of names like that. Most people would consider Claude Garamont, in his own line of work, of a stature comparable to the folks listed above. But the greatest name—the first to resound in Valhalla—is that of Nicolas Jenson.

This month I'd like to try to make up for a terrible lapse and talk about something that should have been dealt with a year ago, because it's nearly impossible to exaggerate the veneration in which Jenson is held by those who write about type.

Daniel Berkeley Updike:
"Jenson's roman types have been the
accepted models for roman letters
ever since he made them, and,
repeatedly copied in our own day,
have never been equalled."

J. Ben Lieberman: "The first great roman type was that of Jenson... It is the basic example of the so-called 'Venetian' style of letter, and has, in fact, remained a major model for roman typefaces ever since."

Frederic Goudy: "This type, which has been the inspiration for all fine roman types since 1470, is the first roman type form of distinction."

William Morris: "Jenson carried the roman type as far as it can go." Douglas McMurtrie: "Nicolas Jenson was certainly the world's first great type designer, perhaps the greatest in all typographic history."

#### Who's on First?

There seems to be general agreement among these authors about the significance of Jenson's type, but they waver, at varying frequencies, about the question of whether he was really the pioneer. They use expressions like "first roman type form of distinction" and "first great roman type." But was Jenson actually the first designer of such a font?

If by "roman type" you mean a font in which the basic shapes of the letters correspond in general to the shapes found in the printing of most European languages today, then certainly Jenson was not the first. But if you mean, in addition, a font entirely free of the influence of the earlier German blackletter, then the question becomes much more interesting. It absolutely fascinated me, so I'm going to tell you more about it than you want to know.

First, it would probably be good to get an idea of the stunning effect that Jenson's Eusebius font must have had on the world of 1470. If you keep in mind the fact that 1470 is not far removed from the days of Gutenberg—Jenson's edition of Eusebius followed Gutenberg's 42-line Bible by just 15 years—you'll have a good notion of the pace at which early printing was developing. Figure 1 shows part of a column of type from Gutenberg's Bible.

It's difficult to think of a reason why this should not be called one of

# Figure 1 Column of Type from Gutenberg's 42-Line Bible of 1455

Ouod a audiller dauid: klendit in prelidia. Philitlifm aucm venimes distult funt in valle raphaim. Et cos luluit dauid dam diens. Be alemia ad philitlifm et le dabis eos i manu mea: Et dixit das ad dauid. Alemix: ga radus dabo philitlifm in manu ma. Venit ergo dauid ad balpharas lim: et preullit eos ibi et dixit. Divilit das inimicos meos corá me: licut disuidunt aque. Properta vocará en men loci illio baalphara lim. Et religs runt ibi ladpilia lua: qualit auid et virieo. Et addicent adhue philitis

# Figure 2 Three Early Attempts at a Roman Font

(a) Earliest Known Roman Type: Adolph Rusch, Strassburg, c. 1464
fequebant dimissis nó ad Seleucú ut sibi antea per
Syrie virú perduxit ibiqi firmis custodus presidui
igit in loco relegato Demetrio & angustis finibus
splendida & cultú regiú pertinebat iussu Selcuci pa
& iocunda pomeria & orti uariis arboribus consitu
miliaribus suo arbitratu utebatur iqui cum crebro
semper modestos sermones a Seleuco afferebant qu

(b) First Type Used in Italy: Sweynheym & Pannartz, Subiaco, 1465 agië.ut hūana diumis tribuat auctoritate: cū pocius hum; buermt. Que nūc fane omittamus.ne mbil apud istos agan materia, pcedat. Ea igë queramus testimoma. qbus illi post aut certe non repugnare. Sibillas plurimi et maximi auct grecoy: Aristoricus: et Appollodorus: Erithreus: nostro nestella. Hi omes pcipuam et nobilem preter ceteras. Eritl

(c) Roman Typesace of John de Spire: Venice, 1469

Ed necesse est inquiunt: ut terrena corpora na teneat: uel cogat ad terram: & ideo in caelo esse non illi homies in terra erant nemorosa atque seructuo: obtinuit. Sed quia & ad hoc respondendu est: uel proquo ascendit in caelum: uel propter sanctorum qual sunt: intucantur paulo attentius pondera ipa terre

mankind's supreme achievements, and, fortunately, everybody does call it that. The color of the type page is, of course, very black, but it's wonderfully even. The baseline is kept straight—and this is a trick that many of Gutenberg's early followers performed only indifferently well (though it does seem a fairly fundamental requirement, if only to help keep the type from falling all over the floor when the chase is moved.) I think its only drawback is the sad fact that the typeface is, to our tastes, an unlovely one

The use of such a type is naturally understandable because its model was the typical manuscript

hand found throughout the Germanic-speaking world in Gutenberg's day. The free-style, almost arbitrary, contractions and abbreviations represent another echo of the work of the scribes; and those of us who have done battle with people who turn surly whenever a typeset line ends with a hyphen may be pardoned an evil grin when we see that Gutenberg hyphenated eight lines in this short sample, with three such lines in succession!

If you have access to Updike's *Printing Types*, you'll find our Figure 1 on page 62 of volume 1. Now turn the pages, stopping only to examine the illustrations, and you'll notice

that there's a certain sameness to the work of most of the earliest printers. Whatever Gutenberg did became, I suppose, a "rule of typography" by default. When you reach Illustration 22 (Figure 2a), it seems at first to be in keeping with everything that's gone before it. It's a heavy, black face, and it doesn't seem at all remarkable until you actually try to read it. Then there's no doubt that the shapes of the letters are roman. The fine Italian hand, reaching across the Alps, tickled the fancy of just a few early German printers, and one of them, Adolph Rusch (known as "The R Printer" or "The Printer of the R Bizarre") produced this font in 1464. It's the earliest known example of the roman letterform set in moveable type.

Move to Illustration 24 (Figure 2b ), the first type used in Italy. Conrad Sweynheym and Arnold Pannartz set up the first Italian press in the monastery of Subiaco outside Rome and this font was used there in 1465. It's Lieberman's choice as the first true roman type. He's right that the font is clearly an attempt to accommodate the humanistic Italian manuscript hand, but the pull of the Mainz tradition was too strong for Sweynheym & Pannartz. The result is much like Rusch's "roman" font, but in fact it's even less roman than Rusch's type. It's really a semiroman, as heavy and vertical as any blackletter, but with letters shaped like the roman letters of today.

Updike's Illustration 25 is the second font used by Sweynheym & Pannartz, in 1467. It's closer to being satisfactory because it's rounder and lighter, but it is still not something that a modern reader would find congenial. Illustration 26, however (Figure 2c), seems to represent a genuine roman typeface. It gets Updike's vote as the first truly roman font, and it would be very difficult to dispute him. This font was used by John de Spire at Venice in 1469. So it seems that Jenson must have finished only second, at best, in the race to be the innovator.

## Figure 3 Type of Nicolas Jenson, Venice, 1470

qui omnibus ui aquarum submersis cum filiis suis simul ac nuribus mirabili quoda modo quali lemen huani generis conseruatus est: que utina quasi viuam quandam imaginem imitari nobis contingat:& hi quidem ante diluuium fuerunt:post diluuium autem alii quoru unus altıssımi dei sacerdos iustitix ac pietatis miraculo rex iustus lıngua hez braoru appellatus est: apud quos nec circuncisionis nec mosaica legis ulla mentio erat. Quare nec iudxos(posteris eni hoc nomen suit) neces gentiles: quoniam non ut gentes pluralitatem deorum inducebant sed hebrxos proprie noiamus aut ab l-lebere ut dictu est: aut qa id nomen transitiuos significat. Soli appe a creaturis naturali rone & lege snata no scripta ad cognitioné ueri dei trassere: & uoluptate corporis cotépta ad rectam uitam puenisse scribunt: cum quibus omibus præclarus ille totius generis origo Habraam numerādus est:cui scriptura mirabilem iustitia qua non a mosaica lege(septima esm post Habraa generatione Moyles nascitur)sed naturali fuit ratione consecutus suma cum laude attestatur. Credidit enim Habraam deo & reputatu est ei in iustitiam.

Keep in mind, though, that de Spire was a Venetian printer; that's an interesting point, and we'll return to it later.

Finally, stop at page 74, and when you think you're ready, turn the page. That is Jenson's Eusebius font, and if you aren't totaled by it after everything that I just put you through, then you have no soul. It's presented here as Figure 3.

The beauty of the entire page is what blows away the commentators, rather than any perfection of letterform. Goudy believed that Jenson's method of spacing his characters on the page was the secret and that it died with Jenson—until Goudy rediscovered it. (He thought it all depended on the serifs.)

## How Did Jenson Get That Way?

Nicolas Jenson was born in the north of France, at an uncertain date. He was employed as master of the French Royal Mint—at Tours, according to Updike, although McMurtrie says we don't know whether it was the mint at Tours or the one at Paris. In either case, it's clear that Jenson must have known rather a lot about engraving and casting metals. According to Updike and Lieberman, there is a "legend" (and they both use that word) that Charles VII, fascinated by printing, sent Jenson off to Mainz to study this new technology as early as 1458.

McMurtrie cannot understand why anybody should consider this event legendary. He tells us that there is in the Bibliothèque Nationale at Paris a document found in the archives of the Mint, according to which Charles VII, on October 4, 1458, ordered the masters of the mints to choose a suitable man to be sent secretly to Mainz to learn printing, and that Nicolas Jenson was their choice.

Updike says that IF Jenson went to Mainz for that purpose, he never returned to France, and at this point Goudy weighs in with the flat statement that Jenson did indeed return to France in 1461. So we are not sure when he was born; we don't know precisely where he worked; it may be only a legend that the King sent him to Mainz to learn printing—but, if true, there's conflicting evidence about whether he ever returned to France or not.

#### Is nothing certain?

It's certain that Charles VII died in 1461. And it also seems certain that no press was set up in France before 1470. So it appears that Louis XI did not share his father's enthusiasm for printing, or at least that he did not share his father's impatience about introducing it into his kingdom. This lends credence to Lieberman's version of the "legend": Lieberman says that after the death of Charles VII Jenson found that he was not welcome in France, or that his new skills were not sufficiently appreciated there.

He next turns up in Venice in 1468. (You see what's coming, don't you?)

McMurtrie states the case best. Assuming as he does (as, in fact, all of the critics do) that Jenson's Eusebius font of 1470 is far too polished to have been a maiden effort, the question naturally arises: What was Jenson up to between 1461 and 1470? The natural assumption, McMurtrie says, is that he was honing his skills in printing offices run by others, and nothing is more plausible than that he was cutting punches somewhere in Venice between 1468, the year he is first known to be living there, and 1470, when he issued his own edition of Eusebius. It's more than likely, McMurtrie feels, that Jenson produced the roman type used by John de Spire in Venice in 1469.

Updike acknowledges that this possibility has been raised, but he is not ready to commit himself to it. For Updike, the designer of the first roman type was the person who cut de Spire's 1469 type, whoever that may have been.

But McMurtrie even goes a step beyond this: since John de Spire himself had once worked for Sweynheym & Pannartz in Rome, what prevents Jenson from having been his successor there, and from having produced the second (and much more roman) of the Sweynheym & Pannartz types used at Rome in 1467? McMurtrie assures us that this is all speculation, but he insists that it's well within what he calls the "range of probability."

I certainly lack the knowledge and powers of observation necessary to make a credible judgment about it. I will only say that there's a definite process of refinement going on from 1467 to 1469 to 1470. The overall weight of the type changes from chunky to svelte, and the S (most troublesome of letters) progresses from crude to elegant. If I had to offer an opinion as to whether one man designed all three of these faces within a 3-year period, I'd say that someone else probably cut the Sweynheym & Pannartz type, but that it's easily possible that Jenson produced both of the others.

#### A Legend in Its Own Time

It's nice to be able to report that

Ienson prospered in Venice. He was everywhere acclaimed as the master, and had become Count Palatine, a title bestowed in the Papal States. He also amassed a substantial fortune. One does not become wealthy merely by designing typefaces, so this is a tribute to his shrewdness in marketing the books that he producedalthough the beauty of his typefaces would surely have been a factor in the success of his books. In the decade from the Eusebius until his death he printed about 150 titles, under the imprint (for the first five years) of Nicolas Jenson and Company. Later, in failing health, he apparently curtailed his activities and allowed the firm to be reorganized as "John of Cologne, Nicolas Jenson and Company." It's also nice to be able to report that on his death in 1480 he left generous bequests to his mother, brother, son and three daughters (I can't find any reference to his having been a widower, but it seems likely), as well as to several charities. But nicest of all, in a way, is this: he left his most valuable property-his punches and matrices-to his best friend Peter Uglheimer, a printer from Frankfurt, and they continued to be used. Andrea Torresano, later to become the father-in-law of Aldus, once boasted of having used Jenson's type as soon after his death as 1483.

The fact that Jenson recognized the value of his type points up the fact that none of the foregoing theories and speculations matter; what matters is the Eusebius font itself, whether it was the first genuine roman type or the tenth, and whether it was Jenson's first typeface or his twentieth. Of more recent typefaces that were explicit copies of Jenson, we can cite Benton's Cloister Old Style, Rogers's Centaur and William Morris's "Golden" type (difficult as that may be to believe). It has also seemed to me that Goudy's Deepdene may be another, although I don't believe that Goudy ever said so, and he was most meticulous about attributions. Perhaps he thought that by telling us that Jenson provides the basis for "all fine roman types since 1470" he had already said enough.

#### Brøderbund Upgrade

The first nonfree update to TypeStyler is available as version 1.5, so it isn't clear to me that we're supposed to consider it a major upgrade—but it's major enough. If there's anyone in the audience tonight who has forgotten to buy this program, you should know that for any type lover it's more fun than a barrel of composing sticks. I'm pretty sure I would consider it worth the \$28.50 upgrade fee even if I had no real use for it.

Version 1.5 permits several dandy new tricks with the shaping tool, and it pays more attention (i.e., it pays some attention) to FOND resources. It includes an absolutely essential utility in SmoothMover (a Font/DA Mover clone for use with TypeStyler's SmoothFonts) and it's more hospitable to fonts of varying formats. As an upgrade bonus, three more SmoothFonts from The Font Company are included. These are three members of the Craw Modern family, designed by Freeman Craw for ATF between 1958 and 1966. Brøderbund (and The Font Company) call them simply "Craw." I've always found that Craw Modern Bold bears a certain vague resemblance to Engraver's Roman, so it would be a good type for novice counterfeiters to practice with.

# THAREWALL OLD

The program is still pretty pokey and I can still find no elegant way to center several objects horizontally along a common center-line (though I'm sure that capability lurks somewhere within). Nor can I yet find a way to set picas as the default ruler units.

#### Next month:

A return to PD and shareware, free-flowing, expressive, maybe even tell-tale—in a word, scripts.

About these newsletters ...

# **Club Logos**

by Lee Raesly

Before I start on this month's topic, let me share with you two letters that I received.

The first was from Les Hesly, of Mason City, Iowa. Les is Editor for the River City RC Club's newsletter. called River City News. He tells me that his newsletter generally is about 12 pages long. He uses an Apple IIGS, with extended memory and a "Computer Eyes" digitizing board. The software he uses is "Publish It! 3" (which will actually run on any Apple II with 128K). Les gets his graphics from "Computer Eyes" and inserts them in his DTP program. He has over 500 digitized graphics that he uses as a Library to reference from for each newsletter. Les has also just acquired a "Quickie" hand scanner, and I expect that will generate a lot more graphics for him, since it is so easy to use.

Since I also use an Apple II GS (and "Publish It! 3"), Les and I have set up an exchange. I sent him the 1,800 graphics that I have, in exchange for what he had. If anybody else out there is interested in joining this Ad Hoc Graphics Exchange, drop me a note with a SASE. I'll get back to you.

The second letter was from Kay Larson of Bremerton, Washington. (Between the three of us, we do span the country...)

Kay is both newsletter Editor and Treasurer of KITSAP Aircraft Radio Control Society. Her newsletter is called the "ARCLIGHT."Her newsletter generally runs about 8 pages in an issue.

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Kay uses an IBM 386 Clone, and the DTP program "FONTASY" for her work. She tells me that she is "thoroughly spoiled" with that combination. She says she often will redo her newsletter up to 10 times to get it to satisfy her husband. She enjoys doing it (as do I and all other editors with whom I have spoken) but sometimes does get some "razz" on various topics she introduces in the newsletter. Kay states she is the only woman in their club, and that this explains how some of her thoughts in the newsletter seem to get this "razz." Kay, you also have a nice solid newsletter with lots of info, and very nice looking.

Now on to this month's topic: "Club Logos, and What They Say About Us"—

Logos seem to tell a lot about a club. Not just what the logo is (although that is informative), but what the club is. Let me explain what I have seen.

I exchange newsletters with 30 clubs (I am slowly increasing to 50, where I will stop. I wish I could exchange with all 2,500+ clubs, but obviously cannot afford that. Incidentally, if you are interested in exchanging with me, send me a copy of your newsletter, and a note. I will get back to you). And I read them all in detail, not just check them for articles or cartoons. And I have noticed some interesting correlations between them.

Of the 30 newsletters, 24 have a club logo—a special logo, not just a part of the nameplate. And of those 24, 20 have a separate newsletter logo, at least as best I can tell.

When I read the newsletters, I

look for signs of EDC ("Esprit de Corps"). Of the total 30 clubs, 18 seem to have very high EDC. And guess which ones these are? Right! Sixteen of the clubs with high EDC, have both a club logo, as well as a newsletter logo. And the other two have a club logo.

I am sure that a club logo does not itself bring high EDC, but rather that the logo flows from the high EDC. After all, if the people are really interested in their club, they want it to be unique and memorable, so a logo is a natural way to catch that "spirit."

The same is true of the newsletter. Those editors who invest themselves in their newsletter, want it to stand out from the others. And a newsletter logo certainly helps there.

I have noticed several other factors about these high EDC clubs. Let me share them with you.

First, each club seems to have a series of regular club activities: Organized activities, Fun-Flys, Races, R/C activities. And, each of them has at least one event each year which is its own, such as a Float Fly-In. The Annual Labor Day Fun-Fly, the Annual July 4th Fun-Fly and Family picnic. So that they not only have organized R/C activities and regular time during the Spring-Summer-Fall, but also have these special club R/C events. Some even have two events a year.

I find some very interesting other factors. For instance, club membership is generally over 100! Makes sense, in a way. Most people are not that active in a club, just sort of belong and say to themselves, "Next month I'll do some things!" So large numbers are needed to get the small number of people who volunteer and become active.

The surprising factor to me were the fees. Generally, the yearly fee was between \$40 and \$50. And the initiation fee was usually between \$25 and \$50 with many at the higher end (\$40 or \$50) On second thought, this also makes sense to me. If you want to do things within a

club, it takes money. And a club with 100 members paying \$40 per year will generate \$4,000. from memberships alone. With 150 members, that is a minimum yearly income of \$6,000. plus new initiations fees, plus what is generated through various club activities.

A lot of the clubs use this money for door prizes at meetings (that certainly increases attendance!) and at events. It also creates funds for things like a club VCR Video Loan Library, which many have.

There is one other interesting note. All of these clubs have newsletters that run 8-10 and even 12 pages a month. And these seem to cover club events, club news, as well as other types of articles of general interest to the average hobbyist. Building tips, cartoons, and things like the aerodynamics of helicopter flight, historical figures in aviation history, etc.

And of course, it is the newsletter that keeps the non-active members with the club, as well as carries the news of the events to the active members. The reporting of the events in the newsletter gives the message to the non-active members: "See what you are participating in by being a member? Aren't you glad that you are a member?"

A club logo and newsletter logo represent a starting point for an active club, as well as serve as an identifier in the newsletter. Incidentally, I have the logos of 36 clubs printed by Laser Printer. If anybody wants a copy of the set, send me a SASE and \$2.

Next month I will return to some of the basics of creating a newsletter, with an emphasis on using DTP templates, and several advantages from them. I will also touch on related matter of the format, or design layout, of a newsletter. If space permits (darn this reduction in pages - it sure does hurt us editors!) I will cover avoiding "Body Bags"!

So send me your tips, techniques, or simply an explanation of how you put your newsletter together. Send them to Leon H. Raesly; 6201 Greenbelt Road Suite M-16; College Park, MD 20740.

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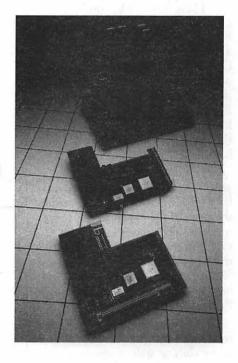
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**DeskWriter** 

by Lou Pastura

There are 3 items of interest to potential and current DeskWriter users that I thought I'd spend a little space on this month.

First, Hewlett Packard has reduced the list price of the Desk-Writer from \$1,195 to \$995. Prices at local dealers vary, so shop around. I was recently able to obtain a favorable price at a local store while making a purchase for a friend, so don't be afraid to talk a little. Walk softly but carry a big checkbook. Also, besides reducing the price, HP has added built-in AppleTalk capability, so that you can connect the DeskWriter to your Mac without sacrificing a precious serial port. The AppleTalk upgrade for us "pioneers" will ring in at about \$149, I'm told.

The second piece of good news is that HP has dropped the list price on their collection of scalable fonts for the DeskWriter from \$395 to \$195. The package includes CS Century Schoolbook, CS Palacio (corresponds to Palatino), CS ITC Bookman, CS ITC Avant Garde Gothic, CS Triumvirate Condensed (corresponds to Helvetica Narrow) and CS ITC Zapf Chancery and Dingbats. Thus, the completely installed package brings the DeskWriter up to parity (font-wise) with printers that are sold with the standard 35-font Postscript package.

Those of you who have been suffering with Adobe Type Manager's fractional spacing problems should take note. The HP fonts are really well done. I asked our resident font expert (he claims he's not, but he'll do until one comes along) Jim Donnelly, to take a look at some 14- and 30-point samples of all of the HP fonts and their Adobe/

ATM counterparts, both printed on my DeskWriter. His comments were favorable, both regarding the fonts and the DeskWriter's print quality. Regarding the fonts he said "...the letters themselves, re: resolution and crispness looked identical to me" and "...the HP fonts were BETTER than the ATM output because of ATM's miserable spacing".

On print quality he commented: "The first thing I noticed was the terrific density of the blacks with the DeskWriter. Of course I suppose this is a function of the ink rather than the HP fonts, because the Adobe samples you sent are also much darker than my LW output." Those considering the purchase of a DeskWriter should especially note that per HP's ad on page 42 of the November Journal, if you purchase a DeskWriter before December 31, 1990, the font collection will be included at no extra cost. With locally advertised prices as low as \$669, this may be the time to take the plunge.

This brings up the third news

item-the long awaited new waterresistant ink-on which HP has been working for what seems like forever, is now available...kind of. The samples I sent to ID were printed using the new ink, but only because I cajoled a cartridge out of the HP folks for this review. The HP rep with whom I spoke was quick to point out that the new ink is water resistant, and not waterproof. My tests with the new ink support this statement. You can use a highlighter on the ink and still end up with acceptable copy. Even if the page gets soaked, the words on the paper will not completely disappear. Although some/most of the ink will run, the underlying text is still decipherable, and I would not hesitate to use the new ink for mailing labels or envelopes. HP is shipping their new printers with the improved ink and expects that the new ink will be available at normal retail outlets in November or December, after supplies of the old ink are exhausted. The part number for the new cartridge is the same as the old one and the cartridges are identical. The only difference I was able to identify was "New Ink" printed on the box enclosing the cartridge.

Even with the price of PostScript and QuickDraw laser printers at an all time low, the DeskWriter package with 300 DPI resolution, 35 scalable fonts, the new water-resistant ink and AppleTalk are certainly worth a close look.

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## **Fontina**

by Nancy Seferian

I sure selected the right program for my first review. This is a simple, useful little program.

Fontina is a combination INIT/cdev that creates an alphabetized list of every font you have installed from Adobe Garamond to Zapf Chancery, organizes the list by font families and, as you scroll the list, displays the highlighted font in its own typeface.

To install Fontina, you just drag it into the System folder on your System disk. Then choose Control Panel from the Apple (\*) menu and choose Fontina from the control panel items to see this screen:

Menu font, lists every font in your System so that you can select your favorite font (or at least the one you least mind looking at every time you go to your font menu) as the display font for viewing the list of all your fonts. The other option, Menu size, lets you select the size at which the Menu font will be displayed.

That's all there is to setting Fontina up. After you close the Control Panel and choose Restart from the Special menu, Fontina will run every time you start your Mac.

Once installed, Fontina works within your applications so that when you choose the Font menu an became very fond of Fontina. Soon after I installed Fontina I began to experience a bombing and printing problem when trying to scan some line art with MacScan. In an attempt to see if the problem was anything I had added to my System recently, I started deleting everything new and Fontina was one that went. (I'm pretty sure the difficulty was the print monitor that was installed with PageMaker 4.0, because the problem went away when I got rid of it.) I'm telling you this because I missed Fontina in the interim and was glad to have it back. Fontina worked just the way I've described in all my painting and

many fonts that your screen cannot

hold all of them, Fontina accommodates you by narrowing the columns

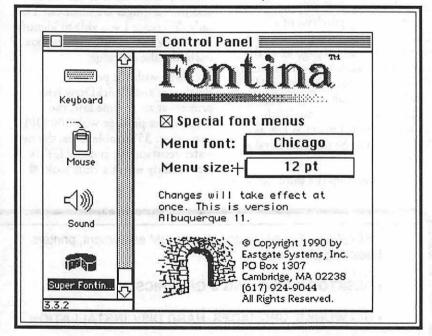
in the multi-column listing, showing only a portion of longer font names. This is not a problem since the full name of the selected font appears at the top of the screen in both its own typeface and in the font you selected

as the display font. It is so convenient to have a display of all available fonts at my fingertips that I quickly

Fontina worked just the way I've described in all my painting and drawing programs (Freehand, Canvas, MacDraw, MacPaint, SuperPaint, etc.) and in PageMaker, FileMaker and almost everything else. But Fontina would not work in MS Word or Smart Art. I decided to call Eastgate Systems to see if someone there could help me.

I talked to Mark Bernstein, who I think might be one of the programmers, and he was very nice. He said that when Fontina reorders fonts for some programs with scrolling lists (Word, for example) the program gets confused. He thought their next release would take care of that.

Fontina is available for \$69.95 from Eastgate Systems, Inc., P.O. Box 1307, Cambridge, MA 02238, (617) 924-9044 or (800)562-1638.



An "x" in the Special font menus box means that Fontina is activated. You can turn it on or off by selecting or deselecting Special font menus.

There are two other options in the Control Panel. The first one,

alphabetized list, organized according to font family, of every font installed is displayed in the font and size you selected in the cDEV. As you move through the list, each font is displayed in its own typeface at the top of the font menu. If you have so



Н



## **Notes on the Mac**

by Paul Schlosser

#### New Macs Introduced!

The big news on the bulletin boards this month concerns the three new Macintosh models announced by Apple on October 15th. Apple describes the new computers as completely new from the ground up, redesigned with the features that customers want the most. They are aggressively priced, to attract those computer users who always wanted a Mac but felt that they were too expensive.

The Macintosh Classic is a onepiece design, with a built-in 9" black and white monitor. The Classic comes in two configurations, the first with 1 Mbyte of RAM, a 1.44M SuperDrive and keyboard for \$999. The other version has 2 Mbytes of RAM, a SuperDrive, 40 Mbyte internal hard drive and keyboard for \$1.499.

The Macintosh IIsi is a modular design (separate CPU and peripherals), and also comes in two configurations. One with 2 Mbytes RAM, SuperDrive and 40 Mbyte internal hard drive for \$3,769, and another with 5 Mbytes RAM, SuperDrive and a 80 Mbyte internal hard drive for \$4,569 (keyboard and monitor extra). The Classic and IIsi are available now.

The Macintosh LC has 2 Mbytes RAM, a SuperDrive, 40 Mbyte internal hard drive and keyboard for \$2,499. The LC will be available in limited quantities until January '91.

The IIsi and LC come with built-in eight bit color video, and a microphone that allows users to record and store voice and/or other sounds. I visited a local Apple dealer to see the new models, and came away impressed. Using the Classic was very similar to using an SE. The IIsi seemed comparable to a IIcx, it was very fast and the color was excellent on the new Mitsubishi-built 12" monitor (more on this below). I was able to use the built-in microphone and new "Sounds" cDEV to record my voice, save it to disk, and then install it as the System alert sound. I asked the salesmen about other uses for the built-in microphone, and as an example he told of being able to record a sound into a spreadsheet cell, to explain why you changed the cell formula or value.

You're sure to see many new software products for using voice mail on networks. The only complaints I've seen about the new models are that the Classic doesn't have a slot (according to Apple fewer than 5% of SE owners used a slot), and that the IIsi and LC models have different slots than earlier Macs. The IIsi has what is called a "flexible slot" that can accept NuBus or SE/30 cards with the addition of an adapter. The LC has a "020 Direct Slot." Apple will have a card for this slot available in January that will enable the LC to run Apple IIe software. The card will list for \$199.

Two new monitors were also introduced, a 12" RGB model (\$599), and a 12" monochrome model (\$299), both manufactured by Mitsubishi.

These new models have been released with System 6.0.7. Since the last system software release was 6.0.5, many have wondered whatever happened to the missing 6.0.6. With just a few days remaining before the new models were to be announced

Apple discovered two significant bugs in 6.0.6. The first would occasionally cause the Mac to indicate that it had lost connection with an AppleShare server or printer, and the second would cause the Mac LC to fail to recognize its keyboard until the mouse was moved. Apple dealers have been instructed to remove any copies of 6.0.6 that slipped out, and replace them with 6.0.7, which fixes these bugs.

#### HyperCard News

Now that System 6.0.7 and HyperCard 2.0 have been released, you should be careful about how and when you upgrade to these new versions. It seems that older versions (pre-2.0) of HyperCard that use sounds will crash under System 6.0.7. With that in mind, you should think twice before upgrading to System 6.0.7 if you still use and depend on one of the older versions of HyperCard.

The version of HyperCard 2.0 that will ship with new Macs comes with only a few of the new v2.0 demonstration stacks, so that everything fits on one 1.44M disk. The home stack in this selection has a large opaque button covering the buttons which select the higher user levels. Apple wanted to protect novice users from accidentally changing something that would cause the stack to stop functioning correctly. I've read that if you type "MAGIC" into the message box the higher user levels will become accessible. The upgrade version that dealers are providing is not limited in any way, and comes with the entire set of demonstration stacks.

#### Apple and Sony to Team Up?

Rumors have recently surfaced that indicate Apple has been talking with Sony about a possible deal that would have Sony producing a Macintosh-compatible laptop computer. An Apple spokesman replied "As a practice, we do not comment on rumors and there have been no announcements...". On October 1 a New York Times reporter

quoted Junichi Kodera (head of Sony's division that makes computer components) as saying "We have begun talking to them about a portable." Stay tuned.

#### Mac - DOS File Transfers

I read recently about an interface card for IBM or compatible computers that allows you to use any Mac floppy disk drive with a DOS machine to manipulate Macintosh format disks and/or files. The card comes with a program that lets you copy files, initialize disks and move data files back and forth between your Mac and the DOS computer. The program also can add the correct file type and creator resources to a file so that the appropriate icon will show up on your Mac. The card sells for \$150, from MicroSolutions, 815-756-3411.

#### TCS News

The newest addition to the Pi's TeleConference System (TCS) is a new message base area, the Network Conference. You can access this new area by selecting Conference 5 from the Main Menu. The Network Conference contains messages from several different on-line services, some of them world-wide in scope. It's been interesting to read messages from Apple owners and users throughout the United States, Canada, France, England and Australia, to name just a few. These messages are relayed throughout the world via public and private bulletin board systems, and are relayed to the TCS via the Pi's ProLine system. It is possible for these messages to have traveled across the country in as little as a few hours, or at most a few days. TCS users may not only read these messages, but can send messages out to these far-ranging networks. This new conference has been in the planning stages for a long time and, thanks to many hours of hard work by Jon Thomason and Dave Harvey, has now been made available to TCS users

#### New Files on the TCS

File area 13 - Mac Fonts

The following files were uploaded to the Macintosh File
Transfer areas on the TCS during the last thirty days. This listing represents only a small portion of the files available for downloading. Call the Pi Office at 301-654-8060 for information on signing on to the TCS.

037 INFRMLOBL.CPT. Informal

Oblique. ATM compatible. Nice! File area 14 - Mac Games 096 DALEKS.PACKED Color DALEKS 095 SOLARIAN.CPT v1.04, very nice color and sounds 094 TOXIC.RAVINE Strategy/ action game in two parts File area 15 - Mac Graphs 087 DOLLAR.CPT TIFF image of \$1 bill, front and back File area 16 - Mac Hypercard 089 HOME.BUD.SIT Home budget stack 088 POPUPMENU.CPT Create popup menus w/ this external File area 18 - Mac Utilities 254 UNSCROLLY.CPT. UnScrolly shows 20 names in control panel 253 ZTERM.SND AOL sound installer for ZTerm 252 UNZIP1.02B.CPT ZIP extractor v1.02b 251 MACARC.CPT ARC extractor V0.040 250 LHARCO.33.CPT LHarc extractor/compressor v.33 249 ARCPOP1.2A Disk Based deARC'er v1.2a 247 SPARKLER.CPT Color module for After Dark 246 WORKS.WORKS.CPT Transfer AW 1, 2 or 3 to Works 2.0 245 WK11.08..11.10. White Knight Patch

244 QUICKGIF.CPT Gif Viewer

243 FINDERPATCH, CPT Patch to

242 COMPACTOR.ICL8 Compac-

that works well with B&W

mod Finder

tor Color Icons

241 PSWRD.TXT Clear the password in a LaserWriter 240 SETFONT.CPT Change the font of menus/dialog boxes 239 OUICKPRINT.CPT Format/ print/spool text files 238 FLASHWRITE.CPT FlashWrite ][, a DA for saving notes 237 DISK.ACC.CPT Desk accessory to manage files, disks 236 MILL.COLORS.CPT Screen saver for After Dark 235 TOPGUN.SNDS.CPT Four sounds from "Top Gun" 234 DISINFECT.CPT Disinfectant version 2.2 233 VIR.DET.CPT Virus Detective v4.0.3 232 NO.ICON.CPT INIT to keep startup ICONs from showing 231 TO.DO.30.CPT TO DO 3.0 DA tracks "to do" list. 230 FILEVISION.CPT FileVision I



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HOT PRODUCTS: The latest version of DynaPerspective (2.0) brings powerful modelling, rendering, and animation to the Mac. FrameMaker 2.1 is the production house's dream come true for all-in-one publication work.

DR. MAC SAYS: "If you have a bad start-up disk stuck in the internal 3.5" drive, instead of using a paper clip (or other sharp object) to eject it, try holding down the mouse button on startup. This will cause the Mac to cycle the eject mechanism.

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### **True Form**

by Gary Goldberg

Let's talk about forms. When you enter a dry cleaning store or a car repair shop, the first action the counter clerk takes, even before he or she asks what you need, is to reach for a blank service form.

The form serves a number of purposes. It is a convenient place to capture all the information about you, the service you need, and other data, like the time and date you walked in. The format of the page makes sure that nothing important is left out-empty boxes or lines grab attention. As the customer, you may need to be aware of disclaimers or policies; including these on the same page means you can't miss them easily. Lastly, the form becomes a legal document—the signature obligates you to pay for service the business is obligated to perform.

When a business has at least a moderate sales volume, paper forms can collect and become a major headache. They can also get lost or damaged. Most important, accounting values and customer statistics have to be data entered twice—once on the form and once in the computer database. Any computer-based solution to this problem must be as easy to use as a paper form and must be flexible enough to handle any situation that a paper form could, like special notes or remarks.

As computers become increasingly prevalent in business, paper still plays an important role. For instance, most people aren't satisfied if a receipt isn't provided. Also, legal signatures must still be committed to paper. Any software worth its bits must be able to produce an accurate hard copy of all previously entered data.

True Form, from Adobe, is fairly

new but is already in its second version (2.1). Although the list price is \$395, MacConnection sells the program for \$225. The software has two components, a forms generator and a fill-out module. Only one copy of the forms generator is necessarythe fill-out module includes everything needed to use the forms every day. One fill-out module is needed for every station at which the forms will be completed. Additional packs of four fill-out modules can be purchased separately. Adobe priced the pack at \$295; I couldn't find a street price for it.

As the latest generation of forms software, True Form answers the call by being first and foremost, familiar. Inertia is a significant reason why most companies never get around to changing the way they do things; one way to overcome this is to change slowly and keep a familiar tone. True Form accepts scanned input, and as a result, screen forms can look exactly like the paper forms they replace. It's a very comforting feeling to see on the screen the same form you may have been using for the past twenty years. Since you know where everything is, it's never necessary to hunt to find what you're looking for.

If you're quick on the uptake, you've already noticed the most immediate drawback to this program—you really need a scanner to get the most out of it, at least to set up the initial master blank. A hand scanner, while wonderful for other applications, won't cut it here because the cleaner the scan, the easier it is to create the original forms. Without a scanner, frustration sets in quickly.

I had set myself the task of

duplicating the Federal SF-171 employment application in True Form as a test of the program's abilities (it's a complex, multi-page form) and because I wanted a computer-based way to fill out the application. This proved impossible. The templates I downloaded from the Apple Pi TCS had incompatible file formats and none of the service bureaus I called handled document scanning. True Form will accept PICT and EPS documents rather than scanned images, but it's difficult and time-consuming to duplicate a form that could be easily scanned. The True Form package includes an optimized scanner driver that is compatible with the Apple and DEST scanners.

A useful True Form feature is readily apparent when you to create your first form. The program is able to detect the edges of a field directly from the form. You click at the place you need an entry, and the field expands to fill it. It was a real breeze to indicate where fields were, at least on the sample document Adobe provided. It may not be as easy if you're working on a grainy, poorly scanned document but it's certainly the way Adobe should be approaching this feature. In any case, it's not difficult to alter the field dimensions afterward.

Printing the forms from the Fill-Out module proved difficult. Not having a Postscript laser printer, I did my printing on an ImageWriter II, using version 2.7 of the Image-Writer driver. No matter what I tried, I couldn't get the program to print the form image, just the contents (the method that's used when you have a supply of preprinted documents). Also, the printing controls are very flexible but there are so many of them, you could get lost in the dialogue boxes! You'd definitely want to set them one way and never change them. I can't imagine most clerks or customers wanting to try to figure them out in a hurry. It would be really useful to have print settings files or pre-set Chooser drivers, particularly if you print to more than one type of



device. The program can also print labels.

I found this much out after getting stuck just trying to get into the program. Adobe's method of software protection involves personalizing the program on the first use; the manual (which seems clearly organized and complete) directs you to enter the serial number from the label of the program disk to continue. This serial number was nowhere to be found. I went through all the materials that arrived with the product, I even peeled up the label from the disks to see if it was hidden, but to no avail. I then called Technical Service. They were very helpful, and there was practically no wait to speak to a technician. It turns out the number was attached to a sticker inside the front cover.

The sample document required the Courier font (supplied) to operate—it says so in the manual. I overlooked this note and as a result the program quit unexpectedly a number of times before I installed the font. I can see this being a problem; it would be very important to keep all fonts on the various systems the same.

As you create the various fields on your form, you can select from a range of functions, formats and data types. Some fields are not usermodifiable: date and calculated fields, for instance. These use formulas or depend on the contents of other fields in a manner similar to a spreadsheet. The program works hard to insure that no matter how you type data into each field, the values look exactly the way you want when you leave the form. Further, it is possible to "group" a number of fields together so they can become a part of a list, with aggregate field references and totals that sum over the list. However, there is no "Ungroup." Once you create it, you live with it or delete the whole

You can designate any field to have a drop-down menu of choices appear when you fill it out. This way, data entry staff must select from the menu, making sure that they can

enter only what you want. Help for each field is easy to create and automatically appears when you tab to that area. One problem-except for grouped fields, you can't select a number of fields and apply the same formatting to all of them at once. Furthermore, you must separately format every field you create. Repeatedly setting the data type, dollar sign formatting, justification, and other settings for each field quickly became a chore, and the form I was working with was a short, one page sample document. With longer documents, this problem eats into the time savings you get from having auto-sizing fields.

It would also be more convenient if you could double-click on a field and have the formatting menus come up, instead of having to select from the menu bar all the time. Or better yet, it might be included as an icon in the Icon Bar, which already lets you perform some of the more common tasks with a mouse click rather than by picking from the menus. It would also be easier if the character and value format dialogues were combined. Currently their contents are chosen separately.

The Fill-Out module has a nice feature: the ability to place notes or remarks anywhere on a form, independent of the fields on it. This QuickForm field can be created in Fill-Out and exists only for that one form. One of the great things about paper forms is how easy it is to scrawl a note in the corner, a comment about payments or pick-up times, for instance.

Once you've collected a number of forms, manipulating the data becomes your next concern. Since it would defeat the purpose to have to re-enter the data into a database after it was already in True Form, the package provides intelligent links to Acius' 4th Dimension database. A special printing module can be installed, allowing a True Form form to be printed from within 4D. The data only flow one way, however. It would be more useful if, as you enter data into True Form, that data could be loaded into the database auto-

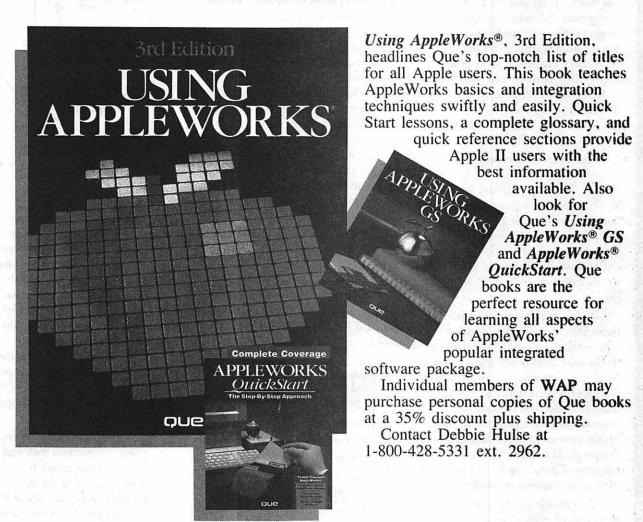
matically. I'm looking forward to Adobe creating interfaces for other databases like Claris FileMaker. For straight data interchange, True Form offers merge sequences, which import and export from text files. Options to control the format of the files are sufficient to let you make simple reports even in the absence of a database or spreadsheet.

The package has other convenience features. Password protection on master forms prevents unauthorized workers from making changes. Unique sequence numbers can be assigned to each copy of a form for inventory purposes. The contents of a group of forms (appropriately called a stack) can be searched for specific values using conditional operators like less-than and does-notequal. Once you've read the wellorganized manual, an included quick reference card has most of the information you'll need everyday except the formula descriptions.

Summing up my experience working with the package, I'd say that despite some of the quirks noted above, the package was easier to use than I expected, with most of the functions well thought-out. It does a fine job of answering the need for computer-based forms with an intuitive way of handling both forms creation and completion, but the program is complex enough to require managers to dedicate serious training time to using this program. The staff who'll be the major users of these electronic forms will have to become comfortable with the flexible, but potentially distracting and time-consuming options they'll be using. In fact, there may be more options for them than you'd want. One help-you can turn off character formatting in the Fill-Out module.

Adobe True Form, version 2.1, requires a Mac Plus or higher machine to operate. A Postscript laser printer is almost necessary for day-to-day printing; a scanner is essential for forms creation.

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### Claris CAD 2.0

by Frank Potter

Claris has done it again—put together a smooth, elegant package that works. If (a) you are an architect or engineer, (b) need a computer program that will handle two-dimensional drafting, and (c) have not already invested a great deal of time getting familiar and comfortable with one of the other programs that do similar work, you owe it to yourself to take a careful and serious look at Claris CAD 2.0.

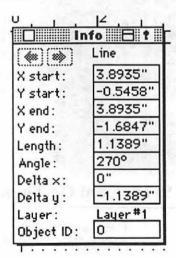
We reviewed this program in its earlier form last July (WAP Journal, Vol. 11, No. 7, p. 30) and we liked it. The program was not then, and is not now, written for all users: it is complex and powerful and embodies precision to a degree that many will not require. But for those who can use its many capabilities, it will be a joy.

As in the previous version, the package is accompanied by a video tape, explaining how to use many of its features. Also preserved is the easy Macintosh interface for which Claris has become the exemplar. Both of these have been cleaned up and improved—to the point that a brand-new user should be able to put the program to effective use within minutes of installing it, and be using 80% of its capabilities within a day.

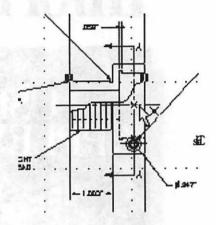
2-D drafting programs are, by their nature, elaborate and very, very precise. When they fail to meet these criteria, they soon become former 2–D drafting programs. Claris CAD 2.0 is not one of these. Claris has kept most or all of the bells and whistles in the earlier version and added a bunch of new ones. They are not always intuitive, but that is scarcely surprising, given the power and range of the program.

The documentation stresses the program's tools, methods and modifiers. The tools are more or less what you would expect, but the options for dealing with them are expanded considerably. An expanded area across the bottom of the page will allow you to set the cursor position or other critical elements of a drawing numerically. The rules are adjustable, and there is now a "magnetic grid" to permit precise placement of points and lines without your having to zoom in to be certain that you are connecting the objects that you intended to connect.

You are now able to access a range of small windows or "windoids," that float above the drawing and that will allow you to select different options without having to address yourself to the standard Macintosh menu bar choices:



An innovation that will surprise many and charm almost anyone is the introduction of "Graphic Guides," tracking the position and movement of the cursor by projecting lines and showing tiny icons that tell you what you are about to create. It has three components: The Preview Cursor, which indicates asterisks and icons at critical points, the Guideliner, which shows alignment lines, and the Dynamic modifier, which helps you select the correct modifier for the tool that you are using.



CAD does not yet allow the user to link to a spreadsheet or database program, which is a disappointment, and it still has trouble reading and writing files to other formats (although there is a separate translation package that will handle many of these problems, if you need to do this). It is said to run under A/ UX2.0, and it does have an extensive context-sensitive online help capability, which we considered one of the few black marks against the program when we reviewed it last.

Claris' telephone support system is not a bright spot: you may end up listening to elevator music for ten minutes or so and end up with someone who knows less about the program than you do. A real minus.

Conclusion: If you do drafting or engineering work, you really ought to give it a look. If I were an architect, I would be seriously tempted to choose Claris CAD as the program around which I organized much of my daily work. I'm not, but it is still nice to have around.

Claris CAD 2.0; List price \$899; upgrades from MacDrawII \$499; MacConnection,\$649

by Rob Clark

tosh applications) over exact placement of the fields, and mixing fonts. The first line can be set to display businesses first or by name, and as indicated above, whether a specific field will be printed. You fill out the form as you would any data entry screen, by typing in the desired information and tabbing to the next field. When you're done filling out the record, you move on. Notice the

In this day and age, with information always changing, it's nice to be able to quickly and easily organize your most basic information, like your address book. You can manage a small part of your world with the nifty program and DA (desk accessory) from Portfolio Systems called Dynodex. Dynodex is a structured flat file manager, with all the details of the data structures already designed for you, It also has some fancy printing capabilities. This program/DA set will make a fine addition to the software library of almost anyone, though access to a laser printer allows you to take full advantage of the program's printing strengths.

#### What comes in the box?

You get a disk with the Dynodex application, version 1.2, the Dynodex Desk Accessory, help files, a HyperCard conversion utility, a tutorial file, a couple of demonstration files, a small binder for use with Dynodex printouts, two small manuals which conveniently fit inside the enclosed binder, and 100 sheets of pre-formatted, pre-punched laser paper for using some of the printing features.

#### General Features

Let's start by double-clicking on the application. If you're just beginning, the application opens with a blank layout, ready for you to enter information. But, if you want to change the layout some, you can. Take a look at Figure 1, just to see what's there. For the time being, ignore all the icons on the left. You notice that you have 22 different

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Title	20 <b>©</b> ●P		
Address	4©•P	rumin	
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Phone 1	8©•P		9 <b>•</b> P
Phone 2	10©•P		11eP
Phone 3	12©•P	urdeşem	13eP
Phone 4	14©•P	The first teacher	15eP
Note	16●P	2222 155 423	CONTROL OF
Key 1	17©•	Date	19•
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Figure 1

fields that you can use. All of them can be configured to some extent. For example you can set the field name (indicated by the buttons), the tab order (indicated by the first number before the bullet (•) or the copyright symbol (©), whether the first letter of an entry in a field will always be initial capped (indicated by the © symbol), and whether the field will be printed (indicated by the "P") — you can print a maximum of five lines to an entry.

Data Entry. The first lines at the top of the screen represent what's actually printed out on the Dynodex sheets. It lists my name, address, and some phone numbers. You have little control (compared to most Macinphone numbers—you can code them, so that you can tell which phone number you'll be dialing. In the example, my phone numbers list two types: home and office. I can code them for any type, including fax and club telephone numbers. As your list of names grows, this feature makes itself more valuable to you.

Finding. Once your information is entered, you'll want to find what you've entered from time to time. So Dynodex includes some standard find routines (such as found in Word), you can base your search by field, and you can set up a "Frequent Find" search, if you always look for information by a specific field. The extras are nice touches.



Importing, Exporting, and Sorting. You get the standard exporting and importing features into and out of the program. Nothing fancy here, but this is important if you need to print out your information in a way that Dynodex can't, or if you want to do some other manipulation. Of course you can sort your information in the manner you need. You get three levels of sorting with Dynodex.

Set Startup of Your Most Used File. Since most people are likely only going to create a single Dynodex file, you get the option of customizing the program to open up a preselected file automatically. This is similar to the "Resume" file that Excel and More use. Again, a nice touch.

Ways to Categorize Your Information. For those who want to categorize their information, Dynodex provides two key search fields. This is very useful for finding only those people who are Washington Apple Pi members, for example. You could then print out a list consisting of only WAP members, yet you could maintain a list of all your friends/co-workers, whatever in a single file.

On-Line Help System. Who reads manuals anyway? The help system for the program is complete and very well laid out. This greatly enhances the value of the program. This is especially important to this program, as Dynodex does have a lot of features, many of which are initially intimidating.

# When to Use the Application and When to Use the DA

Included with the program is a Dynodex Desk Accessory, useful for finding information quickly, dialing the number for you automatically (if you have a modem connected to your Mac), and for updating your files. As you would expect, with the DA version, you can't use the layout features, nor can you print, but you have access to your information. Including the Dynodex DA is a nice

feature.

Editing and Layout Icons. The left portion of the screen displays 13 different icons, useful when you prefer to use the mouse instead of using the menus. While this feature makes the program look like a Macintosh application, in my view they clutter up the screen. The Dynodex documentation takes great pains to point out to you that the program is designed for speed. I find those icons get in the way and are initially confusing when you first use the program. Those tools should be completely left off the main window, used on a tools palette (á la MacPaint, HyperCard, or Page-Maker) or placed on the bottom or right hand side of the screen. (Why on the bottom or on the right side? We read from left to right, top to bottom: their placement on the left side implies they are the most important items on the window, which they are not.)

Printing Your Address Book. Since most of us want the program to manage our address or phone books—this feature is Dynodex's greatest strength. The program comes with specially designed paper, designed to be separated into three smaller sheets to fit into standard six ring address book. You print onto these sheets (it can print out so that both sides of the paper are printed in the correct order), separate them and place them into the provided six ring binder. You can also print out two pages to a sheet or one page to a sheet. You can order refills of the special paper (the package includes 100 sheets of the three pages to a sheet type), and you can order special paper you need if you want to print two pages to a sheet.

The documentation recommends you use a laser printer. This is, I'm sure, because the size of type used in the three pages per sheet mode is pretty small. But we're used to this limitation, and will use a readable font for those sizes. I think the Dynodex people are missing a substantial portion of the market. This product does seem to be

positioned for the professional manager, who's always looking for something to do a specific job quicker and easier. But if you have a laser printer, the three-page per sheet print output can print out on the excess part of the page to print out what are called "Dynets": loose leaf miniatures of your address book printed in tiny type. I use mine to keep my addresses and phone numbers in my wallet. That way I always have my phone numbers with me, even if I don't want to bring my larger address book. Again, this is probably not a feature that'd be useful when using an ImageWriter. All in all, I think the printing is well designed and well thought out.

#### Best Features

The printing feature is well done. Printing out a phone book is the main reason for such a program. I wish more programs had this flexibility. If you need this flexibility, it'll justify the extra cost over similar programs costing less.

At first, Miniature Printouts seems to be a frill, but it's a well-thought out and implemented feature. I always seem to need a phone number just when I'm not carrying my phone book with me. With the Dynets in my wallet, I no longer have the problem. Again, this feature is only useful if you have a laser printer.

#### Worst Features

If you've used your Macintosh for any length of time, you expect your applications to have standard features, like control of exactly how your output looks. You don't get it with Dynodex. You can select the font, and to some extent the font size. To be fair, I think the reason the flexibility isn't there is that you would lose some of the printing flexibility. If I had to choose between printing flexibility and layout flexibility, I would pick the printing flexibility, too.

You can select any font you want for your layout, but the

program doesn't remember the change when you quit. This is really annoying. You have to select your favorite font each time. This would be a real problem, if it weren't so easy to change the font.

#### What's Coming Down the Road

When I was at MacWorld in August, the Dynodex people told me that a new version was coming down the road, one specifically designed to answer the greatest complaint: layout flexibility. You'll have complete control over the font selection (mixing fonts and sizes) and layout organization. Time will tell if these work as advertised. I am hopeful.

DynoPage is a stand-alone program that will give you the ability to select any size paper, essentially giving you the flexibility of Dynodex's printing capabilities for any application. If this works as well as it sounds, you will be able to automate your own filofax with your existing applications. For example, you would be able to use More to maintain your To Do List or use Excel for your expense reports and print the information to fit into your notebook.

DynoPlanner. (Name is not yet determined) I'm not sure if this is a real product that's being worked on, or if it's just an idea the Dynodex people are thinking about, but this is to be an application to automate all of your filofax. This makes sense, since many people want to include the Dynodex phone book information with an existing filofax.

#### Technical Support

I called the technical support line and was immediately put in contact with a knowledgeable person on the line. He was helpful and courteous. I wasn't placed on hold, nor was I forced to wait for a return phone call because tech support was busy. Better yet, the number was toll free!



#### Value

Dynodex is an excellent value. It retails for \$149.00, but can be purchased for about \$90 at most mail order firms. The technical

service, the program's ease of use, exporting and importing functions and printing features make this a great buy.

#### System Requirements

Mac Plus, or higher; System 4.3/ Finder 5.1, or higher, laser printer or standard dot matrix printer recommended.

#### Conclusions

Pros — great printing flexibility, fast, well thought out features, Dynets.

Cons — lack of layout flexibility, can't remember font selection.

Recommendation. I don't hesitate to recommend Dynodex.



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## 911 Utilities

by Frank Potter

Microcom 911 Utilities is one of those programs that you will want, hoping that you will never need it. Human and electronic fallibility being what it is, however, the chances are that you will need it, and when and if you do, you will be very happy indeed that it was available to you.

The program is a conglomerate of utilities produced by different companies, and collected into one place by Microcom, a North Carolina company that seems to have fixed its sights on the big time. What they have set out to do is to provide help for anyone who has ever had or thinks he or she may some day have a disk crash, a virus attack, an erroneously deleted file or an elderly hard disk that may have an occasional memory lapse. If none of these categories fits you, then you probably don't need the program—but then of course, you can already walk on water and leap tall buildings in a single bound, and probably have no need for mundane contrivances like computers anyway.

The workhorse of the program is found on the first of two disks: it is called 1st Aid HFS, and is a mildly modified version of a program with the same name that has been around for several years, produced by a small company up in Massachusetts, I think, whose name I forget. This program, together with the informative manual that accompanies it, has been written to walk you through those horrible moments, usually in the middle of the night or a rush job, when your hard disk has just turned from a valued friend into a obdurate, impenetrable object that simply looks in the other direction when

you ask it a simple question. Like, for example, "Is anybody there?"

With manual in hand, you turn to the pages that seem most appropriate to your hideous situation and you begin the process of diagnosis and, one devoutly hopes, cure. You have a range of options for recovering files, and if all goes well, you will find yourself back in the land of the living hard drives within a fairly short and, we would all like to think, stress-free interval. The program has a lot on online help, and it is written in a way to be actually helpful.

Disk Doctor, if you *must* know), but if we had had True Grit, we probably would have worked harder with 911 than we did. The Moral of this story: Panic overrides intellectual curiosity.

Another utility in the package is a cDEV called Complete Undelete. If you install it in your System Folder, and we recommend that you do, it will allow you to recover a file that you put into the trash in all its pristine glory—or at least condition. If, that is, you have done nothing in the interim like writing over that file. Even then, if you have written over only part of the file, it will allow you to recover whatever is left. Good value for this little fellow.

Also included in the package is Virex—a virus detection and preventative utility. It is not, in our view, quite as powerful and flexible as SAM (Symantec Antivirus for the Mac) but it is certainly a professional-quality tool and nothing to be sneezed at.

## If you have a problem, and you are not a Mac expert, 911 Utilities may be all that you will ever need.

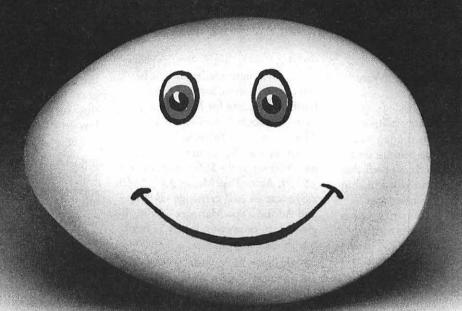
If you have a problem, and you are not a Mac expert, 911 Utilities may be all that you will ever need.

We are forced by candor to admit that we did not have the fortitude to do something stupid with our own hard disk drive to see if we could recover from the brink of disaster. That, it seems to us, would be to tempt Fate, and tempting Fate has never appealed to us as an occupation with a high life expectancy. Driving on the highways in the area is bad enough.

Speaking of Fate, in the last few minutes we had the unsettling experience of having a Syquest cartridge suddenly declare itself unreadable. Did 911 Utilities manage to read it? No. We did get it back, using another utility (Norton

Still another utility, and one that we have seen no place else, is Sector Collector—a utility that will identify and isolate defective or potentially defective sectors on your hard disk drive (we suppose floppy disks as well, although once sectors begin to go there, it seems wiser to assign new duties to the floppy-like cleaning mud from your boots). It does this by gathering them up into a specially designated category that tells your hard disk something like "Don't even think of trying to write here, now and forever." (Don't you love it when we talk techie?) So if you have been finding occasional read or write errors on your disks, this may be the answer.

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## Bits & Bytes

by Lynn R. Trusal

#### Macintosh/Technology News from Japan

1. Sony has announced a palm-size CD-ROM Reader for the Japanese market. The Japanese price is about \$386 in U.S. dollars. It is called the Data Discman EB and will will ship with five different Japanese and English language dictionaries. Other software is under development which will cost from \$19 to \$132. There are no plans to introduce it into the U.S. market as yet. I have seen this new CD-ROM drive in an Osaka store. (Source - Info World)

- 2. I thought readers might be interested in some software and hardware pricing for Macintosh items at a local Tokyo Apple Dealer. The prices are as follows: Mac-Recorder - \$220; Adobe Illustrator 88 - \$665, Excel - \$566, Super Card - \$159, Aldus PageMaker 3.0 - \$840; a Syquest 44 MB cartridge - \$167; and Adobe Type Manager - \$100. Be glad MacConnection is just a "free" telephone call away.
- 3. Japan has proven to be a very lucrative market for Apple Computer. Sales are rising fast with an increase of 150% in the last two

years. Apple estimates that the \$1 billion level will be reached in 1994. Sales for 1989 were \$125 million and \$250 million in 1990. I don't know where they are since the only place I have seen any Apple computers are in an Apple store.

- 4. John Sculley attended the first Board of Directors meeting at Apple Japan in September and promised a new low-cost Mac will be released in the Japanese market "within the year." I have seen no speculation that this will be different from the new low-cost Macs in the U.S.
- 5. Catena Corp. is now marketing "The Translator," which is an English-to-Japanese translation software package for the Macintosh. The program can translate 10,000 to 20,000 words per hour. It contains a 25,000 word dictionary to which users can add new words and costs \$1,300.
- 6. Apple is now the first NASDAQ-quoted company to have

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5301 Shawnee Rd. • Suite 400 • Alexandria, VA 22312 (703) 354-1600 • FAX (703) 354-1027 • BBS (703) 354-0966 its stock listed on the Tokyo Stock Exchange. Such a move will help legitimize Apple in the Pacific where "form" can often be more important than "substance."

7. Sony has released "DAT Walkman" or the world's first portable Digital Audio Tape (DAT) machine. It is about the same overall size as the current Sony Walkmans but may be thicker. It will sell for about \$700-\$800 so it will be a while before prices drop enough to make it affordable for the mass market.

#### Hard Drive Companies

I previously (April 90) discussed the importance of assessing hard disk drive vendors before purchasing a hard disk. I stated that "bottom line" price was not always the "bottom line." With Jasmine in Chapter 11 (now emerging) and with Crate Technology joining it, caution is more important than ever.

An article in *MacWorld* predicted that fully one-half of all hard

disk drive re-packagers will go out of business in the next three years. Of course if you buy a cheap hard disk and it never fails you have no complaints. Don't forget to differentiate the original manufacturer of the hard disk itself from the repackager of the final product.

My 2-year-old CMS external 80MB hard disk failed shortly after I arrived in Japan. The drive itself was a Quantum and you know my feelings about Quantum, including their never having replied to two letters I sent them.

I returned the drive to CMS and received a fax telling me the drive needed to be replaced; they offered me a refurbished 80MB model for \$450. I sent a second letter asking them to be more specific about the cause of the drive's problem and received a second fax telling me that a second technician found out it was only a \$150 power supply problem, much to my relief.

If you get limited information

from the manufacturer, don't be afraid to ask for specific information on what tests they ran and what is exactly the problem with your drive. My second letter saved me \$300 and it only cost me \$0.25 to find out.

CMS has been around awhile and will probably continue to do so. Ehman may also survive but others may not, given the predatory pricing policies of Ehman and others. Think twice before going with the "newest and cheapest" drive around.

#### Carpal Tunnel Syndrome

In an earlier column, I discussed Carpal Tunnel Syndrome (CTS), which is one type of "repetitive motion injury." Prior to leaving for Japan, I was diagnosed as suffering from a mild case of this syndrome.

Basically, the syndrome is caused by compression of the median nerve which runs through a tunnel formed by the carpal bones in the hand and tendons in the wrist. Inflammation of the tendons (connect muscles to



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muscles) compress the nerve and can cause numbness, pain and eventual loss of function.

Since I was in Japan for 3 months without my computer, I noticed a lessening of my symptoms, which began to return after delivery of my Macintosh and its more regular use.

One intermediate stopgap measure is to wear wrist braces. See *MacWorld*, October 1990, page 87 for a photograph of a person using wrist braces while using a computer keyboard. Another article on CTS is in the September 25th issue of *MacWeek*.

In worse cases, surgery may be necessary, which consists of making an incision in the palm of the wrist and cutting the tendons to relieve pressure on the nerve. Recovery takes a minimum of 6-12 weeks and total sensation may never return if nerve damage is severe.

This potential problem has

recently gotten more play in computer magazines as a problem whose signs need to be recognized early and corrective measures taken. The ergonomic layout of the chair height, keyboard and wrist position are important to prevent occurrence and lessen symptoms.

If you have tingling, numbness, or pain in the wrist, hand or arm from prolonged and repeated computer use, I would strongly urge you visit an appropriate medical specialist and get your condition diagnosed. The exam may consist of electromyographic or strength test procedures. The sooner you address the pain the less chance of permanent damage.

#### The Macintosh in the International Scientific Community

Having recently returned from international scientific meetings in Osaka, Japan and Bangkok, Thailand, I thought readers would be interested in how the Macintosh was put to use at these two meetings.

I can spot Mac output a mile away and I was therefore surprised to see scientists from 9 countries, at the Osaka bacteriology meeting, using the Macintosh to prepare their scientific posters. The countries included the U.S., Japan, India, Czechoslovakia, Netherlands, Thailand, South Korea, Canada, Australia, France and the United Kingdom. Japan made more use of the Mac than any other country and acceptance of the Mac in scientific and university environments in this country appear to mirror the U.S.

One scientist from Czechoslovakia told me that he had the first Mac at his university but there were now five. He appealed to me for any information he could use to gain larger acceptance of the Mac in his university. He also had an Apple scanner and LaserWriter which cost



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Located in the Camalier Building, 10215 Fernwood Road, Bethesda, Maryland 20817 considerably more to purchase in Eastern Europe than in the U.S.

I will do my best to send him some information including the WAP Journal, a copy of *MacWeek* and how to order the *Macintosh Digest*, which lists all hardware and software products.

I was equally surprised to see that the organizers of the virology meeting in Bangkok, Thailand had used the Macintosh to publish the meeting proceedings and even to make the name badges used by participants from 20 countries.

The message should not be lost on Apple that such uses exposes the Mac and its technology to a rather large international community. The Osaka, Japan meeting was attended by scientists from 56 countries and the Bangkok meeting had representatives from 20 countries, mostly in Asia.

#### Tips

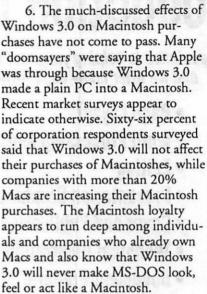
1. If you use an OCR program with dot matrix output and find it less than satisfactory, try the following: use "letter quality" dot matrix output when available. Next try to use the "darken" option prior to scanning found in programs like OmniPage. I found this alone significantly increased the accuracy of the translation process. Second, xerox the original dot matrix output, which results in a darker image and even permits use of various shades of darkness. Even a combination of these may work wonders. Third, a separate software program such as OmniDraft, by Caere, electronically connects the individual dots before beginning the translation process. This may be the least desirable method since OmniDraft costs another \$100.

#### Real Bits

1. Motorola has just released the world's smallest watch and pager combination. It can receive, display and store up to 6 caller telephone numbers and will have a suggested retail of under \$300.

- 2. The Boston Computer
  Museum has opened a large "WalkThru Computer" built to scale
  including a 25 ft keyboard, and a 9
  ft. trackball. In all, the computer is
  two stories high and permits visitors
  to walk through the motherboard
  and follow the flow of simulated
  electrons through the computer. If
  you are in Boston, check out the
  Boston Computer Museum. (Source
   MacWeek)
- 3. Doubling the printer resolution from 300 dpi to 600 dpi quadruples the number of dots from 90,000 (300 dpi) to 360,000 (600 dpi), but don't be confused by stated resolutions. A printer listed as being 1,000 dpi does not necessarily mean 1,000 dpi x 1,000 dpi. The Laser-MAX printer states it provided 1,000 dpi output which in reality is 1,000 dpi by 400 dpi. This particular printer is based on a 400 dpi Canon printer that uses a proprietary controller to print 1,000 dpi in the horizontal direction.
- 4. Mitch Kapor and Steve Wozniak have joined together to found an organization called, "Electronic Frontier Foundation." Both believe that the government has become overzealous in its search and prosecution of computer hackers. Although both feel that hackers who are criminals should be prosecuted, they also believe the government has walked over too many innocent persons in their search. The foundation will provide legal assistance to those whose constitutional rights have been abridged in the search for real criminals. (Source - Business Week).
- 5. I have seen products from the Canon color copier and they are excellent. Such faithful reproduction has raised counterfeiting concerns but Minolta Corp. is about to release a new color copier which addresses the problem. The Minolta copier marks a barely visible code onto copies which can be traced back to the specific copier they were made on. In addition, to purchase the copier the user will have to show why they need a color copier and furnish

their social security and corporate tax identification numbers when the copier is purchased. I find that hard to believe!?! (Source - Business Week).



7. Certain government offices, including the military, have shown great interest in the ability to have a TV image on the Macintosh screen simultaneously with other computer applications. It was not to watch 'soaps" but instead to keep an eagle eye on "CNN" and its 24-hr news. I previously mentioned that the National Military Intelligence Center (NMIC) in the Pentagon has separate TV monitors for each analyst which stay tuned to CNN News. They have developed a healthy respect for CNN's ability to stay on top of things. (Keep on top of it, Ralph!) Having CNN on the Macintosh screen would eliminate the need for separate TV monitors in addition to the computer screen. Although this would be one application, I have no knowledge that the NMIC specifically is planning such a

Lynn R. Trusal, Ph.D. is a Lieutenant Colonel in the U.S. Army stationed in Tokyo, Japan and may be reached at the PSC Box 1892, APO San Francisco 96293. The opinions expressed in this column are his very own.



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Michael Hartman C and TML Pascal	(301)	445-15	03
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OPERATING SYSTEMS	` '		
Apple DOS			
John Wiegley after 2:15	(703)	437-18	808
CP/M Art Wilson	(301)	774-80	43
ProDOS	(001)	774 00	,40
John Love	,	569-22	
John Wiegley after 2:15	(703)	437-18	801
ProDOS 8 and 16	/747\	ECC C7	, OO
Barry Fox RWTS, Disk structure	(/1/)	566-67	09
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Thomas O'Hagan	(301)	593-96	83
SPREADSHEETS			
General Walt Francis	(202)	966-57	42
MagicCalc/SuperCalc2.0	(202)	300 01	72
Leon Raesly	(301)	220-07	17
Terry Prudden	(301)	933-30	65
Telecommunications	(201)	240.70	990
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Morgan Jopling	(301)	721-78	374
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Barry Fox	(717)	566-67	09
WORD PROCESSORS			
General Walt Francis	(202)	966-57	749
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Dianne Lorenz	(301)	530-78	81
Leon Raesly	(301)	220-07	117
AppleWorks GS	(700)	007.00	
A.D. (Bill) Geiger Letter & Simply Perf	(703)	237-36	14
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Gene Carter		363-23	
Word Handler			
Jon Vaupel Word Perfect	(301)	593-33	116
James Edwards	/301\	585-30	າດວ
Henry Donahoe		298-91	
Word Star	` ,		
Art Wilson	(301)	774-80	43
Apple IIGS Paul Tarantino (hefore 10pm)	/7021	A51.50	:00
Paul Tarantino (before 10pm) Neil Laubenthal		451-56 691-13	
FA.D. (Bill) Geiger		237-36	
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Barry Fox	(717)	566-67	'09
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Charlene Ryan	(703) 822-5137
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## **DECEMBER**

3 Monday 7:00 PM	PI-SIGcall Editorial Deadline—January Issue
5 Wednesday 7:30 PM 7:30 PM	dPub SIG
6 Thursday 7:00 PM 7:30 PM	Columbia Slice
8 Saturday 9:30 AM 10:00 AM	Frederick SliceFrederick Annapolis SliceSeverna Park
7:00 PM 7:30 PM	
13 Thursday 7:30 PM 8:00 PM	Board of Dir.'s Mtngcall office StockSIGoffice
8:00 AM 9:00 AM noon	AppleWorks SIGbefore WAP sale WAP Garage Salecall office HyperCard SIGafter WAP sale New SIGafter WAP sale
19 Wednesday 7:00 PM 7:30 PM 7:30 PM 7:30 PM	WorksSIG
20 Thursday 7:30 PM	AV SIGoffice
21 Friday	Ad Space Deadline—February Issue
24 Monday 7:00 PM	Apple IIGS SIGMcLean (call) Writers' Deadline—February Issue
26 Wednesday 7:30 PM	
27 Thursday 7:30 PM	Ed SIGcall office Ad Copy Deadline—February Issue
N.B. There	will be no WAP tutorials in December. Santa

N.B. There will be no WAP tutorials in December. Santa Claus is coming to town.

December being December, there will be no General Meeting; it is supplanted by the Garage Sale (which has never, in our recollection, *ever* been held in a garage. Still...)

Nor, and for similar reasons, will there be any tutorials this month, tutors and students being in short supply. So—save up your questions (and pennies) and wait for 1991.

#### **WAP General Meetings**

Monthly General Meetings are generally held on the 4th Saturday of the month at various places in the DC area. A recording on the main office number (301/654-8060) will provide information on the next meeting and topics for discussion.

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.

We also have a special session to welcome new computer users and get them started. Group purchase items can be bought at the office at 1pm.

#### **Meeting Notices**

Annapolis Slice —2nd Saturday; Severna Park Library on McKinsey Rd(off Rt. 2)., 10:00am.

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 345-3230 for information.

Apple III SIG —4th Wednesday; WAP office, 7:30 PM.

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 the Howard County Board of Education Bldg., Route 108, Columbia, MD, 7:00 PM.

Database SIG/4D—Second Wednesday, 7:15 pm start (until about 9:30 or 10:15 pm); Mac-In-Office Training Room, 4th Floor, Brick Triad; 101 West Broad Street, Falls Church, Virginia; (Along Route 7 at the intersection with US 29/211—Free office parking lot abundantly behind the office buildings) (Via Metrorail, use \*East\* East Falls Church Metrostation. Call Eric Gutsche to confirm, (703) 379–1265.

#### December

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

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, 7:30 PM. Call Jim Manley (703) 490-1034 to confirm location.

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

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

HyperCard SIG—after the WAP general meeting, 12:00 noon.

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

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

NeXT SIG —meets 2nd Wed. of each month, NIH Bldg 12A, Rm B51, 7pm. Call Hugh O'Neill, (202) 328–9510.

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—currently unscheduled.

Notice: Anyone having information on changes to the calendar is encouraged to call the Calendar Editor and leave a message on his home answering machine, tel.: (301) 595-2539 in Beltsville, Maryland. E-mail can be left at: Andy Shaw, Twilight Clone BBS; SHAW@UMUC.BITNET.

### **JANUARY**

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2 Wednesday 7:30 PM 7:30 PM	dPub SIGPEPCO Mac Programmersoffice
3 Thursday 7:00 PM 7:30 PM	Columbia Slice
4 Friday	Editorial Deadline—February Issue
<b>7 Monday</b> 7:00 PM	PI-SIGcall
9 Wednesday 7:00 PM 7:30 PM	NeXT SIGNIH Database SIG/4DComputer Factory
10 Thursday 7:30 PM 8:00 PM	Board of Dir.'s Mtngcall office StockSIGoffice
12 Saturday 9:30 AM 10:00 AM	Frederick SliceFrederick Annapolis SliceSeverna Park
16 Wednesday	ÿ.
7:00 PM 7:30 PM 7:30 PM 7:30 PM	WorksSIG office Excel SIG office Fed SIG call HyperTALK SIG call
17 Thursday 7:30 PM	AV SIGoffice
23 Wednesday 7:30 PM	y Apple III SIGoffice
24 Thursday 7:30 PM	Ed SIGcall office
25 Friday	Ad Space Deadline—March Issue
8:00 AM 9:00 AM noon noon	AppleWorks SIG before WAP Mtng. WAP General Mtngcall office HyperCard SIG after WAP Mtng. New SIG after WAP Mtng.
28 Monday 7:00 PM	Apple IIGS SIGMcLean (call)
29 Tuesday	Writers' Deadline—March Issue
30 Wednesday	Ad Copy Deadline—March Issue

The January General Meeting will feature Adobe Illustrator 3.0 and Adobe Photoshop. Information on the Apple II topic(s) should appear in the January issue.

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	Art & Video		Michael Hartman	(301) 445-1583	HyperCard	
	Nancy Seferian	(202) 333-0126	MS BASIC	(001) 443-1303	Rick Chapman	(301) 989-9708
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	Mort Greene	(703) 522-8743	David Morganstein	(301) 972-4263		(700) 256 422
	Paula Shuck bef. 10pm	(301) 621-5549	Mark Pankin	(703) 524-0937	Charles Don Hall	(703) 356-422
	Helix		Jim Graham	(703) 370-5737	John Wiegley after 2:15	(703) 437-180
	Jim Barry to midnight (703) 662	-0640	Dick & Nancy Byrd	(703) 978-3440	IBM	
	Harvey Levine	(301) 299-9380	Bob Pulgino	(301) 474-0634	Leon Raesly	(301) 220-071
	Double Helix		Tom Cavanaugh	(703) 627-8889	Math-OR Appins	
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	General		Microsoft Word		Stock Market	
8	Frank Potter bef. 9 pm	(703) 620-8886	Marty Milrod	(301) 464-5981	Robert Wood	(703) 893-959
	Jay Rohr	(301) 655-0875	Harris Silverstone	(301) 435-3582	MS/DOS	
8	Freddi Galloway (V/TTY)	(202) 234-5837			Tom Cavanaugh	(703) 627-888
	ReadySetGo	(202) 234-3037	Tom Cavanaugh	(703) 627-8889	Dvorak Keyboard	•
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	Mort Greene	(703) 522-8743	<b>Hebrew Word Processing</b>			Control of the Contro
	GRAPHICS		Tim Childers	(301) 992-0105	Call us	The state of the s
	General		WriteNow	( and the second	(so we can ca	all you)
	Bill Baldridge	(301) 779-8271	Bill Baldridge	(301) 779-8271		
	Jay Rohr	(301) 655-0875	WordPerfect—Mac	100171100211	301 654-8	000
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	SuperPaint 2.0	ONTO THE REPORT OF THE PARTY.	Doug Tallman	(Frederick)	663-3268 Mac	
	Mort Greene	(703) 522-8743	Scott Galbraith	(Monrovia)	865-3035 Apple // & G	S
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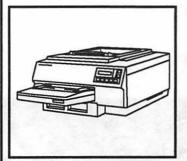
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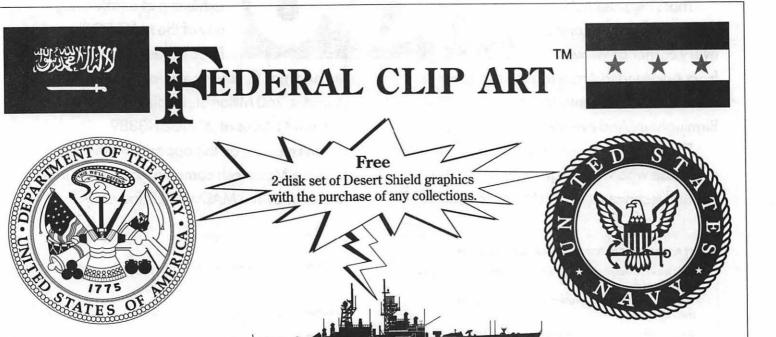
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# Norton Utilities for the Macintosh

by Brent Pye

A True Story .....

The package was at my door when I arrived home from work. "Great," I thought, "now I can have some real fun. I can see what's inside those files, get to the nitty-gritty. I do the fun stuff on my home Mac just like I do at work on the DOS machines."

That evening I installed The Norton Utilities for the Macintosh (NU) on my SE. I skimmed the manual for installation instructions and quickly had NU up and running. "Goodness," I told myself, "this is so much easier to use than the DOS version." The icons. buttons, dialogue boxes and other Mac features were impressive. Peter Norton had hit the spot with his first Mac release! I started the Norton Disk Doctor module and sat back to watch the action. Such eye-catching and clever use of graphics, good speed .....

What? I couldn't believe what NU was telling me. My SE had a virus? No way, I was telling myself; this couldn't be correct. But there it was, in big bold type:

A virus has been found on "Nolan"

Your disk may be infected with a virus

It was telling me that the System file, MacDraw and MacPaint might be infected. Hmmm, "might be," it said— not definitely. In my years of working with computers and networks I had never yet been face-to-face with a virus. Maybe PN had fumbled on this attempt. Maybe, just maybe, PN was in error.

I restarted the SE from the backup system disk, the one with Disinfectant 2.1 for just such an occasion. I started the virus scan. I didn't know whether I wanted PN to be right or wrong. Within a minute I had confirmation. Disinfectant agreed: three files were infected with the nVIR A virus. Peter Norton, you've won my respect once again!

Before I installed NU I had printed a MacDraw diagram from a diskette used earlier that day at work. A co-worker and fellow Mac owner had used the lone Macintosh at the Bureau to create diagrams of the network. The next day we confirmed that this was the source of the virus. We eradicated the virus and informed the boss. We were heroes for a day. Computers were not just a job—they were fun again. I felt like I was starring in a Miata commercial.

#### Now, The Facts

Peter Norton (PN) made his fame creating innovative DOS software. His UnErase program has saved countless files and probably a few jobs. I have used his software for

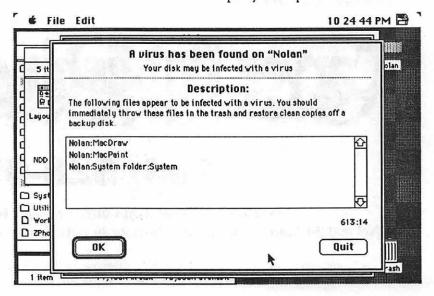
years on the job. I was not the least bit disappointed with his first Macintosh release, The Norton Utilities for the Macintosh. NU is a comprehensive set of utilities for restoring, managing and editing files, and a unique disk diagnosis tool. It incorporates three applications, three startup documents (INITs), two desk accessories and a Help file. The overall effect of NU is a warm, fuzzy feeling of security.

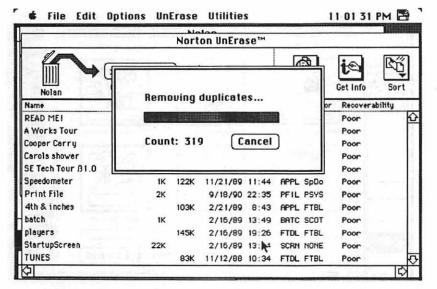
## System requirements and documentation

NU is compatible with System 4.2 or higher on a Plus on up to the IIfx and the Portable. A call to Tech Support confirmed NU's compatibility with the new Macs running System 6.0.7. (Forget about 6.0.6; it is not supported by Norton due to it's well-known bugs.) One megabyte of RAM is required. A hard disk is recommended but not required. It has been well-behaved under MultiFinder 6.0.5.

The manual is well-written and organized, a trademark of all PN products. It offers a glossary of Mac and/or computer terms, a Tips and Techniques section, a Troubleshooting section, a listing of NU error messages and information on receiving free technical support (you pay for the call).

Hard disk installation is a snap. You insert the Installation disk and follow the prompts. You may install all or just your chosen components, plus you are presented with the





option to customize the installation parameters. NU is distributed on three 800K disks.

#### Features

NU for the Mac consists of eleven components: UnErase, the Norton Disk Doctor, FileSaver, Format Recover, Speed Disk, Fast Find, Directory Assistance, Layout Plus, KeyFinder, DiskLight and the Norton Disk Editor.

#### UnErase

The Peter Norton name is most often associated with file recovery. The UnErase feature is one of four options available in the main Norton Utilities application. It features three levels of file recovery: Quick UnErase, UnErase by file type and text-search UnErase. Use UnErase if you have dragged a file into the Trash and emptied it. No matter which method you choose, NU will report the probability of successful recovery.

The Quick UnErase will search for all erased files. It works best if you have previously activated the File saver INIT (to be covered later). If Quick UnErase can't find the file, you can use the File Types option to narrow the search criteria. A dialogue box listing fifty-plus file types is provided. Text Search will look for text strings within a file. The displayed string is entered from the keyboard and translated into hexadecimal in the dialogue box.

With these search methods, if it isn't found, it's not there.

Each of the methods incorporates a File, Edit, Options and an UnErase Menu. A Utilities Menu allows quick switching to other components of the NU for the Mac.

#### Norton Disk Doctor

Advertised as "an absolutely unbeatable disk diagnosis and recovery tool", Norton Disk Doctor (NDD) is the automated disk repair option of the NU application. As indicated in the introduction, it is also capable of diagnosing virus infections. NDD works on HFS hard disk and floppies (sorry, no go on MFS disks).

NDD is composed of six functions:

Checking Volume Info—checks to see if the disk can be mounted

Analyzing Directory—verifies that all files are listed in the directory

Checking Hierarchy— verifies the directory information

Checking Allocation—looks for cross-linked files (two or more files assigned to the same disk area)

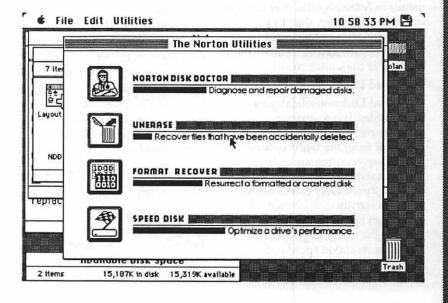
Looking for Lost Files—searches for areas that are reported as in use but have no assigned files

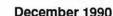
Analyzing Files—checks all files for problems such as missing Finder icons, file corruption or viruses and duplicate copies of the Finder and System file

Any problems found during execution of these functions is reported immediately. A brief description and a prompt for action is displayed. You can choose to allow NDD to correct the problem or to continue. A dialogueue box is displayed when the operations are completed. You have the option to view and save a more detailed report of NDD's findings, including the current system configuration.

I have found the similar NDD feature in the DOS version to be a valuable tool. It has successfully resurrected hopelessly damaged disks; it has made me look like a genius more than once. I would buy NU just for NDD and the UnErase features alone.

FileSaver







FileSaver is a combination INIT and CDEV that works with Format Recover to protect the hard disk from accidental formatting or severe damage. It creates a file on the disk that keeps a record of files and folders by monitoring the Trash, disk eject and Shutdown commands. FileSaver is configured from the Control Panel. Options include how many files to track, and whether to save the Get Info comments and Format Recover and Un Frase info.

Format Recover is function of the NU application. It is designed to restore data to a badly corrupted or an accidentally formatted hard disk, provided FileSaver had been previously installed. It will not work on a floppy due to the low-level formatting done when a floppy is initialized (the low level format actually overwrites data on the entire disk surface, making recovery impossible).

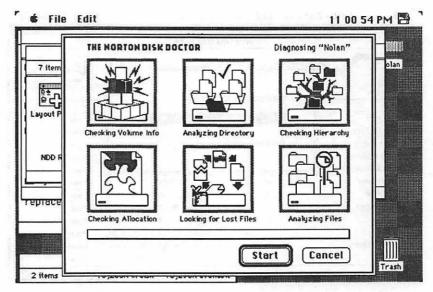
#### Norton Disk Editor

Norton Disk Editor (NDE) is the fourth function of the NU application. It requires the most knowledge of the user for successful usage. The manual gives a stern warning of its inherent dangers. NDE is a powerful editor that can easily cause more damage than good. It allows editing at the byte level and is more powerful than ResEdit in this respect.

(I use the DOS version of NDE to edit the text characters in compiled C programs on the job. Our programmer places network commands in function calls; they are not converted to binary, thus I can change the drive linking, for example, without having to modify and re-compile the source code.)

#### Speed Disk

Speed Disk consolidates fragmented files. It is a separate application that may be launched from the Finder or from the Utilities Menu of NU, however, it cannot be launched from the startup disk. (The disk that contains Speed Disk comes configured as a startup disk.) Speed Disk can be run in either the default Easy Level or the more involved Expert Level. Its execution speed is determined by the size of the disk, the number of files on the disk, the



degree of fragmentation, and, of course, the speed of the CPU. The initial run on my moderately fragmented 30 megabyte disk with 300 plus files took over 30 minutes in Expert Mode!

Speed Disk features several safety and configurable options:

Before Optimization

Check Drive—calculates the percentage of fragmentation

Check Media—confirms the readability of the sectors

Check Files—confirms that the file allocation information actually corresponds to the files

**During Optimization** 

Verify Data—checks the accuracy of the write-to-disk process

Verify Media—confirms the readability of the disk sectors

Verify Files—ensures that the file allocation information actually corresponds to the files on the disk before optimization

Prioritize Files—which allows you to specify certain files types to be relocated in a predetermined, constant order

TurboCharge—disables the animation and provides only limited updating of the displayed disk map to increase speed

The animation is entertaining and informative. A "pencil" depicts the defragmenting process by drawing black lines representing contiguous sectors. A magnifying glass feature shows the area of the disk under the cursor, including the file name, type and number of fragments per file.

#### Fast Find

Fast Find is a DA that lives up to its name. Not only is it quick, but it is loaded with features. It displays the path with icons and file/folder names. You can open the file by double-clicking the file name. Text files can be viewed without opening the application that created them. Perhaps its best feature is the pleasant, electronic chord signaling success!

#### Directory Assistance

Directory Assistance is an INIT that modifies the Save, Save As and Open dialogue boxes in applications. It allows you to create folders, delete files, search the disk and change the file viewing preference from the dialogue box.

#### Layout Plus

This is PN's adaption of the shareware application Layout, used to make adjustments to the presentation of the desktop. The font and size of the text on the desktop can be changed, as well as the icon spacing.

#### KeyFinder

Another DA, KeyFinder is a quicker and more sophisticated Key Caps. Its main claim to fame is its Show ASCII and Programmer Mode options. Show ASCII allows you to view ASCII values and their keystroke equivalents when one doesn't exist in the selected font.

Programmer Mode adds hexadecimal guides at the top and at the left of the character table. This allows you to locate an ASCII value and its hexidecimal equivalent.

#### DiskLight

The final function, DiskLight is a combination INIT/CDEV that flashes a disk icon in the menu bar to indicate disk activity. It is configurable from the Control Panel.

#### Observations and impressions

NU would be worth the money for UnErase and the Norton Disk Doctor alone. I would also throw in Speed Disk. These utilities are essentials for everyone: novices to professionals. Peter Norton's products have value that may be unmatched by other competing utility packages. The applications work as intended, the manuals are easy to follow and contain valuable

educational material as well, and the Tech Support may be as good as WordPerfect's. To paraphrase a tired cliché, no one ever got fired for buying Peter Norton.

I hope never to need to test the Format Recover option. I've been running the FileSaver and Directory Assistance INIT's for over a month with no problems. I find the enhanced dialogueue boxes a very real improvement and a great convenience.

DiskLight is a cute but not essential option. It crowds an already crowded menu bar. Fast Find is a joy; I haven't used File Find since I installed NU. Layout Plus appears to be a good tool for the fastidious user who tires of the same old look.

Three words sum up the Norton Utilities for the Macintosh: value, security and entertainment. I paid \$84 for NU from a mail order vendor, an outstanding price for such excellent software. Now, if I could only replace those DOS clones at work with Macs....

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## On the Trail of the Apple III

#### by David Ottalini Apple III SIG Co-Chairman

#### The end of another year

Hard to believe that 1990 is nearly over. I hope you feel you've gotten your money's worth from WAP and your III SIG this year. Your kind words in those recent surveys indicate that, for the most part, you are pretty happy with what we're trying to do.

Our primary goal for the new year remains to help you make your SARA as productive as it can be. Your Apple III doesn't multitask, it doesn't RISC, it doesn't even have icons or a graphical interface. It does work very hard to get the most out of the software available to it. It can do word processing, databases and spreadsheets. It can play games and even do some graphics on occasion.

At that basic level, what other machine can do better with 128 to 256K of memory? No Apple machine except the Apple II, which is also a 6502-based computer.

#### III SIG brochure

Thanks to Lee Raesly, we've gotten a laser-quality printout of our new III SIG Brochure. It looks great. A copy will be included in with other WAP materials when someone with a III expresses an interest in joining the club.

#### Holiday disks

If it's December, we must have some new PD disks for your consideration. How about a complete accounting program called "EASy Accounting?" Originally a commercial program from a long-dead company called Denver Software, we're placing it into the PD for all to

enjoy. We're also created a new category, Accounting, for it. You'll need all four disks to use this system, 3ACCT-01 through 04. On disk 3ACCT-01, you'll also find some information about the program and what it can do for you. The manual was too long to place on disk. But it has been placed into the WAP library if you are interested.

Also going into the PD this month is Three Cheers, the only known magazine on disk for the Apple III. The boot and program disk is 3MSC-13 and the two issues are on 3MSC-14. Three Cheers is Pascal based and the graphics are excellent. You'll also enjoy the articles and other information.

Looking into the new year, I can promise you a new contributions disk, a disk full of Basic programs from On Three, a ton of Pascal disks and even the fourth "Best of Ottalini" disk with all my columns from 1990 (buy that one early ... there's always a rush...)

By the way, I've also updated our 3WDP-01, Word Processing disk. When the disk first came out about two years ago, we included some information from Al Bloom about placing Super Apple Writer onto a hard disk under Catalyst. Well turns out there were some problems with those instructions and Dr. Bloom has graciously gone back over the material to bring it up to date. Any member who has been having trouble with this can get a free replacement disk by bringing in their old one in trade.

Finally, in order to make joining the WAP TCS a little more valuable to III SIG members, we will now include a copy of the TCS disk, 3TEL-08 when you sign on. The TCS really is a great value for WAP members and we'd love to have more IIIers on board. All you need is a modem (2400 Baud now goes for less than \$100.00) and telecommunications software (try XMODEM III, 3TEL-05 for \$2.00).

#### Disk drive maintenance

With the holidays upon us, it's a good idea to consider doing a little maintenance work on your disk drives to keep them up to speed for the next year. Sun Remarketing offered some tips a while back about how to do this and they bear repeating here:

Disk drive problems can sometimes be media (disk) problems. Make sure you keep your disks away from heat, dust, magnets or other electromagnetic devices.

To clean the head on your disk drive you'll need a cotton swab and a mixture of 80% denatured alcolol and 20% dejonized or distilled water.

- 1) Remove the cover of your drive and clan the guide rails (the metal shafts that the head slides on) with the alcohol/water solution. Do not use grease.
- 2) Inspect the head for worn or dull spots in the ceramic. If you find any, you'll need to consider replacing the head. Call your III SIG for help on this one.
- 3) Clean the head with the alcohol/water solution.
- 4) Move the head assembly back and forth along its full length of travel. Check for blockage and smooth easy movement.
  - 5) You're done.

#### It's official...

"ACE" or Active Computer Enthusiasts has officially become the newest Apple III users group in the U.S. Based in Columbus, Ohio, their first meeting was held this past September. I've had a chance to talk with President Richard Gast a number of times and it looks like he's determined to make the club a viable enterprise. If you're interested

## **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 may, 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.

#### Profile controller

Seth Mize reports that InCider/
A+ Magazine for November 1990
has a note in the Apple Clinic section
on page 22, by Cecil Fretwell and
Paul Statt that says the old ProFile is
old technology and best replaced;
however, you can upgrade your
controller card ROM chip for FREE
(Apple Part number is 341-0299,
Revision B) at your local Authorized
Apple Dealer. He was wondering if
anyone has done this yet?

#### Cheap modem

Dave Harvey shares with us the information that an \$89.00, 2400 Baud modem is being offered by Micro Center Perscom, 1555 West Lane Ave., Columbus, OH 43221, Phone: (614) 481-4409. The company says that their modem is Hayes command compatible, has advanced digital signal processing and adaptive equalization to provide great performance and reliability. Dave has no further information regarding this modem, but if you are

in the market it may be to your advantage to gather some more facts. The price is very attractive. I remember, and it wasn't too long ago, when I purchased my new 300 Baud Hayes MicroModem. It cost me \$330.00. Times have changed.

#### GEnie Star\*Service

In a previous column, I mentioned the new GEnie Star\*Service that has a monthly fee and no additional charges. A little warning and piece of advice might be appropriate to the subscribers. If you capture the Index of Keywords and Page Numbers, you will notice that all the Star\*Services are in the Page 8XXX area. You will also notice that some of the same topics (keywords) are also outside the Page 8XXX area. Examples: \*MAIL - 8004, MAIL -200; \*LOAN - 8790, LOAN - 790; \*CINEMAN - 8330, CINEMAN -330. Please notice the asterisks (stars) in front of some of the names. If you omit the star when visiting that area, you will go to a different page -AND WHILE YOU REST THERE you will be accruing TIME CHARGES. So, if you are taking advantage of the Star\*Services "no additional cost" please Move to a 8XXX page or place a "\*" before the keyword.

#### Used computers

The Kiplinger Washington Letter states that the "used-computer business will grow and become better organized, as equipment bought in sales boom of mid-'80s comes due for replacement. Some computer stores will take trade-ins or help you sell your old stuff. A good deal for

thrifty buyers...and growth for brokers and dealers." Washington Apple Pi Hot-Line volunteers have noticed an increase in questions from newer members who have just received "Uncle Charlie's" old Apple II (family) computer and don't know how to work it. I would expect that more and more of these people exist and the need for a strong WAP support system for Apple II's is indicated. If you know of anyone who has just received an Apple computer (even a Mac), please encourage him/her to join the WAP where the support system is already in place with Hot-Lines, Special Interest Groups, Tutorials, TCS Boards, regular meetings and Q & A sessions at the meetings.

#### GS/OS System file changes

Here is a valuable list originating from Marc Rendino and offered by Rick Zeman

Files changed between System 5.0.2 and System 5.0.3: :System,Disk:

:System:

:Drivers:

Console.Driver

**ImageWriter** 

Printer

Modem

Error.Msg

ExpressLoad

:FSTs:

Char.FST

Pro.FST GS.OS

GS.OS.Dev

P8 (V1.9)

Start.GS.OS

:System.Setup:

Resource.Manager

TS2

TS3

:Tools:

Tool014 (Window Mgr V3.2)

Tool015 (Menu Mgr V3.2)

Tool016 (Ctl Mgr V3.2)

Tool018 (QD Aux V3.2)

Tool020 (LineEdit V3.2)

Tool021 (Dialog Mgr V3.3)

Tool023 (Std File V3.2)

Tool027 (Font Mgr V3.2)

Tool028 (List Mgr V3.2)

Tool034 (TextEdit V1.2)

:Icons:

FType.Main





APPLE

FType.Aux BASIC.System (V1.4.1) :System.Tools,Disk: :CDevs: **ATIWriter ATLQIWriter ATLW**riter :Desk.Accs: VideoMix.NDA :Drivers: **ATalk** ATP2.ATRAM DeskJet.Plus **ImageWriter** ImageWriter.LQ (completely new, uses all capabilities of LQ) Modem Printer SCSI.Manager SCSICD.Driver SCSIHD.Driver UniDisk3.5 :FSTs: AppleShare.FST :Tools: Tool029 (ACE V1.2) :Fonts: Shaston.16 Times.12 Installer

## Using ProTerm with America Online

ProTerm in conjunction with AOL saved text files can make your life a little less complicated—so read on.

As you may know, due to a technique which I never did like, AOL forces you to save each and every message, or text subject in a separate file on your hard disk or floppy. Unfortunately, it does not offer you the opportunity to append one file to another, so you have to give each a distinctive filename. Thus, if you are like me and find that it is easier to study text from the printed page, rather than the computer screen AND are concerned about online charges while you are reading the screen, you probably dump ({OPEN-APPLE OA-2 SAVE) each piece of a subtopic to disk with the intentions of forming one file and printing it to paper for inspection.

A technique that I find useful and rapid is to prepare a 3.5" disk named AOL and create a directory such as AOL.1215 (the 1215 represents the current date, and will change if it is not December 15th). The reason that the directory is needed is that you may have more than 51 files to place on the disk. (Hard drive users - just make a directory at the appropriate place.) Before you go on-line to AOL, set your prefix to /AOL/AOL.1215 (or whatever is appropriate). Have a digital watch which shows seconds handy.

Sign on to AOL and start your reading session. When you get to some text that you want to save, do an OA-2, look at your watch and type an "A", the HH/MM/SS (hour, minute, seconds). Unless you are calling very close to noon or midnight the HH may be one or two digits, but please keep the MM and SS at two digits. Example: The first saved text might be marked -A32432 - meaning 3:24 and 32 seconds. If you keep up this procedure, all file names will be unique. Don't worry about other identification - unless absolutely necessary.

When you finish your session you will have a list of files arranged in numerical order on your disk. It would be nice if I could process these file right away via AppleWorks, but AppleWorks only allows 12 files on the desktop at one time and appending, via the clipboard, is not as fast as the ProTerm technique.

The ProTerm editor allows you to append file after file at the cursor. Just what is needed. Boot up ProTerm, I am using v2.2, but an earlier version will work too. Go into the editor with an "E" at the main menu. Do an OA-L (Load) and adjust the prefix to where your captured text files from AOL are housed. A listing of the files IN NUMERICAL ORDER, will appear. Highlight the first file, REMEMBERING THE NUMBER and press Return. The file will be loaded in the editor and the cursor will be moved to one line past the end of the load. Immediately, do another OA-L, highlight the second file, and press Return. You can load/

append the files in a very short period of time. The only unfortunate thing is that ProTerm, when it returns to the file menu, doesn't remember the last file (like Windows does), and you will find yourself at the top of the menu each time it returns. Since you have each file in numerical order, it is really easy to quickly go down the menu with the down arrow key to find the next file, recall that you have remembered the number of the previous file.

Now with your file collection in the ProTerm editor, you can edit to your hearts content, cutting out information that is of no further interest, pasting pieces together, printing out marked sections to the printer, saving pieces - even the entire contents of the editor to disk. You can, with ProTerm save it in either line or paragraph format (good way to get rid of those carriage returns). You can even convert it to an AppleWorks file for further processing.

#### Easter egg

Dave Rancall tells us about and interesting AppleWorks GS (AWGS) "Easter Egg" and suggests that we look for it by putting the mouse cursor in the "About Appleworks GS" window and typing "moof" <CR>. Dave wonders what "moof" means? JON THOMASON is quick to inform us that "moof" is a big inside joke around Apple, stemming from a character in the old Cairo font. One of the Mac technotes explains the whole thing or it did... he thinks it may have been officially removed.

## More cut sheet feeder information

In my article about the ImageWriter II cut sheet feeder last month, I left out one important additional use that can save you a lot of money. After printing out reams of information (as I am doing now since I am using GEnie Star\*Service), I take all the paper that I don't need and mark it with a yellow higlighter (Please turn to next page)

## Header Tabs and Spreadsheet Statistics

by Gary Hayman

Here are a couple of special AppleWorks hints that might prove valuable to you.

One of our members, Daniel Hanlon, was asking some questions about the use of Tabs in headers and footers. He was experiencing some difficulty. I advised him that when using "virgin" AppleWorks 3.0, there is a Tab problem which was corrected by wizards Alan Bird and Mark Munz in Patcher 1.3, I believe. Formerly, in the word processor, placing a Tab ruler in the header or footer would cause AppleWorks to continue using that ruler outside of the header/footer. Further, if no tab ruler was used in the header/footer, the ruler in existence at the time a

#### (Continued from previous page)

slash, and use the back side for some more drafts. It is easy to place the used paper back into the cut sheet feeder. Try that with used pin feed paper that has been laying around a few days. You can easily see how this can stretch your computer paper budget.

#### IIGS Memory

Mr. Helpful, Kim Brennan, was assisting an individual who found that he was having trouble with AWGS. Kim's comments, which are valuable for all to remember, in part stated that, "It is definitely time for you to consider adding memory to your GS. ANY TIME YOU START ADDING NDAS, CDEVS, or new FONTS you are going to start eating up more memory. AWGS requires a MINIMUM of 1.25 meg. Once you have added Cdevs and NDAs you are eating into that 1.25 reducing the available memory for AWGS."

header/footer was encountered in the normal course of typing would be the one used. The patch turns off the header/footer ruler when the header/footer is finished printing, restoring the last used Tab ruler. Again, as I mentioned in my Byts and Pyces columns - if you are using AppleWorks 3.0, it \*should\* be patched. The latest FREE patch is PATCHER 1.5 available from any Beagle Buddy, the TCS, "up to date" AppleWorks users, or me.

#### Tab-tastrophe

Dan's questions prompted me to do some experimentation and I discovered another "apparent" bug with regards to Tabs. If your AppleWorks is appropriately patched and you insert a header and CRE-ATE A NEW Tab ruler inside the header delimiters as advertised, that ruler will only affect that header/footer, and when PRINTED TO PAPER, all will be as it should be.

HOWEVER, your screen might be a mess. When I experimented, I found that at least as far as the screen is concerned, the Tab ruler set in the header/footer ( when it is different from the Tab ruler prior to the document seeing this ruler) will cause the document screen to follow it, rather than return to what it is supposed to be— even though the printing is fine.

Did you get lost? Then try this little experiment. After booting up AppleWorks and starting a new WP document, type your name and a Return; a Tab, your name and a Return; two Tabs, your name and a Return. What you will see is your name staggered on the screen on

three lines. Now go to the top of the document with an OA-1 and select your Printer options with an OA-O. Select a Page Header with a "HE" and a Return and then ESC out. Place your cursor between the Header and the Header End and do an OA-T and select Create New (Tab). First, eliminate all the Tab markings with a "N," move the cursor to about column 45 and type an "R" to select Right. ESC out. Don't look at the screen yet. Type a Tab and one or two words. Now look at your screen. Notice what happened to your three names. For more of a surprise, print what you have to your printer and compare the printed page to the screen representation. They do not match. The printed page is correct, but the screen is not. A Tab bug, of sorts, still exists in even the patched versions of AppleWorks. BOO!

YEA! You just knew that I would have a work-around for you didn't you. Try this. Make sure that you can see the printer commands (use OA-Z if you can't) and then place your cursor on the "-Page Header" line. Now let's trick AppleWorks a little. Do an OA-T and select "Create new" as if we were going to create a new Tab ruler. But, immediately press ESC. What you have done is captured the default ruler and printed it - you always wondered how to do that didn't you? Now read carefully. The Tab ruler will appear one line above the Page Header line. Move your cursor to that line and select OA-M as you are going to move the line. Select "Within document" and press Return so only that line is selected. Now move the cursor to where Page Header End is located and press Return again. The Tab ruler will be inserted just above the Page Header End line. Look at that, your document is now normal. Will wonders never cease? Now your screen WILL match your print out.

I don't know if anyone will correct the "bug," but at least until they do, you have a work-around that is easy to use.

#### Shades of the previous

You will find a similar problem occurring if you use, for example, Right Justification in the Header/ Footer for a special effect. The print out will be correct, but the screen will be MESSED UP. My suggestion here is that if you turn on "RJ", "CJ" or similar print commands in the header/footer, turn it (them) off with "UJ" or whatever is appropriate before you leave the header/footer. Then your screen will come to an agreement with your printed page.

## Updating statistics in spreadsheets

I have had a couple of similar calls recently concerning updating statistical information on a period basis in the AppleWorks spreadsheet. One fellow called about baseball statistics and one woman called about bowling statistics. What they wanted to do was to apply weekly information to a spreadsheet that will automatically update the season's statistics. They were attempting to do most of the mathematics by hand, thus defeating the real purpose of the spreadsheet. All they had on their spreadsheets was the individual's name, input information, and some formulae that would produce the required statistics. A better approach would be to produce a series of columnar groups which would represent each week's input and have the required statistics being generated by formula at the far right edge of the spreadsheet. If they wanted, they could move the necessary right columns to the left just after the individual's names-as long as they remembered to do an OA-K (recalculation) several times to ensure proper processing. Now this technique might be limited by the desktop space available to you, and, in case of entire leagues (baseball or bowling), recalculation times might be quite long due to the many columns and rows.

Imagine spreadsheet that consists of three sections. The first, "CURRENT" contains the current

(or last week's) statistical information. The second, "INPUT" will contain all the necessary information to update the statistics. The third "RESULTS" will be a complete formula section that will process information from the first and second sections to arrive at the updated statistics. Please note that the arrangement and layout of section three must precisely match that of section one. Section one will be containing information (no formulas) only, while section three will contain formulas.

After you design the spreadsheet you save it as a FORMAT for permanent safe keeping. Bring the format to the desktop and rename it "WEEK.1", or whatever. Fill out the necessary information in sections one and two and do your first recalculation (OA-K always more than once) and save your spreadsheet to disk.

You now are collecting week two's information. When it is time to enter it into your spreadsheet, bring both FORMAT and WEEK.1 to the desktop. Rename FORMAT to WEEK.2. Select WEEK.1 and BLOCK COPY section three (RESULTS) "To the Clipboard". Now move to WEEK.2 and place the cursor at the top left of section one (CURRENT). OA-C (Copy) "From the clipboard" and select "Values only" - this is important for you do not want any formulas, only the last period's values. Now, when you enter the weekly update information into section two (INPUT) and do a recalculation, the formulas in section three are put into operation and your updated statistics are displayed. Save WEEK.2 and later use its section three when preparing WEEK.3 spreadsheet. Etc. You will find this system very easy to use once you try it. Use it if it meets your needs, if desktop space is limited or you are troubled by excessively long recalculation.

#### Copying sections

Please note the following:

1) When you OA-C (Copy)

- "Within a spreadsheet," the information will OVERWRITE starting at the location you select. However, it will not let you OVERWRITE itself.
- 2) When you OA-C (Copy) "To the clipboard" either ROWS or COLUMNS, the information will INSERT (moving everything right or down) at the location you select when you copy back "From the clipboard."
- 3) When you OA-C (Copy) "To the clipboard" a BLOCK, the information will OVERWRITE starting at the location you select when you copy back "From the clipboard." This is why you need to OA-C by block the information from one spreadsheet to another that I mentioned above so that there will only be an OVERWRITE not an INSERT. Of course, when asked, specify "Values only" to prevent formulas from making the trip.

(The author is currently Chairman of both the Apple Works 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 Seven Hills Software Partner Program Coordinator. 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.)

## View from the Cat House

by Kim Brennan

#### Us versus Them?

As I write this column, here in October, Apple Computer has just publicly announced its newest Macintosh computer models. Of course, the first thought I had was "where is the new Apple II?" And then the thought occurred to me that 'we' (the Apple II users) don't need a new Apple II computer, but 'they' (the Mac users) do.

How did I deduce this? Well it basically comes down to slots or a lack of them. The one distinguishing feature of the Apple II line of computers (excepting the Apple IIc models that were designed to be semi-portable) was those expansion slots on the main logic board. When the Mac was released it had no slots, and while some models of the Mac do now have slots there is very little consistency through the Macintosh line on which boards will work with which Mac. In the end the only thing all Macs have in common are a common user interface and a 680xx computer chip.

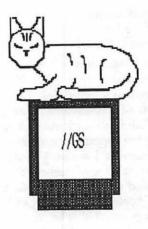
The Apple II line of computers, on the other hand, has always had an expansion bus that has been consistent through the years. A board designed for the first Apple II computers will run on the current GS models for the most part and vice versa. This is one of the strongest features the Apple II line has. A Mac with an Apple IIe emulation board won't change that. That expansion bus allows Apple II computers to be used in industrial applications, business applications or in an educational setting. Unfortunately of those three areas the educational setting is the least likely to make use

of those expansion connectors, primarily because of a lack of funds.

Don't get me wrong on this, I would love to see a new improved Apple IIgs, not to mention an upgrade of the IIc to full IIgs capability, but with expansion slots the user can do a lot of the upgrading himself. Do you need a faster hard disk? Add a DMA SCSI board or the RamFast board. Do you need a fast computer? Add an accelerator, either the Applied Engineering Transwarp GS or the Zip Chip GS from Zip Technology. Do you need to control Robots? Add a Digital to Analog controller board. Want a hand scanner? Pop in a Quickie or Lightning Scan. That's the beauty of those expansion slots. They allow the individual owner to upgrade his machine as he needs without having to buy a whole new computer. Those Mac owners can't do that. So give them a little pity.

Of course, you can also make use of all those Mac people. A lot of the peripherals for those computers will also work on the GS. The expanded keyboard is one such item. Apple Dealers don't sell it for the GS, but it works fine anyway. I've had mine for about a month now and I like it more and more. The original GS keyboard is good for traveling, but the expanded keyboard feels slightly better to me. This is one of those subjective things though, so try before you buy. I still wish the Control key was where the Caps lock key is (on the expanded keyboard these two keys are reversed from where they are on the GS keyboard). Oh, well.

In the world of Laserprinters there have been a few developments



over the last few months. I purchased the Hewlett Packard Laserjet IIp which I then equipped with a Postscript emulation cartridge. My original outlay ran around the \$1500 mark. Texas Instruments also makes a Postscript printer that is attractively priced. Since the features on the TI laserprinter vary the price ranges from \$1700 to \$1900 at the local discount stores. And Apple Computer has also announced a new lower cost Laserwriter. The Personal Laserwriter NT is priced in the \$2500 range.

The HP IIP still seems to have the edge on price plus it can be installed in modules, so to speak. The original purchase (\$950) will let you use the printer with Appleworks Classic, and now possibly with even more. Vitesse, the makers of the Ouickie hand scanner, have just announced a set of printer drivers for a wide variety of printers including the HP Laserjet series of printers [ed.note-Seven Hills Software is releasing a font package with drivers and outline fonts to give true 300 dpi]. As soon as I get my copy I'll start running the drivers through their paces and report on what I discover. If you are interested in the flexibility offered by Postscript then I can tell you that there are at least seven different Postscript cartridges for the Laserjet printers. However, it you are interested in an easy, painless hook up of the Laserjet printer, or are interested in attaching the printer to an Appletalk network then you should be warned that only one of these cartridges will work with HP's

Appletalk interface boards and that is one of the HP Postscript cartridges (HP part # 33439P).

As I began this column I had the dreaded event happen. A bad block appeared on my hard disk. One bad block is not cause for panic, on the other hand this particular bad block decided to appear at a most inopportune moment. I was busy doing some translating of Apple II files that happened to be on a Mac disk, back to the Apple II side of things when the crash occurred. The crash resulted in an 'open' file being left on my boot disk. I couldn't delete the file, the folder it was in or the disk (well, to be honest I wasn't going to delete the disk, but I did try everything.) I decided that the only way to get rid of this problem was to reformat the hard drive. Have you ever tried backing up 150meg of data to floppies? I sure wasn't going to (actually it was only around 90meg but that is bad enough.)

Instead, I made use of my new acquisition, a removable hard disk. Since each cartridge of the removable holds 44meg I calculated that I would need three cartridges. Since I have only one, a trip to the nearest computer store was in order. Fortunately, they were open on Saturdays so the fun could begin. The Finder is not the best program for copying huge amounts of files, but it was the only one that I had available at that instant. Five hours later, with all my files safely on the cartridges I could proceed with the reformatting of the hard drive.

With my old Sider I could see the software formatting and verifying the media, of course the verifying seemed to take forever, but if any bad areas were found they were spread out (removed from use by the O/S) and reserves were made available. Modern SCSI drives don't seem to do this. Or at least mine doesn't. After formatting I manually (with the Finder, ugh) verified the media on each partition. And I discovered two bad blocks (on different partitions, of course.) How was I going to deal with this?

Well, a memory surfaced and I recalled that Glen Bredon's ProSEL 16 had a utility that did just what I wanted. Vitesse has a new product called Deliverance that can do the same thing. Basically what these products do is check for bad blocks on your disk and then create a file (called badblocks—filetype BAD) and assign those bad blocks to that file. This way none of your important files will use those bad blocks. The trick is, of course, never to delete that bad blocks file. Anyway the upshot of all this is that I have my hard disk back up and running at full speed, but minus two blocks (out of 304.601 blocks total). Too bad.

New software for the GS has appeared. Two new games that I've picked up are The Immortal from Electronic Arts and Rastan from Taito. Rastan is an arcade hack and slash game, while The Immortal is a hack and slash dungeon game. Both look very good, but I haven't really explored either for more than a few minutes. I also just bought The Last Ninja from Activision because it was priced at \$12.99 and I figured that \$13 was cheap enough to try it. The Last Ninja is another hack and slash type game. All three of these games are more of an arcade type nature than I would prefer, but they all are quite nice to look at. A game of the sort that I prefer is Dark Designs I. This game is available on Softdisk GS #9 available in many bookstores for \$13.95. This is a Wizardry type game (exploring a dungeon) but is self mapping and pretty easy to play. There is one bug. When the game went to copying company one important key was lost. There is a patch available on the TCS as well as America Online if you haven't patched your game yet.

Oh, yeah. Not to leave a tale dangling, that disk I was working on when my hard disk crashed was Don Lancaster's Postscript Show and Tell disk. Basically it is a disk (designed to educate Mac owners) that demonstrates the power of straight Postscript programming (rather using a program that generates Postscript

output or that prints directly to a Postscript printer.) Since Postscript is designed in such a fashion as to be a general purpose programming language few programs or Postscript generators actually use the true power of Postscript. That's what this disk is all about. You should be seeing these examples in a future issue of the Journal if not this same one. They are quite impressive.

More next month.

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## Wings across the GS

by Dale Smith

Vitesse, Inc. has been putting together a series of utilities called Salvation which includes Wings (program launching and file/disk management utility functions), Guardian (backup and restore functions), Salvation (disk optimization functions), Deliverance (directory repair and file/directory recovery functions), and Exorcisor (viral protection functions) programs. These programs provide functions that approach the capabilities of the ProSel-16 package, but do it from a desktop environment rather than a text-based environment. Several of these programs (Salvation and Renaissance) have been recently reviewed in the Journal.

#### Overview

The package you receive includes a 100-page manual and a 3.5" disk with the programs. There are really three separate, but related, programs included in the package: Wings, MiniWings, and MicroWings.

Wings is a full featured program launcher which also has many file, folder, and volume management utility functions. Wings itself does not use what I consider the normal desktop metaphor. The desktop is always in the background behind a very much extended standard filetype window which can be moved but cannot be closed. The window acts more like a control panel with scroll lists of files in the current directory. From this, you can make selections for the various management functions, unprogrammed program launching, programmable buttons for launching selected applications, and a number of

dedicated function buttons—plus the standard file dialog buttons.

Besides Wings itself, you also get two other auxiliary programs, MiniWings and MicroWings. MiniWings is a stand-alone program launcher that will work independently of Wings itself. MiniWings is designed as a programmable desktop program launcher that can be customized to provide turnkey or predefined application launching. It is intended to limit the user to a predefined path of action-or possibly several such paths. It does not let the user roam at will in the system on which it's running. MiniWings comes with its own scripting language that gives the ability to define windows, buttons, etc. to achieve the final desktop that you want to present in your application.

MiniWings is also provided with a nonprofit distribution license for distributing disks with a run-time compiled script on them that provides launching and other available functions for the programs or files on the disk. The details of this conditional license are in one of the appendices of the manual.

MicroWings is another standalone program launcher. It is intended for high-speed and/or low-memory or low-storage applications. It is a very simple program launcher using the Standard File dialog to move through directories and disks to the application to be launched. Under System 5.0.2 this means of movement through the directories is not the most efficient; I feel much more at home being able to go directly to the disk I want to use instead of having to step around the

entire sequence of volumes online to get to the one I want. This is just one of the operating system inadequacies that show up in programs that rely on the Standard File dialog. It's been fixed for System Software version 5.0.3 according to the technotes (though we are still, as of this writing, waiting for that release.)

MicroWings is small enough that it almost always stays memory resident regardless of what program you might launch. Thus it will come back very fast when you Quit from your application program. Because of its small size it will also let you set up a GS/OS boot disk with actual room for a significant application (or even two). For this you replace the Finder (\*:System:Start on the original GS/ OS System. Disk) with MicroWings — this will free up nearly 100K of space. There may be many other files that can be deleted too to free more space.

#### In The Beginning

The system requirements for Wings are a IIGS running GS/OS System 5.0.2 or later and with at least 1 M of memory. The program is really designed to be used on a hard disk. It is possible (barely!) to put it on a 3.5 disk, provided you can give it 250K of free space.

When you start up Wings, you can install it with Apple Computer's Installer and specific scripts provided for installing Wings, MiniWings, MicroWings, or even restoring the Finder. The program comes on two distribution disks which are not copy protected. I \_LIKE\_ THAT! The best option is NOT TO BOOT THE PROGRAM IMMEDI-ATELY, but make your working copies and boot from those. When you boot for the first time, you will be asked to enter your name and this will be written to the disk - it serves as a registration of the program in your name. This is not repeated again.

Now you can use the single preprogrammed button on Wings main screen to launch Installer from the second disk. If the disk doesn't

happen to be online, you're covered—the program asks for it to be inserted. Once the Installer is up, you can select which of the scripts you want to run. In my first run I wanted to see the main program, Wings, so I did the installation of that program. This replaces the Start file in \*:System directory with the Wings program under the name "Start" after renaming the original Start file to Finder.

#### Programming launch buttons

Programming the launch buttons is really very easy since you can do it automatically, letting Wings search a specified volume for programs it recognizes and installing them as it finds them in the next available button. There is a built-in list of recognized applications. However, I did discover that, even for applications recognized by Wings, the program does not always install them; I have several applications on the volume I used that occur more than once at different depths and only one was installed; and others that were never installed though they seemed to be at a depth in the directory structure that was shallower than others that were installed. Only 40 or so buttons were installed in this automatic mode. which did not use all the launch buttons. In short it is limited, but the nature of the limitation is not clear and is not mentioned in the manual.

Besides the automatic mode, you can program your own choices. The

programming is quite simple: enter the "Program a Button" mode, select a button, enter/change the name to be displayed on the button, and then use Find to locate the application via the standard file dialogue. Doubleclick on the file, and its full pathname will be entered associated with the button you were working on and the button is ready to go when you exit the programming mode. You can also move the location of specific buttons around: swapping two buttons or copying a button to another location on the same or a different page of buttons. You can reorder the pages; rename them; etc. There is a lot of customizing and organizing your applications that you can do within the constraints of 8 pages of buttons each holding 16 buttons.

I personally prefer to use the manual mode since it lets me select where to put specific applications and it does not run blind with the programmer's choice of applications. I found that after using the automatic mode there were some application entries that I did not want and others that I did and, of those installed, most were not where I wanted them and had to be moved.

#### Wings Overview

When Wings is launched you come to the Main Menu screen. The left third of the screen holds the 16 launch buttons of the first page of buttons; the center of the Main Menu contains the Scroll List (see

Figure 1) where you can select entries for various functions including launching programs; the right third of the Main Menu holds some fixed function buttons (Finder and BASIC launch buttons and warm and cold boot buttons) and the standard file scroll list manipulation buttons.

This type of menu has been used in previous program launchers for GS/OS/ProDOS-16. Examples include HyperLaunch (commercial), UtilityWorks (shareware), and maybe some others. Wings differs in that it has many additional features that these earlier programs do not.

#### Wings Details

Let's look at some of the file/ folder utilities in Wings. These items are all under the File menu bar item. The Auto mode is the default choice on this menu and if it is selected when you double-click on a file, it will be launched if launchable, displayed as a graphic if it's a graphic file, played if it's a sound file, opened in the Text Editor if it's a text file, or file info on that file will be displayed for files other than these specific types. Other functions include Launch, File Info, Rename, Delete, Undelete, View Graphics, Play Sounds, Text Processor, File Utilities, Volume Utilities, and Print.

Most of these are self-explanatory and several are really unique to this program; the Text Processor and the Play Sound functions are quite unique. The Text Processor is a text file editor that lets you view any

TXT or SRC file and edit it from within this program (see Figure 2). I have loaded some VERY large files into it for editing-definitely larger than would fit into memory; however, just yesterday I ran into a file of 195K that would not open and it actually hung the program by trying to open it - the window opened, but the file never showed up and I had to reboot. That really is one monster file that is not typical at all of the files you might use this function to edit or view.

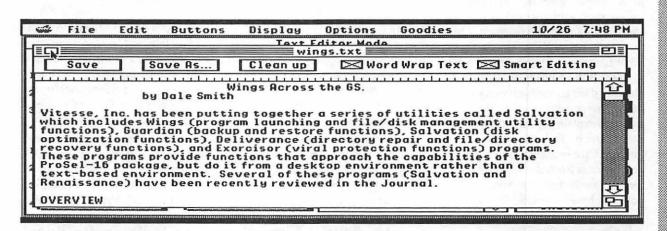
This function is very similar to the NDAs Write!It and EGOed, though they cannot deal with files as large as this function can. I have had occasion to use both EGOed and this function together cutting and copying material from one window to the other (ed.note-The editor has

\*Note of warning\*, if you've imported another filetype, strip characters important in the format of that file, and Save it back to its original filetype, it will very likely be UNUSABLE!! This is one of many warnings given in the manual they are important — in this case I would avoid using the Text Editor to work (edit) files of types other than TXT unless I planned to convert them to TXT filetype or you knew exactly what you were doing. I don't think I would know enough about such files to prevent permanent damage to it—that's why I advise against doing it.

The Play Sounds function is another of the unique functions this program has that is not present in ProSel-16. I did not use this particular function. I did, however, try the

anything. I fully agree with this warning.

The "Goodies" menu provides a number of useful functions too. One of these permits activating and deactivating System files (CDAs, NDAs, Drivers, and System.Setup files). This works just like the equivalent function in ProSel-16 with the one exception-all of the relevant directories are opened at the same time in a four-part window with four separate scroll lists of the different types of files (see Figure 3). This function is a bit more convenient in Wings than in ProSel-16, where each directory has to be opened separately. Unfortunately, Wings does not include CDevs in the Activate System Files function so these files have to be handled through the File Info window on the



used WriteIt 2.0 with files -500k). If you like desktop-style editing, this feature will please you. My preferred program launcher has been ProSel-16, but in the case of this particular feature there is nothing comparable in ProSel-16.

Text Editor does not support multiple fonts - not too much of a problem since the Editor is intended to work TXT or SRC files - well, not those only; it will load ASCII text files, source files, AppleWorks, AppleWorksGS, and WordPerfect files... but when you Save these files they will be saved as TXT filetype unless you hold down the Option Key as you Save.

View Graphics function on several graphics, a double Hi-Res picture and an SHR picture. The graphics display very nicely and a simple keypress or mouse-button click returns you to the Wings main screen.

The File Info function not only shows the standard Info box with its Locked and Inactive check boxes, but also has a Change Attributes button to let you edit any of the files attributes. This function can be very dangerous to your files if you're not careful. There is a warning that it can make files unusable and that for novice users it is better used ONLY to display information, not to change

particular file.

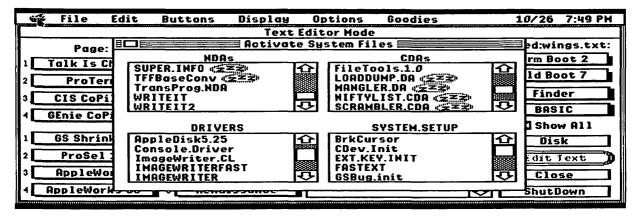
Another of the useful Goodies items is the Sort function. The Wings Sort function will let you alphabetize a scroll list or manually move items up or down in the list. Then you can either make the reordering permanent, writing the reordered directory to disk, or hit the "Done" button, leaving the disk directory as it was. This function has significantly less built-in functionality than the equivalent function in ProSel-16's Utilities. In the ProSel-16 Sort function you can do manual sorting but there are more built-in options: sort by alphabetical order, by date of creation or modification,



by filetype, by size, or by reversing the existing order; these options can also be performed in various sequences to achieve various types of ordering and sub-ordering.

program. It is the only utility or productivity program that I know that does not provide a means to Quit. When you select OpenApple-Q, you get a window with two

environment, which ProSel-16 does not provide. But Wings by itself only offers a small subset of the functions in ProSel-16 plus a couple unique functions. The functions provided



The chapter "Wings Overview" in the manual gives the beginners' information sufficient to get you up and running with the program. Once there you can look into the details of other functions as you come to need to use them. The chapter on "Wings Details" does go through every single menu choice everywhere in the program explaining what it does and how to use it. Tips on various functions are included to help you get the most from the function. It seems quite complete to me, but it does not have to be read first to get started.

I do want to stress the importance of the cautions and warnings spread throughout the descriptions of various functions. This program offers capabilities that can get the unwary into trouble; that power can be useful, but it has to be used wisely.

#### Missing in Action

Wings does fail to provide several functions which I have found useful in ProSel-16. First, it has no provision for displaying the device list nor the complete set of prefixes (or options for setting the prefixes upon booting) which GS/OS may use. Also, and even more important, the program has no provision within the program for Quitting from the

buttons: Cancel the choice and return to Wings or Restart (reboot) the computer. ProSel-16, Finder, UtilityWorks, etc. all provide a Quit with three options: Cancel, Return to Launching Application, or Restart (reboot) the system. In this case Wings resides on a one-way street with an entrance but no exit. I find this unacceptable in the program.

Besides some of the more limited functions mentioned in the previous section, there are others which do not provide as much information as the equivalent ProSel-16 function. An example is the File Compare function. In Wings, only the first five differences are shown, while ProSel-16's Utilities permit you to see ALL of the differences and even to enter offsets to reveal common code that is only located at a different positions in the two files. In a function like this, I want the maximum information available and Wings does not provide that.

#### What do I think of it?

As I mentioned previously, my preferred program launcher and utility set has been ProSel-16. I have not changed my mind on that after reviewing this package. However, this package does provide some complementary functions, particularly text editing in the desktop

certainly do not add up to 5/6ths of the functions provided by ProSel-16, and don't seem to be worth 5/6ths of the ProSel-16 street price. At a price of \$49 (Roger Coats' current price) compared to \$59 for the ProSel-16 package that includes FAR more capability, the performance/price ratio is clearly in favor of ProSel-16.

However, you do commit yourself to a text-type menu system with ProSel-16 versus a desktop button system with Wings. Some people just like the GUI (Graphic User Interface) better in spite of its inefficient demand on computing power. So, if you want a GUI and don't like Finder, this package just might be for you. You just have to be prepared to pay the price for it in a number of ways.

Wings Vitesse, Inc. 13909 Amar Road, Suite 2 La Puente, CA91746-1669

## Monitors for the GS

by Phil Shapiro

Buying a computer is almost always a confusing experience. After deciding upon a particular model of computer, you still have to decide which monitor to get, which drive(s) to get, and how much memory to buy.

These decisions can really perplex purchasers of the modular Macs (the whole Mac II series). Apple II purchasers don't face quite as many decisions, at least regarding monitor choice. Their main choice is whether or not to buy a color monitor.

For Apple IIGS buyers, this decision is basically a foregone conclusion. 98% of Apple IIGS buyers choose to get a color monitor (either the high end RGB monitor, or the low end composite monitor) to take advantage of the IIGS's spectacular colors. Incidentally, few people know that Apple does sell a monochrome monitor for the IIGS. The display shows the IIGS's 4,096 colors as various shades of grey. It's a functional monitor, but rather desolate to view.

Apple IIe and IIc+ buyers face the choice of getting an Apple monochrome monitor, an AppleColor composite monitor, or a color or monochrome monitor made by a third party vendor. Tracking down third party Apple compatible monitors can take some sleuthing, even if you live in a large metropolitan area.

The best method is to check with people in your local user group. Or, you could check in the various Apple II magazines; and order your hardware from a reputable mail order company. These companies typically sell second-hand Apple hardware, and a smattering of third party hardware.

But I stray from my original purpose, which is to sing the praise of monochrome monitors for the classic Apple II. (The classic Apple IIs are all the models of Apple II's that preceded the Apple IIGS, along with the new Apple IIC+. The full list of classic Apples IIs includes the Apple II+, IIe, IIc, and IIc+). Monochrome monitors for the Apple II give a crisp display of all software, whether the software is intended for mono or color display.

There are few programs for the Apple II that absolutely require a color monitor. In the educational field, the only programs I can think of that require color are "Rocky's Boots," a logic game by the Learning Company, and "Think Quick," by the same company. MousePaint, an old 8 -bit paint program, also benefits from being displayed on a color monitor. But the vast majority of educational programs do not require a color monitor. This contrasts with educational software for IBM and compatibles, which invariably requires that you have a color monitor.

The subject of monochrome monitors was recently brought to mind by a family I know that always buys the "best" for their kids, but have a simple mono monitor on their Apple IIc. When asked about the possibility of upgrading to a color monitor (or a IIGS system), the mother replied that the monochrome IIc system suits all their needs. Her kids enthusiastically use the computer on a regular basis. So the added motivation of using a color monitor would have no appreciable effect—at least worthy of the added expense.

What type of added expense does a color monitor add to a classic

Apple II system? The going rate for a new AppleColor composite monitor is \$350. The going rate for a new Apple brand monochrome monitor is \$120. But the extra money could be better spent on software. After all, hardware is just one small part of the overall cost of a computer. It's not unusual for people to purchase as much software as the cost of the computer system itself. In some cases, the cost of a person's software collection could amount to a multiple of the cost of the system.

So just as it makes sense to forego the top of the line audio system, to make more money available for records, tapes, and CDs, so too does it make sense to forego the top of the line computer configuration, to make funds available for a varied software library. But the truth is, you're not foregoing much by choosing a mono monitor for your Apple IIe or IIc+ (or IIc and II+). A mono monitor actually gives you a crisper, clearer display.

When, you ask, is a color monitor most called for? The consensus among educators is that young children can sometimes benefit by having the added appeal of a color monitor. Software intended for preschoolers usually combines a colorful scene with enchanting animation. When such software is used on a mono monitor, the animation takes on the central focus. (Note that the colors are not entirely lost. They still show up as varying shades of green (or white) on a monochrome display.)

This brings me to the various colors of mono displays. The traditional color for monochrome displays is green on black. Studies have shown green on black to be the most appealing, least tiring colors for the human eye to look at. Amber is the second most common color for mono monitors. Connoisseurs of monochrome monitors speak in poetic terms about amber displays, although the green/amber distinction is mostly a matter of preference.

The third option for mono displays is white on black. Apple adopted this as a new standard (for

Apple II mono displays) around 1987. Apple produces some fine computers, but they made a monumental mistake in choosing the new white on black displays. They look terrible, especially when used in 80column mode for word processing and telecommunications. It's not even white on black: it's sort of light grey on dark grey. Most annoyingly, the contrast is poor, causing headaches for some people.

(To see what a true white on black looks like, look at an Apple IIGS with an RGB background. The black background on the IIGS is so black that it looks like you're peering into a black hole.)

So if you're in the market to buy a new IIe or IIc+, my recommendation is to find a second-hand green or amber monitor. Second-hand Apple II monitors are quite plentiful these days. The going rate is anywhere between \$30 and \$70.

You can even buy a second-hand monitor from established secondhand dealers, such as Pre-Owned Electronics (800-274-5343), in Waltham, Mass., or Shreve Systems (800-227-3971), in Shreveport, La., or Alltech Electronics (619) 721-7733, with several branches in California.

The two most popular secondhand mono monitors are two Apple brand monitors: the Monitor II and the Monitor III. Both of these monitors have good quality displays, and a full range of fine controls (brightness, contrast, vertical hold, etc.) In many respects, the Monitor II and the Monitor III are identical, except for slight differences in outwards appearance. (I always wondered if the Monitor III was intended for the Apple III computer, or whether it was originally intended for the Apple II. In any event, I've seen it being used on dozens and dozens of Apple IIs.)

Third party Apple II compatible monitors usually work well. The standard configuration is a 12 inch monitor (measured across), but you run into quite a few 9 inch monitors. Be wary of Apple II compatible monitors which don't have a

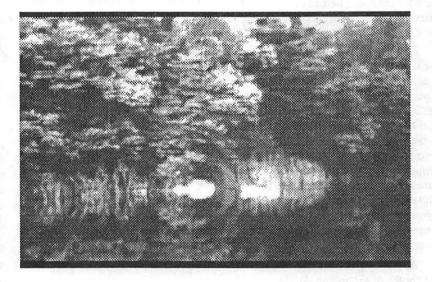
standard RCA-type plug for the monitor cable from your computer. You might have to make several trips to Radio Shack to find the right adapter.)

For the technically minded, monochrome monitors can be broken down into two broad groups: slow persistence phosphors and fast persistence phosphors. Many of the old monitors (circa 1982 and before) are slow phosphor. Many of the new monitors are fast phosphor. The term "persistence" means that the pixels stay lit for a brief period after they're turned off.

Is there any advantage of slow phosphor monitors over fast phosphor monitors? Not really, although to my mind, the slow phosphors have a certain gentleness to them. This might sound a little odd, but

the slow phosphor monitors are more calm, less hectic. You don't need to go out of your way to buy a slow phosphor monitor, but if you ever do buy one, treasure it. Your less knowledgeable friends might think that all Apple II compatible monochrome monitors are alike, but little do they know of the fine distinctions.

There you have it. Monochrome monitors are widely viewed as being far inferior to color monitors. But the truth is that monochrome monitors give excellent, crisp displays. And with Apple II software, you're not sacrificing software selection by choosing to go with monochrome. The few programs that absolutely require color are programs that you can generally live without.





# ComputerEyes card and software

by Dirk J. Bakker

I'm currently in the middle of digitizing a series of slides and photographs to incorporate into the Photo.Stack, a collection of Hyper-Studio stacks dealing with photography, soon to be available through the disketeria, the TCS, or both.

To digitize the images, I'm using the ComputerEyes card by Digital Vision. After much experimenting, I've discovered several settings that I'd like to share with you. I am using an RCA 5320 Color Video Camera connected to the video-in cable emerging from my GS. However, you could easily connect any camcorder or for that matter digitize off a VCR. I have also had great success using the digital freeze option from a Pioneer Laserdisc player.

I will at this point presume that you have properly installed the card and the software. The first crucial adjustment is to set the "Capture Settings..." window properly. First there is the Dithering ON/OFF button. I prefer to leave Dithering ON most of the time. However, not all images are best rendered with it ON. Dithering, as you may already know, allows the software to create gradations between those colors allowed by the particular palette/ mode being used. The only drawback, I've noticed is that certain images are better displayed using the "posterization" effect when it is OFF. Again, this is something that you must use both on and off to see the difference. The second setting, which I AL-WAYS have engaged is "Capture speed SLOW." The only time I can see using the fast (less detailed) setting is if you're capturing a "live" situation like taking someone's picture and they're apt to move during the

sssllllooooowwww 12 seconds.

Like the Capture speed button, I also always leave "Auto calibrate ON" and the palette Unfrozen, but I will discuss later when to have it otherwise.

Next, you'll see two additional settings: "No. Colors/levels" and "Color separation." Before capturing an image using OA-C for Capture Color, I leave Colors/levels to "15," which reserves one color/level for incorporating/manipulating with a paint program like DeluxePaint II should you need to color it differently (as for a title/header) and not upset the graphic itself.

The last setting, "Color separation," is very useful. If you experiment with it—suppose you set it at 3 or 4—the software will "jump" certain colors and give you combinations previously unavailable. Even when digitizing using the OA-B for Capture B/W, the setting allows you to control the contrast of the image. I also discovered you can only have this setting in the range of 1 thru 7.

One technique you may want to use is to create separate windows for each version. Then capture into each window using a different setting. If you move the windows so you can see them side by side you'll be able to see exactly what the effect of the setting was. Another option once you're more familiar with these effects is to change the settings and use the "Paint From Raw Data" setting to change the way the software manipulates the image. You may not have them side by side but you will quickly see the change.

Once you've captured the best possible version you can, you have at

your disposal two other settings. The first, "View Special" allows you to view the captured image under different modes/formats. You have the following:

- 1. Super Hi-Res (B/W)
- 2. Super Hi-Res (640 B/W)
- 3. Double Hi-Res (Color)
- 4. Double Hi-Res (B/W)
- 5. Standard Hi-Res, and
- 6. Print Shop Graphic

Once you've seen the results, there are corresponding settings under "Save SPECIAL," which will allow you to keep your final choice. In order to use these graphics within HS, I usually stay with straight OAC or OA-B (320 modes) which in HS I display using Xcmds and 640 B/W which I used for the screens in the stacks.

Lastly, there is "Adjust Palette" or OA-A. This allows you to make final adjustments to the palette, such as overall lightening, increasing or decreasing contrast. I also, like the ability to introduce a monochrome tone to B/W images. When you're creating a series of images where you need to have the same palette, you can set the "Palette Frozen" in the Capture Settings window.

I find that the ComputerEyes card is at its best when in B/W mode. The color mode is somewhat problematic and therefore you cannot expect to get similar results. In color mode, I find it best when digitizing images with bold distinct areas. If you try getting a subtle gradation, you're bound to be disappointed. But with the judicious use of the settings I've outlined above, you are going to make the best of a very useful addition to your GS system.

[Ed.—the images on the preceding page were produced with this equipment.]

#### Game reviews

### Katie's Farm

On the outside of the box, (we all DO know we can judge a book or software by its cover don't we), we see a program that will entice the kids to learn and play with our computer. Of course it has GREAT graphics and sound and...you get the picture—another one of THOSE kids programs, like the other 12 sitting on my shelf here that no one plays with.

WRONG....This is a GREAT program. The graphics look like the cover of the box and the animation is very smooth. The kids love the sounds and the colors. Something must be wrong here, a Great program that the kids play and learn with and it's not copy-protected. WOW!

OK, what happens in this program, you might say-or did you? First, you should know that Katie is one of the characters in the McGee series. McGee is a small child who is portrayed in the program. It is McGee that the kids move around in the story and watch and learn. This program, Katie's farm, is the second in this series. The software company says there will be more.

The only way to test a kid's program is to let the kids have it to play with. The first thing is to write protect the disk and try to make a copy of the program if we can. No problem—this one isn't protected. It comes on two disks, a boot disk and a play or graphics disk. The second disk must be online anytime you play the program. I let my daughter have the copied disks and said start it up. She had no problem, but then again she has been playing with my Apple since she was born. [Ed.—the discerning reader will correctly have

by David K. Page (with LOTS of assistance from his daughter)

concluded that a certain amount of artistic license is granted to all WAP authors.]

The program starts right off with McGee talking and Katie answering. All the sounds come through loud and clear. The play is enjoyable and selections are different if you select them again or again. Since it is a farm setting you might guess there are a few animals to be heard and played with. There is a horse, a cow, a pig and some chickens, just to name a few. Then of course there has to be a barn and a scarecrow, this is a farm remember!

I must admit that I thought it was a little short lived as there are only 3 items that can be accessed from each screen. If you choose the same screen more than once, it is different. But, for a child this is magic...they can do it by themselves. For the older kids, about 6 up to 8, the game is still fun but it is old hat to do it by themselves.

Now comes the scoring part of the review. Everyone has an opinion, even reviewers.

\*For graphics I rate it as a 9: they are very well done and use the screen to its full extent. The father and mother are excellent.

\*For animation, I rate it as an 8: the animation is a little jerky, but, my daughter rated it as a 10, go figure.

\*For ease of play, I rate it a 10 it doesn't get any easier than this!

\*For sound, I rate it as an 8.5, the sound is great but there could be more of it. I know it is about all that could be packed on to an 800K disk, but then most people have hard disks don't they?

\*For ease of use of the instructions that come with it-not any to speak of, it is THAT simple, a 10.

The bottom line is it is a great kid's program—I liked it also so I would give it a 9.2 on a scale of 10. It is a game that you should have for your child aged from about 2 to 6. It will give them many hours of fun.

> Lawrence Productions 1800 South 35th Street Galesburg, MI 49053-9687 **4**

## Great Western Shootout

by David Wood

Remember an arcade game called Hogan's Alley? In it, you had a lightsensitive gun, and had to shoot at pop-up targets in a shooting gallery and around a bunch of buildings. Some targets should be shot, some shouldn't. If you missed any of the hostile ones, or hit any of the neutral ones, you got in trouble. Take away the shooting gallery, and replace the street scenery with wooden buildings, rocks, trees, and a mineshaft.

And there you have The GWSO.

Great Western Shootout is a game for the Apple IIGS, with 512K of memory, mouse, and disk drive. The idea is simple: See the sheriff about a job. He sends you out into the woods to bring in some outlaws... dead.

Shooting them is simple: Move the mouse pointer over the person (Continued on next page)

you want to kill, and click. You have to be careful, because some of 'em are innocent (Hint: The villains wear black hats). You also have to be fast because the villains shoot back (they aim). You can only hit so many innocents or get shot yourself before you get put six feet under. Once in a while, you find medicine in the street; it's taken ballistically (you shoot it).

This game actually doesn't have much in the way of bells and whistles; apart from the motion of the targets, there's no animation to speak of. Apart from gunshots, groans, whoops, and two different sounds at the end (based on your success), there's no soundtrack. It's a simple concept, and it's been simply

implemented.

Look: 6/10. The scenery is nice, but otherwise, this program feels like a no-frills production.

Feel: 8/10. It reminds me of a cartoon from an old Punch magazine— a general was talking to a woman, sitting in front of a terminal of some sort. The caption: "Now Mrs. Robinson, this system is very easy to use: just move the cursor over the areas you'd like to destroy."

Play: 8/10. Very simple, and at times challenging. The tenth (and last) stage has a variety of obstructions and annoyances which make it a pain.

Overall: 7/10. Simplicity.

## **Task Force**

by David Wood

You're walking down the street, when this bunch of skinheads appears, crouched down and waddling towards you. They're intent on deadly mischief; everyone around here is. A machine gun is much too slow, so you unlimber your bazooka...

Sounds strange, doesn't it? Sort of a cross between the Guns-A-Blazin' Action Movie of the Week and Monty Python's Ministry of Silly Walks. Actually, it's Task Force, a game for the Apple IIGS, 768K, joystick highly recommended.

In it, you're a member of a government Task Force (get it?) who's trying to bring down nationally known bad-guy Hector Vasquez. He's a member of the Mafia (Chicago), a leader in the Aryan Army (San Francisco), founder of a major vigilante group (New York—and not the one you're thinking of, either!), a gang leader (Los Angelas), and he's probably in charge of a few Political

Action Committee as well (Times Rom- er, Washington D.C.).

Those five cities— New York, Washington D.C., Chicago, San Francisco, and Los Angelas— are where the majority of the action takes place. Each city has its own army of bad guys, and as a member of that Task Force, it's your sworn duty to use whatever weapons you have available to mow them down like wheat.

They start off better armed than you do, but every so often, a weapon will be dropped by someone who no longer needs it. You start with a handgun (oh boy). Eventually, you can acquire a machine pistol, taser (lightning gun), rocket launcher, flamethrower, bazooka, and grenades if you're really good.

Threats vary based on location: If you're outside, then you'll probably get buzzed a few times by a grenade-dropping helicopter (When it's low enough, you can hit it with the rocket launcher or bazooka). If you're indoors, then the grenade throwers have to run up to you; they're easily stopped. Each city has three stages, except New York, which has five. Through each city, you only have a limited amount of health (5000 units) which will quickly bleed away as you wither under their incredible firepower. There's no way to get health back except by finishing the last stage; then you start the next city with all your health back.

I had troubles left and right with this package. First, when I get review disks, I always write-protect them so I don't damage them. However, Task Force requires a non-write-protected boot volume, so I had to make a backup. The backup wouldn't work until I renamed the backup volume to the original (Good thing I'm psychic; the instructions say nothing about the boot disk being name sensitive). I tried installing it on my hard disk, but it wouldn't work, so I had to stay with floppies.

You can have problems within the game as well. When you're hit by a bullet, you fall back briefly and can do nothing. Some people have autofire, which means they can shoot as many bullets as they like in a row. When you're hit by a grenade, you're thrown back a hellacious distance and are lying prone for several seconds. During this time, the bad guys can gather around you and perform more nefarious actions.

I think you can guess what happened: I was caught by a grenade (health at this point: around 1100), a goon with autofire started firing over my stunned body, and when I got up (automatic action), I started getting hit. I couldn't move out of the line of fire, and he wouldn't stop firing. Fourteen hits later (each hit removes 80 health), I was down to zero and the game was over. After that little stunt, I had to buy a soldering iron to fix the joystick which I threw down in disgust.

In all, the concept behind the game is simple enough: If it moves, (Continued on next page)

(Continued from previous page)

kill it. Everything moves. It's made tough by the sheer magnitude of what you have to do. I've encountered enough problems with the game to make me wonder if it's really worth the trouble.

Look: 7/10 The graphic presentation is nice, but sounds are limited to gunfire, explosions, and enraged shouts. You'd think that a game like this would deserve a killer soundtrack, wouldn't you? Wrong: There's no music whatsoever. Just a

bewildering variety of weapons fire.

Feel: 8/10 Joystick operation is smooth; keyboard, I have less faith in.

Play: 5/10 The concept is so straightforward, your neck will lock. The only thing that spoils it is that the universe wants very badly for you to lose.

Overall: 7/10 It does what it promises: action. Any more, I've already said it.

Software review

## **StoryWorks**

These days new possibilities are opening up for non-programmers to replicate some of the creative work previously the sole domain of computer programmers. HyperCard on the Macintosh has been the premiere authoring system, unleashing a torrent of creativity on the part of rank and file computer users.

Similar hypertext programs have been created for the Apple II line, including Tutor Tech, HyperStudio, and HyperScreen. Various barriers, including price and complexity, have precluded some of these programs from achieving the same widespread appeal as HyperCard. Along comes StoryWorks, a program published by the Teachers' Idea and Information Exchange, a national association of AppleWorks-using teachers. Tapping into the enthusiasm most people have for AppleWorks, StoryWorks allows you to make hypertext stacks straight from your AppleWorks files. These stacks can be displayed in two formats: a 30 columns, graphics font format, or, a regular 80 column text format.

In the past, the TI&IE people have done good work in collecting

by Phil Shapiro

and disseminating AppleWorks templates and files for Apple II using educators as the distribution channel. So publishing StoryWorks and distributing StoryWorks stacks seems like a natural progression in their unique mission in the Apple II universe.

impression on the students' minds, and forever changing the face of modern education. This is not so.

The plight of teachers is such that they're already overburdened with outside work. Sure, some innovative, energetic types might occasionally dabble in a little experimentation. But that's the exception, rather than the rule.

Having said that, I must admit that I found StoryWorks to be quite well done. And yes, I could see it being used in the classroom. But the success of any particular stack is a function of the imaginative powers of the stack's creator. StoryWorks seems like a wonderful tool, but a tool only as powerful as the imagination of the stack creator.

Creating stacks with StoryWorks doesn't require any special expertise, but you do need to spend a good hour or two reading through the manual. From there, the best place to go is the demonstration stacks themselves, whose structure you can duplicate in your own stacks.

Navigating through any particular stack, as a user, is quite easy. All you have to do is press the appropriate letter key, corresponding to a particular topic, and you're hastily

All in all, Story Works appears to be a program with some real promise.

For the sake of objectivity, it's best if I state my biases right up front. I'm always skeptical of toolkit programs that give teachers "great freedom to design wild and wonderful lessons for their classes". The underlying assumption is that the average computer using teacher has an extra 20 hours of free time a week to come up with innovative lesson plans that can be executed once on the computer, leaving an indelible

whisked away to a new screen of information. You can also use the up and down arrow keys to scroll through longer fields of text. Returning to your original place is as easy as pressing the return key.

It's difficult to assess the merits of toolkit programs, such as Story-Works, without seeing a number of different demonstration stacks. The StoryWorks program disk comes with six or seven demonstration

stacks, all of which are interesting, but none of which is astounding.

More impressive were two stacks distributed on the September, 1990, monthly subscription disk distributed by the Teacher's Idea and Information Exchange. The first stack shows a timeline from 1960 and 1961. This stack is made to be viewed in 80 column mode, which means that a lot of information can fit onto the screen. To find more information about any historical event on the timeline, you can press the corresponding letter key.

correct. But the quiz heightened my sense of "knowledge deficiency," which then made me more receptive to the tutorial. So there did seem to be a good reason to place the quiz before the tutorial.

All in all, StoryWorks appears to be a program with some real promise. Certainly, creating stacks in StoryWorks is easier than creating stacks in HyperStudio, HyperScreen, or Tutor Tech. Since StoryWorks is completely text based, you can focus your attention on textual content, rather than graphical enhancements.

...the success of any particular stack is a function of the imaginative powers of the stack's creator. Story Works seems like a wonderful tool, but a tool only as powerful as the imagination of the stack creator.

The structure of the timeline stack was such as to promote a playful browsing of the timeline. By using the up and down arrow keys you could scroll up and down the timeline. When you saw an event or topic that you wanted to read more about, you just pressed the corresponding letter key. With one key press, you could get knowledge on demand. A return key spirited you back to the timeline.

Another stack that was quite well done was a timely stack on the Middle East. The stack started off with a ten question quiz, aimed at an upper high school or college level student. The questions cover such topics as mid-East geography and demographics. The program keeps a score of your answers, and tells you how well you did at the end of the quiz. Following the quiz is a well written little tutorial, written in encyclopedic style, that delivers a dose of pertinent information on the Middle East. I sort of wished that the tutorial section would have preceded the quiz, so that I might have gotten some more of the quiz questions

And StoryWorks' affordability (at \$49.95), makes it a favorite over Tutor Tech (which sells for over \$130).

But you do have to have a creative inspiration to produce a stack. The program's general ease of use doesn't mean that educational stacks are going to write themselves. However, it wouldn't surprise me to see some innovative stacks produced by other Apple II using educators.

More exciting would be to see some stacks produced by other organizations with a proven track record of creative production. The organization which first leaps to mind is the Children's Television Workshop, the folks who produce the brilliant television show 3-2-1 Contact. Imagine having one of their dynamic television shows tied in with a hypertext stack, all followed by a Story Works quiz. They already produce a teacher's guide to their innovative documentaries. So why not go one step further, and use their talented staff to produce some StoryWorks stacks?

Another organization that could

produce some interesting stacks is Newton's Apple, the public television science show. They already have produced several public domain Apple II tutorial disks. With the generous funding of DuPont, which underwrites other parts of the show, Newton's Apple could do some scintillating science using Story-Works.

Another organization with the talent to create StoryWorks stacks is Scholastic Software. In the past they've created some wonderful hypertext adventures, called Twistaplots, on their monthly Microzine disks. They have some of the most imaginative children's writers doing work for them.

In summary, the strengths of StoryWorks are its ease of use and appealing screen font. The program is so easy that kids could learn to use StoryWorks to create branching stories. Of course it takes a certain type of child, in a certain kind of mood, to create a branching fictional story. This creativity tool doesn't have quite the same widespread appeal as The Print Shop.

Branching fictional stories are one thing. But more important is StoryWorks' ability to deliver factual knowledge, organized in a logical hierarchy, accessible at the touch of a key. This program has a lot of potential to disseminate knowledge to a knowledge hungry generation.

StoryWorks is available from the Teacher's Idea and Information Exchange, P.O. Box 6229, Lincoln, NE 68506. (402) 483-6987. Price: \$49.95, plus \$3 shipping and handling.

(The author is the founder of Balloons Software, a new Apple II educational software company. GEnie address: P.Shapiro 1)



### **IIGS Disketeria**

by Chris Hutmire

#### Revised Disks

WAP recently released a 10-disk set of GS fonts. While installing a selection of these fonts on my hard disk, I noticed that there were two font conflicts. These conflicts have been corrected. This month we are re-releasing two font disks, GSFT-07 (Fonts D-1) and GSFT-09 (Fonts G-1).

#### New Disks

We have nine new disks this month. They include the next three disks in our series of Desk Accessories (GSDA-04, GSDA-05 and GSDA-06), three disks in the Graphics series (GSGX-10, GSGX-11 and GSGX-12), a disk in the Communications series (GSCM-02), and two disks in the Utilities series (GSUT-05 and GSUT-06).

#### A Note about Shareware

These disks may include "shareware" as well as public domain software. The writers of shareware code ask that the user of his code pay for its usage. Information on how to pay the program's author is included in the software or the documentation.

#### GSDA-04

- Desk Accessories 4

/ASCII.CHART/ folder: This CDA presents a chart giving all of the ASCII codes.

/ASCII.TABLE.V2/ folder: This is a handy ASCII table CDA that will display the ASCII characters and their respective codes on a single screen.

/BASIC.CDA/ folder: This

CDA allows you to write short Applesoft BASIC programs and run them. No access to ProDOS for disk access.

/CPU.CDA/ folder: This CDA allows you to save a custom control panel setting for each bootup disk.

/ENVELOPE/ folder: This CDA will print envelopes quite easily.

/ERRORCODES/ folder: This CDA will list GS/OS, Prodos 8 and Applesoft error codes.

/MARVIN/ folder: This is a simple and worthless CDA. Includes source code which demonstrats how to write a CDA with the APW version of TML Pascal.

/NIFTY.LIST.3.0/ folder: This CDA is a programmer's debugging tool. Disassemble sections of memory, naming toolbox calls and operating system calls. This release provides support for resources and new control definitions in System 5.02.

/SDUMP.BIN/ folder: This CDA saves the current SHR screen as a 65 block BIN file.

/BREATHE/ folder: NDA for screen theatrics. By WAP member Ion Thomason.

/FILE.MANAGER1.1/ folder: This is an NDA to perform a number of file management activities (move, copy, delete, get/change info, view text/source files).

/MELTUP/ folder: A modification of the Meltdown NDA.

/PUZZLE/ folder: This folder contains the puzzle NDA and the TML Pascal source code for the "Four Puzzle" NDA.

/RULER/ folder: This NDA

places a ruler on the screen.

/SHOWPIC.V4.6/ folder: Version 4.6 of the ShowPic.NDA. Has a few new enhancements over the older version, including saving the picture into different graphics formats.

/SYS.CONTROL/ folder: System Control allows the user to set the System Parameters on the IIGS from the Super-High Res DeskTop.

/SYSTOOLVERSIONS/ folder: This NDA reports the version number of the tools.

/ACC.CHOOSER.NDA/ folder: This NDA will allow you to load your NDAs and CDAs as you need them, instead of at bootup. Works with System 4.0 but is not compatible with System 5.0 or greater.

/CARPET.2.0/ folder: Carpetbag v2.0 is a DA loader INIT that also adds the MenuBar clock. Includes an authors note that states that there is one bug reported in one part of the "Remove NDAs" capability. Note this version lets you load AND remove NDAs but only load CDAs. Use only with System 5.0.2—may crash unpredictably with older System Software.

/CDEV.COLOR.V2.1/ folder: This is a CDEV used by the Control Panel NDA. It allows you to change the color or pattern of the Finder desktop. It also allows the user to choose a graphics picture as the background.

/FONTDA.INST1.0/ folder: Font Da Installer v1.0. This NDA allows you to install and remove Fonts and DAs without rebooting.

/FONTDA.INST2.0/ folder: Version 2.0 of the wonderful Font/ DA installer/deinstaller. This NDA allows you to install and remove Fonts and Desk Accessories (NDAs and CDAs) "on the fly" without rebooting. Shareware.

/FUN.KEYS/ folder: Function key init (STR) for your GS. Adds Mac-like keyboard functions to your GS, such as being able to eject disks, shutdown the system, send text screens to the printer, save super-

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hires screens from running applications to disk, and more.

/INSTALL.DA/ folder: This program lets you install CDAs and NDAs without having to reboot. You can have your DAs on a separate disk and load them as needed.

/RUN.Q/ folder: This INIT has the ability to set a queue of programs to be run without having to return to the finder or other program launcher in between each program. Shareware.

#### GSDA-05

- Desk Accessories 5

/CDA.TERM.SSC/ folder: CDA Term v2.1 (Super Serial Card version.) This is an improved version of the old SimpleTerm CDA.

/DRAGON.WARS/ folder: Dragon Wars IIe Revival CDA will do the following: All Characters are brought back to life; health fully restored; stun points fully restored; power points fully restored.

/HEXDECBIN/ folder: This is a simple four function number conversion desk accessory. Includes source code and the five CDAs: HDB.Convert, HDB.DA, HDB.DA.C, Hex.Dec.BIN, HexDecBIN.

/MINITERM/ folder: Miniterm V1.0 is a simple CDA which allows access to the built in terminal mode of Port #2.

/NOTEPAD.CDA/ folder: This folder includes the Notepad CDA and Notepad Patcher which will patch the CDA Notepad to save to a different pathname.

/SIMPLE.TERM/ folder: This folder contains Terminal CDA. This is an earlier version of the CDA.Term.SSC CDA.

/SLOTSWITCH.DA/ folder: This CDA will let you switch between "YOUR CARD" and the built in slot without rebooting.

/SPEEDSWITCH.DA/ folder: This CDA allows you to change the system speed from the Desk Accessory menu.

/TABLET/ folder: "Tab.16" is a CDA to install/remove an Apple Graphic Tablet driver for use in any 16 bit, superhires (320 or 640) program.

/X10/ folder: This folder contains two CDAs (Power.House.CDA and X10.DA) for use with the X10 Power House home control unit.

/ALTER.FILE.INFO/ folder: This NDA allows you to alter a file's created and modified dates and times, File Type, and alter a file's Access Attributes.

/BICLOCK/ folder: This is a strange clock for Humans and Aliens. Time is displayed using standard Alphanumeric and Rigel-5 Galcatica formats.

/CALENDAR/ folder: This NDA displays a calendar showing the current month, date and time. You can choose to display any month for the current year and the following year. Includes an appointment book.

/CLIPBOARD/ folder: This NDA is useful for applications that don't have a "Show Clipboard" option.

/COLOR.CLOCK/ folder: This is the latest version of the simple ColorClock NDA. If you click in the clock content area, the window will change colors and possibly patterns.

/CRAYON16320/ folder: This NDA allows you to adjust the color palette of the application that is in use when you activate this NDA. Includes R-G-B sliders which allows you to change any of the 16 colors and swap, copy, spread, default and cancel options.

/CURSOR/ folder: This NDA will replace your cursor with a small colorful icon of a head.

/FILEMANAGER1.11/ folder: This is an NDA to perform a number of file management activities (move, copy, delete, rename, alter attributes, get/change info, view text/ source files). This version (1.11) fixes some bugs that interferred with display of the icons.

/FUNPACK/ folder: This collection of files are Shareware, fee \$10. By Joel Prail. This folder

includes the following 10 NDAs: Chronograph.NDA; DoodlePad.NDA; FadeOut.NDA; MemCheck.NDA: MenuTimeHM.NDA; MenuTimeHMS.NDA; MouseInfo.NDA: Online.NDA: Prefix.NDA; ProdosFiler.NDA. Included is a permanent INIT file (Beep.Boot) and two Binary files (Beep.Code and Beep.Sound) which replaces the cheap sounding bonk with a digitized sound file. This folder also includes two Finder icon files, two SHR pictures and a GS/OS program (FunPack.Sys16).

/INSTANT.ICON/ folder: This NDA will allow you to mark off part of the SHR screen and save it as an Icon.

/JOYSTICK/ folder: This NDA will allow you to center your joysticks. Displays the X and Y values of your joystick.

/MEMORY/ folder: This NDA displays Total Memory, Free Memory, and Largest Block.

/MEMORY.NDAS/ folder: This folder contains two memory NDAs by Floyd Zink, Jr. The first NDA, Memory, displays Total Memory, Free Memory, Max. Block, RAM Disk size, and Used Memory. The second NDA, Memory.v1.3, displays Total Memory, Real Free Memory, RAM Disk size, Free Memory, Max. Block, and Used Memory.

/SCREEN/ folder: I'm not sure what this NDA is supposed to do. I could not get it to work. I think it is a screen capture NDA.

/STV/ folder: This NDA shows system tools version numbers.

/TEXTREADER1.0C/ folder: TextREADer is an NDA that will allow you to view a TXT or SRC file in a window. V1.0c makes a major improvement to the NDA with a minor addition in the function of the document window.

/ACCS.CHOOSER/ folder: This NDA will allow you to load your NDAs and CDAs as you need them, instead of at bootup. Works with System 4.0 but is not compatible with System 5.0 or greater. 

/CARPET.2.0/ folder: Carpetbag v2.0 is a DA loader INIT that also adds the MenuBar clock. Includes an authors note that states that there is one bug reported in one part of the "Remove NDAs" capability. Note this version lets you load AND remove NDAs but only load CDAs. Use only with System 5.0.2—may crash unpredictably with older System Software.

/CLIPLIB/ folder: CLIP LIBRARY for the Apple IIgs. By Joseph Ontiveros. This is a hypermedia-like utility.

/FAST.TEXT.INIT/ folder: FasText is a small INIT startup file that dramatically speeds up the text display for native mode Apple IIGS programs that use the Pascal mode Text Tools for display.

/FONTDA.INST2.0/ folder: Version 2.0 of the wonderful Font/ DA installer/deinstaller. This NDA allows you to install and remove Fonts and Desk Accessories (NDAs and CDAs) "on the fly" without rebooting. Shareware.

/INSTALL.DA/ folder: This program lets you install CDAs and NDAs without having to reboot. You can have your DAs on a separate disk and load them as needed. Freeware.

/LOAD.APPLE.CDAS/ folder: This is an INIT that automatically activates the built-in Memory Peeker and Visit Monitor CDAs.

/NDA/ folder: Allows use of New Desk Accessories from within a Prodos16 shell.

/PEEKER/ folder: Execute this file to connect the built in memory checker CDA.

GSDA-06

- Desk Accessories 6

/CPR/ folder: This is a cutpaste-undo CDA. It may be useful for a text based application like AppleWorks Classic.

/ESP.SCREEN.DUMP/ folder: This CDA will save the current SHR screen to disk as a 32.5k Binary file.

/GS07/ folder: Selecting this CDA will give you a choice of using

one of the following 5 built-in CDAs: Visible Bell; Hex/Dec/Bin; Type File; Rational Calculator; SHR C1 Saver.

/LOAD.DUMP/ folder: This CDA will do the following: Dump Memory Segment Table, Dump Pathname Table, Dump Jump Table, Dump Loader Globals, Dump ProDOS Packets, Dump File Buffer Variables, Dump Address, and Get Load Segment Information.

/MANGLE/ folder: Memory Mangler version 1.4 by Steven Glass and Fern Bachman.

/MOUSE.TEXT/ folder: Displays a chart of the mousetext characters.

/PEEKS.N.POKES/ folder: I think this CDA is supposed to display Applesoft Peeks Pokes, and Call, but it crashed on me. It may not be compatible with System 5.0.2.

/PS/ folder: This CDA prints the text screen to your printer.

/S.DUMP.EA/ folder: This CDA will save the current SHR screen to disk as a 32.5k type \$C1 SHR Screen Image graphics file.

/SETSLOT/ folder: This CDA allows you to change the settings of your slots to either "your card" or to the slot's built-in function.

/TEXT.TIME/ folder: This CDA installs a clock in the top right hand corner which is displayed on the 40/80column text screens.

/WRITE.PROTECT/ folder: I'm not sure how this CDA is supposed to be activated. It was displayed in the Control Panel as "Write Protect now OFF" and I could not change it to ON. You may have better luck.

/KALEIDONDA/ folder: This NDA fills the screen with a continuously changing multi-color display similar to a kaleidoscope.

/MASTER.NDA/ folder: Master NDA is designed to give you complete access to All your New Desk Accessories. Only the first 13-16 are available from the Apple menu, unless you are using system 5.0 or later. Master NDA will give you access to the full 249 NDAs that the Desk Manager can support.

/MR.APPLE/ folder: This NDA causes the apple in the menubar to change colors.

/NODOS16/ folder: NoDOS16 version B 3.01 allows you to delete or rename a file and to change it's file type.

/OVAL/ folder: This simple NDA draws an oval inside a window with scroll bars.

/PALETTE.PULLER/ folder: This NDA displays the current graphics mode, current palette number, mouse X,Y coordinates, and the colors and their values of the current palette. The arrow keys allows to to advance through the different colors of each of the 16 palettes.

/PUZZLE.NDAS/ folder: This folder contains three versions of the puzzle NDA. These NDAs are similar to the Mac's puzzle NDA. FourPuzzle1.0 and Puzzle2.0 are two versions of the 4 by 4 puzzle. Puzzle.NDA is a 3 by 3 puzzle and is easier to solve.

/QUICKSOUND.V1.5/ folder: This NDA allows you to listen to digitized sound files. It supports the following sound file formats: AE standard, 2:1 and 2.67:1 formats; Raw and Standard Binary Data; AIFF format; ACE Compressed 8:4 and 8:3 formats; Sound Shop format. This folder also contains a selection of sound files in ACE Compressed format for your listening pleasure.

/SHOWPIC4.7/ folder: This is version 4.7 of ShowPic, a NDA written by Dave Leffler. Requires System Disk 5.02 or higher. This NDA will let you view almost any type of SHR picture or PrintShop GS graphic.

/XFUSION.DEMO/ folder: This is a demo version of a NDA that acts as a telcomm program from within the desktop. This program was written by the authors of GS Plus Magazine, you may receive a full-featured version of the program,

onscreen. Includes three scetches for you to view.

if you subscribe. graphics file

/ACCS.CHOOSER/ folder: This NDA will allow you to load your NDAs and CDAs as you need them, instead of at bootup. Works with System 4.0 but is not compatible with System 5.0 or greater.

/BLANK.INIT/ folder: This INIT will check 60 times a second whether a key has been pressed or if the mouse has been moved. If neither has happened within the specified delay, the screen will blank. It will put everything back to normal if you hit a key or move the mouse.

/CARPET.2.0/ folder: Carpetbag v2.0 is a DA loader INIT that also adds the MenuBar clock. Includes an authors note that states that there is one bug reported in one part of the "Remove NDAs" capability. Note this version lets you load AND remove NDAs but only load CDAs. Use only with System 5.0.2—may crash unpredictably with older System Software.

/FONTDA.INST2.0/ folder: Version 2.0 of the wonderful Font/ DA installer/deinstaller. This NDA allows you to install and remove Fonts and Desk Accessories (NDAs and CDAs) "on the fly" without rebooting. Shareware.

/INSTALL.DA/ folder: This program lets you install CDAs & NDAs without having to reboot. You can have your DAs on a separate disk and load them as needed. Freeware.

/MONITOR.INSTALL/ folder: Monitor.Install is a GS/OS application which will install the built-in Visit Monitor and Memory Peeker CDAs.

/TWILIGHT.CDEV/ folder: This is a modular screen blanker CDev with the capability to add your own special blank screens. Includes source code for Twilight modules, two SHR Pictures and a Finder icons

#### GSGX-10

- Pics and Graphic Utils 4 /AWGS.PALETTES/ folder: Twelve Apple Preferred Format graphics files containing nothing but the palettes for use with AppleWorks GS. To use simply Open one of the palette files or import them and answer yes to adjust the colors. You MUST have AWGS 1.0v2 to use these.

/FRACTAL.2E/ folder: This freeware program will generate multicolored fractal images on the DHR screen, at a level of detail approaching that of published pictures. Explore the infinite complexities of the Mandelbrot set and also countless Julia sets, without having to enter numeric coordinates.

/FRACTALS.GS.1.1/ folder: This is V1.1 of FractalGS. A program for generating Fractals on the SHR screen. Several changes have been implemented in this version.

/GIF.3200/ folder: This awesome program from Jonah Stich and Bad Luck Software allows you to convert GIF files into 16 or 3200 color GS Pictures. NOTE: This is v0.1 and, as such, is unfinished. There are still bugs, and a lot of features are left to be added.

/GIF.STRIPPER/ folder: Joey Schober's GIF utility to strip GIFs of those MAC/Bin headers that keep us Apple ][ users from converting them. This is version 1.1a. Docs included.

/GS.EXPERIENCE/ folder: This is a 3-dimensional graphics demo, which is played at 20 frames a second, although the author claims he had it at 30+ frames per second. The animation sequence was rendered a Hewlett Packard 9000/ 370 TSRX graphics workstation, using HP/UX 6.5.

/PAINTWKS.PATCH/ folder: This Applesoft BASIC program will modify Paintworks Gold for GS/OS 5.0. Allows Paintworks Gold to work if you have 1.5Meg.

/PICTURES/ folder: This folder contains the following six pictures: Carousel.Head; Carousel.Horse; Ferrari.640; Groo; Neptune.SHR; Space.Train.

/SUPER.LATHE/ folder: Create 3-D images with 2-D scetches. Allows you to "carve"

#### GSGX-11

- Modulae Graphics Demo

This is the latest demo from FTA of animation and sound for the IIGS. It's arguably the best demo available for the IIGS. It's better than Nucleus or any other demo I've seen. The switch on the lower right hand corner that says "automatik" determines if you can operate the controls. To gain control over the animations, just turn the switch off and click on the axis you care to manipulate. Quite a show. You control the demo by using the number keys on the keypad.

#### GSGX-12

- Paula Abdul Graphics Demo

Paula Abdul animation and sound demo for GS. Good demo of the graphics, animation and sound capabilities of the IIgs. Demo lasts about 20 seconds. From DreamWorld Systems, a company that plans to release "Dream Vision," a 3200 color paint program in the near future.

#### GSCM-02

- SnowTerm

/A2FILEXCHANGE.7/ folder: A2FX (Apple II File Exchange) is a program that will read an 800k Macintosh disk (HFS) on an Apple IIgs, IIe, IIc and convert them to a ProDOS format as an Apple Single, Apple Double, or BIN file. You can convert files for use with Steve Chick's Resource Spy without needing a MAC! This program is still in beta (v0.7) but seems to be pretty solid.

/GSHK.1.0.3/ folder: This is version 1.0.3 of the IIGS file archiving utility, GS/ShrinkIt. This is the complete update pack including GSHK, its docs, ShrinkIt.Icons, and a "Bug Reports" form that will help Andy Nicholas get the kind of information on bugs that's necessary to track them down and fix them. This will handle SIT, ARC, ZOO, and compress (unix) files as well as all the kinds of Apple II archives.

/GSVT.1.0/ folder: GSVT Version 1.00 is a communications program (VT100 Emulator) for the Apple IIgs. The emulator incorporates a subset of the VT100/ANSI control sequences and is useful for communicating with VAX computers or other mainframes that can drive a VT100 terminal. GSVT maps the GS numeric keypad to emulate the VT100 keypad for editing using EDT or other special functions. Uses the super high resolution screen for displaying its characters.

/NUPAK.IIGS.2.0/ folder: This is the first GS-specific archive program and supports NuFX, BLU and Macintosh .SIT files. This program is not fully functional. While it will unpack ShrinkIt, BLU/ACU, and StuffIt files, the file packing features are very limited. Main attraction: it is the first Apple II program to unStuff Mac files.

/RESOURCE.SPY/ folder: This is a program to examine and convert Macintosh resource files into IIGS format. The Mac files have to be converted to a ProDOS disk with AFE before they can be read by the program. You can capture icons, fonts, etc. and save them in one of several formats for the GS.

/SNOWTERM.2.03/ folder: This is version 2.03 of the shareware VT100, VT52 communications program for the Apple IIGS computer. SnowTerm emulates the Digital Equipment (DEC) VT100 and VT52 terminals. SnowTerm runs in the super high resolution graphics mode of the Apple IIGS. It uses the graphics and color capabilities of the Apple IIGS to accurately emulate the VT100 terminal including: bold and blinking character attributes, the line drawing character set, and double high and double wide characters.

/UNZIP.2.0/ folder: UnZip is a small Zipfile extract utility. It will only work with the APW or ORCA/M shells. It is written to be as small and portable as possible; ideal as a starting point for handling .ZIP files in non-IBM environments. A STRIP

program is included which makes porting MSDOS source easier. It replaces carriage-return and linefeed combinations with a single carriage-return, expands TABs to every 4th column, and gobbles the Ctrl-Zs that pad some MSDOS text files.

GSUT-05

- Utilities #4

/AWGS.MAKER.RED/ folder: This folder contains the program, AW.GS.PATCH version 2.03, by Chet Page. Allows large AppleWriter files on an Apple IIGS by patching AppleWriter version 2.0. This program was described in the April 1990 issue of the WAP Journal in as article titled "Giant AppleWriter Files."

/FILE.DIR/ folder: This utility will read your directory and will create a text file containing directory information for input into an Appleworks database. The filetype field has the file type spelled out for you automatically in a manner similar to the Finder's "Icon Info" command.

/FINDER.PATCHER/ folder: This handy Finder-patching program will: Allow you to place folders on the desktop; Change the OA-Q default to Restart or Return to launching application; Allow you to close all windows using the AO-S command.

/FONTVIEW/ folder: Fontview (shareware) - Allows viewing of the font sets currently on your disk. By WAP member Jim Frison.

/LEAPFROG.2/ folder: This is a beta version of Leapfrog, a combination Switcher/Multifinder type program for the GS. Patches Taskmaster to allow several program to run at once. Ctrl-@ brings up other to forefront so you can use the keyboard for input. It does work somewhat, but don't depend on it, yet. This version seems to be more stable than the previous one, but still has many problems. Use at own risk.

/MAKE.PROG.1.1/ folder: An APW utility to automate recompilation/relink. Version 1.1 of

the APW Make Utility is changed to support longer pathnames.

/RAMFAST.EJECT/ folder: A utility that will eject all partitions from the ProDOS-8 device queue in excess of two per slot with the RamFAST SCSI card.

/RESCUE/ folder: This program will rescue blocks from corrupted disk. Examine and read blocks on floppy or hard disk. Copy blocks to new file on another disk. Useful if directory or index blocks have been corrupted, making a file inaccessible.

/SLAVER/ folder: Force Slot 6 boot. Alters any disk to boot slot 6 instead of booting.

/SLOT.MAN/ folder: This is a Freeware program that facilitates switching //GS slots back and forth between cards and "internal" (e.g., printer port) settings.

/SRESET/ folder: Short SYS program that sets the system so that a WARM reboot is all that is required to make Control Panel changes take effect. Allows you to toggle between a Slinky type ramcard and a slot's built in function without destroying the information on the ramcard.

/START.PIC1.1/ folder: StartPic is an Initialization file that shows a SHR picture while Prodos 16 (GS/OS) is booting. Includes Docs, a sample of a bootup screen used with StartPic and SHR.OFF which is used to turn the SHR screen off if you are using a text screen based program selector.

/START.SOUND1.2/ folder: StartSound is an Initialization file that plays a digitized sound while Prodos 16 (GS/OS) is booting. Includes Docs, two samples of sound files used with StartSound and SS.CONFIG which is used to set the playback speed of your startup sound(s).

/SYS.BEEP1.4/ folder: Sysbeep is an Initialization file that modifies your error beep to a digitized sound of your choosing. Includes Docs, a sample of a sound file used with SysBeep and AUXSET which is used to set the playback speed of your

#### SystemBeep.

/SYSTEM.SWITCH/ folder: System Switch is a short utility that allows you to have both System 4.0 and System 5.0 on the same hard drive and to switch between the two systems quickly and easily.

/TSGS/ folder: Latest version of Tonight's Sky GS (Version 3.02), a shareware planetarium program. Tonight's Sky GS is an integrated software package designed as a simple tool for amateur astronomers to prepare for an evening's observing.

/XREF.C.EXEC/ folder: This is a cross reference utility which runs under the APW shell, it provides a x-ref for you from a C source file. It was ported over from the Amiga by a member of the Dallas Apple Corps. Included are: the EXEC file, the HELP file, and instructions on how to install it.

#### GSUT-06

- ZZ Copy v2.12 Disk Copier

ZZ Copy is a very fast GS disk copy program. This is the latest version (2.12) of the Freeware Disk copying program from France. The instructions to this program are accessible from inside the program.

ZZ copy incorporates a variety of features including: screen blanker; virus detector; copies Mac disks; graphics and mouse interface; disk optimizer; interleave factors of 2, 3, or 4 to 1; verify option; turn sound on or off; and a small "Brick Out" game; ROM 1 and ROM 3 compatibility.

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## **Macintosh Disk Library**

by Dave Weikert

#### Mac Disk Catalog

The newest Disketeria Catalog is still available for purchase and is being included in Macintosh New Member packets. The catalog covers all Macintosh disks issued through August 1990 and includes disk descriptions and alphabetical lists of programs and files. The catalog price is \$3 and it is available at the office or at the monthly general meeting from 8:30 to 9:30. You may also have it sent to you for an additional \$1.50 to cover postage; use the Macintosh Disk order form in the back of the Journal.

#### New and Recent Disks

We have ten new disks this month; three Anti-Virus Utilities (Mac Disks #1.01B, #1.02B and #1.03B), four LaserWriter Fonts series (Mac Disks #6.06 through #6.09) and three Telecommunications series (Mac Disk #13.10 through #13.12). If we receive the master disks from Apple Computer in time we will also have HyperCard 2.0 (a five disk set) and Apple System Software 6.0.7 (a five-disk set).

The most recent disks include Anti-Virus Utilities series updates (Mac Disk #1.04A and #1.05), the INITs/cdevs series (Mac Disks #9.14 through #9.16), Programmer/Hacker series (Mac Disks #14.21 and #14.22), the System Utilities series (Mac Disks #16.09B through #16.13B), the Word Processing Utilities series (Mac Disks #17.04 through #17.06), a special Hyper-Card StackWare set of six disks (Mac Disks #19.35 Disks 1 through 6) and conversion of the more recent of the 400K serially numbered disks to 800K format.

## Anti-Virus Utilities...Enough Already!!

Virus Detective (version 4.0.3) and Disinfectant (version 2.3) have both been revised this month. Both now detect the ANTI B virus variant and Disinfectant additionally detects the MDEF C virus variant. Virus Detective is on Mac Disk #1.01B and Disinfectant is on #1.02B; both of these disks are self starting (boot) disks. Both programs are also on Mac Disk #1.03B (along with other popular anti-virus utilities) for the economy-minded who want to create their own boot disks. Anybody who bought the B versions of these disks since last month has the latest versions as revised after the deadline for the Journal but prior to the October meeting. If the new System Software version 6.0.7 is received in time, the System folders on Mac Disks #1.01B and #1.02B will be updated to boot on the new Mac IIsi. They should both boot on the new Mac Classic with the current System Software version 6.0.5, which is on the disk.

#### Laser Writer Fonts

Jim Donnelly has written two entertaining and informative series of articles on fonts for the Journal. In his second series "Building fonts" in the August, September and October issues of the Journal, he describes a number of shareware and freeware fonts for PostScript printers. Most of the fonts he describes (along with many others) are included in the four disks we have added to this popular series. A number of the fonts are in the Type 1 format and are useable with the Adobe Type Manager on

non-PostScript printers such as the ImageWriter or Personal LaserWriter IISC. In addition, check out Mac Disk #6.05, which includes the New Compact font discussed by Jim.

These downloadable fonts are easy to use; just move the PostScript file into your System folder and install the screen font (bit-mapped font) into your System file. The screen fonts may be installed with the Font/DA Mover found on the Apple System Software disk (Utilities 2) or using a commercial utility such as Suitcase II (Fifth Generation Systems) or MasterJuggler (ALSoft).

#### **Telecommunications**

The three disks added to this series include some new programs and some revisions to programs included on earlier disks in this series. These programs run the gamut from telecommunications support (such as file compression) through full-fledged terminal emulation software with X, Y and Z modem capabilities. Crank up any of these programs and call your favorite bulletin board system, the WAP TCS or one of the many commercial services; you'll be glad you did.

#### Apple System Software 6.0.7

The latest version of Apple System Software is a five-disk set which comes standard with the new Mac Classic and the Mac IIsi and is expected to come with the Mac LC. This upgrade provides some "bug" fixes but is primarily for use with the new computers. If you do not have the new machines and are using System 6.0.5, there is no compelling reason to upgrade to 6.0.7 unless you must produce "boot" disks that will work on all Macs.

We will also continue to sell System 6.0.5 while there is demand. When you order, please specify whether you want System Software version 6.0.7 or 6.0.5.

#### HyperCard 2.0

HyperCard Version 2.0 is a five disk set and is the same as the version

sold by Claris. The new Mac Classic and Mac IIsi come with an abbreviated set of 2 disks. Contrary to rumors you may have heard, the version packaged with the new computers is completely functional including all of the scripting capability of the version sold by Claris. What is missing from the version accompanying the new computers are some of the example and help files and the documentation does not describe the scripting. If you need the full documentation, buy the Claris labeled HyperCard from one of our advertisers. (Don't forget to ask whether they offer a discount for Pi members.)

You must have proof that you have been an owner of HyperCard in order to purchase this set. To demonstrate proof of purchase, you may show us the first page of the HyperCard manual, a sales receipt, an original disk or one of the update disks.

#### Cartridge Barter

Most of the programs in our Mac Disketeria are archived on fiveinch 20 Megabyte Bernoulli cartridges or on 45 Megabyte SyQuest cartridges. This includes material already issued as well as downloads waiting to be tested, annotated and assembled onto disks. Because of the expense, the club has been able to purchase only a limited number of these cartridges. I previously requested donations or long term loans of these cartridges and have had only one donation thus far. However, one member was willing to barter cartridges in exchange for copies of disks in the library. The deal we worked out was a two-for-one exchange. We received six cartridges, returned four of them filled with copies of all the library disks and kept the remaining two. We will offer the same two-for-one deal to anybody else who is interested. Call me at (301) 948-9646 and leave a message. The Bernoulli cartridges may be from IOMEGA, Mountain Computer or Bering; the SyQuest cartridges may be from PLI, CMS,

Ehman, MassMicro, LaCie or a number of other vendors.

## DISK #1.01B — 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 startup 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 1.3 and Virex on disks that have 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.

Repair 1.5: By Steve Brecher. This application repairs files infected with the nVIR virus. You must first determine if a file is infected using a virus detection utility such as Virus Rx version 1.6.

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 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.

Virus Rx 1.6: By Apple Computer, Inc. Scans selected 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.

VirusBlocade™ II 1.0 Demo f: VirusBlocade™ II 1.0 Demo: By Jeffrey S. Shulman. This INIT/cdev permits you to foil attempts by virus 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 demon version is fully functional except configuration changes cannot be saved. Shareware – \$30 for fully functional version.

Virus Detective Virus DetectiveTM: 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. Detects files infected by all of the currently known viruses including Scores, nVIRA & B, INIT 29, ANTI, WDEF A & B, CDEF, ZUC, MDEF A (Garfield) and MDEF B (Top Cat) and MacMag (Peace). This version has extended capabilities over previous versions and permits you to easily check out an entire floppy disk library. VD 4.0.3 Doc (MW) IW is the terse but comprehensive documentation on the theory and use of Virus Detective. The DA is included in the System file as noted following. Shareware - \$35, for license, \$40 for license and disk with other demo programs.

system 6.0.5 (or 6.0.7) f: Includes Apple System Software version 6.0.5 (or 6.0.7) with System and Finder to provide a self starting disk. The System has been stripped of all possible fonts and DAs and the DA Virus Detective has been installed for your convenience in use as your primary virus detection, eradication and prevention disk.

## DISK #1.02B — 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 startup 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 1.3 and Virex on disks that have the WAP INIT file installed.

Disinfectant 2.3: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIRA & B, INIT 29, ANTI, WDEF A & B, CDEF, ZUC, MDEF A (Garfield), MDEF B (Top Cat) and MDEF C, MacMag (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. A menu item permits the installation of a protective INIT in your system folder.

RezTag f: RezTag: By Raymond G. Maraza. Examines the System file and lists resources and types and evaluates them as possible viruses. For more advanced users. RezTag.docs is the text

format documentation.

system 6.0.5 (or 6.0.7) f: Includes Apple System Software version 6.0.5 (or 6.0.7) with System and Finder with Control Panel device SCSIProbe to provide a self starting disk. The System has been stripped of all possible fonts and DAs. This disk is self starting (booting) for your convenience in use as your primary virus detection, eradication and prevention disk.

## DISK #1.03B — AV 3 ANTI-VIRUS UTILITIES

This disk contains the most popular Anti-Virus application files from Mac Disks #1.01, #1.02 and #1.04 but does not include a System Folder. Its is designed for users who want to "roll their own"

Anti-Virus startup disks.

Disinfectant 2.3: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIRA&B, INIT 29, ANTI, WDEF A & B, CDEF, ZUC, MDEF A (Garfield), MDEF B (Top Cat) and MDEF C, MacMag (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. A menu item permits the installation of a protective INIT in your system folder.

Gatekeeper Aid f (v1.0.2): Gatekeeper Aid: By Chris Johnson. A supplement to version 1.1.1 of the Gatekeeper Anti-Virus System. It locates and removes the WDEF viruses. Gatekeeper Aid Docs. is in MacWrite format.

GateKeeper f (v1.1.1): GateKeeper: By Chris Johnson. This cdev is placed in your System folder and is then accessible via the Control Panel after booting. It 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. A description of the program and help information is found by clicking the question mark when the cdevis selected at the Control Panel. GateKeeper Release Notes and GateKeeper Introduction describe the privileges needed by selected applications.

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 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.

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DISK #6.06 - LW 6

#### LASER WRITER FONTS

Architect f: By Hank Gillette. A Type 3 font that simulates hand printing of the type typically done by architects. Inspired by Adobe's new font Tekton (TM), it has a full set of letters, numbers, and punctuation, and quite a few extra characters. Architect Read Me is in text format.

BlackForest f: By Printers Devil. A Type
1 font with an old world German feel
with intricate upper case letters. It is
designed without any curves. Best at
larger sizes. Read Me First!! is in text

format. Shareware - \$10.

Bodidly Bold f: By Printers Devil. A Type 1 font that looks great in small or large sizes. This one can readily pass for Poster Bodoni at a fraction of the cost. Read Me First! is in text format. Shareware - \$10.

Bullets & Boxes f: By Mike & Sandy Casey. This sampler includes a selection of bullets, boxes, triangles, octagons, kerning slashes and the command key symbol. Each character has a blemish in the upper right hand corner. Instructions. Text is in text format. Samplerware - \$39.

Caroles Chunk f: By J. O'Bryan, Aartvark
Design Studios. Avery decorative Type
3 font for the holidays. Upper case
letters only. Read Me First is in text
format. A holiday greeting or postcard.

CartWright f: By Printers Devil. A Type
1 font inspired by the Adobe wood
type Ponderosa font. Just the font for
designing those old west wanted
posters. Read Me First!! is in text
format. Shareware - \$10.

Charlie Chan f: A decorative font that has a oriental look.

Chester f (v1.1): By John Malay. An idiosyncratic (and not particularly readable) modernistic Type 3 display font. chestdox is in text format. Shareware – \$20.

<u>Daytona f:</u> By OLDUVAI Corporation. A display font with unusually curvaceous letters. <u>Daytona Laser Font Instructions</u> is in text format.

Deusex f: By David Rakowski. A very plain but bold display font designed without curves. Lower case letters are "small caps" format. ReadMe Deusex is in text format.

<u>Domino Effect f:</u> By David Rakowski. Each of the 26 capital letter characters looks like a domino with a letter carved out of it, rather than numbers. Upper case letters only. Read me DominoEffect is in text format.

FutureShock II f: By Jim Rinaldo. A half-breed typeface inspired by a classified ad in the Sunday Boston Globe. Upper case letters only. Future Doc txt READ ME! is in text format. BuzzyWear—\$ for a burger & rings at Buzzy's Roast Beef stand.

Grayscale f (v2.0): By David Rakowski.

This is a very unusual font that has no characters, only rectangles in various shades of gray. There are one hundred and one rectangles, each a value on the gray scale from 0 to 100. Read me Grayscale 2.0 is in double clickable application format.

## DISK #6.07 — LW 7 LASERWRITER FONTS

Heidelberg f: By Bill Horton. A Type 3 calligraphic style font considered by the author to be a refinement of his earlier MacHumaine calligraphic font. This is a rounded blackletter type font that is quite attractive. READ ME.txt is in text format.

Igloo f: This special purpose display font consists of heavy black letters with "snow" covering the upper horizontal surfaces. Upper case letters only.

Informal Oblique/ProtoType f: By Phil Noguchi. Informal Oblique is the Type 1 version of Slant Informal and replaces it in public distribution. (Slant was originally designed for informal correspondence and general every-day printing.) Docs for Informal Oblique is in text format.

InkaBod f: By Printers Devil. A Type 1 font designed without any curves and based on the bitmapped font Nordic. Read Me First!! is in text format. Shareware - \$10.

KiddieKorner f: By George Pytlik. An alphabet as it might look if printed by young children. KiddieKorner Info is in HyperCard format. Shareware – \$20 for the full character set.

LaserLondon f: By Bill Ware. This PostScript font is based on the bit-mapped London font. LaserLondon.doc is in text format. Shareware - \$10 or 20.

MaryDale f: By Brian L. Willson. A sans-seriffont with a light, hand printed look.

Medici f: By John Paul McCarty. A Type 3 version of the Michelangelo typeface. This is a titling font com-

panion to Palatino with all upper case letters. Medici doc is in MS Word format. Shareware - \$20.

## DISK #6.08 — LW 8 LASERWRITER FONTS

Modern Print Bold f: This sans-serif font is intended as a headline or accent typeface (fashioned after the Gordon's Jewelers logo) but a number of letters are replaced by a request for \$25. The Mod bold dox2 in text format doesn't say where to send the money. Can anybody out there help with an address?

Monotony: f: By Phil Noguchi. The monospaced font that nobody's been waiting for according to Phil. This is a type 3 san-serif font designed because there are very few monospaced fonts for PostScript printers. Monotony; TM Docs is in double clickable application format.

Morton Dingbats f: By Jim Morton. This font contains an assortment of creepy symbols, (skulls, snakes, spiders, swastikas), religious symbols (crosses, Star of David, Yin-Yang), astrological, I Ching and rune symbols and much more. Read Me Mortbats is in text format.

OCR f: By Doug Bloomquist. This font copied from an IBM Selectric typing element was developed for optical character readers. This appears to be an update of the font of the same name on Mac Disk #6.02.

OswaldBlack f: By Printers Devil. A Type 1 font that looks great in small or large sizes. Very similar to the Cooper Bold commercial font from Altsys but check out the non commercial shareware fee. Read Me First! is in text format. Shareware - \$10.

OswaldGrey f: By Printers Devil. A Type 3 font that has an 80% grey fill with a black border. It is for PostScript compatible printers only and looks best in sizes of 24 points and larger. Read Me First! is in text format. Shareware – \$10.

<u>PIXL Misc f:</u> By Al Telles. A symbol font that includes a number of useful symbols and artwork such as credit card symbols. Read.me is in text format.

PIXymbols<sup>TM</sup> Demo f: By Page Studio Graphics. Another collection of useful symbols/artwork. Installing PIXymbols<sup>TM</sup> Demo is in double clickable application format. PIXymbols™ Demo doc is a MacWrite format document; remember to install the PIXymbols font before you print it.

PSTESC.FNT: A PostScript escape 9, 10 and 12 installable as a font in the System file. Anybody know how to (or why one would want to) use this?

Quantum f: A compact san-serif display font that should be particularly good for headlines. It compares favorably with New Compact on disk #6.05 but this one is free.

## DISK #6.09 — LW9 LASER WRITER FONTS

ShockFont f: By Al Telles. A specialty font best used for short headlines for ads that you want to grab the viewer's attention. Upper case characters only. Read.me is in text format.

Shpfltnat 1.8 f: By David Rakowski. This font of musical notes and other symbols is an update of a prior version on Mac Disk #6.03. Read me shpfltnat 1.8 is in double clickable application format. Shareware – tax deductible donation of more than \$10 to Columbia Univ. Music Dept.

SlabFace/Aartvark f: By Jim O'Bryan. A
Type 1 font that is perfect for ads,
flyers or posters. Bet You Don't Read
This! is in text format.

Stalingrad f: By Robert Shenk. A display font that should be printed in large size only. It includes only capital letters (and some samples of other fonts the author has for sale). Read.Me.StalingraDemo is in MS Word format and there is a similarly named document in MacWrite format.

Stalingrad2 f: By Ingrimayne Typefaces. A display font that should be printed in large size only. It includes both capital letters and lower case letters in "small caps" format. Read.Me is in text format and includes a 25 fonts for \$25 offer good through June 90. Check with the author to see if it has been extended.

Stencil Cut f: By Gary Hagestead. A Type 1 bold display font consisting of upper case letters, and most of the commonly used symbols. It is patterned after Adobe's "STENCIL" type style. Stencil Cut. docs is in Mac Write format. Shareware - \$15.

<u>Sydney f:</u> By Paul W. Glomski. A sanserif decorative font that has a somewhat angular and squashed appearance.



Tiny Helvetica f: This is a small font styled like Helvetica. When set at 24 points, it shows on the screen and prints as if it is 10 or 12 points.

#### DISK #13.10 — T 10 **TELECOMMUNICATIONS**

Archive Threader 1.2 f: Archive Threader 1.2: By Mike Babulic. Creates a separate text file for each thread in an archive (created by Navigator). Threads are based on the subject of the message. About Archive Threader... is in text format. Not tested. Shareware - \$5.

Batch Binary 0.9: By Eric Larson. Converts from Mac file format to MacBinary file format and back. For transfer of files between Mac and other computer systems (MS DOS, for example). Similar to BinHex5 except operates on all files in a folder rather than one file at a time. Shareware -\$25; free for non-commercial use.

Calc DL cost f: Calc DL/Excel, /SYLK and /WingZ: Spreadsheets for calculating the cost of downloads for CompuServe, GEnie and CONNECT services. You will have to update the costs for the services to their current

Fawn + 1.00 f: Fawn + 1.00: By Brian Candler and Iain Sharp. A terminal emulator for the Macintosh which supports the Fawnbook protocol, also known as SSMP, for full screen terminal access to mainframe systems over packet networks. Fawn+Doc 1.00 is in MacWrite format. Freeware for non-commercial users.

FreeTerm 3.0 f: FreeTerm 3.0: By William Bond. This simple terminal emulator supports ASCII file transfers. The XModem protocol is supported as is the Macintosh MacBinary II format. It will work on asynchronous communications devices that support data transfer rates from 300 to 57600 baud. If you have a Hayes-compatible modem, there is support for autodialing and hang up commands. The FreeTerm 2.0 Doc describes all of its features and lists a number of the XModem error messages.

GEnie Help f: Symmetry RT Help.AA: By Mark Phillips. This is an adaptation of the help files from Category 1 of the Symmetry RoundTable on GEnie (page 596) into Acta Advantage format (Acta Advantage Demo included).

Read Me.TX is in text format.

GEnie Reformatter 2.01: By SK Hushing III. Converts the GEnie two line per file listing format to a single line format. Permits the selection of fields and selection of tab or two spaces as field delimiters. Shareware - \$3.

Kermit 0.98(62) f: Kermit 0.98(62): By Bill Catchings, Bill Schilit, Frank da Cruz, Matthias Aebi, Paul Placeway and many others. Kermit is a virtual terminal and file transfer program that can send files between two microcomputers, or a micro-computer and mainframe, when there is a version running on both ends. KERMIT-0940-DOC.TXT.1 is the standard Columbia material for an earlier version of Kermit.

LegalTerm™: By Tim Buehrer. Provides access to the LEXIS®/NEXIS® and WESTLAW® legal data bases using familiar Mac interface. LegalTerm™ for LEXIS includes all of the most commonly used buttons on the LEXIS terminals, represented by on-screen buttons that work just like their LEXIS/NEXIS terminal counterparts. LegalTerm WESTLAW provides all of the most commonly used buttons on the WALT® terminal, represented by onscreen buttons. There is also a DA version, not included here. Shareware - \$30.

MacArc 0.04 f: MacArc 0.04: By Leo Laporte, recompiled and reworked by Ray Terry. This file compression and archiving utility is based on an MS DOS program named ARC. MacArc only unarchives files created by MS DOS ARC. Read Me is in text format.

#### DISK #13.11 — T 11 **TELECOMMUNICATIONS**

IconUX 1.0 f: IconUX 1.0: By Lee Atchison. Interfaces the Macintosh to a UNIX machine over a simple serial line (such as a modem and phone line). Intended to provide the convenience and ease of use of the Macintosh environment for the more cryptic UNIX environment. Provides an iconbased window environment to view UNIX files (similar to what the Finder provides for Macintosh files). Text Manual is in text format. Shareware -\$45.

MiniTerm 2.9.7 f: MiniTerm 2.9.7: By Jerry LeVan. This is a simple terminal

emulation program that provides basic file transfer capability including standard XModem and MacBinary XModem and YModem file protocols. History of MiniTerm (MW), Menus(MW) and Documentation (MW) are the change history and documentation of the program in MacWrite format. Shareware - \$15.

Multi-Station 0.92b f: Multi-Station 0.92b: By Christopher Lloyd. A VT 320 emulator with multi-session capabilities and resizeable terminal windows. docs.text is in text format. Not tested.

OVT 2.1 f: QVT 2.1: By . A DEC VT 220 terminal emulator following standard Mac interfaces. It fully supports the Kermit, Xmodem, Ymodem, and MacBinary transfer protocols.

Termulator 2.02 f: Termulator 2.02: By Brad Quick. Another VT 100 compatible terminal emulation program; this one features user programmable macro buttons, split session windows, connect time clock (with cost) and copy and paste to modem. It supports plain and MacBinary XModem and ZModem (including batch send and receive) file transfers. Termulator Docs (MacWrite) is in MacWrite format. Shareware - \$25.

#### DISK #13.12 — T 12 **TELECOMMUNICATIONS**

Term-Plus 6.93 f: Term-Plus 6.93: By Rick Trethewey, PEEK[65]. A smart terminal program targeted to users of commercial telecommunications services such as CompuServe or GEnie. It is compatible with the CompuServe's VIDTEX™ terminal control codes and supports CompuServe's B protocol for file transfers. Term-Plus supports MacBinary file transfers and XModem and YModem so that it may be used with other services. It also has a built-in file text editor. Term-Plus features macro string capability and the macros may be represented by buttons at the bottom of the terminal window. Term-Plus also has a navigate mode for getting around various CompuServe and GEnie locations and a scripting capability called AutoPilot that includes goto, gosub, if and then functions; Sample Script is an example. TPLM.WRT is a MacWrite format document that describes the features and operation of Term-Plus.

Shareware – Free for Level 1, \$20 for Level 2 and \$40 for level 3.

Terminal Emulator f: Terminal Emulator: By Joe Mastroianni. A rudimentary terminal emulator with source code (in C) so you may see how it is done. Term Info is the text format documentation.

<u>UnZip 1.02b f:</u> UnZip 1.02b: By Samuel H. Smith, Darin Wayrynen, R.P. Byrne, Paul DuBois and Peter Maika. A utility for decompressing files

archived by the popular PC utility PKZIP. About.UnZip 1.01, appnote.txt and UNZIP.DOC are all in text format.

ZipPop: By D. G. Gilbert. Another utility for decompressing PKZIP files.



## FEDERAL EMPLOYEES SF 171 Software

What can FEDERAL JOBLINK do for you?

- Provides forms on screen.
- · Has modified pages for jobs.
- Produces unlimited copies.
- Prints forms & answers in one step.
- 9 out of 10 in WAP July 1988 review.
- Creates near-typeset 171.
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15 disk set; \$45	11.02 - P 2	14.01 - PH 1	17.02 - WP 2	19.30 - SW 30	
5.01 - IW 1	11.03 - P3	14.02 - PH 2	17.03 - WP 3	19.31 - SW 31	
5.02 - IW 2	— 11.04 - P4	- 14.03 - PH 3		19.32 · SW 32	
			17.04 - WP 4		
5.03 - IW 3	11.05 - P 5	14.04 - PH 4	17.05 - WP 5	19.33 - SW 33	
5.04 - IW 4		14.05 - PH 5	17.06 - WP 6	19.34 - SW 34	
	D1-111 4 0 4-				C dial act 845
5.05 - IW 5	Digitized Sounds	14.06 - PH 6		19.35 - SW 35>	<ul><li>6 disk set; \$15</li></ul>
5.06 - IW 6	31 disk set; \$93	14.07 - PH 7	Adobe Screen Fonts	<del></del>	
5.07 - IW 7				Mac II Series	
	12.01 - S 1	14.08 - PH 8	16 disk set; \$48		
5.08 - IW 8	12.02 - \$ 2	14.09 - PH 9	18.01A - AF 1	11 disk set; \$33	
5.09 - IW 9	12.03 - 5 3	14.10 - PH 10	18.02A - AF 2	20.01 A- M II 1	
5.10 - IW 10	12.04 - S 4	14.11 - PH 11	18.03A - AF 3	20.02 A- M II 2	
5.11 - IW 11	12.05 - S 5	14.12 - PH 12	18.04A - AF 4	20.03 A- M II 3	
5.12 - IW 12	12.06 - S 6	14.13 - PH 13	18.05A - AF 5	20.04 A- M II 4	
5.13 - IW 13		14.14 - PH 14	18.06A - AF 6	20.05 A- M II 5	
	12.08 - 5.8		18.07A - AF 7		
E 4 A . NAI 4 A		14.15 - PH 15	15 U/A - AT /	20.06 A- M II 6	
5.14 - IW 14					
5.14 - IW 14 5.15 - IW 15	12.09 - 5 9	14.16 - PH 16	18.08A - AF 8	20.07 A- M II 7	Serially Numbered
	12.09 - S 9	14.16 - PH 16	18.08A - AF 8		Serially Numbered Disk 30/92
	12.09 - S 9 12.10 - S 10	14.16 - PH 16 14.17 - PH 17	18.08A - AF 8 18.09A - AF 9	20.08 A- M II 8	Disk 30/92
5.15 - IW 15	12.09 - S 9	14.16 - PH 16	18.08A - AF 8		Disk 30/92 Disk 74/75
5.15 - IW 15	12.09 - S 9 12.10 - S 10 12.11 - S 11	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10	20.08 A- M II 8 20.09 A- M II 9	Disk 30/92
5.15 - IW 15 LaserWriter Fonts	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10	Disk 30/92 Disk 74/75 Disk 77/78
5.15 - IW 15  LaserWriter Fonts 8 disk set; \$24	12.09 - S 9 12.10 - S 10 12.11 - S 11 12.12 - S 12 12.13 - S 13	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12	20.08 A- M II 8 20.09 A- M II 9	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84
5.15 - IW 15 LaserWriter Fonts	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10	Disk 30/92 Disk 74/75 Disk 77/78
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84 Disk 85/89
5.15 - IW 15  LaserWriter Fonts 8 disk set; \$24 6.01 - LW 1 6.02 - LW 2	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84 Disk 85/89 Disk 91/95
5.15 - IW 15  LaserWriter Fonts	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11 HyperCard Externals	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84 Disk 85/89 Disk 91/95 Disk 96/104
5.15 - IW 15  LaserWriter Fonts 8 disk set; \$24 6.01 - LW 1 6.02 - LW 2 6.03 - LW 3	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11 HyperCard Externals	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84 Disk 85/89 Disk 91/95
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11 HyperCard Externals 5 disk set; \$15	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84 Disk 85/89 Disk 91/95 Disk 96/104 Disk 105/106
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils 11 disk set; \$33	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84 Disk 85/89 Disk 91/95 Disk 96/104 Disk 105/106 Disk 108/128
5.15 - IW 15  LaserWriter Fonts 8 disk set; \$24 6.01 - LW 1 6.02 - LW 2 6.03 - LW 3 6.04 - LW 4	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11 HyperCard Externals 5 disk set; \$15	Disk 30/92 Disk 74/75 Disk 77/78 Disk 80/84 Disk 85/89 Disk 91/95 Disk 96/104 Disk 105/106
5.15 - IW 15  LaserWriter Fonts 8 disk set; \$24 6.01 - LW 1 6.02 - LW 2 6.03 - LW 3 6.04 - LW 4 6.05 - LW 5 6.06 - LW 6	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22  Miscellaneous Utils 11 disk set; \$33	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2	Disk 30/92 Disk 74/75 Disk 77/78 Disk 85/89 Disk 91/95 Disk 96/104 Disk 105/106 Disk 105/143 Disk 134/143
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22  Miscellaneous Utils 11 disk set; \$33 15.01A - MU 1	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3	Disk 30/92 Disk 74/75 Disk 74/75 Disk 78/78 Disk 85/89 Disk 95/104 Disk 105/106 Disk 108/128 Disk 134/143 Disk147
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7  6.08 - LW 8	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4	Disk 30/92 Disk 74/75 Disk 74/75 Disk 80/84 Disk 85/89 Disk 95/104 Disk 105/106 Disk 108/128 Disk 134/143 Disk 150/151
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22  Miscellaneous Utils 11 disk set; \$33 15.01A - MU 1	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3	Disk 30/92 Disk 74/75 Disk 74/75 Disk 78/78 Disk 85/89 Disk 95/104 Disk 105/106 Disk 108/128 Disk 134/143 Disk147
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7  6.08 - LW 8	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4	Disk 30/92 Disk 74/75 Disk 74/75 Disk 80/84 Disk 85/89 Disk 95/104 Disk 105/106 Disk 108/128 Disk 134/143 Disk 150/151
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7  6.08 - LW 8  6.09 - LW 9	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Uilis 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2 15.03A - MU 3	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4 21.05 - HE 5	Disk 30/92 Disk 74/75 Disk 74/75 Disk 80/84 Disk 85/89 Disk 95/104 Disk 105/106 Disk 108/128 Disk 134/143 Disk 150/151
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7  6.08 - LW 8  6.09 - LW 9  HyperCard Upgrade requires	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21 12.22 · S 22  HyperCard proof of purchas	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Uilis 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2 15.03A - MU 3 15.04A - MU 4  Are you a memb	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1 19.02A - SW 2  page of manual, receipt or previous of Washington Apple Pi, Ltd?	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4 21.05 - HE 5  bus HyperCard Upgrade disk.  Yes/No If Yes, Member	Disk 30/92 Disk 74/75 Disk 74/75 Disk 74/75 Disk 80/84 Disk 85/89 Disk 91/95 Disk 96/104 Disk 105/106 Disk 105/106 Disk 134/143 Disk 147 Disk 150/151 Disk 153
5.15 - IW 15  Laser Writer Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7  6.08 - LW 8  6.09 - LW 9  HyperCard Upgrade requires  Mail this form with your Disketeria	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21 12.22 · S 22  HyperCard proof of purchas	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Uilis 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2 15.03A - MU 3 15.04A - MU 4  Are you a memb	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1 19.02A - SW 2	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4 21.05 - HE 5  bus HyperCard Upgrade disk.  Yes/No If Yes, Member	Disk 30/92 Disk 74/75 Disk 74/75 Disk 74/75 Disk 80/94 Disk 85/89 Disk 91/95 Disk 96/104 Disk 108/106 Disk 108/128 Disk 134/143 Disk 147 Disk 150/151 Disk 153
5.15 - IW 15  LaserWriter Fonts 8 disk set; \$24 6.01 - LW 1 6.02 - LW 2 6.03 - LW 3 6.04 - LW 4 6.05 - LW 5 6.06 - LW 6 6.07 - LW 7 6.08 - LW 9  HyperCard Upgrade requires  Mail this form with your bisketeria Washington Appte Pi,	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21 12.22 · S 22  HyperCard proof of purchas	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2 15.03A - MU 3 15.04A - MU 4  Are you a memb All payments mu	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1 19.02A - SW 2  page of manual, receipt or previous of Washington Apple Pi, Ltd? st be in U.S. funds drawn agains	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4 21.05 - HE 5  bus HyperCard Upgrade disk.  Yes/No If Yes, Member t U.S. banking institutions.	Disk 30/92 Disk 74/75 Disk 74/75 Disk 74/75 Disk 80/94 Disk 85/89 Disk 91/95 Disk 96/104 Disk 108/106 Disk 108/128 Disk 134/143 Disk 147 Disk 150/151 Disk 153
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7  6.08 - LW 8  6.09 - LW 9  HyperCard Upgrade requires  Mail this form with yu Disketeria Washington Apple Pi, 7910 Woodmont Ave.	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21 12.22 · S 22  HyperCard proof of purchas	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2 15.03A - MU 3 15.04A - MU 4  Are you a memb All payments mu	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1 19.02A - SW 2  page of manual, receipt or previous of Washington Apple Pi, Ltd?	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4 21.05 - HE 5  bus HyperCard Upgrade disk.  Yes/No If Yes, Member t U.S. banking institutions.	Disk 30/92 Disk 74/75 Disk 74/75 Disk 74/75 Disk 80/84 Disk 85/89 Disk 91/95 Disk 96/104 Disk 105/106 Disk 105/106 Disk 134/143 Disk 147 Disk 150/151 Disk 153
5.15 - IW 15  LaserWriter Fonts  8 disk set; \$24  6.01 - LW 1  6.02 - LW 2  6.03 - LW 3  6.04 - LW 4  6.05 - LW 5  6.06 - LW 6  6.07 - LW 7  6.08 - LW 8  6.09 - LW 9  HyperCard Upgrade requires  Mail this form with your bisketeria  Washington Apple Pi,	12.09 · S 9 12.10 · S 10 12.11 · S 11 12.12 · S 12 12.13 · S 13 12.14 · S 14 12.15 · S 15 12.16 · S 16 12.17 · S 17 12.18 · S 18 12.19 · S 19 12.20 · S 20 12.21 · S 21 12.22 · S 22  HyperCard proof of purchas	14.16 - PH 16 14.17 - PH 17 14.18 - PH 18 14.19 - PH 19 14.20 - PH 20 14.21 - PH 21 14.22 - PH 22 Miscellaneous Utils 11 disk set; \$33 15.01A - MU 1 15.02A - MU 2 15.03A - MU 3 15.04A - MU 4  Are you a memb All payments mu	18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16  HyperCard StackWare 40 disk set; \$117 19.01A - SW 1 19.02A - SW 2  page of manual, receipt or previous of Washington Apple Pi, Ltd? st be in U.S. funds drawn agains	20.08 A- M II 8 20.09 A- M II 9 20.10 A- M II 10 20.11 A- M II 11  HyperCard Externals 5 disk set; \$15 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4 21.05 - HE 5  bus HyperCard Upgrade disk.  Yes/No If Yes, Member t U.S. banking institutions.	Disk 30/92 Disk 74/75 Disk 74/75 Disk 74/75 Disk 80/84 Disk 85/89 Disk 91/95 Disk 96/104 Disk 105/106 Disk 105/106 Disk 134/143 Disk 147 Disk 150/151 Disk 153
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MODEMS
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Anchor 1200E / 2400E (1200 / 2400 external, Hayes-compatible) 119 / 165 Prometheus Promodem 2400A (2400 card w / software) 135 Promodem 1200G / 2400G (1200 / 2400 external) 115 / 175
MEMORY EXPANSION & VIDEO BOARDS & CPU'S Applied Engineering RamWorks III (256k-1 meg, for I(e)
RamFactor (256k-1 meg, for   - or   ga)   198   gaRAM (256k-1.5 meg, for   ga)   138
garAM Plus (1 meg-6 meg for liga)
gatAM Plus (1 meg-6 meg for Igs) 288 RamKeeper (battery backup for gaRAM) 159 Sonic Blaster (stereo digitizer / playback for Igs) 100
Transwarp II (7 mnz 500zc accellerator for II + and II e)
PC Transporter (IBM-on-a-card, 768k) 389 AMR 80-column card (64k, for IIc)
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AS800 (3.5° 800k drive for Hgs, Hc+, Mac)
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ProGrappler (parallel printer interface w/graphics)
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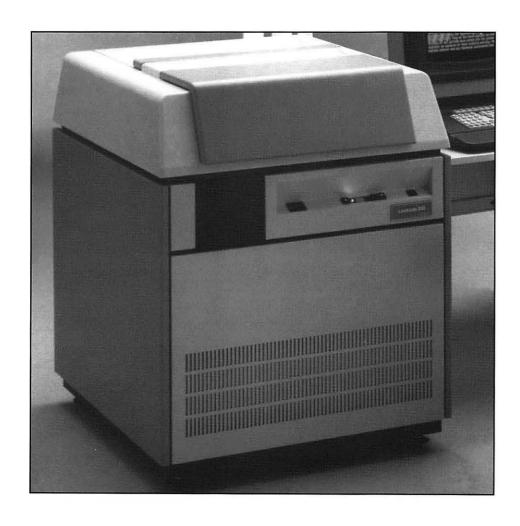
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WriteMove (QuickDraw-compatible inkjet printer)	5 9
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MSF-300GS scanner (256-level groyscale, software, cable)	1)
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